## Edmonds

SCHOOL DISTRICT

Each student learning, every day!

## School Board Regular Business Meeting <br> Agenda

June 8, 2021
To view on YouTube highlight and right click the link below
https://www.youtube.com/user/EdmondsSD
Or highlight and right click the link below to join webinar: https://edmondsschools.zoom.us/j/93766082965?pwd=WndpanpTcyt6emZweXRVSW5NckhsQT09

Passcode: 990474
Or iPhone one-tap :
US: +12532158782,,93766082965\#,,,,,,0\#,,990474\# or +16699006833,,93766082965\#,,,,,,0\#,,990474\#
Or Telephone:
Dial(for higher quality, dial a number based on your current location):
US: +1 2532158782 or +1 6699006833 or +13462487799 or +16468769923 or +13017158592 or +1312626 6799
Webinar ID: 93766082965
Passcode: 990474
International numbers available: https://edmondsschools.zoom.us/u/am64j8viR

## CALL TO ORDER

5:00 pm-Executive Session Legal Updates
6:30 pm- Business Meeting

## LAND ACKNOWLEDGEMENT

We acknowledge the original inhabitants of this place, the Sdohobsh people and their successors the Tulalip Tribes, who since time immemorial have taken care of, hunted, fished and gathered on these lands.
We respect their sovereignty, their right to self-determination, and we honor their sacred spiritual connection with the land and water. By acknowledging these homelands, we commit to working with tribal nations to further the education aims they have identified in our classrooms and schools.

## FLAG SALUTE

## APPROVAL OF AGENDA

## APPROVE SCHOOL BOARD MINUTES FOR:

May 18, 2021, Study Session
May 25, 2021, Business Meeting

## PUBLIC COMMENTS

The public comment item on the agenda is an opportunity for citizens to address the School Board. Items brought forward during this portion of the agenda will not be acted upon by the Board at this time. Questions may also be referred to the superintendent or staff for examination and later response.

Due to the COVID-19 pandemic the Board will accept written comments, only, until further notice. The Board will allow up to 30 minutes during the Board meeting to read comments received. The President will have the discretion to increase the time, as needed. Please click on the link below to submit your comments for the Board. Link will close at 4:00 pm the afternoon of the meeting

## CONSENT AGENDA

## Approve Personnel Actions

1. Single reading, approve personnel actions.

Approve Bills: Vouchers audited and certified by the auditing office required by RCW 42.24.080, and those expense reimbursement claims certified by RCW 42.24.090 have been recorded and the listing made available to the Board.

## Miscellaneous Consent Items

1. Single reading, approve surplus of Student Services Apple iPads.
2. Single reading, approve purchase of Server Infrastructure/Licensing.
3. Single reading, approve Resolution 21-24 Contracts for Supervisory Certificated Personnel

## CELEBRATION

The School Board will recognize individuals and groups that have contributed to the children and staff of the District. Nominees can be an employee, a parent, student(s) or a community member that may have supported students and staff in exceptional ways. The following will be recognized at this Board meeting:

The Board Celebrates the 2020-2021 Student Advisors to the Board Bandhna Bedi, Kai Hinch, Ritika Khanal, Isabel Vergara Ramos, and Cerelia Vu for the contribution they have made through their participation in School Board meetings this year.

## STUDENT PRESENTATION

Chase Lake Community Garden
Sean Silver, Principal and students Max Eldridge and Nicolas "Nico" Aguilar

## REPORTS

1. Re-Entry Update

Dr. Gustavo Balderas, Superintendent
2. Budget and Finance Report, Lydia Sellie, Executive Director

## PUBLIC HEARING

A public hearing is a formal proceeding held in order to receive testimony from all interested parties, including the general public, on a proposed issue or action. In accordance with state statute the Edmonds School District will hold a public hearing regarding the delegation of limited obligation bonds.

The Edmonds School District Board of Directors will take public input on the proposed Resolution \#21-23, "Authorization \& Delegation of Limited General Obligation Bonds." Resolution \#21-23 can be found linked to New Business Item \#1 below. Due to the COVID-19 outbreak the Board will accept written comments, only, until further notice.
Please click on the link below to submit your comments for the Board specific to the proposed Resolution 21-23.
https://docs.google.com/forms/d/e/1FAlpQLSegzo 2N9L139HYuxQjCkJWi 812x3Q5ApalXd lyUNBwmgg/viewform?vc=0\&c=0\&w=1

1. Second reading, adopt Policy \#4218 Family Language Access Plan

## NEW BUSINESS

1. First reading, (no action) adopt iReady Math Assessment System
2. Single reading, approve Resolution \# 21-23 Authorization \& Delegation of Limited General Obligation Bonds.
3. Single reading, approve OSPI Study and Survey for School Construction Assistance Program (SCAP).
4. Single reading, approve Project Award for Spruce Elementary Phase 2 Relocatable Classrooms Project.
5. Single reading, approve resolution \#21-20 Guaranteed Maximum Price Amendment for Spruce Elementary Phase 2 Addition and Replacement Project, and increase in total project budget.
6. Single reading, approve High School General Chemistry and Science Materials Adoption Recommendations.
7. First reading, (no action) approve revised Policy 5202- Federal Motor Carrier Safety Administration Mandated Drug and Alcohol Testing Program.

## PUBLIC COMMENTS

## BOARD MEMBER COMMENTS

## SUPERINTENDENT'S COMMENTS

## DISCUSSION TOPIC

1. Board Meeting live-streaming and archiving plan
2. Legislative updates

## FUTURE BOARD MEETING DATES

June 15, 2021-Study Session
June 22, 2021-Business Meeting
June 24, 2021-Study Session
June 25, 2021-Board Study Session
July 13, 2021-Business Meeting

ADJOURNMENT

EDMONDS SCHOOL DISTRICT BOARD OF DIRECTORS

| Carin Chase | Term Expires Dec. 2023 | Director District \#1 |
| :--- | :--- | :--- |
| Ann McMurray | Term Expires Dec. 2021 | Director District \#2 |
| Gary Noble | Term Expires Dec. 2023 | Director District \#3 |
| Deborah Kilgore | Term Expires Dec. 2021 | Director District \#4 |
| Nancy Katims | Term Expires Dec. 2023 | Director District \#5 |

## Board Minutes

Regular Business Meeting<br>Meeting Date: 06/08/2021<br>Submitted By: Allison Kaufmann

## Information

## Subject

Approval of School Board Minutes

Recommendation
It is recommended the Board approve the minutes for the 5.18.21 Study session and the 5.25.21 Business meeting.

## Background

## Fiscal Impact

## Attachments

5.18.21 Study Session Minutes
5.25.21 Business Meeting Minutes

## Form Review

## Edmonds

SCHOOL DISTRICT

## Edmonds School District No. 15 School Board Study Session Minutes

May 18, 2021

## CALL TO ORDER

Director Kilgore called the meeting to order at 9:10 am
Present: Ann McMurray, Gary Noble, Carin Chase, Nancy Katims, Deborah Kilgore

## DISCUSSION TOPIC

The Board of Directors met in a Study Session and received Equity Training. They discussed the Strategic Plan, Fall Board Meetings, and the Superintendent's Evaluation Process/Goals Review. No action was taken by the Board at this meeting.

Presentation Materials are attached.

## ADJOURNMENT

Director Kilgore adjourned the meeting at 2:55 pm.

Deborah Kilgore, Board President

## Gustavo Balderas, Board Secretary/Superintendent

EDMONDS SCHOOL DISTRICT BOARD OF DIRECTORS

| Carin Chase | Term Expires Dec. 2023 | Director District \#1 |
| :--- | :--- | :--- |
| Ann McMurray | Term Expires Dec. 2021 | Director District \#2 |
| Gary Noble | Term Expires Dec. 2023 | Director District \#3 |
| Deborah Kilgore | Term Expires Dec. 2021 | Director District \#4 |
| Nancy Katims | Term Expires Dec. 2023 | Director District \#5 |

# Edmonds 

SCHOOL DISTRICT
Each student learning, every day!

## School Board Regular Business Meeting Minutes

## May 25, 2021

To view a recording or transcript highlight and right-click the link below https://www.youtube.com/user/EdmondsSD

## CALL TO ORDER

Director Kilgore called the Executive Session to order at4:30 pm. The board was updated on a property matter. Director Kilgore adjourned the Executive Session at 4:55 pm.
Attending: Director Kilgore, Director Katims, Director Chase and Director Noble
Director Kilgore called the Study Session to order at 5:01 pm. The Board heard a presentation on Ethnic Studies. Director Kilgore adjourned the meeting at 6:03 pm.
Attending: Director Kilgore, Director Katims, Director Chase and Director Noble
Director Kilgore called the Business Meeting to order at 6:30 pm.

| Present: | Gary Noble, Carin Chase, Nancy Katims, Deborah Kilgore |
| :--- | :--- |
| Absent: | Ann McMurray |
| Staff | Gustavo Balderas, Dana Geaslen, Greg Schwab, Helen Joung, Rob Baumgartner, Victor Vergara, Lydia |
| Present: | Sellie, Debby Carter |

## LAND ACKNOWLEDGEMENT

Dr. Balderas acknowledged the original inhabitants of this place, the Sdohobsh people and their successors the Tulalip Tribes, who since time immemorial have taken care of, hunted, fished and gathered on these lands.

## FLAG SALUTE

Director Kilgore led the flag salute.

## APPROVAL OF AGENDA

Passed - Unanimously

## APPROVE SCHOOL BOARD MINUTES FOR:

1. May 11, 2021

Moved by Board Member Gary Noble, Seconded by Board Member Nancy Katims
Aye: Board Member Gary Noble, Board Member Carin Chase, Board Member Nancy
Katims, Board Member Deborah Kilgore
Passed - Unanimously

## PUBLIC COMMENTS

Due to the COVID-19 pandemic the Board accepted written comments. Directors read the comments received.

Transcript will be attached to published minutes.

## CONSENT AGENDA

Moved by Board Member Nancy Katims, Seconded by Board Member Gary Noble
Aye: Board Member Gary Noble, Board Member Carin Chase, Board Member Nancy Katims, Board Member Deborah Kilgore
Passed - Unanimously

## Approve Personnel Actions

1. Single reading, approve personnel actions.

Approve Bills: Vouchers audited and certified by the auditing office required by RCW 42.24.080, and those expense reimbursement claims certified by RCW 42.24 .090 have been recorded and the listing made available to the Board.

1. Single reading, approve General Fund Vouchers, Apr. 2021 Paydays
2. Single reading, approve Associated Student Body Fund Vouchers, Apr. 2021 Paydays
3. Single reading, approve Capital Project Fund Vouchers, Apr. 2021 Paydays
4. Single reading, approve Private Purpose Trust Fund Vouchers, Apr. 2021 Paydays
5. Single reading, approve Automated Clearing House (ACH) Remittance of Sales Tax, Payment of Employee Reimbursements and Payroll Direct Deposit; Various Funds, Apr. 2021 Paydays
6. Single reading, approve Payroll Vouchers as summarized on the Auditing Officer's Certification. There are no payments for employee taxable meal reimbursements requiring separate board approval in these payroll vouchers.

## Miscellaneous Consent Items

1. Single reading, approve School Board Resolution \#21-18 Edmonds School District membership renewal with Washington Interscholastic Activities Association (WIAA).
2. Single reading, approve waiver regarding (Professional Growth and Assessment (PGAP) Conference deadline for the Health Services Department for the 21-22 school year.
3. Single reading, approve waiver regarding changes to start time for Certificated Staff at Edmonds Elementary for the 21-22 school year.
4. Single reading, approve waiver regarding the start time for certificated staff at College Place Middle School for the 21-22 school year.
5. Single reading, approve waiver regarding planning periods at College Place Middle School for the 2021-22 school year.
6. Single reading, approve Memorandum of Understanding regarding provision of Speech/Language Pathologist Services for the 2021-22 school year.
7. Single reading, approve changes to Pay Rates for Classified Substitutes and Hourly Pay Rates

## STUDENT PRESENTATION

Brier Terrace Middle School presented Community Building Through Journalism. Principal Scott Morrison introduced Journalism teacher Krista Morales who shared that this is the first year that journalism has been offered as an elective. Students Savanah Coco-Barrett, Gelila Asgedom, Isaac Baumann, Ethan Hudson and Teya Shook spoke about their roles and experiences in producing the Bulldog Brief, their electronic publication.

Presentation is attached.

## REPORTS

1. Superintendent Balderas and district leadership provided an update on the current reentry status, in person graduation ceremonies, the county health picture, summer learning opportunities, and a look ahead at the 21-22 school year.

Presentation is attached.
2. Dr. Rob Baumgartner and Brandon Lagerquist provided an iReady Math Assessment System Report.

Presentation is attached.

## NEW BUSINESS

1. Single reading, approve Resolution \#21-17, Authorize Interfund Transfer of Invest Ed Funds from Private Purpose Trust Fund to Associated Student Body Fund.

Moved by Board Member Gary Noble, Seconded by Board Member Nancy Katims A roll call vote was called

Aye: Board Member Gary Noble, Board Member Carin Chase, Board Member Nancy Katims, Board Member Deborah Kilgore
Passed - Unanimously
2. Single reading, approve Project and Budget Authorization for the Boiler Replacement at Cedar Way Elementary School.

Moved by Board Member Carin Chase, Seconded by Board Member Nancy Katims A roll call vote was called

Aye: Board Member Gary Noble, Board Member Carin Chase, Board Member Nancy Katims, Board Member Deborah Kilgore
Passed - Unanimously
3. Single reading, approve Authorized Agents for OSPI Construction Grants Process

Moved by Board Member Gary Noble, Seconded by Board Member Nancy Katims A roll call vote was called.

Aye: Board Member Gary Noble, Board Member Carin Chase, Board Member Nancy Katims, Board Member Deborah Kilgore<br>Passed - Unanimously

4. Single reading, approve Resolution \#21-19 June Proclaimed LGBTQA+ Pride Month.

Moved by Board Member Nancy Katims, Seconded by Board Member Gary Noble Director Katims read a revised version of the resolution. The revisions in the fourth paragraph the addition of "2020" before the word study, "(Gay, Lesbian, and Straight Education Network)" after GLSEN, and the words "this year" removed. Added to the sixth paragraph were the words " to share age-appropriate readings and activities with students about the achievements, culture, and struggles of the LGBTQ+ community".
A roll call vote was called to adopt the resolution as read.
Aye: Board Member Gary Noble, Board Member Carin Chase, Board Member Nancy Katims, Board Member Deborah Kilgore
Passed - Unanimously
5. Single reading, approve Resolution \# 21-21 Edmonds School District Academic and Student Well-being Recovery Plan

Moved by Board Member Nancy Katims, Seconded by Board Member Gary Noble Noted to check the WAKids box for assessments used in the final document.
A roll call vote was called.
Aye: Board Member Gary Noble, Board Member Carin Chase, Board Member Nancy Katims, Board Member Deborah Kilgore
Passed - Unanimously
6. First reading, (no action) adopt Policy \#4218 Family Language Access Plan

## BOARD MEMBER COMMENTS

Ritika Khanal, Student Advisor said she was excited for Pride Month, a step forward in terms of equity. She said the Journalism presentation highlights the need for support and funding for
electives to get students involved and keep them engaged.
Isabel Vergara Ramos, Student Advisor really loved the journalism elective presentation and that it is a great opportunity for students. She was glad that the Pride Month resolution was adopted. She has noticed Edmonds School District providing helpful information for her as she prepares for college, and she appreciates the support from counselors.

Cerelia Vu, Student Advisor, was excited for the adoption of the Pride Month resolution and the support it provides for the students.

Director Katims thanked Krista Morales and students for the presentation. She also thanked Brandon Lagerquist, Rob Baumgartner and their team for all they are doing and that she knows how hard it is to implement an assessment system. She is proud of adopting the Pride Month resolution. She shared the Equity interest of the Board, and that at last week's retreat they received a two-hour equity training. The training included parts staff are also receiving. She said the Board will continue learning with an interest in equity issues.]

Director Chase is proud of the district for being inclusive and supporting initiatives for the community. She spoke of Bill 5044, WSSDA Equity training for school directors and Boards. She shared that WSSDA is creating some training to meet the requirements of the bill. The legislative committee met last week and a report will be out soon for bills to consider later this month, and she will share it when it is available. She asked the Board members to hold June 10th for a meeting with Representatives, Larsen and Jamayapal.

Director Noble thanked students for presenting, saying the class is a boon for Hawkeye at Mountlake Terrace High School. He appreciated the iReady presentation for the information and comprehensive report. He noted the need for an assessment tool and that the process has been thorough. He shared he is proud to have approved June Pride Month

Director Kilgore reminded her colleagues of the Superintendent review, and to please look at the documents he sent. She shared she is really pleased about adopting the Pride Resolution and thanked Dr. Katims for taking the lead. Dr. Katims for taking the lead. She was appreciative of the iReady presentation as well as the long process, noting no product is perfect. She was in favor of the implementation and the need for a broad look at all we should be doing to support our students.

## SUPERINTENDENT'S COMMENTS

Dr. Balderas said it is about systems and culture in school districts for them to be effective and Edmonds is continuing to work on these with the strategic plan based on the Board's guidance and vision. He noted what they saw tonight, with Krista Morales and her students, hands on learning and the engagement that is had. He said it is about good first teaching, what happens in the classroom the very first time and making sure that we have continued professional learning wrapped around the right interventions with the right data to inform student placement and meet students at their level

He appreciated the Board for their engagement to do the hard work. He thanked them for being champions for the equity work and looked forward to the conversations to continue. He thanked Director Katims and the whole Board for the Pride Month resolution noting the positive impact it will have for our students.

## FUTURE BOARD MEETING DATES

June 8, 2021-Executive Session-Legal Updates
June 8, 2021-Business Meeting

## ADJOURNMENT

Director Kilgore adjourned the meeting at 8:52 pm.

## Deborah Kilgore, Board President

## Gustavo Balderas, Board Secretary/Superintendent

## EDMONDS SCHOOL DISTRICT BOARD OF DIRECTORS

| Carin Chase | Term Expires Dec. 2023 | Director District \#1 |
| :--- | :--- | :--- |
| Ann McMurray | Term Expires Dec. 2021 | Director District \#2 |
| Gary Noble | Term Expires Dec. 2023 | Director District \#3 |
| Deborah Kilgore | Term Expires Dec. 2021 | Director District \#4 |
| Nancy Katims | Term Expires Dec. 2023 | Director District \#5 |

Student Advisers: Bandhna Bedi, Kai Hinch, Ritika Khanal, Isabel Vergara Ramos, Cerelia Vu

# Regular Business Meeting 

## Information

## Subject

Personnel Actions

## Recommendation

It is recommended that the Board approve these Personnel Actions.

## Background

A copy of the Personnel Actions is attached for the Board's information and approval.

## Fiscal Impact

## Attachments

## Personnel Actions 6.8.21

Inbox
Superintendent's Office
Form Started By: Victoria Alunni
Final Approval Date: $05 / 28 / 2021$

## Form Review

## Personnel Actions

|  |
| :--- |
| Fiscal Impact |
| Attachments |

Reviewed By
Allison Kaufmann

Date
05/28/2021 06:41 AM
Started On: 05/27/2021 03:24 PM

Certificated Retirements
Effective Date

| Masaoka, Adah | $8 / 31 / 2021$ |
| :--- | ---: |
| Hathaway, Patricia | $6 / 30 / 2021$ |
| Cuba, Eileen | $8 / 31 / 2021$ |
| Erickson, Laurie | $8 / 31 / 2021$ |
| Bridges, Dorothy | $8 / 31 / 2021$ |
| Seago, Lori | $8 / 31 / 2021$ |
| Spooner, Patrick | $6 / 30 / 2021$ |
| Shumway, Ana | $8 / 31 / 2021$ |
| Smithers, Gary | $8 / 31 / 2021$ |
| Hartley, Camille | $8 / 31 / 2021$ |
| Schellenberger, Henry | $8 / 31 / 2021$ |
| Harris, Marilyn | $8 / 31 / 2021$ |
| Moliter, William | $8 / 31 / 2021$ |
| Wilson, Nathaniel | $6 / 30 / 2021$ |
| Sand, Debra | $6 / 30 / 2021$ |
| Hereford, Mary | $6 / 30 / 2021$ |
| Webb, Cathy | $6 / 30 / 2021$ |
| McGivern, Deborah | $6 / 30 / 2021$ |
| Walter-Bell, Anna | $6 / 30 / 2021$ |
| Wrolstad, Cathi | $8 / 31 / 2021$ |
| Glodowski, Mary | $8 / 31 / 2021$ |
| Fike, Mitzi | $8 / 31 / 2021$ |
| Sullivan, Thomas | $6 / 30 / 2021$ |
| Donahue, Paula | $8 / 31 / 2021$ |

Certificated Resignations
Effective Date
****************************************************************************************************

| Betz, Patricia | $8 / 31 / 2021$ |
| :--- | ---: |
| Caldwell, Deborah | $8 / 31 / 2021$ |
| Presho, Scott | $8 / 31 / 2021$ |
| Wilson, Lawrence | $8 / 31 / 2021$ |
| Alexander, Sandra | $8 / 31 / 2021$ |
| Hendrix, Laurel | $8 / 31 / 2021$ |
| Zwahl, Brenda | $8 / 31 / 2021$ |
| Cooke, Julie | $8 / 31 / 2021$ |
| Paddock, Julie | $8 / 31 / 2021$ |
| Catford, Teresa | $8 / 31 / 2021$ |
| Knutsen, Beth | $8 / 31 / 2021$ |
| Dennis, Terra Lea | $8 / 31 / 2021$ |
| McGaughey, James | $8 / 31 / 2021$ |
| Davis, Tiffany | $8 / 31 / 2021$ |
| Landon, James | $8 / 31 / 2021$ |
| Thomas, Liane | $8 / 31 / 2021$ |
| Gray, Gayle | $8 / 31 / 2021$ |
| Shoda, Taryn | $8 / 31 / 2021$ |
| Heinekin, Karyn | $8 / 31 / 2021$ |
| Carroll, Sandra | $8 / 31 / 2021$ |
| Maxwell, Rosemarie | $8 / 31 / 2021$ |

N/A - Individual is in continuing position. Ending Date is not applicable.

Report to the School Board: Human Resources Activity

| Jorstad, Carolyn |  |
| :--- | ---: |
| Lindley, Amanda | $8 / 31 / 2021$ |
| Watkins, Amy | $8 / 31 / 2021$ |
| Wilder, Jane | $8 / 31 / 2021$ |
| Rink, Taira | $8 / 31 / 2021$ |
| Dolman, Kurtis | $8 / 31 / 2021$ |
| Curtis, Jamie | $8 / 31 / 2021$ |
| Wone, Khin | $8 / 31 / 2021$ |
| Ramsey, Jacob | $8 / 31 / 2021$ |
| Saenz, Maria | $8 / 31 / 2021$ |
| Jones, Stacey | $8 / 31 / 2021$ |
| Nelson, Kimberly | $5 / 28 / 2021$ |
| Anderson, Sharon | $8 / 31 / 2021$ |
| Boone, Kelsey | $8 / 31 / 2021$ |

Certificated Reduction in Force Effective Date
****************************************************************************************************
Hannaford, Stephanie 6/30/2021
Classified Elections Effective Date Ending Date
****************************************************************************************************

| Arford, Debra | Classfied Nurse | $09 / 01 / 2021$ | N/A |
| :--- | :--- | :--- | :--- |
| Rathe-Music, Sandra | Custodian | $05 / 24 / 2021$ | N/A |
| Thompson, Carol | Food Service Worker | $09 / 01 / 2021$ | N/A |

Classified Resignations Effective Date
$* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *$

| Cooper, Chana | Paraeducator | $06 / 11 / 2021$ |
| :--- | :--- | :--- |
| Dawn, Laura | Paraeducator | $08 / 31 / 2021$ |
| Fiorillo, Catherine | Office Manager | $08 / 02 / 2021$ |
| Grooms, Jeremiah | Custodian | $06 / 02 / 2021$ |
| Johnson, Roger | Bus Driver | $05 / 19 / 2021$ |
| Nguyen, Timothy | Paraeducator | $05 / 28 / 2021$ |
| Rodriguez, Maria | Food Service Worker | $05 / 25 / 2021$ |

Classified Retirements
Effective Date
****************************************************************************************************

| Andrews Smith, Patricia | Paraeducator | $08 / 31 / 2021$ |
| :--- | :--- | :--- |
| Chin, Mila | Food Service Worker | $08 / 31 / 2021$ |
| Dormaier, Rhonda | Elementary Office Support Secretary | $08 / 31 / 2021$ |
| Hart, Diane | Paraeducator | $08 / 31 / 2021$ |
| Landry, Carolyn | ASB Secretary | $08 / 31 / 2021$ |
| Lehnert, Martha | Paraeducator | $08 / 27 / 2021$ |
| Morgan, Ruth | Paraeducator | $08 / 31 / 2021$ |
| Remter, Shawn | Bus Driver | $07 / 30 / 2021$ |

Consent 1.
Regular Business Meeting
Miscellaneous consent
Meeting Date: 06/08/2021
Submitted By: Devone Miles, Purchasing Agent
Submitted For: Kath Pothier

## Information

## Subject

Surplus of Student Services Apple iPads

## Recommendation

It is recommended that the board approve the surplus of 263 Apple iPad devices.

## Background

In an effort to align iPad replacement with other district equipment replacement schedules and ensure effective and safe devices are available for staff and students, Student Services is seeking to surplus 263 iPad devices and intends to purchase new ones to be configured and ready for use in the 21-22 SY.

The iPads are used for individual student and classroom based learning activities including Augmentative and Alternative Communication for students with significant barriers to other communication methods. iPads are used in special education when the unique functionality of an Apple device is required for the individual student or programmatic needs of that classroom (some applications and programs are only available on Apple devices).

In the past, the Technology Department has not been involved in the management of these iPads. Currently, all AT iPads do not meet the regulations for ensuring student safety, privacy and security. iPads have not had an upgrade cycle like other technology in the district.

Currently 95\% of Student Services iPads (staff and student assigned) are older than 4 years. Laptops and chromebooks are on a 4 year cycle of replacement through the tech department using Tech Levy. The Technology and Assistive Technology teams have agreed to a methodology of managing the enrollment in Jamf (management software for the Apple platform) and ensuring necessary filter and security settings for all iPads. Necessary security measures need to be implemented with all existing devices requiring all iPads be turned in at the end of the 20-21 school year.

Using Tech Levy money, the plan is to create a 3-4 year replacement cycle for district iPads. The first step in the regular replacement process will be to replace the oldest devices for the 21-22 SY. See list of proposed surplus. Surplussed devices will be sent to a buyback program and funds will offset cost of replacement.

The Technology team will take over the set-up of all iPads coming into the district to ensure that they meet the safety, privacy and security requirements on the management software. The AT team will continue to provide management of groups (teacher or itinerant provider groups and student groups) for assignment of apps and programs.

## Fiscal Impact

## Fiscal Year: <br> 20-21

Amount Requested:

## Source of Funds:

## Account Code:

## Fiscal Impact:

## Attachments

IPad Surplus
Inbox
Student Services Exec Director
Budget \& Finance Exec Dir
Superintendent's Office
Form Started By: Devone Miles
Final Approval Date: 05/21/2021

## Form Review

Reviewed By
Dana Geaslen

Allison Kaufmann

Date
05/21/2021 10:43 AM
05/21/2021 04:03 PM
05/21/2021 04:19 PM
Started On: 05/21/2021 06:11 AM

## SERIAL AND MODEL

## F9FTV9STHLFC;"iPad (5th gen)

| F9FTVCNYHLFC;"iPad (5th gen) |
| :--- |
| DMPMKVLCFK10;"iPad Air (WiFi)" |
| DMPSTM71HG5F;"iPad Air 2 (WiFi)" |
| DMPSTM78HG5F;"iPad Air $2(\mathrm{WiFi}) "$ |
| DMPSWX0LHG5F;"iPad Air $2(\mathrm{WiFi}) "$ |
| DMPSWX7RHG5F;"iPad Air $2(\mathrm{WiFi}) "$ |
| DMPSWX6SHG5F;"iPad Air $2(\mathrm{WiFi}) "$ |
| DMPT58TSHG5F;"iPad Air $2(\mathrm{WiFi}) "$ |
| DMQQQ0NNFK14;"iPad Air (WiFi)" |

DMPR5BEFFK14;"iPad Air (WiFi)"
DMPR5T1ZFK14;"iPad Air (WiFi)"

| DMPRC1D6FK14;"iPad Air (WiFi)" |
| :--- |
| F6QRG056DFHW;"iPad 2 (WiFi) (rev A)" |
| \| |

DMPS13C3G5VT;"iPad Air 2 (WiFi)"
DMPS139VG5VT;"iPad Air 2 (WiFi)"
F6QS20V7FK10;"iPad Air (WiFi)"
F9GTX6ZGHLFC;"iPad (5th generation
F9GTX6WSHLFC;"iPad (5th generation
F9GTX2P6HLFC;"iPad (5th generation
F9GTX716HLFC;"iPad (5th generation
F9GTX71QHLFC;"iPad (5th generation
F9GTX2GMHLFC;"iPad (5th generation
F9GTX6UQHLFC;"iPad (5th generation
F9GTX5Q0HLFC;"iPad (5th generation
F9GTX5UFHLFC;"iPad (5th generation
F9GTX64CHLFC;"iPad (5th generation
F9GTX6G5HLFC;"iPad (5th generation
F9GTX6Z9HLFC;"iPad (5th generation
F9GTX6APHLFC;"iPad (5th generation
F9GTX5BNHLFC;"iPad (5th generation
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Consent 2.
Regular Business Meeting
Miscellaneous consent
Meeting Date: 06/08/2021
Submitted By: Christian Bailey

## Information

Subject<br>Approve Purchase of Server Infrastructure/Licensing

## Recommendation

It is recommended that the school board approve the replacement of the district's aging virtualized server and data storage system.

## Background

The district currently has two virtualized server and data storage systems, a primary system and a redundant off-site system. With the exception of the district's security camera system, all of the district's 165 servers and related storage are virtualized on these systems. In the event of a down primary server, its backup server will take over. In the event of a power failure, internet outage, fire, or other disaster at the primary site, the systems at the back-up site will take over.

The virtualized server and data storage systems are aging and need to be replaced. The various components of our current systems are 6-8 years old. It is recommended that we replace these systems in the summer of 2021 when the work can be done with the least amount of disruption to district staff and students. These systems will be functionally end-of-life as of December 2021. The manufacturer will no longer support the systems after this date and will no longer manufacture replacement parts.

The attached quote includes the hardware and software required to host the servers and data, the annual maintenance contract to maintain the hardware for the next seven years, and the annual maintenance contract to maintain the software for the next four years, in addition to professional services for configuration.

The hardware is expected to serve the district's needs for approximately 7 years, and will be covered by a warranty for the duration of that time. The software support will need to be renewed in 2025 for 3 years to align with the expected life of the hardware. That cost, when known, will be factored into the 2024 Capital/Technology Levy.

This purchase is being made through the Sourcewell 081419 Master Code

Contract. The vendor is CDW-G. This project was a planned expense in the 2020 Capital/Technology Levy.

## Fiscal Impact

## Fiscal Year: 2020-21

Amount Requested: $\$ 808,647.24$
Source of Funds: 2020 Technology Levy

## Account Code: 6494

## Fiscal Impact:

This project was a planned expense in the 2020 Capital/Technology Levy.

## Attachments

Virtualization Infrastructure Quote
Inbox
Bus Serv -Purchasing: MilesD
Budget \& Finance Exec Dir
Superintendent's Office
Form Started By: Christian Bailey
Final Approval Date: 05/28/2021

| Form Review |  |
| :--- | :--- |
| Reviewed By | Date |
| Devone Miles | $05 / 27 / 2021$ 02:53 PM |
| Lydia Sellie | $05 / 27 / 2021$ 04:13 PM |
| Allison Kaufmann | 05/28/2021 06:41 AM |
|  | Started On: 05/27/2021 02:28 PM |



Prepared For Customer \#:

Attention: Peter Crawford
Project: Data Center Date: May 14, 2021

Payment Type: NET30
Contract: Sourcewell 081419 Master Code

Submitted By: Mallory Moylan
Account Manager
Phone: (312) 547-2172
E-Mail: mallmoy@cdwg.com
Quote \#: 3000084592308.10

Remit To: CDW Government
75 Remittance Dr.
Suite 1515
Chicago, II 60675


Prepared By: Marion Massey (Solution Architect Support Specialist)
Prices are contingent on final pricing approval from Manufacturer
Quote provided based on specification provided by customer. No workload validation has been done.
The terms and conditions provided on this link apply: https://www.cdwg.com/content/cdwg/en/terms-conditions.html Applicable Shipping not shown.


|  | Qty. | Part Numbers | Description |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 4 \\ & 4 \\ & 4 \end{aligned}$ | $\begin{array}{\|l} \hline 340-B Z G W \\ 340-C O P R \\ 995-8131 \end{array}$ | Dell EMC XC640ENT Shipping <br> PowerEdge R640 $x 4$ and $\times 10$ Drive Shipping Material Information Only, Channel Partner Installation Required |  |  |
|  |  |  |  |  | Extended Sell |
|  |  |  |  | Services Total: | \$0.00 |
|  |  |  |  | Extended Sell |  |
| Solution Total: $\quad$ \$132,688.44 |  |  |  |  |  |
|  |  |  |  | Estimated Taxes: | \$27,864.58 |
|  |  |  |  | Grand Total: | \$160,553.02 |
|  |  |  |  | System Quantity: | 2 |
|  |  |  |  | Extended Total: | \$321,106.04 |

Pricing expires 30 calendar days from date on Proposal
Prepared By: Marion Massey (Solution Architect Support Specialist)
Prices are contingent on final pricing approval from Manufacturer
Quote provided based on specification provided by customer. No workload validation has been done.
The terms and conditions provided on this link apply: https://www.cdwg.com/content/cdwg/en/terms-conditions.html Applicable Shipping not shown.


Pricing expires 30 calendar days from date on Proposal
Prepared By: Marion Massey (Solution Architect Support Specialist)
Prices are contingent on final pricing approval from Manufacturer
Quote provided based on specification provided by customer. No workload validation has been done.
The terms and conditions provided on this link apply: https://www.cdwg.com/content/cdwg/en/terms-conditions.html Applicable Shipping not shown.

## SERVICES PROPOSAL

## PRoJECT Fundamentals

| Project Name: | Nutanix Cluster Deployment Services - vSphere \& VMware <br> NSX-V to NSX-T Implementation | Requested By (Sales): <br> Mallory Moylan <br> (312) 547-2172 <br> mallmoy@cdwg.com |
| :--- | :--- | :--- |
| Customer Name: | Edmonds School District \#15 | Submitted By (SA/ISA): |
| CDW Affiliate: | CDW Government | Besnik Zekiri, Todd King |

## Customer-Designated Locations

| Location(s) | Service(s) |  |  |
| :---: | :---: | :---: | :---: |
| Edmonds School District \#15 TBD | Assessment Configuration Design Implementation | Knowledge Transfer Project Management Reconfiguration Reinstallation | Staff Augmentation Support Training Custom Work |
| Edmonds School District \#15 TBD | Assessment Configuration Design Implementation | Knowledge Transfer Project Management Reconfiguration Reinstallation | Staff Augmentation Support Training Custom Work |

## Project Scope

This scope of engagement, together with the Agreement between the CDW entity selling the Services described herein ("Seller" or "Provider"), and the Customer ordering such Services ("Customer"), shall be deemed to be a contract upon Seller’s acceptance of Customer’s Purchase Order ("PO").

## SERVICES SUMMARY

Seller will perform the following:

- Install and configure a Nutanix cluster consisting of up to eight (8) nodes utilizing VMware vSphere as the hypervisor.


## Nutanix Cluster Deployment Services - vSphere

Services will consist of the items listed below ("Services"):

- Pre-Engagement Call (Customer Kick-off Meeting)
o Review scope and expectations
o Identify stakeholders and key contacts
o Identify project constraints and limitations
- Cluster Design and Planning Session
o Remote session with Customer and Seller to discuss design and planning variables
o Perform verification of site readiness for service delivery
o Work with Customer to design the layout and configuration of the Nutanix cluster
- Discussions around layer 2 data and management networking, cluster layout, design variables, etc.
- Discussions around VMware vSphere integration and design variables
o Complete discovery, configuration, and Nutanix cluster pre-installation checklist and review with Customer
o Complete solution summary documentation and applicable Visio drawings
- Nutanix Cluster Deployment and Configuration
o Performs the pre-site installation checklist with Customer team
- Confirms network and connected switch settings
- Conducts a site readiness assessment for project
- Completes the Nutanix pre-installation site checklist
o Racks, cables, and power testing of Nutanix cluster
- If using $3^{\text {rd }}$ party hardware, the appropriate prep SoW module must be added to the scope to account for connectivity and firmware efforts
- Seller will assist Customer in racking and cabling verification to ensure proper physical installation and connectivity
o Initial Imaging and OS installation for all nodes in cluster via Nutanix Foundation
- Validation of
- IP, DNS, NTP, data network settings
- Node/cluster intercommunication
- Controller Virtual Machine (CVM) Validation
- Seller will assist Customer with installing and configuring a local Nutanix Foundation appliance for purposes of imaging.
- VMware vSphere Integration
o _ If Customer has compatible vCenter server already in place, Seller can integrate Nutanix cluster as a new environment within the existing vCenter infrastructure
- Configuration of vSphere cluster (DRS/HA) for use by Nutanix cluster
- Configuration of vCenter, storage, and virtual networking for use by Nutanix cluster
o If Customer does not have vCenter in place (or does not wish to integrate with it), a new vCenter Server appliance needs to be installed and configured by the Seller. This is handled by an additional SOW module that needs to be added to the project to bring this in scope.
- Prism Central Deployment and Configuration
o Deployment of Prism Central VM
o Configuration and integration of Prism Central to new/existing clusters
o If PrismPro license was purchased, install license to unlock PrismPro features
- Functional Demonstration and Knowledge Transfer around Nutanix vSphere cluster
o Prism Dashboard Overview and Administration
o vCenter Web Client Overview and Administration
o Functional Demonstration of Nutanix administration
- Nutanix AOS Upgrades via Prism
- Addition of nodes to Nutanix cluster
- NCC Health Check
- If PrismPro license was purchased and installed, overview of PrismPro additional features
o Workload Migration
- Migration or creation of up to five (5) non-production VMs to Nutanix cluster, using available tools


## New Cluster - Metro Availability Configuration

Services will consist of the items listed below ("Services"):
o Design discussions around Metro Availability deployment considerations and network configuration variables for synchronous replication
o Configure Metro Availability services:

- Protection Domain configuration
- Availability Policy configuration (Active/Standby)

0 Test process of 1 non-production datastore promotion via Metro Availability Policy

- Non-Production VMs only to test local datastore access


## CUSTOMER RESPONSIBILITIES

- Customer needs to have a 10 GbE Top-of-Rack (TOR) switch to use with the Nutanix cluster and it must have the appropriate number of 10 GbE open ports available/licenses to use those ports. Otherwise Customer will need to purchase a TOR switch and/or additional licenses to open those ports.
- Customer needs to have a 1 Gb management switch to use with the Nutanix cluster and it must have the appropriate number of open ports available/licenses to use those ports. Although not recommended, the same switch for ToR connectivity can be used for management if the applicable ports are available.
- Configuration of network switches for data and management will be completed by the Customer unless explicitly stated otherwise in the "Services Summary" section above.
- Assist Seller with project planning and design variable gathering.
- Customer is responsible for creating a backup of the VMs to be test migrated
- Customer shall provide Provider with detailed and accurate information regarding its current network environment, including information regarding network provisioning, TCP/IP settings, server hardware details, software versions, or regulatory requirements. Inaccurate information may add time and cost to the project.
- Customer shall perform a full working backup of its network prior to commencement of the Services. Seller is not responsible for lost data.
- Provide qualified personnel who will perform Customer's obligations under this SOE, make timely decisions necessary to move performance of the Services forward, participate in this project to the extent reasonably requested by Seller and reasonably assist Seller with its performance of the Services
- Provide Seller’s personnel with appropriate levels of access and privilege to systems and information necessary for Seller's performance of the Services
- Limiting access to Customer's network and/or facilities only as needed to perform the Services
- Make any final decisions regarding, and take responsibility for the implementation of any recommendations or potential solutions provided by Seller under this SOE
- Site Preparation:
o All hardware will be received and inventoried prior to scheduling Seller to arrive onsite. All hardware/software/firmware are compatible in accordance with manufactures support matrix(s)
o Complete all change control task(s) and schedule all required maintenance windows.
o Customer shall assume all responsibility for site preparation, including space, cabling, HVAC and electrical requirements that have already been provided.
o Customer is responsible for providing customer-owned or licensed copies of any customer or third-party software that Seller is required to install on the Customer's behalf. This includes VMware vSphere and vCenter licensing as needed for the project.


## ASSUMPTIONS AND ACKNOWLEDGEMENTS

- Services will be delivered onsite.
- Customer's personnel will be available on a timely basis, and when reasonably requested by Seller, Customer's personnel will provide input, review the Services being performed and the items provided by Seller, answer questions, provide signoff, and allow Seller to gather and validate information, perform reviews and obtain other input
- The scope and objectives of this project will be jointly managed by Customer and Seller to better ensure completion of the project within the anticipated schedule
- Customer acknowledges and agrees that Seller will not process personal data that is subject to applicable data security and privacy laws ("Personal Data") within the scope of the Services, and that Customer will restrict Seller from accessing any Personal Data during the performance of the Service


## ENGAGEMENT PLANNING AND MANAGEMENT

The following planning tasks will be performed:

1. Internal project technical planning
2. External project meeting
3. Project management

## OUT OF SCOPE

- Firmware upgrades for non-Nutanix hardware (3 $3^{\text {rd }}$ party hardware platforms) unless otherwise stated with the appropriate services module.
- Creation and configuration of new vCenter appliances, unless otherwise stated with the appropriate services module.
- Nutanix Metro Availability
- Configuration of LAN/SAN switches
- Remediation of any issues or problems is out of scope for this engagement
- Seller will not perform Services for Customer's foreign affiliates if any
- Any other Services not specified herein
- Replacement of any security certificates.
- Any P2V conversions
- Network configuration of switches/non-Nutanix devices to support DR configuration
- Recovery or operability testing on production VMs
- Tasks not defined within this SoW


## ITEM(S) PROVIDED

| Item | Description | Format |
| :--- | :--- | :--- |
| Nutanix Planning and Design Pre-installation checklist for the project <br> Documentation | Design variable documentation | PDF |
| Nutanix Cluster As-Built <br> Documentation | Vendor Procedural documentation |  |
| Nutanix Administration <br> Documentation | PDF/URL |  |

## AsSESS NSX-V TO NSX-T MIGRATION READINESS

This service provides a transition assessment between an existing VMware NSX ${ }^{\circledR}$ Data Center for vSphere ${ }^{\circledR}$ deployment to a future VMware NSX-T Data Center desired state. This is achieved through a comprehensive review of the current vSphere and NSX ${ }^{\circledR}$ Data Center for vSphere ${ }^{\circledR}$ environment configurations. VMware will document and review final pre-transition state and proposed transition end state. The customer is provided with a document that describes the VMware recommended transition path through a high-level functional transition plan.

| Specification | Parameters | Description |
| :--- | :--- | :--- |
| Use Case |  |  |
| NSX-V Environment | Up to two (2) | VMware NSX-V Manager instances within the scope <br> of the assessment activities. |
| VMware vCenter | Up to two (2) | VMware vCenter within the scope of assessment <br> activities. |
| NSX-V | Four (4) Edge Nodes | Edge Migration for routing function |

## DESIGN AND PLAN NSX-T ENVIRONMENT

This service provides a Design for the deployment to a future VMware NSX-T Data Center desired state. This is achieved through a comprehensive plan for the deployment of NSX-T as the destination of the migration. Evaluation of all the features required from the migration assessment and current environment are utilized for the design

| Specification | Parameters | Description |
| :--- | :--- | :--- |
| Use Case |  |  |
| NSX-T Environment | Up to one (1) | VMware NSX-T Managers instance within the scope <br> of the assessment activities. |
| VMware Compute Manager | Up to two (2) | VMware vCenter Connects to NSX-T as a compute <br> manager for inventory and integration. |
|  |  |  |

NSX-T Edge Deployment
NSX-T Distributed Firewall rules

Up to two (2) cluster zero

NSX Edge services are out of scope.
Distributed Firewall is out of scope

## Migrate Current environment in-PLAce from NSX-V to NSX-T

Design, plan and migration of VMware NSX ${ }^{\circledR}$ Data Center for vSphere ${ }^{\circledR}$ platform to VMware NSX-T Data Center. This requires preparation work to be done on existing environment and infrastructure as well as new greenfield NSX-T Management cluster to be deployed in advance.

| Specification | Parameters | Description |
| :--- | :--- | :--- |
| Requirements review and design |  | Requirements review and design workshop to <br> ascertain Customer environment readiness before <br> migration. The result of these workshops is used to <br> establish design parameters for migration <br> Number of existing NSX for vSphere instances to be <br> used as the source of migration |
| NSX-V Manager instances | Up to two (2) | Sites NSX will be deployed |
| Data Center | Up to two (2) | Number of ESXi hosts that will be migrated to per <br> site |
| ESXi hosts for destination | Up to four (4) per DC | Number of Load balancers migrated <br> NSX Load balancers |
| NSX Distributed Firewall Rules | Zero (0) | No Firewall rules currently running on production <br> workloads |
| NSX Logical Segments | Up to four (4) | Logical Segments to be migrated |
| NSX Knowledge Transfer | Up to twelve (12) hours | Knowledge transfer on NSX-T infrastructure <br> components, logical networks, routing, micro- <br> segmentation, and operations |
|  |  |  |

## RESPONSIBILITIES

As part of this engagement, Customer is responsible for providing the following:

1. Customer is responsible for, and assumes any risk associated with any problems resulting from the content, completeness, accuracy and consistency of any data, materials and information supplied by Customer.
2. Customer is responsible for the design and implementation of all infrastructure necessary to support the deployment of VMware NSX including vSphere, physical infrastructure, migration of workloads to the new environments, requisite physical network architecture and implementation changes.
3. Configuration of the physical network, server, and storage
4. Current environment being migrated must be vSphere 6.7 U 1 with NSX-V 6.4 or later with NICs to support N-VDS, consolidated VDS requires vSphere 7

As part of this engagement, Seller is responsible for the following:

1. Manage any support issues which may arise throughout the duration of the Design

## Project Assumptions

1. Seller is not responsible for modifications beyond the initial configuration engagement.
2. Customer has a current VMware license.
3. Customer has reviewed each vendor's policy for operating system and application virtualization and is responsible for license compliance.
4. Design sessions are limited to NSX-T deployed on vSphere components
5. NSX-T Design is a two (2) site with one edge cluster per site
6. Design is limited to two (2) site with a maximum of two (2) vCenter with four (4) hosts each
7. Migration will utilize lift and shift of the environment not in place which will require migration of the virtual machines
8. Cross vCenter Migration may require upgrade see https://kb.vmware.com/s/article/2106952 for details
9. In place migration of Cross-VC NSX-Vis not supported in NSX-T Migration Coordinator 3.1.1
10. Project management and site readiness tasks will be performed
11. After hours work will be conducted in a two, four (4) hour change windows or a single maximum eight (8) hour change window
12. Adequate hardware resources to deploy NSX-T Managers, Edge Node and NSX-T appliances

## Out OF ScOPE

Tasks outside the statement of work include, but are not limited to:

1. Implementation of any products not in the scope
2. Replacement of any security certificates.
3. Additional Use Cases not specified in the scope
4. Design or Integration with any $3^{\text {rd }}$ party systems or applications
5. Storage Migration or VM Migration with HCX
6. Integration with any cloud management suites such as VMware vRealize Automation or Orchestration
7. Integration with any container platforms such as Kubernetes or Pivotal Container Services
8. Any high availability configuration for vCenter or the Platform Services Controller
9. Analyzing Customer workloads for use in NSX environment
10. Resolving Physical Network Connectivity issues
11. Configuration of Physical Network Infrastructure
12. Configuration of Server or Storage Hardware
13. Application coding or scripting
14. Seller is not responsible for modifications beyond the initial configuration engagement.

Services not specified in this SOW are considered out of scope and will be addressed with a separate SOW or Change Order.

## ITEM(S) PROVIDED TO CUSTOMER

Table 1 - Item(s) Provided to Customer

| Item | Description | Format |
| :--- | :--- | :--- |
| Design Document | Documentation of Design including use cases and <br> implementation of environment | PDF |

## Customer Resource Requirements

Table 2 - Customer resource commitments assumed

| Role | Description | Participation |
| :--- | :--- | :--- |
| Executive Sponsor | Executive Sponsors of the initiative | $2 \%$ |
| IT Management | IT Management responsible for engagement ownership | $5 \%$ |


| Role | Description | Participation |
| :--- | :--- | :--- |
| Application owners | IT/Business owners of required applications associated with the <br> applications may be needed to verify functionality | $5 \%$ |
| Technical Expertise | Infrastructure, Application, Compute, Database, Telecommunications <br> expertise associated with the project | $50 \%$ |
| Project Management | Project Management responsible for the engagement | $50 \%$ |

Services not specified in this SOW are considered out of scope and will be addressed with a separate SOW or Change Order.

## Project Scheduling

Customer and Seller, who will jointly manage this project, will together develop timelines for an anticipated schedule ("Anticipated Schedule") based on Seller’s project management methodology. Any dates, deadlines, timelines or schedules contained in the Anticipated Schedule, in this SOW or otherwise, are estimates only, and the Parties will not rely on them for purposes other than initial planning.

## Total Fees

The total fees due and payable under this SOW ("Total Fees") include both fees for Seller’s performance of work ("Services Fees") and any other related costs and fees specified in the Expenses section ("Expenses"). Unless otherwise specified, taxes will be invoiced but are not included in any numbers or calculations provided herein.

Seller will invoice for the Total Fees.

## SERVICES FEES

Services Fees hereunder are FIXED FEES, meaning that the amount invoiced for the Services will be $\$ 67,315.00$.
The invoiced amount of Services Fees will equal the amount of fees applicable to each completed project milestone, as specified in Table 1.

Table 2 - Services Fees

| Project Milestones | Percentage | Fees |
| :--- | ---: | ---: |
| Signed SOW | $50 \%$ | $\$ 33,657.50$ |
| Completion of Work | $50 \%$ | $\$ 33,657.50$ |
| Totals | $\mathbf{1 0 0 \%}$ | $\$ 67,315.00$ |

## EXPENSES

All services under this SOW will be performed remotely; therefore, neither travel time nor direct expenses will be billed for this project.

The parties agree that there will be no travel required for this project.

## Not For Signature

THIS DOCUMENT IS A DRAFT INTENDED ONLY FOR USE IN THE REVIEW OF TEXT APPLICABLE TO A POSSIBLE SERVICES ENGAGEMENT. IT DOES NOT CONSTITUTE A CONTRACT OR A PROPOSAL FOR A CONTRACT. THE CONTENT OF THIS DOCUMENT, AS IT MAY BE NEGOTIATED BY THE PARTIES, IS INTENDED TO BE INCORPORATED INTO A STATEMENT OF WORK, WHICH WILL INCLUDE OTHER PROVISIONS AND WHICH WILL BE GOVERNED BY ADDITIONAL TERMS AND CONDITIONS. A PARTY'S SIGNATURE OR OTHER INDICATION OF APPROVAL ON OR RELATED TO THIS DOCUMENT SHALL HAVE NO BINDING OR CONTRACTUAL EFFECT.

Regular Business Meeting
Miscellaneous consent
Meeting Date: 06/08/2021
Submitted By: Victoria Alunni, HR Admin Assistant
Submitted For: Debby Carter

## Information

## Subject

Resolution 21-24 Contracts for Supervisory Certificated Personnel

## Recommendation

It is recommended that the Board approve Resolution 21-24 regarding 2021-22 Employment Contracts for Supervisory Certificated Personnel in the Cabinet employee group.

## Background

The Board must annually authorize employee contracts to be issued for the ensuing year. Approval of Resolution 21-24 will meet this requirement.
A copy of Resolution 21-24 and the employee group contracts are attached for the Board's information and approval.

## Fiscal Impact

## Attachments

## Resolution 21-24

Cabinet Base Contract 21-22
Cabinet Cert Supplemental Contract 21-22
Cabinet Class Supplemental Contract 21-22

| Form Review |  |  |
| :--- | :--- | :--- |
| Inbox | Reviewed By | Date |
| Human Resources Exec Director | Deborah Carter | 05/27/2021 04:11 PM |
| Superintendent's Office | Allison Kaufmann | 05/28/2021 06:41 AM |
| Form Started By: Victoria Alunni |  | Started On: 05/27/2021 03:05 PM |

## RESOLUTION NO. 21-24

## EDMONDS SCHOOL DISTRICT NO. 15 SNOHOMISH COUNTY, WASHINGTON

WHEREAS, the Board of Directors of Edmonds School District No. 15 has a statutory obligation to employ regular supervisory certificated personnel by written contract; and

WHEREAS, it is essential to the success of the District's educational program that personnel vacancies for the ensuing school year be identified in advance so that well qualified replacements may be located and employed;

## NOW, THEREFORE, BE IT RESOLVED:

1. Individual employment contracts shall be issued forthwith to those supervisory certificated personnel in the Cabinet employee group determined by the Superintendent to be entitled to an offer of employment for the 2021-22 contract year;
2. The Board hereby adopts the 2021-22 final salary schedule, as modified through negotiations for the identified group, on an interim basis for application to 2021-22; and
3. The Superintendent is hereby directed to cause to be delivered forthwith, to the supervisory certificated personnel in the identified group offered employment for the 2021-22 school year, a completed contract in the appropriate form attached hereto and consistent with the 2021-22 salary schedule as they apply to each contract recipient.

ADOPTED by the Board of Directors of Edmonds School District No. 15, Snohomish County, Washington, at a regular meeting thereof held on the 8th day of June 2021.

EDMONDS SCHOOL DISTRICT NO. 15

President

Vice President

By: $\qquad$
Dr. Gustavo Balderas
Secretary, Board of Directors

# EDMONDS SCHOOL DISTRICT \#15 <br> HUMAN RESOURCES DIVISION <br> CERTIFICATION AND DATA MANAGEMENT 

TO: «NAME»
FROM: HUMAN RESOURCES DATA ANALYST TEAM
RE: 2021-22 EMPLOYMENT CONTRACT

BELOW YOU WILL FIND YOUR ANNUAL CONTRACT FOR THE 2021-22 CONTRACT YEAR. PLEASE REVIEW AND SIGN VIA DOCUSIGN BY 4:00 PM ON «RETURN_DATE».

THANK YOU.

## SUPERINTENDENT'S CABINET EMPLOYMENT BASE CONTRACT 2021-22

It is hereby agreed by and between the Board of Directors of Edmonds School District No. 15, Snohomish County, State of Washington ("District" herein) and «NAME», ("Employee" herein) that Employee shall perform assigned services in the public schools of the District from «ContractStart» through «ContractStop» as "«Position_Title»", «Level» as prescribed by this contract, applicable State and Federal laws and regulations, agreements between the District and the Edmonds Superintendent's Staff, and District policies and regulations.

1. Assignment. Employee shall be assigned, reassigned or transferred by the Board of Directors of the District or its delegated administrative authority. Services under this contract shall be «FTE» FTE consisting of «DAYS» work days, exclusive of holidays and vacation days. All employment duties shall be performed by Employee in compliance with applicable Federal, State and local laws (including administrative rules and regulations) and applicable District policies and procedures. Employee affirms that he or she is not bound by any other contract with might interfere with the performance of duties under this contract.
2. Compensation. Employee shall be entitled in return for his or her performance of employment duties to an annual salary based on the District's 2021-2022 salary schedule. Said salary shall be paid in «INSTLMTS» installments commencing on or about the last day of July 2021, with successive installments payable on or about the same day of each succeeding calendar month, unless mutually agreed otherwise by Employee and the District. Employee agrees that entitlement to the foregoing salary shall be subject to adjustment by the District as necessary to reflect underpayments or overpayments due to clerical or other errors in the computation of Employee's entitlement or misplacement on the salary schedule.
3. Benefits. In addition to the annual salary, Employee shall receive the benefits, rights and entitlements as specified by Board policies and Memorandum of Understanding between the District and the Edmonds Superintendent's Staff.
4. Professional Duties and Development. Employee hereby agrees to devote his/her time, skill, labor and attention to assigned duties during the term of this contract, provided, however, that Employee, by agreement with the District and using leave where appropriate, may undertake consultative work, speaking engagements, writing, lecturing or other professional duties and obligations. The District expects Employee to continue professional development and to participate in relevant learning experiences.
5. Annuity. At the request of Employee and in accordance with State and Federal law, the District shall withhold and transfer annually, semi-annually or monthly, an amount of salary determined by Employee within limitations established in Federal law, to a tax-deferred annuity program mutually agreeable to Employee and the District. It is intended that all amounts applied toward the purchase of such annuity will be excludable from the gross income of Employee under Sections 402(g), 414(v),
and 403(b) of the Internal Revenue Code of 1986, as amended, and the regulations thereunder, as applicable, to the extent made on a pre-tax basis. To the extent such amounts are contributed as Roth contributions, such amount will be included in the gross income of Employee when made.
6. Section 403(b) Plan. In accordance with and subject to the terms of the Edmonds School District 403(b) Plan (the "Plan") and with and subject to applicable State and Federal law (including any applicable limitations), Employee may make pre-tax and/or Roth elective deferral contributions to the Plan under a salary reduction agreement with the District. It is intended that all amounts contributed under the Plan will be excluded from the gross income of Employee under Sections 402(g), 414(v) and 403(b) of the Internal Revenue Code of 1986, as amended, and the regulations thereunder, as applicable, to the extent made on a pre-tax basis. To the extent such amounts are contributed as Roth contributions, such amounts will be included in the gross income of Employee when made.
7. Section 457(b) Plan. In accordance with and subject to applicable State and Federal law (including any applicable limitations) and with and subject to the terms of the Washington State Deferred Compensation Program, a Section 457(b) plan, (the "DCP" Plan"), Employee may elect to make deferral contributions to the DCP Plan in accordance with the requirements established by the Plan Administrator thereof, and the Washington State Department of Retirement Systems.
8. Professional Meetings and Reimbursements. Employee shall attend, contingent upon prior approval of the immediate supervisor, appropriate professional meetings at the local, state and national level, the expenses of said attendance to be paid by the District. Employee shall file an itemized expense statement with the District for any reimbursement claimed. Mileage will be reimbursed at the maximum allowable mileage rate recognized by the Internal Revenue Service as a deductible business expense. Employee shall also be entitled to mileage and other expense reimbursement for official business as provided by law and District policy for administrators.
9. Conditions to the Effectiveness of This Contract. This contract shall not become effective: (1) Unless the Employee signs and returns the contract without modification to the District Human Resources Office on or before «RETURN_DATE»; (2) Until successful completion of criminal background and sexual misconduct checks; and (3) Until Employee registers with the District Human Resources Office (A) The valid certificate(s) required by law as a condition to Employee's performance of his or her employment duties pursuant to this contract, (B) An official transcript of preparation, and (C) Any other required credential.

BY:


WHO, BY AFFIXING HIS OR HER SIGNATURE, HEREBY ACCEPTS THE TERMS OF THIS CONTRACT.

BY:
Employee
WHO, BY AFFIXING HIS OR HER SIGNATURE, HEREBY ACCEPTS THE TERMS OF THIS CONTRACT.

DATE: $\qquad$ DATE: $\qquad$

## EDMONDS SCHOOL DISTRICT NO. 15 <br> Lynnwood, WA 98036

## CABINET'S SUPPLEMENTAL EMPLOYMENT CONTRACT <br> 2021-2022

## EMPLOYEE:

The Board of Directors of Edmonds School District No. 15 ("District") and the employee named above ("Employee") agree that Employee is authorized, in addition to the duties and service under the Employee's Base Contract, to perform the following additional days or services in the public schools of the District during the 2021-2022 contract year:

Pursuant to the Memorandum of Understanding (MOU) between the District and the Edmonds Cabinet ("Cabinet"), Employee shall receive a Responsibility Stipend.

Employee agrees that entitlement to the foregoing payments shall be subject to adjustment by the District as necessary to reflect underpayments or overpayments due to clerical or other errors in the computation of the Employee's entitlement or misplacement on the salary schedule.

Pursuant to RCW 28A.405.240, this supplemental contract is not subject to the continuing contract provisions of Title 28A RCW, and it shall automatically terminate at the end of the 2020-21 contract year.

This supplemental contract is subject to and will be construed in accordance with applicable State and Federal laws and regulations, District policies and procedures, and collective bargaining agreements, and conforms with the action of the Board at its meeting on June 22, 2021.

This contract must be signed by Employee and returned to the District's Human Resources Office on or before «RETURN_DATE». If this contract is not signed and returned by «RETURN_DATE», the District will consider the supplemental contract offer to be rejected.


WHO, BY AFFIXING HIS OR HER SIGNATURE, HEREBY ACCEPTS THE TERMS OF THIS CONTRACT.

By: Employee

WHO, BY AFFIXING HIS OR HER SIGNATURE, HEREBY ACCEPTS THE TERMS OF THIS CONTRACT.

DATE: $\qquad$

# EDMONDS SCHOOL DISTRICT NO. 15 <br> Lynnwood, WA 98036 

## CABINET'S SUPPLEMENTAL EMPLOYMENT CONTRACT <br> 2021-2022

## EMPLOYEE:

The Board of Directors of Edmonds School District No. 15 ("District") and the employee named above ("Employee") agree that Employee is authorized, in addition to the duties and service under the Employee's Base Contract, to perform the following additional days or services in the public schools of the District during the 2021-22 contract year:

Pursuant to the Memorandum of Understanding (MOU) between the District and the Edmonds Cabinet ("Cabinet"), Employee shall receive a Responsibility Stipend.

Employee agrees that entitlement to the foregoing payments shall be subject to adjustment by the District as necessary to reflect underpayments or overpayments due to clerical or other errors in the computation of the Employee's entitlement or misplacement on the salary schedule.

This supplemental contract is subject to and will be construed in accordance with applicable State and Federal laws and regulations, District policies and procedures, and collective bargaining agreements, and conforms with the action of the Board at its meeting on June 22, 2021.

This contract must be signed by Employee and returned to the District's Human Resources Office on or before «RETURN_DATE». If this contract is not signed and returned by «RETURN_DATE», the District will consider the supplemental contract offer to be rejected.

BY:


Superintendent
WHO, BY AFFIXING HIS OR HER SIGNATURE, HEREBY ACCEPTS THE TERMS OF THIS CONTRACT.

DATE:
$\qquad$
9.

Regular Business Meeting<br>Meeting Date: 06/08/2021<br>Submitted By: Allison Kaufmann

## Information

## Subject

Student Presentations
Recommendation
Background

## Fiscal Impact

Attachments
No file(s) attached.

Form Started By: Allison Kaufmann

## Form Review

Started On: 02/17/2021 11:50 AM
Final Approval Date: 02/17/2021

## Regular Business Meeting

Meeting Date: 06/08/2021
Submitted By: Allison Kaufmann

## Information

Subject
Reports

Recommendation
Background

## Fiscal Impact

## Attachments

No file(s) attached.

## Form Review

Final Approval Date: 03/15/2021

# Regular Business Meeting 

Meeting Date: 06/08/2021
Submitted By: Allison Kaufmann

## Information

Subject
Reports
Recommendation

## Background

## Fiscal Impact

## Attachments

April Board Report

Form Started By: Allison Kaufmann

## Form Review

Started On: 05/25/2021 10:23 AM
Final Approval Date: 05/25/2021

# Edmonds <br> SCHOOL DISTRICT 

Each student learning, every day!

# Monthly Financial Report 

(Unaudited)
For the Month Ended

April 30, 2021

EDMONDS SCHOOL DISTRICT NO. 15
FUND SUMMARY
AS OF APRIL 30, 2021

General Fund
Beg. Fund Balance
Revenue
Expenditures
End. Fund Balance

ASB Fund
Beg. Fund Balance
Revenue
Expenditures
End. Fund Balance

Capital Projects Fund
Beg. Fund Balance
Revenue
Expenditures
End. Fund Balance

Debt Service Fund
Beg. Fund Balance
Revenue
Expenditures
End. Fund Balance

Transportation Vehicle Fund
Beg. Fund Balance
Revenue
Expenditures
End. Fund Balance

| 2019-2020 |  |  |  |  |  | 2020-2021 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANNUAL |  | ACTUAL |  | $\$$ | \% |  | ANNUAL |  | ACTUAL |  | \$ | $\stackrel{\%}{\text { \% }}$ |  |
|  |  | 4/30/2020 |  | VARIANCE | BUDGET |  |  |  | 4/30/2021 |  | VARIANCE | BUDGET | YEAR |
| \$ 12,450,000 | \$ | 21,037,080 | \$ | 8,587,080 |  | \$ | 25,400,000 | \$ | 29,365,522 | \$ | 3,965,522 |  |  |
| 342,200,000 |  | 231,795,777 |  | (110,404,223) | 67.74\% |  | 356,500,000 |  | 230,710,281 |  | $(125,789,719)$ | 64.72\% | 66.67\% |
| 343,400,000 |  | 317,809,449 |  | 25,590,551 | 92.55\% |  | 360,400,000 |  | 323,501,204 |  | 36,898,796 | 89.76\% | 66.67\% |
| \$ 11,250,000 | \$ | 38,042,002 | \$ | 26,792,002 |  | \$ | 21,500,000 | \$ | 44,174,310 | \$ | 22,674,310 |  |  |
| \$ 1,752,689 | \$ | 1,762,810 | \$ | 10,121 |  | \$ | 1,658,503 | \$ | 1,820,993 | \$ | 162,490 |  |  |
| 3,217,701 |  | 1,454,341 |  | $(1,763,360)$ | 45.20\% |  | 2,910,366 |  | 254,104 |  | $(2,656,262)$ | 8.73\% | 66.67\% |
| 3,432,924 |  | 1,607,719 |  | 1,825,205 | 46.83\% |  | 3,293,415 |  | 385,681 |  | 2,907,734 | 11.71\% | 66.67\% |
| \$ 1,537,466 | \$ | 1,839,354 | \$ | 301,888 |  | \$ | 1,275,454 | \$ | 1,838,663 | \$ | 563,209 |  |  |
| \$ 31,822,679 | \$ | 28,479,863 | \$ | (3,342,816) |  | \$ | 24,003,000 | \$ | 27,075,451 | \$ | 3,072,451 |  |  |
| 220,000,000 |  | 16,034,926 |  | $(203,965,074)$ | 7.29\% |  | 22,000,000 |  | 30,864,924 |  | 8,864,924 | 140.30\% | 66.67\% |
| 66,800,000 |  | 20,264,812 |  | 46,535,188 | 30.34\% |  | 35,876,600 |  | 17,986,845 |  | 17,889,755 | 50.14\% | 66.67\% |
| \$ 185,022,679 | \$ | 31,050,089 | \$ | $(153,972,590)$ |  | \$ | 10,126,400 | \$ | 49,247,095 | \$ | 39,120,695 |  |  |
| \$ 29,702,752 | \$ | 29,830,503 | \$ | 127,751 |  | \$ | 29,787,450 | \$ | 32,382,121 | \$ | 2,594,671 |  |  |
| 58,212,140 |  | 50,496,311 |  | $(7,715,829)$ | 86.75\% |  | 59,736,900 |  | 38,960,426 |  | $(20,776,474)$ | 65.22\% | 66.67\% |
| 56,235,825 |  | 49,863,963 |  | 6,371,862 | 88.67\% |  | 59,467,600 |  | 54,276,863 |  | 5,190,737 | 91.27\% | 66.67\% |
| \$ 31,679,067 | \$ | 30,462,852 | \$ | $(1,216,215)$ |  | \$ | 30,056,750 | \$ | 17,065,685 | \$ | $(12,991,065)$ |  |  |
| \$ 2,706,332 | \$ | 2,715,137 | \$ | 8,805 |  | \$ | 2,276,465 | \$ | 2,909,740 | \$ | 633,275 |  |  |
| 1,197,981 |  | 21,626 |  | $(1,176,355)$ | 1.81\% |  | 1,338,211 |  | 3,158 |  | $(1,335,053)$ | 0.24\% | 66.67\% |
| 2,200,000 |  | 1,837,901 |  | 362,099 | 83.54\% |  | 2,200,000 |  | 674,400 |  | 1,525,600 | 30.65\% | 66.67\% |
| \$ 1,704,313 | \$ | 1,672,422 | \$ | $(31,891)$ |  | \$ | 1,414,676 | \$ | 2,247,042 | \$ | 832,366 |  |  |

Key:

1) Budget $=$ School Board approved budget for the fiscal year
2) Actual = Fiscal year-to-date totals to the date of the report (expenditures includes encumbrances)
3) $\$$ Variance $=$ The difference between the annual budget and year-to-date amounts
4) $\%$ Budget $=$ The amount received/spent year-to-date as a percentage of the annual budget
5) $\% \mathrm{Year}=$ The month reported as a percentage of the 12 -month fiscal year
6) NOTE: Debt Service Fund Expenditures include "other financing uses" to reflect debt repayment
7) Actual Ending Fund Balance does not include encumbrances

General Fund | Financial Summary
For the Period Ending April 30, 2021




Powered By:
FORECASTS"

General Fund Revenues | Dashboard Summary


General Fund Expenditures | Dashboard Summary
For the Period Ending April 30, 2021


## Expenditure Analysis

| Top 10 Expenditures by Program (YTD) |  |
| :--- | ---: |
|  |  |
| BASIC ED | $\$ 114,685,962$ |
| SPEC ED 3-21 STATE | $\$ 30,273,064$ |
| DISTRICT WIDE | $\$ 24,092,243$ |
| OTHER INSTRUCTIONAL | $\$ 12,200,296$ |
| VOC ED-HS | $\$ 5,358,986$ |
| ALT LEARNING EXPERIENCE | $\$ 4,334,084$ |
| SCHOOL FOOD SERVICES | $\$ 4,047,315$ |
| LAP-STATE | $\$ 3,930,109$ |
| TRANSITIONAL BILINGUAL | $\$ 3,355,228$ |
| PUPIL TRANSPORTATION | $\$ 2,918,144$ |
|  |  |
| Percent of Total Expenditures YTD | $95.04 \%$ |





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FORECASTS

## General Fund | Month-End Balances

For the Period Ending April 30, 2021


Powered By:
FORECASTS


> 10--GENERAL FUND-- FUND BALANCE -- AGENCY ACCOUNTS -- Revised -- BUDGET-STATUS-REPORT Fiscal Year 2020 (September 1, 2020 - August 31, 2021)

For the $\qquad$ School District for the Month of $\qquad$ , $\underline{2021}$

|  | ANNUAL | ACTUAL | ACTUAL |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. REVENUES/OTHER FIN. SOURCES | BUDGET | FOR MONTH | FOR YEAR | ENCUMBRANCES | BALANCE | PERCENT |
| 1000 LOCAL TAXES | 53,562,334 | 22,374,506.72 | 49,838,702.06 |  | 3,723,631.94 | 93.05 |
| 2000 LOCAL SUPPORT NONTAX | 15,488,796 | 121,020.03 | 1,226,840.11 |  | 14,261,955.89 | 7.92 |
| 3000 STATE, GENERAL PURPOSE | 198,390,662 | 17,559,157.90 | 130,776,289.27 |  | 67,614,372.73 | 65.92 |
| 4000 STATE, SPECIAL PURPOSE | 49,512,050 | 4,212,257.55 | 31,122,164.97 |  | 18,389,885.03 | 62.86 |
| 5000 FEDERAL, GENERAL PURPOSE | 105,598 | 41,965.86 | 86,775.05 |  | 18,822.95 | 82.17 |
| 6000 FEDERAL, SPECIAL PURPOSE | 33,012,920 | 1,812,174.60 | 12,089,937.73 |  | 20,922,982.27 | 36.62 |
| 7000 REVENUES FR OTH SCH DIST | 2,000,000 | . 00 | 1,572,207.00 |  | 427,793.00 | 78.61 |
| 8000 OTHER AGENCIES AND ASSOCIATES | 2,531,040 | 559,692.00 | 2,039,462.97 |  | 491,577.03 | 80.58 |
| 9000 OTHER FINANCING SOURCES | 1,896,600 | 427,251.05 | 1,957,902.17 |  | 61,302.17- | 103.23 |
| Total REVENUES/OTHER FIN. SOURCES | 356,500,000 | 47,108,025.71 | 230,710,281.33 |  | 125,789,718.67 | 64.72 |
| B. EXPENDITURES |  |  |  |  |  |  |
| 00 Regular Instruction | 190,767,330 | 15,152,457.59 | 122,635,320.77 | 62,226,752.06 | 5,905,257.17 | 96.90 |
| 10 Federal Stimulus | 7,966,731 | 314,472.60 | 351,938.56 | 281,736.81 | 7,333,055.63 | 7.95 |
| 20 Special Ed Instruction | 52,964,199 | 4,098,006.86 | 32,484,383.99 | 16,551,976.26 | 3,927,838.75 | 92.58 |
| 30 Voc. Ed Instruction | 11,138,452 | 855,286.73 | 6,026,933.78 | 3,018,061.25 | 2,093,456.97 | 81.21 |
| 40 Skills Center Instruction | 0 | . 00 | . 00 | 0.00 | . 00 | 0.00 |
| 50+60 Compensatory Ed Instruct. | 18,797,669 | 1,255,768.83 | 9,615,191.85 | 4,689,796.27 | 4,492,680.88 | 76.10 |
| 70 Other Instructional Pgms | 20,226,538 | 1,658,091.41 | 12,590,834.71 | 3,803,462.71 | 3,832,240.58 | 81.05 |
| 80 Community Services | 1,646,031 | 101,913.05 | 854,273.60 | 423,550.10 | 368,207.30 | 77.63 |
| 90 Support Services | 56,893,050 | 5,604,303.18 | 31,342,615.52 | 16,604,375.54 | 8,946,058.94 | 84.28 |
| Total EXPENDITURES | 360,400,000 | 29,040,300.25 | 215,901,492.78 | 107,599,711.00 | 36,898,796.22 | 89.76 |
| C. OTHER FIN. USES TRANS. OUT (GL 536) | 0 | . 00 | . 00 |  |  |  |
| D. OTHER FINANCING USES (GL 535) | 0 | . 00 | . 00 |  |  |  |
| E. EXCESS OF REVENUES/OTHER FIN.SOURCES |  |  |  |  |  |  |
| OVER (UNDER) EXP/OTH FIN USES (A-B-C-D) | 3,900,000- | 18,067,725.46 | 14,808,788.55 |  | 18,708,788.55 | 479.71- |
| F. TOTAL BEGINNING FUND BALANCE | 25,400,000 |  | 29,365,521.85 |  |  |  |
| G. G/L 898 PRIOR YEAR ADJUSTMENTS (+OR-) | xxxxxxxxy | . 00 |  |  |  |  |
| H. TOTAL ENDING FUND BALANCE | 21,500,000 | 44,174,310.40 |  |  |  |  |
| $\underline{(E+F}+O R-G)$ |  |  |  |  |  |  |

> 20--CAPITAL PROJECTS FUND-- FUND BALANCE -- AGENCY ACCOUNTS -- Revised -- BUDGET-STATUS-REPORT

Fiscal Year 2020 (September 1, 2020 - August 31, 2021)

For the EDMONDS SCHOOL DISTRICT NO. 15 School District for the Month of April_, 2021


> 30--DEBT SERVICE FUND-- FUND BALANCE -- AGENCY ACCOUNTS -- Revised -- BUDGET-STATUS-REPORT

Fiscal Year 2020 (September 1, 2020 - August 31, 2021)

For the EDMONDS SCHOOL DISTRICT NO. 15 School District for the Month of April_, 2021

|  | ANNUAL | ACTUAL | ACTUAL |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. REVENUES/OTHER FIN. SOURCES | BUDGET | FOR MONTH | FOR YEAR | ENCUMBRANCES | BALANCE | PERCENT |
| 1000 Local Taxes | 59,736,900 | 9,872,987.79 | 38,960,434.03 |  | 20,776,465.97 | 65.22 |
| 2000 Local Support Nontax | 0 | . $01-$ | $7.98-$ |  | 7.98 | 0.00 |
| 3000 State, General Purpose | 0 | . 00 | . 00 |  | . 00 | 0.00 |
| 5000 Federal, General Purpose | 0 | . 00 | . 00 |  | . 00 | 0.00 |
| 9000 Other Financing Sources | 0 | . 00 | . 00 |  | . 00 | 0.00 |
| Total REVENUES/OTHER FIN. SOURCES | 59,736,900 | 9,872,987.78 | 38,960,426.05 |  | 20,776,473.95 | 65.22 |
| B. EXPENDITURES |  |  |  |  |  |  |
| Matured Bond Expenditures | 48,205,000 | . 00 | 48,205,000.00 | 0.00 | . 00 | 100.00 |
| Interest On Bonds | 10,962,600 | . 00 | 6,071,862.50 | 0.00 | 4,890,737.50 | 55.39 |
| Interfund Loan Interest | 0 | . 00 | . 00 | 0.00 | . 00 | 0.00 |
| Bond Transfer Fees | 300,000 | . 00 | . 00 | 0.00 | 300,000.00 | 0.00 |
| Arbitrage Rebate | 0 | . 00 | . 00 | 0.00 | . 00 | 0.00 |
| Underwriter's Fees | 0 | . 00 | . 00 | 0.00 | . 00 | 0.00 |
| Total EXPENDITURES | 59,467,600 | . 00 | 54,276,862.50 | 0.00 | 5,190,737.50 | 91.27 |
| C. OTHER FIN. USES TRANS. OUT (GL 536) | 0 | . 00 | . 00 |  |  |  |
| D. OTHER FINANCING USES (GL 535) | 0 | . 00 | . 00 |  |  |  |
| E. EXCESS OF REVENUES/OTHER FIN.SOURCES |  |  |  |  |  |  |
| $\underline{\text { OVER (UNDER) EXPENDITURES ( } \mathrm{A}-\mathrm{B}-\mathrm{C}-\mathrm{D} \text { ) }}$ | 269,300 | 9,872,987.78 | 15,316,436.45- |  | 15,585,736.45- | < 1000- |
| F. TOTAL BEGINNING FUND BALANCE | 29,787,450 |  | 32,382,121.08 |  |  |  |
| G. G/L 898 PRIOR YEAR ADJUSTMENTS (+OR-) | xxxxxxxxx | . 00 |  |  |  |  |
| H. TOTAL ENDING FUND BALANCE | 30,056,750 | 17,065,684.63 |  |  |  |  |
| $\underline{(E+F+O R-G)}$ |  |  |  |  |  |  |

I. ENDING FUND BALANCE ACCOUNTS:

G/L 810 Restricted for Other Items
G/L 830 Restricted for Debt Service $30,056,750$
G/L 835 Restrictd For Arbitrage Rebate
.00
$17,065,684.63$
.00
G/L 870 Committed to Other Purposes 0
G/L 889 Assigned to Fund Purposes 0
.00
G/L 889 Assigned to Fund Purposes
0
.00

TOTAL
30,056,750
$17,065,684.63$

40--ASSOCIATED STUDENT BODY FUND-- FUND BALANCE -- AGENCY ACCOUNTS -- Revised -- BUDGET-STATUS-REPORT
Fiscal Year 2020 (September 1, 2020 - August 31, 2021)

For the EDMONDS SCHOOL DISTRICT NO. 15 School District for the Month of April_ 2021

| A. REVENUES |  | ANNUAL | ACTUAL | ACTUAL |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | BUDGET | FOR MONTH | FOR YEAR | ENCUMBRANCES | BALANCE | PERCENT |
| 1000 General Student Body |  | 850,484 | 18,094.30 | 120,065.85 |  | 730,418.15 | 14.12 |
| 2000 Athletics |  | 887,540 | 21,317.66 | 96,093.47 |  | 791,446.53 | 10.83 |
| 3000 Classes |  | 88,164 | 1,455.46 | 10,569.31 |  | 77,594.69 | 11.99 |
| 4000 Clubs |  | 1,033,755 | 672.64 | 16,029.32 |  | 1,017,725.68 | 1.55 |
| 6000 Private Moneys |  | 50,423 | 1,160.76 | 11,345.69 |  | 39,077.31 | 22.50 |
| Total Revenues |  | 2,910,366 | 42,700.82 | 254,103.64 |  | 2,656,262.36 | 8.73 |
| B. EXPENDITURES |  |  |  |  |  |  |  |
| 1000 General Student Body |  | 764,420 | 46,371.60 | 106,889.41 | 63,970.90 | 593,559.69 | 22.35 |
| 2000 Athletics |  | 1,265,834 | 20,974.44 | 90,037.23 | 60,749.55 | 1,115,047.22 | 11.91 |
| 3000 Classes |  | 97,642 | . 00 | 12,133.37 | 11,100.00 | 74,408.63 | 23.79 |
| 4000 Clubs |  | 1,114,070 | 2,626.00 | 17,010.15 | 13,426.60 | 1,083,633.25 | 2.73 |
| 6000 Private Moneys |  | 51,449 | 423.76 | 10,363.51 | 0.00 | 41,085.49 | 20.14 |
| Total EXPENDITURES |  | 3,293,415 | 70,395.80 | 236,433.67 | 149,247.05 | 2,907,734.28 | 11.71 |
| C. EXCESS OF REVENUES |  |  |  |  |  |  |  |
| OVER (UNDER) EXPENDITURES | ( $\mathrm{A}-\mathrm{B}$ ) | 383,049- | 27,694.98- | 17,669.97 |  | 400,718.97 | 104.61- |

D. TOTAL BEGINNING FUND BALANCE

1,658,503
E. G/L 898 PRIOR YEAR ADJUSTMENTS (+OR-)

## F. TOTAL ENDING FUND BALANCE

$\underline{C+D+O R-E)}$
G. ENDING FUND BALANCE ACCOUNTS:

| G/L 810 Restricted for Other Items | 0 |
| :--- | ---: |
| G/L 819 Restricted for Fund Purposes | $1,275,454$ |
| G/L 840 Nonspnd FB - Invent/Prepd Itms | 0 |
| G/L 850 Restricted for Uninsured Risks | 0 |
| G/L 870 Committed to Other Purposes | 0 |
| G/L 889 Assigned to Fund Purposes | 0 |
| G/L 890 Unassigned Fund Balance | 0 |

TOTAL
$1,275,454$

90--TRANSPORTATION VEHICLE FUND-- FUND BALANCE -- AGENCY ACCOUNTS -- Revised -- BUDGET-STATUS-REPORT
Fiscal Year 2020 (September 1, 2020 - August 31, 2021)

For the EDMONDS SCHOOL DISTRICT NO. 15 School District for the Month of April_ 2021

|  | ANNUAL BUDGET | ACTUAL FOR MONTH | ACTUAL FOR YEAR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. REVENUES/OTHER FIN. SOURCES | BUDGET | FOR MONTH | FOR YEAR | ENCUMBRANCES | BALANCE | PERCENT |
| 1000 Local Taxes | 0 | . 00 | . 00 |  | . 00 | 0.00 |
| 2000 Local Nontax | 25,000 | 276.12 | 3,158.17 |  | 21,841.83 | 12.63 |
| 3000 State, General Purpose | 0 | . 00 | . 00 |  | . 00 | 0.00 |
| 4000 State, Special Purpose | 1,285,711 | . 00 | . 00 |  | 1,285,711.00 | 0.00 |
| 5000 Federal, General Purpose | 0 | . 00 | . 00 |  | . 00 | 0.00 |
| 6000 Federal, Special Purpose | 0 | . 00 | . 00 |  | . 00 | 0.00 |
| 8000 Other Agencies and Associates | 0 | . 00 | . 00 |  | . 00 | 0.00 |
| 9000 Other Financing Sources | 27,500 | . 00 | . 00 |  | 27,500.00 | 0.00 |
| A. TOTAL REV/OTHER FIN.SRCS (LESS TRANS) | 1,338,211 | 276.12 | 3,158.17 |  | 1,335,052.83 | 0.24 |
| B. 9900 TRANSFERS IN FROM GF | 0 | . 00 | . 00 |  | . 00 | 0.00 |
| C. Total REV./OTHER FIN. SOURCES | 1,338,211 | 276.12 | 3,158.17 |  | 1,335, 052.83 | 0.24 |
| D. EXPENDITURES |  |  |  |  |  |  |
| Type 30 Equipment | 2,200,000 | . 00 | 665,855.85 | 8,544.44 | 1,525,599.71 | 30.65 |
| Type 60 Bond Levy Issuance | 0 | . 00 | . 00 | 0.00 | . 00 | 0.00 |
| Type 90 Debt | 0 | . 00 | . 00 | 0.00 | . 00 | 0.00 |
| Total EXPENDITURES | 2,200,000 | . 00 | 665,855.85 | 8,544.44 | 1,525,599.71 | 30.65 |
| E. OTHER FIN. USES TRANS. OUT (GL 536) | 0 | . 00 | . 00 |  |  |  |
| F. OTHER FINANCING USES (GL 535) | 0 | . 00 | . 00 |  |  |  |
| G. EXCESS OF REVENUES/OTHER FIN SOURCES |  |  |  |  |  |  |
| OVER (UNDER) EXP/OTH FIN USES (C-D-E-F) | 861,789- | 276.12 | 662,697.68- |  | 199,091.32 | 23.10- |
| H. TOTAL BEGINNING FUND BALANCE | 2,276,465 |  | 2,909,739.57 |  |  |  |
| I. G/L 898 PRIOR YEAR ADJUSTMENTS (+OR-) | xxxxxxxxx |  | . 00 |  |  |  |
| J. TOTAL ENDING FUND BALANCE | 1,414,676 |  | 2,247,041.89 |  |  |  |
| K. ENDING FUND BALANCE ACCOUNTS: |  |  |  |  |  |  |
| G/L 810 Restricted For Other Items | 0 |  | . 00 |  |  |  |
| G/L 819 Restricted for Fund Purposes | 1,414,676 |  | 2,247,041.89 |  |  |  |
| G/L 830 Restricted for Debt Service | 0 |  | . 00 |  |  |  |
| G/L 835 Restrictd For Arbitrage Rebate | 0 |  | . 00 |  |  |  |
| G/L 850 Restricted for Uninsured Risks | 0 |  | . 00 |  |  |  |
| G/L 889 Assigned to Fund Purposes | 0 |  | . 00 |  |  |  |
| G/L 890 Unassigned Fund Balance | 0 |  | . 00 |  |  |  |
| TOTAL | 1,414,676 |  | 2,247,041.89 |  |  |  |

## Regular Business Meeting

Meeting Date: 06/08/2021
Submitted By: Allison Kaufmann
Submitted For: Dr. Victor Vergara

## Information

## Subject

Adoption of Policy \#4218 Family Language Access Plan

## Recommendation

It is recommended the Edmonds School Board Adopt Policy \# 4218 Family Language Access Plan.

## Background

In July 2016, the Washington State School Directors' Association (WSSDA) published model policy and procedure 4218 - Language Access Plan, providing a baseline standard and guidance for school districts in Washington State to adopt policies in accordance with the mandate of the State for parents/guardians to access information about the education of their child in a language they can understand. Additionally, in 2016, then Superintendent, Dr. McDuffy requested the Executive Director of Student Learning convene a task force to examine and develop a Family Language Access Policy. In collaboration with Student Learning, the Family and Community Engagement Coordinator and Interpretation and Translation Coordinator established the attached policy to ensure our ongoing commitment to supporting family language access.

Specifically, the WSSDA guiding documents echo the sentiment expressed by the Equity and Civil Rights Office of the Office of the Superintendent of Public Instruction (OSPI), which plainly states "all parents have the right to information about their child's education in a language they can understand."

Furthermore, in 2019 WSSDA revised the policy and procedure to reflect HB1130-Public School Language Access. HB 1130 requires districts to document the preferred language of families with students eligible for special education services. Additionally, HB 1130 requires districts to document whether a qualified interpreter was provided at any planning meeting related to a student's individualized education program (IEP), section 504 plan, or meetings related to school discipline and truancy. A "qualified interpreter" is someone who is able to interpret effectively, accurately, and impartially, both receptively and expressively using any necessary specialized vocabulary.

## Fiscal Impact

## Attachments

## 4218 Family Language Access Plan

## Form Review

Form Started By: Allison Kaufmann
Final Approval Date: 06/01/2021

## Family Language Access Plan

The Board of Directors is committed to improving meaningful, two-way communication and promoting access to District programs, services and activities for students and families with limited English proficiency. To that end, the Board of Directors requires the District to implement and maintain a language access plan tailored to the District's current population of families with limited English proficiency.

At a minimum, the District's language access plan will incorporate the procedures that accompany this policy and address:

## Identification of Language Need

The District will accurately and in a timely manner identify families with limited English proficiency and provide them information in a language they can understand regarding the language service resources available within the District.

## Oral Interpretation

The District will take reasonable steps to provide families with limited English proficiency competent oral interpretation of materials or information about any program, service, and activity provided to English proficient families and to facilitate any interaction with district staff significant to the student's education. The District will provide such services upon request of families with limited English proficiency and/or when it may be reasonably anticipated by District staff that such services will be necessary.

## Written Translation

The District will provide accurate written translation of vital documents for each of the 5 largest limited English proficient groups identified through the Home Language Survey. For purposes of this policy, "vital documents" include, but are not limited to, those related to:

- registration, application, and selection;
- academic standards and student performance;
- safety, discipline, and conduct expectations;
- special education and related services, Section 504 information, and McKinney-Vento services;
- policies and procedures related to school attendance;
- requests for permission in activities or programs;
- opportunities for students or families to access school activities, programs, and services;
- student/family handbook;
- the District's Family Language Access Plan and related services or resources available;
- school closure information; and
- any other documents notifying families of their rights under applicable state laws and/or containing information or forms related to consent or filing complaints under federal law, state law, or District policy.

If the District is unable to translate a vital document due to resource limitations or if a small number of families require the information in a language other than English, the District will provide the information to families in a language they can understand through competent oral interpretation.

## Staff Responsibilities

All school staff, particularly those who have the most interaction with the public such as office staff, administrators, certificated staff, and other appropriate staff as determined by the superintendent, will receive ongoing professional development on meaningful communication with families with limited English proficiency, best practices for working with an interpreter, how to access an interpreter or
translation services in a timely manner, language services available within the District and other information deemed necessary by the superintendent to implement the language access plan.

Appropriate district staff, as determined by the superintendent, will also receive guidance on the interaction between this policy and the District's policy on effective communication with students, families, and community members with disabilities.

The superintendent is authorized to establish procedures and practices for implementing this policy.

| Cross references: | 3210 <br> 4129 Nondiscrimination <br> 4217 <br> Family Involvement <br> Effective Communication |
| :--- | :--- |
|  | Chapter 28A.642 RCW Discrimination prohibition <br> Chapter 49.60 RCW Discrimination - Human Rights Commission <br> Chapter 392-400 WAC Discipline <br> WAC 392-400-215 Student rights <br> Title VI of the Civil Rights Act of 1964 |
| Management resources: | 2016 - July Issue <br> OSPI website: Interpretation and Translation Services |

Adoption Date: 6.8.21
Classification: Encouraged
Revised Dates:

# Regular Business Meeting 

Meeting Date: 06/08/2021
Submitted By: Sari White
Submitted For: Brandon Lagerquist

## Information

## Subject

iReady Math Assessment System

## Recommendation

We recommend support for continuing the implementation of i-Ready Diagnostic and Online Instruction.

## Background

This report serves as the culmination of a three year process to review and make improvement recommendations to our assessment system. The report details the stages of this process and our i-Ready pilot this year.

## Fiscal Impact

## Attachments

i-Ready Board Presentation May 25 2021.pdf
I-Ready Board Report
Inbox
Exec. Dir. Baumgartner
Superintendent's Office
Form Started By: Sari White
Final Approval Date: 06/04/2021

Form Review

Reviewed By
Robert Baumgartner
Allison Kaufmann

Date
05/14/2021 09:27 AM
05/14/2021 11:24 AM
Started On: 05/14/2021 08:51 AM

# iReady Math <br> Assessment System 

Report to the Edmonds School District
Board of Directors - May 25, 2021
Brandon Lagerquist - Director of Assessment, Research, and Evaluation

## The Recommendation

i-Ready Math: Support the advancement and growth of a data-informed school district culture and require the use of i-Ready Math Diagnostic and Online Instruction in grades K through 8 and require the use of the i-Ready Math Diagnostic in grade 9 .
i-Ready Reading: Continue to support the use of the i-Ready Reading Diagnostic and Online Instruction in grades K through 8 and maintain the current optional status in grades 3 through 8 in order to collect more data to inform a longer term recommendation moving forward. It is recommended to require use of $i$-Ready Reading in grades K-2 in order to meet the state mandate for a Dyslexia screener to be implemented by fall 2021.

## The Why

Three-fold:

1) Math achievement has been below expectations for a decade or longer.
2) OSPI requires the use of diagnostic assessments for the school year 2021-2022 plans that are due from every district on June 1st.
3) The charge given the Director of Assessment, Research, and Evaluation upon being hired in August 2016 was to update and modernize the Edmonds School District assessment system.

## Examples of Data Displaying Math Performance



## Comparison Districts and Use of Diagnostic Assessments

| School District | District-Wide Common Math Assessment System |
| :--- | :--- |
| Clover Park | MAP and Star |
| Edmonds | iReady |
| Everett | iReady |
| Evergreen | Star |
| Marysville | Star |
| Mukilteo | iReady |
| Northshore | MAP and CenterPoint |
| Seattle | iReady |
| Shoreline | iReady |
| Tacoma | iReady |
| Vancouver |  |

## System of Common Assessments for Useful and Meaningful Feedback

- Formative - Assessment for Learning.
- Screening
- Diagnostic
- Progress Monitoring
- Informal
- Summative - Assessment of Learning
- State Assessments
- Federal Assessments



## The Assessment Pyramid in Edmonds in 2016

Assessments that are:

- Common to all applicable schools.
- Taken by all students in applicabl grade levels.
- Used for a specific purpose(s)
- In 2016, the system was top heavy - too reliant on summative data.
- In 2016, the main gaps were a lack of common district-wide Diagnostic Assessments and Progress Monitoring Assessments.

The Assessment Pyramid in Edmonds in 2021

## State Assessments*

 i-Ready - Overall ScoreAcadience - K-2
Naglieri - 2nd grade
Dyslexia Screener - K-2
Student Wellness - 3-12
i-Ready - Domain Scores \& Algebra Readiness Indicator Teachers College Running Records
*State assessments include: Smarter Balanced ELA and Math grades 3 through high school, WCAS Science grades 5, 8, and 11, WA-AIM grades $3-12$, ELPA grades $\mathrm{K}-12$, WIDA grades K-12 and WaKIDS kindergarten.
i-Ready Progress Towards Annual Typical Growth Goal as of February 2021


[^0]i-Ready Progress Towards Annual Typical Growth Goal as of February 2021

**Due to small numbers, grades 7 and 8 are not shown.

## Timeline of Pilot

| Phase One: <br> 2018-19 | Phase Two: <br> 2019-2020 | Phase Three: <br> 2020-2021 | Phase Four: <br> $2021-2022$ |
| :--- | :--- | :--- | :--- |
| Needs Assessment <br> with a focus on <br> grades 5 through <br> 9. | Math Assessment <br> Pilot - Expanded <br> focus to grades <br> K-12. | District-Wide Math <br> and Reading <br> i-Ready Pilot - <br> Expanded focus to <br> Reading and Math. | Implementation of <br> i-Ready Math and <br> Reading as a <br> district-approved <br> Tier 1 resource. |

## Funding for the iReady System

| Implementation | i-Ready |  | Prof. Development |  | Total |  | Price Per Student/Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| i-Ready Math Assessment \& Instruction | \$ | 264,816.00 | \$ | 117,000.00 | \$ | 381,816.00 | \$ | 19.76 |
| i-Ready Math Assessment \& Instruction \& Reading Assessment | \$ | 329,136.00 | \$ | 117,000.00 | \$ | 446,136.00 | \$ | 24.56 |
| i-Ready Math \& Reading Assessment \& Instruction | \$ | 442,872.00 | \$ | 117,000.00 | \$ | 559,872.00 | \$ | 33.05 |

- Diagnostic Assessment
- K-12
- Adaptive
- Personalized Online Instruction
- K-8
- Auto-assigned and/or Teacher assigned
- Learning Games
- K-8
- PDF Lesson Plans
- K-12
- Standards Mastery Assessments
- K-8


## Known and Expected Challenges

- Length of time to complete the diagnostic assessment.
- Remote testing.
- Using My Path with fidelity.
- Student motivation.
- Smarter Balanced.
- Need for improved assessment literacy and data literacy across all levels of the system.


## Questions?

# The Development and Implementation of a Comprehensive District-Wide System of Common Assessments: 

K-12 Mathematics Assessment and Data Needs Assessment, Multi-Phase Pilot, and Recommendation for Implementation

Report to the Edmonds School District Board of Directors
May 14, 2021

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## Appendices

Appendix I: A Model of a Comprehensive District-Wide System of Common Assessments.
Appendix II: Full data set of most recent state assessments results in mathematics.
Appendix III: OSPI Diagnostic Assessments Manual and other Sources of Assessment System Best Practices

Appendix IV: Math Task Force Review of Math Placement Procedures and Outcomes in Demographic Proportionality.

Appendix V: American Institute of Research Screening Tools Chart
Appendix VI: Scoring rubric for evaluation of assessments to pilot.

Appendix VII: Interim Assessment Block Blueprints.

Appendix VIII: Publisher information regarding the Orleans Hanna Algebra Prognosis Test.

Appendix IX: Middle School Math Placement Process and Procedures.
Appendix X: High School Math Placement Process and Procedures.
Appendix XI: Grade 6 Math Pathways for the Class of 2023.
Appendix XII: i-Ready Teacher feedback from Fall and Winter 2019.
Appendix XIII: Star Teacher feedback from Winter and Spring 2020.

Appendix XIV: i-Ready and Star Student Feedback.

Appendix XV: i-Ready and Star Community Review Feedback.
Appendix XVI: August 252020 School Board Report slide deck
Appendix XVII: Final feedback from teachers, parents and students
Appendix XVIII: i-Ready growth analysis report
Appendix XIX: Bias review

## Appendix XX: Technical review committee membership

Appendix XXI: Sample articles that discuss models of assessment systems.
Appendix XXII: Preliminary assessment schedule for the 2021-2022 school year.

# The Development and Implementation of a Comprehensive District-Wide System of Common Assessments: <br> K-12 Mathematics Assessment and Data Needs Assessment, Multi-Phase Pilot, and Recommendation for Implementation 

## Recommendation

With the support and approval of the Math Task Force, Math Assessment Steering Committee, and the Instructional Materials Committee, the recommendation is as follows:
i-Ready Math: Support the advancement and growth of a data-informed school district culture and require the use of i-Ready Math Diagnostic and Online Instruction in grades K through 8 and require the use of the i-Ready Math Diagnostic in grade 9.
i-Ready Reading: Require the use of the i-Ready Reading Diagnostic for grades K through 8 for the 21-22 school year. Maintain the optional use of the i-Ready Online Instruction in Reading in grades K through 8. It is recommended to require use of i -Ready Reading in grades K-2 in order to meet the state mandate for a Dyslexia screener to be implemented by fall 2021.

## Rationale For Recommendation

Mathematics achievement has been a known area of need in the Edmonds School District. In the Fall of 2018, the Edmonds School Board and the Superintendent's Cabinet were provided a presentation which provided data which highlighted how great of an area of needed improvement mathematics truly is. Describing the issue as "code red", the Superintendent charged the district with developing a task force to conduct a thorough needs analysis to understand better what was needed to improve the academic outcomes in mathematics for the students of the Edmonds School District. Through this needs analysis, the Math Task Force uncovered a variety of needs including but not limited to:

- Immediately end the use of the Smarter Balanced Interim Assessments as part of the set of data used for math class recommendations in grades 7 through 9 .
- Further study the tracking of students within mathematics, beginning in grade 7.
- Phase out or redesign the 2nd Grade Place Value assessment so that the content and rigor aligns better with the Common Core State Standards.
- Provide professional development and resources for Tier 1 mathematics support for all students.
- Research and pilot diagnostic assessments with the intent that all students would benefit from having consistent, high quality data from a valid and reliable assessment tool that is common across all classrooms in the school district.

More background on the work and outcomes of the Math Task Force is provided later in this report. In addition to the work and processes that the Math Task Force engaged in during the

2018-2019 school year, there are other needs that have come up, some of which came about as a function of the pandemic that initially closed schools in Washington state in the middle of March 2020. These more recent rationale include:

- OSPI Guidance for Reopening Schools in Fall 2020 - The guidance released by OSPI in spring 2020 strongly recommended that school districts implement diagnostic assessments.
- OSPI Guidance for the 2021-2022 School Year - On June 1st 2021 all school districts must submit plans to OSPI, related to the 2021-2022 school year. A strong recommendation from OSPI is to utilize diagnostic assessments in order to continue the monitoring of student growth and to ensure students are achieving grade level standards. Specifically, the guidance states:
- "Diagnostic assessment is a particular type of formative assessment intended to help educators identify students' specific knowledge, skills, and understanding in order to build on each student's strengths and specific needs. Because of their domain specificity and design, diagnostic assessments can guide curriculum planning in more specific ways than most summative assessments."
- Dyslexia Screener Mandate - All school districts in Washington state are required to identify the instrument they are using to assess for reading difficulties related to Dyslexia for all students in grades K-2. I-Ready Reading will fulfill the state mandate.


## Assessment Vision

Upon hire in August 2016, the Director of Assessment, Research, and Evaluation was tasked with conducting a district-wide review of the district's assessment and data systems as part of a process to update the school district's assessment system and contribute towards improving the overall data culture of the school district. Based on interviews with central office administrators, school administrators, and teachers, along with researching the literature on assessment systems (ETS, 2018; Sigman \& Mancusco, 2017; Stevens, 2009; Wiliam et. al., 2019) the concept of an assessment system to implement in the school district is described as a Comprehensive and Balanced System of District-Wide Common Assessments. Such a system is visualized in the pyramid graphic shown below in Figure 1.

The graphic in Figure 1 depicts a balanced system of assessment where teachers should be spending most of their time assessing at the base of the pyramid and the least amount of time assessing at the top of the pyramid. There is a similar expectation in regards to how much time teachers should be spending with the data that is gained from the different types of assessment. Thus, teachers should be spending most of their time with the informal assessments. Informal assessments are those activities that all teachers are engaged with on a daily basis. Informal assessments are activities such as observation, checks for understanding, self-assessment, and reflection. At the top of the pyramid are the summative assessments. State assessments, such as Smarter Balanced, are examples of summative assessments. In the model depicted in

Figure 1, summative assessments should expend the least amount of time during the school year because they are intended to only be administered once at the end of the school year. How i-Ready and other district assessments currently fit into this model of a system is depicted in Figure 2.

Figure 1. A model of a district-wide system of common assessments.


Figure 2, shown below, depicts how the balanced assessment system in the Edmonds School District is taking shape and where i-Ready exists within this model of a comprehensive district-wide system of common assessments. As can be seen, the primary purpose of i-Ready is to be a diagnostic tool as well as a progress monitoring measure.

Figure 2. A model of how current district assessments fit into a comprehensive assessment system.
The Assessment Pyramid in


## Rationale for a Comprehensive System of District-Wide Common Assessments

The need, and subsequent development of a model, for a comprehensive system of district-wide common assessments was developed over the course of numerous years with the input and reflections of a large variety of shareholders. Some beneficial features that a comprehensive system of district-wide assessments include:

- Ability to progress monitor within and between school years, due to the assessments being common within and between grade levels.
- Streamlined data engagement - all schools are using the same core set of assessments and thus can quickly and efficiently understand the data for new and incoming students.
- Facilitates and supports the implementation of Multi-Tiered Systems of Support (MTSS) and collaborative structures such as Professional Learning Communities (PLC's).
- Provides more freedom for school budgets to be utilized for needs other than assessment and data collection tools.
- Ensures that all students have the opportunity for high quality and actionable feedback based on assessment results

The next sections of this report will describe the various processes in which the district has engaged since the specific review of mathematics achievement was formally undertaken in the 2018-2019 school year.

## Mathematics Achievement Data

The mathematics achievement data for the Edmonds School District has long told a story suggesting a need for further and specific attention. In addition to reporting the math achievement results at an annual school board meeting, math achievement was given a deeper look at a board study session on October 15, 2019. Figure 3 depicts the typical outcomes we find from the mathematics state assessments. In the chart, the district performance is the yellow bar and it is noticeably lower than the bars to the immediate left and right. The school districts in the chart are organized, left to right, by percentage of students in the district who qualify for the free and reduced lunch program. The free and reduced lunch program is the metric available to school districts that offers the closest approximation to a measure of poverty. A district's percentage of students enrolled in the free and reduced lunch program is a significant predictor of outcomes on state assessments, in that the lower a district's percentage of free and reduced lunch, the higher their achievement tends to be on state assessments. Due to those reasons, the chart helps to identify districts that are out performing or underperforming their demographics. The chart in Figure 1 clearly shows Edmonds underperforming.

Figure 3. 3rd grade math performance compared to other school districts.


Figure 4, shown below, exemplifies the persistence of the pattern of the Edmonds School District underperforming in relation to other school districts throughout Washington state. The full set of mathematics performance data can be found in Appendix 2.

Figure 4. 8th grade math performance compared to other school districts.


## Timeline of Process

Below is a basic outline of how the process was approached and how it has unfolded over the course of 3 years. Year 1, the 2018-19 school year, focused on a needs assessment on a variety of aspects of mathematics in the Edmonds School District such as current assessments, currently available data, evaluations of math programs, the math placement procedures and processes, in addition to scrutiny of the current assessments being used for math by the district versus assessments that are available from publishers. An outcome of Phase One was the determination that Star and i-Ready math assessments were recommended to both be piloted. Phase Two was the initial round of math assessment pilots. The popularity of the assessments grew rapidly in the fall of 2019 and the pilot was quickly expanded from grades 5 through 9 to grades K through 12. Phase Three is a part of the current 2020-2021 school year. Based on the recommendation of Elementary and Secondary Continuous Learning Workgroups, the pilot was extended to reading as well as math and was again offered to all teachers in the school district. Phase Four is dependent on the acceptance of the recommendation that is provided at the beginning of this report.

Table 1. Basic outline of the four phases of the math assessment pilot.

| Phase One: 2018-19 | Phase Two: <br> 2019-2020 | Phase Three: <br> 2020-2021 | Phase Four: <br> 2021-2022 |
| :--- | :--- | :--- | :--- |
| Needs Assessment <br> with a focus on <br> grades 5 through 9. | Math Assessment <br> Pilot - Expanded <br> focus to grades <br> K-12. | District-Wide Math <br> and Reading <br> i-Ready Pilot - <br> Expanded focus to <br> Reading and Math. | Implementation of <br> i-Ready Math and <br> Reading as a <br> district-approved <br> Tier 1 resource. |

## Math Task Force

Due to the need to better understand the state of mathematics in the Edmonds School District, a task force was launched in the fall of 2018. The Math Task Force was co-lead by the Director of Assessment, Research, and Evaluation and the Secondary Math Content Lead and the membership included a wide range of shareholders. Table 2 provides details on the membership of the Math Task Force.

Table 2. Membership of the Edmonds School District Math Task Force

| Role | Number of Representatives |
| :--- | :--- |
| Parents and Community Members | 5 |
| Edmonds College | 1 |
| Highly Capable Program Teachers | 1 |
| Elementary Coaches | 3 |


| Math Task Force, continued... | 3 |
| :--- | :--- |
| Elementary Teachers | 9 |
| Secondary Teachers | 2 |
| Specialists | 2 |
| School Administrators | 3 |
| District Administrators and Staff |  |

The Math Task Force (MTF) convened its first meeting on October 29th 2018. The focus of the initial meeting of the MTF was on developing a foundational and shared understanding of:

- Types and Purposes of Assessment - Available in Appendix III.
- Current status of math placement in secondary grade levels and demographic proportionality of enrollment in secondary math courses. More detailed information can be found in Appendix IV.

Upon developing a shared understanding of the team's purpose and the rationale for the work, in November 2018 the MTF began to consider the gaps and weaknesses in our current math placement processes and procedures. One area that was identified as in need of further inquiry is the racial disproportionality that is consistently found in secondary level math courses. In general, advanced math courses have a disproportionately high number of students who are grouped as Asian or White. Conversely, regular grade level math classes have disproportionately high numbers of students categorized as Hispanic/Latino and students who qualify for federal programs such as the free and reduced price lunch program, English language services, and special education services.

Another piece of that work was to research what other school districts had in place for their assessment systems, particularly in regards to math diagnostic assessments. The table below shows the findings of that research. What we find is that every school district we research has diagnostic assessments that are required and most of the districts that were researched have had diagnostic assessments in place for a number of years. There are many districts not included in Table 3 that also have diagnostic assessments implemented in their systems, such as Arlington, Bellingham, Monroe and Anacortes to name just a few that are also within our same Educational Service District (ESD). These findings highlight the research based evidence that is also supported by the Office of Superintendent of Public Instruction that the use of high quality diagnostic assessments are a necessity for school districts to implement. Clearly, most school districts in the state of Washington are following the guidance to take advantage of the data that comes from administering diagnostic assessments.

Table 3. School districts around Washington state and their required diagnostic assessments.

| School District | District-Wide Common Math Assessment System |
| :--- | :--- |
| Clover Park | MAP and Star |
| Edmonds | iReady |
| Everett | iReady |
| Evergreen | Star |
| Marysville | Star |
| Mukilteo | iReady |
| Northshore | MAP and CenterPoint |
| Seattle | iReady |
| Shoreline | iReady |
| Tacoma | iReady |
| Vancouver |  |

As an additional component of the Math Task Force work, the team reviewed the Screening Tools Chart developed by the American Institutes of Research. An example of this tool can be found in Appendix $V$ and the full tool can be accessed through the following URL: https://charts.intensiveintervention.org/ascreening.

As part of the work, the MTF developed a scoring rubric to determine the top candidates for a math assessment pilot in the 2019-2020 school year. The final version of the rubric can be found in Appendix VI.

In December of 2018, the MTF focused its efforts on updating the math placement process and procedures. The changes that were put into place, as of Winter 2019, include:

- Eliminating the Smarter Balanced Interim Assessment Blocks (IAB's) from the criteria utilized in the math class recommendation matrix. This decision was based on a couple of factors:
- 1) Analysis of IAB scores and subsequent outcomes strongly suggested that the IAB's were not properly screening students as intended.
- 2) As part of the process, the MTF conversed with a psychometrician from the Smarter Balanced consortium and found further evidence that the IAB's are an inappropriate tool for the purpose they were intending to fulfill. For example, it was found that on some IAB's a student could get a Level 2 (out of three possible levels) by getting only one item correct on the entire test. In addition, the Level 2 range was found to be so broad that it had very little ability to differentiate between actual student skill level and preparedness for advanced content. Finally, the standard error of measurement is at times large enough to encompass a portion of the
range for all three possible levels. For these reasons, the psychometrician suggested that the appropriate interpretation of a Level 2 on an IAB should be expressed as, "indeterministic due to a large standard error."
- More information on IAB's can be found in Appendix 7 and in Table 4 showing the differences between IAB's and i-Ready are shown in the table below:

Table 4. Differences between SBA interim assessments and i-Ready.

| Feature | SBA Interim Assessments | iReady Assessment System |
| :--- | :--- | :--- |
| Adaptive | No | Yes |
| Provides "years behind" indicator | No | Yes |
| Growth Measure | No | Yes |
| Automatic Scoring | Mostly | Yes |
| Scale Score | No | Overall scale score and projected <br> growth goal. |
| Level Score | Overall level - below, at/near, above | Overall level for each domain - Tier <br> 1, Tier 2, Tier 3. <br> Grade level indicator for each of 4 <br> domains. |
| Percentile Score | No | Yes |
| Personalized Online Instruction | No | Yes |
| Ready for use during remote <br> learning | No | Yes |

- The MTF also expressed a desire to find a more updated and suitable replacement for the Orleans - Hanna Algebra Prognosis Assessment (OH). The reasons for the desire to replace the OH include:
- It's a timed test and speed is not a focus or component of the mathematics Common Core Standards.
- The publisher does not update the instrument or the norms on a regular basis. The most recent version was developed in 2005 and was last normed in 1993, which predates Common Core State Standards.
- The publisher does not offer any translated materials and refused our request to have permission to translate the instrument using our own resources.
- Further information regarding the OH can be found in Appendix 8.
- The MTF also sought to simplify the process of recommending students for secondary math courses. In coming to this decision, the MTF reviewed the placement procedures, details of which are found in Appendices 9 and 10. One
of the more striking visuals is shown below in Figure 5 and a larger version can be found as Appendix 11.

Figure 5. Grade 6 math pathways for the class of 2023.


The work of the Math Task Force led to a simplification of the 7th Grade math class recommendation process, which is described in Table 5.

Table 5. Adjusted benchmarks and assessments for 7th grade math recommendations.

| Algebra Recommendations |  |
| :---: | :---: |
| Orleans Hanna | 5th Grade Smarter Balanced |
| 30 to 35 | $>2664$ |
| 36 to $\mathbf{4 0}$ | $>2595$ |
| 41 to 45 | $>2531$ |
| 46 to 50 | $>2472$ |
| Honors Recommendations |  |
| Orleans Hanna | 5th Grade Smarter Balanced |
| 22 to 25 | $>=2577$ |
| 26 or higher | 2490 or higher |

Upon the culmination of learning about assessment and data literacy, studying current placement process, procedures, and outcomes, and researching available resources, the MTF made the decision to learn more about the Star assessment system from Renaissance and the i-Ready assessment system from Curriculum Associates. Both vendors were invited for presentations in January 2019. Upon compiling the feedback from the presentation rubrics, the MTF decided to move both systems forward to be piloted in the 2019-2020 school year.

The rationale for continuing through with a math assessment pilot process is because the Math Task Force found that none of the tools currently available to our schools were producing the data that met the needs of our students. Examples of measures that were found to be needs of the system include but are not limited to:

- A metric to determine which students are "two or more grade levels behind in mathematics." The need for this metric is exemplified by the lack of anticipated outcomes from the Intensified Algebra program that is run at our four comprehensive high schools.
- Intensified Algebra is a program which has a research base that suggests the program is best suited to meet the support needs of students who are 2 to 3 years behind in mathematics.
- Without a metric that identifies years behind in math, the school district is left without a valid indicator that ensures students are being prioritized appropriately for admission to that course.
- Teachers voiced frustration over not having a district provided tool that could quickly and effectively provide fine-grained detailed information for students who enroll in the district. Particularly when the student is in 3rd grade or below, there is not even state assessment data for the teacher to lean-on to understand better each student's strengths and opportunities for growth.


## Math Assessment Pilot

With the recommendation of the Math Task Force, the Math Assessment Pilot was launched in August 2019. The pilot began with i-Ready and then switched to Star in January 2020 to allow for the same group of teachers and students to experience and provide feedback for both assessment systems. Since part of the charge of the Math Task Force was to focus on the "transition years", described as when elementary students move on to middle school and when middle school students move on to high school, the recruitment of teachers to participate had an initial focus on grades 5 through 9 . Grade 5 was selected as the lower-bound because at that time there were tentative discussions taking place around the possibility of restructuring to a grades 6-8 middle school system. There were no limits placed regarding how many teachers would be allowed to participate.

The initial pilot group consisted of 121 teachers across 26 schools, including all middle schools, all high schools, and both of our K-8 schools. This group of teachers received initial training in August of 2019 as part of the Summer Institute. Follow-up training was provided to all pilot
teachers in October 2019. The i-Ready assessment system quickly gained popularity amongst several schools. Due to the enthusiasm and the need to vet the utility of the assessment at all elementary grade levels and the usefulness and potential return on investment of the online instruction component, several schools opted-in to having their entire school be a part of the pilot. These schools were Beverly Elementary, Meadowdale Elementary, and Sherwood Elementary. With this change, the number of teachers in the pilot increased to 159.

Participating teachers assessed students twice, once in early fall and again in December, in order to generate growth scores which allowed for the scrutiny of all levels and types of data that is produced by i-Ready. In addition, teachers were asked to utilize the online instruction from i-Ready, called My Path, between the two rounds of diagnostic testing. Teachers and students were asked to provide feedback on their opinions, impressions and recommendations regarding i-Ready after the 1st diagnostic and again after the 2nd diagnostic in December 2019. By and large, the feedback was overwhelmingly positive. Figures 6 and 7 below displays the overall ratings after the 1st diagnostic followed by the overall ratings provided after the 2nd diagnostic. As can be seen, over $70 \%$ of responses rated i-Ready an 8 or higher and over $65 \%$ retained an 8 or higher by the end of December 2019. The full data sets from the 2019 i-Ready pilot can be found in Appendix 12.

Figure 6. Overall teacher ratings of i-Ready after 1st diagnostic in the 2019-2020 school year.

What is your overall rating of this assessment?
84 responses


Figure 7. Overall teacher ratings of i-Ready after 2nd diagnostic in the 2019-2020 school year.

What is your overall rating of this assessment?
52 responses


With the completion of the i-Ready pilot in December 2019, the team of pilot teachers began to utilize the Star math assessment system. Initial training on Star was provided in January with a follow-up training in February. After the initial administration of the Star math assessments, $11.8 \%$ of responding teachers rated Star an 8 or higher. Upon completion of the second administration of the Star math assessments, almost $31 \%$ of responding teachers gave a rating of 8 or higher. These ratings are shown in more detail in Figures 8 and 9. The full data sets can be found in Appendix 13.

Figure 8. Overall teacher ratings of Star after 1st diagnostic in the 2019-2020 school year.

What is your overall rating of this assessment?
51 responses


Figure 9. Overall teacher ratings of Star after 2nd diagnostic in the 2019-2020 school year.

What is your overall rating of this assessment?
37 responses


As seen in Figure 10, students rated Star assessments higher than i-Ready, but both assessments had a less than $50 \%$ approval rating from students. The full data sets, including student comments, are included in appendix 14.

Figure 10. Student overall ratings of i-Ready and Star math assessments.


Families, community, and staff that weren't a part of the pilot team were also provided with the opportunity to learn more about the assessment systems and to provide their input. Due to restrictions on in-person gatherings that were in place during the spring of 2020, an electronic viewing method was devised and implemented. Both companies provided a link to a website of resources that offered the community the opportunity to see sample assessments, the research base that underlies the assessment systems, in addition to the other materials that would be available as a function of licensing with the company. The materials review opportunity garnered 67 responses on the feedback survey. Figure 11 displays the outcomes of the overall
rating that respondents provided. I-Ready was overwhelmingly the more popular assessment with half of respondents rating i-Ready a 4 out of 4 compared to $9 \%$ of respondents rating Star a 4 out of 4. The full data set is found in Appendix 15.

Figure 11. Community review ratings of i-Ready and Star math assessments.


## Math Steering Committee

In order to review the data collected from the pilot and to develop a recommendation to move forward to the board of directors, a Math Steering Committee was brought together in February 2020. The Math Steering Committee had a team of 22 staff members and more detailed information about the team is provided in Table 6.

Table 6. Membership of the Math Steering Committee.

| Role | Number of Representatives |
| :--- | :--- |
| Highly Capable Program Teachers | 2 |
| Elementary Coaches | 3 |
| Elementary Teachers | 4 |
| Secondary Teachers | 4 |
| Specialists | 3 |
| School Administrators | 2 |
| District Administrators and Staff | 4 |

Along with processing the data described earlier in this report, the Math Assessment Steering Committee also held a meeting with i-Ready representatives and a separate meeting with Star representatives, in order to get a first hand demonstration of the assessment systems as well as to get any and all additional questions answered, prior to developing a recommendation to move forward to the school board of directors. In addition, the committee was able to review some initial outcomes data that looked at if and how strongly i-Ready and Star math assessment scores were correlated with scores from the Smarter Balanced math assessment. The results of the analysis are shown below in Table 5. I-Ready showed a stronger relationship with Smarter Balanced, compared to the Star assessments, across all grade levels that were evaluated.

Table 7. Correlations between i-Ready and Star math assessments with Smarter Balanced.

|  |  | SBA |
| :--- | :--- | ---: |
| SBA | Pearson | 1 |
|  | Correlation | 1937 |
|  | N | $.836^{* *}$ |
|  | Pearson | 402 |
|  | Correlation | N |

Based on the available data and the information received from the vendors, the Math Assessment Steering Committee took a final vote on April 272020 regarding which, if any, of the assessment systems they would like to move forward for board approval. The i-Ready system received $78.9 \%$ of the votes, Star received $15.8 \%$ of the votes, and 1 individual wanted both assessment systems and was thus still undecided.

Due to the preponderance of evidence that tilted heavily in favor of i-Ready, the Math Assessment Steering Committee agreed with moving i-Ready forward for approval with a recommendation that it be required in all K -12 classrooms. The recommendation was initially brought forward to the school board on August 25th 2020. The school board sought more time to consider the recommendation and held a vote on September 8th 2020. That vote approved the contract that was necessary to continue moving forward and gather further evidence of return on investment with the math side of i-Ready and to expand an all-district pilot to the reading components of the i-Ready platform as well. The full slide deck provided at the August 25, 2020 board meeting is found as Appendix 16.

## i-Ready Math and Reading Pilot and the Covid-19 Pivot

As we all know and have experienced, the Covid-19 pandemic has upended and thrown a twist in just about all plans. In this section of the report, I will detail what the impact of Covid-19 has been on the process of piloting the math assessments.

## March 2020 through June 2020

By the time that all schools were ordered to be closed in mid-March, the administration of the assessments for the math pilot were about $3 / 4$ of the way completed. The second round of the Star assessment was completed in April of 2020. By this time, the evidence was already strongly suggesting that i-Ready was a clear front runner between the two systems. Due to that and due to teachers suddenly being in a state of heightened need for flexible resources that would meet the needs of the sudden and dramatic shift to all-remote learning, i-Ready was again offered to any teachers who weren't on the pilot team but wanted to take advantage of the resources due to the unexpected circumstances of school building closures.

The "all-call" for the additional participation opportunity resulted in about 100 additional teachers joining in to utilize the i-Ready resources during the school building closures. Through this unexpected experiment of utilizing i-Ready resources in a home setting, 1,770 completed a math diagnostic remotely and 2,601 students utilized the My Path online instruction in the remote setting. This experience provided the school district extremely valuable information to assist in the planning of the 2020-2021 school year. At that time, spring 2020, most people would not have thought that we would remain fully remote for most of the 2020-2021 school year. The teachers who used i-Ready in the spring were surveyed and $100 \%$ of respondents agreed that was a valuable and useful support during the spring 2020 school closures.

## July 2020 through August 2020

Over the summer of 2020, instead of taking the usual time to rest, reflect, and rejuvenate for the 2020-2021 school year, more than a dozen work groups in the district convened to attempt to plan for all the unknowns and develop the best strategies for supporting students, teachers, and families through the pandemic while maintaining purposeful instruction and learning opportunities for all students. The work groups submitted their recommendations to the Superintendent's Cabinet and to the School Board for approval. The approved plans from the Elementary and Secondary workgroups both included the recommendation that i-Ready math and i-Ready reading should be used by all teachers during the 2020-2021 school year. The decision of the workgroups were due to several reasons:

- State assessments and other district data collection activities had been cancelled in Spring 2020 and gathering current academic data for all students was of critical importance.
- The flexibility of assigning the My Path online instruction from i-Ready was seen as a very useful tool, in particular with the scheduling of asynchronous learning opportunities.
- With extensive concerns of what the media has termed as "learning loss" the work groups wanted to ensure the district had a tool available to all teachers that would allow for a common metric across all students to measure academic success throughout the pandemic and beyond.


## September 2020 through early May 2021

With the support and recommendations of the Math Task Force, the Math Assessment Steering Committee, and the Elementary and Secondary Summer Workgroups, i-Ready math and reading was made available to all teachers in September 2020. In order to be assured that teachers had a proper level of understanding of i-Ready to make an informed decision on whether or not to use the system this school year, all staff were provided with 2 to 3 hours of training on September 23rd 2020. Enthusiasm for leveraging the capabilities of i-Ready was swift and immediate.

- During the fall 2020 assessment administration window, a total of 10,802 students completed the math diagnostic.
- a total of 7,048 students completed the reading diagnostic.
- During the winter 2021 assessment administration window, a total of 10,575 students completed the math diagnostic.
- 8,359 students completed the reading diagnostic.

Considering that i-Ready is an optional resource this school and considering the volume of new learning that students have been engaged with throughout this school year, the volume of use of the i-Ready platform is seen as an extremely positive sign that the resources are meeting a variety of the needs that were uncovered in the needs analysis conducted in the 2018-2019 school year by the Math Task Force

The My Path online instruction modules from i-Ready have also been heavily utilized throughout this school year. As of May 6, 2021, a total of 11,862 students have used the My Path instruction in math and a total of 9,154 students have utilized the My Path instruction in reading. As a reminder from previous reports, the My Path instruction is designed to be used for about 45 minutes per week, per content area, thus a total of 90 minutes per week for students engaged with both the reading and math i-Ready resources.

The wide usage of i-Ready diagnostic assessments and i-Ready My Path online instruction has allowed us to conduct a preliminary analysis of the potential return on investment that would be gained with a full implementation that is used in all classrooms.

## Final Feedback Forms from May 2021

Teachers, students, and families were provided an opportunity to provide summative feedback on their overall experiences with i-Ready during the 2020-2021 school year. Below are the charts that reflect the outcomes on the surveys concerning satisfaction with i-Ready and degree to which they support the further use of the i-Ready resources in the 2021-2022 school year and beyond. Full sets of results can be found in Appendix 17.

Figure 12. Final i-Ready ratings from teachers.


Figure 13. Final i-Ready recommendations from teachers.


Figure 14. Final ratings and recommendations from families.


Figure 15. Final i-Ready feedback from students.

## Please rate the i-Ready Program based on the following:



## Analysis of Return on Investment

Details of the costs associated with i-Ready are detailed in a later section. Since i-Ready does come with a cost, it is important to identify evidence for the return on investment that we should expect to find from a resource that requires significant investment.

The method we have currently utilized to establish what, if any, return on investment we are seeing from i-Ready, we analyzed growth on the i-Ready diagnostic assessments as a function of degree of usage of the My Path online instruction.

Below in Figure 16 is the analysis of growth on the math i-Ready diagnostic, comparing students who completed 36 or more lessons versus those who completed 35 or fewer lessons on the My Path online instruction. The number 36 was selected because there was, on average, 18 weeks between the fall test and the winter test and modules are roughly 20 minutes in length, which means completing two modules per week provides about 40 minutes of weekly online instruction time for the student. The full report was provided as a board briefing in April 2021 and can also be found as Appendix 18.

In the next two figures below, Figures 16 and 17, the black bar represents median progress towards growth goals for students completing 36 or more lessons and the grey bar represents the median progress towards meeting growth goals for students completing fewer than 36 online lessons.

Figure 16. i-Ready growth analysis for the math diagnostic.
i-Ready Progress Towards Annual Typical Growth Goal as of February 2021

**Due to small numbers, grades 7 and 8 are not shown.

And here, as Figure 17, is the growth comparison chart for i-Ready reading:

Figure 17. i-Ready growth analysis for the reading diagnostic.
i-Ready Progress Towards Annual Typical Growth Goal as of February 2021

**Due to small numbers, grades 7 and 8 are not shown.

## Qualitative Return on Investment Data

Along with the quantitative statistics that are run for reporting and evaluations, qualitative data has also been collected informally regarding the returns on investment that staff have been finding with the use of i-Ready. Two such qualitative stories were provided to the Edmonds School District Board of Directors at the August 25, 2020 Board Meeting. At this meeting, the board heard from:

- Nicole Hill - LAP/Title teacher at Meadowdale Elementary: Nicole described how Meadowdale Elementary has been able to effectively utilize the i-Ready math diagnostic as a tool to screen students in need of math support and to progress monitor to ensure the effectiveness of the supports and interventions provided to students.
- Tanya King - 6th grade teacher at Beverly Elementary: Tanya described how she is able to leverage the i-Ready platform to motivate students to achieve the highest levels of growth possible. Along with utilizing the tool to motivate students, she also described the impact of processing the i-Ready data reports side-by-side with students so that the students better understands what their strengths and areas of opportunity are.

In addition to the above accounts, other folks have stepped forward during various committee meetings to report what they've experienced in regard to the impact of i-Ready with students:

- Sally Guzmán - Family Engagement Coordinator at ESC: Sally has been the site supervisor at the E-HUB since it opened earlier this school year. The E-HUB mostly supports students who are experiencing homelessness. Sally has described i-Ready as being an indispensable tool for engaging students and motivating them to build-up their foundational skills in mathematics and reading.
- Aaron Claar - EL Teacher - Meadowdale High School: Aaron Claar is a member of the Instructional Materials Committee, along with being a teacher at Meadowdale High School. Aaron has described the challenges of establishing the strengths and areas of opportunity for EL students who enroll in the high school throughout the school year. I-Ready has helped Aaron better identify where students' greatest areas in need of support are. The My Path online instruction has also been described as an effective tool to give students support that ensures all foundational skills are solid.


## District Committee Engagement

## Professional Excellence Committee (PEC)

The Edmonds School District Professional Excellence Committee was provided a variety of opportunities to provide feedback on this project throughout the multi-year process. Dates of i-Ready presentations to the PEC include:

- April 21st, 2021
- January 19th, 2021
- March 18th, 2020
- June 10th, 2020
- November 21st, 2019
- December 12th, 2018


## Instructional Materials Committee (IMC)

In addition to PEC, the districts Instructional Materials Committee was provided updates on the following dates:

- May 11, 2021
- April 27, 2021
- March 10, 2021
- February 11, 2021
- January 12, 2021
- March 10, 2020


## Equity Alliance for Achievement (EAACH)

- February 4, 2020
- May 18, 2020


## District Leadership Teams

The various district leadership teams were provided updates and opportunities for feedback on the following dates:

- January 9th, 2019
- February 22nd, 2019
- January 14th, 2020
- August 6th, 2020
- September 1, 2020
- December 1, 2020


## Contract Details

The i-Ready resources are priced in 3 categories: Assessments, My Path online instruction, and Professional Development. Professional development, led by i-Ready, is a required component of a contract of services in order to ensure teachers are receiving a foundational level of support to utilize the resources with as much success as possible. Table 8 provides a summary of projected costs for different scenarios of usage in the school district. Please note from the table
below that adding on the reading components of i-Ready does not double the price of the contract. While a single content area (in this case math) costs $\$ 381,816.00$ adding on the other content area (in this case reading) adds an additional $\$ 178,056.00$ which is a percentage increase of $46.6 \%$. Details on professional development are provided in the next section.

Table 8. Projected costs associated with the implementation of i-Ready in the 2021-2022 school year.

| Implementation | i-Ready |  | Prof. Development |  | Total |  | Price Per Student/Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I-Ready Math Assessment \& Instruction | \$ | 264,816.00 | \$ | 117,000.00 | \$ | 381,816.00 | \$ | 19.76 |
| i-Ready Math Assessment \& Instruction \& Reading Assessment | \$ | 329,136.00 | \$ | 117,000.00 | \$ | 446,136.00 | \$ | 24.56 |
| i-Ready Math \& Reading Assessment \& Instruction | \$ | 442,872.00 | \$ | 117,000.00 | \$ | 559,872.00 | \$ | 33.05 |

## Funding Sources

The primary funding source for a school year 2021-2022 i-Ready contract would come from the Tech Levy that passed in February 2020. That levy provides an allocation to support the implementation of an assessment system. In addition to the Tech Levy, The Department of Assessment, Research, and Evaluation has budgeted for additional support that is incurred from activities such as additional needs for training and time sheets for training that takes place after the contract day.

## i-Ready Professional Development

## Professional Development in the 2020-2021 School Year

Providing timely, rigorous, and engaging professional development is an integral component of a successful assessment implementation. To meet the goal of timely, rigorous, and engaging professional development, we are dedicated to providing all staff a minimum of 3 training opportunities per year for a total of around 6 hours of professional development per school year. Along with the approximately 6 hours of required professional development, we also offer a variety of further opportunities for those who would like more support or for those who are ready to take things to the next level.

During the 2020-2021 school year, teachers have had a myriad of opportunities for i-Ready professional development and the model utilized for this year is planned as part of the implementation for the 2021-2022 school year and beyond. This school years staff training opportunities included:

- August and September - Getting Good Data - 2 hours.
- October and November - Understanding Your Data - 2 hours.
- February and March - Interpreting Growth and Leveraging My Path - 2 hours.
- Drop-In Sessions - Wednesdays from 9am to 1 pm and covering a range of topics including:
- Analyzing diagnostic data.
- Personalized instruction.
- Preparing to administer the diagnostic.
- Learning games.
- Communicating with families.
- Goal setting with students.
- In addition to the training described above, which was geared specifically to teachers, School Psychologists received training specific to their needs on December 9, 2020.


## Staff Resource Website

Along with annually required and optional training and professional development opportunities, we have designed and are constantly updating an i-Ready resource website for staff, which is housed in the Staff Workspace. The i-Ready staff resources in the Staff Workspace include:

- Recordings of most training sessions.
- Electronic versions of reference materials such as the Teacher Success Guide.
- Resources to support families in assisting their children with i-Ready.
- Samples and released items of i-Ready content.

The Staff Workspace requires a log-in by someone with district credentials. Thus, we also designed, built, and populated a specific web site for families, which is described below.

## Family Night

Along with annual professional development for school and district staff, families are also provided with opportunities every school year to learn more about i-Ready and how to support their students learning at home. This school year's family night occurred on December 7th 2020. In order to ensure as much accessibility as possible, the i-Ready Family Night was hosted in the top 6 languages.

## Family Resource Website

The i-Ready family resource website can be found at:
https://www.edmonds.wednet.edu/departments/student learning assessment curriculum instru ction/assessment/school_or district assessments/i-_ready

Along with a recording of the Family Night webinar that took place on December 7, 2020, the resource website has the following compartments of resources available for download:

| Introduction to the i-Ready Assessment at Home | $\mathbf{+}$ |
| :--- | :---: |
| Assessing at Home Resources | $\mathbf{+}$ |
| i-Ready Personalized Instruction Resources | $\mathbf{+}$ |
| Other Resources | $\mathbf{+}$ |
| Frequently Asked Questions | $\mathbf{+}$ |
| How to Use the Translation Tool on the i-Ready website |  |

For the 2020-2021 school year, a focus of family support was placed on supporting students that are testing at home.

i-Ready Supports, Technical Standards, and Bias Review

## English Language Learner Supports

Ensuring that district-wide common assessments are accessible to all students is of central importance and has been a prime focus of the Math Task Force and the Math Assessment Steering Committee. To that goal, it was ensured that English language teachers and special education teachers had a strong voice in each committee and at all parts of the process. English language teachers in the district have reported a high level of success with utilizing i-Ready with their English learners. At the high school level in particular it has been reported that use of i-Ready reading has been an effective tool at understanding a students current academic achievement as well as providing support to become a fluent English speaker.

In regards to embedded accessibility features for English learners, i-Ready currently has a Spanish version of the math diagnostic and is releasing a Spanish version of the K-2 reading diagnostic in the 2021-2022 school year. The intent of offering a Spanish version of the reading assessment at only the K-2 level is to provide the support necessary to ensure learning is accessible while a student still may be in the early phases of the maturation process in gaining English language fluency. I-Ready also provides My Path online instruction in Spanish for the mathematics lessons. By the beginning of the 2021-2022 school year, the platform is scheduled to offer Spanish language lessons in grades K through 8.

In addition to supporting students with language barriers, i-Ready also provides a variety of resources in families that are translated in the following languages:

- Arabic
- Bengali
- Chinese (Mandarin)
- Haitian Creole
- Hmong
- Korean
- Portuguese
- Russian
- Samoan
- Somali
- Spanish
- Tagalog
- Urdu
- Vietnamese
- Yupik

The resources that are available in the above languages include:

- Family flyer and checklist for assessing at home.
- Fridge tips for supporting assessment day.
- Family guide.
- Assess at home videos
- Fridge tips for supporting i-Ready lessons.
- I-Ready personalized instruction family guidance videos.
- Understanding your students' diagnostic data.
- Video: Understanding your students diagnostic data.


## Technical Standards and Bias Review

The i-Ready assessments have undergone an independent technical standards and bias review conducted by the American Institutes of Research and the outcomes are found in Appendix 16. Along with requiring a proven track record of expertise, inclusion criteria also included expertise on culturally and linguistically diverse populations. Please see Appendix 17 to view a detailed list of the membership of the various technical review committees.

Within the technical standards and bias review outcomes (Appendix 16) it is seen that i-Ready Math and Reading earned the highest scores possible in a wide variety of areas including:

- Classification Accuracy and Cross-Validation Summary in Fall, Winter, and Spring.
- Reliability
- Validity (concurrent and predictive)


## Known and Expected Challenges

## Length of Time to Complete a Diagnostic

The amount of time that some students take to complete the diagnostic assessments is the most prevalent theme of negative feedback from teachers. There are several variables that have been identified as possible contributors towards a long testing duration:

- It is an untimed test. Students have 21 days to complete the diagnostic from the day they initiated the assessment.
- A diagnostic assessment is a new type of assessment to most students and teachers in the Edmonds School District.
- A diagnostic assessment, by its nature, is often longer than the typical assessment.
- A diagnostic assessment is often a long test because getting fine-grained levels of detailed data almost always requires asking lots of questions in order to get lots of data back from the students.
- Since a diagnostic wants to find out precisely what each student knows and doesn't know yet, all students will get about half the questions wrong.
- Due to the above, many teachers have reported that students will often sit on questions for a long time when they clearly don't know how to arrive at the answer.
- Testing remotely didn't allow for the usual type and level of supervision from the teacher that would have supported students to stay focused, stay motivated, and not be overly concerned with questions they don't know the answer to.

A feature of i-Ready is that it tracks how long each student tested for. Due to that feature, we are able to look at the average testing times from the fall and winter window from the 2020-2021 school year. Please keep in mind that all the testing times displayed in Table 9 are from remote testing circumstances and likely don't reflect the classroom testing experience. The data in Table 9 is reported in minutes for each grade level. Thus, in Kindergarten, students have been taking an average of about 46 minutes to complete the math diagnostic and about 45 minutes to complete the reading diagnostic. Since students have 21 days to complete a diagnostic from the day they initiated the test, the times below often reflect two or more sessions of testing.

Table 9. Average time testing for each grade level

| Average Time Testing For Each Grade Level - Reported in Minutes |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Math | K | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | 11th | 12th |
| Average Minutes Fall | 38 | 47 | 46 | 57 | 71 | 78 | 90 | 95 | 94 | 92 | 95 | 90 | 72 |
| Average Minutes Winter | 46 | 43 | 47 | 58 | 69 | 80 | 102 | 100 | 96 | 79 | 95 | 77 | 53 |
| Avg. Combined | 46.2 | 44.9 | 46.5 | 57.4 | 69.7 | 79.2 | 96.2 | 97.6 | 94.6 | 89.2 | 95.0 | 85.9 | 64.6 |
| Reading | K | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | 11th | 12th |
| Average Minutes Fall | 33 | 44 | 40 | 60 | 67 | 76 | 88 | 85 | 79 | 78 | 82 | 72 | 63 |
| Average Minutes Winter | 45 | 43 | 43 | 62 | 71 | 77 | 93 | 85 | 81 | 76 | 85 | 73 | 62 |
| Avg. Combined | 45.4 | 43.6 | 41.4 | 60.8 | 69.5 | 76.9 | 90.7 | 84.9 | 79.9 | 76.9 | 83.9 | 72.3 | 62.4 |

The federal Department of Education has cited that school districts should strive for standardized testing to take up no more than $2 \%$ of instructional time. If we use 1,000 hours as the required instructional time, then standardized assessments should take up no more than 20 hours of time for each student at every grade level. Grade 7 has the longest average testing time in the table above with an average of 97.6 minutes spent on the math diagnostic. Below is a model of the average amount of time that each 7th grader would be engrossed in standardized assessments if they took i-Ready reading and math three times per year in addition to completing the required state assessments:

- i-Ready Math and Reading - Fall: 3 hours
- i-Ready Math and Reading - Winter: 3 hours
- i-Ready Math and Reading - Spring: 3 hours
- Smarter Balanced Math - Spring: 3 hours
- Smarter Balanced English Language Arts - Spring: 5 hours
- English Language Proficiency Assessment (ELPA) - Winter: 2 hours
- This assessment is only taken by students currently being served in the English Language Learner program.
- Including ELPA, which is only taken by students enrolled in the English Language Learner program, 7 th graders would be under the 20 hour goal for standardized testing, even though 7th grade had some of the longest average testing times on i-Ready.

A more detailed graphic of average expected testing times, including surveys and other district data collection activities, is included in the draft assessment and data collection schedule for the 2021-2022 school year found in Appendix 22.

## Remote Testing

Many teachers, families, and students reported that the remote environment was a culprit in a few variables that impacted the ability to achieve fully valid and reliable data from all students. Below is an explanation of the issues reported specific to remote testing:

- Parents, older siblings, or other adults in the house would help students with the answers. This practice led to over-inflated scores for some students which then resulted in My Path online instruction being assigned at a level that was too high and well out of the students true zone of proximal development.
- Students found it very difficult to stay on task when taking a standardized assessment from home. This might have led to increased testing times that would not have been realized in a classroom setting.
- Teachers found it difficult to properly supervise students during testing and extremely difficult to quickly solve technical difficulties. In a classroom setting, many of the technical issues would likely have been fixed quickly, but instead would drag on in the remote environment and might have led to longer average testing times in addition to frustration for both the students and teachers.
- Getting help with answers by searching the web on other devices. A handful of teachers reported that students were able to use a smartphone, tablet, or other device with internet access to search for help or answers to questions.


## Using My Path Instruction with Fidelity

As described earlier in this report, our data suggests that students who use the My Path online instruction as intended experienced significantly more growth from fall to winter compared to students who did not use the My Path online instruction as intended. Another finding from that same report is that the majority of students have not been using the My Path online instruction as intended. A variety of teachers reported that they struggled with having students spend about 45 minutes per week on the My Path online instruction. Thus, a central question to answer in order to maximize the benefit to all students is to better understand how to motivate students to utilize the My Path online instruction for about 45 minutes per week.

## Student Motivation

Student motivation, and the decline thereof, has been an often reported issue throughout this school year and i-Ready is no exception. We look forward to analyzing the results of the spring data collection, upon the closure of the window on June 4th, to establish if students who returned to hybrid instruction in April 2021 show any noticeable and significant differences from students who are staying remote for the remainder of this school year.

## Smarter Balanced in Fall 2021

Due to state assessments being cancelled in spring 2020 and spring 2021, due to the pandemic, the Office of Superintendent of Public Instruction made the decision to have students take the state assessments in the fall of 2021 as well as the spring of 2022, thus twice in the same school year. For students in state testing grade levels (grades 3 through 8 and high school) this will add about 8 hours of standardized testing time to their testing year.

The problem with simply waiting until winter of next school year to take the i-Ready diagnostic is that the My Path online instruction is based on the results of the diagnostic. By waiting until January to take the diagnostic, students would have lost valuable time in the fall to have benefitted from the extra academic growth that has been shown to accumulate from the usage of the My Path online instruction.

## Supporting Improved Data Literacy and Assessment Literacy

The Edmonds School District would benefit from a systematic program of data literacy and assessment literacy professional development, in order to improve our collective understanding of the purposes and goals of the various types of educational achievement assessments. As stated earlier in this report, a diagnostic assessment is a novel form of assessment for most of our students and teachers, particularly those who have been in the Edmonds School District for
a period of time. It has also been noted in feedback forms that teachers would benefit from more intensive training on how to find, interpret, and use the wealth of data that is gained from a platform such as i-Ready.

## Need for Ongoing Evaluation

The pandemic brought barriers to collecting the full array of data that would typically be collected and analyzed as part of the process for adopting a diagnostic assessment. These barriers were due to the cancellation of the state assessments in spring 2019 and spring 2020 and the necessity of having students complete standardized assessments in the remote setting.

In a more typical year we would have completed an analysis of the relationship between i-Ready diagnostic assessment results and the state assessments. In the analysis we would have focused on answering two central questions: 1) is i-Ready predictive of subsequent performance on state assessments and 2 ) if it is predictive, to what extent? In other words, how strong is the relationship between i-Ready scores and state assessment scores?

The remote settings that students tested in also creates barriers to a complete analysis of data due to likely issues with validity of data that is collected from a remote setting. For example, there were various instances of parents or siblings being heard in the background of a Zoom testing session and appeared to be assisting the student with finding answers to the test question they were working on. This almost certainly led to inflated scores for an unknown number of students. In addition, since teachers weren't able to supervise as effectively and float around to ensure students were on task, many teachers reported students hitting high levels of frustration due to not being able to get the help that they would have received in a more traditional classroom setting.

Due to the above circumstances, it is vitally important to continue with a full and thorough evaluation in the 2021-2022 school year.

## Acknowledgements

The work described in this report was only possible because of the collective vision, enthusiasm, expertise, and passion of a wide-range of school district and community members. The following is likely an incomplete list of those who have contributed to this report.

Math Task Force

| Name | Role | Name | Role |
| :---: | :---: | :---: | :---: |
| Teresa Lynd | Math Content Lead | Julia Snider | Teacher - Terrace Park |
| Jeff Brender | Teacher - eLearning | Kristen Tollefsen | Instructional Tech Coach |
| Deb Caldwell | Teacher - Terrace Park | Jen Hyppa | Teacher - College Place MS |
| Angel Ericksen | Teacher - Alderwood MS | Kristina Brown | Teacher - HiCap |
| Jeremy Matthews | Edmonds College | Deborah Dunne | Teacher - Meadowdale MS |
| Mani Dillow | Community Member | Gehan Girgis | Community Member |
| Shannon McKenzie | Teacher - College Place Elem | Nicole Hill | LAP/Title Teacher Meadowdale Elementary |
| Sara Lowes | Administrator - Lynnwood HS | Jen Winckler | Community Member |
| Wendy Sinclair | Community Member | Lesley MacPherson | Community Member |
| David Whitney | Teacher - Lynnwood HS | Andrew Lohrmann | Teacher - Chase Lake |
| Dawn Withee-Hurd | Teacher - Lynnwood HS | Michael Nelson | Teacher - Meadowdale Elem |
| Celeste Yeisley | Teacher - Lynnwood HS | Patti Rodgers | Teacher - Meadowdale Elem |
| Hannah Lamont | Teacher - Hazelwood | Sarah Haun | Teacher - Meadowdale MS |
| Judy Verner | Teacher - Alderwood MS | Matt Weaver | Teacher - Alderwood MS |

Math Task Force, continued...

| Name | Role | Name | Role |
| :--- | :--- | :--- | :--- |
| Patti Hathaway | Instructional Coach | Ryan Treadway | Teacher - Brier Terrace MS |
| Aaron Claar | EL Teacher - Meadowdale <br> HS | Roberto Figueroa | Administrator - College <br> Place MS |
| Lynn Caulkins | Assessment and Data <br> Specialist | Peggy Aguilar | Highly Capable Coach |

Math Assessment Steering Committee

| Name | Role | Name | Role |
| :--- | :--- | :--- | :--- |
| Abbey Alessi | Teacher - Cedar Valley | Julie Paddock | Instructional Tech <br> Coach |
| Leah Bracken | Principal - Cedar Valley | Kate Pothier | Special Education <br> Manager |
| Kelly Dack | ELL Coordinator | Kristina Brown | Teacher - HiCap |
| Deb Caldwell | Teacher - Terrace Park | Celeste Yiesley | Teacher - Lynnwood HS |
| Angel Ericksen | Teacher - Alderwood MS | Shannon McKenzie | Teacher - College Place <br> Elem |
| Pam Espinosa | Teacher - Lynnwood El | Peggy Aguilar | Highly Capable Coach |
| Patti Hathaway | Instructional Coach | Sara Lowes | Administrator - <br> Lynnwood HS |
| Nicole Hill | LAP/Title Teacher - <br> Meadowdale Elem | Tanya King | Teacher - Beverly Elem |
| Jen Hyppa | Teacher - College Place MS | Aaron Claar | EL Teacher - <br> Meadowdale HS |
| Ryan Treadway | Teacher - Brier Terrace MS | Teresa Lynd | Math Content Lead |

## References

ETS (2018). Understanding balanced assessment systems.
Federal Department of Education (2015). Fact sheet: Testing action plan.

National Center for Intensive Intervention. Academic screening tools chart. Retrieved from: https://charts.intensiveintervention.org/ascreening

Office of Superintendent of Public Instruction (2020). Reopening Washington schools 2020 district planning guide.

Office of Superintendent of Public Instruction (2020). Test administration manual: Smarter Balanced and WCAS summative assessments.

Office of Superintendent of Public Instruction. ELPA21 annual assessment. Retrieved from:
https://www.k12.wa.us/student-success/testing/state-testing-overview/english-language-proficie ncy-assessments/elpa21-annual-assessment.

Sigman, D., \& Manucso, M., (2017). Designing a comprehensive assessment system. San Francisco, CA: WestEd.

Stevens, J., (2009). Washington state diagnostic assessment guide. Office of the Superintendent of Public Instruction.

Wiliam, D., Stiggins, R., McTighe, J., \& Brookhart, S., (2019). The future of assessment practices: Comprehensive and balanced assessment systems. Policy Paper - Learning Sciences International.

# A Model of A Comprehensive District-Wide System of Common Assessments 

## System of Common Assessments for Useful and Meaningful Feedback

- Formative - Assessment for Learning.
- Screening
- Diagnostic
- Progress Monitoring
- Informal
- Summative - Assessment of Learning
- State Assessments
- Federal Assessments



## The Assessment Pyramid in Edmonds in 2016

Assessments that are:

- Common to all applicable schools.
- Taken by all students in applicabl grade levels.
- Used for a specific purpose(s)
- In 2016, the system was top heavy - too reliant on summative data.
- In 2016, the main gaps were a lack of common district-wide Diagnostic Assessments and Progress Monitoring Assessments.

The Assessment Pyramid in Edmonds in 2021

## State Assessments*

 i-Ready - Overall ScoreAcadience - K-2
Naglieri - 2nd grade
Dyslexia Screener - K-2
Student Wellness - 3-12
i-Ready - Domain Scores \& Algebra Readiness Indicator Teachers College Running Records
*State assessments include: Smarter Balanced ELA and Math grades 3 through high school, WCAS Science grades 5, 8, and 11, WA-AIM grades $3-12$, ELPA grades $\mathrm{K}-12$, WIDA grades K-12 and WaKIDS kindergarten.

Appendix II


Appendix II



Appendix II
2019 State Assessment Percent Meeting Standard by District and State Ordered by Percent Free/Reduced Meal


Grade 5 Math


Appendix II
2019 State Assessment Percent Meeting Standard by District and State Ordered by Percent Free/Reduced Meal


Appendix II



Appendix II



Appendix II



Appendix II


Appendix II 2019 State Assessment Percent Meeting Standard by District and State
Ordered by Percent Free/Reduced Meal Ordered by Percent Free/Reduced Meal


Grade 10 Math


District and Percent F/R Meal

Appendix II
2019 State Assessment Percent Meeting Standard by District and State Ordered by Percent Free/Reduced Meal


Appendix II



Appendix II


Appendix II


Appendix II


Appendix II


High School Math


Appendix II


SBA Results by Ethnicity


## SBA Results by Ethnicity



## SBA Results by Ethnicity



# SBA Results by Ethnicity 



## SBA Results by Ethnicity



## SBA Results by Ethnicity



## SBA Results by Ethnicity



# SBA Results by Ethnicity 



SBA Results by Ethnicity


## SBA Results by Ethnicity

High School Science


## Edmonds School District SBA Results by Program



## Edmonds School District SBA Results by Program



Edmonds School District SBA Results by Program


Edmonds School District SBA Results by Program


## Edmonds School District SBA Results by Program

Grade 6


# Edmonds School District SBA Results by Program 

Grade 7


# Edmonds School District SBA Results by Program 

Grade 8


# Edmonds School District SBA Results by Program 

Grade 8 Science


# Edmonds School District SBA Results by Program 

High School


## Edmonds School District SBA Results by Program

High School Science


## Edmonds School District SBA Results

Grade 3



## Edmonds School District SBA Results



## Edmonds School District SBA Results

 Grade 8

100\%
90\%
80\%
$70 \%$

60\%
50\%
40\%
$30 \%$

20\%

10\%

0\%
2014-15 2015-16 2016-17 2017-18 2018-19

- ELA - Math $\longrightarrow$.Science (Changed from MSP to WCAS in 2018)


## Edmonds School District SBA Results



In the OSPI calculations that are reported publicly, students who do not test are considered as not having met standard. With the changes in the high school assessments, in some years participation rates have been quite low and thus not reflective of students' true abilities.

In 2015, all 11th graders were to have tested in ELA and math. Of the 1,719 members of the Class of 2016, 1,336 had previously met standard on the HSPE Reading and Writing assessments, thus fulfilling their graduation requirement and seeing no need to sit for the ELA SBA in 2015. ELA participation was only $14 \%$.

For math, 1,228 members of the Class of 2016 had already met their graduation requirement via an end-ofcourse exam prior to 2015. Math participation was $16 \%$.

In 2016, 11th grade ELA participation was 94\%. In math, the majority of students had already met their graduation requirement, leaving participation at 47\%.

In 2017, participation was $89 \%$ and $59 \%$ for ELA and math respectively.

In 2018, ELA and math assessments shifted to the 10th grade. Participation in 2018 and 2019 was between $93 \%$ and $95 \%$.

In 2018, science changed from the biology end-of-course exam, which had participation rates in the 70 's, to the grade 11 WCAS. As science is not a graduation requirement, motivation is low and participation was $46 \%$ and $55 \%$ in 2018 and 2019, respectively.

# Washington State Diagnostic Assessment Guide 

JANUARY 2009

PREPARED BY:

Joe Stevens, Ph.D.
MESA
University of Oregon
Under contract with the Office of the Superintendent of Public Instruction

Appendix III

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## Executive Summary

This summary provides a brief overview of the issues discussed in the remainder of this guide. The purpose of The Washington State Diagnostic Assessment Guide is to provide Washington State educators with information that will support the selection, use, and interpretation of formative and diagnostic assessments. Recent legislation in Washington provides support for educators to purchase and use diagnostic assessments. This report provides a clear definition of the concept of assessment as well as background and general information on formative and diagnostic assessment including:

1. A brief review of the Washington state diagnostic assessment legislation (ESHB 6023)
2. Definitions of different assessment purposes and how they relate to diagnostic assessment
3. A description of some of the major findings from the research on formative and diagnostic assessment
4. A discussion of the policy issues related to the implementation of diagnostic and formative assessment processes as well as the use and interpretation of assessment results.

The 2007 Washington State Legislature appropriated $\$ 4.8$ million to school districts to purchase and implement "diagnostic" assessments during the 2007-2009 biennium. School districts were eligible to receive $\$ 5$ per student for the purchase and implementation of diagnostic tools during the 2007-08 school year. During the 2007-2008 session, the legislature decided to change the way the original $\$ 4.8$ million were to be used. Approximately $\$ 2.3$ million were to be allocated to districts for purchasing and administering diagnostic assessments. The remaining $\$ 2.5$ million were to b e used to develop and implement diagnostic and formative assessments. During the 2007-2008 school year, approximately $\$ 1.8$ million of the $\$ 2.3$ million were distributed to 116 of the State's 295 school districts based on their iGrants applications for and proposed use of the diagnostic assessment tools and results. School districts that receive funding are to report whether or not they expended the funds; remaining funds must be spent on diagnostic assessment purchase and use in future years.

ESSB 6023 defined a "diagnostic assessment" as an assessment that helps to improve student learning, identifies academic weaknesses, enhances student planning and guidance, and develops targeted instructional strategies to assist students before the high school WASL. According to the legislation, to the greatest extent possible the assessments tools had to be:
a) aligned to the state's grade level expectations;
b) individualized to each student's performance level;
c) administered efficiently to provide results either immediately or within two weeks;
d) capable of measuring individual student growth over time and allowing student progress to be compared to other students across the country;
e) readily available to parents; and
f) Cost-effective.

The legislation also authorized the preparation of this Washington State Diagnostic Assessment Guide and the development of a Formative Assessment Comparative Guide that identified and provided information on commercially available formative and diagnostic assessment instruments. This work was carried out by Measurement, Evaluation, and Statistical Analysis (MESA) Associates. Questions about the Comparative Guide should be addressed to Joseph Stevens, jstevens.mesa@comcast.net.

Throughout this Guide, the term assessment takes on a broad array of meanings. The term might refer to a particular assessment tool, such as the Early Diagnostic Mathematics Assessment (EDMA). The term is also used to describe assessment results (scores, reports, and descriptive information) derived from students' responses to an assessment tool. The term assessment may be used to refer to an event such as screening at the beginning of a school year. Finally, the term may be used to refer to an assessment process - using assessment tools to gather assessment information as well as summarizing, interpreting, and acting upon information obtained from one or more assessment tools. Given this variety of meanings, throughout this guide, we indicate whether we are discussing an assessment event, an assessment process, an assessment tool, or assessment results.

In addition to the array of meanings for the term assessment, there are many assessment purposes. This Guide defines each of these assessment purposes so that the diagnostic and formative assessment purposes can be distinguished from the purposes of large-scale tests, interim assessments, etc. Educators must be clear about the information they need in order to achieve their purposes so they can select one or more assessment tools that provide the information they need. When educators are clear about their assessment purposes, they are more likely to use the assessment results in a process that helps them achieve their goals. Finally, if educators are clear about their purposes, they are more likely to set up assessment events so that results are available when needed.

The Appendix gives resources for two major assessment purposes - formative and diagnostic with diagnostic assessments being a subcategory of formative assessments. This Guide does not describe or suggest instructional interventions, even though it is well recognized that a strong link between assessment and instruction is a key component of educational effectiveness. This report does not describe or endorse specific assessment tools. There is a companion report in two parts: The Formative Assessment Comparative Guide - Consumer Report and the Formative Assessment Comparative Guide - Technical Report. These Comparative Guides provide information on most commercially available assessment tools in mathematics, reading, science, and writing for grades K-12. The consumer report provides quick summary of the purpose of the assessment, a summary of the focus of the assessment, contact information for the publisher, costs, and a technical rating. The technical report provides detailed information regarding content assessed, information on evidence for reliability and validity of the tests, and additional details on scores, reporting, and
administration procedures. These Comparative Guides are intended to help teachers, schools, and districts select the most appropriate tools for their assessment purposes.

The research on the use of formative assessment processes shows positive impacts on a number of aspects and outcomes of educational practice including: a) increases in student motivation and attitude, b) improved student attention, and c) more active and deeper learning. One of the most important results from the research on formative assessment processes is the finding that regular use of a formative assessment process results in substantial gains in student achievement (Black \& Wiliam, 1998b). Many studies have found that the use of a formative assessment process improves achievement for all students, sharply increases the performance of lower achieving students, and narrows the achievement gap between lower achieving and higher achieving students.

This Diagnostic Assessment Guide also defines four specific formative assessment purposes: screening, diagnosis, interim measurement, and progress monitoring. Although some authors consider these to be distinct, we consider them as subcategories of formative assessment. The purpose of screening is to make an early identification of a student's strengths or weaknesses to allow classification, placement, or intervention. Screening assessment tools are designed to rapidly identify those individuals who need specific placement, attention, or instructional intervention. Diagnosis is another subcategory of formative assessment - designed specifically to identify the causes of student weaknesses, usually with intent to guide or modify instruction or to design differentiated instruction. Interim measurement takes place two or three times per year to determine where students are in relation to achievement of specific academic standards. Finally, progress monitoring is a specific type of interim assessment event, characterized by frequent, repeated use of assessment tools, to determine whether students are responding well to particular instructional interventions. Progress monitoring is usually conducted in conjunction with the delivery of an instructional intervention so that the student's response to intervention can be observed and evaluated.

In addition to the definition of formative assessment purposes, we define the summative assessment purpose as evaluation for the purpose of judging performance at a particular point in time. Summative assessments instruments are primary tools in accountability testing and in efforts to evaluate the performance of students, schools and states. Summative assessment events occur at or near the end of a course of study, a class, or an instructional unit, or a school year rather than during the period of instruction. Summative assessment results are inherently evaluative and typically express results as grades, judgments of proficiency, or measures of attainment. Summative assessments are generally high stakes events, often being used to determine eligibility for matriculation to the next grade, graduation, or other significant decisions.

The timing of assessment events is one key difference between formative and summative assessment purposes. While summative assessment events occur at the end of an instructional period, formative assessment events occur before and during the instructional process. Formative
assessment tools are designed to be more closely linked to learning and instruction; therefore, they are used more frequently and are interlaced with instructional activities. Another key difference between summative and formative assessment purposes is the relative emphasis on evaluation or grading. While evaluation is at the core of summative assessment, there may be no evaluation or grading per se in a formative assessment process. Rather, information from formative assessment tools is used to provide feedback and guidance on learning in progress.

An important topic discussed in this Diagnostic Assessment Guide is the role of feedback in the assessment process. For summative assessment results, feedback is provided in the form of final evaluative judgments (e.g., a final course grade), which can include information about mastery and level of attainment. On the other hand, feedback that is directly linked to instructional change in order to improve student achievement is a distinguishing attribute of feedback from formative assessment events. Formative feedback provides immediate information to students and teachers that focuses on how instruction can be adjusted to achieve improvement in student performance.

The Diagnostic Assessment Guide also presents a discussion of the use of diagnostic and formative assessment in the identification and instruction of students with special needs including the use of progress monitoring methods to evaluate students' responses to interventions (RTI) to help in determining whether students need special education services. Diagnostic assessments play a critical role in the identification of students in need of special education services. Many students who struggle in academic content areas have inconsistent response patterns that make it difficult to diagnose causes using typical classroom formative, district interim, and state level assessments. To provide instructionally relevant information, well developed diagnostic and formative assessment tools can be used to more carefully determine the whether students are learning targeted knowledge and skills and, if not, to determine sources of students' learning needs.

Formative and diagnostic assessment tools must be designed and administered in such a way that differences in language ability do not impede the evaluation of students' skills and content area knowledge. The key challenge in assessment of English language learners (ELL) is making sure that the targeted knowledge and skills are being measured and not some other aspect of language knowledge or language ability. It is recommended that the reading and language requirements of science, social science, and mathematics assessment tools be made as simple and accessible as possible. The use of simplified language in content area assessments has been shown to help both English language learners and native English speakers as well.

Any time an assessment is administered, some test-takers may have cognitive, sensory, physical, or language characteristics that interfere with interpretation of the assessment results. As such, test scores may not accurately reflect the student's understanding (or misunderstanding) in the domain. To ameliorate this problem, accommodations can be provided during assessment events. Accommodation decisions should be matched to the intended purpose of the assessment results.

For example, if the assessment results will be used to prediction later achievement and track of student progress toward achieving the standards on state tests, the policies and methods used for accommodations should closely match those used for the state test. On the other hand, if the purpose of the formative assessment is more directly focused on learning improvements, then greater flexibility in the choice and application of accommodations may be warranted.

Choice of an assessment tool is complex. The companion Comparative Guides provide suggestions and recommendations for how to choose an assessment. These issues are also described in this Guide. Resources for locating assessment instruments are listed in the Appendix of this guide.

The Standards for Educational and Psychological Testing (AERA, et al, 1999) provide extensive guidelines for the effective and responsible use of assessment tool and processes, including discussion of best practices and detailed information on technical adequacy of tests and assessments. Test users should review information on the stated purpose and development of an assessment tool to determine whether it matches users' purposes. Examination of evidence for the reliability and validity of the use and interpretation of assessment results should be a paramount concern for all those who use assessments to ensure that the instrument works effectively in the ways intended.

The final section of the Diagnostic Assessment Guide discusses the implementation, use, and interpretation of diagnostic and formative assessment results. A number of difficulties are briefly discussed - including problems and pitfalls that are common in current assessment practice or that may occur in the implementation of a new assessment system. Some of the challenges discussed at length in the research are aspects of teacher practice that do not conform to best practice in formative assessment processes. Research shows that teachers often apply summative assessment strategies borrowed from high-stakes tests to classroom assessment tools and predominantly focus on assessment for grading and evaluation purposes rather than using assessment processes to support student learning. The assessment tools used may not be designed to support diagnostic or formative applications. For effective diagnostic and formative assessment processes, it is important to select or develop a tool that provides an appropriate sampling of the content domain, is closely aligned with the instructional program, and that can provide sufficient specificity to provide detailed descriptive feedback that supports ongoing student learning.

The research on formative assessment also provides a number of suggestions for effective formative assessment processes. One recommendation is to ensure that there are clear linkages among assessment, curriculum, and instruction. Teachers should explicitly design feedback strategies that connect assessment results with instructional decision-making and planning for intervention.

As mentioned earlier, student involvement is a key component of formative assessment processes. Student involvement should be included as part of assessment and instructional activities
including the use of self and peer assessment. Increased involvement enhances student engagement and increases student motivation and achievement. The research also recommends more integrated involvement of teachers in the design and use of assessment tools and results, which requires increased professional development opportunities since many teachers may not know how to develop or select appropriate formative assessment tools, use assessment results formatively, or interpret assessment results to design responsive instruction.

Last, the research suggests changes in school or district level practices to support effective implementation of diagnostic and formative assessment processes. Policy should be adopted that communicates clear achievement expectations for students. Assessment systems should be coordinated across the district, and assessment results should be communicated in a timely and understandable way. In order to ensure assessment accuracy, investment must be made in fostering assessment literacy among the participants and in evaluating implementation of the assessment system.

## Introduction and Purpose of the Diagnostic Assessment Guide

The purpose of the Diagnostic Assessment Guide is to provide educators with information that will guide their selection and use of diagnostic and formative assessment tools. Throughout this Guide, the term assessment takes on a broad array of meanings. The term might refer to a particular assessment tool, such as the Early Diagnostic Mathematics Assessment (EDMA). The term is also used to describe assessment results (scores, reports, and descriptive information) derived from students' responses to assessment tools. The term may be used to refer to an assessment event such as screening at the beginning of a school year. Finally, the term may be used to refer to an assessment process - using assessment tools to gather assessment information as well as summarizing, interpreting, and acting upon results obtained from one or more assessment tools. Given this variety of meanings, throughout this guide, we indicate whether we are discussing an assessment event, an assessment process, an assessment tool, or assessment results.

In addition to the array of meanings for the term assessment, there are many assessment purposes. This Guide defines each of these assessment purposes so that diagnostic assessment purposes can be distinguished from the purposes of large-scale tests, interim assessments, etc. Educators must be clear about the information they need in order to achieve their purposes so they can select one or more assessment tools that provide the information they need. When educators are clear about their assessment purposes, they are more likely to use the assessment results in a process that helps them achieve their goals. Finally, if educators are clear about their purposes, they are more likely to set up assessment events so that results are available when needed.

This Guide also provides educators with information that will support the selection, use, and interpretation of results from diagnostic assessment tools. Recent legislation in Washington provides support for educators to purchase and use diagnostic assessment tools. This is an astute investment in that years of educational research link strong gains in student achievement, engagement, and motivation to the regular use and implementation of formative assessment tools and processes. Diagnostic assessment tools are a special type of formative assessment tools and processes.
"Formative assessment is central to good instruction in several ways, including focusing learning activities on key goals; providing students feedback so they can rework their ideas and deepen their understanding; helping students develop metacognitive skills to critique their own learning products and processes; and providing teachers with systematic information about student learning to guide future instruction and improve achievement." (Lewis, 2006)

This Guide provides background and general information on formative and diagnostic assessment tools and processes. The Guide briefly reviews the Washington legislation, defines a wide range of assessment purposes, describes some of the major findings from the research on formative and
diagnostic assessment, and discusses issues in the selection and use of diagnostic and formative assessment tools as well as the interpretation of assessment results.

The Appendix presents resources for users of formative and diagnostic assessment tools and processes. It is not the purpose of this guide to describe or suggest instructional interventions even though it is well recognized that a strong linkage between assessment and instruction is a key component of educational effectiveness. This report also does not describe or support the use of specific assessment instruments. There is a companion report for this Guide that comes in two parts: The Formative Assessment Comparative Guide - Consumer Report and the Formative Assessment Comparative Guide - Technical Report. These Comparative Guides provide information on most commercially available assessment tools in mathematics, reading, science, and writing for grades K-12. The consumer report provides quick summary of the purpose of the assessment, a summary of the focus of the assessment, contact information for the publisher, costs, and a technical rating. The technical report provides detailed information regarding content assessed, information on evidence for reliability and validity of the tests, and additional details on scores, reporting, and administration procedures. These Comparative Guide are intended to help teachers, schools, and districts select the most appropriate tools for their assessment purposes.

## Overview of the Washington State Legislation

The 2007 Washington State Legislature appropriated $\$ 4.8$ million to school districts so they could purchase diagnostic assessment tools and implement diagnostic assessment processes during the 2007-09 biennium. School districts were eligible to receive $\$ 5$ per student for the purchase and implementation of diagnostic tools. Districts that enrolled fewer than 100 students were to be allocated $\$ 500$ per school district. The number of students for each school district was determined using the October 2006 student count (See school district "October 2006 Student Counts" at: http://reportcard.ospi.k12.wa.us/summary.aspx?year=2006-07).

Applications were approved if the diagnostic assessment tools that were to be funded were consistent with the State's definition of a diagnostic assessment and if funds were applied for an allowable use. Allowable uses included:
a. purchase of assessments;
b. costs of administering, scoring and reporting results; or
c. Training costs.

Funds were to be used for purchasing and administering the assessments to students. Funds could not be used for developing diagnostic assessments, although they could be used to administer and score previously developed diagnostic assessment tools.

During the 2007-2008 session, the Legislature changed the way the original $\$ 4.8$ million were to be used. Approximately $\$ 2.3$ million were to be allocated to districts for purchasing and
administering diagnostic assessment tools. The remaining $\$ 2.5$ million were to be used to develop and implement diagnostic assessment tools.

During the 2007-2008 school year, approximately $\$ 1.8$ million of the $\$ 2.3$ million were distributed to 116 of the State's 295 school districts based on their iGrants applications for and proposed uses of the diagnostic assessment tools and results. School districts that received funding were required to report whether or not they expended the funds; remaining funds had to be spent on diagnostic assessment purchase and use in future years.

ESSB 6023 defined a diagnostic assessment as an assessment that "helps to improve student learning, identifies academic weaknesses, enhances student planning and guidance, and develops targeted instructional strategies to assist students" before the high school WASL. According to the legislation, to the greatest extent possible the assessment tools had to be:
a) Aligned to the state's grade level expectations;
b) Individualized to each student's performance level;
c) Administered efficiently to provide results either immediately or within two weeks;
d) Capable of measuring individual student growth over time and allowing student progress to be compared to other students across the country;
e) Readily available to parents; and
f) Cost-effective.

The legislation also authorized the preparation of this Diagnostic Assessment Guide and the development of a Diagnostic Assessment Comparative Guide to identify and provide information on commercially available diagnostic assessment instruments. This work was carried out by Measurement, Evaluation, and Statistical Analysis (MESA) Associates. Questions about the Comparative Guide should be addressed to Dr. Joseph Stevens, jstevens.mesa@comcast.net.

## ASSESSMENT PURPOSES

There are many different types of assessment tools. Various authors and users apply different terms to define the same or similar approaches to educational assessment. In this guide we attempt to clarify assessment terms, using common-sense definitions that are consistent with the history of assessment practice and that draw important distinctions for application and practice. It is not the purpose of this guide to discuss in detail all types of assessment tools. However, in order to provide clarity and contrast we briefly define and discuss a range of assessment purposes that may be distinct in important respects but often overlap with formative and diagnostic assessment purposes.

## Norm Referenced- and Criterion Referenced/Standards-Based Assessment TOOLS AND PURPOSES

Glaser (1963) distinguished between two types of information that can be provided from
performance on an achievement test: a) the relative position of one test-taker to others or b) the degree to which a test-taker has attained a particular criterion or level of achievement. This distinction has traditionally defined the essence of norm-referenced and criterion referenced assessment purposes, respectively. More recently, with the advent of the standards movement, standards-based assessment is a name for a specific form of criterion-referenced testing.

## Norm-Referenced Testing

The purpose norm-referenced testing (NRT) is the comparison of one examinee's performance to the performance of a representative group of examinees of the same age or grade level and who were administered the same assessment under the same standardized testing conditions.
Judgments of performance are relative - they only describe a person's standing in comparison to the norm group rather than what students have learned. As an analogy, consider people running a foot race. If the results are reported in terms of order of finish ( $1^{\text {st }}, 2^{\text {nd }}, 3^{\text {rd }}$, etc. $)$, then a norm referenced interpretation has been made.

NRTs are designed and constructed to rank the test takers. Therefore there is a preference in test construction to select items that discriminate well among the test-takers and that represent a range of difficulty from below grade level to above grade level content. In this way, results are useful in comparing students' scores. Because of the way NRTs are constructed, scores tend to result in a normal or bell-shaped distribution of test scores. Scores are commonly reported as percentile ranks that report the relative ranking of an individual in comparison to the rest of the scores in the distribution. For example, student score that results in a percentile rank of 75 means that $75 \%$ of test takers in the norm group received that the same or a lower score than the student.

The quality of the scores from an NRT depends on how well the norm group represents the population of examinees (e.g., how well the norm group represents all fourth grade students in the United States). While some norm referenced scores are based on local comparisons (i.e., local norms or 'user' norms), generally scores are based on studies done by commercial test developers using nationally representative samples for the norm groups. In order to represent the population, professional test developers use careful sampling designs that ensure the norm group matches census information with respect to age or grade, gender, ethnicity, type of community, school size, and region of the country. The norm group is administered the NRT using the same standardized conditions that will be used for all test-takers. Because the process of sampling and testing of a norm group is complex, time-consuming, and resource intensive, test publishers do not test norm groups every year. The results from a norm group may be used as the basis for comparison for five or more years. Students' scores from a local administration are then reported in relation to the performance of this norm group.

Many commercially available tests are NRTs, including the California Achievement Tests (CAT); the Comprehensive Test of Basic Skills (CTBS)-TerraNova; the Iowa Tests of Basic Skills (ITBS) and Tests of Academic Proficiency (TAP); Metropolitan Achievement Tests (MAT); and the

Stanford Achievement Tests (SAT), among others. Most NRTs are "battery" type tests that must cover an array of national content standards; therefore, there are usually only a small number of items within any specific area of the content domain. As a result, NRTs do not provide reliable information at levels more specific than general content categories (see for example, Stevens, 1995).

## Criterion-Referenced Testing

The purpose of a Criterion-Referenced Test (CRT) is to determine whether students achieved a standard of mastery or competence in relation to the knowledge and skills students should learn at a particular grade level. There is no need to compare one student's performance to the performance of other students; therefore, there is no need for below and above grade level content. Depending on the type of information needed, the passing score for a CRT may be set to indicate minimum competency or to indicate mastery of complex content. It is possible for nearly every examinee to earn a passing or a failing score on a CRT.

CRTs may be developed nationally (i.e., the National Assessment of Educational Progress or NAEP) or by states, school districts, schools, and/or classroom teachers. The test development processes for CRTs differ from test development processes for NRTs. CRT items are chosen to represent the content standards being taught. After a period of instruction on certain skills, the expectation is that the majority of students will perform well on items measuring those skills. A properly designed CRT contains multiple items for each learning target in the content domain allowing some evaluation of students' strengths and weaknesses.

For a CRT used at district, state, or national levels, the passing score and all performance level cut-scores are most commonly determined by a committee of experts. In classroom applications, the passing score may be determined by the teacher. In either case, interpretations of performance on the CRT depend on subjective judgments about the proper location of the passing score and other cut-scores (Cizek \& Bunch, 2007). The degree to which the subjective judgment is a reasonable judgment depends on the process used to set the cut-scores and the qualifications/expertise of the individuals who set the cut-scores.

## Standards-Based Testing

Standards-Based Tests (SBTs) are one type of CRT. The central feature of a SBT is the alignment of test content to a particular set of content standards; reporting of assessment results describes performance in reference to proficiency levels. SBT is the name for a CRT that meets the accountability requirements of the 2001 Elementary and Secondary Education Act (also known as "No Child Left Behind"). There is substantial variation from one state to another in the fundamental construction of their SBT. NCLB requires the reporting of results in proficiency levels (i.e., "basic", "proficient" or "advanced"). The "proficient level" is intended to represent what students should know and be able to do in different content areas at a particular grade level.

Defining the proficiency categories requires a judgmental process for determining how test performance relates to expectations for student performance (see Cizek \& Bunch, 2007). Because each state develops its own content standards and standards-based tests, individuals within each state often debate the appropriateness of academic content standards and associated performance levels or benchmarks. Debates focus on whether the content standards are too general or too narrow, too easy or too difficult, and whether appropriate levels of cognitive complexity are referenced in the standards.

A key issue in the use of standards-based tests is the degree of alignment between the test content and state content standards. One of the challenges in constructing SBTs is how to fully represent content standards with a test of limited length. Often, many important standards or benchmarks are not assessed or the curricular alignment is only present at a general level, making it difficult to provide detailed diagnostic or formative assessment results.

States have constructed their SBTs in a variety of ways. Some states have constructed their SBTs directly from state content frameworks; others have used existing NRTs and simply set proficiency cut-offs on the NRT scores. For states that adopt NRTs, there is only a loose connection between the state's content standards and the content on their state tests. Finally, some states use an augmented NRT wherein a core of items come from an existing NRT and supplemental items are added to create a stronger match to the state's particular content standards. It is important to recognize that simply attaching proficiency category descriptions to test scores does not eliminate important differences in test development and construction that can affect proper use and interpretation of results. Given that NRTs assess above and below grade level content, scores are very difficult to interpret in terms of grade level content standards.

## Standardization in Assessment

Standardization refers to the process of making the test content and structure, testing conditions, and test administration comparable or "standard" for all test takers. This process of controlling test content, structure, conditions, and administration is necessary if one person's performance is to be compared to another's. It is obviously an important and necessary feature of normreferenced tests and of tests used for summative assessment purposes.

Standardization may also be important when using other types of tests for other purposes. Whenever direct comparisons are to be made from one test taker, school, district, or state to another or from one time to another, standardization is important. Some degree of standardization is important when administering standards-based assessment tools to ensure that judgments of whether a test takers have met proficiency is determined using the same conditions from one test taker to another.

Standardization may also be important for diagnostic and formative assessment tools and events depending on the purpose of assessment and how the assessment results will be used and
interpreted. If information from a diagnostic or formative assessment is used to make comparisons across test takers, standardization is important.

For some assessment purposes, standardization is directly at odds with the need to provide accommodations that meet to the needs of a particular student. In such cases, standardization of administration across individuals makes little sense. However, other aspects of standardization may be just as important. It may be necessary to use test forms that are equivalent from one assessment occasion to another if the purpose of assessment is to measure growth of skills or abilities over time. Standardization of test content, administration of test forms, and testing conditions ensure that observed growth is due to the skills and abilities of examinees and not due to fluctuations in test content, score meaning, or administration conditions.

## Formative and Summative Assessment Purposes

Scriven (1967, pp. 40-43) is credited with the first published use of the terms 'formative"' and "summative" as descriptions of two general functions of program evaluation. Later these terms were applied more narrowly to educational assessment. The distinctions between formative and summative assessment that we draw here are based primarily on assessment purposes, the timing of assessment events, the types of tasks given to students, the results produced by the assessment tools, and the ways in which assessment results are used and interpreted. We define screening, diagnosis, interim measurement, and progress monitoring as specific subcategories of formative assessment that have unique purposes. We also address whether different assessment tools can be used in tandem and whether one assessment tool can serve multiple purposes.

## Summative Assessment

The key purpose of a summative assessment tool is to summarize performance at a particular point in time. Summative assessment tools are primary tools in accountability testing and in efforts to evaluate the performance of students, schools and states. Summative assessment tools are commonly used to mark attainment of a benchmark and/or certify student performance. The delivery of a summative assessment is usually timed at or near the end of a school year, a course of study, a school term, or an instructional unit rather than during the course of instruction. Summative assessment events occur less frequently than formative assessment events and are designed to provide a snap-shot of performance at a particular point in time. Summative assessment purposes are inherently evaluative and the results are typically expressed as grades, judgments of proficiency, or measures of attainment. Summative assessment events are generally high stakes events, often being used to determine eligibility for the next grade, graduation, or other significant decisions.

Although not a requirement, many summative assessment tools are designed to yield results that compare an individual's performance to other individuals and are therefore norm-referenced (see discussion above on Norm-Referenced Testing). When used in accountability applications like

NCLB, summative assessment results emphasize group performance (e.g., " $40 \%$ met proficiency") and may or may not include reporting of group comparison information (e.g., "percentile rank"). However, the main purpose of summative assessment event is the reporting of results that emphasize evaluative judgments (e.g., "grade of A", "course is passed", "meets proficiency"). Because of the inherent emphasis on evaluation in summative assessment, Harlen \& Crick, 2003 found that the primary motivation for students taking such assessments is often extrinsic (e.g., to please others, to earn a diploma) rather than intrinsic (to self-evaluate attainment of a personal goal).

Summative assessment tools are often equated with standardized tests such as state accountability tests administered for NCLB reporting purposes; however, they are more commonly used for district and classroom assessment events. Local summative assessment tools include district benchmark tests, classroom end-of-unit or chapter tests, and final or end-of-term exams. Because summative assessment events occur after teaching, it is difficult to use summative assessment results to guide instructional interventions, to provide feedback to students, or to modify the course of learning. Instead the strength of summative assessment results is as a means to gauge the absolute level of student performance, to help evaluate the effectiveness of programs, teaching, school improvement plans, or the adopted curriculum.

Advantages of well-constructed summative assessment tools are the provision of reliable and valid snapshots of student knowledge and skills in a defined content area at the time of testing. Summative assessment tools can be a cost effective means for determining whether large groups of students have met learning targets on a broadly sampled representation of a content area.

Of necessity, summative assessment tools must measure a broad range of knowledge and skills in a relatively brief period of time. For this reason, developers of summative tests select test questions that are a sample of all that students should know and be able to do. Test development tends to emphasize the sampling of a breadth of content to represent the course of study being evaluated. Test development methods focus on measurement of overall level of skill and ability in the content area. In many summative assessments the ability to discriminate one performance level from another is the primary psychometric concern.

## Formative ASSESSMENT

The Council of Chief State School Officers (CCSSO) has created an interstate consortium called the Formative Assessment for Students and Teachers: State Collaborative in Assessment and Student Standards (FAST SCASS). FAST SCASS defined formative assessment as:
"... a process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes." (McManus, 2008, p. 3)

The two key characteristics of a formative assessment process are: a) a purpose to enhance learning, inform instruction, or provide feedback, and b) timing that involves the delivery of assessment at the beginning or during instruction or a course of study, class, or instructional unit (Black \& Wiliam, 1998b; McManus, 2008; Sadler, 1989). The purpose of a formative assessment process is to guide and motivate learning and to provide feedback to the student and teacher. Unlike summative assessment tools that provide a final evaluation of goal attainment, formative assessment tools are designed to provide an ongoing assessment of the progress of learners toward learning targets. To facilitate student learning progress, design and development of a formative assessment tool requires greater depth and representation of content and a design that allows users to discover and reveal student strengths and weaknesses. Instead of a psychometric emphasis on discriminating among student performances, a formative assessment tool should be technically adequate in measuring achievement of clearly specified learning targets and in tracking learning over time. Scores and reports from formative assessment tools are intended to allow users to compare current performance to learning targets or goals. Reports are especially effective when assessment results provide information that can be used prescriptively to guide the design and delivery of subsequent instruction.

The timing of assessment events is a key difference between formative and summative events. While summative assessment events occur at the end of an instructional period, formative assessment events occurs during the instructional process. Formative assessment tools are designed to be more closely linked to learning and instruction and, therefore, they are used more frequently, dynamically, and are interlaced with instructional activity. However, to be effective, formative assessment events must be given at a time that allows for instructional changes by a teacher, to promote changes in study activities by a student, or to facilitate changes in student motivation following assessment feedback. The intent of a formative assessment process is to provide the information needed to modify and guide teaching to improve its effectiveness and student achievement. This means that the information provided by formative assessment tools must occur during the time when learning is occurring so that both teacher and student can understand what adjustments need to be made so the student can progress toward learning goals.

Another key difference between summative and formative assessment purposes is the relative emphasis on evaluation or grading. While evaluation is at the core of summative assessment, there may be no evaluation or grading per se in the use of formative assessment tools. Rather, results from formative assessment tools are used to provide feedback and guidance; the assessment itself may be seen more as a form of practice than as a test. As a student learns, it is not expected that high levels of achievement or mastery will be immediately evident. Instead, a period of learning and engagement must occur during which the emphasis is on the assessment of progress and determining the next steps to be taken along a pathway culminating in the learning goal. The purpose of a formative assessment process is to inform the student and the teacher about the progress being made as well as guiding the next steps that need to be taken to support learning.

Another difference between summative and formative assessment is the role of the student. While a formative assessment process requires and depends on the involvement of the student, there is little involvement of the student in a summative assessment process beyond test-taking. In a formative assessment process, students need to be involved in assessing their own learning and in using the feedback provided by each assessment tool to modify their own behaviors. The feedback loop among assessment, instruction, and learning (see section on feedback below) is a critical component of an effective formative assessment process. Research shows that student involvement in assessment increases their motivation to learn (Natriello, 1987). Teachers may involve students in the assessment process by providing descriptive feedback, having students chart or monitor their own progress and performance, or by having students help to assess and give feedback to peers. Direct involvement of the student also provides clear information about what the student knows and can do, what still needs to be learned, and how to improve to reach next steps on the pathway toward the learning goal.

It is also important to note that formative assessment processes may be particularly effective for lower performing students. Research shows that the use of formative assessment processes may narrow the gap between low and high performing students while raising the overall level of achievement for all students (Black \& Wiliam, 1998b). The specific feedback provided by formative assessment tools may be important both for student understanding of how to learn and also for helping teachers make specific plans about the next steps needed for student progress and success.

Formative assessment tools may include observational checklists, homework, student selfevaluation guides, quizzes, and ongoing projects. To be effective, formative assessment tools must assess a few selected learning targets and provide results that guide instruction toward achievement of those targets. In the following sections, we describe several subcategories of formative assessment purposes that are relevant to diagnosis and intervention.

On the following pages, several types of formative assessments are described including screening assessments, diagnostic assessments, interim assessments, and progress-monitoring. In the side bars, a health example is used to help readers better understand the distinctions between these assessment purposes.

## Screening Assessment

The purpose of a screening assessment tool is to make an early identification of student's strengths or weaknesses to allow classification, placement, or intervention. Screening assessment tools are a subtype of formative assessment tools, but they are not designed to result in an in-depth understanding of student skills and abilities. Instead, screening assessment tools are designed to rapidly identify those individuals who need specific forms of placement, attention, or instructional intervention.

As a result, an assessment tool being used for screening may be characterized by less depth of content and by less accuracy or detail in the assessment information provided. One would also expect a well designed screening assessment tool to focus on a narrow range of skill, knowledge, or performance at a particular grade level rather than attempting to measure a large range of ability. For example, to identify children in need of reading intervention for basic skills, a good screener would concentrate on the identification of basic skill deficits; an instrument designed to screen children for a talented/gifted program would focus on other ranges of performance and ability.


A key distinction between screening assessment and other formative assessment events is the timing of administration. Unlike other forms of assessment, screening assessment occurs before instruction or placement. The results from a screening assessment may also suggest the need for additional assessment events or samples of student work to help determine what areas of the student's knowledge and skills are truly problematic, most in need of remediation, and are amenable to instruction.

## Diagnostic Assessment

Diagnostic assessment tools are a subcategory of formative assessment tools that are designed specifically to identify the causes of students' learning problems - usually with the intent to guide or modify instruction or to design differentiated instruction. Many consider diagnostic assessment to be a distinct category of assessment (Kellough \& Kellough, 1999; McMillan, 2001); however, our view is that much of the purpose, practice, and application of formative and diagnostic assessment overlap.

An effective diagnostic assessment process will focus on the identification of specific student weaknesses that will lead to remediation through additional instruction. A diagnostic assessment process can be viewed as a decision making strategy for determining when and how to deliver instructional remediation. For a diagnostic assessment tool to be useful in this process, it must provide detailed analysis of student performance that allows specificity in diagnosis and that provides sufficiently rich detail so that intervention can be planned and implemented. To be instructionally relevant, diagnostic assessment tools must also be sufficiently aligned and representative of content being taught or soon to be taught in the classroom.

## Diagnostic Assessment

The doctor does several diagnostic tests to figure out why Kale's breathing is labored and his blood pressure and pulse are low. She checks Kale's lungs, thyroid, and blood. She finds that Kale has an enlarged thyroid, a low thyroid hormone count, and anemia (a low hemoglobin count).
 are performing well or poorly, diagnostic assessment tools are designed to provide a bridge between identification of the proficiency level and instruction by illuminating the reasons for the level of performance. Diagnostic assessment tools may also help users determine whether the student is ready to move on to the next skill or concept. For example, instruction on interpreting character's motives may be ineffective if students struggle with literal comprehension or with following the events of a story.

The results of a high quality diagnostic assessment tool help to ensure that instructional activities are tailored to a student's identified needs. Diagnostic assessment purposes may be contrasted with formative assessment purposes by a greater focus on those in need of remediation and by the presumption that individualized intervention will be linked to diagnosis. Therefore, diagnostic assessment tools typically focus on the assessment of basic, underlying skills rather than higher order thinking skills. However, once students have mastered basic skills, tools are needed to determine why some students struggle with higher order thinking skills.

| Individualized Intervention |
| :--- |
| Kale's doctor prescribes a thyroid <br> hormone and iron tablets. |

## Interim Assessment

The purpose of an interim assessment tool is to provide a measure of students' progress toward achieving proficient performance on a standards-based summative test or to measure their growth on a measurement scale as they move toward a final summative assessment event. To be effective, interim assessment tools measure the same knowledge and skills as are measured on the summative test and indicate students' level of performance on an interval scale. Interim assessment events occur several times each year. Interim assessment tools provide sub-scores related to areas of tested knowledge and skills (e.g., number sense, measurement, literal comprehension) so that teachers know how to focus their teaching. If students are not demonstrating adequate growth, teachers can reteach important skills and concepts in areas of weakness. However, interim assessments are unlikely to provide sufficiently detailed results to diagnose learning problems.

Interim Assessment
Kale goes back to the doctor every three months so that the doctor can check his blood pressure, pulse, thyroid hormone level and hemoglobin level.


Interim assessments may be computer adaptive tests. Computer adaptive tests use students responses to items to 'locate' the student on an underlying scale (similar to a ruler) so that the students only see and respond to test items targeted to their current level of performance. The development of computer adaptive interim assessments requires a large pool of test items that are all calibrated to the same achievement scale. The computer program must select items for each student that represent the same content standards as those that are assessed on the summative, standards-based test. The computer program selects items for each content standard that are at the appropriate level of difficulty for each student's ability level.

## Progress Monitoring

Progress monitoring is a special type of interim assessment process that is characterized by frequent, repeated assessment. Screening, diagnosis, intervention, and progress monitoring are used in combination in a process called "response to intervention." Progress monitoring is generally used in special education programs and to determine whether students should receive special education services. A progress monitoring assessment process can be implemented with individual students or groups of students. Progress monitoring is generally used in combination with specific instructional interventions so that the student's response to interventions can be observed and evaluated to determine whether the interventions are successfully addressing students' learning needs. Progress monitoring provides a means to determine whether a student is showing adequate progress or needs additional forms or methods of instruction.


In typical practice, a progress monitoring process is used to determine a student's current level and rate of improvement and to establish learning goals over time. Frequent assessment is conducted to monitor progress toward the learning goals. If there is not adequate progress and learning goals are not met, additional or alternative forms of instruction are implemented. The progress monitoring assessment results are also useful for evaluating the relative efficacy of multiple approaches to instruction or intervention.

Since progress monitoring depends on frequent assessment events (perhaps weekly or monthly) and the tracking of student performance over time, there are technical requirements for a progress monitoring tool to be effective. These requirements may be different than those for other types of assessment instruments. First, a key requirement of a good progress monitoring tool is the availability of multiple forms of the tool. To allow the intensive repeated assessment necessary for some applications of progress monitoring, an assessment tool may need to have 20 or more test forms. A progress monitoring process depends on the ability to make valid comparisons of student performance over time. As a result, tests and their administration conditions need to be standardized. It is also important that test forms are designed so that the content and difficulty of each form are equated and scaled to allow valid comparisons from one form to another.

There are two common, but distinct approaches used to monitor student learning when students
are served by special education programs: curriculum based measurement (CBM) and mastery measurement. Most classroom assessment tools used in special education programs assess students' mastery of a single skill or small set of skills. When mastery is demonstrated, instruction and assessment focuses on the next set of skills. As a result, each assessment tool references different concepts and skills at different times of the school year. Student progress is difficult to track over time because different content is being assessed on each testing occasion.

In contrast, CBMs can be effectively used to monitor progress. The CBM approach to measurement depends on the construction of tests that sample all skills/knowledge in one curriculum area (e.g., reading) on each assessment occasion. Each test form is designed to be an alternate form with different items but the same representation of the annual content and equivalent difficulty of each form. Thus scores received by a student on one occasion can be compared to scores received at other times of year so that progress can be evaluated validly.

## Summary of ASSessment Purposes

The foregoing discussion may suggest that all assessment tools fall neatly into one of the assessment purposes described above; however, there can be a great deal of overlap among the different assessment purposes and some tools, if developed appropriately, may be used for more than one assessment purpose. For example, a well developed progress monitoring tool might provide diagnostic information.

The foregoing may also suggest that all types of formative assessment tools fall into one of four categories: screening, diagnosis, interim evaluation, and progress monitoring. Classroom teachers use many different types of formative assessments to monitor student learning and to help them evaluate the success of their instruction. These tools may be developed by the teacher or embedded in published instructional materials. It is beyond the scope of this Guide to describe the full range of formative assessment tools, processes, and events. Three recommended classroom assessment texts (Shepard, 2006) are Student Centered Classroom Assessment (Stiggins, 20xx), Understanding by Design (McTighe \& Wiggins, 20xx), and Classroom Assessment: Supporting Teaching and Learning in Real Classrooms (Taylor \& Nolen, 2007). These texts are intended to guide classroom teachers in the selection, development, and use of classroom assessment tools, results, and processes. Information about other types of classroom-based assessment is given on Page 24 in this Guide.

One of the challenges faced by educators and policy-makers is the inconsistency with which the terms describing these assessment tools and purposes are used by test publishers, test users, and researchers. One clear distinction is between summative and formative assessment. Summative assessment events tend to occur after instruction has occurred while formative assessment occurs before or during the instructional period. The emphasis in summative assessment is on evaluation while the emphasis in formative assessment is on enhancement of learning.

Within formative assessment there is a great deal of overlap among different subtypes. Screening assessments are brief, occur prior to instruction, and serve to aid placement or classification decisions. Diagnostic assessment can be characterized by a greater emphasis on discovering weaknesses and reacting with remedial instruction. Interim assessments are those that give educators a sense of whether students are progressing toward proficiency on a standards-based test. Progress monitoring is characterized by more frequent, repeated assessment to track the course of learning and evaluate the effectiveness of instructional interventions.

Effective use of assessment results depends on selecting the tools that are likely to provide the information needed. An interim assessment tool that provides sub-scores related to broadly state standards is unlikely to provide adequate information to determine the causes of students' learning difficulties; therefore, such a tool will not provide adequate diagnostic assessment information. If an assessment tool designed to be a screening tool is used for diagnostic assessment, it is unlikely to provide sufficiently specific information about students' strengths or weaknesses to assist teachers in designing adequate instructional interventions. Diagnostic assessment tools may not provide sufficient breadth of coverage of the content standards to determine whether students are making adequate progress toward standards. In selecting assessment tools, users should carefully examine the content assessed and the types of reports generated to see whether the information provided will meet users' needs.

## Combining Different Assessment Purposes

Knowledge of the distinctions in purposes of assessment is important for correctly matching an assessment tools to the intended purpose and use of the assessment results. Assessments of one type seldom can be substituted for an assessment of another type (Popham, 1999). Because of the different purposes of formative and summative assessments, the design, construction, and development of the instrument will often differ. The timing of assessment, administration conditions, scoring, and reporting are also likely to be different depending on whether an assessment is designed to be formative or summative. Of particular importance in a diagnostic assessment tool is design that provides a level of detail needed for identification and diagnosis of specific causes of weaknesses. Of particular importance in a formative assessment is design that provides results that can be directly linked to instruction. To accomplish these tasks, diagnostic and formative assessment tools involve different item types, scores, and score reporting methods than summative assessment tools. Because of these fundamental differences in test purpose, design, and reporting, a test designed for one purpose may not function well for another. We caution users to carefully evaluate and determine whether an assessment tool considered for use has been designed and developed to effectively support formative and diagnostic applications.

Some believe that any assessment can be used in either a formative or summative way. However, for an assessment to work well, it needs to be designed and constructed to fit its intended purpose. For example, the kind of standards-based tests (SBTs) used in state NCLB testing may be used to
provide formative feedback but with limited success since they do not have enough items or the appropriate kind of items and tasks to provide diagnostic detail and because the timing and infrequency of assessment events will not be suited to instructional monitoring and intervention. We urge caution in attempting to use an assessment tool for applications other than the primary purpose for which the assessment tool was developed unless there is independent research validating the additional uses.

Even when assessments are correctly categorized as serving different purposes, there is some debate as to whether different assessment types can be used together in the same assessment or accountability system. Crooks (1988) examined whether formative and summative assessment use can be compatible. His view was that the functions served by the two types of assessment were distinct (feedback versus grading for example) and that the summative function has been too dominant. Crooks argued for separating formative and summative functions. In contrast, Brookhart (2001) and others argue that each kind of assessment can be seen as parts of the same whole. Biggs (1998) suggested that we need to make use of both kinds of assessment but this marriage works best if both formative and summative assessments are both criterion referenced.

Some argue (e.g., Biggs, 1996) that there is a powerful interaction between formative and summative assessment purposes that could be profitably considered together within a common framework. Such a synthesis could provide support for learning that contextualizes the results of summative assessment events to ensure their more positive application and allows the results to support feedback from formative assessment. However, when feedback from summative assessment tool cannot be used to lead to appropriate adjustments to teaching and learning, a key component of formative assessment (Sadler, 1989), then the two assessment types are seen in effect as mutually exclusive.

Whether or not they are mutually exclusive depends on the model of assessment adopted. Feedback from summative assessment events ("backwash") is generally agreed to be negative, focusing on individual characteristics of the learner instead of the learning process and task and leading to a shallower approach to learning. Feedback from formative assessment on the other hand is oriented directly toward the learning task and facilitates deeper learning (Biggs, 1998).

## Formative Assessment Processes:

## BACKGROUND AND FINDINGS FROM THE RESEARCH

This section of the guide presents research on formative assessment tools and processes. This research represents studies conducted over many years to illuminate the characteristics of effective formative assessment processes and to better understand how these processes work to support teaching and student learning.

Some early research helped to define and characterize formative assessment and what practices and processes are involved in making assessment formative. Bloom et al. (1971) borrowed the term "formative evaluation" from Scriven's (1967) description of different kinds of program evaluation. Bloom and colleagues were concerned with the use of brief tests for the evaluation of mastery learning. Their model consisted of a) the diagnosis of learner characteristics, b) the analysis of learning tasks to determine the next instructional steps, c) feedback and corrections, and d) summative evaluation of attainment. Sadler $(1983,1989)$ described the importance of a feedback loop in the use of formative assessment. In this model, formative assessment entailed a) attending to learning goals, $b$ ) developing strategies to meet goals, and $c$ ) monitoring performance to determine goal achievement. Both of these early models of formative assessment emphasize the use of feedback and explicit attention to the discrepancy between student performance on a current assessment tool and the attainment of learning goals.

The research on formative assessment establishes its positive impact on a number of features and outcomes of educational practice. Natriello (1987) found that student motivation and achievement were impacted by several features of formative assessment practice including a) a focus on tasks rather than comparison of student performance, b) use of clear criteria for achievement, c) setting challenging standards, and d) provision of differentiated feedback to students. Crooks (1988) documented a number of positive effects of formative assessment on students. He found that formative assessment served to consolidate students' prior skill and knowledge before new material was introduced, helped to focus students' attention, encouraged active learning, and provided greater opportunities for practice. Some other important features of formative assessment noted by Crooks were the provision of corrective feedback, development of student's self-monitoring, guidance of further instruction, and the creation of feelings of mastery and accomplishment for students.

One of the most important results from the research on formative assessment is the finding that regular use of formative and diagnostic processes assessment results in substantial gains in student achievement on large scale tests. In an extensive review of the research, Black and Wiliam (1998b), found that the use formative assessment resulted in improvements in learning achievement ranging from .40 to .70 of a standard deviation. They found that the use of a formative assessment process results raised achievement of students overall, closed the achievement gap between lower achieving and higher achieving students, and positively affected
student motivation and self-esteem. The research also documents that well-designed formative and diagnostic assessment tools can provide detailed, individualized, and instructionally relevant information that can guide and foster both teaching and student learning (Black, Harrison, Lee, Marshall, \& Wiliam, 2004). Thus, in contrast to commonly used summative tests, formative assessment tools provide a direct and effective linkage between assessment and instruction.

## The Importance of Feedback

Feedback is an integral component of any assessment process. Whenever assessment events occur, feedback is provided to one or another user of the assessment results. Close examination of how feedback is provided and used reveals a great deal about the purpose and utility of an assessment tool or system of tools. For example, summative feedback in the form of a course grade provides the student with information about achievement of course goals and communicates similar information to other consumers of the grade report (e.g., parents, teachers in the next course). Summative assessment feedback may also shape future learning by influencing student enrollment decisions or by motivating a student to work harder during the next grading period. Most commonly, however, both the timing and the level of detail in the report of summative feedback prevent its effective use to guide instruction or alter specific trajectories of student learning.

On the other hand, feedback that is directly linked to instructional improvement is a distinguishing attribute of formative assessment. Formative feedback can provide immediate information to students, teachers, or administrators. The focus in formative feedback is on how assessment information can inform instructional improvement. Formative feedback has been defined as:
"...information about the gap between the actual level and the reference level of a system parameter which is used to alter the gap in some way." (Ramaprasad, 1983, p. 4, emphasis added)

There are several noteworthy features of this definition. First, there is an implicit learning goal defined (i.e., reference level). Second, assessment results are used to reveal the discrepancy between current level of performance and the learning goal (i.e., the gap). But last and perhaps most important is the idea that the assessment results are used to alter the gap. Thus a key feature of a formative assessment process is use of information about gaps in desired performance to alter or change instructional practice. This might occur for a student by having different instructional activities assigned to improve mastery. For a teacher, formative feedback might result in a change in curriculum design for the whole class if the teacher found a gap in performance for many students in a class. The expectation of the feedback provided by formative assessment results is that it will help students improve their performance relative to the learning goal. However, for formative assessment events to result in effective use of results, they must occur repeatedly during the learning process. When a formative assessment event occurs during
learning, feedback can be provided while there is still time for the teacher to take action and for the student to benefit from feedback

Effective descriptive feedback focuses on the learning process, identifies specific strengths and accomplishments, identifies weaknesses that need improvement, and describes the pathways students can take to close the gap between current performance and learning targets. Effective feedback also provides scaffolding that helps students and teachers understand next steps that need to be taken to move forward in their learning. The most helpful feedback provides specific information about current levels of understanding, suggests means for improvement, and motivates students to focus their attention on learning goals rather than on getting right answers on tests (Bangert-Drowns, Kulick, \& Morgan, 1991). Further, to effectively use diagnostic and formative assessment results, feedback to teachers must provide some degree of prescription about what instructional interventions are needed. To be most effective, the information must relate to a developmental model of cognitive growth that helps to guide the course of learning in developmentally valid ways (i.e., construct-relevant; Messick, 1975). Clearly, given these critical purposes for feedback, assessment results are only part of the feedback. Information regarding effective instructional practices in response to learning challenges is essential.

In summary, it is clear from an abundance of research that one of the central characteristics of a formative assessment process is the provision of feedback. Feedback is the critical link between assessment and instruction that fosters the benefits of formative assessment. In planning the implementation of formative assessment systems, users should explicitly consider the match between curricular goals and the assessment instrument to ensure that feedback information will be matched to assessment purpose. Users should also explicitly design methods and procedures to enhance the use and impact of feedback information to motivate students and to guide instruction and curricular planning and design.

## Informal Assessment and Classroom Assessment

The focus of the Washington Diagnostic Assessment Project is on commercially available formative and diagnostic assessment instruments (see review in the Washington State Diagnostic Assessment Comparative Guide). However, research shows that informal assessments and locally developed classroom assessments can be very effective for some types of formative assessment purposes. Such assessment strategies may include question and answering techniques used by a teacher with students, observations during small group work, homework, quizzes, projects, and other techniques. Effective teachers can use a range of assessment strategies and techniques to gather valuable formative information from students. This information can be applied to modify instruction and to guide the delivery of instruction and the course of student learning. In such usage, assessment is closely intertwined with instruction.

A number of instructional strategies suggested in the research can be used in support of classroom assessment. These include involving students in setting goals and having clear expectations for
learning. When students participate in goal setting they develop a better understanding of what is expected as well as the criteria for meeting goals. Students can be included in the definition and description of what quality work looks like, what criteria should be used to judge goal attainment, and the processes to move toward learning goals. Assessment tools, assessment results, and examples of assessments that demonstrate goal attainment can all be used and discussed with students to support progress.

## Questioning

Questioning is an integral part of pedagogy. The strategic use of questioning should be viewed not only as an instructional strategy but as a formative assessment activity. Well framed questions allow the teacher to quickly determine the level and nature of student understanding. Questioning can make almost immediate instructional adjustment and adaptation possible. The adroit use of questions can encourage metacognitive thinking in students and can help model learning strategies and problem solutions. Effective questioning can also engage students in the classroom and help motivate students. Another effective aspect of questioning strategies concerns helping students learn how to frame their own questions effectively, either for use with the teacher or in peer activities with other students (Johnson \& Johnson, 1990; Rosenshine et al., 1996).

## Observation

Observation is another classroom assessment strategy that can provide formative assessment results. Direct observation of student work and activities is an important mechanism for gathering formative assessment information. The teacher may be able to observe process or procedures being used by students that can reveal misconceptions, weaknesses in skills, and other information that can be used to make adjustments in order to improve teaching and student learning. Teachers can also encourage students to observe and assess how peers complete work or solve problems as a way to make the learning process more explicit and to develop learning community.

## Peer and Self-ASSEsSment

Peer and self-assessment processes have also been shown by research to be effective formative assessment strategies and to be motivating for students (Biggs, 1999; Black \& Wiliam, 1998b; Brown, Rust \& Gibbs, 1994; McManus, 2008). Peer assessment activities help to create a learning community within a classroom. Self assessment activities can increase student understanding of their progress and how learning targets can be achieved. When students are involved in goal setting, self assessment provides an important opportunity for students to monitor their own progress and develop metacognitive skills in support of learning.

## Descriptive Feedback

Descriptive feedback is an integral part of effective formative assessment. Information gathered by the teacher in questioning, observation, and other classroom activities can be used to guide student learning through detailed feedback to students on how they are currently performing, how that level of performance relates to learning targets and goals, and how the student can make progress toward her/his learning targets.

Deeper discussion of these valuable alternative methods of classroom instruction and assessment are beyond the scope of this Guide but the reader is encouraged to consider these methods as additional alternatives for supporting the use of formative assessment and fostering student learning (see, for example, Stiggins et al., 2007 and Taylor \& Nolen, 2007).

## Diagnostic Assessment for Students with Special Needs

Diagnostic assessments play a critical role in the identification and instruction of students with special needs (Fuchs \& Fuchs, 1986). For convenience in some of the following discussion we group students in special education programs and English language learners (ELL) together because, although assessment accommodations may differ for these groups of students, several diagnostic assessment issues, procedures, and recommendations can be generalized across these groups of students.

## Diagnostic Assessment for Students in Special Education Programs

Diagnostic assessment tools play a critical role in the identification of students in need of special education services. The recent reauthorization of the Individuals with Disabilities Education Act (IDEA; 2004) recognized a strategy called "response to intervention" (RTI) as a potential procedure for identifying students in need of special services. RTI relies on an integrated assessment and instruction strategy to deliver and monitor the effects of precisely designed instruction to students at-risk for failure. Diagnostic assessment tools provide the necessary information for determining the instructional needs of these students.

RTI is a process of systematically using assessment results to design, monitor, and adjust instruction to meet students' needs. Screening tests are administered to all students to determine whether or not they are at risk. Those students whose performance indicates that they are not on target for achieving the instructional benchmarks are given diagnostic assessments to determine their misconceptions or skill deficits in a content area. Because these students may have significant deficits that are not easily remedied by typical classroom instruction, diagnostic assessment tools provide valuable information about students' misconceptions or skill deficits. Teachers can use this information to develop varied instructional interventions that are tailored to each student's needs (Fuchs, Fuchs, Hosp, \& Hamlett, 2003).

Determining the instructional interventions or strategies students need to compensate for misconceptions or skill deficits is the primary purpose of the RTI diagnostic assessment process. Diagnostic assessment results should differentiate between students' slips in thinking and persistent bugs. Slips are random errors in students' declarative or procedural knowledge that are not the result of inherent misconceptions or skill deficits in the content area. Bugs, however, represent persistent misconceptions about domain specific knowledge or skill deficits that consistently interfere with students' learning. Identifying bugs in student thinking or skills is the intent of the RTI diagnostic assessment process.

Many students who struggle in academic content areas have inconsistent response patterns that make it difficult to diagnose causes. To provide instructionally relevant information, diagnostic assessment tools should be strategically designed to adequately reflect students' conceptual understanding and skills in the domain. Essential prerequisite knowledge and skills should be sufficiently sampled to provide a clear representation of what students know and are able to do. Items should be written to provide detailed information about students' persistent misconceptions or skill deficits. These technical requirements make several assumptions about the diagnostic assessment tool: a) content aligns with a cognitive model, ${ }^{1}$ b) sub-score reliability is sufficient to be able to depend upon students' scores, and c) item responses provide information about misconceptions or skill deficits patterns.

In an RTI model, once instructional intervention decisions have been made and implemented for at-risk students, their responses to the instruction are monitored. Progress monitoring assessment tools are administered to determine whether the instructional design and delivery decisions are appropriately aligned with students' needs as evidenced by their growth rates. If students are not making adequate progress, additional diagnosis is done and additional interventions are planned, implemented, and monitored. Diagnostic assessment tools used for RTI provide information about students' progress as well as the effectiveness of interventions.

## Diagnostic Assessment for English Language Learners

Formative and diagnostic assessment tools and processes must be designed and administered in such a way that differences in language ability do not impede the evaluation of students' skills and content area knowledge. The key challenge in assessment for ELL students is making sure that the content of interest is being measured and not some other aspect of language knowledge or ability. It is critical to avoid confusing language learning with issues of academic knowledge and achievement. Language issues may be particularly relevant to consider in the arena of diagnostic assessment when a misdiagnosis of learning needs may lead to an inappropriate learning intervention.

[^1]An important prerequisite step in adapting assessment tools for ELL students is the explicit specification of which skills and abilities are representative of the construct of interest and which skills may be embedded in the item or task that are not directly relevant to what is being measured. For example, if the ability to apply mathematics to real world situations is the targeted mathematics skill, then context is a critical component of the test. However, ELL students may struggle with reading and be unable to demonstrate their ability to solve problems. However, if the problems are translated or presented orally, this change in presentation may allow them to demonstrate their knowledge and skills. Oral presentations and translations, in such as case, are accommodations. They change the mode of presentation but do not change the content being measured. In contrast, if an English language skill is not related to the content being assessed, then an accommodation is unlikely to ameliorate the impact of this skill on performance. For example, if on the test of mathematics problem-solving students are required to use written language to describe their problem-solving process when their process would be demonstrated more accurately using numeric, symbolic, or graphic means, then having an accommodation such as a scribe could result in an invalid score on the test.

Research by Abedi et al. (2004) demonstrates that a key issue in the design and use of assessment tools for ELL students is the need to make sure that, on tests of content other than the language arts, the reading and language requirements of the assessments are made as simple and accessible as possible. The use of "simplified language," "modified language," or "plain language" is intended to reduce the reading level and to increase the accessibility of an assessment tool to a nonnative English speaker. Research has shown that this accommodation helps both English language learners and native English speakers (Abedi, Lord, Hofstetter, \& Baker, 2000). Abedi et al. also say that the most promising accommodations for ELL students include provision and use of customized dictionaries and glossaries and using modified English. Modified English revises the test item language to reduce language complexity without changing the fundamental content of the test item.

Additional training of those who score or rate assessments may also be needed to ensure valid assessment of ELL students. Shaw (1997) found that while most responses were reliably scored, ELL spelling and syntax on certain responses were significant sources of error. Shaw recommended using raters who are knowledgeable about typical patterns in written English used by ELL students. Another recommendation was that, as new assessments are developed, the use of performance items be exploratory pending evidence for their reliability and validity with ELL students (Shaw, 1997).

## Assessment Accommodations

Anytime an assessment is administered, some test-takers may have cognitive, sensory, physical, or language issues that interfere with interpretation of the assessment results. Physical disabilities may influence a student's ability to demonstrate his or her knowledge and skills on the test. As
such, test scores may not accurately reflect the student's understanding (or misunderstanding) in the content area. For diagnostic assessment processes, incorrect interpretation could lead to inappropriate assignment of instructional interventions or remediation strategies. To more precisely determine misconceptions and skill deficits for students with challenging personal attributes, accommodations can be applied to the test administration. The AERA/APA/NCME Standards for Educational and Psychological Testing (American Educational Research Association et al., 1999) defines an accommodation as "...the general term for any action taken in response to a determination that an individual's disability requires a departure from established testing protocol" (AERA, et al., 1999, p. 101).

Accommodations are designed to maintain the integrity of the tested construct so that interpretations of test results do not differ for students taking the accommodated as compared to the non-accommodated test. Effective accommodations should not materially alter the nature of the task or the required response, and they should yield scores that are valid indicators of the construct being assessed.

Possible accommodations include changes to the presentation of material, student's response method, and timing or schedule of administration, or setting of test administration. Presentation accommodations include changes to the format in which test items are delivered to students, such as presenting material in Braille or magnifying text. Response mode accommodations include changes in the manner in which students respond to test items such as providing assistive technology devices or allowing students to dictate their responses. Timing accommodations change the amount of time or distribution of time allowed to complete the test. Changes in the schedule for an assessment might include testing at specific times during the day in which the student is most productive. For example, students might be provided with additional time to take a test or the testing session might be broken into multiple shorter sessions. Setting accommodations require changes in the physical setting in which students take tests. These accommodations include providing a testing environment that is free from distractions such as noise or other students.

An Individualized Education Program (IEP) team typically assigns accommodations by considering the student's personal characteristics in light of the targeted construct. IEP teams must understand the construct so as to avoid providing accommodations that detract from the valid interpretation of results.

In applying accommodations during formative assessment events, it is important to match accommodation decisions to the intended purpose of the assessment tool. For example, if the assessment results will be used to predict and track student progress toward achieving a state standard (an interim assessment purpose), the accommodations used should closely match those used for the state test. On the other hand, if the purpose of the formative assessment is more directly focused on learning improvements in the classroom, then greater flexibility in the choice
and application of accommodations may be warranted. However, even in the classroom, accommodations must be designed to minimize the influence of disabilities or language demands rather than leading to inaccurate assessment results. Only then can the assessment results help teachers and students determine whether or not students are learning the targeted knowledge and skills.

## Test Design for Students with Special Needs

When choosing or developing a formative or diagnostic assessment, a number of considerations will aid the applicability and interpretability of the assessment results for students with special needs. The principle of universal design can be applied to assessments used for students in special education program or ELL students. Universal design asserts that assessments should be designed so that the greatest number of people can use them without the need for modification. In order to achieve this goal, unnecessary obstacles need to be eliminated.

To maximize universal design, developers of diagnostic and formative assessments should consider the needs of students with disabilities and English language learners when designing their assessments and making decisions about such issues as time limits, wording of test items, and response formats. One of the most common accommodations, extra time, has been shown to improve performance for general education students as well as students with disabilities and English language learners (Abedi, Hofstetter, \& Lord, 2004; Elliott, Kratochwill, \& McKevitt, 2001; Zuriff, 2000). Careful consideration of the amount of time required to complete a test (or whether time limits are needed at all) may reduce the need for extended time accommodations. Research has also shown that language simplification helps both English language learners and native English speakers (Abedi, Lord, Hofstetter, \& Baker, 2000) suggesting that greater attention should be expended on ensuring that assessments use language that is maximally accessible.

Test developers should also include special education students and English language learners during the field testing of assessment tasks. Field testing provides critical information about the performance of the assessment, and inclusion of students from these groups will help identify problems during the earliest stages of test development. In tests using normative samples for comparisons it also may be important to ensure that students from these subgroups are represented in the normative sample proportionately.

## Issues in the use and Interpretation of Diagnostic Assessments

In this section of the Guide we discuss a number of issues in the choice, evaluation, use, and interpretation of formative assessment instruments. There are a number of excellent resources that can provide further information on these topics (see Appendix).

## Criteria for Choosing an Assessment

The Standards for Educational and Psychological Testing (AERA, et al, 1999) provides extensive guidelines for the effective and responsible use of assessments. The Standards contain detailed information on best practices in test planning, test design and development, administration, security, and test use and interpretation. An important component of the Standards is focus on the technical aspects of test development, use, and interpretation. Users are encouraged to consider a range of criteria in deciding which assessment to use. One of the most important criteria is the match of an assessment tool to the assessment purpose. Test developers and publishers can sometimes be overly optimistic in describing the breadth of applications of their assessment tools. However, assessment tools seldom work well for all purposes. Assessment tools must to be designed and developed in one way for one purpose and in a different way for another assessment purpose.

Another critical consideration in choosing an assessment tool is the alignment of the content and skills on the assessment tool to curricular content and standards. The purpose of the Washington State diagnostic assessment legislation is to support assessment processes that lead to improvements student learning of the Essential Academic Learning Requirements (EALRs) and the associated Grade Level Expectations (GLEs). As a result, it is important that the assessment tool shows alignment to the Washington State curriculum standards. Users need to seek additional information or conduct their own evaluation to determine if the content alignment of an instrument is sufficient for the desired assessment purpose.

Another important feature of instrument design that users should consider is the relative specificity and detail provided in score reporting. Sometimes an assessment tool only presents information at a global or overall level (e.g., "mathematics concepts" and "mathematics computation"). While more global score reporting at this level may be sufficient for summative purposes, lack of specificity undermines the utility of formative assessment, diagnosis, and feedback. Greater specificity provides the basis for more targeted intervention and more focused feedback to the student or teacher. Therefore, users should critically examine the kinds of information and score reports that will be provided by an assessment tool to determine whether it will meet user needs.

Critical review of the technical properties of an assessment is very important before adopting an assessment (see below). Users should review information on the stated purpose and development of an instrument to determine whether it matches user needs. Users should critically examine
evidence that the test developer or publisher has expended effort to obtain independent reviews of the instrument to ensure it is sensitive to all test takers and that it is not biased against protected groups of students.

## Technical Quality

Examination of evidence for the reliability and validity of the use and interpretation of assessment results should be a paramount concern for all those who use assessments. While many people do not like to deal with technical issues involving formulas, psychometrics, and statistics, how well an assessment works and therefore how effectively it supports and enhances student learning depends on the technical adequacy of the assessment tool and the assessment results. We briefly discuss here major aspects of reliability and validity as well as the need for technical quality in test construction, reporting, and the review of bias and sensitivity in test use.

## Evidence for Reliability

Reliability in assessment refers to the consistency of results across different evaluators, occasions, tasks, or forms of the assessment. If no learning changes have occurred, assessment results should not vary substantially regardless of the evaluator, the day of testing, or the test form (in the case of multiple forms of a test). If results from an assessment tool are not reliable, then the results cannot be trusted; they are likely to vary depending on changes in the conditions of the assessment event rather than differences in the student's skills or abilities. So for example, if a student's scores depend on who gives the assessment or which day the assessment is given or which test form is administered, the resulting scores are unreliable.

Several distinct sources of unreliability are usually defined and it is the responsibility of the test developer to minimize the effects of these sources. Evidence for reliability should be provided for each use of an assessment instrument. One way of estimating the reliability of results is called internal consistency. Internal consistency refers to the consistency with which examinees respond to the different items on the assessment. If responses to items measuring the same knowledge or skill are highly inconsistent, then a measure of internal consistency would be diminished. This kind of reliability can be maximized by careful analysis of the items when assessment tools is being developed to ensure that items function well together

A second method for gathering evidence for reliability is to determine whether examinees would get the same results if they take two different forms of a test (i.e., alternate forms reliability). If two test forms differ in difficulty or content, they are not comparable and reliability will be diminished. This measure of reliability can be optimized during test development if careful steps are taken to ensure that all forms of the test are developed using the same test blueprint and selecting items for each sub-skill that are about the same level of difficulty.

A third method for estimating reliability is to examine the consistency of those who assign scores
to students' responses (i.e., inter-rater reliability or inter-judge agreement). If one rater or teacher assigns a different score to a student performance than a second rater or teacher, then part of the score is associated with who did the scoring rather than how well the student performed. There also may be inconsistencies that occur when only a single rater or scorer is used that occur due to fatigue or gradual changes in way the rater uses the scoring criteria. Careful specification of assessment goals and criteria, using clear and specific scoring keys or rubrics, training and practice with previously scored sample or model papers, and occasionally having two scorers rate the same student responses are procedures for enhancing intra and inter-rater reliability.

Another method for gathering evidence of reliability is commonly referred to as test-retest reliability. For this method of reliability the issue of concern is whether the same assessment results would be obtained if the assessment tool were administered to the same students at more than one point in time. Over short periods of time, before learning or development has occurred, different administrations of an assessment tool should produce the same or similar results.

Reliability of assessment results is most often evaluated with statistical analyses that produce a correlation or similar index of the degree of consistency of measurement. Such indices typically range from 0 , completely unreliable to 1.00 , perfectly reliable. There is no strict cutoff value for reliability estimates. The degree of reliability expected should be matched with the importance of the use of the assessment results - the more important the usage, the higher the expected measure of reliability. Rules of thumb should never be interpreted strictly, but estimates of .85 or higher are considered good and reliability estimates of .90 or higher are recommended for important, high-stakes uses of assessment results (e.g., placement or classification decisions; Henson, 2001; Nunnally \& Bernstein, 1994).

There are some important relationships between reliability and validity. If reliability is the consistency of measurement, validity is the accuracy of measurement. Reliability is prerequisite to validity. If measurement is inconsistent, it is difficult to be accurate. It is also possible to have high reliability but little or no validity. For example, a ruler can give perfectly consistent measurement, but if it is an inch short, it is never accurate. Finally, reliability puts an upper limit on validity. Assessment accuracy depends on a certain level of dependability in the assessment results.

What aspects of reliability are important in formative and diagnostic assessment? Because most formative and diagnostic assessment requires repeated measurement over time so student progress can be monitored and evaluated, two of the more important measures of reliability are test-retest and alternate-forms reliability. If multiple raters or scorers are used in evaluating results, evidence for inter-rater reliability is important as well.

## EVIDENCE FOR VALIDITY

Validity refers to how accurately an assessment tool measures the specific skill or conceptual understanding it is designed to measure and whether the results, conclusions, and inferences derived from the assessment tool are accurate (Messick, 1989; 1994; 1995). Evaluation of validity includes consideration of how well the assessment results serve their intended purpose and whether the assessment results are used and interpreted correctly. A number of different types of evidence can be gathered to support the validity of an assessment.

Content-related evidence for validity is gathered by determining whether the content of an assessment tool is appropriate for its stated purpose. The sample of items, tasks, or performances in an assessment tool should represent the important content, skills, or behaviors of the domain of interest. Content-related evidence for validity is usually obtained by having a panel of experts judge whether items on the assessment tool are relevant and fully representative of the content domain. For example, to gather content-related evidence for validity of a $3^{\text {rd }}$ grade mathematics test, experts would be selected (e.g., elementary math teachers) and asked to provide ratings on how well each item matched the mathematics curriculum for $3^{\text {rd }}$ graders. Alignment studies that are carried out to evaluate whether state's standards-based tests match the state's content standards is another method of obtaining content-related evidence for validity.

Criterion-related evidence for validity refers to evidence that a test can predict performance on some current or future standard or criterion of performance. When the prediction between the test and the criterion is measured at a single point in time it is called concurrent evidence for validity and when the test is used to predict performance at a later point in time it is called predictive evidence for validity. Typically this criterion-related evidence for validity is evaluated using correlational statistics; the higher the correlation, the stronger the evidence that the test can predict the criterion performance of interest. For example, students' scores from a $4^{\text {th }}$ grade standardized reading test could be correlated with the students' classroom grades in reading (concurrent evidence); SAT/ACT scores during high school could be correlated with first year college grade point averages (predictive evidence).

The most general and overarching type of evidence for validity is construct-related evidence, which refers to how well the construct of interest is being measured. There are many ways to gather construct related evidence for validity. Convergent evidence for validity demonstrates that test scores are related to behaviors and other assessments that are indicators of the same construct. Criterion-related evidence and content-related evidence are both types of convergent evidence for validity. Discriminant evidence for validity shows that test scores are unrelated to behaviors and test scores that are indicators of different constructs.

For example, construct-related evidence can be obtained by showing that student scores on a reading test correlate highly with the students' scores on another reading test (convergent evidence) and correlate much lower with their scores on a mathematics test (discriminant
evidence). Another way to gather convergent evidence for validity is to show that there are differences in test scores between groups of students who should differ in their performance on the test. For example, there should be substantial differences in performance for students who have completed an instructional unit when compared to students who are just starting the unit.

What types of evidence for validity are important to gather when using formative and diagnostic assessment? Different types of evidence may be more or less important depending on the purpose and use of the assessment results. For example, if the primary purpose of a formative assessment is to predict how well the students are likely to do on the state test, predictive evidence would be one of the most important kinds of evidence to gather. In many applications of formative assessment, content-related evidence for validity is important - especially in demonstrating that assessment tasks and items are closely tied to local curricula and are specific and extensive enough to support detailed assessment of student strengths and weaknesses.

Ultimately, the most important validity issue is whether the use and interpretation of assessment information leads to accurate decisions about how to support student learning, adapt instruction to learning needs and properly intervene to allow students to reach their full potential. Evidence that the assessment results will support these uses is the most important evidence needed.

Gathering evidence for validity of assessment results in not solely the responsibility of the assessment developer or test publisher. Any user of an assessment tool should gather evidence to determine whether the assessment results support the planned interpretation and use. Studies are needed to determine whether scores are valid across individuals, groups, instructional interventions, and contexts. In that sense, validity studies are an ongoing responsibility of assessment developers and users. This is done by monitoring and evaluating the success of individual students as well as the performance of the assessment system overall to determine whether the consequences of interpretation and use of assessment results are those that are intended.

## Test Forms, Scores, and Reports

Another indication of the utility and appropriateness of an assessment tool is the match between the design and features of the instrument and its intended use and purpose. The number of assessment forms available should match plans for the frequency of administration. Most formative assessment processes require repeated assessment events and, in the case of progress monitoring, many parallel forms of the assessment are needed. Some assessment tools have only one or a few forms and are not usable in formative assessment applications where reuse of the form can lead to over-familiarity, memorization, or teaching to the test. When choosing a formative assessment tool, it is important to verify that a sufficient number of forms are available and to ascertain that technical work has been completed to ensure comparability of the forms. Each form should represent curricular content appropriately and the forms should be equated for difficulty to ensure that differences from one form to another are due to true proficiency
differences and not differences in the test. On the other hand, screening and diagnostic assessment purposes may not require multiple assessment forms. One or two forms of an assessment tool may be sufficient for these purposes.

Scores resulting from the assessment and the design of score reports should also match assessment purpose. For example, if detailed diagnostic information on student strengths and weaknesses is needed, an assessment tool that only provides general reading skill score (e.g., literal comprehension) will not serve the users' purpose well. For diagnostic assessment purposes, a substantial degree of specificity is needed to provide feedback that is detailed enough to guide instructional decisions, make instructional adjustments, and provide clear direction to students for improvement.

The specificity needed for instructional decision-making also suggests that certain kinds of score information, like percentile ranks or grade equivalent scores, have little utility in formative and diagnostic assessment. Knowing the relative standing of a student in relation to a norm group does not help users identify learning needs or progress toward learning goals. Assessment tools should be chosen that provide results in a metric that is understandable to students and teachers and that can easily be related to progress on a continuum toward learning targets. Similarly, assessment reports should be designed to clearly communicate the progress of learning and the relation of performance to learning goals and targets.

## Bias and Sensitivity Reviews

A basic principle of assessment development and score interpretation and use is a commitment to fairness and accuracy (see Code of Fair Testing Practices, 2004). Assessment developers and users must ensure that all students have an equal opportunity to demonstrate their knowledge and skills and that construct-irrelevant test design, characteristics, or procedures do not result in the differential performance of test-takers with the same ability. In reviewing and choosing an assessment tool, it is very important to determine whether the test developer has conducted thorough reviews of the assessment for test bias and for sensitivity.

Bias is the presence of some characteristic of an assessment, a test item, or task in the assessment that results in different performance for two individuals who have the same knowledge and skill but who are from different student subgroups. Test bias can be minimized or prevented through careful test development processes including clear specification of the content to be measured and the training of item writers. However, no matter how careful the test development, field-testing and item analysis (e.g., Differential Item Functioning or DIF) must be conducted to gather evidence for potential sources of bias. Items identified as showing systematic differences between groups of test-takers are usually reviewed by panels of diverse, independent stakeholders who provide advice and recommendations on item appropriateness.

Sensitivity refers to the appropriateness of test language, content, and design for all test-takers.

The goal of sensitivity review is to ensure that the assessment is accessible and respectful of all people and does not unfairly disadvantage or disturb the test-taker. Sensitivity review is intended to eliminate language or topics that are inflammatory, controversial, insulting, and/or slanted. Sensitivity review is usually incorporated into the test development process but should also be augmented by a sensitivity review panel. The review panel should be composed of independent reviewers who broadly represent a variety of community groups. The goal of the review is to ensure sensitivity to different gender, cultural, religious, ethnic, socio-economic, and disability groups as well as to avoid items, text, or topics that may elicit strong or negative reactions or emotions from students that impede or interfere with their performance (Zeiky, 2006). Test users should review technical documents for published diagnostic and formative assessments to determine whether bias and sensitivity reviews and DIF studies have been conducted to ensure the validity of assessments for all students.

## Implementation, Use and Interpretation

Implementation of new assessment systems or tools by a teacher, school or district can be challenging. We briefly discuss here a number of difficulties, problems, and pitfalls that are common in current assessment practice or that may occur in the implementation of a new assessment system. We then focus on several suggestions from the literature for effective implementation of formative assessments.

## Difficulties, Problems, and Pitfalls

The assessment literature (e.g., Amrein \& Berliner, 2002; Barton, 1999; Black \& Wiliam, 1998b; Cizek et al., 1995; Dorn, 1998; Heubert \& Hauser, 1999; Popham, 1999; Stevens, et al. 2000) describes a number of difficulties associated with current use and implementation of tests and other assessment tools. These difficulties include issues in assessment design (e.g., wrong test type for stated purpose; technical adequacy at a different level than the inferences made; tests that measure construct irrelevant skills; confusion of NRTs with CRTs), assessment implementation (e.g., lack of time; delayed access to results; use of tests that do not support the assessment purpose; teaching to the test), interpretation and use of assessment results (e.g., misinterpretation of test results; drawing conclusions not supported by the results), resources for assessment use and interpretation (e.g., need for greater assessment literacy of participants, professional development; funding for test development and implementation; funding to ensure technical adequacy), and consequences of implementation (e.g., narrowing the curriculum; teaching to the test).

Several authors describe weaknesses in current assessment practices that directly undermine learning and instructional effectiveness including: a) tests that emphasize superficial learning and recall, b) teachers who appear to be unaware of the assessment work of colleagues and do not trust or use other teachers' assessment results, and c) an emphasis on quantity and presentation of work rather than on quality of work in relation to learning (Black \& Wiliam, 1998b). Both in
questioning and written work, research shows that teachers' assessment practices focus too much on low-level knowledge and skills, mainly memorization and recall (Cizek et al., 1995). Cizek, et al. (1995) also say that current assessment practices overemphasize grading functions and underemphasize feedback and advice for learning, focus on competition rather than personal improvement, and use comparative assessment interpretations that ensure that some students will be labeled as "low performers" or "low ability students."

Another difficulty that may be embedded in current assessment practices is the inability to use and apply assessment results in support of learning (Cizek, et al., 1995). Teachers' feedback often serves social and managerial functions instead of learning functions. Teachers may be able to predict student performance but know too little about student learning needs or strategies to apply that information for student improvement. Teachers often start "new" every year in assessing students and may not use or may have no information on student performance from previous teachers. Finally, grading is often given higher priority and importance than analysis of student work for learning intervention.

There are some common implementation pitfalls that schools encounter when trying to improve their use of assessment processes for decision making and providing timely and ongoing feedback to students about their progress, strengths, and areas for improvement. Some of the barriers that teachers face can include lack of time and limited assessment literacy skills. Even if commercially produced assessment tools are used, teachers may not know how to interpret results, communicate results to stakeholders (i.e., students and parents), provide the kinds of descriptive feedback necessary for student improvement, diagnose needs for particular intervention strategies, or implement those strategies.

## Suggestions for Successful Implementation

We review here some suggestions for implementation that have been made specifically for the use of formative and diagnostic assessments (see in particular Black \& Wiliam, 1998b; Stiggins, 2007b). Assessment design and choice of assessment tool is an important prerequisite step to successful implementation. Black and Wiliam (1998b) discuss the importance of refining and clarifying assessment purpose to guide design and use of assessment tools and the use of high quality assessment tools that match learning targets. The Washington State Comparative Guide is designed to provide support in making such choices. For progress monitoring assessment tools, it is important to select a tool that provides representative sampling of the content domain, is closely aligned to the delivered curriculum, has enough equated forms to allow for the intended frequency of assessment, provides score reporting that can provide detailed feedback, has strong evidence of technical adequacy, and has been screened for bias and sensitivity. For diagnostic assessment tools, it is important that there are sufficient items for each concept or skills area to have reliable sub-skill scores. It is also important than answer choices for multiple-choice items or scoring protocols for constructed-response items provide information about the sources of learning
difficulties. A diagnostic assessment tool may measure fewer skills in a more focused way than a more general classroom assessment tool or a progress-monitoring tool.

Another critical feature of a successfully implemented formative assessment process is the clear linkage of assessment with curriculum and instruction. Teachers should explicitly design feedback strategies that connect assessment results with instructional decision-making and planning for intervention. It is also important to clearly identify and communicate learning targets to students and communicate assessment results and expectations to students during the learning process. A commonly overlooked issue is the need to explicitly design assessments and activities that focus on transfer and generalization of knowledge and skills. This helps to ensure that learning is focused on attainment of the skills and conceptual understanding of interest and not on details of a particular assignment or assessment. Finally, test users should make sure that analysis and reporting of assessment results are at a level of specificity that allows clear and direct linkage of results to instructional intervention.

As described earlier, student involvement is a key component of a formative assessment process. Increased involvement enhances student engagement with content and can strengthen student motivation and self esteem. To ensure involvement, teachers should design methods to regularly use assessment results to provide detailed descriptive feedback to students. Feedback should be clearly linked to expectations for learning. Teachers should also plan ways to use student self assessment and self monitoring as additional interventions for instructional improvement.

It is important to develop a formative assessment process that supports effective use of results. This can be done by providing clear guidelines on the appropriate interpretation and uses of assessment results including explicit discussion of the ways in which assessment results should not be used. Reports should be designed so that they are useful for instructional purposes, provide sufficient detail to inform instruction, provide enough descriptive information for effective feedback to students, and display assessment results in ways that are easy to communicate and understand (e.g., graphs of learning curves). For diagnostic assessment tools, reports should indicate causes learning difficulties (misconceptions and skill deficits) that interfere with students' progress.

Another suggestion for effective use of a formative assessment system is to design systems for the more integrated involvement of teachers and professional development opportunities to aid teachers in using assessment information in appropriate ways. Properly applied, a formative assessment process requires a greater emphasis on feedback useful for learning. This may require changes in classroom practice. In particular, for the full benefits of a formative assessment process to be realized, teachers need to know how to interpret and use assessment results to adjust instruction and to provide detailed descriptive feedback to students. Teachers may not know how to use assessment information in these ways, which necessitates additional teacher support and professional development for effective implementation. Professional development opportunities
must be provided including pre- and post-assessment training on the use of the system and analysis of reports, data interpretation, and the use of data to inform instruction and specific interventions.

Stiggins (2007) also suggests several school or district level practices to support the effectiveness of implementation of a formative assessment process. First he suggests the establishment of policy that communicates clear achievement expectations for students. He also recommends coordination of assessment systems across the district and the communication of results in a timely and understandable way. In order to ensure assessment accuracy, investment must be made in fostering assessment literacy among the participants and in evaluating implementation of the assessment system.

## CONCLUSION

This Guide has presented a wide range of information including clear definitions of assessment purposes, research on the use of diagnostic and formative assessment processes, accounting for students with special needs in assessment administration, and the technical issues associated with assessment development and the interpretation and use of results. More information about the issues and ideas presented in this Guide can be found in the resources listed in the references and in the appendix that follows.

## References

Abedi, J. (2002). Standardized Achievement Tests and English Language Learners: Psychometrics Issues, Educational Assessment, 8(3), 231-257.

Abedi, J., Hofstetter, C. H., \& Lord, C. (2004). Assessment Accommodations for English Language Learners: Implications for Policy-Based Empirical Research, Review of Educational Research, 74(1), 1-28.

Abedi, J., Lord, C., Hofstetter, C., \& Baker, E. (2000). Impact of accommodation strategies on English language learners' test performance. Educational Measurement: Issues and Practice, 19(3), 16-26.

American Educational Research Association, American Psychological Association, \& National Council on Measurement in Education. (1999). Standards for educational and psychological testing. Washington, DC: American Educational Research Association.

Amrein, A. L. \& Berliner, D. C. (2002). High-stakes testing, uncertainty, and student learning. Education Policy Analysis Archives, 10(18). http://epaa.asu.edu/epaa/v10n18/

Bangert-Drowns, R. L., Kulick, J. A. \& Morgan, M. T. (1991a). The instructional effect of feedback in test-like events), Review of Educational Research, 61, 213-238.

Bangert-Drowns, R. L., Kulik, J. A. \& Kulik, C.-L. C. (1991b). Effects of frequent classroom testing, Journal of Educational Research, 85, 89-99.

Barton, P. (1999). Too much testing of the wrong kind: Too little of the right kind in K-12 education. Princeton, NJ: Educational Testing Service.

Biggs, J. (1998). Assessment and classroom learning: A role for summative assessment? Assessment in Education, 5, 103-110.

Black, P. J., Harrison, C., Lee, C., Marshall, B. \& Wiliam, D. (2004). Working inside the black box: Assessment for learning in the classroom, Phi Delta Kappan, 86(1), 9-21.

Black, P. J. \& Wiliam, D. (1998a). Assessment and classroom learning. Assessment in Education: Principles, Policy and Practice, 5(1), 7-73.

Black, P. J. \& Wiliam, D. (1998b). Inside the black box: Raising standards through classroom assessment. Phi Delta Kappan, 80, 139-144.

Bloom, B. S., Hastings, J. T., \& Madeus, G. F. (1971). Handbook on formative and summative evaluation of pupil learning. New York: McGraw-Hill.

Boston, Carol (2002). The concept of formative assessment. Practical Assessment, Research \& Evaluation, 8(9). http://PAREonline.net/getvn.asp?v=8\&n=9

Brookhart, S. M. (2001). Successful pupils' formative and summative uses of assessment information. Assessment in Education, 8, 153-169.

Brookhart, S. M. (2007). Expanding views about formative classroom assessment: A review of the literature. In J. H. McMillan (Ed.), Formative Classroom Assessment:Theory Into Practice (pp. 43-62). New York: Teachers College Press.

Brown, S., Rust, C., \& Gibbs, G. (1994). Strategies for Diversifying Assessment in Higher Education. Oxford: Oxford Center for Staff Development.

Cizek, G. J., Fitzgerald, S. M. \& Rachor, R. E. (1995). Teachers' assessment practices: preparation, isolation and the kitchen sink, Educational Assessment, 3, 159-179.

Cizek, G. J., \& Bunch, M. B. (2007). Standard Setting: A Guide to Establishing and Evaluating Performance Standards on Tests. Thousand Oaks, CA: Sage.

Code of Fair Testing Practices in Education. (2004). Washington, DC: Joint Committee on Testing Practices. http://www.apa.org/science/fairtestcode.html

Crooks, T. J. (1988). The impact of classroom evaluation practices on students, Review of Educational Research, 58, 438-481.

Dorn, S. (1998). The political legacy of school accountability systems. Education Policy Analysis Archives, 6(1), 1-34.

Elliott, S. N., Kratochwill, T. R., \& McKevitt, B. C. (2001). Experimental analysis of the effects of testing accommodations on the scores of students with and without disabilities, Journal of School Psychology, 39(1), 3-24.

Fuchs, L. S. (1993). Enhancing instructional programming and student achievement with curriculum-based measurement. In J. J. Kramer (Ed.), Curriculum-Based Measurement (pp. 65-1030). Lincoln, NE: Buros Institute of Mental Measurements.

Fuchs, L. S. \& Fuchs, D. (1986). Effects of systematic formative evaluation: a meta-analysis, Exceptional Children, 53, 199-208.

Fuchs, L. S., Fuchs, D., Hosp, M. K., \& Hamlett, C. L. (2003). The potential for diagnostic analysis within curriculum-based measurement. Assessment for Effective Intervention, 28, 13-22.

Glaser, R. (1963). Instructional technology and the measurement of learning outcomes. American Psychologist, 18, 519-521.

Harlen, H., \& Crick. R. D. (2003). Testing and motivation for learning, Assessment in Education, 10(2), 169-207.

Henson, R. K. (2001). Understanding internal consistency reliability estimates: A conceptual primer on coefficient alpha. Measurement and Evaluation in Counseling and Development, 34, 177-189.

Heubert, J.P., \& Hauser, R.M. (Eds.) (1999). High Stakes: Testing for tracking, promotion, and graduation. Washington, DC: National Academy Press.

Johnson, D.W., \& Johnson, R.T. (1990). Co-operative learning and achievement. In: S. Sharan (Ed.), Co-operative Learning: theory and research (pp. 23-27). New York: Praeger.

Kellough, R. D., \& Kellough, N. G. (1999). Middle School Teaching: A Guide to Methods and Resources ( ${ }^{\text {rd }}$ Ed.). Upper Saddle River, NJ: Merrill.

Kulik, C.-L. C., Kulik, J. A. \& Bangert-Drowns, R. L. (1990). Effectiveness of mastery-learning programs: a meta-analysis, Review of Educational Research, 60, 265-299.

Leahy, S., Lyon, C., Thompson, M., \& Wiliam, D. (2005). Classroom assessment: Minute by minute, day by day. Educational Leadership, 63(3), 19-24.

Lewis, A. (2006). Celebrating 20 years of research on educational assessment: Proceedings of the 2005 CRESST Conference (CSE Technical Report 698). Los Angeles, CA: CRESST.

McManus, S. (2008). Attributes of Effective Formative Assessment. Washington, DC: Council of Chief State School Officers.

McMillan, J. H. (2001). Secondary teachers' classroom assessment and grading practices. Educational Measurement: Issues and Practice, 20(1), 20-32.

McMillan, (2007). Formative classroom assessment: The key to improving student achievement. In J. H. McMillan (Ed.), Formative Classroom Assessment: Theory Into Practice (pp 1-7). New York: Teachers College Press.

Messick, S. (1975) The standard problem: meaning and values in measurement and evaluation, American Psychologist, 30, 955-966.

Messick, S. (1989). Validity. In R.L. Linn (Ed.), Educational measurement (3 ${ }^{\text {rd }}$ ed., pp. 13-103). New York: American Council on Education.

Messick, S. (1994). The interplay of evidence and consequences in the validation of performance assessments. Educational Researcher, 23(2), 13-23.

Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons responses and performances as scientific inquiry into score meaning. American Psychologist, 50, 741-749.

Natriello, G. (1987). The impact of evaluation processes on students, Educational Psychologist, 22, 155-175.

Nunnally, J. C., \& Bernstein, I. H. (1994). Psychometric theory (3rd ed.). New York: McGrawHill.

Popham, J. (1999). Why standardized tests don't measure educational quality. Educational Leadership, 56(6), 8-15.

Popham, W. J. (2001). The truth about testing: An educator's call to action. Alexandria, VA: Association for Supervision and Curriculum Development.

Ramaprasad, A. (1983). On the definition of feedback, Behavioural Science, 28, 4-13.
Rosenshine, B., Meister, C. \& Chapman, S. (1996). Teaching students to generate questions: a review of the intervention studies, Review of Educational Research, 66, 181-221.

Sadler (1983). Evaluation and the improvement of academic learning. Journal of Higher Education, 54, 60-79.

Sadler, R. (1989). Formative assessment and the design of instructional systems, Instructional Science, 18, 119-144.

Scriven, M. (1967). The methodology of evaluation. In R. W. Tyler, R. M. Gagne, \& M. Scriven (Eds.), Perspectives of Curriculum Evaluation (pp. 39-83). Chicago: Rand McNally.

Shaw, J. M. (1997). Threats to the validity of science performance assessments for English language learners, Journal of Research in Science Teaching, 34(7), 721-743.

Stevens, J. J. (1995). Confirmatory factor analysis of the Iowa Tests of Basic Skills. Structural Equation Modeling: A Multidisciplinary Journal, 2(3), 214-231.

Stevens, J. J., Estrada, S., \& Parkes, J. (2000). Measurement issues in the design of state accountability systems. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Stiggins, R. L. (1999). Assessment, pupil confidence, and school success. Phi Delta Kappan, 81, 191-198.

Stiggins, R., Arter, J. A., Chappuis, J., \& Chappuis, S. (2007). Classroom Assessment for Student Learning: Doing It Right--Using It Well. Prentice-Hall.

Ravitz, Jason (2002). CILT2000: Using Technology to Support Ongoing Formative Assessment in the Classroom, Journal of Science Education and Technology, 11(3), 293-296.

Taylor, C. S. \& Nolen, S. B. (2007). Classroom Assessment: Supporting Teaching and Learning in Real Classrooms. Columbus, OH: Merrill-Prentice Hall.

Zeiky, M. (2006). Fairness review in assessment. In S. M. Downing and T. M. Haladyna (Eds.), Handbook of test development (pp. 359-376). Mahwah, NJ: Erlbaum.

Zuriff, G.E. (2000). Extra examination time for students with learning disabilities: An examination of the maximum potential thesis. Applied Measurement in Education, 3, 99 117.

## APPENDIX: Resources for Educators Interested In Formative ASSESSMENT

In this appendix, we list a number of resources and links to internet sites that may be useful to educators interested in formative assessment and related topics.

## InFormation on locating assessment instruments:

American Educational Research Association (AERA) FAQ/Finding Information About Psychological Tests: http://www.apa.org/science/faq-findtests.html

Buros Institute of Mental Measurements website on testing:
http://www.unl.edu/buros/bimm/index.html
To determine if a there is a Buros review for a particular test, go to the following web address: http://buros.unl.edu/buros/jsp/search.jsp

The ERIC/AE Test Locator can be found at http://www.ericae.net/testcol.htm.
The ETS Test Collection is an extensive library of more than 25,000 tests and assessments: http://www.ets.org/portal/site/ets/menuitem.1488512ecfd5b8849a77b13bc3921509/?vgnextoid=e d462d3631df4010VgnVCM10000022f95190RCRD\&vgnextchannel=85af197a484f4010VgnVC M10000022f95190RCRD

The University of Chicago Library also has a useful test collection at http://www.lib.uchicago.edu/e/su/tests/.

## Other Assessment and Measurement Resources:

## The ABC's of School Testing (http://www.apa.org/science/jetpweb.html)

A videotape developed by the Joint Committee on Testing Practices (JCTP) and a collaboration of several other testing organizations. Designed to help parents understand the many uses of testing in schools today. In addition to the videotape, two publications are also included: Leader's Guide and the Code of Fair Testing Practices.

AERA Position Statement on High-Stakes Testing in Pre-K - 12 Education:
http://www.aera.net/policyandprograms/?id=378
The Assessment Training Institute provides newsletter articles and other publications about classroom and formative assessment as well as videos and training sessions for a fee.
http://www.assessmentinst.com/
The Center for Research on Evaluation, Standards, and Student Testing (CRESST) has many useful resources and publications:

CRESST products and resources: http://www.cse.ucla.edu/products.html

CRESST newsletters (http://www.cse.ucla.edu/products/newsletters.asp) offer full texts of the organization's activities and policy views since Fall 1991
CRESST policy briefs provide guidance to educators and policy makers: http://www.cse.ucla.edu/products/policy.html

CRESST technical reports: http://www.cse.ucla.edu/products/reports.asp
Ericae.net contains valuable information about assessment, evaluation, and research: http://ericae.net/nintbod.htm

FAST is a part of the CCSSO Formative Assessment Initiative from the Council of Chief State School Officers. They have several reports available:
http://www.ccsso.org/projects/scass/Projects/Formative\_Assessment\_for\_Students\_ and\%5FTeachers/

National Center on student progress monitoring: http://www.studentprogress.org/default.asp
National Council on Measurement in Education (NCME) has a series called ITEMS: The Instructional Topics in Educational Measurement Series. The goal of ITEMS is to improve the understanding of educational measurement principles by providing brief instructional units on timely topics in the field, modules developed for use by college faculty and students as well as by workshop leaders and participants. http://www.ncme.org/pubs/items.cfm

The National Education Association (NEA) website has a number of publications and resources on assessment:

NEA Teacher Toolkit is a suite of Web-based classroom tools designed by NEA members for teachers: http://www.nea.org/marketplace/ttk.html

Peer Assessment Teaches Students How to Think
A veteran teachers reflects on the value of students' self-evaluations and peer assessment.
http://www.nea.org/teachexperience/ifc070501.html
Accountability and Testing - Balanced Assessment Report
More and more, state and federal legislators and education policy makers are relying on multiple, large-scale standardized testing programs to measure student ...
http://www.nea.org/accountability/balanced.html
Accountability and Testing - Assessment
NEA has long supported comprehensive assessment of students' learning. In fact, NEA policy states that "a student's level of performance is best assessed with ..
http://www.nea.org/accountability/assessment.html
The National Research Council (2001) has produced a book on classroom assessment in science, Classroom Assessment and the National Science Education Standards, that includes information on and examples of applications of formative assessment: http://www.nap.edu/catalog/9847.html.

Northwest Regional Educational Laboratory provides an extensive professional development toolkit on assessment: http://www.nwrel.org/assessment/toolkit98.php

Rights and Responsibilities of Test Takers: Guidelines and Expectations http://www.apa.org/science/ttrr.html

The Standards for Educational and Psychological Testing http://www.apa.org/science/standards.html

## LISTSERVS RELATED TO ASSESSMENT AND MEASUREMENT:

Subscribe to: AERA-D - Sponsored by the AERA division that studies educational measurement and research methodology.
[Send e-mail to: LISTSERV @ ASUACAD.BITNET with message: Subscribe AERA-D yourfirstname yourlastname (omit signature)]

Subscribe to: ASSESS - Discussion on assessment in higher education. [send e-mail to: LISTSERV@LSV.UKY.EDU with message: Subscribe ASSESS yourfirstname yourlastname (omit signature)]

Subscribe to: ASSESS-P - Sponsored by the Psychological Assessment/Psychometrics Forum at St. John's University. Topics include clinical and research settings, psychometric theory and application.
[Send e-mail to: LISTSERV@SJUVM.STJOHNS.EDU with message: Subscribe ASSESS-P yourfirstname yourlastname (omit signature)]

Subscribe to ARN-L - Assessment Reform Network - Sponsored by FairTest and ERIC/AE [Send e-mail to listserv@cua.edu with message: Subscribe ARN-L yourfirstname yourlastname (omit signature)]

Subscribe to: EVALINFO - General listserv of the American Evaluation Association. Circulates updated job bank information, AEA membership form, AEA meeting info., and a list of AEA SIG's.
[Send e-mail to: listserv@BAMA.UA.EDU with message: Subscribe EVALINFO yourfirstname yourlastname (omit signature)]

Subscribe to: K12ASSESS-L - The goal of K12ASSESS-L is to provide educators with a fast, convenient, and topical electronic discussion forum focusing on issues related to educational assessment in grades K-12. K12ASSESS-L is a place for local assessment personnel to share and obtain resources, ideas, and support. Visit the K12ASSESS-L Home Page.
[Send e-mail to: mailserv@lists.cua.edu with message: Subscribe K12ASSESS-L yourfirstname yourlastname (omit signature)]

Subscribe to: PSYCHOEDUCATIONAL ASSESS - For those interested in psychoeducational assessment, especially special education related assessment. Most list participants are school
psychologists. [Send e-mail to: LISTSERV@LISTSERV.ARIZONA.EDU with message: Subscribe PSYCHOEDUCATIONAL_ASSESS yourfirstname yourlastname (omit signature)]

## LINKS TO TESTING-RELATED ASSOCIATIONS AND ORGANIZATIONS:

American Counseling Association (ACA)
American Educational Research Association (AERA)
American Speech-Language-Hearing Association (ASHA)
Association of Test Publishers
International Personnel Management Association (IPMAAC)
The Joint Committee on Standards for Educational Evaluation (JCSEE)
National Association of School Psychologists (NASP)
National Council on Measurement in Education (NCME)
Personnel Testing Council of Metropolitan Washington, DC (PTC)
Society for Industrial and Organizational Psychology (SIOP)
Society for Personality Assessment (SPA)

## Additional Selected Articles and Readings on Assessment:

Atkin, J.M., Black, P., \& Coffey, J. (2001). Classroom Assessment and the National Science Education Standards. Washington, DC: National Academy Press.

Angelo and Cross, 1993). Classroom Assessment Techniques: A Handbook for College Teachers
Black, P. (1998). Education Assessment: Designing Assessments to Inform and Improve Student Performance. San Francisco: Jossey-Bass.

Bransford, J. D., Brown, A. L., \& Cocking, R. R. (Eds.). (1999). How people learn: Brain, mind, experience, and school. Washington, DC: National Research Council.

Chappuis, J., (2005) Helping students understand assessment. Educational Leadership, 63(3), 3943.

Chappuis, S., Stiggins, R.J., Arter, J., Chappuis, J. (2005). Assessment for Learning: An Action Guide for School Leaders. Assessment Training Institute, Portland, OR.

An article from the National Center for Fair \& Open Testing Journal, Fair Test Examiner on the value of formative assessment: http://www.fairtest.org/facts/FormativeAssessment.pdf

Gardner, John (ed.) (2006). Assessment and Learning. London, England: Sage Publications.
Gregory, K., Cameron, C., \& Davies, A. (2000). Self-assessment and Goal-setting. Merville, British Columbia, Canada: Connections Publishing.

Herman, Aschbacher, and Winters, (1992). A Practical Guide to Alternative Assessment ()
Leahy, S., Lyon, C., Thompson, M., \& Wiliam, D. (2005). Classroom assessment: Minute by minute, day by day. Educational Leadership, 63(3), 19-24.

Marzano, R. (1992). A different kind of classroom: Teaching with dimensions of learning. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (2006). Classroom Assessment \& Grading that Work. Alexandria: VA: Association for Supervision and Curriculum Development.

Meisels, S., Atkins-Burnett, S., Xue, Y., Bickel, D. (2003). Creating a System of Accountability: The Impact of Instructional Assessment on Elementary Children's Achievement Scores, Educational Policy Archives, 11(9), pp. 19.

Rodriquez, M. (2004). The Role of Classroom Assessment in Student Performance on TIMSS. Applied Measurement in Education, 17(1), 1-24.

Stiggins, R. (2004). New Assessment Beliefs for a New School Mission. Phi Delta Kappan. September: pp. 22-27

Stiggins, R., (2005). From formative assessment to assessment for learning: a path to success in standards-based schools. Phi Delta Kappan, 87(4), 324-328.

Stiggins, R., (2007). Assessment through the student's eye. Educational Leadership, 64(8), 2226.

Stiggins, R., (2007) Five assessment myths and their consequences. Education Week, 27(8), 2829.

Stiggins, R., \& Chappuis, J., (2006) What a difference a word makes: assessment "for" learning rather than assessment "of" learning helps students succeed. Journal of Staff Development, 27(1), 10-14.

Tunstall, P. \& Gipps, C. (1996). Teacher feedback to young children in formative assessment: A typology. British Educational Research Journal.

Wiggins, G. (1998). Educative assessment: Designing assessments to inform and improve student performance. San Francisco: Jossey-Bass.

Wiliam, D. (2006). Does Assessment Hinder Learning? ETS Europe Breakfast Seminar: Professor Dylan Wiliam's Speech.

Wiliam, D. The impact of educational research on mathematics education. In A. Bishop, M.A. Clements, C. Keitel, J. Kilpatrick \& F.K.S. Leung (Eds.), Second International Handbook of Mathematics Education (pp. 469-488). Dordrecht, Netherlands: Kluwer Academic Publishers.

Yorke, M. (2003). Formative assessment in higher education: Moves towards theory and the enhancement of pedagogic practice. Higher Education, 45 (4), p. 477-501.

## WestEd <br> WestEd.org

# Designing a Comprehensive Assessment System 

DEBORAH SIGMAN • MARIE MANCUSO

States and districts face unprecedented challenges today in navigating an assessment landscape that is characterized by controversy, competing priorities, and increased demands for innovation as well as accountability (Hill \& Barber, 2014). Assessments are expected to be fair and technically sound measures of rigorous college- and career-readiness standards that call for students to demonstrate complex, analytical thinking skills and deep content knowledge. As a result, stakeholders are demanding new delivery platforms and item types for these assessments. New technologies have spurred innovations in next-generation assessments that have the potential to maximize accessibility for all students, promote test security, and accommodate the incorporation of performance-based activities on a large scale (Laitusis, 2016).

As part of the current assessment environment, many have questioned the emphasis placed on summative assessments in federal and state accountability systems. Local districts and schools have also developed or selected their own assessments in addition to those required by the state. With this abundance of assessments, educators are faced with balancing the need to collect information for accountability purposes and the need for student performance data that are more closely linked to classroom instruction. Many educators, parents, and students have raised concerns
that over-testing takes valuable time away from teaching and learning. As a consequence, "opt-out" movements have gained momentum in some communities. Meanwhile, policymakers at the state and federal levels are likely unaware of local assessment practices that may add to the assessment burden. These concerns are amplified when tests are used for purposes other than those for which they were designed or when one assessment is used for multiple purposes (Newton, 2007).

As these various pushes and pulls on state and local assessment systems have
increased, it is little wonder that frustration has emerged among policymakers, K-12 educators, parents, faculty in institutions of higher education, and workforce leaders. However, the need for equitable measures that inform and support student learning remains paramount. Therefore, it is time to revisit and reevaluate current assessment practices in light of these critical needs and competing priorities.

Assessments, as tools, are used to collect or elicit evidence, and through the assessment process, practitioners and policymakers reason from that evidence to make informed decisions. What is needed is an assessment system that provides decision-makers at all levels with sound information on which they can base their decisions in support of student learning. In a comprehensive system, there is a place for different types of assessment tools and processes, used for different purposes at different levels of the system: national, state, district, school, and classroom. But designing this kind of system is more difficult than it might appear.

The purpose of this paper is to conceptualize what a comprehensive system that is balanced and aligned might comprise, as well as identify what actions states, districts, and schools can take to create a comprehensive assessment system. Section I describes the federal response to recent testing concerns. Section II describes the purposes and characteristics of a comprehensive assessment system. Section III outlines concrete steps that policymakers and stakeholders might consider in developing a comprehensive assessment system. The final section provides examples from three state education agencies (SEAs)
engaged in creating a comprehensive assessment system.

## SECTION I

The Federal Response

The Testing Action Plan

In October 2015, the U.S. Department of Education (ED) released the Testing Action Plan (TAP) fact sheet, a document to guide the development, selection, and use of "fewer and smarter assessments." Included in the TAP is a set of seven principles to ensure a thoughtful approach to testing by SEAs and local education agencies (LEAs). These seven principles, excerpted below, are intended to provide SEAs and LEAs with a clear statement of purpose and strategies for ensuring that all assessments administered in their jurisdictions are rigorous, fair, and yield unique (i.e., non-redundant) information about what students know and can do in relation to academic content standards. In short, assessments must be:

1. Worth taking
2. High quality
3. Time-limited
4. Fair - and supportive of fairness in equity in educational opportunity
5. Fully transparent to students and parents
6. Just one of multiple measures
7. Tied to improved learning

The TAP reaffirms the importance of assessment and it clearly articulates state and district responsibilities in selecting or developing assessment tools:


#### Abstract

One essential part of educating students successfully is assessing their progress in learning to high standards. Done well and thoughtfully, assessments are tools for learning and promoting equity. They provide necessary information for educators, families, the public, and students themselves to measure progress and improve outcomes for all learners. Done poorly, in excess, or without clear purpose, they take valuable time away from teaching and learning, draining creative approaches from our classrooms. In the vital effort to ensure that all students in America are achieving at high levels, it is essential to ensure that tests are fair, are of high quality, take up the minimum necessary time, and reflect the expectation that students will be prepared for success in college and careers. (2015, Fact Sheet, para. 1)


The TAP also outlines the actions the federal government planned to take to minimize testing redundancies. In addition, in early 2016, the department began releasing case studies that highlight exemplary practices from states and districts across the country as they started to review and revise their assessment systems (https://www2.ed.gov/ documents/press-releases/testing-action-plan-profiles.pdf).

## Every Student Succeeds Act

In December 2015, new federal policies related to assessment and accountability were enacted through the reauthorization of the Elementary and Secondary Education Act, termed the Every Student Succeeds Act (ESSA). ESSA shifted much of the authority
and responsibility for assessment and accountability systems to SEAs and LEAs, thereby allowing for increased flexibility in design of these systems. Both the TAP and ESSA set the stage for states and districts to examine their current assessments and make needed changes.

## SECTION II

## A Comprehensive Assessment System

Shifting more authority and flexibility to SEAs and LEAs will not necessarily ensure the effective selection and use of assessments. Much work must be done at the state and local levels to achieve these outcomes. That work begins with developing a shared understanding of the characteristics or elements of a comprehensive system.

A 2001 report from the National Research Council, Knowing What Students Know: The Science and Design of Educational Assessment, defines a comprehensive system as comprising a range of measurement approaches used to provide a variety of evidence to support education decision-making. In such a system, multiple measures enhance the validity of inferences drawn from assessment. These multiple measures may include four broad categories of assessment: formative, diagnostic, interim/benchmark, and summative (Center on Standards and Assessment Implementation, 2016). The information each type of assessment provides is summarized on page 4.

## Type of

 Assessment| Formative |
| :--- |
| Assessment |
|  |
|  |
|  |

## Diagnostic Assessments

## Interim/ <br> Benchmark <br> Assessments

## Description of Assessment

Formative assessment is a process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes (Council of Chief State School Officers, 2008). The information collected is finely grained, providing a level of detail about the current status of student learning in relation to lesson goals. Its purpose is to inform real-time teaching and learning.

While many assessments may be considered diagnostic, traditionally and formally, diagnostic tests are generally used when students are demonstrating difficulties in learning, and results may assist in diagnosing strengths and needs. Because of the diagnostic nature of these assessments, they are often administered by specially trained education personnel.

Interim or benchmark assessments are generally administered by teachers at key points in time for one or both of two purposes: 1) to evaluate what students have learned in relation to mid-term goals; 2) to predict students' performance on particular standards assessed by the state's end-of-year summative assessment. Interim assessments may be administered under standardized or non-standardized conditions depending on purpose. Results may provide teachers with an early warning signal about those students who are falling behind in their learning and may benefit from targeted assistance to help them learn content prior to end-of-year testing. For leaders, results indicate whether students are on track in meeting learning goals and can inform decisions about curricular adjustments and professional learning needs, for example.

Summative assessments provide information about students' achievement of academic content standards following a longer period of instruction, such as a full semester or school year. Examples of summative assessment include final course exams developed by a teacher and an end-of-year or end-of-course assessment developed by a state or a multi-state consortium. State-developed summative assessments are administered in a standardized manner so that each student across the state can demonstrate his or her achievement under the same testing conditions. Results from summative measures can be used for grading and reporting purposes, policy and program decisions, and decisions about resource allocation and professional learning priorities.

## An Assessment Continuum

Figure 1, below, displays how these broad assessment categories can provide information along an assessment continuum. The grain size - the size and scope of the learning goals assessed becomes larger along the continuum. Assessments along the continuum may provide information at the instructional, program, or institutional (policy) level (Stiggins, 2008). Formative assessment provides real-time information at a fine grain size that the teacher and student
can act upon immediately or in the near term. Interim assessments measure a larger number of standards or portion of learning, while still providing opportunity for instructional adjustments before moving on. Summative assessments indicate what students have achieved by the end of the term or year across the scope of the standards, providing information at a coarser level. Diagnostic assessments may be needed at different points along the continuum depending on students' demonstrated needs.

Figure 1. The Assessment Continuum


Source: Adapted from English Language Arts/English Language Development Framework for California Public Schools: Kindergarten Through Grade Twelve, Chapter 8. Copyright 2014 by the California Department of Education. Adapted with permission.

## Additional Assessment Aspects to Consider

This section identifies three aspects of assessment to consider when developing a comprehensive system:
" assessment purpose;
» balance; and
» alignment.

## Assessment Purpose

Assessments are developed and designed to serve a particular purpose. A comprehensive assessment system includes different types of assessment, aligned to standards, to provide the information educators at different levels of the system and other stakeholders (e.g., parents, students, and policymakers) need to fulfill their responsibilities. For example, SEAs use assessment information to determine state priorities and policies, for accountability purposes, and to make decisions about needed supports to LEAs. LEAs use assessment data for decisionmaking about the effectiveness of certain policies, programs, or practices. Teachers use assessment data to make choices about instructional methods or approaches to teaching students with different academic strengths and needs. Finally, parents obtain information about their child's achievement status relative to academic standards; and students may use information from assessments to monitor their own progress and improvement.

It is important to note that along the assessment continuum, each assessment can contribute unique types of information to the collective understanding of what
students know and can do, such that no one assessment will be expected to yield evidence it was not designed to collect.

## Balance

Balancing varied assessments requires what Chattergoon and Marion (2016) refer to as assessment efficiency, meaning "getting the most out of assessment resources and eliminating redundant, unused, and untimely assessments... enabl[ing] each assessment to do what it is designed to do" (p. 8).

In some contemporary assessment systems, state summative assessments - and needs for accountability - are weighted so heavily that it has resulted in an imbalance with the other measures in the system. On the one hand, the underemphasis on instructionally sensitive measures and formative practices can vitiate efforts to promote a seamless instruction, curriculum, and assessment cycle. On the other hand, calling for the cessation of all summative assessment administrations and advocating for the sole use of formative practices could lead to an imbalance, leaving those stakeholder groups who need summative assessment data for decision-making at a disadvantage. Overemphasizing one test purpose or emphasizing the needs of one stakeholder group compared to another, can lead to system dysfunction as well as ineffective use of scarce resources. This perspective has been articulated by the National Association of State Boards of Education (NASBE):

Recognizing that no single test serves all purposes, states need to create a comprehensive, balanced assessment system that includes both assessment
of learning (reporting on what's been learned) as well as assessments for learning (providing ongoing feedback to teachers and students as learning progresses). (2009, p. 46)

Figure 2. Finding the Right Balance


Source: Authors.

Achieving and maintaining balance in an assessment system requires reconsideration of the purposes, uses, and targeted audience for all current or proposed measures. Finding the right balance in an assessment system also requires consensus-building among key stakeholder groups about the information that is needed and identification of those assessments that can best be utilized to collect such information.

Given the limited resources available in most education communities, making decisions about the "just right" set of assessments requires the identification of trade-offs, such as cost versus benefit and value versus burden, for each assessment considered for inclusion in the collection
of assessments (see figure 2). As leaders make decisions about their comprehensive systems, achieving this balance will include examination of the primary assessment purpose, the ease of administration, the time involved in the administration, and the type and format of the information needed. As assessment decisions are made, each will require choices about cost, time, and value. Recognizing and articulating the trade-offs will facilitate transparency of the system. Thoughtful consideration of the balance of value versus burden, and of benefit versus cost, can serve as a guardrail to prevent practitioners and policymakers from relying too heavily on any one assessment. In addition, considering balance in this fashion can highlight the many levels and types of information available for varied decisionmaking processes.

## Alignment

And finally, assessments along the continuum should be aligned - aligned with each other so that measures along the continuum assess learning at different grain sizes, from formative to interim/ benchmark to summative. Also necessary in a comprehensive system is alignment at different levels of the system: classroom, school, district, and state, so that what is taught and measured leads to college- and career-ready citizens.

Figure 3 reminds us of the continuous feedback loop between curriculum, instruction, and assessment. When a comprehensive assessment system is deliberately developed, the feedback loop of instruction, curriculum, and assessment is strengthened and the learning process is enhanced:

Curriculum, instruction, and assessment must work together as a continuous cycle of the learning process. Assessment viewed in isolation will not improve student achievement. (Wisconsin, 2009, p. 8)

## Figure 3. The Curriculum, Instruction, and Assessment Cycle



Source: Adapted from The Teacher Guide to the Smarter Balanced Summative Assessments: English Language Arts/Literacy, Grades Three, Four, and Five, p. 3. Copyright 2016 by the California Department of Education. Adapted with permission.

## SECTION III

## Recommendations

 for Creating a Comprehensive SystemThe reauthorization of the ESEA provides a critical and much-needed opportunity for states and districts to reevaluate the tests and measures currently in use and, in doing
so, to reconsider the information needs of all stakeholders.

As states and districts undertake this effort, they may want to consider the following recommendations:
» Develop a framework for a comprehensive system.

- Frameworks that include information regarding different types of assessments, definitions, purpose, format, frequency, and use can serve as a guide for states and districts in building common understanding and in examining and redesigning current systems. See the Center on Standards and Assessment Implementation's (CSAI) Overview of Major Assessment Types for an example.
- A framework can guide both SEAs and LEAs in building coherence across the system. See CCSSO's resource, Comprehensive Statewide Assessment Systems: A Framework for the Role of the State Education Agency in Improving Quality and Reducing Burden, which presents different approaches and key action steps a state can take to advance an efficient and effective system.
" Establish a set of principles to guide the redesign.
- Engage stakeholders in a process for reaching consensus on a set of principles that can guide decisionmaking. The guiding principles in the Testing Action Plan and in the Commitments on High-Quality Assessments, jointly published by CCSSO and the Council of the Great

City Schools (CGCS), can provide a place to start.
" Identify and weigh the information needs of a wide range of stakeholders.

- Students, teachers, administrators, parents, the community, advocacy groups, and policymakers need to be considered and consulted during this process.
- CSAI provides a number of communication resources that could support this work. These resources are available at http://www.csai-online. org/search?type=All\&type=All\& search_api_views_ fulltext=communication
» Keep policymakers and stakeholders informed about the process and system.
- Communicate the features of a proposed comprehensive assessment system.
- Communicate how the measures in the proposed system would work together to serve multiple purposes and audiences.
- Communicate how information from these assessments can and/or will be used to improve teaching and learning.
» Conduct an inventory of all measures in the current assessment system.
- Include state, district, school, and classroom assessments to the degree possible.
- Clarify the intended purpose(s) for each assessment.
- Evaluate the usefulness of the data collected from each assessment.
- Determine if purpose(s) and use(s) are meeting the needs of the target population of stakeholders.
- Weigh trade-offs such as burden and cost with benefit and value.
- Determine if the assessments work together in a coherent way to move the state or district forward in addressing valued student learning outcomes. What is missing and/or should be added?
- Is the same type of information being collected from multiple sources?
- Are one or more of these sources of information redundant or unnecessary?
- The Student Assessment Inventory for School Districts from Achieve allows districts and schools to inventory their assessments and assessment strategies from a student's perspective. The tool can be found at http://www.achieve.org/files/ AchieveStudentAssessment Inventory.pdf
- The CSAI-developed inventory tool uses the TAP's seven principles to guide the inventory process. The tool may be used by states and districts. The tool can be found at http:// www.csai-online.org/sites/default/ files/Assessment\%20Inventory\%20 Resource\%20and\%20TAP\%20 Handout.pdf
" Take advantage of local flexibility to consider that a balanced assessment system can be both state and locally driven.
- ESSA allows a great deal of flexibility in designing a state-level assessment system. A summary of the final assessment regulations can be found at https://www2. ed.gov/policy/elsec/leg/essa/ essaassessmentfactsheet1207.pdf
- Explore the use of innovative assessments as part of a comprehensive system.
- Determine how these assessments may impact practices and policies for stakeholders.
- Examine both intended and unintended consequences of these assessments.


## SECTION IV Examples of State Approaches

This concluding section provides examples of states that have begun the process of establishing a comprehensive assessment system.

## Nevada Assessment Inventory

The Nevada Department of Education (NDE) sought a process for systematically analyzing and evaluating its state and district assessment systems. It was interested in obtaining feedback on the efficacy of state assessments, cataloging district assessments, exploring how state and district assessments align, and estimating the overall cost versus benefit of each system component. In 2016, with the assistance of WestEd's Center on Standards and Assessment Implementation and the West Comprehensive Center, the NDE conducted an inventory of state and district assessments used, and administered a series of surveys and focus groups in three regions of the state. A report of findings from these activities highlighted current assessment practices and perceptions of these practices from a range of state stakeholders.

NDE leaders have reported that this effort was invaluable as the state considers changes to its system of assessments. The NDE has shared report findings with district administrators and state policymakers to support informed decision-making about a comprehensive system and to plan future actions. In addition, the Nevada State Board of Education used the results to inform a policy decision on K-2 assessments, and NDE has used the analysis in its ESSA planning. "It couldn't have happened at a better point in time; it has proven to be an invaluable resource for stakeholders at all levels" (Peter Zutz, NDE Director of Assessment, personal communication, August 19, 2016).

## Colorado Assessment Literacy Initiative

After WestEd assisted the Colorado Department of Education in collecting input from stakeholders on the value versus burden of state and local assessments, the department launched the Colorado Assessment Literacy Program (CALP) to (a) help fill assessment knowledge gaps among teachers, (b) describe the features of a high-quality assessment system and how it can support optimal student learning, and (c) promote systemslevel thinking during the processes of selecting and developing assessments. Teachers and administrators were provided with online resources (https://www.cde.state.co.us/ contentcollaboratives/phase3) and in-person workshops with department staff designed to deepen their assessment knowledge and skills. One resource is the Colorado Assessment Framework, which describes the features of a high-quality assessment system that is tailored to the specific needs of Colorado stakeholders.

The department is beginning to see early signs of the positive impact of the CALP. Participating district personnel report greater confidence during decision-making about assessment choice and data use and in evaluating what is working and what is not. The department has learned that it can play an important role in providing training and support to districts and that messaging is critical. As Angela Landrum, Principal Consultant for the department's Vision 2020, puts it, "We can't say at the state level that we believe in a comprehensive system, but only focus on the state assessment" (personal communication, October 25, 2016). Colorado's Assessment Literacy Program is helping districts and schools view the state assessment in the larger context of a comprehensive system driven at the local level.

## Building a Next-Generation, Comprehensive Assessment System in California

Prompted by a legislative requirement (California Education Code, 2014) to "... provide a system of assessments of pupils that has the primary purposes of assisting teachers, administrators, and pupils and their parents; improving teaching and learning; and promoting high-quality teaching and learning using a variety of assessment approaches and item types," the California Department of Education set out to reimagine what an effective, comprehensive assessment might look like. The department was seeking a system that had the potential to improve teaching and learning throughout the state, with roles for both the SEA and the LEAs in realizing this vision.

For this effort, the department and its partners, including WestEd, collected information from existing resources, solicited input from a range of stakeholders, and solidified a set of principles to guide the decision-making. The result was a report (http://www.cde.ca.gov/ $\mathrm{ta} / \mathrm{tg} / \mathrm{ca}$ /documents/compassessexpand.pdf) that synthesized all collected information and articulated a vision for a comprehensive assessment system in California that would be used to guide policies governing California's assessment system by both the state board of education and the legislature.

## References

California Department of Education. (2014). English language arts/English language development framework for California public schools: Kindergarten through grade twelve (Chapter 8, Assessment). Sacramento, CA: Author. Retrieved from http://www.cde.ca.gov/ci/rl/cf/documents/ elaeldfwchapter8.pdf

California Department of Education. (2016). The teacher guide to the Smarter Balanced Summative Assessments: English language arts/literacy, grades three, four, and five. Sacramento, CA: Author. Retrieved from http://www.cde.ca.gov/ta/tg/ca/documents/sbteachgdeela35.pdf

California Education Code, Section 60602.5(a) (2014).

Center on Standards and Assessment Implementation. (2016). Overview of major assessment types in standards-based instruction. San Francisco, CA: WestEd. Retrieved from http://www.csai-online. org/sites/default/files/resources/6257/CSAI_AssessmentTypes.pdf

Chattergoon, R., \& Marion, S. (2016). Not as easy as it sounds: Designing a balanced assessment system. State Education Standard, 16(1), 6-9.

Council of Chief State School Officers. (2008). Attributes of effective formative assessment. Washington, D.C.: Author. Retrieved from http://www.ccsso.org/Documents/2008/Attributes of Effective 2008.pdf

Hill, P., \& Barber, M. (2014). Preparing for a renaissance in assessment. London: Pearson.
Laitusis, C. (2016). Coming together to raise achievement for students with disabilities and English learners. In The road ahead for state assessment (p. 13). Princeton, NJ: Educational Testing Service.

NASBE. (2009). Reform at a crossroads: A call for balanced systems of assessment and accountability [The Report of the NASBE Study Group on Assessment Systems for the 21st Century Learner]. Alexandria, VA: National Association of State Boards of Education.

National Research Council. (2001). Knowing what students know: The science and design of educational assessment. Committee on the Foundations of Assessment; J. Pelligrino, N. Chudowsky, \& R. Glaser, Eds.; Board on Testing and Assessment; Center for Education; Division of Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.

Newton, P. (2007). Clarifying the purposes of educational assessment. Assessment in Education, 14(2), 149-70.

Stiggins, R. (2008). Assessment manifesto: A call for the development of balanced assessment systems [Assessment Training Institute]. Princeton, NJ: Educational Testing Service. Retrieved from http://www.nyscoss.org/img/uploads/file/Assessment Manifesto Article_-Rick_Stiggins.pdf
U.S. Department of Education. (2015). Fact sheet: Testing action plan. Retrieved from
https://www.ed.gov/news/press-releases/fact-sheet-testing-action-plan
Wisconsin Department of Public Instruction. (2009). Crafting a balanced system of assessment in Wisconsin: Recommendations of the Next Generation Assessment Task Force. Madison, WI: Wisconsin Department of Public Instruction.

## Additional Resources

## Assessment Policy Landscape

Every Student Succeeds Act (ESSA) Assistance - Center on Standards and Assessment Implementation
Testing Action Plan Fact Sheet - U.S. Department of Education
Testing Action Plan Resources and Guidance - Center on Standards and Assessment Implementation
Testing Action Plan: State and District Profiles - U.S. Department of Education
Testing Overload in America's Schools - Melissa Lazarín, Center for American Progress
The Changing Nature of Educational Assessment - Randy Elliot Bennett, Review of Research in Education, 39(1), 370-407.

## Building a Comprehensive, Balanced, and Aligned System

Coherent Systems of Assessment: The Pathway to Student Success - Center on Standards and Assessment Implementation

Comprehensive Standards-Based Assessment Systems Supporting Learning - Center on Standards and Assessment Implementation and National Center for Research on Evaluation, Standards, and Student Testing

Comprehensive Statewide Assessment Systems: A Framework for the Role of the State Education Agency in Improving Quality and Reducing Burden - Council of Chief State School Officers

Criteria for High-Quality Assessment - Stanford Center for Opportunity Policy in Education, Center for Research on Student Standards and Testing, and Learning Science Research Institute

Developing a Coherent Assessment System Webinar - Center on Standards and Assessment Implementation

Guide to Evaluating Assessments Using the CCSSO Criteria for High Quality Assessments: Focus on Test Content — Brian Gong and Thanos Patelis, The National Center for the Improvement of Educational Assessment

How Much Testing is Taking Place in North Carolina Schools at Grades K-12? An Analysis of Federal, State, and Local Required Assessments - Micah Guindon, Hunter Huffman, Allison Rose Socol, and Sachi Takahashi-Rial, Public Schools of North Carolina, State Board of Education

Nevada State and District Assessment Survey - Expanded Summary - Center on Standards and Assessment Implementation, submitted to Nevada Department of Education

Not as Easy as It Sounds: Designing a Balanced Assessment System — Rajendra Chattergoon and Scott Marion, National Association of State Boards of Education

Ohio Testing Report and Recommendations_ Richard A. Ross, Ohio Department of Education
Re-Balancing Assessment: Placing Formative and Performance Assessment at the Heart of Learning and Accountability - Peter Hofman, Bryan Goodwin, and Stuart Kahl, McREL International and Measured Progress

Recommendations for Building a Next-Generation: Comprehensive Assessment System in California WestEd submitted to California Department of Education

Standards for educational and psychological testing. (2014). Prepared by the Joint Committee on Standards for Educational and Psychological Testing of the American Educational Research Association, American Psychological Association and National Council on Measurement in Education. Washington, DC: AERA.

The Colorado Standards and Assessments Task Force (HB14-1202): Report of Findings and Recommendations - HB14-12O2 Standards and Assessments Task Force

## General Assessment Information

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A Framework for Considering Interim Assessments - Marianne Perie, Scott Marion, and Brian Gong, National Center for the Improvement of Educational Assessment

Assessment Design Toolkit - Center on Standards and Assessment Implementation
Attributes of Effective Formative Assessment - Sarah McManus, Council of Chief State School Officers
Criteria for Procuring and Evaluating High-Quality Assessments - Council of Chief State School Officers
CSE Report 806-District Adoption and Implementation of Interim and Benchmark Assessments Kristen L. Davidson and Greta Frohbieter, National Center for Research on Evaluation, Standards, and Student Testing

Curriculum-Embedded Performance Assessments (CEPAs): Policy Considerations for Meaningful Accountability - Jane Best and Emily Winslow, McREL International

Distinguishing Formative Assessment from Other Educational Assessment Labels — Council of Chief State School Officers

Overview of Major Assessment Types - Center on Standards and Assessment Implementation
Quality Performance Assessment Framework - Center for Collaborative Education

## Taking Stock of Your System

Addressing Overtesting: The Student Assessment Inventory in Action - Achieve
Assessment Evaluation Tool (AET) - Student Achievement Partners
Assessment Inventory Resource - Center on Standards and Assessment Implementation
Assessment Review Tool - Rhode Island Department of Education and National Center for the Improvement of Educational Assessment

Colorado Assessment Review Tool - Colorado Professional Learning Network
Evaluating the Content and Quality of Next Generation Assessments - Nancy Doorey and Morgan Polikoff, Fordham Institute

Four Ways to Reduce Testing and Maintain Accountability - Mike Thomas, Excel in Ed and Foundation for Excellence in Education

Knowing the Score: The Who, What, and Why of Testing - Nancy Kober, Center on Education Policy
Resources for Evaluating Assessment Systems - Center on Standards and Assessment Implementation
Student Assessment Inventory for School Districts - Achieve

Student Assessment Inventory for School Districts - Illinois State Board of Education<br>Student Assessment Inventory for School Districts: Considerations for Assessing English Language Learner Students - Kenji Hakuta, Achieve<br>Student Assessment Inventory for School Districts: Considerations for Special Education Assessment Systems - Achieve and National Center on Educational Outcomes<br>Student Assessment Inventory for School Districts: Guidance for School Districts - Achieve<br>Student Testing in America's Great City Schools: An Inventory and Preliminary Analysis - Ray Hart, Michael Casserly, Renata Uzzell, Moses Palacios, Amanda Corcoran, and Liz Spurgeon, Council of the Great City Schools<br>Teaching is the Core: District Assessment Review - Cortland School District (New York)

## Communicating about Assessment

Communications 101: Getting Your Message Out - Collection of Communication Tools - Center on Standards and Assessment Implementation<br>Empowering Parents with Data: Ensuring Parents Have Data to Make Informed Choices - Data Quality Campaign<br>Parent Assessment Event Toolkit - National Parent Teacher Association<br>Sample Student Assessment Reports - Achieve<br>The Role of Strategic Communications in the Transition to New Academic Standards and Assessments: Case Studies of Tennessee and Kentucky - The Hunt Institute<br>Understanding the Results (PARCC Score Report) - Partnership for Assessment of Readiness for College and Careers<br>Why Education Data? - Data Quality Campaign

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## WestEd

WestEd.org

WestEd is a nonpartisan, nonprofit research, development, and service agency that works with education and other communities throughout the United States and abroad to promote excellence, achieve equity, and improve learning for children, youth, and adults. WestEd has more than a dozen offices nationwide, from Massachusetts, Vermont, and Georgia to Illinois, Arizona, and California, with headquarters in San Francisco.

## Understanding Balanced Assessment Systems

Integrating assessment in a way that works for students and their families, the school, the district and the state.

## Introduction

Assessment is an established part of the educational landscape. It has a critical role to play in improving educational outcomes by measuring student learning. But this landscape is evolving as new legislative frameworks, such as the Every Student Succeeds Act (ESSA), introduce new accountability requirements, and wider developments such as rapidly advancing technologies emerge. These changes in turn have an impact on assessment systems. Educational stakeholders at all levels should consider whether their assessment systems continue to provide the right information in a timely manner and in the appropriate format to ensure their system is still fully fit for purpose.

Understanding the different types of available assessments and how these can be connected to enable best assessment practice is a key step
to assuring fit for purpose. Within K 12, there are three main assessment types: formative, interim and summative. Each has a critical role to play in delivering the right data to the right people to meet their particular needs, from student, parent, educator and principal to district- and state level stakeholders. Together, these assessments combine to create a balanced system that provides insights to accelerate educational progress.

This briefing looks at the characteristics of each form of assessment and how each could be used and applied to yield evidence that can inform various decisions, whether at a policy, district/school or classroom level to support the improvement of education. It also looks at the benefits of integrating assessment to create a balanced system whose whole is greater than the sum of its parts.


## Fit for purpose

The reason three different types of assessment are utilized in the K-12 arena is because each serves a different purpose. Understanding the goal of each assessment can help to ensure each is used to appropriately add value to improving overall learning outcomes. So, whether it's formative, interim or summative, it is important to be familiar with the function, and the limitations, of each form of assessment.

## Formative assessment

Fundamentally, the purpose of formative assessment is to inform both students and teachers about learning in the classroom. Formative assessment occurs within the classroom, planned and orchestrated by the teacher and provides information that helps them to make decisions about what are appropriate next learning steps for students to move learning forward, and to support students as they gain insights into their own learning. Formative assessment can take many different forms, from purposeful listening to student discussions as they collaborate together and providing feedback to help them deepen their understanding, to bringing important ideas forward to the whole class, or to extending work on a project with rounds of feedback from peers. Any information gained from formative assessment activities should be useful in the moment.

A good analogy for thinking about the role of formative assessment is Roger Bannister breaking the four-minute mile barrier. Finally running a sub four-minute mile was a summative performance with a specific target reached. The times for all Bannister's practice runs were not used to calculate his average for the year, but all the practices were essential in order for him to achieve his 'summative' performance. In the same way, formative assessment informs and guides ongoing learning during the year until a culminating summative assessment.

## Interim assessment

Interim assessment provides an opportunity to "check-in" on student learning at several points during the year and to get an estimate of likely performance
on the summative assessment. It is intended to provide a shared point of reference across teachers and classes within a grade level on student learning during the year. Interim assessment data can be used to examine group performance to address questions such as, "how does the performance of English Learners in our school compare to other students?" Data could be disaggregated by gender, race/ethnicity, disability status, or socio-economic status if there are sufficient numbers of students in a subgroup.

Data may be used to inform some adjustments in resources or curriculum strategies during the academic year, but may not necessarily influence classroom instruction in the way that a more targeted formative assessment would. Essentially, the information interim assessment delivers enables administrators and educators to understand where students are with respect to grade-level standards at given points in time during the year

## Summative assessment

The goal of state-wide summative assessment is to evaluate student learning usually near the end of the school year. It may also be referred to as the accountability assessment. State-wide summative assessment provides a broad view of student and school educational performance and allows districts and states to measure how well learning and teaching is meeting required state standards. As it measures specific outcomes at a single point in time, it is useful for examining individual student's overall mastery of state standards and also for comparing performances of groups of students across schools or districts. Given the survey nature of the assessment - covering a year's worth of standards in a relatively short period of time - it produces aggregated data that is useful for state education agencies and districts for accountability and resourcing purposes. For teachers, it can identify student strengths and weaknesses broadly but they will need additional more targeted information during the academic year to inform ongoing instruction.

Figure 1 below illustrates how formative, interim and state-wide summative assessments exist together, illustrating how the stakes vary, and the scope of each assessment varies in terms of the standards assessed.


Performance Tasks can be used for both Formative and Classroom Summative Assessment

Fig. 1. Representation of a balanced assessment system

Note that while not the focus on this paper we recognize that teachers often use classroom summative assessments as part of the process of determining student grades and also there is an increasing interest in the role of performance assessments which can be used in either a formative or summative capacity (Wylie \& Lyon, 2017).

## Getting the most out of assessment data

Each type of assessment produces a different type and grain size of evidence, from the very individualized information of formative assessment to the broader year-long view of summative. Formative, interim and summative assessment work together to create a multi-faceted view of learning at an individual, class, district and state level and the differing size of data generated by each is key to their appropriate deployment and successful application.

## The relevance of real-time data

Formative assessment provides very fine grain information, sometimes targeting only a single standard or aspect of a standard, which may be tailored to an individual student or a small group and of a particular moment. It is timely and informative, providing real-time feedback that teachers are then able to quickly apply to adjust their teaching plan to better reflect specific needs, or that students can apply to their own work to improve it. It is the immediacy and relevance of the insights gained that makes it highly effective. This allows teachers to incorporate the evidence of student learning into their planning and act on insights to augment their classroom-based instruction immediately, making a positive impact on deepening student learning. This process of timely adjustment to meet student learning needs as they are emerging has a positive impact on student learning ${ }^{1,2,3}$. There is no delay between the capture and application of data and this real-time characteristic is crucial to effective formative assessment.

Formative assessment can be wide-ranging, from more practice-based activities such as quick, verbal
checks-for-understanding, to more formal types of assessment such as extensive tasks that support deeper learning and that are designed to provide more scaffolded or supported learning opportunities. Evidence may take the form of notes that the teacher makes about questions to ask students about their writing drafts during conference time the next day, patterns across a set of exit tickets that students complete at the end of a class that will then inform groupings for an opening activity the next day, or student self-reflections or feedback to peers. In some cases, a teacher may share evidence with another teacher to see if she has observed similar patterns in student work in order to strategize an effective alternative representation to help students better understand an important concept. However, it is less likely that evidence will be reported or shared beyond a very immediate, local context. Most critically, if the evidence is truly formative then it will provide information to be acted on immediately, either confirming for the teacher that the direction she is going in is appropriate or suggesting a different next step, but in either instance the information will become quickly out-of-date. In short, the teacher and students obtain information about learning, both student and teacher can respond to that and then the learning has moved forward.

Research suggests that teachers need ongoing professional support to develop and deepen their formative assessment practices ${ }^{4,5}$. Collaborating with peers to plan and create shared tools and approaches to elicit evidence of student learning, to analyze student work together and to plan ways to deepen student learning based on evidence of current learning, are all important professional learning experiences for teachers. Teachers need time and opportunities to develop and practice these skills.
${ }^{1}$ Black, P., \& Wiliam, D. (1998). Assessment and classroom learning. Assessment in Education: Principles Policy and Practice, 5, 7-73.
${ }^{2}$ Heritage, M., \& Heritage, J. (2013). Teacher questioning: the epicenter of instruction and assessment. Applied Measurement in Education, 26, 176-190.
${ }^{3}$ Andersson, C., \& Palm, T. (2017). The impact of formative assessment on student achievement: a study of the effects of changes to classroom practice after a comprehensive professional development programme. Learning and Instruction, 49, 92-102.
${ }^{4}$ Gotwals, A.W. \& Birmingham, D. (2016). Eliciting, identifying, interpreting, and responding to students' ideas: Teacher candidates' growth in formative assessment practices. Research in Science Education, 46: 365. https://doi.org/10.1007/s11165-015-9461-2
${ }^{5}$ Furtak, E.M., Kiemer, K., Circi, R.K. et al. (2016). Teachers' formative assessment abilities and their relationship to student learning: findings from a four-year intervention study. Instructional Science, 44: 267. https://doi.org/10.1007/s11251-016-9371-3

## The benefits of interim assessment

School and district leaders need to have a view of student performance as the school year unfolds so they can make informed, local decisions such as where to deploy coaches, or what type of professional development needs to plan for. Similarly, teachers want to be able to gauge student performance against summative expectations at the end of the year and adjust curriculum and learning strategies for both the student and cohort at regular points accordingly.

Interim assessments provide additional opportunities to monitor student progress using a set of content that is broader than formative, before reaching the summative end-of-year testing. Performance on the interim assessments will confirm a teacher's formative assessment judgments about student learning, or help teachers to identify students who may be performing more strongly or more poorly than the teacher had realized, and focus instruction in these areas. Students can sometimes have changes in learning that go undetected by the teacher and these interim check points can draw attention to these students. While interim data has greater longevity than its formative partner, it must still be provided in a timely way if it is to be acted on to drive educational improvement and to be effective.

## Beyond accountability

State, district and school leaders may want to understand student performance in aggregate, both in terms of absolute attainment and progress over time, but also by sub-groups to identify disparities and monitor the effectiveness of approaches being used to reduce achievement gaps. This is the role of summative assessment - to provide data that can support meaningful comparisons across groups of students, classes, schools, districts and so on. This macro data provides districts and schools with an overall pulse on how
students are progressing by grade, by school and by content area. It also measures student achievement against required state standards to deliver the type of information that may then be used to develop educational policies at a state and federal level.

However, summative assessment has applications beyond accountability. The data can help district or school leaders to identify areas for professional learning, and it can support teacher reflection on teaching strategies or curriculum at the end of the year and inform adjustments ahead of the next year's instructional planning. In addition, summative data might be used for planning at the start of the year, with the receiving teacher using it to get a snapshot of the new students entering their classroom and to think about the appropriate level to begin instruction.

With the introduction of the Every Student Succeeds Act (ESSA), state educational stakeholders now have the opportunity to revisit their assessment systems and to explore options that do not focus solely on a single end-of-year assessment. During this time of transition, some states are beginning to explore options around using multiple interim assessments for the purpose of accountability or greater use of performance assessments.


## A balanced assessment

A strategically balanced assessment system is one that incorporates summative, interim and formative components in order to provide meaningful and interpretable information for stakeholders at all levels in the educational system. By working together, these individual components provide greater insights into where students are and where they need to be throughout their K-12 journey, supporting learning opportunities for all students that are addressing their individual learning needs to help improve educational success for all.

## The need for integration

Formative, interim and summative - each type of assessment has a role to play in enhancing learning outcomes and driving forward standards in education. Understanding when to attend to each source of information is important. Usable, meaningful data is also timely data. Timely summative results allow teachers to use them to reflect on the year just ending and to use them as part of their planning for the following year. Interim results can be reviewed by grade level teams after each administration to identify any adjustments needed to instructional plans for the rest of the year. Formative assessment evidence - based on the same set of standards - will be ongoing throughout the year supporting teachers and students to identify current understandings from which to build next instructional or learning steps.

A coherent system built around common standards helps to create consistency across the different assessment components and means that the information generated can be interpreted more easily and productively. For example, if interim assessments are built to the same blueprint as the summative assessment, only shorter, as within a balanced system, then results can be linked directly to progress towards summative requirements. An effective assessment system is one that reconnects assessment to learning.

A balanced assessment system does this by allowing the various testing components within the system to interact with each other. Interim and summative assessments can use the same reporting scales and share item types, for example, making it easier to integrate and compare analyses. Formative assessment directly provides support for teachers to closely attend to student understanding to develop instruction that best meets their immediate learning needs, and supports students reflect on their own learning and that of their peers which also has a positive impact on their learning.

## The role of assessment design

With advances in technology, summative assessments are able to more strongly signal what is important for deeper student learning by greater use of assessment items that model good instructional practices, requiring students to demonstrate understanding through writing. In the past state-wide assessments tended to use primarily multiple choice questions due to the cost of human scoring and lack of technology support for more enhanced item types. With artificial intelligence (natural language processing) technologies, student open-ended responses can now be scored in a reliable way without the cost of human scoring. This allows the summative assessment to more fully assess the breadth of standards, which is likely to have a positive effect by encouraging broader curriculum teaching rather than focusing instruction only on parts of the standard that were known to be assessed.

For assessments that are closer to instruction, value is added by providing information to help teachers plan next instructional steps for a student or cohort. Where assessments are able to make use of learning progressions that target key ideas in the standards and describe how student understanding develops from naïve to expert levels, the reports can support teacher planning by signalling what is likely to be the next developmental milestone for students.

## Making better sense of data

A system that uses a common language where appropriate across all components, and where reporting focuses on meaningful, actionable next steps appropriate for that component enables stakeholders to more easily understand, communicate about, and take action in the light of students' learning. Connecting the various types of assessment can have a positive impact on analysis and reporting too.

A single dashboard that contains all the assessment data can be accessed and shared by all educational stakeholders at the appropriate grain size. For example, if an online reporting system contained both statewide summative results and interim assessment results it could facilitate the use by state, district and school administrators to examine levels of student progress and attainment of state milestones, making
the sharing of data more straightforward, increasing opportunities for gaining insights about student progress using multiple source of data, and creating a more efficient approach.

How data is presented can also improve the effectiveness of assessment and reduce time spent analyzing data to pinpoint the key trends. An intuitive system that allows stakeholders to easily identify relevant information without extensive training will increase the likelihood that the reports are accessed and analyzed, and the information used.

Furthermore, advances in technology and the increasing availability of curated online teaching resources support the development of score reports that can link to additional materials that might be useful for next teaching or learning steps.


## In Summary

K 12 assessment can seem complicated. Different types of assessment using different standards, reporting and delivery systems can produce a feeling that there is too much assessment producing too much data and not enough useful information.

Designed, developed and implemented effectively, assessment can play a valuable role in supporting learning outcomes and improving education. However, understanding the characteristics of formative, interim
and summative assessment is key to also understanding how together these assessment types can add value beyond the sum of their parts. A balanced approach to assessment connects all three components to create a more efficient pathway to improving educational outcomes for all students.


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# Teach. Learn. Grow. (/blog) The education blog 



By Steve Underwood<br>(https://www.nwea.org/blog/author/sunderwood/) June 30, 2020<br>Category | Formative Assessment<br>(https://www.nwea.org/blog/category/formative-<br>assessment/)

## How to build a balanced assessment system


(/blog/content/uploads/2020/06/TLG-IMG-06302020-e1593468889299.jpg)As my colleague Chase Nordengren said recently, teaching and learning have been transformed (/blog/2020/power-of-formative-assessment-when-only-constant-is-change/) by COVID-19 school closures-and they're unlikely to return to what we were used to anytime soon, if ever. They'll also have a big impact on what most children are ready for in the fall.

Student learning differences are not a new challenge for educators. However, the scope and learning variance that students will display this fall is likely to be fairly significant. This moment in time is an opportunity to revisit and rebalance your assessment practices. In this post, I offer up a mental model for how a balanced assessment system-built on formative assessment practices-can guide instruction to meet the needs of your students.

Make data easier to understand and use

There is a saying that schools can be data rich, but information poor. This means that you can have many sources of data on students but lack the coherent information you need to make effective decisions. It's helpful to consult many sources of formal and informal data to inform your instructional design, of course, but without an intentional, well-thought-out plan for how all the sources of data fit together, it will be hard to make decisions well. A coherent approach to assessment practices can streamline decision-making and improve learning.

One way to achieve this coherence is by developing a balanced assessment system. A balanced assessment system intentionally makes use of formative, interim, and summative assessment practices -with the most emphasis placed on formative assessment. This type of system is at the heart of a Multi-Tiered System of Support (MTSS), which uses a decision-tree approach to assist in streamlining decisions, as shown below.


## (/blog/content/uploads/2020/06/MTSS-decision-tree.jpg)

## Strike a balance

To create a balanced assessment system, there are two major domains that teachers need to consider:

1. The standards-based core instruction domain that aligns to grade-level or advanced content
2. The intervention domain for students who are not yet achieving standards and need additional support

Formative assessment plays a key role in both domains and should always be the starting point. It begins as a universal screening process for all students. Universal screening can take many forms, such as an early literacy probe, behavioral data, attendance patterns, grades, and even MAP ${ }^{\circledR}$ Growth ${ }^{\text {™ }}$ (/map-growth/) or MAP ${ }^{\otimes}$ Reading Fluency ${ }^{\text {™ }}$. (/map-reading-fluency/) The purpose, just like when
doctors take your blood pressure and weight during an annual checkup, is to look for signs that something might be off track. Following the administration of a universal screening process, educators face a decision point that affects which of the two domains come into focus for teaching and learning.

For students who are more or less on track with the universal screening measures, teachers should proceed with business as usual in the core instruction domain, using formative assessment practices to connect to and activate prior knowledge in ways that guide the relationship of teaching and learning, check for understanding along the way, and assess mastery against grade-level outcomes to determine if future adjustments need to be made.

This moment in time is an opportunity to revisit and rebalance your assessment practices. [...] [A] balanced assessment system-built on formative assessment practices -can guide instruction to meet the needs of your students.

If the universal screener indicates that the learning or social-emotional well-being of a student is at risk, then the best course of action for teachers is to employ formative assessment practices that diagnose and pinpoint what support is needed within the intervention domain, monitor progress on a learning progression, and assess mastery of prerequisite learning.

## How to move forward with core instruction

All students should experience teaching and learning that supports their success in the core instruction domain. This begins with teachers reviewing the scope and sequence of standards-aligned content, establishing clear learning targets, and using formative assessment data to develop responsive plans (/blog/2020/how-responsive-planning-can-strengthen-formative-assessment/) for lessons and units. The figure below illustrates three key assessment practices within core instruction: activate prior knowledge, check for understanding, and check for mastery and adjust instruction as needed.

(/blog/content/uploads/2020/06/Core-instruction-domain.jpg)

## Before core instruction: Activate prior knowledge

Lessons and units should start with formative assessment practices in the form of a pre-assessment or a process of activating prior knowledge. This serves the purpose of illustrating what students already know and assists teachers and students in understanding the learning path that students will need to take to reach the learning target.

Formative assessment at the beginning of a lesson or unit can take many forms, such as entrance tickets (https://www.brown.edu/sheridan/teaching-learning-resources/teaching-resources/course-design/classroom-assessment/entrance-and-exit), K-W-L chart activities
(http://www.readwritethink.org/classroom-resources/printouts/chart-a-30226.html), Venn diagrams (https://arbs.nzcer.org.nz/venn-diagrams), think-pair-share (/blog/2012/classroom-techniques-formative-assessment-idea-number-five/), and more. No matter the type, a formative assessment activity at the beginning of a lesson or unit will create the context for helping you know how to adapt core instruction by adding more scaffolding for students who may struggle; adapting content to adjust for key background knowledge that the whole class may need to be successful; or developing differentiated paths for advanced students who may wish to go deeper with their learning in the particular content area.

## During core instruction: Check for understanding

Formative assessment practices should take the form of checking for understanding. In a lesson, for example, this may occur when you monitor small group conversations, review students' quick writing assignments, or listen to how students report out on jigsaw activities (/blog/2013/classroom-techniques-formative-assessment-idea-number-eight/). Over the course of a unit, formative assessment should be occurring throughout, even incorporating more formal interim assessments (/map-growth/), quizzes, and longer-term assignments.

All students should experience teaching and learning that supports their success in the core instruction domain.

What makes these practices formative is using them to adjust instruction to keep learning progressing. If the activities are used for grading or there's no change to the long-term instructional trajectory, they no longer serve a formative purpose and swing over into the arena of summative assessment.

## After core instruction: Check for mastery and adjust

At the end of a lesson or unit, a balanced assessment system will make use of purposeful summative assessment. If the learning targets were clear from the beginning, a summative assessment will focus solely on the success criteria by which students demonstrate that they have learned what was expected. It is often common practice that end-of-unit summative assessments do not serve a formative purpose. However, if you intend to reteach the content or proceed to a new unit that builds
on the previous one, summative assessment can be utilized in a formative manner if there is an intentional effort made to adjust teaching and learning based on the degree to which students mastered the success criteria.

## Tackling the intervention domain

In the intervention domain, assessment practices often take on different terminology and more formal designs, but they represent similar ideas to the core instruction domain and are guided by the principles of formative assessment. When students are identified by a universal screener as being at risk, adopt the MTSS sequence illustrated below: diagnose learning needs; monitor progress; and check for mastery and adjust.


## (/blog/content/uploads/2020/06/Intervention-domain.jpg)

## Before intervention: Diagnose learning needs

In elementary schools, educators often make the mistake of making intervention about the content of the universal screener. For example, an early literacy screener might emphasize reading fluency, so some teachers will make intervention about fluency. Without diagnosis, the teacher may not uncover that the root cause of the student's poor fluency performance is an underlying issue with phonics.

By implementing a clear plan for diagnosis before intervening, you stay true to the idea of formative assessment by gaining the information you need to pinpoint the best starting point for teaching and learning. In early literacy, there are diagnostic assessments for phonemic awareness, phonics, comprehension, and more. In high school, a mathematics teacher may engage in diagnostic assessment by assessing students on a spectrum of math standards from lower grade levels. Regardless, the purpose of diagnostic assessment has the long-term learning trajectory in mind and can be matched with short-term success criteria that students can demonstrate to show their learning is on track. This creates the connection between diagnostic assessments and progress monitoring.

## During intervention: Monitor progress

Once you pinpoint the entry level for intervention, instruction and a progress-monitoring plan are needed. For example, an eighth-grade algebra teacher may diagnose that a student has strengths in many areas but is struggling because they have not yet learned to identify when two expressions are equivalent (a sixth-grade standard). This means that during intervention, instruction would begin at this level, and a learning path would slowly build toward eighth-grade standards. Formative assessment would occur in the form of progress monitoring that is broken out to measure the success criteria of each step needed to meet the related eighth-grade math standards.

Similarly, in early literacy, when students have mastered their basic phonics skills but still need support working on automaticity, accuracy, and prosody (i.e., fluency), a teacher might choose to use the progress monitoring for oral reading test within MAP Reading Fluency as a progress-monitoring tool.

By implementing a clear plan for diagnosis before intervening, you stay true to the idea of formative assessment by gaining the information you need to pinpoint the best starting point for teaching and learning.

Similarly, in early literacy, if a third-grade student is identified as struggling with variant vowels (a firstgrade skill), intervention would build from variant vowels and measure student progress toward mastery of this and successive phonics skills until the student demonstrates grade-appropriate success criteria with word reading.

## After intervention: Check for mastery and adjust

Following instruction, student learning should be verified through a summative assessment that measures whether or not a student has mastered the goals that have been set within their learning progression. A summative approach could even be the same diagnostic assessment tool that was used to identify the student's learning needs. If this is the case, the purpose changes from a formative, diagnostic use to a summative checkpoint that assesses mastery.

## Tying it all together

Here's a visual representation of the sequence and relationship between formative, interim, and summative assessment and the relevant assessment approaches that are most helpful in the core instruction domain and the intervention domain.


## (/blog/content/uploads/2020/06/Balanced-assessment-system.jpg)

Want to be sure you're engaging in formative assessment every step of the way? Here's how:

- Use the information you glean about students before instruction to plan core instruction and intervention
- Take what you learn during instruction to respond to students' needs and adjust what comes next in your lesson or unit plans
- Put summative assessment gathered after instruction to use guiding how you will reteach content or adjust your plans for the next unit

For more tips, visit our Formative Assessment archive (/blog/category/formative-assessment/) on Teach. Learn. Grow. And to explore this topic further-on your own or with your colleagues-try the following discussion questions:

## Questions for teachers

- What are ways to activate learning in your classroom?
- During core instruction, how are you checking for understanding during the lesson?
- How does instruction in the domain of intervention differ from the domain of core instruction?
- How can you ensure your classroom has a balanced assessment system in place? In what ways do all of your assessment practices inform each other?
- How have you determined the progression of learning that your students need?
- How are you diagnosing or pinpointing student intervention needs within a learning progression?


## Questions for leaders

- What processes do you have in place to monitor school-wide data and reflect on improvements that are needed for teaching, learning, and leading?
- How can you ensure there is a balanced assessment system in place system-wide? To what extent does your school have a systematic approach where different types of assessments inform each other?
- How can you support teachers in identifying effective learning progressions and developing responsive plans that move students forward along a progression?
- Does your school's schedule assure there is sufficient time for both core instruction and intervention?

This is the third in a series on formative assessment. Read the previous post. (/blog/2020/how-responsive-planning-can-strengthen-formative-assessment/) And read the entire series in our e-book (/resource-center/resource/making-it-work-how-formative-assessment-can-supercharge-yourpractice/).

## Recommended for you



The importance of student self-assessment
(https://www.nwea.org/blog/2021/the-importance-of-student-self-assessment/)


Formative assessment is not for grading
(https://www.nwea.org/blog/2021/formative-assessment-is-not-for-grading/)


19 formative assessment strategies for online teaching
(https://www.nwea.org/blog/2020/19-formative-assessment-strategies-for-online-teaching/)


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# CI It's time to revisit and rebalance your assessment practices. 

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## POLICY PAPER

Recommendations from the National Panel on the Future of Assessment Practices

## The Future of Assessment Practices:

## COMPREHENSIVE AND BALANCED ASSESSMENT SYSTEMS

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## Introduction

## About LSI

Learning Sciences International® (LSI) empowers schools and districts to transform core instruction and leadership practices, resulting in rapid gains in student learning.

At the center of this transformation is the company's Schools for Rigor partnerships, which are proven to raise student performance through strengthening core instruction and leadership practices and meet Every Student Succeeds Act (ESSA) requirements for evidence-based interventions.

LSI empowers each student and educator to meet the new challenges of a new economy (in which today's students and educators must prepare for a future in which new jobs, skills, functions, and disciplines are necessary) by transforming traditional core instruction and leadership practices with research-based, results-driven strategies, products, and services. By combining the most effective elements of traditional pedagogy, such as the strong social bonds forged by impassioned educators, with the advancements of new technology at a student's fingertips, LSI is at the forefront of this educational evolution and transformation for the better.

## About The Panel

The United States spends ${ }^{\$ 130,000}$ to educate each student from K through 12 - yet lags behind many other countries in academic achievement and is slipping further behind. Now is the time to fix our classrooms. Our students have waited long enough.

In 2018 the National Panel Charting the Future of Assessment Practices in the U.S. began as a movement where student success takes center stage. In that same year, at the 2nd annual Formative Assessment National Conference, leading educational experts on formative assessment-Susan Brookhart, Rick Stiggins, Jay McTighe, and Dylan Wiliam-participated in a fervent panel discussion. In the end, they all agreed a lack of a comprehensive and balanced assessment system is at the very heart of our challenges.

In that discussion Dr. Susan M. Brookhart exclaimed that we have seen an absence of implementation despite the many assessment systems which have been written and developed over the years.

While Dr. Dylan Wiliam lamented, "It is hard for me to imagine how it could be any worse." He went on to expound that teacher education needs to be treated as a process of habit change.

In 2019 at the 3rd annual Formative Assessment National Conference we tackle the elephant in the room - grading.

Susan M. Brookhart, Jay McTighe, Tom Guskey, and Dylan Wiliam will continue to discuss this important shift which can ripple into a farreaching effect on how students ultimately think and behave.

In fact, Dr. Wiliam maintains, "Grading is essential in American schools. We have to have measures of how much the students have learned. The trouble is the way it's done in many schools, grading gets in the way of learning."

Join us in our effort to give each and every one of our students a shot at a better life. Let's start by raising awareness with this thought-provoking policy paper, "Comprehensive and Balanced Assessment Systems."

## Author Bio



## Susan Brookhart

Dr. Susan M. Brookhart is Professor Emerita at Duquesne University and an expert consultant with an extensive background working with schools, districts, universities, and states. She studies the role of both formative and summative classroom assessment in student motivation and achievement, the connection between classroom assessment and large-scale assessment, and grading. She is author or coauthor of 18 books and more than 70 articles and book chapters and has served as editor for academic journals.


## Jay McTighe

Jay McTighe brings a wealth of assessment experience from leading classroom formative performance assessment efforts with the Maryland Assessment Consortium, from his work on large-scale performance assessments with the Maryland State Department of Education, and from his many other projects at state and district levels. He is co-author of 15 books, including the award-winning and bestselling Understanding by Design® series with Grant Wiggins, and has written more than 40 articles and book chapters.


Rick Stiggins
Dr. Rick Stiggins founded the Assessment Training Institute (ATI) to help teachers, school leaders, policy makers, and communities develop assessment literacy. He guides practitioners to assess accurately and use the classroom assessment process to support, not merely monitor, student learning. ATI's approach to assessment has been used productively by hundreds of thousands of teachers and school leaders for the past three decades. He is the author of dozens of articles, books, and training programs.


Dylan Wiliam
Dr. Dylan Wiliam has helped to successfully implement classroom formative assessment in thousands of schools all over the world. A BBC documentary tracking his work showed how his formative assessment strategies empower students, significantly increase engagement, and shift classroom responsibility from teachers to students. He has written over 300 books, chapters, and articles; his latest book breaks down the gaps between what research tells us works and what we actually do in schools.

## Executive Summary

Educational assessment is the process of eliciting, gathering, and interpreting evidence of student learning to describe student learning and/or inform educational decisions. School district assessment systems should serve to improve student learning and to document that learning for a variety of stakeholders. Comprehensive assessment systems assess all valued learning outcomes, not just those that are easy to test, and assess learning at all levels of the system: individual learners, classrooms, schools, and districts. Balanced assessment systems provide meaningful, relevant, and sufficient information for each stakeholder, with information quantity and quality commensurate with the uses to made from it: more detailed information for individual learners and their teachers in the classroom, where the learning takes place, and proportionally less (more general, and more aggregated) information available as the distance from the learning increases. Comprehensive and balanced assessment systems include a variety of types of assessments, producing evidence that can be used formatively, to improve learning, and evidence that can be used summatively, to certify, report on, or evaluate learning. Comprehensive and balanced assessment systems pay attention to the quality of assessment information; the process used to gather, interpret, and use assessment information; and the people who participate at all levels of the system, including students.

To be blunt, most district assessment systems are neither comprehensive nor balanced. This white paper describes the components of an ideal comprehensive, balanced assessment system that includes classroom formative assessment (within and between lessons), medium-cycle formative assessment (within and between instructional units), classroom summative assessment (grading), long-cycle formative assessment (several times during the school year), and district and state-level accountability assessment.

## To be blunt, most district assessment systems are neither comprehensive nor balanced.

It suggests ways these components should work together to provide the information needed at all levels to support teaching and learning and support a view of student learning consistent with current theories of student learning and motivation. The paper ends with some suggestions for districts interested in moving forward toward this vision, and advocates for doing so.

## Comprehensive and Balanced Assessment Systems

Educational assessment is the process of gathering evidence of student learning to inform educational decisions. Assessment systems should serve both to improve student learning and to document that learning for a variety of stakeholders. An assessment system is composed not only of assessment tools and processes, but also the people who use them. Many school districts use collections of assessment tools and processes that either do not serve to improve student learning, miss important learning outcomes, or under-serve one or more stakeholder groups. The purpose of this white paper is to describe ideal comprehensive and balanced assessment systems for school districts. We will address the system concept as a school district matter because this is the context in which the educational decisions are made that impact student learning. Districts may use this description to evaluate their own assessment system and set goals for improvement. The paper is organized into three sections: an overall vision for comprehensive and balanced assessment systems, the components of a comprehensive and balanced assessment system, and recommendations for enacting such a system.

## A Vision for Comprehensive and Balanced Assessment Systems

If an assessment system is to help improve student learning and document that learning for a variety of stakeholders, it must be both comprehensive and balanced. Comprehensive
assessment systems assess all valued learning outcomes, not just those that are easy to test, and assess learning at all levels of the system, with results and analyses describing learning for individual learners, classrooms, schools, and districts. Comprehensive and balanced assessment systems include a variety of types of assessments to serve a variety of purposes and uses, producing some evidence that can be used formatively, to improve learning, and some evidence that can be used summatively, to certify or report learning. Balanced assessment systems strike a balance in the assessment such that the available information is appropriate and useful for the information needs at the various levels of the system. Following this logic, a balanced assessment system does not provide an equal amount of assessment information available to each level of the system, but rather offers more detailed information to individual learners and their teachers in the classroom, where the learning takes place, and proportionally less (more general, and more aggregated) information available as the distance from the learning increases.

Learning outcomes are the foundation of a comprehensive, balanced assessment system and the reference against which assessment information should be interpreted. An important feature of a comprehensive and balanced assessment system is coherence among the learning outcomes, attendant assessment and instruction, and the views of learning they imply, at all levels of the system (Wilson, 2004). State standards are broad statements of
learning goals measured by district and state level assessments. Curricular and unit goals are smaller in scope, and typically a state standard will encompass more than one curricular or unit goal. Measurement of learning goals at this level is typically accomplished by both mediumcycle formative assessment and classroom summative assessment. Each unit learning goal typically encompasses several daily learning targets for individual lessons, and classroom formative assessment garners information keyed to lesson-sized learning targets. A critical aspect of a comprehensive assessment system is that these learning outcomes are coordinated; they work together to guide students' learning and teachers' instruction; they describe all the valued learning outcomes necessary for students to ultimately reach the standards; and they are framed by compatible understandings of learning, instruction, and assessment.

A balanced assessment system prompts educators to collect data in grain sizes that are appropriately actionable at each level of the system. Balanced assessment systems generate a great deal of classroom formative assessment information, varying in length from a few seconds to a week, because the resulting actions are more immediate and smaller in scope-typically actions taken by learners and their teachers during lessons. These small outcomes are often not recorded-although they can be-but rather are the basis for student and teacher action. As the assessment information increases in aggregation and distance from the classroom, or is collected periodically, the resulting actions are more distant and larger in scope-typically resource allocation or policy decisions made by administrators for district planning. Such
information should be less frequent and less detailed. A comprehensive and balanced assessment system should attend to both the assessment tools (tests, skill checks, performance assessments, classroom questions) and processes (the methods by which students and teachers participate in assessment activities, and the classroom climate in which they do so) that are currently presented in other descriptions of assessment systems, and also to the assessment literacy and information needs of the actors at each level of the system (Michigan Assessment Consortium, 2017; Stiggins, 2017).

The process of evaluating and improving local systems should be guided by a set of key questions:

- Are the learning goals to be assessed clear to all stakeholders, including students?
- Is the purpose of each assessment clear: What is the decision to be informed and who will make it (them)?
- Are the assessment tools capable of providing the needed information?
- Do the assessment processes deliver the needed information into the hands of the intended users in a timely and understandable form?
- Do assessment users at all levels of the system have the skills they need to gather, interpret, and use assessment information?

This last question focuses on the assessment literacy of the teachers and school leaders who manage assessment at all levels; that is, the level of their mastery of the basic principles of sound
assessment practice. Without this foundational professional competence in place, development of a quality local assessment system is highly unlikely.

> One of the current problems with assessment systems in many districts is that this balance is backward, with more resources spent on the less frequent and summative components of the system.

Figure 1 on the next page, identifies the components of a comprehensive and balanced assessment system. The locus of assessment
administration and use moves from closest to the learning on the left to closer to administrative and policy decision-making on the right. The frequency of assessment is greater and grain size of information is smaller on the left and increases toward the right. Arguably, then, the amount of time and other assessment resources invested should be largest on the left and decrease toward the right. One of the current problems with assessment systems in many districts is that this balance is backward, with more resources spent on the less frequent and summative components of the system. The result is more information to inform the periodic instructional decisions made by administrators and less information to inform those made continuously day to day in the classroom by learners and their teachers.

Figure 1. Components of a Comprehensive Assessment System

| Comprehensive Assessment System Components |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Short-Cycle Classroom Formative Assessment | Medium-Cycle <br> Formative Assessment | Classroom Summative Assessment (Grading) | Long-Cycle Formative Assessments | District-Level <br> Summative <br> Assessments and <br> Annual State <br> Accountability <br> Assessments |
| Evidence of learning of lesson-sized learning target(s), generated and used by both students and teachers during the course of learning | Evidence of learning across related lessons or a unit (e.s., weekly diagnostics), for shortterm instructional and learning adjustment | Evidence of student achievement at a point in time, for reporting (e.g., unit tests, performance assessments) | Evidence of student learning, typically 2 to 3 times a year, for longer-term instructional planning | Evidence of student achievement of curricular learning outcomes and/or state standards, for reporting (e.g., end-of-course exams, state accountability assessments) |
| High Utility to Teachers and Parents |  |  | High Utility to Central Office Administrators |  |
|  |  |  |  | High Utility to Policy Makers |
| Have students learned the lesson content? What do they think the learning target is, where are they now, and what should they do next? | Have students retained th (learned curriculum)? | ir learning | Is the retained learning (learned curriculum) aligned with the accountability system? | Does the retained learning (learned curriculum) meet district and state expectations? |
| Appropriate to answer questions such as: |  |  |  |  |
| - How are students thinking about lesson-sized chunks of content (daily learning target concepts/skills)? <br> - What next steps do the students need to take in their understanding? <br> - Was the planning of my lesson effective? <br> - Did the students learn the lesson learning targets? Which students struggled (and why)? Which students need enrichment (and why)? <br> - How will I adjust my planning of tomorrow's lesson for those students | - How are students thinking about unit-sized chunks of content (unit goal concepts/skills)? <br> - What next steps do the students need to take in their understanding? <br> - Did the students retain what they learned in previous lessons? <br> - Which students are still struggling with the content, and which students need enrichment? <br> - How will I adjust my planning in the next few lessons in this unit? | - What are students' current status/ achievement levels on the learning goal(s) assessed? <br> - How should we report students' current achievement to parents/guardians and to the reporting/ record-keeping system? | - Are the standards being taught and learned? <br> - Does our curriculum have gaps between learning expectations and assessment? <br> - What structural or instructional changes might be helpful? | - Does the curriculum cover the standards in appropriate breadth and depth? <br> - How does each tested grade level, subject, and school perform in regard to the standards? <br> - Which curricular area(s) may need more resources? |
| NOT appropriate to answer questions such as: |  |  |  |  |
| - Which students "got it"/"didn't get it"? | - Which students "got it"/"didn't get it"? | - Which students are the best/smartest? <br> - Which teacher is more effective? | - Which teacher is more effective? <br> - Which school is more effective? | - Why did students perform the way they did? <br> - Why did schools perform the way they did? |

[^2]
## The Components of Comprehensive and Balanced Assessment Systems

In this section, we discuss the following assessment components in turn: daily classroom formative assessment (sometimes called short cycle formative assessment), formative assessment within and between instructional units (sometimes called medium-cycle formative assessment) and interim/benchmark assessment (sometimes called long-cycle formative assessment), assessment for classroom grading, and district- and state-level assessments. Each component is defined and its purposes are specified. Then a brief discussion explains how the component should function in the system, what research says about the component, and what questions its information can and, perhaps more importantly, cannot answer. Next, we describe the responsibilities of the various parties involved. In most cases, people from several role groups share joint responsibility in order to coordinate assessment practices and information throughout the system. Finally, for each component the current state of practice is compared with how the component should function in an ideal comprehensive and balanced assessment system.

Short-cycle Classroom Formative Assessment

Short-cycle formative assessment occurs in the classroom, is on-going, and serves only to support student learning. It takes place duringand as part of-instruction, which typically means during a lesson or practice. It helps student/
teacher teams make incremental decisions focused specifically on what they are trying to teach and learn, where they are in the process, and what they need to understand or do next to improve. Formative assessment helps teachers make incremental decisions about what they are trying to teach, how students currently are thinking about the concepts, and what immediate next instructional adjustments would help move students along. Wiliam (2010, p. 31) lists five key strategies that comprise short-cycle formative assessment:

1. Clarifying, sharing, and understanding learning intentions and criteria for success
2. Engineering effective classroom discussions, questions, and tasks that elicit evidence of learning
3. Providing feedback to teachers and students to inform instruction and improve learning
4. Activating students as instructional resources for one another
5. Activating students as the owners of their own learning

When formative assessment is intended, designed, and used to support students as they make the decisions that promote their learning, it helps them understand their learning target, participate in the collection of evidence of their own level of attainment, and collaborate with their teacher in deciding what comes next in their learning.

Research. There is evidence that formative assessment, when done well, improves student learning (Black \& Wiliam, 1998; Graham, Hebert, \& Harris, 2015). In a well-functioning system, short-cycle formative assessment includes both informal methods, like classroom questioning and observation, and more formal methods, like homework and practice work that, while not graded, helps inform students and teachers of learning progress during instruction while there is still time to address learning before reporting time (Ruiz-Primo \& Brookhart, 2018). Importantly for the concept of an assessment system, classroom formative assessment is the component that most involves the students and is most directly connected to their learning process as it is happening. When formative assessment is absent, weak, or poorly implemented in an assessment system, the system's major link to the focal stakeholdersthe learners-is weakened or broken. This disenfranchises learners from a system that should be designed to benefit them and, essentially, washes out the foundation of the system itself.

When formative assessment is absent, weak, or poorly implemented in an assessment system, the system's major link to the focal stakeholdersthe learners-is weakened or broken. This disenfranchises learners from a system that should be designed to benefit them and, essentially, washes out the foundation of the system itself.

Questions addressed. Information from shortcycle formative assessment helps students and teachers know how students are thinking about lesson-sized chunks of content from their daily learning targets and what next steps they need to take, for students to enhance their understanding and/or for teachers to adjust their instruction. Done well, it focuses on uncovering student thinking as opposed to evaluating or scoring student performance. A common but shallow understanding of formative assessment is that it helps teachers know which students "got it" or "didn't get it." This view of formative assessment is not only impoverished; it can lead to evaluative judgments of students by teachers and students themselves about their own learning. Such thinking robs students of the confidence they need to continue striving for success and works against student learning, especially for students who struggle (Stiggins, 2017).

In contrast, interpreting information from welldesigned formative assessment as evidence of student thinking and current place in learning progressions helps learners and teachers figure out next steps. So, for example, the more useful formative assessment information from an incorrect answer to a two-step mathematics problem is not that the student got the problem wrong, but what thinking was in evidence (e.g., was confused about when to divide and when to multiply). This kind of information is immediately actionable, both to focus the student's attention and intentions and to inform the teacher's immediate next instructional decisions. It is detailed at a fine grain size (e.g., not "mathematics" or even "numbers and operations," but "distinguishing multiplication and division").

Thus, classroom formative assessment information is the foundation from which a comprehensive, balanced assessment system is launched; it is foundational in the sense that if the overarching purpose of the assessment system is to support learning, that support begins and is based in this level of the system. It involves and informs the most vulnerable and the most important stakeholders, students. It supports a view of learning that understands students as the agents who regulate their own learning (Zimmerman \& Schunk, 2011). Although students are the primary stakeholders - school districts exist primarily for the purpose of educating students - they are often overlooked in assessment systems, which are typically designed to meet the needs and desires of the adult stakeholders. Formative assessment also empowers teachers, who should be key players in assessment systems but, in current practice, often feel like assessment is something done to them rather than for them. Comprehensive, balanced assessment systems include a solid foundation of high-quality formative assessment, in every lesson, by every student and teacher.

## Responsibility and system coordination.

Responsibility for this component of the system rests, in different ways, with students, teachers, and school leaders. While it may seem odd to give students responsibility for a part of the assessment system, research has shown that when students take responsibility for their own learning and assessment, assessment does support learning-the purpose of the assessment system-and when they don't, learning is less well supported, for students across the achievement range (Zimmerman \& Schunk, 2011). Similarly, teachers improve in their formative assessment
effectiveness when they begin to look at learning and assessment through students' eyes and approach their assessment practices from that perspective, which is a sea change for most educators (Brookhart, 2017). Finally, school leadership (building and district) and support is critical for formative assessment to function effectively and systematically within a school (Noyce \& Hickey, 2011; Schneider \& Randall, 2010). Building principals should take overall responsibility for instructional quality in their building.
Similarly, teachers improve in their formative assessment effectiveness when they begin to look at learning and assessment through students' eyes and approach their assessment practices from that perspective, which is a sea change for most educators (Brookhart, 2017).

Current status vs. ideal functioning. Despite its position as the foundational component in a system whose major purpose is to support student learning, classroom formative assessment typically is the weakest component in most districts' assessment systems. This is due in part to the lack of assessment literacy training both for teachers and their supervisors in their pre-service preparation-training that should develop assessment knowledge and skills as well as the realization that assessment is part of their professional responsibility and the disposition to do it well. Accordingly, professional development in this arena is clearly needed and strongly recommended.

Another issue needing attention is the status of the student, the least powerful stakeholder in systems run by adults. Presently, the students function as examinees who respond to assessments rather than as proactive learners who are actively involved in the assessment process (Stiggins, 2014a). Modern learning theory holds that students actively construct learning (Shepard, 2001; Zimmerman \& Schunk, 2011), and one important aspect of coherence is that assessment of learning be underpinned by similar theories of learning (Pellegrino, Chudowsky, \& Glaser, 2001; Wilson, 2004). The mismatch between treating students as active constructors of knowledge for short-cycle classroom formative assessment and as passive examinees for district tests creates a lack of coherence in the system. Many teachers and even more administrators have yet to realize the sea change described above, looking at learning from the students' point of view. On the contrary, many educators and others still hold associationist theories of teaching and learning and a traditional view of assessment merely as something adults do to students, in which students are respondents (examinees) rather than active participants in the learning process (Brookhart, 2017; Shepard, 2001).

Research suggests that this change can be difficult, re-orienting classrooms and building cultures from primarily adult-centered to primarily student-centered, and is more a matter of habit change than knowledge acquisition.

To move toward a comprehensive and balanced assessment system, a district should begin with intensive development of knowledge, skills, and practice in formative assessment, for all teachers and administrators (Black \& Wiliam, 2004). Research suggests that this change can be difficult, re-orienting classroom and building cultures from primarily adultcentered to primarily student-centered, and is more a matter of habit change than knowledge acquisition. The authors are very aware that calls for the improvement of formative assessment are common, and often not successful. District policy makers who do not know which part of an accountability system most supports learning, and how that happens, mistakenly prioritize large-scale testing over classroom formative assessment. Often, good-faith efforts to improve formative assessment in classrooms, schools, and districts are misdirected or misunderstood (e.g., formative assessment presented as a list of "techniques" such as an Exit Ticket), underfunded, or under-prioritized (e.g., despite formative assessment initiatives, more attention still rests on large-scale accountability tests and teacher evaluation). Only when radical shifts in beliefs about learning and teaching and in classroom and school culture are made will comprehensive, balanced assessment systems be possible.

## Medium-cycle Formative Assessment

Typically accomplished with more formal formative assessment (Ruiz-Primo \& Brookhart, 2018), medium-cycle formative assessment occurs within and between instructional units,
typically in intervals of from one to four weeks (Wiliam, 2010) to inform students' decisions about studying and teachers' decisions about adjusting larger, longer-term lesson plans. For example, in Philadelphia, the year is divided into six-week blocks, with essential standards being taught in the first five weeks, on which students are tested, with the test performance used by teachers do determine whether week six is spent on extension or review (Goertz, Oláh, Nabors, \& Riggan, 2009).

Another example is the common assessments used by teams of teachers in the context of professional learning communities (DuFour, 2004). In this case, teams devise assessments reflective of the intended outcomes units of instruction offered by all team members across classrooms. Results are analyzed by the team to discern which team members achieved the best results so as to instruct others about how to improve their instruction.

Medium-cycle formative assessment typically involves assessment of student work on quizzes or performance tasks that encompass one or more instructional objectives, as opposed to the smaller grain-sized daily learning targets referenced in short-cycle formative assessment. Thus, the main actors in this component of the system are also students and teachers, but the purpose is somewhat broader. Medium-cycle formative assessment shows how students are synthesizing the bite-size chunks of content from their lessons into more general understandings often summarized as unit goals derived from state standards.

Research. Research on medium-cycle, formal
formative assessment has been mixed, largely because of problems in implementation (Furtak et al., 2008). However, there have been some exceptions. Saunders, Goldenberg, and Gallimore (2009) reported on a five-year study of work with grade-level teams in Title I schools. The first two years of work with principals only produced no changes in achievement, but the second phase, which included training for both principals and teacher leaders, increased both achievement and growth.

Questions addressed. Medium-cycle formative assessment answers questions about how students are thinking about unit-sized chunks of content, how they are able to apply what they are learning to build up larger understandings, and where they should go next. The focus of such periodic formative assessment should be on identifying what students are thinking, where they are in a learning progression, and what student or teacher instructional moves might be most likely to increase progress.

While short-cycle formative assessment informs adjustments the teacher or students make during live instruction, medium-cycle formative assessment provides more formal evidence on which teachers can base more general instructional planning, for example lesson planning, adjusting lesson pacing, grouping or regrouping students for remediation or enrichment, tutoring, providing additional practice, and so on. In the context of ongoing classroom formative assessment, the actionable information comes from insights about individual student thinking and performance that assessment results permit. But in the periodic assessment context, actions are suggested by
patterns of student performance detected over time and across classrooms and/or instructional approaches.

Responsibility and system coordination. In larger school districts, the responsibility for mediumcycle formative assessment may lie with district curriculum leaders. Teachers, working alone or in teams, and building principals should share in this work. Teachers and building principals are responsible for implementing the curriculum for students, that is, for mediating the written curriculum into the taught curriculum. As for classroom formative assessment, principals have supervisory responsibilities toward the teachers and coordinating responsibilities toward the rest of the system, as well.

> For all types of formative assessment, those who devise, conduct and use it must be assessment literate.

Current status vs. ideal functioning. For all types of formative assessment, those who devise, conduct and use it must be assessment literate. They must understand and be able to apply basic principles of sound assessment. Specifically, this means they must be masters of the learning goals to be assessed, able to select a proper method for the goal(s), able to build quality assessments and scoring schemes and able to anticipate and minimize any sources of bias that can distort results. These requirements apply regardless of the formative assessment context. We already
have established that many teachers and building principals would benefit from skill development in these two areas, including involving students in the formative learning cycle and reasoning from evidence of learning.

Programs that have embedded periodic formative assessment in curriculum materials without attention to these principles have not had much success (Yin et al., 2008). Once these principles are in place and teachers and administrators begin to develop skills in using them, mediumcycle formative assessment tools such as quizzes and short performance tasks can be incorporated into the process.

## Classroom Summative Assessment (Grading)

Classroom tests and performance assessments are the most common tools used to assess (evaluate) student achievement at a point in time, typically at the end of a series of related lessons and at the end of a unit. These are scored in different ways, most commonly as percent correct or by matching performance to levels on a rubric, sometimes translating the result into grading symbols (e.g., ABCDF) for communication. These individual components are aggregated for reporting at regular intervals, for example, for report cards issued at the end of a 9 -week quarter or other intervals specified by district policy. The purpose of grades is to judge the sufficiency of student learning given pre-set achievement expectations. We seek to inform students and parents of a student's current status on either a subject or standard,
depending on the type of reporting used, in effect creating "punctuation" points in a student's learning trajectory to take stock of learning in a formal way. A secondary purpose is to inform administrators and future teachers of a student's performance, for potential use in administrative or placement decisions. For older students, grades are entered into their permanent records. These are summative functions, although it is possible to use summative assessment results for formative purposes, as well, as for example when a teacher reviews test results to prompt further studying and assessment (Black et al., 2003). [Note that some states "grade" schools as part of the state's accountability system. This is not a district function. In this paper, we use the term "grades" to mean the grades students receive on classroom assessments or report cards, not ratings of schools by states.]

Research. Research on grading has identified several problematic issues (Brookhart, Guskey et al., 2016). Certain teacher grading practices, for example, counting surface features of an assignment that are unrelated to the standard it is designed to assess, or counting class participation in a grade intended to assess content learning, threaten the quality of information about learning that grades provide. Variability in grading practices and inconsistent application of criteria also threaten the reliability of grades. Nevertheless, grades can predict important educational outcomes like dropping out of school and being admitted to and successful in college. They also serve an administrative function in schools by summarizing student learning with a simple indicator that has utility especially in large schools and districts.

Questions addressed. Done well, grades should answer questions about students' current achievement status on important learning goals, to inform students, parents and guardians, and the school and district. For standards-based or standards-referenced grading, those important learning goals are expressed as reporting standards. Grades should not be used to compare students with one another (norm-referencing). The actionable information grades provide for students is less about learning specific concepts and skills-every 9 weeks is a bit late for thatand more about broader questions of whether students' learning needs are being met. They can serve as a way in to discussing learning and school more generally with students and parents. For standards-referenced grading, grades are intended to represent students' current status on learning standards and should not include attendance, motivation, or effort. However, these non-cognitive qualities can be brought in as part of the conversation as students, parents, and teachers interpret and discuss students' grades. Because grades are sometimes difficult to interpret, this component often represents a weak spot in district assessment systems. Grades stand at the transition point in a comprehensive assessment system, between assessment of learning for direct student and teacher consumption and use and assessment of learning for evaluative and administrative purposes.

Responsibility and system coordination. The state legislature empowers the local board of education to establish local policies for their operations, including grading (McElligott \& Brookhart, 2009). Therefore, the local school board and district administrators bear responsibility for grading and can be sued
in court for perceived abdications of this responsibility. Suits mostly focus on due process or equal protection concerns under the 14th Amendment of the U.S. Constitution (McElligott \& Brookhart, 2009). However, in practice, shared responsibility for grading rests with the teachers who assign the grades, building principals who oversee and, in many districts, have the authority to change grades if deemed appropriate, and district administrators.

These responsibilities must be coordinated. Classroom teachers' grading practices and classroom-level policies should be as consistent as possible with other teachers' practices and policies. At the classroom level, the policies are usually about details of what counts as evidence for various grades and how evidence may be collected (e.g., due dates and late policies). That means teachers are responsible for the match between their classroom assessments (e.g., tests and performance assessments), intended learning outcomes, and the approach to learning supported by the system. Teachers are also responsible for weighting and aggregating classroom assessment information into a report card grade that communicates about students' current status on those learning outcomes. At the building level, principals are responsible for seeing that teachers carry out meaningful grading practices, and also for reviewing due process and equal protection concerns. The district is responsible for seeing that students receive due process and equal protection in grading issues, and that grades are accurately recorded into the district database.

Current status vs. ideal functioning. Similar to formative assessment, grading is at present
a weak spot in most districts' assessment systems. To begin with, the dependability of any report card grade depends of the quality of the evidence on which it is based. It is impossible to combine low-quality test scores and get a meaningful representation of a student's level of achievement. We have already mentioned our concerns about the lack of assessment literacy in the classroom. This concern generalizes from classroom formative to medium-cycle formative to classroom summative assessment (report card grading). Professional development may be needed, depending on local circumstances.

Second, in many cases, grading relies on a banking model. Once students have demonstrated their proficiency on a specific standard (once it's "in the bank"), graded work pays no attention to whether what was assessed is retained. However, students often do forget. In some cases, forgetting occurs because learning was not deep enough to begin with, for example, topics were touched on but not completely understood, or skills were not practiced to fluency.

## ... many current grading policies hurt students rather than support learning.

In addition, many current grading policies hurt students rather than support learning. For example, some classroom grading schemes result in students realizing halfway through a unit that they have no chance of passing, causing them to give up and sometimes see themselves as
stupid or worthless. Change may be required so that grades report current levels of student achievement of intended learning outcomes after students have had sufficient formative (learning and practice) opportunities and that the classroom assessment climate supports and motivates students to participate to the best of their ability in the formative learning cycle. Grades should convey to students where they are on learning outcomes they understand and what they are on track to do next. These changes require better description of student work across a continuum for each learning outcome, matched closely to standards and supportive of an active view of student learning.

Changes in grading policies and practices like these may run into some resistance. Some parents and others in our communities see grades as positional goods, whereby higher grades for some students convey status that relies on lower grades for other students. Such attitudes will need to change, although the assessment system we are proposing is possible even if we cannot stop some parents from regarding grades as positional goods. In addition, some new policies and practices will need to be worked out, to deal more appropriately with diversity in student abilities in a learning-referenced grading system, such that helpful and accurate reporting of learning can happen without hurting students. Such policies will be critical to ensuring that standards-based grading does not exacerbate the problems inherent in current and traditional grading systems.

## Long-cycle Formative Assessments

Many districts use interim or benchmark assessments, both of which are typically purchased from commercial vendors, although some larger districts develop their own. Interim assessments usually are parallel test forms for an external accountability test; they cover an entire year's worth of content and are administered two or three times during the school year to track student learning and achievement growth. Benchmark assessments usually are nonparallel test forms covering a portion of the year's content (e.g., the first report period) and are intended to be administered at a specified point in the school year and curriculum (Ferrara, Maxey-Moore, \& Brookhart, in press). However, some educators use the terms interchangeably. Both interim and benchmark assessments are intended to identify students who need more support to succeed and to inform curriculum planning and resource allocation. At present, some teachers see interim and benchmark tests as simply "test prep" practice for the state accountability tests; this is not the use for which these tests were designed.

Instructional and grouping decisions based on long-cycle assessments are not the fluid, in-class adjustments and groupings based on short- and medium-cycle formative classroom assessment, but rather grouping for pull-out interventions and other more structural purposes. At this point in the system, students become secondary stakeholders, involved only to the extent that decisions by teachers and administrators ultimately affect their experiences.

The primary stakeholders for interim and benchmark tests are administrators and teachers. Interim and benchmark tests primarily inform educators, not students, and the decisions made on the basis of their results often affect students other than those who took the assessment (for example, resulting in better curriculum alignment for next year's students). In fact, when benchmark assessments are used to monitor students' progress toward state accountability test performance, they are functioning summatively.

Research. To date there is very little research evidence that using interim/benchmark assessments helps improve student achievement. One study showed no effects of using interim/ benchmark data on student achievement in grades $K$ to 2 and very small effects in grades 3 to 8 (Konstantopoulos et al., 2011). There is some evidence that when data teams in schools use interim/benchmark assessment data, they focus more on internal teaching issues than external forces not under their control (Gallimore et al., 2009), although it is worth reporting that this study reported a significant impact on student achievement. However, a study of teachers' use of mathematics interim/benchmark assessments found teachers mostly used results to group students or reteach procedural knowledge, rather than making sense of students' conceptual understanding (Oláh, Lawrence, \& Riggan, 2010). Reviewing these and other studies, Abrams and McMillan (2013) concluded that interim assessment data influenced topic selection as teachers decided to teach or reteach, but not cognitive considerations about how to reteach. Thus the value of devoting resources to interim
and benchmark assessments, as they are currently used, can be questioned.
> ... the value of devoting resources to interim and benchmark assessments, as they are currently used, can be questioned.

Questions addressed. Interim/benchmark data can answer general questions about student achievement in different areas in the curriculum, and sometimes the standards, depending on the test. However, large-scale assessments like this are much better for raising questions than answering them. Rather than collecting diagnostic information on every student, these monitoring assessments are best used to figure out which students need help; then, a separate assessment is needed to figure out what help to get them. For example an interim assessment might raise the question, "Why are my students not performing in mathematics at the level I expected?" Deep answers to these questions require looking at classroom-level assessment information. For example, a look at students' classroom work over time might find that they are better at computation than problem-solving using fractions and would also identify what kinds of mathematics work they had been asked to do (and perhaps, what they had not been asked to do but should have been). Effective action plans can be made based on these answers, and they cannot be made based on state test results alone.

## Responsibility and system coordination.

Interim and benchmark assessments are a relatively new addition to the components of a comprehensive and balanced assessment system. They arose in response to a perceived need for more instructional, predictive, and evaluative information, at more frequent intervals, than the once-a-year state accountability tests that preceded them (Perie, Marion, \& Gong, 2009). To date, responsibility for purchasing and administering interim and benchmark tests has rested with district administrators, and responsibility for interpreting results has been delegated to building principals and school data teams (Gallimore et al., 2009), with the not altogether satisfactory results reported above.

Current status vs. ideal functioning. As currently practiced, interim and benchmark assessment is the component of an assessment system with the least research support. It may be that, with enhanced short- and medium-cycle formative assessment and improved grading practices, this component can be eliminated or at least have its use radically transformed. When schools primarily use long-cycle interim or benchmark assessments to determine interventions instead of using quicker-acting systems (e.g., classroom formative assessment), they squander the power of formative assessment to prevent learning gaps in the first place. One of the goals of a balanced system weighted heavily on the side of classroom short-cycle and medium-cycle formative assessment is to strengthen core instruction and eliminate over-reliance on interventions.

If interim/benchmark assessments were to be reformed and not eliminated, this component of the assessment system should be conceived
and designed in connection with classroom formative assessment (privileging the curriculum as it is taught), and not large-scale accountability assessment as is the case currently, where it is common for interim/benchmark tests to be built from the same item banks that are used in state accountability tests. Ideally interim/benchmark assessments, if used at all, should be less about mimicking state tests and more about reflecting

> Ideally interim/benchmark assessments, if used at all, should be less about mimicking state tests and more about reflecting standards and learning goals within standards more closely than they do now.

standards and learning goals within standards more closely than they do now. Tracking systems for reconceived interim/benchmark assessments should track learning in concert with classroom formative assessment and should include students as partners. As one of the authors observed, "The state test is a snapshot, and what we need is a photo album."

Finally, if interim/benchmark tests are reinvented, the quality of the teacher learning communities or data teams that deal with the data must be improved. This will require teacher efforts and principal and teacher leadership.

District-level Summative Assessments and Annual State Summative Assessments.

District-level summative assessments are typically end-of-course exams for various subject areas in the curriculum, sometimes for final course assessment and sometimes for high school graduation. They should be keyed to the district course curriculum expectations.

Annual state summative assessments have been much in the news since the reauthorization of the Elementary and Secondary Education Act as the No Child Left Behind Act in 2002 and the current Every Student Succeeds Act in 2015. Annual state assessments are typically keyed to state standards, but at a very large-grain-size level, so that the results speak to aggregated standards (for example, Reading, Mathematics, Writing) rather than to different individual standards within subject areas.

Research. Because the information is so broad in scope, state summative assessment results are best suited for informing policy decisions, not instructional decisions. However, policies affect schools (Au, 2007) and indirectly affect instructional decisions by creating various pressures on teachers and other aspects of the school system. Supovitz (2009) reviewed research on the use of high-stakes, test-based accountability in the United States and concluded that testing does motivate teachers to change, but the changes are mostly (p. 211) "superficial adjustments in content coverage and test preparation activities rather than promoting deeper improvements in instructional practice." Current teacher evaluation practices that use
value-added models based on state summative assessment pressure teachers to change, but the effectiveness of these practices remains, on balance, unproven (Darling-Hammond, 2015). Value-added estimates for individual teachers are not very precise (Jacob \& Lefgren, 2005), vary from year to year (McCaffrey et al., 2009), and depend heavily on statistical assumptions made in the different models (Goldhaber, Goldschmidt, \& Tseng, 2013). For these reasons, the use of value-added modeling for making decisions about individual teachers' effectiveness is not recommended (American Statistical Association, 2014; Baker et al., 2010; Wiliam, 2016).

Questions addressed. End-of-course exams can answer questions about whether students are learning and retaining information they were supposed to learn in the course. This information can be aggregated to answer similar questions at the course, school, and district levels. End-of-course exams typically are not designed to be diagnostic or answer questions about why students performed the way they did.

State level accountability tests can answer questions about general performance in different subject areas. They can, if the tests are well-constructed, be used to describe the performance of different districts in teaching state standards. They cannot answer questions about the reasons for different performance from district to district.

For a variety of practical and technical reasons it is unacceptable to evaluate teacher performance based on change in annual standardized test scores analyzed using value-added models. For example, when tests sample broad domains of
achievement limitations in testing time require that many important learning outcomes go untested or are covered in a very superficial manner. Therefore, a fundamental mismatch could arise between what is tested and some teachers' assigned instructional responsibilities, rendering the test incapable of detecting the mismatched teacher's impact. Over and above the problems with the tests, there is the problem of the year-long time span between pre and post testing during which a wide variety of school and personal factors beyond the control of teachers have been shown to exert profound impacts on student learning success. Finally, there are the problems of the unstable estimates of teacher effects that have been revealed when using value-added analyses of scores. There is a role for the consideration of student growth in teacher evaluation but not using these scores or this kind of analysis. (Stiggins, 2014b).

## Responsibility and system coordination.

Responsibility for district-level summative assessments rests with district administrators, including curriculum coordinators, and is shared by building principals and teachers, especially the respective subject-area departments in which the assessments are used. This responsibility includes both quality control issues for the assessment tools (tests or performance assessments) as well as policy issues (e.g., whether and to what degree a student's results will count in a final grade).

The state, of course, is ultimately responsible for the quality, utility, and effectiveness of its state accountability testing program. District administrators are responsible for administration and reporting in accordance with the state's requirements. Because administering the
state accountability test reaches down into school and classroom schedules, both building administrators and teachers share responsibility for implementation (e.g., following prescribed administration guidelines when giving the test).

Current status vs. ideal functioning. Three issues must be addressed to move current state accountability tests to more ideal functioning.

First, state accountability tests need to move more in the direction of testing applications of knowledge and problem-solving and away from testing discrete facts, as called for by many nextgeneration learning standards. There is some evidence that this is happening slowly, but it has not gone far enough fast enough.

> Students must feel like the state accountability assessments are helpful, or in some way support their learning, in order to be motivated to do their best.

Second, there is the issue of student motivation. We learn little about students' achievement or understanding when they are not performing at their best, which can happen if students do not believe the assessments are important. Students must feel like the state accountability assessments are helpful, or in some way support their learning, in order to be motivated to do their best. At present this is not always the case. Most districts approach state accountability tests as something students must "do," and not only do once but prepare for weeks, in order
to make their school proud. Some school walls sport posters to that effect. Before student motivation about accountability tests really changes, the relevance of state test results for their own learning and for their school must be demonstrated to them. Current state accountability "school report cards" and other uses are not likely to advance this agenda, nor do they fit with a student-centered view of learning.

Third, assessment design for accountability needs to move from testing discrete knowledge of a large amount of content to testing for the application and transfer described in most contemporary learning standards. Then assessment reporting for accountability needs to be redesigned to encourage and support interpretation and use of assessment results for instructional and policy applications beyond emphasizing low-scoring subjects, to include more information about thinking, problem solving, and transfer. In fact, this is a consequence of the more general point that the assessment system should serve the curriculum, which in turn should be based on contemporary standards that include using knowledge, not just accumulating it.

## Further Thoughts on Getting There

Four major conclusions follow from comparing typical district accountability systems with the ideal comprehensive and balanced assessment system described here.

1. Almost every district in the country needs to increase time, money, and professional
development resources to raise both the quantity and quality of formative assessment in classrooms and to make appropriate use of this vital information. This may involve reducing the amount spent on other aspects of assessment: grading a smaller percentage of classroom assessments and increasing ungraded formative work with feedback, and transferring some of the resources now spent on large-scale assessment to classroom assessment.
2. Almost every district in the country needs to increase time, money, and professional development resources to improve teachers' grading practices and district grading policies that enable those practices. As above, this means a shift in the use of assessment resources.
3. Almost every district in the country needs to reduce the amount of time and energy spent on interim/benchmark tests and/or increase the amount of actionable information drawn from them.
4. At all levels of the system, from the classroom to the state, assessment tools and practices need to be broadened to include more assessments that call for students to apply what they know in more realistic (authentic) contexts (McTighe, 2018). At the classroom level, this calls for a change in classroom questioning and student discourse, an increase in the use (and quality) of performance assessment, and improvement in the interpretation and use of the results. At the large-scale level, this calls for assessment design changes so that evidence of student learning matches standards at a deeper level than at present.

Rebalancing districts' comprehensive assessment systems, with more focus and weight on shortand medium-cycle formative assessment, and with appropriate systems and professional development including on how to use the evidence with and for students, is a moral imperative. When teachers and administrators take actions, grounded in sound assessment, for the support of learning, and when students can understand and track their learning, the achievement of all students will rise, and the differences between different groups of students (e.g., minority status, EL status) will diminish. This will reduce the persistent reliance on intervention programs to make up learning deficits that should be a function of strong teaching in core instruction. Investments in short- and mediumcycle systems that strengthen core instruction will be offset with savings in the reduced need for interventions over time.

Evidence for the effectiveness of an ideal comprehensive and balanced assessment system should be collected and used. Such evidence should include evidence of student learning (did it improve? in what way(s)?) and evidence of the student self-efficacy for learning and selfregulation of learning that a student-centered view of learning entails. Additional academic evidence, such as students' understanding of their learning goals, and academic-related evidence, such as student conscientiousness, perseverance, and collaboration, should also be monitored. A comprehensive and balanced assessment system will be ideal to the extent that it supports student learning on outcomes that matter most, does not hurt students, comports with current understandings of how students learn, and contributes to a well-functioning
learning culture in classrooms, schools and districts.

Assessment literacy. Assessment literacy is a term with a quarter-century of history at this point (Stiggins, 1991). Originally referring to educators' understanding of how to produce and interpret high-quality student achievement data, the term has broadened to include the understanding of other stakeholders, including students, parents, and policy makers, needed to participate in a comprehensive assessment system. Assessment literacy is a well-studied academic phenomenon; Xu and Brown (2016), for example, reviewed 100 studies of teacher assessment literacy. Less obvious to the authors of this white paper is evidence of systematic pursuit of assessment literacy as a regular practice in districts across the country. One big step in "getting there" must be continued professional development for teachers and other educators, and continued education about assessment evidence and results for students, parents, and policy makers like school board members.

## Allocation of responsibility for various parts

 of the system. The authors of this white paper agree with Shepard and Penuel (2018, p. 54) that School districts are the most appropriate locus for the design and development of coherent curricular activity systems because control of curriculum most often rests with districts. School districts are also responsible for teacher professional development, grading policies, and interim testing mandates.For these same reasons, the ideal comprehensive and balanced assessment system described in
this paper is intended as a district system, not a state system. States do not control curriculum and, while they do control state achievement standards, those standards describe end points or outcomes and not the learning needed to get there. State accountability tests are only one part in the system, over which districts have little or no control. Designing a comprehensive and balanced assessment system remains in the hands of the district.

Within the district's assessment system, allocation of responsibility has been described above and is summarized here. Notice that each component has several layers of responsibility (for implementing the assessment, for supporting and monitoring that the assessment is done well, for interpreting and using results, for communicating with other levels of the system). This multi-layer responsibility is reflected in the fact that each component implies responsibilities for more than one category of stakeholders.

Most responsible parties at each level include:

- Short-cycle classroom formative assessment - students, teachers, and building principals
- Medium-cycle formative assessment - teachers and building principals (and sometimes district administrators)
- Classroom summative assessment (grading) - teachers, building principals, and district administrators
- Long-cycle interim/benchmark assessments [if used] - district administrators, building principals, school teacher teams
- District assessments and state accountability assessments - district administrators (including curriculum coordinators), building principals, and teachers, especially the
respective subject-area departments

Improvements in assessment systems and increases in assessment literacy that must accompany them cannot be accomplished by the states. Although constitutional authority for education falls to the states, state education policies and Education Department staff tend to change frequently, making for an unstable state assessment landscape. Moreover, state education agencies are too far from the classroom to design and support systems whose main purpose is to support student learning. Neither can the solution be left solely to universities, as studies have documented the inadequacies of preservice teacher and administrator education in assessment literacy (Stiggins, 1991; Xu \& Brown, 2016). The last best hope for improving assessment systems and increasing the assessment literacy of the responsible parties resides at the district level. That is where the main responsibility for the parts of the system lie, and where the benefits and consequences-and thus, presumably, the motivation-accrue.

Alignment of the system. The previous section described issues of shared responsibility so that all stakeholders are responsible for important parts of one or more of the components of the assessment system. These actors will be the means by which the system is aligned. Thus, an important part of their work will be checking that all parts of the system are based on, and give information about, the appropriate standards at the appropriate grain size. The alignment should be deep and based on more than categorization of topics from assessment to assessment. Rather, conceptions of the learning standards and theories of student learning underlying
their instruction and assessment should be coordinated. Wilson (2004, p. 276) calls this "systemic coherence."

Interplay must exist among the components so they work as a system.

Conclusion. Most current district assessment systems are not comprehensive or balanced. At best, the results include less than optimal information for supporting student learning and less than optimal assessment climates in schools, and at worst, can harm students and their teachers. The most vulnerable, especially students who struggle, students of color, and students in poverty, are disproportionately harmed. It will take the concerted efforts of all stakeholders in the district, and a major shift in many educators' understanding of the role of the student in learning and assessment, to improve this situation. This white paper has laid out some issues, described components of an ideal comprehensive and balanced assessment system, and offered some thoughts about getting there. These thoughts are based in research, some of which was cited here, practical experience in teaching and assessing, and a great deal of care and concern about the systems now in place and their harmful effects. The treatment here was brief, as befits a white paper, and needs to be expanded and informed by the work of model and pilot districts willing to take on the challenges of improvement. The authors are convinced this can be done. It will not be easy, but it will be worthwhile.

## References

## References

Abrams, L. M., \& McMillan, J. H. (2013). The instructional influence of interim assessments: Voices from the field. In R. W. Lissitz (Ed.), Informing the practice of teaching using formative and interim assessment (pp. 105-133). Information Age Publishing.

American Statistical Association. (2014). ASA statement on using value-added models for educational assessment. Alexandria, VA: American Statistical Association.

Au, W. (2007). High-stakes testing and curricular control: A qualitative metasynthesis. Educational Researcher, (36)5, 258-267.

Baker, E. L., Barton, P. E., Darling-Hammond, L., Haertel, E. H., Ladd, H. F., Linn, R. L., . . .Shepard, L. A. (2010). Problems with the use of student test scores to evaluate teachers. Washington, DC: Economic Policy Institute.

Black, P., Harrison, C., Lee, C., Marshall, B., \& Wiliam, D. (2003). Assessment for learning: Putting it into practice. Maidenhead, Berkshire, England: Open University Press.

Black, P. \& Wiliam, D. (1998a). Assessment and classroom learning. Assessment in Education, 5, 7-74.

Black, P., \& Wiliam, D. (2004). The formative purpose: Assessment must first promote learning. In M. Wilson (Ed.), Towards coherence between classroom assessment and accountability (pp. 20-50): 103rd yearbook of the National Society for the Study of Education, Part II. Chicago, IL: University of Chicago Press.

Brookhart, S. M. (2017). Formative assessment in teacher education. In D. J. Clandinin \& J. Husu (Eds.) International handbook of research on teacher education (pp. 927-943). London: Sage.

Brookhart, S. M., Guskey, T. R., Bowers, A. J., McMillan, J. H., Smith, J. K., Smith, L F., Stevens, M. T., \& Welsh, M E. (2016). A century of grading research: Meaning and value in the most common educational measure. Review of Educational Research, 86, 803-848.

Darling-Hammond, L. (2015). Can value-added add value to teacher evaluation? Educational Researcher, 44, 132-137.

DuFour, R. (2004). What is a professional learning community? Educational Leadership, 61(8), 6-11.

Ferrara, S., Maxey-Moore, K., \& Brookhart, S. M. (in press). Guidance in the Standards for classroom assessment: Useful or Irrelevant? In S. M. Brookhart \& J. H. McMillan (Eds.), Classroom assessment and measurement. New York: Routledge.

Furtak, E. M., Ruiz-Primo, M. A., Shemwell, J. T., Ayala, C. C., Brandon, P. R., Shavelson, R. J., \& Yin, Y. (2008). On the fidelity of implementing embedded formative assessments and its relation to student learning: $A$ collaboration between curriculum and assessment developers. Applied Measurement in Education, 21, 360-389.

Gallimore, R., Ermeling, B.A., Saunders, W.M., \& Goldenberg, C. (2009). Moving the learning of teaching closer to practice: Teacher Education Implications of School-based Inquiry Teams.

Elementary School Journal, 109(3), 537-553.
Goertz, M., Oláh, L., Nabors, \& Riggan, M. (2009). From testing to teaching: The use of interim assessments in classroom instruction (Vol. RR-65). Philadelphia, PA: Consortium for Policy Research in Education.

Goldhaber, D. D., Goldschmidt, P., \& Tseng, F. (2013). Teacher value-added at the high-school level: Different models, different answers? Educational Evaluation and Policy Analysis, 35(2), 220-236.

Graham, S., Hebert, M., \& Harris, K. R. (2015). Formative assessment and writing: A meta-analysis. The Elementary School Journal, 115, 523-547.

Jacob, B. A., \& Lefgren, L. (2005). Principals as agents: Subjective performance measurement in education. Cambridge, MA: National Bureau of Economic Research.

Konstantopoulos, S., Miller, S., van der Ploeg, A., Li, C.-H., \& Traynor, A. (2011, September). The impact of Indiana's system of diagnostic assessments on mathematics achievement. Paper presented at the Fall 2011 Conference of the Society for Research on Educational Effectiveness, Washington, DC.

McCaffrey, D. F., Sass, T. R., Lockwood, J. R., \& Mihaly, K. (2009). The intertemporal variability of teacher effect estimates. Education Finance and Policy, 4, 572-606.

McElligott, J., \& Brookhart, S. M. (2009). Legal issues of grading in the era of high stakes accountability. In T. Guskey, (Ed.), Practical solutions for serious problems in standards-based grading (pp. 57-74). Thousand Oaks, CA: Corwin Press.

McTighe, J. (2018). Three key questions on measuring learning. Educational Leadership, 75(5), 14-20.

Michigan Assessment Consortium. (2017). Assessment literacy standards. Retrieved 9/3/18 from http:// michiganassessmentconsortium.org/sites/default/ files/mac_AssessLitStds_2017_screen-9.19.17.pdf

Noyce, P. E., \& Hickey, D. T. (Eds.) New frontiers in formative assessment. Cambridge, MA: Harvard University Press.

Oláh, L. N., Lawrence, N. R., \& Riggan, M. (2010). Learning to learn from benchmark assessment data: How teachers analyze results. Peabody Journal of Education, 85, 226-245.

Pellegrino, J. W., Chudowsky, N., \& Glaser, R. (Eds.) (2001). Knowing what students know: The science and design of educational assessment. Washington, DC: National Academy Press.

Perie, M., Marion, S., \& Gong, B. (2009). Moving toward a comprehensive assessment system: A framework for considering interim assessments. Educational Measurement: Issues and Practice, 28(3), 5-13.

Ruiz-Primo, M. A., \& Brookhart, S. M. (2018). Using feedback to improve learning. New York: Routledge.

Saunders, W. M., Goldenberg, C. N., \& Gallimore, R. (2009). Increasing achievement by focusing grade level teams on improving classroom learning: A prospective, quasi-experimental study of title 1 schools. American Educational Research Journal, 46, 1006-1033.

Schneider, M. C., \& Randel, B. (2010). Research on characteristics of effective professional development programs for enhancing educators' skills in formative assessment. In H. L. Andrade \& G. J. Cizek (Eds.), Handbook of formative assessment (pp. 251-276). New York: Routledge.

Shepard, L. A. (2001). The role of classroom assessment in teaching and learning. In V. Richardson (Ed.), Handbook of research on teaching, 4th ed. (pp. 1066-1101). Washington, DC: American Educational Research Association.

Shepard, L. A., \& Penuel, W. R. (2018). Classroom assessment principles to support learning and avoid the harms of testing. Educational Measurement: Issues and Practice, 37(1), 52-57.

Stiggins, R. J. (1991). Assessment literacy. Phi Delta Kappan, 72(7), 534-539.

Stiggins, R. (2014a). Revolutionize assessment. Thousand Oaks, CA: Corwin.

Stiggins, R.J. (2014b) Defensible teacher evaluation: Student growth through classroom assessment. Thousand Oaks CA: Corwin.

Stiggins, R. (2017). The perfect assessment system. Alexandria, VA: ASCD.
Stiggins, R. J., \& Conklin, N. F. (1992). In teachers' hands: Investigating the practices of classroom assessment. Albany, NY: SUNY Press.

Supovitz, J. (2009). Can high stakes testing leverage educational improvement? Prospects from the last decade of testing and accountability reform. Journal of Educational Change, 10, 211-227.

Wiliam, D. (2010). An integrative summary of the research literature and implications for a new theory of formative assessment. In H. L. Andrade and G. J. Cizek (Eds.), Handbook of formative assessment (pp. 18-40). New York: Routledge.

Wiliam, D. (2016). Leadership for teacher learning. West Palm Beach, FL: Learning Sciences International.

Wilson, M. (2004). A perspective on current trends in assessment and accountability: Degrees of coherence. In M. Wilson (Ed.), Towards coherence between classroom assessment and accountability (pp. 272283): 103rd yearbook of the National Society for the Study of Education, Part II. Chicago, IL: University of Chicago Press.

Xu, Y., \& Brown, G. T. L. (2016). Teacher assessment literacy in practice: A reconceptualization. Teaching and Teacher Education, 58, 149-162.

Yin, Y., Shavelson, R. J., Ayala, C. C., Ruiz-Primo, M. A., Brandon, P. R., \& Furtak, E. M. (2008). On the impact of formative assessment on student motivation, achievement, and conceptual change. Applied Measurement in Education, 21, 335-359.

Zimmerman, B. J., \& Schunk, D. H. (2011). Selfregulated learning and performance. In B. J. Zimmerman \& D. H. Schunk (Eds.), Handbook of self-regulated learning and performance (pp. 1-12). New York: Routledge.

# $9^{\text {Tn }}$ Course Enrollment Proportionality Report <br> Algebra <br> Edmonds  

## Overall Population

| Year: | $2018 / 19$ |
| :--- | :--- |
| School(s): |  |
| Grade(s): | 9th Grade |
|  |  |
|  |  |

## Examined Sub Population

## Students: Enrolled in : MAT085, MAT086, MAT087, and MAT088

## Student Sub Groups



| Composition Index Key: |  | Severe $=0.0001-0.4999$ and 1.5000- |  | Significant $=0.5000-0.6999$ and 1.3000- |
| :---: | :---: | :---: | :---: | :---: |
|  | 3.0000 |  | 1.4999 |  |
|  |  | Mild $=0.7000-0.8999$ and 1.1000-1.2999 |  | Average $=0.9000-1.0999$ |

# $9^{\text {th }}$ Grade Algebra <br> Course Enrollment Proportionality Report 

## Overall Population

| Year: | $2018 / 19$ |
| :--- | :--- |
| School(s): |  |
| Grade(s): | 9th Grade |
|  | 1,631 students |

## Examined Sub Population

```
Students: Enrolled in : MAT200, MAT201, MAT202, and OLR201
```


## Student Sub Groups

| $\begin{aligned} & \text { x } \\ & \text { © } \end{aligned}$ | Students | Proportions |  |  | Composition Index |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female | 47.27\% | 49.58\% | 0.000 | 1.05 | 3.0000 | Average |
|  | Male | 52.66\% | 50.27\% | 0.000 | $0.95$ | 3.0000 | Average |
|  | Students | Proportions |  | Composition Index |  |  |  |
|  | Asian | 15.02\% | 13.64\% | 0.000 | 0.91 | 3.0000 | Average |
|  | Black/African American | 6.62\% | 6.4\% | 0.000 | $0.97$ | 3.0000 | Average |
|  | Hispanic | 21.58\% | 27.15\% | 0.000 |  | 3.0000 | Mid |
|  | American Indian/Native Alaskan | 0.42\% | 0.41\% | 0.000 | 0.98 | 3.0000 | Average |
|  | Two or more races | 10.23\% | 11.42\% | 0.000 | $1.1$ | 3.0000 | Mid |
|  | Native Hawaiian/Other Pacific Islander | 1.16\% | 1.81\% | 0.000 |  | 3.0000 | Severe |
|  | White | 44.94\% | 39.13\% | 0.0001 | $0.87$ | 3.0000 | Mila |


| $\begin{aligned} & \sum \\ & \frac{\Sigma}{1} \\ & \frac{0}{0} \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | Students | Proportions |  |  | Composition Index |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bilingual Education | 8.7\% | 10.3\% | 0.0007 | 118 | 3.0000 | Mild |
|  | Free/Reduced Lunch | 37.21\% | 42.33\% | 0.0001 |  | 3.0000 | Mrld |
|  | Homeless | 1.47\% | 2.08\% | 0.0001 | $1.41$ | 3.0000 | Significant |
|  | Special Education | 13.05\% | 5.84\% | 0.00010 .45 |  | 3.0000 | Severe |


| Composition Index Key: | Severe $=0.0001-0.4999$ and 1.5000 $\quad$ |
| ---: | :--- |
|  |  |
|  | Mild $=0.7000-0.8999$ and $1.1000-1.2999 \quad$ |

# $9^{\text {th }}$ Grade Geometry Course Enrollment Proportionality Report 

Schmonds
SCHOOL DISTRICT

## Overall Population

| Year: | $2018 / 19$ |
| :--- | :--- |
| School(s): |  |
| Grade(s): | 9th Grade |
|  |  |
|  |  |

## Examined Sub Population

Students: Enrolled in : MAT300, MAT302, MAT321, MAT322, OLR301, and OLR302

## Student Sub Groups

| $\begin{aligned} & \text { 曻 } \end{aligned}$ | Students | Proportions |  | Composition Index |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female | 47.27\% | 51.59\% | 0.0001 | 3.0000 | Average |
|  | Male | 52.66\% | 48.4\% | 0.00010 | 3.0000 | Average |
| ETHNICITY / RACE | Students | Proportions |  | Composition Index |  |  |
|  | Asian | 15.02\% | 20.21\% | 0.0001 | 3.0000 | Significant |
|  | Black/African American | 6.62\% | 8.24\% | 0.0001 | 3.0000 | Wit |
|  | Hispanic | 21.58\% | 10.1\% | $0.0001 \bigcirc$ | 3.0000 | Severe |
|  | American Indian/Native Alaskan | 0.42\% | 0.26\% | $0.0001 \quad 0.62$ | 3.0000 | Significant |
|  | Two or more races | 10.23\% | 10.1\% | $0.0001 \quad 0.99$ | 3.0000 | Average |
|  | Native Hawaiian/Other Pacific Islander | 1.16\% | 0.26\% | $0.22$ | 3.0000 | Severe |
|  | White | 44.94\% | 50.79\% | $0.0001$ | 3.0000 | Mild |
| $\begin{aligned} & \sum \\ & \frac{\sum}{S} \\ & \frac{1}{U} \\ & 0 \\ & \frac{\alpha}{2} \end{aligned}$ | Students | Proportions |  | Composition Index |  |  |
|  | Bilingual Education | 8.7\% | 1.59\% | $0.18$ | 3.0000 | Severe |
|  | Free/Reduced Lunch | 37.21\% | 23.67\% | $0.0001 \quad 0.64$ | 3.0000 | Significant |
|  | Homeless | 1.47\% | 0.26\% | $0.18$ | 3.0000 | Severe |
|  | Special Education | 13.05\% | 1.32\% | $0.1$ | 3.0000 | Severe |



# gin Grade Alagbra II $^{2 m i}$ Course Enrollment Proportionelity Report 

## Overall Population

| Year: | $2018 / 19$ |
| :--- | :--- |
| School(s): |  |
| Grade(s): | 9th Grade |
|  |  |
|  | 1,631 students |

## Examined Sub Population

Students: Enrolled in : MAT250, MAT251, MAT252, MAT253, MAT254, and OLR251

## Student Sub Groups



| Composition Index Key: |  | Severe $=0.0001-0.4999$ and 1.5000- |  | Significant $=0.5000-0.6999$ and 1.3000- |
| :---: | :---: | :---: | :---: | :---: |
|  | 3.0000 |  | 1.4999 |  |
|  |  | Mild $=0.7000-0.8999$ and 1.1000-1.2999 |  | Average $=0.9000-1.0999$ |

# Grade 8 Math <br> Course Enrollment Proportionality Report 

 SCHOOL DISTRICTEach student learring, every dayy

## Overall Population

| Year: | $2018 / 19$ |
| :--- | :--- |
| School(s): |  |
| Grade(s): | 8th Grade |
|  |  |
|  |  |

## Examined Sub Population

```
Students: Enrolled in : DMA081, DMA790, DMA791, DMA800, DMA801, DMA802, and OLD281
```


## Student Sub Groups



## Composition Index Key:

Severe $=0.0001-0.4999$ and 1.5000-


Mild $=0.7000-0.8999$ and 1.1000-1.2999
Average $=0.9000-1.0999$

# Grade 8 Algebra <br> Course Enrollment Proportionality Report 

Edmonds
$\underset{\text { school ilstrict }}{\text { Edmonds }}$


## Overall Population

| Year: | $2018 / 19$ |
| :--- | :--- |
| School(s): |  |
| Grade(s): | 8th Grade |
|  |  |
|  | 1,552 students |

## Examined Sub Population

```
Students: Enrolled in : DMA810, DMA811, DMA812,
``` MAT200, and OLR201

\section*{Student Sub Groups}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow{3}{*}{岙} & Students & \multicolumn{3}{|l|}{Proportions} & \multicolumn{3}{|l|}{Composition Index} \\
\hline & Female & 50.12\% & 54.74\% & 0.0001 & 1.09 & 3.0000 & Average \\
\hline & Male & 49.87\% & 45.25\% & 0.0001 & 0.91 & 3.0000 & Average \\
\hline \multirow{8}{*}{} & Students & \multicolumn{3}{|l|}{Proportions} & \multicolumn{2}{|l|}{Composition Index} & \\
\hline & Asian & 13.14\% & 14.09\% & 0.0001 & 1.07 & 3.0000 & Average \\
\hline & Black/African American & 5.99\% & 5.14\% & 0.0001 & 0.86 & 3.0000 & Mild \\
\hline & Hispanic & 22.29\% & 13.27\% & \multicolumn{2}{|l|}{\[
0.0001 \quad 0.6
\]} & 3.0000 & Significant \\
\hline & American Indian/Native Alaskan & 0.57\% & 0.54\% & 0.0001 & 0.95 & 3.0000 & Average \\
\hline & Two or more races & 8.95\% & 10.56\% & 0.0001 & - & 3.0000 & Mild \\
\hline & Native Hawaiian/Other Pacific Islander & 1.03\% & 1.08\% & 0.0001 & 1.05 & 3.0000 & Average \\
\hline & White & 48\% & 55.28\% & 0.0001 & \[
1.1
\] & 3.0000 & Mild \\
\hline \multirow{5}{*}{\[
\begin{aligned}
& \sum \\
& \frac{\sum}{2} \\
& \frac{0}{0} \\
& 0 \\
& 0 \\
& 0
\end{aligned}
\]} & Students & \multicolumn{2}{|l|}{Proportions} & \multicolumn{3}{|c|}{Composition Index} & \\
\hline & Bilingual Education & 10.18\% & 1.35\% & \[
0.13
\] & & 3.0000 & Severe \\
\hline & Free/Reduced Lunch & 41.04\% & 22.49\% & 0.00010 .55 & & 3.0000 & Significant \\
\hline & Homeless & 2.96\% & 0\% & 2,0001 & & 3.0000 & - \\
\hline & Special Education & 14.11\% & 2.43\% & \[
\begin{array}{r}
0.17 \\
\hline
\end{array}
\] & & 3.0000 & Severe \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{Composition Index Key:} & & \multicolumn{2}{|l|}{Severe \(=0.0001-0.4999\) and 1.5000-} & \multirow[t]{2}{*}{Significant \(=0.5000-0.6999\) and 1.3000-} \\
\hline & 3.0000 & & 1.4999 & \\
\hline & & Mild \(=0.7000-0.8999\) and 1.1000-1.2999 & & Average \(=0.9000-1.0999\) \\
\hline
\end{tabular}

\title{
Grade 8 Geometry Course Enrollment Proportionality Report
}

\section*{Overall Population}
\begin{tabular}{|ll|}
\hline Year: & \(2018 / 19\) \\
School(s): & \\
Grade(s): & 8th Grade \\
& \\
& \\
\hline
\end{tabular}

\section*{Examined Sub Population}

Students: Enrolled in : DMA820, DMA821, DMA822, MAT300, and OLR301
\(250 / 1,552=16 \%\)

\section*{Student Sub Groups}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow{3}{*}{希} & Students & \multicolumn{3}{|l|}{Proportions} & \multicolumn{2}{|c|}{Composition Index} & \multirow[b]{2}{*}{Mill \({ }^{\text {d }}\)} \\
\hline & Female & 50.12\% & 44.8\% & 0.0001 & \[
0.89
\] & 3.0000 & \\
\hline & Male & 49.87\% & 55.2\% & 0.0001 & 4 & 3.0000 & Mrid \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow{8}{*}{} & Students & \multicolumn{3}{|l|}{Proportions} & \multicolumn{4}{|l|}{Composition Index} \\
\hline & Asian & 13.14\% & 25.2\% & 0.0001 & & \[
1.92
\] & 3.0000 & Severe \\
\hline & Black/African American & 5.99\% & 4.4\% & 0.0001 & & & 3.0000 & Mid \\
\hline & Hispanic & 22.29\% & 6.4\% & \[
0.29
\] & & & 3.0000 & Severe \\
\hline & American Indian/Native Alaskan & 0.57\% & 0.4\% & 0.0001 & & & 3.0000 & What \\
\hline & Two or more races & 8.95\% & 9.2\% & 0.0001 & \[
1.03
\] & & 3.0000 & Average \\
\hline & Native Hawaiian/Other Pacific Islander & 1.03\% & 0.4\% & \[
0.39
\] & & & 3.0000 & Severe \\
\hline & White & 48\% & 54\% & 0.0001 & 1.1 & & 3.0000 & Mild \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{4}{*}{\[
\]} & \multicolumn{4}{|l|}{Students Proportions} & \multicolumn{3}{|l|}{Composition Index} \\
\hline & Bilingual Education & 10.18\% & 0\% & 2.000 & & 3.0009 . & \(\pm\) \\
\hline & Free/Reduced Lunch & 41.04\% & 20.4\% & \[
0.0001 \quad 0.5
\] & & 3.0000 & Severe \\
\hline & Homeless & 2.96\% & 0.8\% & \[
0.27
\] & & 3.0000 & Severe \\
\hline & Special Education & 14.11\% & 0\% & 2.0007 & & 3.0000 & \(\square\) \\
\hline
\end{tabular}
\begin{tabular}{rl}
\hline Composition Index Key: & Severe \(=0.0001-0.4999\) and 1.5000 \(\quad\) \\
& \\
& Mild \(=0.7000-0.8999\) and \(1.1000-1.2999\) \\
& \\
& Average \(=0.9000-1.0999\)
\end{tabular}

\title{
Regular Grade 7 Math \\ Course Enrollment Proportionality Report
}

\section*{Overall Population}
\begin{tabular}{|ll|}
\hline Year: & \(2018 / 19\) \\
School(s): & \\
Grade(s): & 7th Grade \\
& \\
& \\
& \\
\hline
\end{tabular}

\section*{Examined Sub Population}

Students: Enrolled in : DMA071, DMA072, DMA700, DMA701, DMA702, DMA790, DMA791, and OLD271
\(744 / 1,554=48 \%\)

\section*{Student Sub Groups}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow{3}{*}{\[
\begin{aligned}
& \text { x } \\
& \text { es }
\end{aligned}
\]} & Students & \multicolumn{3}{|l|}{Proportions} & \multicolumn{3}{|l|}{Composition Index} \\
\hline & Female & 48.84\% & 51.34\% & 0.0001 & \[
\begin{array}{r}
1.05 \\
\hline
\end{array}
\] & 3.0000 & Average \\
\hline & Male & 51.15\% & 48.65\% & 0.0001 & \[
0.95
\] & 3.0000 & Average \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow{5}{*}{\[
\begin{aligned}
& \text { s } \\
& \frac{1}{S} \\
& \frac{0}{0} \\
& 0 \\
& \frac{\alpha}{2}
\end{aligned}
\]} & \multirow[t]{2}{*}{\begin{tabular}{l}
Students \\
Bilingual Education
\end{tabular}} & \multicolumn{4}{|l|}{Proportions} & \multicolumn{3}{|l|}{Composition Index} \\
\hline & & 9.45\% & 13.84\% & 0.0001 & & 1.46 & 3.0000 & Significant \\
\hline & Free/Reduced Lunch & 39.51\% & 53.89\% & 0.0001 & & \[
1.36
\] & 3.0000 & Significant \\
\hline & Homeless & 2.31\% & 3.36\% & 0.0001 & & 1.45 & 3.0000 & Significant \\
\hline & Special Education & 13.44\% & 8.73\% & 0.0001 & 0.65 & & 3.0000 & Significant \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{Composition Index Key:} & & Severe \(=0.0001-0.4999\) and 1.5000- & & \multirow[t]{2}{*}{Significant \(=0.5000-0.6999\) and 1.3000-} \\
\hline & 3.0000 & & 1.4999 & \\
\hline & & Mild \(=0.7000-0.8999\) and 1.1000-1.2999 & & Average \(=0.9000-1.0999\) \\
\hline
\end{tabular}

\title{
Grade 7 Honors Math \\ Course Enrollment Proportionality Report
}

\section*{Overall Population}
\begin{tabular}{|ll|}
\hline Year: & \(2018 / 19\) \\
School(s): & \\
Grade(s): & 7th Grade \\
& \\
& \\
& \\
\hline
\end{tabular}

\section*{Examined Sub Population}

Students: Enrolled in : DMA751 and DMA752

\section*{Student Sub Groups}

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow{5}{*}{\[
\begin{aligned}
& \sum \\
& \frac{\Sigma}{k} \\
& 0 \\
& 0 \\
& 0 \\
& \text { K }
\end{aligned}
\]} & \multicolumn{4}{|l|}{Students Proportions} & \multicolumn{2}{|l|}{Composition Index} \\
\hline & Bilingual Education & 9.45\% & 2.18\% & 0.23 & 3.0000 & Severe \\
\hline & Free/Reduced Lunch & 39.51\% & 24.68\% & \[
0.0001 \quad 0.62
\] & 3.0000 & Significant \\
\hline & Homeless & 2.31\% & 0.62\% & \[
0.27
\] & 3.0000 & Severe \\
\hline & Special Education & 13.44\% & 1.87\% & \[
\begin{array}{r}
0.14 \\
\hline
\end{array}
\] & 3.0000 & Severe \\
\hline
\end{tabular}
\begin{tabular}{rl}
\hline Composition Index Key: & \\
& Severe \(=0.0001-0.4999\) and 1.5000 \(\quad\) \\
& Mild \(=0.7000-0.8999\) and \(1.1000-1.2999 \quad\) Significant \(=0.5000-0.6999\) and \(1.3000-\) \\
& \\
& Average \(=0.9000-1.0999\)
\end{tabular}

\section*{Overall Population}
\begin{tabular}{|ll|}
\hline Year: & \(2018 / 19\) \\
School(s): & \\
Grade(s): & 7th Grade \\
& \\
& \\
\hline
\end{tabular}

\section*{Examined Sub Population}
```

Students: Enrolled in : DMA810, DMA811, DMA812, and MAT200

```

\section*{Student Sub Groups}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow{3}{*}{\[
\frac{x}{e n}
\]} & Students & \multicolumn{2}{|l|}{Proportions} & \multicolumn{2}{|r|}{Composition Index} & \\
\hline & Female & 48.84\% & 45.61\% & \(0.0001 \quad 0.93\) & 3.0000 & Average \\
\hline & Male & 51.15\% & 54.38\% & \(0.0001 \quad 1.06\) & \[
3.0000
\] & Average \\
\hline \multirow{8}{*}{} & Students & \multicolumn{2}{|l|}{Proportions} & \multicolumn{2}{|r|}{Composition Index} & \\
\hline & Asian & 12.16\% & 20\% & 0.0001 & 1.64 3.0000 & Severe \\
\hline & Black/African American & 6.43\% & 3.15\% & 0.00910 .49 & 3.0000 & Severe \\
\hline & Hispanic & 21.68\% & 10.87\% & \(0.0001{ }^{0.5}\) & 3.0000 & Significant \\
\hline & American Indian/Native Alaskan & 0.25\% & 0\% & n, 00001 & 3.0000 & \\
\hline & Two or more races & 11\% & 9.82\% &  & \[
3.0000
\] & Mid \\
\hline & Native Hawaiian/Other Pacific Islander & 1.02\% & 0\% & 2,0004 & 3.0000 & arrued \\
\hline & White & 47.42\% & 56.14\% & 0.0001 & \[
3.0000
\] & Mid \\
\hline \multirow{5}{*}{\[
\begin{aligned}
& \text { E } \\
& \frac{\alpha}{\alpha} \\
& 0 \\
& 0 \\
& \alpha \\
& 0
\end{aligned}
\]} & Students & \multicolumn{2}{|l|}{Proportions} & \multicolumn{2}{|r|}{Composition Index} & \\
\hline & Bilingual Education & 9.45\% & 0.35\% & \[
0.04
\] & 3.0000 & Severe \\
\hline & Free/Reduced Lunch & 39.51\% & 15.43\% & 0.00000 & 3.0000 & Severe \\
\hline & Homeless & 2.31\% & 0.35\% & \[
0.15
\] & 3.0000 & Severe \\
\hline & Special Education & 13.44\% & 2.8\% & \[
0.21
\] & 3.0000 & Severe \\
\hline
\end{tabular}

\section*{Composition Index Key:}
\(\square\) 3.0000

Severe \(=0.0001-0.4999\) and 1.5000-

Mild \(=0.7000-0.8999\) and 1.1000-1.2999


Appendix V
i-Ready Technical Standards from Independent Expert Review

\section*{Technical Standards - i-Ready Math}

Classification Accuracy \& Cross-Validation Summary
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Grade & \[
\begin{gathered}
\text { Grade } \\
3
\end{gathered}
\] & Grade 4 & Grade 5 & \[
\begin{gathered}
\text { Grade } \\
6
\end{gathered}
\] & \[
\begin{gathered}
\text { Grade } \\
7
\end{gathered}
\] & \[
\begin{gathered}
\text { Grade } \\
8
\end{gathered}
\] \\
\hline Classification Accuracy Fall & & & & & & \\
\hline Classification Accuracy Winter &  & & & & & \\
\hline Classification Accuracy Spring & & & & & & \\
\hline
\end{tabular}

Legend
Convincing evidence
Partially convincing evidenceUnconvincing evidence
- Data unavailable
\({ }^{\text {} D i s a g g r e g a t e d ~ d a t a ~ a v a i l a b l e ~}\)

\section*{SBAC}

\section*{Classification Accuracy}

\section*{Select time of year}

F Fall
V Winter
\(\sqrt{V}\) Spring

Describe the criterion (outcome) measure(s) including the degree to which it/they is/are independent from the screening measure.

The percentile scores defined by 2016 SBAC assessments are used to classify students. Students who were below 30th percentile on the SBAC test were classified as at-risk and students who were at or above 30th percentile were classified as no-risk.
Do the classification accuracy analyses examine concurrent and/or predictive classification?

Concurrent
■ Predictive
Describe when screening and criterion measures were administered and provide a justification for why the method(s) you chose (concurrent and/or predictive) is/are appropriate for your tool.
Describe how the classification analyses were performed and cut-points determined. Describe how the cut points align with students at-risk. Please indicate which groups were contrasted in your analyses (e.g., low risk students versus high risk students, low risk students versus moderate risk students). The i-Ready cut scores were determined at the 20th percentile for each grade level using the i-Ready national norms. Using these cut scores, students were identified as at-risk if they were below the 20th percentile on the fall i-Ready Diagnostic test or no-risk if they scored at or above the cut. Classification indices between at-risk/no-risk on i-Ready and at-risk/no-risk on the SBAC assessment are calculated per the formulas in the classification worksheet.
Were the children in the study/studies involved in an intervention in addition to typical classroom instruction between the screening measure and outcome assessment?

No
If yes, please describe the intervention, what children received the intervention, and how they were chosen.

\section*{Cross-Validation}

Has a cross-validation study been conducted? No
If yes, Select time of year.
```

Fall

```
\(\square\) Winter
\(\ulcorner\) Spring
Describe the criterion (outcome) measure(s) including the degree to which it/they is/are independent from the screening measure.

Do the cross-validation analyses examine concurrent and/or predictive classification?

\section*{\(\Gamma\) \\ Concurrent}
\(\ulcorner\)
Predictive
Describe when screening and criterion measures were administered and provide a justification for why the method(s) you chose (concurrent and/or predictive) is/are appropriate for your tool.
Describe how the cross-validation analyses were performed and cut-points determined. Describe how the cut points align with students at-risk. Please indicate which groups were contrasted in your analyses (e.g., low risk students versus high risk students, low risk students versus moderate risk students). Were the children in the study/studies involved in an intervention in addition to typical classroom instruction between the screening measure and outcome assessment?
If yes, please describe the intervention, what children received the intervention, and how they were chosen.

\section*{New York State Testing Program (NYSTP)}

\section*{Classification Accuracy}

Select time of year
\(\checkmark\) Fall
V Winter
\({ }^{V}\) Spring
Describe the criterion (outcome) measure(s) including the degree to which it/they is/are independent from the screening measure.

3-8: The estimated 30th percentile scores based on the publicly released percentile score ranges are used to classify students. Students who were below the grade-level cut scores on the NYS test were classified as at-risk and students who were at or above the cut scores were classified as no-risk.
Do the classification accuracy analyses examine concurrent and/or predictive classification?
\(\ulcorner\) Predictive
Describe when screening and criterion measures were administered and provide a justification for why the method(s) you chose (concurrent and/or predictive) is/are appropriate for your tool.

Describe how the classification analyses were performed and cut-points determined. Describe how the cut points align with students at-risk. Please indicate which groups were contrasted in your analyses (e.g., low risk students versus high risk students, low risk students versus moderate risk students).

The i-Ready cut scores were determined at the 20th percentile for each grade level using the on i-Ready National Norms. Using these cut scores, students were identified as at-risk if they were below the 20th percentile in the fall i Ready Diagnostic test or no-risk if they scored at or above the cut. Classification indices between the at-risk/no-risk on i-Ready and at-risk/no-risk on the NYS assessment are calculated per the formulas in the classification worksheet. AUC values are calculated using the Risk/No-Risk categories on the criterion (outcome) measure as the dependent variable and the i-Ready score as the independent variable.
Were the children in the study/studies involved in an intervention in addition to typical classroom instruction between the screening measure and outcome assessment?

No
If yes, please describe the intervention, what children received the intervention, and how they were chosen.
Cross-Validation
Has a cross-validation study been conducted?
No
If yes,
Select time of year.
Fall
ᄃ
Winter
\(\ulcorner\)
Spring
Describe the criterion (outcome) measure(s) including the degree to which it/they is/are independent from the screening measure.
Do the cross-validation analyses examine concurrent and/or predictive classification?
ᄃ
Concurrent
「 Predictive
Describe when screening and criterion measures were administered and provide a justification for why the method(s) you chose (concurrent and/or predictive) is/are appropriate for your tool.
Describe how the cross-validation analyses were performed and cut-points determined. Describe how the cut points align with students at-risk. Please indicate which groups were contrasted in your analyses (e.g., low risk students versus high risk students, low risk students versus moderate risk students).

Were the children in the study/studies involved in an intervention in addition to typical classroom instruction between the screening measure and outcome assessment?
If yes, please describe the intervention, what children received the intervention, and how they were chosen.

\section*{Classification Accuracy - Fall}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Evidence & Grade 3 & Grade 4 & Grade 5 & Grade 6 & Grade 7 & Grade 8 \\
\hline Criterion measure & SBAC & New York State Testing Program (NYSTP) & SBAC & SBAC & SBAC & SBAC \\
\hline \begin{tabular}{l}
Cut Points - \\
Percentile \\
rank on \\
criterion \\
measure
\end{tabular} & & & & & & \\
\hline Cut Points Performance score on criterion measure & & & & & & \\
\hline Cut Points Corresponding performance score (numeric) on screener measure & \[
407.00 \text { (20th }
\]
percentile) & 426.00 (20th percentile) & 444.00 (20th percentile) & \[
458.00 \text { (20th }
\]
percentile) & 465.00 (20th percentile) & \begin{tabular}{l}
\[
474.00 \text { (20th }
\] \\
percentile)
\end{tabular} \\
\hline \begin{tabular}{l}
Classification \\
Data - True \\
Positive (a)
\end{tabular} & & & & & & \\
\hline \begin{tabular}{l}
Classification \\
Data - False \\
Positive (b)
\end{tabular} & & & & & & \\
\hline Classification Data - False Negative (c) & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Evidence & Grade 3 & Grade 4 & Grade 5 & Grade 6 & Grade 7 & Grade 8 & & \\
\hline \begin{tabular}{l}
Classification \\
Data - True \\
Negative (d)
\end{tabular} & & & & & & & & \\
\hline Area Under the Curve (AUC) & 0.92 & 0.93 & 0.93 & 0.94 & 0.95 & 0.94 & & \\
\hline \begin{tabular}{l}
AUC \\
Estimate's 95\% \\
Confidence \\
Interval: \\
Lower Bound
\end{tabular} & 0.92 & 0.93 & 0.92 & 0.94 & 0.94 & 0.93 & & \\
\hline \begin{tabular}{l}
AUC \\
Estimate's 95\% \\
Confidence \\
Interval: \\
Upper Bound
\end{tabular} & 0.93 & 0.94 & 0.93 & 0.95 & 0.95 & 0.95 & & \\
\hline Statistics & & & & & Grade 3 & Grade 4 & Grade 5 & Grade \\
\hline Base Rate & & & & & & & & \\
\hline Overall Classi & ation Rate & & & & & & & \\
\hline Sensitivity & & & & & & & & \\
\hline Specificity & & & & & & & & \\
\hline False Positive & & & & & & & & \\
\hline False Negative & & & & & & & & \\
\hline Positive Predi & e Power & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Statistics & & & Grade 3 & Grade 4 Grade 5 & Grade \\
\hline \multicolumn{6}{|l|}{Negative Predictive Power} \\
\hline Sample & Grade 3 & Grade 4 & Grade 5 & Grade 6 & Grade 7 \\
\hline Date & 2015-2016 & Spring 2016 for 3-8 & 2015-2016 & 2015-2016 & 2015-2016 \\
\hline \multicolumn{6}{|l|}{Sample Size} \\
\hline Geographic Representation & Middle Atlantic (NY) & Middle Atlantic (NY) & Middle Atlantic (NY) & Middle Atlantic (NY) & Middle Atl \\
\hline \multicolumn{6}{|l|}{Male} \\
\hline \multicolumn{6}{|l|}{Female} \\
\hline \multicolumn{6}{|l|}{Other} \\
\hline \multicolumn{6}{|l|}{Gender Unknown} \\
\hline \multicolumn{6}{|l|}{White, Non-Hispanic} \\
\hline \multicolumn{6}{|l|}{Black, Non-Hispanic} \\
\hline \multicolumn{6}{|l|}{Hispanic} \\
\hline \multicolumn{6}{|l|}{American Indian/Alaska Native} \\
\hline \multicolumn{6}{|l|}{Other} \\
\hline \multicolumn{6}{|l|}{Race / Ethnicity Unknown} \\
\hline Low SES & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|l|} 
Sample & Grade 3 & Grade 4 & Grade 5 & Grade 6 & Grade 7 \\
\hline IEP or diagnosed disability & & & & & \\
\hline English Language Learner & & & & & \\
\hline
\end{tabular}

\section*{Classification Accuracy - Winter}
\begin{tabular}{|l|l|l|l|l|l|l|} 
Evidence & Grade 3 & Grade 4 & Grade 5 & Grade 6 & Grade 7 & Grade 8 \\
\hline \begin{tabular}{l} 
Criterion \\
measure
\end{tabular} & \begin{tabular}{l} 
New York State Testing \\
Program (NYSTP)
\end{tabular} & SBAC & \begin{tabular}{l} 
New York State Testing \\
Program (NYSTP)
\end{tabular} & SBAC & SBAC & SBAC \\
\hline \begin{tabular}{l} 
Cut Points - \\
Percentile \\
rank on \\
criterion \\
measure
\end{tabular} & & & & & \\
\hline \begin{tabular}{l} 
Cut Points - \\
Performance \\
score on \\
criterion \\
measure
\end{tabular} & & & & & & \\
\hline \begin{tabular}{l} 
Cut Points - \\
Corresponding \\
performance \\
score \\
(numeric) on \\
screener \\
measure
\end{tabular} & 420 (20th percentile) & 439 (20th & 453 (20th percentile) & 465 (20th \\
\hline \begin{tabular}{l} 
percentile)
\end{tabular} & & \begin{tabular}{l}
472 (20th \\
percentile)
\end{tabular} & \begin{tabular}{l}
481 (20th \\
percentile)
\end{tabular} \\
\hline \begin{tabular}{l} 
Classification \\
Data - True \\
Positive (a)
\end{tabular} & & & & & & \\
\hline \begin{tabular}{l} 
Classification \\
Data - False \\
Positive (b)
\end{tabular} & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Evidence & Grade 3 & Grade 4 & Grade 5 & Grade 6 & Grade 7 & Grade 8 & & \\
\hline \begin{tabular}{l}
Classification \\
Data - False \\
Negative (c)
\end{tabular} & & & & & & & & \\
\hline \begin{tabular}{l}
Classification \\
Data - True \\
Negative (d)
\end{tabular} & & & & & & & & \\
\hline Area Under the Curve (AUC) & 0.92 & 0.94 & 0.92 & 0.95 & 0.94 & 0.93 & & \\
\hline \begin{tabular}{l}
AUC \\
Estimate's 95\% \\
Confidence \\
Interval: \\
Lower Bound
\end{tabular} & 0.90 & 0.93 & 0.91 & 0.94 & 0.94 & 0.92 & & \\
\hline \begin{tabular}{l}
AUC \\
Estimate's 95\% \\
Confidence \\
Interval: \\
Upper Bound
\end{tabular} & 0.93 & 0.94 & 0.93 & 0.95 & 0.95 & 0.94 & & \\
\hline Statistics & & & & & Grade 3 & Grade 4 & Grade 5 & Grade \\
\hline Base Rate & & & & & & & & \\
\hline Overall Classi & ation Rate & & & & & & & \\
\hline Sensitivity & & & & & & & & \\
\hline Specificity & & & & & & & & \\
\hline False Positive & & & & & & & & \\
\hline False Negative & & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Statistics & & Grade 3 & Grade 4 & Grade 5 & Grade \\
\hline \multicolumn{6}{|l|}{Positive Predictive Power} \\
\hline \multicolumn{6}{|l|}{Negative Predictive Power} \\
\hline Sample & Grade 3 & Grade 4 & Grad & & Grade \\
\hline Date & Spring 2016 for 3-8 & & Sprin & 016 for 3-8 & \\
\hline \multicolumn{6}{|l|}{Sample Size} \\
\hline Geographic Representation & Middle Atlantic (NY) & & Mid & Atlantic (NY) & \\
\hline \multicolumn{6}{|l|}{Male} \\
\hline \multicolumn{6}{|l|}{Female} \\
\hline \multicolumn{6}{|l|}{Other} \\
\hline \multicolumn{6}{|l|}{Gender Unknown} \\
\hline \multicolumn{6}{|l|}{White, Non-Hispanic} \\
\hline \multicolumn{6}{|l|}{Black, Non-Hispanic} \\
\hline \multicolumn{6}{|l|}{Hispanic} \\
\hline \multicolumn{6}{|l|}{American Indian/Alaska Native} \\
\hline \multicolumn{6}{|l|}{Other} \\
\hline Race / Ethnicity Unknown & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l} 
Sample & Grade 3 & Grade 4 & Grade 5 & Grade \\
\hline Low SES & & & & \\
\hline IEP or diagnosed disability & & & & \\
\hline English Language Learner & & & & \\
\hline
\end{tabular}

\section*{Classification Accuracy - Spring}
\begin{tabular}{|l|l|l|l|l|l|l|} 
Evidence & Grade 3 & Grade 4 & Grade 5 & Grade 6 & Grade 7 & Grade 8 \\
\hline \begin{tabular}{l} 
Criterion \\
measure
\end{tabular} & SBAC & SBAC & \begin{tabular}{l} 
New York State Testing \\
Program (NYSTP)
\end{tabular} & SBAC & SBAC & SBAC \\
\hline \begin{tabular}{l} 
Cut Points - \\
Percentile \\
rank on \\
criterion \\
measure
\end{tabular} & & & & & & \\
\hline \begin{tabular}{l} 
Cut Points - \\
Performance \\
score on \\
criterion \\
measure
\end{tabular} & & & & & & \\
\hline \begin{tabular}{l} 
Cut Points - \\
Corresponding \\
performance \\
score \\
(numeric) on \\
screener \\
measure
\end{tabular} & 430 (20th \\
percentile)
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Evidence & Grade 3 & Grade 4 & Grade 5 & Grade 6 & Grade 7 & Grade 8 & & \\
\hline \begin{tabular}{l}
Classification \\
Data - False \\
Negative (c)
\end{tabular} & & & & & & & & \\
\hline \begin{tabular}{l}
Classification \\
Data - True \\
Negative (d)
\end{tabular} & & & & & & & & \\
\hline Area Under the Curve (AUC) & 0.94 & 0.95 & 0.94 & 0.95 & 0.94 & 0.93 & & \\
\hline \begin{tabular}{l}
AUC \\
Estimate's 95\% \\
Confidence \\
Interval: \\
Lower Bound
\end{tabular} & 0.93 & 0.94 & 0.93 & 0.95 & 0.93 & 0.93 & & \\
\hline \begin{tabular}{l}
AUC \\
Estimate's 95\% \\
Confidence \\
Interval: \\
Upper Bound
\end{tabular} & 0.94 & 0.95 & 0.95 & 0.96 & 0.94 & 0.94 & & \\
\hline Statistics & & & & & Grade 3 & Grade 4 & Grade 5 & Grade \\
\hline Base Rate & & & & & & & & \\
\hline Overall Classi & ation Rate & & & & & & & \\
\hline Sensitivity & & & & & & & & \\
\hline Specificity & & & & & & & & \\
\hline False Positive & & & & & & & & \\
\hline False Negative & & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Statistics & & Grade 3 & Grade 4 & Grade 5 & Grade \\
\hline \multicolumn{6}{|l|}{Positive Predictive Power} \\
\hline \multicolumn{6}{|l|}{Negative Predictive Power} \\
\hline Sample & Grade 3 & Grade 4 & Grad & & Grade \\
\hline Date & & & Sprin & 2016 for 3-8 & \\
\hline \multicolumn{6}{|l|}{Sample Size} \\
\hline Geographic Representation & & & Mid & Atlantic (NY) & \\
\hline \multicolumn{6}{|l|}{Male} \\
\hline \multicolumn{6}{|l|}{Female} \\
\hline \multicolumn{6}{|l|}{Other} \\
\hline \multicolumn{6}{|l|}{Gender Unknown} \\
\hline \multicolumn{6}{|l|}{White, Non-Hispanic} \\
\hline \multicolumn{6}{|l|}{Black, Non-Hispanic} \\
\hline \multicolumn{6}{|l|}{Hispanic} \\
\hline \multicolumn{6}{|l|}{American Indian/Alaska Native} \\
\hline Other & & & & & \\
\hline Race / Ethnicity Unknown & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l} 
Sample & Grade 3 & Grade 4 & Grade 5 & Grade \\
\hline Low SES & & & & \\
\hline IEP or diagnosed disability & & & & \\
\hline English Language Learner & & & & \\
\hline
\end{tabular}

\section*{Reliability}
\begin{tabular}{|l|c|c|c|c|c|c|} 
Grade & Grade 3 & Grade 4 & Grade 5 & Grade 6 & Grade 7 & Grade 8 \\
\hline Rating & & & & & \\
\hline
\end{tabular}

\section*{Legend}

Convincing evidence
Partially convincing evidence
Unconvincing evidence
Data unavailable
\({ }^{\circ}\) Disaggregated data available
*Offer a justification for each type of reliability reported, given the type and purpose of the tool.

The i-Ready Diagnostic provides two types of reliability estimates: •IRT-based reliability measures such as the marginal reliability estimate and standard error of measurement. • Test-retest reliability coefficients. Marginal Reliability: Given that the i-Ready Diagnostic is a computer-adaptive assessment that does not have a fixed form, some traditional reliability estimates such as Cronbach's alpha are not an appropriate index for quantifying consistency or inconsistency in student performance. The IRT analogue to classical reliability is called marginal reliability, and operates on the variance of the theta scores and the average of the expected error variance. The marginal reliability uses the classical definition of reliability as proportion of variance in the total observed score due to true score under an IRT model (the i-Ready Diagnostic uses a Rasch model to be specific). Standard Error of Measurement (SEM): In an IRT model, SEMs are affected by factors such as how well the data fit the underlying model, student response consistency, student location on the ability continuum, match of items to student ability, and test length. Given the
adaptive nature of i-Ready and the wide difficulty range in the item bank, standard errors are expected to be low and very close to the theoretical minimum for the test of the given length. The theoretical minimum would be reached if each interim estimate of student ability is assessed by an item with difficulty matching perfectly to the student's ability estimated from previous items. Theoretical minimums are restricted by the number of items served in the assessment-the more items that are served up, the lower the SEM could potentially be. For mathematics, the minimum SEM for overall scores is 6.0. The Center also possesses graphical representations of the conditional standard errors of measurement (CSEM) that provide additional evidence of the precision with which i-Ready measures student ability across the operational score scale. In the context of model-based reliability analyses for computer adaptive tests, such as i Ready, CSEM plots permit test users to judge the relative precision of the estimate. These figures, which help contextualize the table of reliability analysis results, are available from the Center upon request.. Test-retest Reliability: The i-Ready Diagnostic is often used as an interim assessment, and students can take the assessment multiple times a year. Therefore, the test-retest reliability estimate is appropriate to provide stability estimates for the same students who took two Diagnostic tests.

\section*{*Describe the sample(s), including size and characteristics, for each reliability} analysis conducted.

Data for obtaining the marginal reliability and SEM was from the August and September administrations of the i-Ready Diagnostic from 2016 (reported in the 2016 i-Ready Diagnostic technical report). All students tested within the time-frame were included. Evidence of test-retest stability was assessed based on a sub-sample of students who, during the 2016-2017 school year, took iReady Diagnostic twice within the recommended 12-18-week testing window. The average testing interval is 106 days ( 15 weeks).
*Describe the analysis procedures for each reported type of reliability.
This marginal reliability uses the classical definition of reliability as proportion of variance in the total observed score due to true score. The true score variance is computed as the observed score variance minus the error variance (see equation below). \(\rho \_\theta=\left(\sigma_{-}(\theta-)^{\wedge} 2 \sigma_{-}^{-} E^{\wedge} 2\right) /\left(\sigma_{-} \theta^{\wedge} 2\right)\) where \(\rho \theta\) is the marginal reliability estimate, \(\sigma 2 \theta\) is the observed error variance of the ability estimate, \(\sigma^{-} E^{\wedge} 2\) is the observed average conditional error variance. Similar to a classical reliability coefficient, the marginal reliability estimate increases as the standard error decreases; it approaches 1 when the standard error approaches 0 . The observed score variance, the error variance, and SEM (the square root of the error variance) are obtained through WINSTEPS calibrations. One separate calibration was conducted for each grade. For testretest reliability, Pearson correlation coefficients were obtained between scores for the two Diagnostic tests. Correlations between the two Diagnostic tests were calculated. In lower grades where growth and variability are expected to be higher, test-retest correlations are expected to be relatively lower.
*In the table(s) below, report the results of the reliability analyses described above (e.g., internal consistency or inter-rater reliability coefficients).
\begin{tabular}{|c|c|c|c|c|c|}
\hline Type of Reliability & Age / Grade & n & Median Coefficient & \begin{tabular}{l}
95\% Confidence \\
Interval \\
Lower Bound
\end{tabular} & \begin{tabular}{l}
95\% Confidence \\
Interval \\
Upper Bound
\end{tabular} \\
\hline Marginal & Grade 3 & 376087 & 0.95 & & \\
\hline Test-retest & Grade 3 & 213324 & 0.825 & 0.824 & 0.827 \\
\hline Test-retest & Grade 4 & 214833 & 0.851 & 0.85 & 0.852 \\
\hline Marginal & Grade 4 & 366044 & 0.96 & & \\
\hline Marginal & Grade 5 & 366142 & 0.96 & & \\
\hline Test-retest & Grade 5 & 212796 & 0.865 & 0.864 & 0.866 \\
\hline Test-retest & Grade 6 & 160344 & 0.874 & 0.873 & 0.875 \\
\hline Marginal & Grade 6 & 276255 & 0.96 & & \\
\hline Marginal & Grade 7 & 254216 & 0.97 & & \\
\hline Test-retest & Grade 7 & 141754 & 0.872 & 0.871 & 0.874 \\
\hline Test-retest & Grade 8 & 130054 & 0.871 & 0.87 & 0.872 \\
\hline Marginal & Grade 8 & 238758 & 0.97 & & \\
\hline
\end{tabular}

Results from other forms of reliability analysis not compatible with above table format:
Manual cites other published reliability studies:
No
Provide citations for additional published studies.

Do you have reliability data that are disaggregated by gender, race/ethnicity, or other subgroups (e.g., English language learners, students with disabilities)? No
If yes, fill in data for each subgroup with disaggregated reliability data.
\(\left.\begin{array}{|l|l|l|l|l|l|}\begin{array}{l}\text { Type of } \\ \text { Reliability }\end{array} & \text { Subgroup } & \begin{array}{l}\text { Age } / \\ \text { Grade }\end{array} & n & \begin{array}{l}\text { Median } \\ \text { Coefficient }\end{array} & \begin{array}{l}\text { 95\% Confidence } \\ \text { Interval } \\ \text { Lower Bound }\end{array}\end{array} \begin{array}{l}\text { 95\% Confidence } \\ \text { Interval } \\ \text { Upper Bound }\end{array}\right\}\)

Results from other forms of reliability analysis not compatible with above table format:
Manual cites other published reliability studies:
Provide citations for additional published studies.

\section*{Validity}
\begin{tabular}{|l|c|c|c|c|c|c|} 
Grade & Grade 3 & Grade 4 & Grade 5 & Grade 6 & Grade 7 & Grade 8 \\
\hline Rating & & & & & & \\
\hline
\end{tabular}

Legend
Convincing evidence
Partially convincing evidence
Unconvincing evidence
Data unavailable
\({ }^{\text {d Disaggregated data available }}\)
*Describe each criterion measure used and explain why each measure is appropriate, given the type and purpose of the tool.

The internal structure of the i-Ready Diagnostic assessments is supported by the construct maps and the ordering of the skills addressed at different stages on the map. We recognize that coverage of skills and difficulty of items will overlap a fair amount across grades, as much material is reviewed from year to year. However, what should be apparent from the estimated item difficulties is that, generally, items measuring skills targeting lower levels of the map should be easier, and items measuring skills targeting higher levels of the map should be more difficult.
*Describe the sample(s), including size and characteristics, for each validity analysis conducted.

Active items in the current item pool for the 2016-2017 school year are included in the analysis for interval validity. The number of items per grade is listed in the table below.
*Describe the analysis procedures for each reported type of validity. Distributions of indicator difficulties by grade level provide further evidence of internal structure. The difficulty of an indicator corresponds to a \(67 \%\) probability of passing on the indicator characteristic curve aggregated across all items aligned to the indicator. The table below shows the average and standard deviation of indicator difficulties.
*In the table below, report the results of the validity analyses described above (e.g., concurrent or predictive validity, evidence based on response processes, evidence based on internal structure, evidence based on relations to other variables, and/or evidence based on consequences of testing), and the criterion measures.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Type of Validity & \begin{tabular}{l}
Age / \\
Grade
\end{tabular} & Test or Criterion & n & Median Coefficient & 95\% Confidence Interval Lower Bound & \begin{tabular}{l}
95\% Confidence \\
Interval \\
Upper Bound
\end{tabular} \\
\hline Predictive & Grade 3 & PARCC & 5969 & 0.78 & 0.77 & 0.79 \\
\hline Concurrent & Grade 3 & NC & 7662 & 0.818 & 0.81 & 0.825 \\
\hline Concurrent & Grade 3 & MS & 3483 & 0.842 & 0.832 & 0.851 \\
\hline Concurrent & Grade 3 & OH & 2429 & 0.807 & 0.793 & 0.82 \\
\hline Concurrent & Grade 4 & OH & 2151 & 0.818 & 0.804 & 0.832 \\
\hline Concurrent & Grade 4 & MS & 3750 & 0.855 & 0.847 & 0.864 \\
\hline Concurrent & Grade 4 & NC & 7686 & 0.819 & 0.812 & 0.827 \\
\hline Predictive & Grade 4 & PARCC & 6067 & 0.8 & 0.79 & 0.81 \\
\hline Predictive & Grade 5 & PARCC & 5899 & 0.81 & 0.8 & 0.82 \\
\hline Concurrent & Grade 5 & NC & 7208 & 0.821 & 0.813 & 0.828 \\
\hline Concurrent & Grade 5 & MS & 3481 & 0.842 & 0.832 & 0.851 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Type of Validity & \begin{tabular}{l}
Age / \\
Grade
\end{tabular} & Test or Criterion & n & Median Coefficient & \begin{tabular}{l}
95\% Confidence Interval \\
Lower Bound
\end{tabular} & \begin{tabular}{l}
95\% Confidence \\
Interval \\
Upper Bound
\end{tabular} \\
\hline Concurrent & Grade 5 & OH & 2183 & 0.839 & 0.826 & 0.851 \\
\hline Concurrent & Grade 6 & OH & 1241 & 0.847 & 0.83 & 0.862 \\
\hline Concurrent & Grade 6 & MS & 3570 & 0.85 & 0.841 & 0.859 \\
\hline Concurrent & Grade 6 & NC & 4829 & 0.828 & 0.819 & 0.836 \\
\hline Predictive & Grade 6 & PARCC & 4096 & 0.79 & 0.78 & 0.8 \\
\hline Predictive & Grade 7 & PARCC & 3913 & 0.8 & 0.79 & 0.81 \\
\hline Concurrent & Grade 7 & NC & 5578 & 0.817 & 0.808 & 0.825 \\
\hline Concurrent & Grade 7 & MS & 3104 & 0.843 & 0.832 & 0.853 \\
\hline Concurrent & Grade 7 & OH & 1114 & 0.821 & 0.801 & 0.839 \\
\hline Concurrent & Grade 8 & OH & 935 & 0.796 & 0.771 & 0.818 \\
\hline Concurrent & Grade 8 & MS & 2942 & 0.85 & 0.839 & 0.859 \\
\hline Concurrent & Grade 8 & NC & 5086 & 0.813 & 0.804 & 0.823 \\
\hline Predictive & Grade 8 & PARCC & 3146 & 0.79 & 0.77 & 0.8 \\
\hline
\end{tabular}

Results from other forms of validity analysis not compatible with above table format:

The table below shows evidence of internal validity represented by indicator difficulty. The mean and standard deviation, as well as the number of items are presented by grade. Results show that items targeting progressively higher grade levels are progressively more difficult, as indicated by the aggregate
difficulty of the indicator. Differences in item difficulties between the upper grades are less dramatic than such differences between the lower grades, which reflects the reality of student performance in the classroom. Type of Validity Age or Grade Indicator Difficulty (Mean) Indicator Difficulty (SD)
Number of Items Internal 3463.8020 .28306 Internal 4483.9624 .28354 Internal 5508.11 19.15 270 Internal 6521.8523 .29374 Internal 7546.38 15.59261 Internal 8548.8519 .72223

Manual cites other published reliability studies:
Provide citations for additional published studies.
Describe the degree to which the provided data support the validity of the tool.
The internal structure of the i-Ready Diagnostic assessments is supported by the construct maps and the ordering of the skills addressed at different stages on the map. Skills representing the lower levels on the construct map are those generally associated with items targeted at lower grade levels, and skills representing the higher levels on the map are ones generally associated with items targeted at higher grade levels.
Do you have validity data that are disaggregated by gender, race/ethnicity, or other subgroups (e.g., English language learners, students with disabilities)? If yes, fill in data for each subgroup with disaggregated validity data.
\begin{tabular}{|l|l|l|l|l|l|l|} 
& & \\
\begin{tabular}{l} 
Type of \\
Validity
\end{tabular} & Subgroup & \begin{tabular}{l} 
Age / \\
Grade
\end{tabular} & \begin{tabular}{l} 
Test or \\
Criterion
\end{tabular} & \(n\) & \begin{tabular}{l} 
95\% Confidence
\end{tabular} & \begin{tabular}{l} 
95\% Confidence \\
Interval \\
Coefficient
\end{tabular} \\
Interval \\
Lower Bound
\end{tabular}\(\quad\)\begin{tabular}{l} 
Upper Bound
\end{tabular}

Results from other forms of validity analysis not compatible with above table format:
Manual cites other published reliability studies:
No
Provide citations for additional published studies.

\section*{Bias Analysis}
\begin{tabular}{|l|l|l|l|l|l|l|} 
Grade & Grade 3 & Grade 4 & Grade 5 & Grade 6 & Grade 7 & Grade 8 \\
\hline Rating & Yes & Yes & Yes & Yes & Yes & Yes \\
\hline
\end{tabular}

Have you conducted additional analyses related to the extent to which your tool is or is not biased against subgroups (e.g., race/ethnicity, gender, socioeconomic status, students with disabilities, English language learners)? Examples might include Differential Item Functioning (DIF) or invariance testing in multiple-group confirmatory factor models.

Yes
If yes,
a. Describe the method used to determine the presence or absence of bias:

Differential Item Function (DIF) was investigated using WINSTEPS® by comparing the item difficulty measure for two demographic categories in a pairwise comparison through a combined calibration analysis. The essence of this methodology is to investigate the interaction of the person-groups with each item, while fixing all other item and person measures to those from the combined calibration. The method used to detect DIF is based on the MantelHaenszel procedure (MH), and the work of Linacre \& Wright (1989) and Linacre (2012). Typically, the group representing test takers in a specific demographic group is referred to as the focal group. The group made up of test takers from outside this group is referred to as the reference group. For example, for gender, Female is the focal group, and Male is the reference group.

\section*{b. Describe the subgroups for which bias analyses were conducted:}

The latest large-scale DIF analysis included a random sample ( \(10 \%\) ) of students from the 2015-2016 i-Ready operational data. Given the large size of the 2015-2016 i-Ready student population, it is practical to carry out the calibration analysis with a random sample. The following demographic categories were compared: Female vs. Male; African American and Hispanic vs. Caucasian; English Learner vs. non-English Learner; Special Ed vs. General Ed; Economically Disadvantaged vs. Not Economically Disadvantaged. In each pairwise comparison, estimates of item difficulty for each category in the comparison were calculated.
c. Describe the results of the bias analyses conducted, including data and interpretative statements. Include magnitude of effect (if available) if bias has been identified.

Active items in the current item pool for the 2016-2017 school year are included in the DIF analysis. The total numbers of items are 3103 for Mathematics. WINSTEPS (Version 3.92) was used to conduct the calibration for DIF analysis by grade. To help interpret the results, the Educational Testing Service (ETS) criteria using the delta method was used to categorize DIF (Zwick, Thayer, \& Lewis, 1999) and is presented. The number and percentage of items exhibiting DIF for each of the demographic categories are reported in the table below. It should be noted that not all students have individual demographic information and the total number of items for two exclusive groups in the categories does not necessarily equal to the total number of items. It is clear that the majority of ELA items show negligible DIF (mostly more than 90 percent), and very few items (less than 6 percent) are showing large DIF (level C) by grade.

\section*{Technical Standards - i-Ready Reading}

\section*{Classification Accuracy \& Cross-Validation Summary}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline Grade & Kindergart en & Grad e 1 & Grad e 2 & Grad e 3 & Grad e 4 & Grad e 5 & Grad e 6 & Grad e 7 & Grad e 8 \\
\hline \begin{tabular}{l}
Classificati \\
on \\
Accuracy \\
Fall
\end{tabular} &  &  &  &  &  &  &  &  & \\
\hline \begin{tabular}{l}
Classificati \\
on \\
Accuracy \\
Winter
\end{tabular} & \(\square\) & \(\square\) &  &  &  &  &  &  & \\
\hline \begin{tabular}{l}
Classificati \\
on \\
Accuracy Spring
\end{tabular} & \(\bigcirc\) & \(\square\) &  &  &  &  &  &  & \\
\hline
\end{tabular}

Legend
Convincing evidence
Partially convincing evidence
Unconvincing evidence
- Data unavailable
\({ }^{\circ}\) Disaggregated data available

\section*{SBAC}

\section*{Classification Accuracy}

Select time of year
F Fall
\(\sqrt{v}\) Winter

Spring
Describe the criterion (outcome) measure(s) including the degree to which it/they is/are independent from the screening measure.

The percentile scores defined by 2016 SBAC assessments are used to classify students at grade 3-8. Students who were below 30th percentile on the SBAC test were classified as at-risk and students who were at or above 30th percentile were classified as no-risk.
Do the classification accuracy analyses examine concurrent and/or predictive classification?
ᄃ
Concurrent
ᄃ
Predictive
Describe when screening and criterion measures were administered and provide a justification for why the method(s) you chose (concurrent and/or predictive) is/are appropriate for your tool.
Describe how the classification analyses were performed and cut-points determined. Describe how the cut points align with students at-risk. Please indicate which groups were contrasted in your analyses (e.g., low risk students versus high risk students, low risk students versus moderate risk students).

The i-Ready cut scores were determined at the 20th percentile for each grade level using the i-Ready National Norms. Using these cut scores, students were identified as at-risk if they were below the 20th percentile on the fall i-Ready Diagnostic test or no-risk if they scored at or above the cut. Classification indices between at-risk/no-risk on i-Ready and at-risk/no-risk on the SBAC assessment are calculated per the formulas in the classification worksheet.
Were the children in the study/studies involved in an intervention in addition to typical classroom instruction between the screening measure and outcome assessment?

No
If yes, please describe the intervention, what children received the intervention, and how they were chosen.

\section*{Cross-Validation}

Has a cross-validation study been conducted?
No
If yes, Select time of year.

Fall
\(\ulcorner\) Winter
\(\ulcorner\) Spring

Describe the criterion (outcome) measure(s) including the degree to which it/they is/are independent from the screening measure.
Do the cross-validation analyses examine concurrent and/or predictive classification?
Г
Concurrent
\(\ulcorner\) Predictive
Describe when screening and criterion measures were administered and provide a justification for why the method(s) you chose (concurrent and/or predictive) is/are appropriate for your tool.
Describe how the cross-validation analyses were performed and cut-points determined. Describe how the cut points align with students at-risk. Please indicate which groups were contrasted in your analyses (e.g., low risk students versus high risk students, low risk students versus moderate risk students). Were the children in the study/studies involved in an intervention in addition to typical classroom instruction between the screening measure and outcome assessment?
If yes, please describe the intervention, what children received the intervention, and how they were chosen.

\section*{DIBELS NEXT}

\section*{Classification Accuracy}

Select time of year
F Fall
\(\sqrt{v}\) Winter
\(\sqrt{V}\) Spring
Describe the criterion (outcome) measure(s) including the degree to which it/they is/are independent from the screening measure.

The scores of DIBELS assessment are used to classify students at grade K-2. Students who were below the level of "Likely to Receive Intensive Support" were classified as at-risk and students who were at or above that cut score were classified as no-risk.
Do the classification accuracy analyses examine concurrent and/or predictive classification?
ᄃ
Concurrent
\(\ulcorner\) Predictive

Describe when screening and criterion measures were administered and provide a justification for why the method(s) you chose (concurrent and/or predictive) is/are appropriate for your tool.
Describe how the classification analyses were performed and cut-points determined. Describe how the cut points align with students at-risk. Please indicate which groups were contrasted in your analyses (e.g., low risk students versus high risk students, low risk students versus moderate risk students).

The i-Ready cut scores were determined at the 20th percentile for each grade level using the i-Ready National Norms. Using these cut scores, students were identified as at-risk if they were below the 20th percentile on the fall i-Ready Diagnostic test or no-risk if they scored at or above the cut.
Were the children in the study/studies involved in an intervention in addition to typical classroom instruction between the screening measure and outcome assessment?

No
If yes, please describe the intervention, what children received the intervention, and how they were chosen.

\section*{Cross-Validation}

\section*{Has a cross-validation study been conducted?}

Yes
If yes, Select time of year.
- Fall

V Winter
\({ }^{-}\)Spring
Describe the criterion (outcome) measure(s) including the degree to which it/they is/are independent from the screening measure.

K-2: Selected scale scores of DIBELS assessments are used to classify students at grade K-2. Specifically, for grades 1 and 2, students who were below the level of "Likely to Receive Intensive Support" were classified as atrisk and students who were at or above that cut score were classified as norisk. For Kindergarten, consistent with Curriculum Associates' guidance on screening, a higher DIBELS score is used to guard against incorrectly identifying students in need of intervention as being sufficiently proficient
Do the cross-validation analyses examine concurrent and/or predictive classification?

Concurrent
\(\ulcorner\) Predictive

Describe when screening and criterion measures were administered and provide a justification for why the method(s) you chose (concurrent and/or predictive) is/are appropriate for your tool.
Describe how the cross-validation analyses were performed and cut-points determined. Describe how the cut points align with students at-risk. Please indicate which groups were contrasted in your analyses (e.g., low risk students versus high risk students, low risk students versus moderate risk students). The i-Ready cut scores were determined at the 20th percentile for each grade level using the on i-Ready National Norms. Using these cut scores, students were identified as at-risk if they were below the 20th percentile in the fall iReady Diagnostic test or no-risk if they scored at or above the cut. Classification indices between the at-risk/no-risk on i-Ready and at-risk/no-risk on the NYS assessment are calculated per the formulas in the classification worksheet. AUC values are calculated using the Risk/No-Risk categories on the criterion (outcome) measure as the dependent variable and the i-Ready score as the independent variable.
Were the children in the study/studies involved in an intervention in addition to typical classroom instruction between the screening measure and outcome assessment?

No
If yes, please describe the intervention, what children received the intervention, and how they were chosen.

\section*{New York State Testing Program (NYSTP)}

\section*{Classification Accuracy}

Select time of year

Describe the criterion (outcome) measure(s) including the degree to which it/they is/are independent from the screening measure.

3-8: The estimated 30th percentile scores based on the publicly released
percentile score ranges are used to classify students. Students who were below the grade-level cut scores on the NYS test were classified as at-risk and students who were at or above the cut scores were classified as no-risk.
Do the classification accuracy analyses examine concurrent and/or predictive classification?

Concurrent
ᄃ
Predictive
Describe when screening and criterion measures were administered and provide a justification for why the method(s) you chose (concurrent and/or predictive) is/are appropriate for your tool.
Describe how the classification analyses were performed and cut-points determined. Describe how the cut points align with students at-risk. Please indicate which groups were contrasted in your analyses (e.g., low risk students versus high risk students, low risk students versus moderate risk students).

The i-Ready cut scores were determined at the 20th percentile for each grade level using the on i-Ready National Norms. Using these cut scores, students were identified as at-risk if they were below the 20th percentile in the fall iReady Diagnostic test or no-risk if they scored at or above the cut.
Classification indices between the at-risk/no-risk on i-Ready and at-risk/no-risk on the NYS assessment are calculated per the formulas in the classification worksheet. AUC values are calculated using the Risk/No-Risk categories on the criterion (outcome) measure as the dependent variable and the i-Ready score as the independent variable.
Were the children in the study/studies involved in an intervention in addition to typical classroom instruction between the screening measure and outcome assessment?

No
If yes, please describe the intervention, what children received the intervention, and how they were chosen.

\section*{Cross-Validation}

Has a cross-validation study been conducted?
No
If yes, Select time of year.
```

Fall

```
\(\ulcorner\) Winter
「
Spring
Describe the criterion (outcome) measure(s) including the degree to which it/they is/are independent from the screening measure.
Do the cross-validation analyses examine concurrent and/or predictive classification?

Concurrent
\(\ulcorner\) Predictive

Describe when screening and criterion measures were administered and provide a justification for why the method(s) you chose (concurrent and/or predictive) is/are appropriate for your tool.
Describe how the cross-validation analyses were performed and cut-points determined. Describe how the cut points align with students at-risk. Please indicate which groups were contrasted in your analyses (e.g., low risk students versus high risk students, low risk students versus moderate risk students). Were the children in the study/studies involved in an intervention in addition to typical classroom instruction between the screening measure and outcome assessment?
If yes, please describe the intervention, what children received the intervention, and how they were chosen.

\section*{Classification Accuracy - Fall}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline Evidence & Kindergarten & Grade 1 & Grade 2 & \[
\begin{aligned}
& \text { Grade } \\
& 3
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& 4
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& 5
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& 6
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& 7
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& \mathbf{8}
\end{aligned}
\] \\
\hline Criterion measure & DIBELS NEXT & DIBELS NEXT & DIBELS NEXT & SBAC & SBAC & SBAC & SBAC & SBAC & SBAC \\
\hline Cut Points - Percentile rank on criterion measure & & & & & & & & & \\
\hline Cut Points - Performance score on criterion measure & & & & & & & & & \\
\hline \begin{tabular}{l}
Cut Points - \\
Corresponding performance score (numeric) on screener measure
\end{tabular} & 328.00 & 370.00 & 421.00 & 463 & 486 & 509 & 528 & 542 & 555 \\
\hline Classification Data - True Positive (a) & & & & & & & & & \\
\hline \begin{tabular}{l}
Classification Data - False \\
Positive (b)
\end{tabular} & & & & & & & & & \\
\hline Classification Data - False Negative (c) & & & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Evidence & Kindergarten & Gra & de 1 & Grade 2 & \[
\begin{aligned}
& \text { Grade } \\
& 3
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& \mathbf{4}
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& 5
\end{aligned}
\] & Grade 6 & \[
\begin{aligned}
& \text { Grade } \\
& 7
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& 8
\end{aligned}
\] & & \\
\hline \begin{tabular}{l}
Classification Data - T \\
Negative (d)
\end{tabular} & & & & & & & & & & & & \\
\hline Area Under the Curve (AUC) & 0.75 & 0.87 & & 0.93 & 0.93 & 0.94 & 0.94 & 0.94 & 0.94 & 0.94 & & \\
\hline AUC Estimate's 95\% Confidence Interval: Lower Bound & 0.72 & 0.85 & & 0.92 & 0.93 & 0.93 & 0.94 & 0.94 & 0.93 & 0.93 & & \\
\hline AUC Estimate's 95\% Confidence Interval: Upper Bound & 0.78 & 0.89 & & 0.94 & 0.94 & 0.93 & 0.95 & 0.95 & 0.94 & 0.95 & & \\
\hline Statistics & & & Kind & rgarten & Grade 1 & Grad & & Grade 3 & Grade 4 & & Grade 5 & Grade \\
\hline Base Rate & & & & & & & & & & & & \\
\hline Overall Classification & & & & & & & & & & & & \\
\hline Sensitivity & & & & & & & & & & & & \\
\hline Specificity & & & & & & & & & & & & \\
\hline False Positive Rate & & & & & & & & & & & & \\
\hline False Negative Rate & & & & & & & & & & & & \\
\hline Positive Predictive Pow & & & & & & & & & & & & \\
\hline Negative Predictive Po & & & & & & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Sample & Kindergarten & Grade 1 & Grade 2 & Grade 3 & Grade 4 & Grade 5 & Grade 6 \\
\hline Date & 2016-2017 & 2016-2017 & 2016-2017 & Spring 2016 & Spring 2016 & Spring 2016 & Spring 2 \\
\hline Sample Size & & & & & & & \\
\hline Geographic Representation & & & & & & & \\
\hline Male & & & & & & & \\
\hline Female & & & & & & & \\
\hline Other & & & & & & & \\
\hline Gender Unknown & & & & & & & \\
\hline White, Non-Hispanic & & & & & & & \\
\hline Black, Non-Hispanic & & & & & & & \\
\hline Hispanic & & & & & & & \\
\hline American Indian/Alaska Native & & & & & & & \\
\hline Other & & & & & & & \\
\hline Race / Ethnicity Unknown & & & & & & & \\
\hline Low SES & & & & & & & \\
\hline IEP or diagnosed disability & & & & & & & \\
\hline English Language Learner & & & & & & & \\
\hline
\end{tabular}

\section*{Classification Accuracy - Winter}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline Evidence & Kindergarten & Grade 1 & Grade 2 & Grade & \[
\begin{aligned}
& \text { Grade } \\
& 4
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& 5
\end{aligned}
\] & Grade
\[
6
\] & \[
\begin{aligned}
& \text { Grade } \\
& 7
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& \mathbf{8}
\end{aligned}
\] \\
\hline Criterion measure & DIBELS NEXT & DIBELS NEXT & DIBELS NEXT & SBAC & SBAC & SBAC & SBAC & SBAC & SBAC \\
\hline Cut Points - Percentile rank on criterion measure & & & & & & & & & \\
\hline Cut Points - Performance score on criterion measure & & & & & & & & & \\
\hline \begin{tabular}{l}
Cut Points - \\
Corresponding performance score (numeric) on screener measure
\end{tabular} & 347 & 397 & 444 & 480 & 500 & 520 & 539 & 550 & 562 \\
\hline \begin{tabular}{l}
Classification Data - True \\
Positive (a)
\end{tabular} & & & & & & & & & \\
\hline Classification Data - False Positive (b) & & & & & & & & & \\
\hline Classification Data - False Negative (c) & & & & & & & & & \\
\hline Classification Data - True Negative (d) & & & & & & & & & \\
\hline Area Under the Curve (AUC) & & & 0.93 & 0.93 & 0.94 & 0.93 & 0.94 & 0.93 & 0.93 \\
\hline AUC Estimate's 95\% Confidence Interval: Lower Bound & & & 0.92 & 0.93 & 0.94 & 0.93 & 0.93 & 0.92 & 0.93 \\
\hline AUC Estimate's 95\% Confidence Interval: Upper Bound & & & 0.95 & 0.94 & 0.95 & 0.94 & 0.93 & 0.93 & 0.94 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Statistics & Kindergarte & n Grade 1 & Grade 2 & Grade 3 & Grade 4 & Grade 5 & Grade \\
\hline Base Rate & & & & & & & \\
\hline Overall Classification Rate & & & & & & & \\
\hline Sensitivity & & & & & & & \\
\hline Specificity & & & & & & & \\
\hline False Positive Rate & & & & & & & \\
\hline False Negative Rate & & & & & & & \\
\hline Positive Predictive Power & & & & & & & \\
\hline Negative Predictive Power & & & & & & & \\
\hline Sample & Kindergarten & Grade 1 & Grade 2 & Grade 3 & Grade 4 & Grade 5 & Grade 6 \\
\hline Date & Spring, 2017 & Spring, 2017 & Spring 2017 & Spring 2016 & Spring 2016 & Spring 2016 & Spring 2 \\
\hline Sample Size & & & & & & & \\
\hline Geographic Representation & & & & & & & \\
\hline Male & & & & & & & \\
\hline Female & & & & & & & \\
\hline Other & & & & & & & \\
\hline Gender Unknown & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Sample & Kindergarten & Grade 1 & Grade 2 & Grade 3 & Grade 4 & Grade 5 & Grade 6 \\
\hline White, Non-Hispanic & & & & & & & \\
\hline Black, Non-Hispanic & & & & & & & \\
\hline Hispanic & & & & & & & \\
\hline American Indian/Alaska Native & & & & & & & \\
\hline Other & & & & & & & \\
\hline Race / Ethnicity Unknown & & & & & & & \\
\hline Low SES & & & & & & & \\
\hline IEP or diagnosed disability & & & & & & & \\
\hline English Language Learner & & & & & & & \\
\hline
\end{tabular}

\section*{Classification Accuracy - Spring}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline Evidence & Kindergarten & Grade 1 & Grade 2 & \[
\begin{aligned}
& \text { Grade } \\
& 3
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& 4
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& \mathbf{5}
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& \mathbf{6}
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& 7
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& 8
\end{aligned}
\] \\
\hline Criterion measure & \[
\begin{aligned}
& \text { DIBELS } \\
& \text { NEXT }
\end{aligned}
\] & DIBELS NEXT & DIBELS NEXT & SBAC & SBAC & SBAC & SBAC & SBAC & SBAC \\
\hline Cut Points - Percentile rank on criterion measure & & & & & & & & & \\
\hline Cut Points - Performance score on criterion measure & & & & & & & & & \\
\hline Cut Points Corresponding performance score & 367 & 416 & 464 & 491 & 505 & 526 & 543 & 553 & 567 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Evidence & Kindergarten & Grade 1 & Grade 2 & \[
\begin{aligned}
& \text { Grade } \\
& 3
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& \mathbf{4}
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& 5
\end{aligned}
\] & \[
\begin{aligned}
& \text { Grade } \\
& 6
\end{aligned}
\] & Grade & \[
\begin{aligned}
& \text { Grade } \\
& \mathbf{8}
\end{aligned}
\] & & \\
\hline (numeric) on screener measure & & & & & & & & & & & \\
\hline \begin{tabular}{l}
Classification Data - True \\
Positive (a)
\end{tabular} & & & & & & & & & & & \\
\hline Classification Data - False Positive (b) & & & & & & & & & & & \\
\hline Classification Data - False Negative (c) & & & & & & & & & & & \\
\hline Classification Data - True Negative (d) & & & & & & & & & & & \\
\hline Area Under the Curve (AUC) & 0.80 & & 0.92 & 0.94 & 0.95 & 0.94 & 0.94 & 0.93 & 0.93 & & \\
\hline AUC Estimate's 95\% Confidence Interval: Lower Bound & 0.77 & & 0.90 & 0.94 & 0.94 & 0.93 & 0.94 & 0.92 & 0.92 & & \\
\hline AUC Estimate's 95\% Confidence Interval: Upper Bound & 0.83 & & 0.93 & 0.95 & 0.95 & 0.93 & 0.95 & 0.93 & 0.94 & & \\
\hline Statistics & & Kind & rgarten & Grade 1 & Grad & & Grade 3 & Grad & & Grade 5 & Grade \\
\hline Base Rate & & & & & & & & & & & \\
\hline Overall Classification Rate & & & & & & & & & & & \\
\hline Sensitivity & & & & & & & & & & & \\
\hline Specificity & & & & & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Statistics & Kindergarten & Grade 1 & Grade 2 & Grade 3 & Grade 4 & Grade 5 & Grade \\
\hline False Positive Rate & & & & & & & \\
\hline False Negative Rate & & & & & & & \\
\hline Positive Predictive Power & & & & & & & \\
\hline Negative Predictive Power & & & & & & & \\
\hline Sample & Kindergarten & Grade 1 & Grade 2 & Grade 3 & Grade 4 & Grade 5 & Grade 6 \\
\hline Date & Spring 2016 & Spring 2016 & Spring 2016 & Spring 2016 & Spring 2016 & Spring 2016 & Spring 2 \\
\hline Sample Size & & & & & & & \\
\hline Geographic Representation & & & & & & & \\
\hline Male & & & & & & & \\
\hline Female & & & & & & & \\
\hline Other & & & & & & & \\
\hline Gender Unknown & & & & & & & \\
\hline White, Non-Hispanic & & & & & & & \\
\hline Black, Non-Hispanic & & & & & & & \\
\hline Hispanic & & & & & & & \\
\hline American Indian/Alaska Native & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|l|l|l|} 
Sample & Kindergarten & Grade 1 & Grade 2 & Grade 3 & Grade 4 & Grade 5 & Grade 6 \\
\hline Other & & & & & & & \\
\hline Race / Ethnicity Unknown & & & & & & & \\
\hline Low SES & & & & & & & \\
\hline IEP or diagnosed disability & & & & & & & \\
\hline English Language Learner & & & & & & & \\
\hline
\end{tabular}

\section*{Cross-Validation - Fall}
\begin{tabular}{|l|l|l|l|} 
Evidence & Kindergarten & Grade 1 & Grade 2 \\
Criterion measure & \begin{tabular}{l} 
DIBELS \\
NEXT
\end{tabular} & \begin{tabular}{l} 
DIBELS \\
NEXT
\end{tabular} & \begin{tabular}{l} 
DIBELS \\
NEXT
\end{tabular} \\
\hline Cut Points - Percentile rank on criterion measure & 20 & 20 & 20 \\
\hline Cut Points - Performance score on criterion measure & 328.00 & 370.00 & 421.00 \\
\hline Cut Points - Corresponding performance score (numeric) on screener measure & & & \\
\hline Classification Data - True Positive (a) & & & \\
\hline Classification Data - False Positive (b) & & & \\
\hline Classification Data - False Negative (c) & & & \\
\hline Classification Data - True Negative (d) & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Evidence & Kindergarten & Grade 1 & Grade 2 & \\
\hline AUC Estimate's 95\% Confidence Interval: Lower Bound & 0.71 & 0.87 & 0.94 & \\
\hline AUC Estimate's 95\% Confidence Interval: Upper Bound & 0.74 & 0.89 & 0.95 & \\
\hline Statistics & & & & Kinderga \\
\hline Base Rate & & & & \\
\hline Overall Classification Rate & & & & \\
\hline Sensitivity & & & & \\
\hline Specificity & & & & \\
\hline False Positive Rate & & & & \\
\hline False Negative Rate & & & & \\
\hline Positive Predictive Power & & & & \\
\hline Negative Predictive Power & & & & \\
\hline Sample & & & & Kinderga \\
\hline Date & & & & 2016-201 \\
\hline Sample Size & & & & \\
\hline Geographic Representation & & & & \\
\hline Male & & & & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|}
\hline Sample & & Kinderga \\
\hline Female & & \\
\hline Other & & \\
\hline Gender Unknown & & \\
\hline White, Non-Hispanic & & \\
\hline Black, Non-Hispanic & & \\
\hline Hispanic & & \\
\hline American Indian/Alaska Native & & \\
\hline Other SES & & \\
\hline
\end{tabular}

\section*{Cross-Validation - Winter}
\begin{tabular}{|l|l|l|l|} 
Evidence & Kindergarten & Grade 1 & Grade 2 \\
\hline Criterion measure & \begin{tabular}{l} 
DIBELS \\
NEXT
\end{tabular} & \begin{tabular}{l} 
DIBELS \\
NEXT
\end{tabular} & \begin{tabular}{l} 
DIBELS \\
NEXT
\end{tabular} \\
\hline Cut Points - Percentile rank on criterion measure & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Evidence & Kindergarten & Grade 1 & Grade 2 & \\
\hline Cut Points - Performance score on criterion measure & & & & \\
\hline Cut Points - Corresponding performance score (numeric) on screener measure & 347 & 397 & 444 & \\
\hline Classification Data - True Positive (a) & & & & \\
\hline Classification Data - False Positive (b) & & & & \\
\hline Classification Data - False Negative (c) & & & & \\
\hline Classification Data - True Negative (d) & & & & \\
\hline Area Under the Curve (AUC) & & & 0.95 & \\
\hline AUC Estimate's 95\% Confidence Interval: Lower Bound & & & 0.94 & \\
\hline AUC Estimate's 95\% Confidence Interval: Upper Bound & & & 0.95 & \\
\hline Statistics & & & & Kinderga \\
\hline Base Rate & & & & \\
\hline Overall Classification Rate & & & & \\
\hline Sensitivity & & & & \\
\hline Specificity & & & & \\
\hline False Positive Rate & & & & \\
\hline False Negative Rate & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline Statistics & Kinderga \\
\hline Positive Predictive Power & \\
\hline Negative Predictive Power & \\
\hline Sample & Kinderga \\
\hline Date & Spring 20 \\
\hline Sample Size & \\
\hline Geographic Representation & \\
\hline Male & \\
\hline Female & \\
\hline Other & \\
\hline Gender Unknown & \\
\hline White, Non-Hispanic & \\
\hline Black, Non-Hispanic & \\
\hline Hispanic & \\
\hline American Indian/Alaska Native & \\
\hline Other & \\
\hline Race / Ethnicity Unknown & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l} 
Sample & Kinderga \\
\hline Low SES & & \\
\hline IEP or diagnosed disability & & \\
\hline English Language Learner & \\
\hline
\end{tabular}

\section*{Cross-Validation - Spring}
\begin{tabular}{|l|l|l|l|} 
Evidence & Kindergarten & Grade 1 & Grade 2 \\
\hline Criterion measure & \begin{tabular}{l} 
DIBELS \\
NEXT
\end{tabular} & \begin{tabular}{l} 
DIBELS \\
NEXT
\end{tabular} & \begin{tabular}{l} 
DIBELS \\
NEXT
\end{tabular} \\
\hline Cut Points - Percentile rank on criterion measure & & & \\
\hline Cut Points - Performance score on criterion measure & & & \\
\hline Cut Points - Corresponding performance score (numeric) on screener measure & 367 & 416 & 464 \\
\hline Classification Data - True Positive (a) & & & \\
\hline Classification Data - False Positive (b) & & & \\
\hline Classification Data - False Negative (c) & & & \\
\hline AUCa Under the Curve (AUC) & & & \\
\hline Classification Data - True Negative (d) & 0.73 & 0.94 \\
\hline & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline Statistics & Kinderga \\
\hline Base Rate & \\
\hline Overall Classification Rate & \\
\hline Sensitivity & \\
\hline Specificity & \\
\hline False Positive Rate & \\
\hline False Negative Rate & \\
\hline Positive Predictive Power & \\
\hline Negative Predictive Power & \\
\hline Sample & Kinderga \\
\hline Date & Spring 20 \\
\hline Sample Size & \\
\hline Geographic Representation & \\
\hline Male & \\
\hline Female & \\
\hline Other & \\
\hline Gender Unknown & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l} 
Sample & & Kindergal \\
\hline White, Non-Hispanic & & \\
\hline Black, Non-Hispanic & & \\
\hline Hispanic & & \\
\hline American Indian/Alaska Native & & \\
\hline Other & & \\
\hline Race / Ethnicity Unknown & & \\
\hline Low SES & & \\
\hline English Language Learner & & \\
\hline
\end{tabular}

\section*{Reliability}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline Grade & \begin{tabular}{l}
Kindergarte \\
n
\end{tabular} & \[
\begin{gathered}
\text { Grad } \\
\text { e } 1
\end{gathered}
\] & \[
\begin{gathered}
\text { Grad } \\
\text { e } 2
\end{gathered}
\] & \[
\begin{gathered}
\text { Grad } \\
\text { e } 3
\end{gathered}
\] & \[
\begin{gathered}
\text { Grad } \\
\text { e } 4
\end{gathered}
\] & \[
\begin{gathered}
\text { Grad } \\
\text { e } 5
\end{gathered}
\] & \[
\begin{gathered}
\text { Grad } \\
\text { e } 6
\end{gathered}
\] & \[
\begin{gathered}
\text { Grad } \\
\text { e } 7
\end{gathered}
\] & Grad e 8 \\
\hline Ratin g & & & d & & d & & & & \\
\hline \multicolumn{10}{|l|}{Legend} \\
\hline
\end{tabular}
*Offer a justification for each type of reliability reported, given the type and purpose of the tool.

The i-Ready Diagnostic provides two types of reliability estimates: • IRT-based reliability measures such as the marginal reliability estimate and standard error of measurement. • Test-retest reliability coefficients. Marginal Reliability: Given that the i-Ready Diagnostic is a computer-adaptive assessment that does not have a fixed form, some traditional reliability estimates such as Cronbach's alpha are not an appropriate index for quantifying consistency or inconsistency in student performance. The IRT analogue to classical reliability is called marginal reliability, and operates on the variance of the theta scores and the average of the expected error variance. The marginal reliability uses the classical definition of reliability as proportion of variance in the total observed score due to true score under an IRT model (the i-Ready Diagnostic uses a Rasch model to be specific). Standard Error of Measurement (SEM): In an IRT model, SEMs are affected by factors such as how well the data fit the underlying model, student response consistency, student location on the ability continuum, match of items to student ability, and test length. Given the adaptive nature of i-Ready and the wide difficulty range in the item bank, standard errors are expected to be low and very close to the theoretical minimum for the test of the given length. The theoretical minimum would be reached if each interim estimate of student ability is assessed by an item with difficulty matching perfectly to the student's ability estimated from previous items. Theoretical minimums are restricted by the number of items served in the assessment-the more items that are served up, the lower the SEM could potentially be. For ELA, the minimum SEM for overall scores is 8.9. The Center also possesses graphical representations of the conditional standard errors of measurement (CSEM) that provide additional evidence of the precision with which i-Ready measures student ability across the operational score scale. In the context of model-based reliability analyses for computer adaptive tests, such as i Ready, CSEM plots permit test users to judge the relative precision of the estimate. These figures, which help contextualize the table of reliability analysis results, are available from the Center upon request. Test-retest Reliability: The i-Ready Diagnostic is often used as an interim assessment, and students can take the assessment multiple times a year. Therefore, the testretest reliability estimate is appropriate to provide stability estimates for the same students who took two Diagnostic tests.
*Describe the sample(s), including size and characteristics, for each reliability analysis conducted.

Data for obtaining the marginal reliability and SEM was from the August and September administrations of the i-Ready Diagnostic from 2016 (reported in the 2016 i-Ready Diagnostic technical report). All students tested within the time-frame were included. Sample size by grade are presented in the table below. Evidence of test-retest stability was assessed based on a sub-sample of students who, during the 2016-2017 school year, took i-Ready Diagnostic twice within the recommended 12-18-week testing window. The average
testing interval is 106 days ( 15 weeks). Sample sizes by grade are presented in the table below .
*Describe the analysis procedures for each reported type of reliability. This marginal reliability uses the classical definition of reliability as proportion of variance in the total observed score due to true score. The true score variance is computed as the observed score variance minus the error variance (see equation below). \(\rho_{-} \theta=\left(\sigma \_(\theta-)^{\wedge} 2 \sigma_{-}^{-} \mathrm{E}^{\wedge} 2\right) /\left(\sigma_{-} \theta^{\wedge} 2\right)\) where \(\rho \theta\) is the marginal reliability estimate, \(\sigma 2 \theta\) is the observed error variance of the ability estimate, \(\sigma^{-} E^{\wedge} 2\) is the observed average conditional error variance. Similar to a classical reliability coefficient, the marginal reliability estimate increases as the standard error decreases; it approaches 1 when the standard error approaches 0 . The observed score variance, the error variance, and SEM (the square root of the error variance) are obtained through WINSTEPS calibrations. One separate calibration was conducted for each grade. For testretest reliability, Pearson correlation coefficients were obtained between scores for the two Diagnostic tests. Correlations between the two Diagnostic tests were calculated. In lower grades where growth and variability are expected to be higher, test-retest correlations are expected to be relatively lower.
*In the table(s) below, report the results of the reliability analyses described above (e.g., internal consistency or inter-rater reliability coefficients).
\begin{tabular}{|c|c|c|c|c|c|}
\hline Type of Reliability & Age / Grade & n & Median Coefficient & \begin{tabular}{l}
95\% Confidence Interval \\
Lower Bound
\end{tabular} & \begin{tabular}{l}
95\% Confidence \\
Interval \\
Upper Bound
\end{tabular} \\
\hline Marginal & Kindergarten & 184261 & 0.91 & & \\
\hline Test-retest & Kindergarten & 120194 & 0.701 & 0.698 & 0.704 \\
\hline Test-retest & Grade 1 & 166187 & 0.826 & 0.824 & 0.827 \\
\hline Marginal & Grade 1 & 287593 & 0.95 & & \\
\hline Marginal & Grade 2 & 323280 & 0.96 & & \\
\hline Test-retest & Grade 2 & 181997 & 0.852 & 0.85 & 0.853 \\
\hline Test-retest & Grade 3 & 209427 & 0.854 & 0.853 & 0.855 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Type of Reliability & Age / Grade & n & Median Coefficient & \(\mathbf{9 5 \%}\) Confidence Interval Lower Bound & \begin{tabular}{l}
\(\mathbf{9 5 \%}\) Confidence \\
Interval \\
Upper Bound
\end{tabular} \\
\hline Marginal & Grade 3 & 343103 & 0.97 & & \\
\hline Marginal & Grade 4 & 337854 & 0.97 & & \\
\hline Test-retest & Grade 4 & 204577 & 0.861 & 0.86 & 0.862 \\
\hline Test-retest & Grade 5 & 202922 & 0.862 & 0.861 & 0.863 \\
\hline Marginal & Grade 5 & 341292 & 0.97 & & \\
\hline Marginal & Grade 6 & 249454 & 0.97 & & \\
\hline Test-retest & Grade 6 & 144272 & 0.86 & 0.859 & 0.861 \\
\hline Test-retest & Grade 7 & 126128 & 0.855 & 0.853 & 0.856 \\
\hline Marginal & Grade 7 & 224530 & 0.97 & & \\
\hline Marginal & Grade 8 & 222503 & 0.97 & & \\
\hline Test-retest & Grade 8 & 119647 & 0.853 & 0.851 & 0.855 \\
\hline
\end{tabular}

Results from other forms of reliability analysis not compatible with above table format:
Manual cites other published reliability studies:
No
Provide citations for additional published studies.
Do you have reliability data that are disaggregated by gender, race/ethnicity, or other subgroups (e.g., English language learners, students with disabilities)?

Yes
If yes, fill in data for each subgroup with disaggregated reliability data.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Type of Reliability & Subgroup & Age / Grade & n & Median Coefficient & \begin{tabular}{l}
95\% Confidence \\
Interval \\
Lower Bound
\end{tabular} & \begin{tabular}{l}
95\% Confidence \\
Interval \\
Upper Bound
\end{tabular} \\
\hline Split-half & Asian & Grade 1 & 531 & 0.8 & & \\
\hline Split-half & African American & Grade 1 & 2665 & 0.75 & & \\
\hline Split-half & Hispanic & Grade 1 & 2246 & 0.77 & & \\
\hline Split-half & Asian & Grade 2 & 549 & 0.86 & & \\
\hline Split-half & African American & Grade 2 & 2990 & 0.81 & & \\
\hline Split-half & Hispanic & Grade 2 & 2289 & 0.79 & & \\
\hline Split-half & Asian & Grade 3 & 468 & 0.83 & & \\
\hline Split-half & African American & Grade 3 & 2881 & 0.8 & & \\
\hline Split-half & Hispanic & Grade 3 & 2269 & 0.8 & & \\
\hline Split-half & Asian & Grade 4 & 439 & 0.8 & & \\
\hline Split-half & African American & Grade 4 & 1977 & 0.77 & & \\
\hline Split-half & Hispanic & Grade 4 & 1577 & 0.76 & & \\
\hline Split-half & Asian & Grade 5 & 370 & 0.79 & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Type of Reliability & Subgroup & \begin{tabular}{l}
Age / \\
Grade
\end{tabular} & n & Median Coefficient & \begin{tabular}{l}
95\% Confidence Interval \\
Lower Bound
\end{tabular} & \begin{tabular}{l}
\(\mathbf{9 5 \%}\) Confidence \\
Interval \\
Upper Bound
\end{tabular} \\
\hline Split-half & African American & Grade 5 & 1612 & 0.78 & & \\
\hline Split-half & Hispanic & Grade 5 & 1249 & 0.79 & & \\
\hline Split-half & Asian & Grade 6 & 247 & 0.83 & & \\
\hline Split-half & African American & Grade 6 & 515 & 0.78 & & \\
\hline Split-half & Hispanic & Grade 6 & 639 & 0.74 & & \\
\hline Split-half & African American & Grade 7 & 254 & 0.76 & & \\
\hline Split-half & Hispanic & Grade 7 & 278 & 0.81 & & \\
\hline Split-half & African American & Grade 8 & 234 & 0.88 & & \\
\hline Split-half & Hispanic & Grade 8 & 198 & 0.83 & & \\
\hline
\end{tabular}

Results from other forms of reliability analysis not compatible with above table format:
Manual cites other published reliability studies:
No
Provide citations for additional published studies.

\section*{Validity}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline Grade & Kindergarte n & Grad e 1 & Grad e 2 & Grad e 3 & Grad e 4 & Grad e 5 & Grad e 6 & Grad e 7 & Grad e 8 \\
\hline \begin{tabular}{l}
Ratin \\
g
\end{tabular} &  & \(\bigcirc\) & \(\bigcirc\) & & & & & & \\
\hline
\end{tabular}

Legend
Convincing evidence
Partially convincing evidence
Unconvincing evidence
Data unavailable
\({ }^{\text {d Disaggregated data available }}\)
*Describe each criterion measure used and explain why each measure is appropriate, given the type and purpose of the tool.

The internal structure of the i-Ready Diagnostic assessments is supported by the construct maps and the ordering of the skills addressed at different stages on the map. We recognize that coverage of skills and difficulty of items will overlap a fair amount across grades, as much material is reviewed from year to year. However, what should be apparent from the estimated item difficulties is that, generally, items measuring skills targeting lower levels of the map should be easier, and items measuring skills targeting higher levels of the map should be more difficult.
*Describe the sample(s), including size and characteristics, for each validity analysis conducted.

Active items in the current item pool for the 2016-2017 school year are included in the analysis for interval validity. The number of items per grade is listed in the table below
*Describe the analysis procedures for each reported type of validity.
Distributions of indicator difficulties by grade level provide further evidence of internal structure. The difficulty of an indicator corresponds to a 67\% probability of passing on the Indicator Characteristic Curve aggregated across all items aligned to the indicator. The table below shows the average and standard deviation of indicator difficulties.
*In the table below, report the results of the validity analyses described above (e.g., concurrent or predictive validity, evidence based on response processes, evidence based on internal structure, evidence based on relations to other variables, and/or evidence based on consequences of testing), and the criterion measures.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Type of Validity & Age / Grade & Test or Criterion & n & Median Coefficient & 95\% Confidence Interval Lower Bound & \begin{tabular}{l}
95\% Confidence Interval \\
Upper Bound
\end{tabular} \\
\hline Concurrent/Predictive & Kindergarten & Lexile* & 840 & 0.88 & 0.86 & 0.89 \\
\hline Concurrent/Predictive & Grade 1 & Lexile* & 840 & 0.88 & 0.86 & 0.89 \\
\hline Concurrent/Predictive & Grade 2 & Lexile* & 840 & 0.88 & 0.86 & 0.89 \\
\hline Predictive & Grade 3 & PARCC & 5609 & 0.79 & 0.78 & 0.8 \\
\hline Concurrent & Grade 3 & NC & 7603 & 0.83 & 0.82 & 0.83 \\
\hline Concurrent & Grade 3 & MS & 3260 & 0.81 & 0.8 & 0.82 \\
\hline Concurrent & Grade 3 & OH & 3025 & 0.76 & 0.74 & 0.77 \\
\hline Concurrent & Grade 4 & OH & 2696 & 0.78 & 0.76 & 0.79 \\
\hline Concurrent & Grade 4 & MS & 3717 & 0.76 & 0.74 & 0.77 \\
\hline Concurrent & Grade 4 & NC & 7415 & 0.83 & 0.82 & 0.84 \\
\hline Predictive & Grade 4 & PARCC & 5881 & 0.82 & 0.81 & 0.82 \\
\hline Predictive & Grade 5 & PARCC & 5530 & 0.8 & 0.79 & 0.81 \\
\hline Concurrent & Grade 5 & NC & 7505 & 0.82 & 0.81 & 0.83 \\
\hline Concurrent & Grade 5 & MS & 3380 & 0.79 & 0.77 & 0.8 \\
\hline Concurrent & Grade 5 & OH & 2693 & 0.78 & 0.76 & 0.79 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Type of Validity & Age / Grade & Test or Criterion & n & Median Coefficient & \begin{tabular}{l}
\(\mathbf{9 5 \%}\) Confidence \\
Interval \\
Lower Bound
\end{tabular} & \begin{tabular}{l}
\(\mathbf{9 5 \%}\) Confidence \\
Interval \\
Upper Bound
\end{tabular} \\
\hline Concurrent & Grade 6 & OH & 1865 & 0.78 & 0.76 & 0.79 \\
\hline Concurrent & Grade 6 & MS & 3305 & 0.81 & 0.8 & 0.82 \\
\hline Concurrent & Grade 6 & NC & 5205 & 0.82 & 0.81 & 0.83 \\
\hline Predictive & Grade 6 & PARCC & 4022 & 0.79 & 0.78 & 0.8 \\
\hline Predictive & Grade 7 & PARCC & 3925 & 0.79 & 0.78 & 0.8 \\
\hline Concurrent & Grade 7 & NC & 5685 & 0.81 & 0.8 & 0.82 \\
\hline Concurrent & Grade 7 & MS & 2291 & 0.81 & 0.8 & 0.82 \\
\hline Concurrent & Grade 7 & OH & 1607 & 0.77 & 0.75 & 0.79 \\
\hline Concurrent & Grade 8 & OH & 1488 & 0.71 & 0.68 & 0.73 \\
\hline Concurrent & Grade 8 & MS & 2106 & 0.8 & 0.78 & 0.81 \\
\hline Concurrent & Grade 8 & NC & 5282 & 0.79 & 0.78 & 0.8 \\
\hline Predictive & Grade 8 & PARCC & 3721 & 0.78 & 0.77 & 0.8 \\
\hline
\end{tabular}

Results from other forms of validity analysis not compatible with above table format:
*Lexile grade-banded results are featured, rather than grade-specific results. The i-Ready Diagnostic reading scale scores are created on a vertical scale which makes the scale scores comparable across grades. Thus, for efficiency purposes, the linking sample for the Lexile study includes only students from every other grade (i.e., grades 1, 3, 5, and 7), but results are generalized across grades in various grade bands (e.g., K-2). Additional information on the

Lexile study, which was conducted in concert with MetaMetrics, is available upon request. The table below shows evidence of internal validity represented by indicator difficulty. The mean and standard deviation, as well as the number of items are presented by grade. Results show that items targeting progressively higher grade levels are progressively more difficult, as indicated by the aggregate difficulty of the indicator. Differences in item difficulties between the upper grades are less dramatic than such differences between the lower grades, which reflects the reality of student performance in the classroom. Validity Grade ID(Mean) ID (SD) Number of Items Internal K 383.48 29.65439 Internal 1440.7737 .41430 Internal 2502.6340 .37316 Internal 3 524.9733 .99302 Internal 4562.7121 .72225 Internal 5583.5419 .13224 Internal 6601.6017 .77244 Internal 7616.7719 .70253 Internal 8627.24 14.34253

Manual cites other published reliability studies:
No
Provide citations for additional published studies.
Describe the degree to which the provided data support the validity of the tool. The internal structure of the i-Ready Diagnostic assessments is supported by the construct maps and the ordering of the skills addressed at different stages on the map. Skills representing the lower levels on the construct map are those generally associated with items targeted at lower grade levels, and skills representing the higher levels on the map are ones generally associated with items targeted at higher grade levels.
Do you have validity data that are disaggregated by gender, race/ethnicity, or other subgroups (e.g., English language learners, students with disabilities)? If yes, fill in data for each subgroup with disaggregated validity data.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Type of Validity & Subgroup & Age / Grade & Test or Criterion & n & Median Coefficient & \begin{tabular}{l}
95\% Confidence \\
Interval \\
Lower Bound
\end{tabular} & \begin{tabular}{l}
95\% Confidence \\
Interval \\
Upper Bound
\end{tabular} \\
\hline
\end{tabular}

Results from other forms of validity analysis not compatible with above table format:
Manual cites other published reliability studies:
Provide citations for additional published studies.

\section*{Bias Analysis}
\begin{tabular}{|l|l|l|l|l|l|l|l|l|l|} 
Grade & \begin{tabular}{l} 
Kindergarte \\
n
\end{tabular} & \begin{tabular}{l} 
Grad \\
e1
\end{tabular} & \begin{tabular}{l} 
Grad \\
e2
\end{tabular} & \begin{tabular}{l} 
Grad \\
e 3
\end{tabular} & \begin{tabular}{l} 
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\end{tabular} & \begin{tabular}{l} 
Grad \\
e 5
\end{tabular} & \begin{tabular}{l} 
Grad \\
e 6
\end{tabular} & \begin{tabular}{l} 
Grad \\
e 7
\end{tabular} & \begin{tabular}{l} 
Grad \\
e8
\end{tabular} \\
\hline \begin{tabular}{l} 
Ratin
\end{tabular} & Yes & Yes & Yes & Yes & Yes & Yes & Yes & Yes & Yes \\
\hline
\end{tabular}

Have you conducted additional analyses related to the extent to which your tool is or is not biased against subgroups (e.g., race/ethnicity, gender, socioeconomic status, students with disabilities, English language learners)? Examples might include Differential Item Functioning (DIF) or invariance testing in multiple-group confirmatory factor models.

Yes
If yes,
a. Describe the method used to determine the presence or absence of bias: Differential Item Function (DIF) was investigated using WINSTEPS® by comparing the item difficulty measure for two demographic categories in a pairwise comparison through a combined calibration analysis. The essence of this methodology is to investigate the interaction of the person-groups with each item, while fixing all other item and person measures to those from the combined calibration. The method used to detect DIF is based on the MantelHaenszel procedure (MH), and the work of Linacre \& Wright (1989) and Linacre (2012). Typically, the group representing test takers in a specific demographic group is referred to as the focal group. The group made up of test takers from outside this group is referred to as the reference group. For example, for gender, Female is the focal group, and Male is the reference group.
b. Describe the subgroups for which bias analyses were conducted:

The latest large-scale DIF analysis included a random sample (10\%) of students from the 2015-2016 i-Ready operational data. Given the large size of the 2015-2016 i-Ready student population, it is practical to carry out the calibration analysis with a random sample. The following demographic categories were compared: Female vs. Male; African American and Hispanic vs. Caucasian; English Learner vs. non-English Learner; Special Ed vs. General Ed; Economically Disadvantaged vs. Not Economically Disadvantaged. In each pairwise comparison, estimates of item difficulty for each category in the comparison were calculated.
c. Describe the results of the bias analyses conducted, including data and interpretative statements. Include magnitude of effect (if available) if bias has been identified.

Active items in the current item pool for the 2016-2017 school year are included in the DIF analysis. The total numbers of items are 3649 for ELA. WINSTEPS (Version 3.92) was used to conduct the calibration for DIF analysis by grade. To help interpret the results, the Educational Testing Service (ETS) criteria using the delta method was used to categorize DIF (Zwick, Thayer, \& Lewis, 1999).

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Referianical Review Committees
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The Center's six Technical Review Committees are made up of national experts in academic and/or behavioral assessments and interventions and have strong methodological expertise.

\section*{TECHNICAL REVIEW COMMITTEES}
- Academic Screening TRC
- Academic Progress Monitoring TRC
- Academic Intervention TRC
- Behavior Screening TRC
- Behavior Progress Monitoring TRC
- Behavior Intervention TRC

\section*{Academic Screening TRC}

Selection criteria for the Academic Screening TRC were: (a) member has a background in measurement and strong methodological skills and (b) member has strong expertise related to academic screening. Special attention was paid to including members with expertise on culturally and linguistically diverse populations. Members of the Academic Screening TRC include:

Dr. Amy E. Barth is an Assistant Professor of Literacy at the Buena Vista University School of Education and Exercise Science. Dr. Barth's research and teaching focuses on reading and language development and preventing reading difficulties of at-risk children.

Dr. Hugh Catts is a Professor and Director of the School of Communication Science and Disorders at Florida State University. His research interests include the early identification and prevention of language-based reading disabilities. He is currently involved in three projects related to early identification of dyslexia and other reading/language disabilities. He is a past board member of the International Dyslexia Association and past President of the Society for the Scientific Study of Reading.

Dr. Craig Frisby is an Associate Professor of School Psychology and teaches in the School Psychology program at the University of Missouri-Columbia. He also serves as Associate Editor for the APA journal Psychological Assessment. His research interests lie in the measurement of cognitive test session behavior, multidimensional scaling applications, and multicultural issues in school psychology.

Dr. Dave Heistad served as a program evaluator and Executive Director of Research in Minneapolis Public Schools for 25 years and has worked as the Executive Director of the Research, Evaluation and Assessment for Bloomington Public Schools the past five years.
6PVJBhh \({ }^{2}\) Hintze is a Professor and Director of School Psychology training programs at the University of RESOURCESS (/supporting as with progress monitoring and decision-making accuracy of curriculum-based measurement. students-
Diteliafffany Hogan is the Director of the Speech and Language (SAiL) Literacy Lab and a Professor in the Deperdgnent of Communication Sciences and Disorders at MGH Institute. Dr. Hogan studies the genetic, nduribgic, and behavioral links between oral and written language development, with a focus on coGiovidid \({ }^{\text {Sp }}\) peech, language and literacy disorders. Her research is funded by the National Institutes of Health and the Institute of Education Sciences.

Dr. John L. Hosp is a professor of special education in the College of Education at the University of Massachusetts, Amherst. His research has examined the utility of screening measures across disaggregated subgroups of students as well as the use of screening data to plan instruction, particularly in elementary reading and middle school science. He has conducted numerous workshops and trainings on using data from screening measures and is a co-author of The ABCs of CBM-an introduction to the administration and use of curriculum-based measures as well as The ABCs of Curriculum-Based Evaluation: A Practical Guide to Effective Decision Making.

Dr. Evelyn S. Johnson is a Professor of Special Education at Boise State University, and the Scientific Director of Lee Pesky Learning Center. Her research focuses on examining the role of information processing, self-regulation and academic skills to develop more effective interventions for students with learning disabilities, and on developing special education teacher evaluation tools designed to improve the implementation of evidence-based practices in the classroom. She is the co-author of RTI: A Practitioner's Guide to Implementing Response to Intervention, and How RTI Works in Secondary Schools.

Dr. Leanne Ketterlin Geller is a Professor in the Department of Education Policy and Leadership at Southern Methodist University. Her research focuses on the development and validation of formative assessment systems in mathematics that provide instructionally relevant information to support teachers' decision-making for all students. Her work is centered on using technology to provide accessible assessment systems through the integration of accommodations and principles of universal design.

Dr. Kristen Ritchey is a professor of special education in the School of Education at the University of Delaware. Dr. Ritchey conducts research in identification and intervention for young children who are at risk for reading and writing disabilities.

Dr. Mabel Rivera is an Assistant Professor at the University of North Carolina at Pembroke and President of the NC Council for Exceptional Children state unit. She teaches Special Education and Birth-Kindergarten undergraduate courses. Her research interests include the education and prevention
of learning difficulties in English language learners and students with disabilities. In addition, she engages in local and national service activities related to professional development of teachers and related personnel.

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\section*{Academic Progress Monitoring TRC}

GOVIDi19 criteria for the Academic Progress Monitoring TRC were: (a) member has a background in RESOURCES
measurement and strong methodological skills and (b) member has strong expertise related to (/supporting-ertudents-monitoring. Special attention was paid to including members with expertise on culturally and liftersisticeally diverse populations. Members of the Academic Progress Monitoring TRC include:
Dreeds Branum-Martin is an Associate Professor in developmental psychology at Georgia State Uuried \({ }^{\text {dity. }}\). Dr. Branum-Martin has experience in modeling classroom and instructional effects in early fovid-19 and bilingualism in large-scale research projects. His interest in multilevel and longitudinal models includes scaling, factor analysis, and measurement equivalence.

Dr. John Hintze is an Associate Professor of School Psychology and teaches in the School Psychology program at the University of Missouri-Columbia. He also serves as Associate Editor for the APA journal Psychological Assessment. His research interests lie in the measurement of cognitive test session behavior, multidimensional scaling applications, and multicultural issues in school psychology.

Dr. Michelle Hosp is an Associate Professor of Special Education in the Department of Student Development at the University of Massachusetts, Amherst. Her background is in school psychology and special education. Her research interests are in reading and data-based decision making involving formative assessments.

Dr. Joseph R. Jenkinsis an Emeritus Professor of Special Education at the University of Washington. His research focuses on assessment and instruction of students with learning and reading disabilities.

Dr. Evelyn S. Johnson is a Professor of Special Education at Boise State University, and the Scientific Director of Lee Pesky Learning Center. Her research focuses on examining the role of information processing, self-regulation and academic skills to develop more effective interventions for students with learning disabilities, and on developing special education teacher evaluation tools designed to improve the implementation of evidence-based practices in the classroom. She is the co-author of RTI: A Practitioner's Guide to Implementing Response to Intervention, and How RTI Works in Secondary Schools.

Dr. Leanne Ketterlin Geller is a Professor in the Department of Education Policy and Leadership at Southern Methodist University. Her research focuses on the development and validation of formative assessment systems in mathematics that provide instructionally relevant information to support teachers' decision-making for all students. Her work is centered on using technology to provide accessible assessment systems through the integration of accommodations and principles of universal design.

Dr. Amanda Marcotte is an Associate Professor in the School Psychology Program at the University of Massachusetts Amherst. Her primary line of research is in the area of developmental reading theory for assessment and instruction, with research priorities extending to reading comprehension and early vocabulary assessment.

Dr. Benjamin Solomon is an Assistant Professor of School Psychology at the University at Albany. Prior to this, Dr. Solomon was a professor at Oklahoma State University, where he worked closely with other facuity and students building capacity for Response to Intervention statewide. His current research

RESQURCES
. Stecker is a Professor of Special Education at Clemson University in South Carolina. She (/supporting-vinvolved in research and development for progress monitoring tools and teacher decision students-
making since her graduate work in the mid-1980s at Peabody/Vanderbilt University. Pam has taught intensive-nheeds-us special education and general education teachers, both preservice and inservice, to use cburifingum-based measurement in reading/language arts and in mathematics to evaluate their ébvilentss) academic growth, to individualize instructional programs, and to implement intensive academic interventions.

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\section*{Academic Intervention TRC}

Selection criteria for the Academic Intervention TRC were: (a) member has strong methodological skills and (b) member has a background and expertise in the evaluation of K12 academic interventions in reading, mathematics or writing. Special attention was paid to including members with expertise on evaluating the effectiveness of interventions with culturally and linguistically diverse populations. Members of the Academic Intervention TRC include:

Dr. Scott Baker is a research professor at the Center on Research and Evaluation (CORE) at Southern Methodist University (SMU). He was the founding executive director of the center. Dr. Baker is interested in the role scientific research can play in improving policies and practices associated with child outcomes. He has been Principal Investigator on numerous education grants from the Institute of Education Sciences and other federal agencies. Currently, Dr. Baker is interested in the impact of interventions on child outcomes, mechanisms that underlie effective interventions, and how intervention impact varies by factors intrinsic and extrinsic to the child.

Dr. Mindy Sittner Bridges is an Assistant Professor at the University of Kansas Medical Center. Her research interests include the connection between language and reading disabilities, the use of language-intensive interventions with young children to aid later reading comprehension, and the use of Response to Intervention in educational settings.

Dr. Diane Pedrotty Bryant is a Professor of Special Education in the College of Education at The University of Texas at Austin and holds the Mollie Villeret Davis Professorship in Learning Disabilities. She serves as the Project Director for the Mathematics Institute in The Meadows Center for Preventing Educational Risk and Principal Investigator for an IES funded Goal 3 grant on algebra-readiness
interventions. Dr. Bryant's research interests focus on the development and validation of mathematics interventions at the elementary and secondary levels for students with mathematics difficulties and learning disabilities in mathematics.

Dr. Ben Clarke is an Associate Professor in the School Psychology Program at the University of Oregon and Associate Director of the Center on Teaching and Learning. His work is focused on the development and efficacy testing of mathematics intervention programs spanning the K-6th grade spectrum in both traditional and technology based formats. His work has been supported through Cơki®lqgrants from the Institute of Education Science, Office of Special Education Programs, and the REGbioretescience Foundation.
(Surpprtingil Coyne is a Professor of Educational Psychology and the Coordinator of the Special students-
Education Program at the University of Connecticut. He is also Co-Director of the Center for Behavioral Entencastion and Research. He has expertise in beginning reading and early vocabulary instruction and
Educt interfikfgntion, school-based experimental research, multi-tiered or RTI systems of support, and effective R6aidiqeg for students with learning disabilities.

Dr. Frances Mary D'Andrea is an educational consultant and an instructor at the University of Pittsburgh, and other universities. She has over 10 years experience teaching students who were blind or visually impaired and has served as the director of the National Literacy Center for the American Foundation for the Blind. Her work focuses on literacy instruction for students who are blind or visually impaired. She is currently immediate past-chair of the Braille Authority of North America.

Dr. Christian Doabler is an Assistant Professor in the Department of Special Education at the University of Texas at Austin. Dr. Doabler specializes in curriculum design, classroom observation systems, and the prevention of learning difficulties. He is a former general education and special education teacher. Currently, Dr. Doabler serves as a Principal Investigator / Co-Principal Investigator on several efficacy trials and development projects funded through the Institute of Education Sciences and the National Science Foundation.

Dr. Ralph P. Ferretti is a Professor of Education and Psychological \& Brain Sciences, and the past Director of the University of Delaware's School of Education. His current scholarship focuses on interventions that promote students' self-regulatory skills in problem solving and written argumentation. He served as co-editor of The Journal of Special Education, on the editorial boards of Exceptional Children and The Journal of Special Education, and currently serves on the editorial boards of The Journal of Educational Psychology and The Journal of Teacher Education.

Dr. Charles Hughes Hughes is Professor of Special Education at The Pennsylvania State University where he teaches an undergraduate course on instructional design and delivery and a graduate course on effective instruction for students with learning disabilities. He developed, researched, and coauthored five of the instructional books included in the Strategic Intervention Model's (SIM) Learning Strategies Curriculum developed through the University of Kansas Center for Research on Learning and co-authored, with Dr. Anita Archer, a textbook on Explicit Instruction. He served as Co-editor of the Journal of Postsecondary Education and Disability and Editor of Learning Disabilities Research and Practice and serves as an editorial board member for a number of journals including Exceptional Children and the Journal of Learning Disabilities.

Dr. Joseph R. Jenkinsis an Emeritus Professor of Special Education at the University of Washington. His research focuses on assessment and instruction of students with learning and reading disabilities.

Dr. Asha K. Jitendrais a Professor of Special Education in the Graduate School of Education at the University of California, Riverside. She was a professor for 14 years in the College of Education at Lehigh University and faculty to the Center for Promoting Research to Practice. Dr. Jitendra's research interests focus on instructional design, particularly in mathematics and reading, textbook analysis, and dynamic assessment. Her work on mathematical problem solving includes her published curriculum teoviflityed, "Solving math word problems: Teaching students with learning disabilities using schemaRE80erkicessuction."
(/supporting
Br PRoristopher J. Lemons is an Associate Professor of Special Education at Peabody College of students-
Vanderbilt University and a member of the Vanderbilt Kennedy Center. His research focuses on
inheeaving academic outcomes for children and adolescents with intellectual, developmental, and Iedrfing disabilities. His recent research has focused on developing and evaluating reading
 for children and adolescents with learning and intellectual disabilities, data-based individualization, and intervention-related assessment and professional development. He has published studies in peerreviewed journals including Exceptional Children, Focus on Autism and Other Developmental Disabilities, Intellectual and Developmental Disabilities, Journal of Intellectual Disability Research, and Remedial and Special Education. Dr. Lemons has secured funding to support his research from the Institute of Education Sciences and the Office of Elementary and Secondary Education, both within the U.S. Department of Education and from the National Institutes of Health. He chairs the Executive Committee of the Pacific Coast Research Conference. Dr. Lemons is Co-Director of the National Center for Leadership in Intensive Intervention and a Senior Advisor for the National Center on Intensive Intervention, both funded by the Office of Special Education Programs.

Dr. Nonie K. Lesaux is Academic Dean and the Juliana W. and William Foss Thompson Professor of Education and Society. Her research focuses on promoting the language and literacy skills of today's children from diverse linguistic, cultural and economic backgrounds, and is conducted largely in urban and semi-urban cities and school districts. In 2009, Dr. Lesaux received a Presidential Early Career Award for Scientists and Engineers, the highest honor given by the United States government to young professionals beginning their independent research careers.

Dr. Endia Lindo is an Assistant Professor of Special Education at Texas Christian University and core faculty of the Alice Neeley Special Education Research and Service (ANSERS) Institute. Her research focus on improving the reading performance of struggling readers and students with disabilities in the elementary and middle grades. Of particular interest are approaches to teaching reading comprehension, and understanding the social and familial factors that predict students' responsiveness to generally effective instruction and evidence-based intervention.

Dr. Charles A. MacArthur is a Professor of School of Education at the University of Delaware. His major research interests include writing development and instruction for struggling writers, development of self-regulated strategies, adult literacy, and applications of technology to support reading and writing. His work has focused on development of a writing curriculum for students with learning disabilities,
writing strategy instruction in classroom settings, development of multimedia tools to support reading and writing in content areas, speech recognition as a writing accommodation, project-based learning in social studies in inclusive classrooms, and adult literacy.

Dr. Rollanda O'Connor is a Professor at the University of California, Riverside. Her research focuses on reading intervention and issues of early identification of reading disability, effects of multiple layers of support to children over the first few years of schooling, instructional issues for older students with reading difficulties, and transfer and generalization across multiple components of reading.

6PWIntane olinghouse is an Associate Professor in the Educational Psychology Department and a RESOURECES (/suppgrting-use's research interests include learning disabilities, writing instruction, and reliability and studentsvalidity in writing assessment.

DRee dagdia M. Pagliaro is a Professor in Professions in Deafness and Coordinator of the K-12 Deaf and Hd\#\#ing-Hearing Teacher Licensure Program at the University of North Carolina at Greensboro. Her pesid-19 \({ }^{\text {P }}\) ) focuses on mathematics instruction and learning with deaf and hard-of-hearing students, particularly in the areas of cognition, problem solving, and the influence of a visual language (American Sign Language) on mathematics understanding. Dr. Pagliaro is the co-creator of the Building Math Readiness in Young Deaf/Hard-of-Hearing Students: Parents as Partners intervention and the Early Mathematics Performance Diagnostic.

Dr. Shayne Piasta is an associate professor of Reading and Literature in Early and Middle Childhood in the Department of Teaching and Learning at the Ohio State University. She also is a faculty associate for the Crane Center for Early Childhood Research and Policy. Dr. Piasta's research focuses on early literacy development and how it is best supported during preschool and elementary years. Her work emphasizes the use of rigorous empirical methods to identify and validate educational programs and practices, such as experimental evaluation of specific curricula and professional development opportunities.

Dr. Sarah Powell is an Assistant Professor in the Department of Special Education at the University of Texas at Austin. Her research interests include developing, implementing, and evaluating mathematics interventions for students with disabilities. Dr. Powell is also interested in how students solve word problems, interpret mathematics symbols, and use mathematics language.

Dr. Claudia P. Rinaldi is an Associate Professor and Program Director of the Education Program at Lasell College. Her research interests are in the identification and intervention of evidenced-based practices for English language learners with mild/moderate disabilities. Her current research work addresses the implementation of RTI models in urban settings to respond to the needs of diverse learners and developing pathways for diversifying the teacher pipeline.

Dr. David Scanlon is an Associate Professor of Special Education in the Lynch School of Education at Boston College. He teaches and conducts research on content-area literacy and learning for adolescents with mild disabilities, and transition. He is formerly an assistant research scientist with the University of Kansas Center for Research on Learning. Dr. Scanlon is currently serving as editor of the International Journal for Research in Learning Disabilities.

Dr. Pamela M. Seethaler is a Research Associate with the Department of Special Education at Vanderbilt University. Previously, she taught special education students in the Metropolitan Nashville Davidson County public schools. She earned her Master's and Doctoral degrees under the advisement of Dr. Lynn S. Fuchs. Currently, she serves as co-Principal Investigator for a study assessing the efficacy of mathematics and reading comprehension tutoring for second-grade students at risk for developing mathematics and reading disability. Her interests include the early identification of and intervention for students with mathematics disability.

Eo円ąuㅎindelar is a Distinguished Professor of Special Education at the University of Florida and CoREṠ̇OUREEX the CEEDAR Center. His current research has focused on the special education teacher labor (/souppeattingly the impact of recession, declining SLD identification, and other factors have had on SET etadeafonent.
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Dryeldshael Solis is an assistant professor of special education at the University of California Riverside Grafingte School of Education. His line of research focuses on vocabulary and reading comprehension
 support. Currently, Dr. Solis serves as the Principal Investigator for an Institute of Education Sciences Goal Two grant to develop reading interventions for students with autism spectrum disorder. Prior to his work in higher education, he was a special educator, reading specialist, and literacy coach for 10 years.

Dr. Elizabeth Swanson is a Research Associate Professor at The University of Texas at Austin with a joint appointment between the Meadows Center for Preventing Educational Risk and the Department of Special Education. She is currently the Principal Investigator and Co-Principal Investigator of projects funded by the Institute of Education Sciences and the Office of Special Education Programming. Dr. Swanson's research includes developing and testing the efficacy of instructional methods for struggling readers, including students with learning disabilities.

Dr. Jade Wexler is an Associate Professor of Special Education at the University of Maryland. She is currently the Principal Investigator and co-Principal Investigator of projects funded by the Institute of Education Sciences and the Office of Special Education Programs. Her current research focuses on designing reading interventions to support at-risk adolescents with reading difficulties and disabilities in the content-area classroom and supplemental intensive intervention setting. She also focuses on designing effective professional development and school-wide service delivery models to support the implementation of evidence-based adolescent literacy practices.

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\section*{Behavior Screening TRC}

Selection criteria for the Behavior Screening TRC were: (a) member has a background in measurement and strong methodological skills and (b) member has strong expertise related to behavioral screening. Special attention was paid to including members with expertise on culturally and linguistically diverse populations. Members of the Behavior Screening TRC include:

Dr. Aarti Bellara is an Assistant Professor in the Department of Educational Psychology at the University of Connecticut.

Dr. Mack Burke is an Associate Professor in the Department of Educational Psychology at Texas A\&M University. His research interests are emotional and behavioral disorders, integrated academic and behavioral approaches, learning and behavior problems, positive behavior support, universal screening and response to intervention.

Dr. Sandra M. Chafouleas is a Board of Trustees Distinguished Professor in the Department of Educational Psychology within the Neag School of Education at the University of Connecticut. She also serves as Co-Director of the UConn Collaboratory on School and Child Health. She has authored over 150/puldjcations, and regularly serves as a national presenter and invited speaker. She is a fellow in REstU地EESmerican Psychological Association and Association for Psychological Science. She received (/stuppoofing'Conn Alumni Association award for excellence in graduate teaching, the 2016 APA Division \$tuderthend Mid-Career Scholar Award, and previously served as associate dean for The Graduate istapsive2012-2014) and then the associate dean for research in the Neag School (2014-2016). Prior to beebdsing a university trainer, she worked as a school psychologist and school administrator in a variety opurinftings for children with behavior disorders.
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Dr. Erin Dowdy is a Professor in the Department of Counseling, Clinical, and School Psychology at University of California, Santa Barbara. She is a licensed psychologist and a nationally certified school psychologist. Dr. Dowdy's research career and scholarly publications have focused on behavioral and social emotional assessment, particularly universal screening for social and emotional health and risk. She is the co-principal investigator on several screening measurement projects funded through the Institute of Education Sciences and she currently serves as associate editor for School Psychology Review.

Dr. Katie Eklund is an Assistant Professor in the School Psychology Program at the University of Missouri. Prior to entering academia, Dr. Eklund worked in public education for 10 years as a school administrator, school psychologist, and social worker. Dr. Eklund has authored a number of publications on school mental health, including early identification and intervention for childhood behavioral and emotional concerns, school climate, and school safety. Her current research projects include implementation of universal screening and Tier 2 social emotional interventions in K-12 schools, and investigating the impact of School Resource Officers on school climate and safety.

Dr. Austin H. Johnson is an Assistant Professor in the School Psychology program at the University of California, Riverside's Graduate School of Education. Dr. Johnson's research interests focus on the identification of evidence-based behavior support practices and the evaluation of observationally-based behavior assessment methodologies.

Dr. Stephen Kilgus is an Associate Professor in the School Psychology Program at the University of Missouri. His primary research interest is in the area of school mental health. Of particular interest is (a) the evaluation of interventions for students who are at risk for social-emotional and behavioral concerns, and (b) the development and validation of assessments for universal screening, progress monitoring, and problem analysis.

Dr. Kathleen Lynne Lane is a Professor in the Department of Special Education at the University of Kansas. Dr. Lane's research interests focus on designing, implementing, and evaluating comprehensive, integrated, three-tiered (Ci3T) models of prevention to (a) prevent the development of learning and behavior challenges and (b) respond to existing instances, with an emphasis on systematic screening. Dr. Lane serves as the primary investigator (PI) an Institute for Educational Sciences (IES) Researcher-

Practitioner Partnership grant. She also served as PI for other federally-funded projects including: Project WRITE, a Goal Area 2 Grant funded through the IES, focusing on impact of writing interventions for students at risk for EBD who are also poor writers; an OSEP directed project studying positive behavior support at the high school level; and an OSEP field-initiated project studying prevention of EBD at the elementary level. She is currently President of the Council for Children with Behavior Disorders (CCBD). She is the co-editor of Remedial and Special Education and Journal of Positive Behavior Interventions. Dr. Lane has co-authored 10 books and published over 168 refereed journal articles and 34 book chapters.
COVID 19
RDsdracieldMaggin is an Assistant Professor at the University of Illinois, Chicago. His research (/schppestieg-three areas related to the education of students with and at risk for developing emotional atudleatsavioral disorders including (a) the identification of evidence-based practices through the use of intabsisfesearch synthesis methods, (b) the training of school personnel to use a continuum of effeedsie assessment and intervention methods to identify and treat students with varying behavioral plufing- and (c) the development of school-based methods to ensure that effective interventions are covid-19)
implemented with integrity.
Dr. Faith Miller is an Assistant Professor of Educational Psychology within the School Psychology Program at the University of Minnesota. Dr. Miller's research interests relate to improving multi-tiered systems of support for students who experience social, emotional, and behavioral difficulties (SEBD). This includes the use of defensible assessments to inform data-based decision-making and problemsolving, as well as the development and delivery of a continuum of high-quality interventions to improve student outcomes.

Dr. Chris Riley-Tillman is a Professor and Chair of the Department of Educational School and Counseling Psychology at the University of Missouri. He is one of the co-developers of Direct Behavior Ratings as well as a recognized authority in evidence-based practice in schools and the application of experimental design and analysis in applied educational settings. His research interests include development and validation of assessment and intervention methodologies that are both empirically supported and feasible, applied single case design, consultation and school-wide problem-solving models.

Dr. Joni Williams Splett is an assistant professor of school psychology in the University of Florida's College of Education. One area of her research examines the use and outcomes of universal screening measures within a multi-tiered system of support for social, emotional, and behavioral concerns. She has worked with many schools and districts to support implementation of this system and screening practice via multiple funded research projects, consultation, and/or professional development workshops. In this area, she has used real-world datasets from partner schools to examine the factoral validity, consequential validity, and/or stability of four different screening measure, as well as the effects of between teacher differences on teacher ratings of student behavior. Dr. Splett also conducts research to identify cognitive-behavioral intervention strategies to reduce relational aggression and bullying in middle schools

Dr. Nathaniel von der Embse is an assistant professor of school psychology in the College of Education at the University of South Florida. His research has examined the influence of high-stakes testing on teacher and student wellbeing, the development of social-emotional screening tools, and the training of educators in population-based assessment methods to inform tiered and targeted intervention. He is an
associate editor at the Journal of School Psychology, and serves as principal/co-principal investigator on funded research from the Scattergood Foundation, Spencer Foundation, Institute for Education Sciences, and the National Institute of Justice.

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\section*{Behavior Progress Monitoring TRC}

SQVID. 19 criteria for the Behavioral Progress Monitoring TRC were: (a) member has a background in RESOURCES
Reasurement and strong methodological skills and (b) member has strong expertise related to (/supporting-
sthavioral progress monitoring. Special attention was paid to including members with expertise on frtethralle and linguistically diverse populations. Members of the Behavioral Progress Monitoring TRC ingeleds:
Diduring Briesch is an Associate Professor in the Bouvé College of Health Sciences at Northeastern Goviversity. Her research interests include the identification and examination of feasible and psychometrically-sound measures for the formative assessment of student social behavior; the use of self-management as an intervention strategy for reducing problem behaviors in the classroom; and the role of student involvement in intervention design and implementation.

Dr. Sandra M. Chafouleas is a Board of Trustees Distinguished Professor in the Department of Educational Psychology within the Neag School of Education at the University of Connecticut. She also serves as Co-Director of the UConn Collaboratory on School and Child Health. She has authored over 150 publications, and regularly serves as a national presenter and invited speaker. She is a fellow in both the American Psychological Association and Association for Psychological Science. She received the 2009 UConn Alumni Association award for excellence in graduate teaching, the 2016 APA Division 16 Oakland Mid-Career Scholar Award, and previously served as associate dean for The Graduate School (2012-2014) and then the associate dean for research in the Neag School (2014-2016). Prior to becoming a university trainer, she worked as a school psychologist and school administrator in a variety of settings for children with behavior disorders.

Dr. Tanya Eckert is an Associate Professor of Psychology and Director of Graduate Studies in the College of Arts and Sciences at Syracuse University. Dr. Eckert specializes in examining new procedures for assessing academic and behavior problems and developing classroom-based interventions to improve children's academic and behavioral functioning.

Dr. Kathleen Lane is a Professor in the Department of Special Education at the University of Kansas. Her research focuses on exploring the relation between academic achievement and behavior patterns of children and youth with social/behavioral concerns. She has designed and evaluated comprehensive, integrated, three-tiered (CI3T) models of prevention across the K-12 continuum to support all students, including those with emotional and behavioral disorders.

Dr. Daniel Maggin is an Assistant Professor at the University of Illinois, Chicago. His research addresses three areas related to the education of students with and at risk for developing emotional and behavioral disorders including (a) the identification of evidence-based practices through the use of various research synthesis methods, (b) the training of school personnel to use a continuum of
effective assessment and intervention methods to identify and treat students with varying behavioral profiles，and（c）the development of school－based methods to ensure that effective interventions are implemented with integrity．

Dr．David N．Miller is an Associate Professor of School Psychology at the University at Albany，State University of New York．His research interests focus primarily on suicidal behavior and related internalizing problems in children and adolescents，particularly issues in school－based suicide prevention．He is the immediate Past－President of the American Association of Suicidology（AAS），the
 REsioutecesd supporting those affected by it．
（／supporting－
Dr．Chris： Filey －Tillman is a Professor and Chair of the Department of Educational School and students－
Counseling Psychology at the University of Missouri．He is one of the co－developers of Direct Behavior Ratieqs－as well as a recognized authority in evidence－based practice in schools and the application of eđ⿴囗十irigental design and analysis in applied educational settings．His research interests include deviopment and validation of assessment and intervention methodologies that are both empirically supported and feasible，applied single case design，consultation and school－wide problem－solving models．

Dr．Howard P．Wills is an Associate Research Professor at Juniper Gardens Children＇s Project，The University of Kansas．He is currently interested in school－based academic and behavioral interventions for students with challenging behaviors．Dr．Wills is co－developer of the Class－Wide Function－Related Intervention Team（CW－FIT）program and directs CW－FIT efficacy research along with federally funded projects for professional development and interventions for high－school students with challenging behaviors or at risk for school failure．

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\section*{Behavior Intervention TRC}

Selection criteria for the Behavioral Intervention TRC were：（a）member has strong methodological skills and（b）member has a background and expertise in the evaluation of K－12 behavioral interventions． Special attention was paid to including members with expertise in single－subject design，as well as in evaluating the effectiveness of behavioral interventions with culturally and linguistically diverse populations．Members of the Behavioral Intervention TRC include：

Dr．Sandra M．Chafouleas is a Board of Trustees Distinguished Professor in the Department of Educational Psychology within the Neag School of Education at the University of Connecticut．She also serves as Co－Director of the UConn Collaboratory on School and Child Health．She has authored over 150 publications，and regularly serves as a national presenter and invited speaker．She is a fellow in both the American Psychological Association and Association for Psychological Science．She received the 2009 UConn Alumni Association award for excellence in graduate teaching，the 2016 APA Division 16 Oakland Mid－Career Scholar Award，and previously served as associate dean for The Graduate School（2012－2014）and then the associate dean for research in the Neag School（2014－2016）．Prior to becoming a university trainer，she worked as a school psychologist and school administrator in a variety of settings for children with behavior disorders．

Dr. David F. Cihak is a Professor of Special Education and the University of Tennessee's College of Education, Health and Human Sciences Interim Associate Dean and Director of the Bailey Graduate School of Education. His research interests include the use of effective instructional and behavioral strategies, specifically video, augmented, virtual, mobile, and context-aware technologies for improving educational, vocational, functional, and social/communicative outcomes for students with intellectual disability and autism in classroom and community settings.
Di. Tanya Eckert is an Associate Professor of Psychology and Director of Graduate Studies in the CoVfge 9 f Arts and Sciences at Syracuse University. Dr. Eckert specializes in examining new procedures RESORFEEsing academic and behavior problems and developing classroom-based interventions to (/suppportėnçfildren's academic and behavioral functioning.
students-
Dr Steven W. Evans is a Professor of Psychology at Ohio University and co-director of the Center for Intereyention Research in Schools. His research interests include school mental health treatment daúringment and evaluation research for adolescents with ADHD and related problems.
GP. Ridenee Hawkins is an Associate Professor and Coordinator of the School Psychology Program in the College of Education, Criminal Justice, and Human Services at the University of Cincinnati. Her research focuses on empirically-validating interventions designed to improve the behavior and academic performance of students.

Dr. Keith Herman is a Professor in the College of Education at the University of Missouri. His research interests include developmental psychopathology and school mental health; prevention and treatment of child depression; and parenting and family interventions.

Dr. Nicholas Ialongo is a Professor in the Bloomberg School of Public Health at Johns Hopkins University. His research interests include child and family psychology, adolescent substance abuse, and interventions research.

Dr. Kathryn Jaspers is an assistant professor of school psychology at Lewis \& Clark College. Her interests include academic interventions and consultation, development of early math skills, and intervention efficiency, generalization, and maintenance.

Dr. Debra Kamps is the former Director of the Kansas Center for Autism Research and Training and Associate Director and Senior Scientist at the Juniper Gardens Children's Project at the University of Kansas. She has served as Principal Investigator of 11 projects receiving federal research grants in the areas of autism and emotional and behavioral disorders/risk, and has been publishing her research since 1983. Dr. Kamps's work has focused in the areas of small group instruction and peer-mediated interventions for children with autism and emotional and behavioral disorders.

Dr. Krista Kutash is Professor Emeritus, Child and Family Studies at the University of South Florida. The focus of her work has been to conduct and disseminate findings from an integrated set of research and training activities focusing on the implementation of community-based mental health services for children with serious emotional disorders (SED) with a special emphasis on school-based mental health services and support services for parents of children with SED.

Dr. Kathleen Lane is a Professor in the Department of Special Education at the University of Kansas. Her research focuses on exploring the relation between academic achievement and behavior patterns of children and youth with social/behavioral concerns. She has designed and evaluated comprehensive,
integrated, three-tiered (CI3T) models of prevention across the K-12 continuum to support all students, including those with emotional and behavioral disorders.

Dr. Daniel Maggin is an Assistant Professor at the University of Illinois, Chicago. His research addresses three areas related to the education of students with and at risk for developing emotional and behavioral disorders including (a) the identification of evidence-based practices through the use of various research synthesis methods, (b) the training of school personnel to use a continuum of effective assessment and intervention methods to identify and treat students with varying behavioral EOWHIOSGHD (c) the development of school-based methods to ensure that effective interventions are RESPlercezsed with integrity.
(/supporting
Supprizabe th McCallum is an Associate Professor in the Department of Counseling, Psychology and students-
Special Education at Duquesne University. Her research interests include developing and empirically valideating academic interventions for students with and without special education eligibility; the tapedprobilitgs math intervention for building math fluency; academic and behavioral interventions that Łборарряgte technology to improve student performance; and academic accommodations for students with special needs.

Dr. Merilee McCurdy is an Associate Professor in the School Psychology program at the University of Tennessee. Her research interests include the development of interventions to improve student writing achievement in elementary and secondary school students, the evaluation of student writing assessment procedures, and the use of parent tutoring to increase student academic performance in all academic areas. In past research, she has developed a writing intervention that has been successful in increasing the writing performance of middle school children with learning disabilities.

Dr. Samuel Odom is the Director of the Frank Porter Graham Child Development Institute and professor in the School of Education at the University of North Carolina. His recent research has addressed the efficacy of a variety of focused intervention approaches for children with Autism Spectrum Disorders, such as peer-mediated interventions, sibling-mediated interventions, parent-child intervention to promote joint attention and an independent work systems approach to promote learning. In 2007, he received the Outstanding Research Award from the Council for Exceptional Children.

Dr. Brian Reichow is an Associate Professor in Special Education, School Psychology, and Early Childhood Studies and the Anita Zucker Center for Excellence in Early Childhood Studies in the College of Education at the University of Florida. Dr. Reichow's current research interests include the translation of clinical research into practical applications in schools and communities, the identification and evaluation of evidence-based practices, systematic review and meta-analytic methods and applications, and applied research in authentic educational settings.

Dr. Wendy M. Reinke is a Professor in the Educational, School, \& Counseling Psychology department at the University of Missouri with primary research interests in evidence-based social behavioral and emotional interventions, school mental health, prevention science, and school-based consultation. She is the PI or Co-PI on over \(\$ 20\) million in federal research grants. She is the developer of the Classroom Check-Up, a teacher coaching and consultation model. She is currently the lead investigator of a six school district-wide mental health project that has developed a web-based assessment and reporting system to identify students at risk and provide appropriate supports. Additionally, she is the co-author on several books and chapters related to prevention of social emotional and behavior problems in youth and over 85 peer-reviewed publications.

Dr. Chris Riley-Tillman is a Professor and Chair of the Department of Educational School and Counseling Psychology at the University of Missouri. He is one of the co-developers of Direct Behavior Ratings as well as a recognized authority in evidence-based practice in schools and the application of experimental design and analysis in applied educational settings. His research interests include development and validation of assessment and intervention methodologies that are both empirically supported and feasible, applied single case design, consultation and school-wide problem-solving models.

BoMbissa Stormont is a Professor in the College of Education at the University of Missouri. Her RESGORdESiterests include investigating characteristics associated with risk and success in school; (/suppronitiggeachers' knowledge and use of specific instructional practices for children at risk; and stuptenting children with ADHD in school. Prevention of emotional and behavior problems and the intatrssiten to kindergarten are primary areas of Dr. Stormont's research.
needs-
Ddutifigin Sutherland is a Professor in the School of Education at Virginia Commonwealth University. Dr.
Sbliferfond's primary areas of interest include teacher/student interactions in classrooms for students with emotional and behavioral disorders, the relationship between learning and behavior problems, and intervention research.

Dr. Leslie K. Taylor is a Project Manager at UT Physicians an affiliate of the medical school at the University Of Texas Health Science Center. Dr. Taylor works with physicians, behavioral health providers, and faculty to evaluate and coordinate community based integrated and trauma informed care efforts for children and adolescents. She is a member of the advisory board for BridgeUP at Menninger (which creates opportunities to support school based intervention and prevention programming) and is a licensed psychologist in the state of Texas. Her research interests include building and sustaining capacities for high quality mental health programming in schools and other community based settings, school based trauma and disaster focused intervention planning, and teacher identification of student mental health concerns.

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\section*{Related Resources}

\section*{TOOLS CHART}

Academic Progress Monitoring Tools Chart (https://charts.intensiveintervention.org/chart/progressmonitoring)

\section*{TOOLS CHART}

Behavioral Progress Monitoring Tools Chart (https://charts.intensiveintervention.org/chart/behavioral-progress-monitoring-tools)

\section*{TOOLS CHART}

Academic Intervention Tools Chart (https://charts.intensiveintervention.org/chart/instructional-intervention-tools)

\section*{TOOLS CHART}

Behavioral Intervention Tools Chart (https://charts.intensiveintervention.org/chart/behavioral-intervention-chart)

\section*{TOOLS CHART}

Academic Screening Tools Chart (https://charts.intensiveintervention.org/chart/academic-screening)

\section*{TOOLS CHART}

RESZBUKEES Screening Tools Chart (https://charts.intensiveintervention.org/chart/behavior-screening)
(/supporting-
stadents-
intsensivile Tools Charts (/about-charts-resources)
needs-
LANking-
covid-19)
Tools Chart Review Process (/about-charts-review-process)

\section*{The NCII Newsletter}

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(/sûffoforinibility (/accessibility)
students- Policy (/privacy) intensive-
needs-
during-
covid-19)


Appendix VI
\begin{tabular}{|c|c|c|c|c|c|}
\hline Scores and reports immediately available online and printable & & & & & \\
\hline Report uses accessible language for teachers, families, and students & & & & & \\
\hline Variety of report types for different uses/audiences that show growth over time & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{EdmondsSchool District - Math Task Force Assessment Rating Rubric - January 2019} \\
\hline & Level 1 & Level 2 & Level 3 & Level 4 & \multirow[b]{2}{*}{Notes} \\
\hline & Has no features of this quality & Has a few features of this quality & Has several features of this quality & Has many or all features of this quality & \\
\hline Reports at various group sizes (e.g., small group, class, grade level, school, program, district) & & & & & \\
\hline Results reported by single standard, clusters, and domains & & & & & \\
\hline Reports available in languages spoken by our families & & & & & \\
\hline Data sortable by name, score, demographics, etc. & & & & & \\
\hline Asset-based language identifies both strengths and gaps in student performance & & & & & \\
\hline Training provided on using reports & & & & & \\
\hline Online help on how to interpret and use data & & & & & \\
\hline \begin{tabular}{l}
Includes the following scores: \\
- Percentiles \\
- Scale scores \\
- Raw scores \\
-Grade equivalency
\end{tabular} & & & & & \\
\hline Results downloadable into a spreadsheet & & & & & \\
\hline Reports can be generated based on student demographics, program, etc. & & & & & \\
\hline Test Administration & & & & & \\
\hline Ability to administer/assess in different languages (especially Spanish) in math & & & & & \\
\hline Full range of accommodations for students with special needs (e.g., text to speech, enlarge text, extended time, paper and pencil option, etc.) & & & & & \\
\hline Developmentally appropriate (assess skills in question of fine motor/computer skills) & & & & & \\
\hline
\end{tabular}

Appendix VI
\begin{tabular}{|c|c|c|c|c|c|}
\hline Timely, minimal instruction time lost & & & & & \\
\hline Ongoing training provided for test administrators & & & & & \\
\hline Student-firiendy test interface & & & & & \\
\hline Administering the test is easy to understand so that a guest teacher or support staff could administer & & & & & \\
\hline Adjusts to the student's ability & & & & & \\
\hline Test length confined to single class period & & & & & \\
\hline Can be administered in various groupings (e.g., small groups, one-on-one, whole class) & & & & & \\
\hline
\end{tabular}

\section*{Appendix VII}

\section*{Mathematics Interim Assessment Blocks}

\section*{Blueprint}
as of July 2020

The Smarter Balanced Interim Assessment Blocks (IABs) are one type of interim assessment being made available by the Consortium; the other types are the Interim Comprehensive Assessment (ICAs) which are similar in structure and follow the same blueprint as the summative assessment, and the Focused Interim Assessment Blocks (FIABs) which are snapshots of student performance on one or more targets. IABs are short, sets or blocks of items that measure multiple Claim 1 assessment targets. Results from these assessments provide information about a student's strengths or needs in relation to the Common Core State Standards (CCSS) and, therefore, generate more detailed information for instructional purposes than the summative assessment or ICAs alone. All types of interim assessments are currently available as fixed forms. The fixed forms are administered online, using the same delivery software as the summative assessments.

This blueprint presents the specific blocks that are available by grade level for mathematics beginning at grade 3 and continuing through high school. Each block-level blueprint contains information about claim(s), assessment target(s), and depth of knowledge (DOK) level(s) addressed by the items in that block as well as the numbers of items allocated to each of those categories.

The blueprint can be used by educators to plan how to integrate the IABs and FIABs effectively within classroom instruction or to better understand results that are reported. Users of the blueprint can become familiar with the number of IABs/FIABs for each grade level, the general focus of each, (i.e., which assessment targets are addressed in a specific IAB or FIAB and the emphasis of each target relative to the other targets in the block). A fifth-grade teacher, for example, may wish to collect more information regarding her students' knowledge about measurement and data. The teacher could use this blueprint to see that there is a block for measurement and data composed of 14 machined-scored items across the four claims-concepts and procedures, problem solving, modeling and data analysis, and communicating reasoning. After reading the blueprint, she will have a better understanding of the meaning of the measurement and data block.

Finally, educators can use these IAB as well as the FIAB blueprints in conjunction with the summative and ICA blueprints to support more comprehensive classroom-level instruction and assessment plans.

\section*{Mathematics Interim Assessment Blocks}
\begin{tabular}{|c|c|c|}
\hline Grade 3 & Grade 4 & Grade 5 \\
\hline Operations and Algebraic Thinking & Operations and Algebraic Thinking & Number and Operations in Base Ten \\
\hline Measurement and Data & Number and Operations in Base Ten & Number and Operations - Fractions \\
\hline Mathematics Performance Task & Number and Operations - Fractions & Measurement and Data \\
\hline & Measurement and Data & Operations and Algebraic Thinking \\
\hline & Mathematics Performance Task & Mathematics Performance Task \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Grade 6 & Grade 7 & Grade 8 \\
\hline Expressions and Equations & Expressions and Equations & Expressions \& Equations I \\
\hline The Number System & Geometry & Geometry \\
\hline Mathematics Performance Task & Mathematics Performance Task & Mathematics Performance Task \\
\hline & & \\
\hline
\end{tabular}

\section*{High School}
\begin{tabular}{|c|c|}
\hline Algebra and Functions I - Linear Functions, Equations, and Inequalities & Geometry Congruence \\
\hline Algebra and Functions II - Quadratic Functions, Equations, and \\
Inequalities & Geometry Measurement and Modeling \\
\hline & Mathematics Performance Task \\
\hline
\end{tabular}

GRADE 3
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 3 - Operations and Algebraic Thinking (15 items)} \\
\hline Claim & Content Caterorv & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{4}{*}{1. Concepts
and
Procedures} & \multirow{4}{*}{OA} & A. Represent and solve problems involving multiplication and division. & 1, 2 & 4 & \multirow{4}{*}{12} \\
\hline & & B. Understand properties of multiplication and the relationship between multiplication and division. & 1 & 2 & \\
\hline & & C. Multiply and divide within 100. & 1 & 2 & \\
\hline & & D. Solve problems involving the four operations, and identify and explain patterns in arithmetic. & 2 & 4 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{1} & \multirow{3}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & \(2,3,4\) & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 3 (continued)


GRADE 3 (continued)


GRADE 4
Grade 4 - Operations and Algebraic Thinking (16 items)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Claim} & \multirow[b]{2}{*}{Content Categorv} & \multicolumn{2}{|l|}{Grade 4 - Operations and Algebraic Thinking (16 items)} & \multirow[b]{2}{*}{Number of Items} & \multirow[b]{2}{*}{Total Items per Reporting Category} \\
\hline & & Assessment Targets & DOK & & \\
\hline \multirow[t]{3}{*}{1. Concepts and Procedures} & \multirow{3}{*}{OA} & A. Use the four operations with whole numbers to solve problems. & 1, 2 & 4 & \multirow{3}{*}{9} \\
\hline & & B. Gain familiarity with factors and multiples. & 1, 2 & 4 & \\
\hline & & C. Generate and analyze patterns. & 2, 3 & 1 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{2} & \multirow{6}{*}{5} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{3} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{3. Communicating Reasoning} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \multirow{3}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & \(2,3,4\) & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 4 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 4 - Number and Operations in Base Ten (15 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow[t]{2}{*}{1. Concepts and Procedures} & \multirow[b]{2}{*}{NBT} & D. Generalize place value understanding for multi-digit whole numbers. & 1, 2 & 5 & \multirow[t]{2}{*}{12} \\
\hline & & E. Use place value understanding and properties of operations to perform multidigit arithmetic. & 1 & 7 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2,3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{0} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \multirow{3}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 4 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 4 - Number and Operations - Fractions (15 items)} \\
\hline Claim & Content Categorv & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{3}{*}{1. Concepts and Procedures} & \multirow{3}{*}{NF} & F. Extend understanding of fraction equivalence and ordering. & 1, 2 & 5 & \multirow{3}{*}{12} \\
\hline & & G. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. & 1, 2 & 5 & \\
\hline & & H. Understand decimal notation for fractions, and compare decimal fractions. & 1, 2 & 2 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{0} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \multirow{3}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 4 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Claim} & \multirow[b]{2}{*}{Content Category} & \multicolumn{2}{|l|}{Grade 4 - Measurement and Data (15 items)} & & \\
\hline & & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{3}{*}{1. Concepts and Procedures} & \multirow{3}{*}{MD} & I. Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. & 1, 2 & 6 & \multirow{3}{*}{13} \\
\hline & & J. Represent and interpret data. & 1, 2 & 2 & \\
\hline & & K. Geometric measurement: understand concepts of angle and measure angles. & 1,2 & 5 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{0} & \multirow{3}{*}{0} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 4 (continued)


GRADE 5
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 5 - Number and Operations in Base Ten (15 items)} \\
\hline Claim & Content Categorv & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow[t]{2}{*}{1. Concepts and Procedures} & \multirow[b]{2}{*}{NBT} & C. Understand the place value system. & 1, 2 & 4 & \multirow[b]{2}{*}{11} \\
\hline & & D. Perform operations with multi-digit whole numbers and with decimals to hundredths. & 1, 2 & 7 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2,3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{3. Communicating Reasoning} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \multirow{3}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 5 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Claim} & \multirow[b]{2}{*}{Content Category} & \multicolumn{2}{|l|}{Grade 5 - Number and Operations - Fractions (15 items)} & & \\
\hline & & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow[t]{2}{*}{1. Concepts and Procedures} & \multirow[b]{2}{*}{NF} & E. Use equivalent fractions as a strategy to add and subtract fractions. & 1, 2 & 5 & \multirow[b]{2}{*}{11} \\
\hline & & F. Apply and extend previous understandings of multiplication and division to multiply and divide fractions. & 1, 2 & 6 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \multirow{3}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 5 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 5 - Measurement and Data (14 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{3}{*}{1. Concepts and Procedures} & \multirow{3}{*}{MD} & G. Convert like measurement units within a given measurement system. & 1 & 1 & \multirow{3}{*}{9} \\
\hline & & H. Represent and interpret data. & 1, 2 & 2 & \\
\hline & & I. Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition. & 1, 2 & 6 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{3} & \multirow{6}{*}{4} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{3. Communicating Reasoning} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{1} & \multirow{3}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 5 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 5 - Operations and Algebraic Thinking (15 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow[t]{2}{*}{1. Concepts and Procedures} & \multirow[t]{2}{*}{OA} & A. Write and interpret numerical expressions. & 1 & 9 & \multirow[t]{2}{*}{13} \\
\hline & & B. Analyze patterns and relationships. & 2 & 4 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{0} & \multirow{3}{*}{0} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 5 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Claim} & \multirow[b]{2}{*}{Content Category} & \multicolumn{2}{|l|}{Grade 5 - Interim Assessment Block - Performance Task} & & \\
\hline & & Assessment Targets & DOK & Items per Claim & Total Items in PT \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & & \multirow{9}{*}{6} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & 2 & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & 2 & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 6
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 6 - Expressions and Equations (16 items)} \\
\hline Claim & Content Categorv & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{3}{*}{1. Concepts and Procedures} & \multirow{3}{*}{EE} & E. Apply and extend previous understandings of arithmetic to algebraic expressions. & 1 & 3 & \multirow{3}{*}{13} \\
\hline & & F. Reason about and solve one-variable equations and inequalities. & 1, 2 & 6 & \\
\hline & & G. Represent and analyze quantitative relationships between dependent and independent variables. & 2 & 4 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{1} & \multirow{3}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 6 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 6 - The Number System (15 items)} \\
\hline Claim & Content Categorv & Assessment Targets & DOK & Number
of
Items & Total Items per Reporting Category \\
\hline \multirow{3}{*}{1. Concepts and Procedures} & \multirow[t]{3}{*}{NS} & B. Apply and extend previous understandings of multiplication and division to divide fractions by fractions. & 1, 2 & 2 & \multirow[t]{3}{*}{13} \\
\hline & & C. Compute fluently with multi-digit numbers and find common factors and multiples. & 1, 2 & 5 & \\
\hline & & D. Apply and extend previous understandings of numbers to the system of rational numbers. & 1,2 & 6 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{0} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{1} & \multirow{3}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 6 (continued)


GRADE 7


GRADE 7 (continued)


GRADE 7 (continued)


GRADE 8

\section*{Grade 8 - Expressions \& Equations I (14 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Claim} & \multirow[b]{2}{*}{Content Categorv} & Grade 8 - Expressions \& Equations I (14 items) & & & \\
\hline & & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline & \multirow{3}{*}{EE} & A. Work with radicals and integer exponents. & 1, 2 & 3 & \multirow{3}{*}{9} \\
\hline 1. Concepts and Procedures & & B. Understand the connections between proportional relationships, lines, and linear equations. & 1, 2 & 2 & \\
\hline & & C. Analyze and solve linear equations and pairs of simultaneous linear equations. & 1, 2 & 4 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{3} & \multirow{6}{*}{3} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{0} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \multirow{3}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 8 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Claim} & \multirow[b]{2}{*}{Content Categorv} & \multicolumn{3}{|l|}{Grade 8 - Geometry (14 items)} & \\
\hline & & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{3}{*}{1. Concepts and Procedures} & \multirow{3}{*}{G} & G. Understand congruence and similarity using physical models, transparencies, or geometry software. & 1, 2 & 6 & \multirow{3}{*}{13} \\
\hline & & H. Understand and apply the Pythagorean Theorem. & 1,2 & 5 & \\
\hline & & I. Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres. & 1, 2 & 2 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{0} & \multirow{6}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{0} & \multirow{3}{*}{0} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 8 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 8 - Interim Assessment Block - Performance Task} \\
\hline Claim & Content Category & Assessment Targets & DOK & Items per Claim & Total Items in PT \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{2} & \multirow{9}{*}{6} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2,3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{2} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

\section*{High School}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{6}{*}{1. Concepts and Procedures} & \multirow{6}{*}{A, F} & G. Create equations that describe numbers or relationships. & 1, 2 & 1 & \multirow{6}{*}{11} \\
\hline & & I. Solve equations and inequalities in one variable. & 1, 2 & 3 & \\
\hline & & J. Represent and solve equations and inequalities graphically. & 1, 2 & 4 & \\
\hline & & L. Interpret functions that arise in applications in terms of a context. & 1, 2 & 1 & \\
\hline & & M. Analyze functions using different representations. & 1,2, 3 & 1 & \\
\hline & & N. Build a function that models a relationship between two quantities. & 2 & 1 & \\
\hline \multirow{6}{*}{2. Problem Solving 4. Modeling and Data Analysis} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{2} & \multirow{6}{*}{3} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{1} & \multirow{3}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

High School (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{7}{*}{1. Concepts and Procedures} & \multirow{7}{*}{A, F} & G. Create equations that describe numbers or relationships. & 1, 2 & 1 & \multirow{7}{*}{12} \\
\hline & & H. Understand solving equations as a process of reasoning and explain the reasoning. & 1, 2 & 3 & \\
\hline & & I. Solve equations and inequalities in one variable. & 1, 2 & 1 & \\
\hline & & J. Represent and solve equations and inequalities graphically. & 1, 2 & 3 & \\
\hline & & L. Interpret functions that arise in applications in terms of a context. & 1, 2 & 1 & \\
\hline & & M. Analyze functions using different representations. & 1, 2, 3 & 2 & \\
\hline & & N. Build a function that models a relationship between two quantities. & 2 & 1 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{0} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2,3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{2} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2,3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3,4 & & \\
\hline \multirow{3}{*}{3. Communicating Reasoning} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{1} & \multirow{3}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

High School (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Claim} & \multirow[b]{2}{*}{Content Category} & \multicolumn{2}{|l|}{High School - Geometry Congruence (12 items)} & \multirow[b]{2}{*}{Number of Items} & \multirow[b]{2}{*}{Total Items per Reporting Category} \\
\hline & & Assessment Targets & DOK & & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{0} & \multirow{6}{*}{0} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{0} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{12} & \multirow{3}{*}{12} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

High School (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{High School - Geometry Measurement and Modeling (10 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{4} & \multirow{6}{*}{10} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{6} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{0} & \multirow{3}{*}{0} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

High School (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{High School - Interim Assessment Block - Performance Task} \\
\hline Claim & Content Category & Assessment Targets & DOK & Items per Claim & Total Items in PT \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{9}{*}{6} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{3} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

\section*{Mathematics Interim Assessment Blocks Blueprint}
as of July 2020

The Smarter Balanced Interim Assessment Blocks (IABs) are one type of interim assessment being made available by the Consortium; the other types are the Interim Comprehensive Assessment (ICAs) which are similar in structure and follow the same blueprint as the summative assessment, and the Focused Interim Assessment Blocks (FIABs) which are snapshots of student performance on one or more targets. IABs are short, sets or blocks of items that measure multiple Claim 1 assessment targets. Results from these assessments provide information about a student's strengths or needs in relation to the Common Core State Standards (CCSS) and, therefore, generate more detailed information for instructional purposes than the summative assessment or ICAs alone. All types of interim assessments are currently available as fixed forms. The fixed forms are administered online, using the same delivery software as the summative assessments.

This blueprint presents the specific blocks that are available by grade level for mathematics beginning at grade 3 and continuing through high school. Each block-level blueprint contains information about claim(s), assessment target(s), and depth of knowledge (DOK) level(s) addressed by the items in that block as well as the numbers of items allocated to each of those categories.

The blueprint can be used by educators to plan how to integrate the IABs and FIABs effectively within classroom instruction or to better understand results that are reported. Users of the blueprint can become familiar with the number of \(I A B s / F I A B s\) for each grade level, the general focus of each, (i.e., which assessment targets are addressed in a specific IAB or FIAB and the emphasis of each target relative to the other targets in the block). A fifth-grade teacher, for example, may wish to collect more information regarding her students' knowledge about measurement and data. The teacher could use this blueprint to see that there is a block for measurement and data composed of 14 machined-scored items across the four claims-concepts and procedures, problem solving, modeling and data analysis, and communicating reasoning. After reading the blueprint, she will have a better understanding of the meaning of the measurement and data block.

Finally, educators can use these IAB as well as the FIAB blueprints in conjunction with the summative and ICA blueprints to support more comprehensive classroom-level instruction and assessment plans.

\section*{Mathematics Interim Assessment Blocks}
\begin{tabular}{|c|c|c|}
\hline Grade 3 & Grade 4 & Grade 5 \\
\hline Operations and Algebraic Thinking & Operations and Algebraic Thinking & Number and Operations in Base Ten \\
\hline Measurement and Data & Number and Operations in Base Ten & Number and Operations - Fractions \\
\hline Mathematics Performance Task & Number and Operations - Fractions & Measurement and Data \\
\hline & Measurement and Data & Operations and Algebraic Thinking \\
\hline & Mathematics Performance Task & Mathematics Performance Task \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Grade 6 & Grade 7 & Grade 8 \\
\hline Expressions and Equations & Expressions and Equations & Expressions \& Equations I \\
\hline The Number System & Geometry & Geometry \\
\hline Mathematics Performance Task & Mathematics Performance Task & Mathematics Performance Task \\
\hline & & \\
\hline
\end{tabular}

\section*{High School}
\begin{tabular}{|c|c|}
\hline Algebra and Functions I - Linear Functions, Equations, and Inequalities & Geometry Congruence \\
\hline Algebra and Functions II - Quadratic Functions, Equations, and \\
Inequalities
\end{tabular}\(\quad\) Geometry Measurement and Modeling

GRADE 3
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 3 - Operations and Algebraic Thinking (15 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{4}{*}{1. Concepts and Procedures} & \multirow{4}{*}{OA} & A. Represent and solve problems involving multiplication and division. & 1, 2 & 4 & \multirow{4}{*}{12} \\
\hline & & B. Understand properties of multiplication and the relationship between multiplication and division. & 1 & 2 & \\
\hline & & C. Multiply and divide within 100. & 1 & 2 & \\
\hline & & D. Solve problems involving the four operations, and identify and explain patterns in arithmetic. & 2 & 4 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2,3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{1} & \multirow{3}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 3 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 3 - Measurement and Data (15 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{4}{*}{1. Concepts and Procedures} & \multirow{4}{*}{MD} & G. Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. & 1, 2 & 4 & \multirow{4}{*}{12} \\
\hline & & H. Represent and interpret data. & 2, 3 & 2 & \\
\hline & & I. Geometric measurement: understand concepts of area and relate area to multiplication and to addition. & 1, 2 & 4 & \\
\hline & & J. Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures. & 1 & 2 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving Claim 2} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis Claim 4} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{1} & \multirow{3}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 3 (continued)


\section*{GRADE 4}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow[t]{3}{*}{1. Concepts} & \multirow{3}{*}{OA} & A. Use the four operations with whole numbers to solve problems. & 1, 2 & 4 & \multirow{3}{*}{9} \\
\hline & & B. Gain familiarity with factors and multiples. & 1, 2 & 4 & \\
\hline & & C. Generate and analyze patterns. & 2, 3 & 1 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{2} & \multirow{6}{*}{5} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{3} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{3. Communicating Reasoning} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \multirow{3}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 4 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 4 - Number and Operations in Base Ten (15 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow[b]{2}{*}{1. Concepts and Procedures} & \multirow[b]{2}{*}{NBT} & D. Generalize place value understanding for multi-digit whole numbers. & 1, 2 & 5 & \multirow[t]{2}{*}{12} \\
\hline & & E. Use place value understanding and properties of operations to perform multidigit arithmetic. & 1 & 7 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{0} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \multirow{3}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 4 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 4 - Number and Operations - Fractions (15 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{3}{*}{1. Concepts and Procedures} & \multirow{3}{*}{NF} & F. Extend understanding of fraction equivalence and ordering. & 1, 2 & 5 & \multirow{3}{*}{12} \\
\hline & & G. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. & 1, 2 & 5 & \\
\hline & & H. Understand decimal notation for fractions, and compare decimal fractions. & 1, 2 & 2 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{0} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \multirow{3}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 4 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Claim} & \multirow[b]{2}{*}{Content Category} & \multicolumn{2}{|l|}{Grade 4 - Measurement and Data (15 items)} & & \\
\hline & & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow[t]{3}{*}{1. Concepts and Procedures} & \multirow{3}{*}{MD} & I. Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. & 1, 2 & 6 & \multirow{3}{*}{3} \\
\hline & & J. Represent and interpret data. & 1, 2 & 2 & \\
\hline & & K. Geometric measurement: understand concepts of angle and measure angles. & 1, 2 & 5 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2,3 & 1 & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2,3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{0} & \multirow{3}{*}{0} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 4 (continued)


GRADE 5
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 5 - Number and Operations in Base Ten (15 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow[t]{2}{*}{1. Concepts and Procedures} & \multirow[b]{2}{*}{NBT} & C. Understand the place value system. & 1, 2 & 4 & \multirow[b]{2}{*}{11} \\
\hline & & D. Perform operations with multi-digit whole numbers and with decimals to hundredths. & 1, 2 & 7 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{3. Communicating Reasoning} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \multirow{3}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 5 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 5 - Number and Operations - Fractions (15 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow[t]{2}{*}{1. Concepts and Procedures} & \multirow[b]{2}{*}{NF} & E. Use equivalent fractions as a strategy to add and subtract fractions. & 1, 2 & 5 & \multirow[b]{2}{*}{11} \\
\hline & & F. Apply and extend previous understandings of multiplication and division to multiply and divide fractions. & 1, 2 & 6 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \multirow{3}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 5 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 5 - Measurement and Data (14 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{3}{*}{1. Concepts and Procedures} & \multirow{3}{*}{MD} & G. Convert like measurement units within a given measurement system. & 1 & 1 & \multirow{3}{*}{9} \\
\hline & & H. Represent and interpret data. & 1, 2 & 2 & \\
\hline & & I. Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition. & 1, 2 & 6 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{3} & \multirow{6}{*}{4} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{1} & \multirow{3}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 5 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 5 - Operations and Algebraic Thinking (15 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow[t]{2}{*}{1. Concepts and Procedures} & \multirow[t]{2}{*}{OA} & A. Write and interpret numerical expressions. & 1 & 9 & \multirow[t]{2}{*}{13} \\
\hline & & B. Analyze patterns and relationships. & 2 & 4 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{0} & \multirow{3}{*}{0} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 5 (continued)


GRADE 6
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 6 - Expressions and Equations (16 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{3}{*}{1. Concepts and Procedures} & \multirow{3}{*}{EE} & E. Apply and extend previous understandings of arithmetic to algebraic expressions. & 1 & 3 & \multirow{3}{*}{13} \\
\hline & & F. Reason about and solve one-variable equations and inequalities. & 1, 2 & 6 & \\
\hline & & G. Represent and analyze quantitative relationships between dependent and independent variables. & 2 & 4 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{3. Communicating Reasoning} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{1} & \multirow{3}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 6 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 6 - The Number System (15 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{3}{*}{1. Concepts and Procedures} & \multirow{3}{*}{NS} & B. Apply and extend previous understandings of multiplication and division to divide fractions by fractions. & 1, 2 & 2 & \multirow[t]{3}{*}{13} \\
\hline & & C. Compute fluently with multi-digit numbers and find common factors and multiples. & 1, 2 & 5 & \\
\hline & & D. Apply and extend previous understandings of numbers to the system of rational numbers. & 1, 2 & 6 & \\
\hline \multirow{6}{*}{2. Problem Solving 4. Modeling and Data Analysis} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{0} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{3. Communicating Reasoning} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{1} & \multirow{3}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 6 (continued)


GRADE 7
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 7 - Expressions and Equations (15 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow[t]{2}{*}{1. Concepts and Procedures} & \multirow[b]{2}{*}{EE} & C. Use properties of operations to generate equivalent expressions. & 1, 2 & 5 & \multirow[b]{2}{*}{12} \\
\hline & & D. Solve real-life and mathematical problems using numerical and algebraic expressions and equations. & 1, 2 & 7 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow[b]{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow[b]{3}{*}{1} & \multirow[b]{3}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 7 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Claim} & \multirow[b]{2}{*}{Content Category} & \multicolumn{2}{|l|}{Grade 7 - Geometry (13 items)} & & \\
\hline & & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow[t]{2}{*}{1. Concepts and Procedures} & \multirow[t]{2}{*}{G} & E. Draw, construct, and describe geometrical figures and describe the relationship between them. & 1, 2 & 5 & \multirow[t]{2}{*}{11} \\
\hline & & F. Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. & 1, 2 & 6 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{2} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{0} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow[b]{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow[b]{3}{*}{0} & \multirow{3}{*}{0} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 7 (continued)


GRADE 8
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Grade 8 - Expressions \& Equations I (14 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{3}{*}{1. Concepts and Procedures} & \multirow{3}{*}{EE} & A. Work with radicals and integer exponents. & 1, 2 & 3 & \multirow{3}{*}{9} \\
\hline & & B. Understand the connections between proportional relationships, lines, and linear equations. & 1, 2 & 2 & \\
\hline & & C. Analyze and solve linear equations and pairs of simultaneous linear equations. & 1, 2 & 4 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{3} & \multirow{6}{*}{3} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{0} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \multirow{3}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 8 (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Claim} & \multirow[b]{2}{*}{Content Category} & \multicolumn{2}{|l|}{Grade 8 - Geometry (14 items)} & & \\
\hline & & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{3}{*}{1. Concepts and Procedures} & \multirow{3}{*}{G} & G. Understand congruence and similarity using physical models, transparencies, or geometry software. & 1, 2 & 6 & \multirow{3}{*}{13} \\
\hline & & H. Understand and apply the Pythagorean Theorem. & 1, 2 & 5 & \\
\hline & & I. Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres. & 1, 2 & 2 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{0} & \multirow{6}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2,3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{0} & \multirow{3}{*}{0} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

GRADE 8 (continued)


\section*{Blueprint}

\section*{High School}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{High School - Algebra and Functions I - Linear Functions, Equations, and Inequalities (15 items)} \\
\hline \multicolumn{2}{|l|}{\begin{tabular}{ll} 
Claim & \begin{tabular}{c} 
Content \\
Category
\end{tabular}
\end{tabular}} & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{6}{*}{1. Concepts and Procedures} & \multirow{6}{*}{A, F} & G. Create equations that describe numbers or relationships. & 1, 2 & 1 & \multirow{6}{*}{11} \\
\hline & & I. Solve equations and inequalities in one variable. & 1, 2 & 3 & \\
\hline & & J. Represent and solve equations and inequalities graphically. & 1, 2 & 4 & \\
\hline & & L. Interpret functions that arise in applications in terms of a context. & 1, 2 & 1 & \\
\hline & & M. Analyze functions using different representations. & 1,2,3 & 1 & \\
\hline & & \(N\). Build a function that models a relationship between two quantities. & 2 & 1 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{2} & \multirow{6}{*}{3} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2,3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{1} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{1} & \multirow{3}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

\section*{Blueprint}

\section*{High School (continued)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{7}{*}{1. Concepts and Procedures} & \multirow{7}{*}{A, F} & G. Create equations that describe numbers or relationships. & 1, 2 & 1 & \multirow{7}{*}{12} \\
\hline & & H. Understand solving equations as a process of reasoning and explain the reasoning. & 1, 2 & 3 & \\
\hline & & I. Solve equations and inequalities in one variable. & 1, 2 & 1 & \\
\hline & & J. Represent and solve equations and inequalities graphically. & 1,2 & 3 & \\
\hline & & L. Interpret functions that arise in applications in terms of a context. & 1, 2 & 1 & \\
\hline & & M. Analyze functions using different representations. & 1,2, 3 & 2 & \\
\hline & & N. Build a function that models a relationship between two quantities. & 2 & 1 & \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{0} & \multirow{6}{*}{2} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{2} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{1} & \multirow{3}{*}{1} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

\section*{Blueprint}
as of July 2020
High School (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Claim} & \multirow[b]{2}{*}{Content Category} & \multicolumn{2}{|l|}{High School - Geometry Congruence (12 items)} & & \\
\hline & & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{0} & \multirow{6}{*}{0} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1,2,3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{0} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{12} & \multirow{3}{*}{12} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

\section*{Blueprint}
as of July 2020
High School (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{High School - Geometry Measurement and Modeling (10 items)} \\
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{4} & \multirow{6}{*}{10} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{6} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{0} & \multirow{3}{*}{0} \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply.
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

\section*{High School (continued)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{High School - Interim Assessment Block - Performance Task} \\
\hline Claim & Content Category & Assessment Targets & DOK & \begin{tabular}{l}
Items \\
per \\
Claim
\end{tabular} & Total Items in PT \\
\hline \multirow{6}{*}{\begin{tabular}{l}
2. Problem Solving \\
4. Modeling and Data Analysis
\end{tabular}} & \multirow[b]{2}{*}{Problem Solving} & A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. & 2, 3 & \multirow[b]{2}{*}{1} & \multirow{9}{*}{6} \\
\hline & & \begin{tabular}{l}
B. Select and use appropriate tools strategically. \\
C. Interpret results in the context of a situation. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & \multirow{4}{*}{Modeling and Data Analysis} & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
D. Interpret results in the context of a situation.
\end{tabular} & 2, 3 & \multirow{4}{*}{3} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).
\end{tabular} & 1, 2, 3 & & \\
\hline & & G. Identify, analyze, and synthesize relevant external resources to pose or solve problems. & 3, 4 & & \\
\hline \multirow{3}{*}{\begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular}} & \multirow{3}{*}{Communicating Reasoning} & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
D. Use the technique of breaking an argument into cases.
\end{tabular} & 2, 3 & \multirow{3}{*}{2} & \\
\hline & & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is.
\end{tabular} & 2, 3, 4 & & \\
\hline & & \begin{tabular}{l}
C. State logical assumptions being used. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
G. At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)
\end{tabular} & 2, 3 & & \\
\hline
\end{tabular}

\section*{Mathematics Focused Interim Assessment Blocks Blueprint}
as of July 2020

The Smarter Balanced Focused Interim Assessment Blocks (FIABs) are one type of interim assessment being made available by the Consortium; the other types are the Interim Comprehensive Assessment (ICAs) which are similar in structure and follow the same blueprint as the summative assessment, and the Interim Assessment Blocks (IABs) which are snapshots of student performance on multiple targets. FIABs are short, focused sets or blocks of items that measure one or more Claim 1 assessment targets. Results from these assessments provide information about a student's strengths or needs in relation to the Common Core State Standards (CCSS) and, therefore, generate more detailed information for instructional purposes than the summative assessment or ICAs alone. All types of interim assessments are currently available as fixed forms. The fixed forms are administered online, using the same delivery software as the summative assessments.

This blueprint presents the specific blocks that are available by grade level for mathematics beginning at grade 3 and continuing through high school. Each block-level blueprint contains information about claim(s), assessment target(s), and depth of knowledge (DOK) level(s) addressed by the items in that block as well as the numbers of items allocated to each of those categories.

The blueprint can be used by educators to plan how to integrate the IABs and FIABs effectively within classroom instruction or to better understand results that are reported. Users of the blueprint can become familiar with the number of \(I A B s / F I A B s\) for each grade level, the general focus of each, (i.e., which assessment targets are addressed in a specific IAB or FIAB and the emphasis of each target relative to the other targets in the block). A fifth-grade teacher, for example, may wish to collect more information regarding her students' knowledge about geometry. The teacher could use this blueprint to see that there is a block for geometry composed of 13 machined-scored items across the four claims-concepts and procedures, problem solving, modeling and data analysis, and communicating reasoning. After reading the blueprint, she will have a better understanding of the meaning of the geometry block.

Finally, educators can use these FIAB as well as the IAB blueprints in conjunction with the summative and ICA blueprints to support more comprehensive classroom-level instruction and assessment plans.

\section*{Mathematics Focused Interim Assessment Blocks}
\begin{tabular}{|c|c|c|}
\hline Grade 3 & Grade 4 & Grade 5 \\
\hline \begin{tabular}{c|c|c|}
\hline Multiplication and Division: Interpret, \\
Represent, and Solve
\end{tabular} & \begin{tabular}{c} 
Four Operations: Interpret, Represent, \\
and Solve
\end{tabular} & Numerical Expressions \\
\hline Properties of Multiplication and Division & Fraction Equivalence and Ordering & Operations with Whole Numbers and Decimals \\
\hline Multiply and Divide within 100 & Fractions and Decimal Notation & Add and Subtract with Equivalent Fractions \\
\hline Number and Operations - Fractions & Geometry & Geometry \\
\hline Number and Operations in Base Ten & & \\
\hline Geometry & & \\
\hline
\end{tabular}

Mathematics Focused Interim Assessment Blocks
Blueprint
as of July 2020
\begin{tabular}{|c|c|c|}
\hline Grade 6 & Grade 7 & Grade 8 \\
\hline Divide Fractions by Fractions & Equivalent Expressions & \begin{tabular}{c} 
Proportional Relationships, Lines, and Linear \\
Equations
\end{tabular} \\
\hline One-Variable Expressions and Equations & Algebraic Expressions and Equations & Analyze and Solve Linear Equations \\
\hline Dependent and Independent Variables & Geometric Figures & Congruence and Similarity \\
\hline Ratios and Proportional Relationships & Ratios and Proportional Relationships & Expression and Equations II \\
\hline Geometry & The Number System & The Number System \\
\hline Statistics and Probability & Statistics and Probability & Functions \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|c|}{ High School } \\
\hline Equations and Reasoning & Number and Quantity \\
\hline Solve Equations and Inequalities: Linear and Exponential & Interpreting Functions \\
\hline Solve Equations and Inequalities: Quadratic & Seeing Structure in Expressions/Polynomial Expressions \\
\hline Geometry and Right Triangle Trigonometry & Statistics and Probability \\
\hline
\end{tabular}

GRADE 3 - Multiplication and Division: Interpret, Represent, and Solve (12 items)
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & OA & \begin{tabular}{l}
A. Represent and solve problems involving multiplication and division. \\
- The student uses multiplication and division within 100 to solve straightforward one-step word problems in situations involving equal groups, arrays, and measurement quantities such as length, liquid volume and masses of objects. \\
- The student determines an unknown whole number in a multiplication or division equation relating three whole numbers with single-digit factors within 100.
\end{tabular} & 1 & 8 & 8 \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- Mathematical information from the context is presented in a table, graph, or diagram, or is extracted from a verbal description or pictorial representation of the context. \\
C. Interpret results in the context of a situation. \\
- The student reports a number other than the direct result of the computations implied by the problem context because the context provides additional constraints on the allowable answers.
\end{tabular} & 2, 3 & 2 & 2 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
D. Use the technique of breaking an argument into cases. \\
- The student is given a problem that has a finite number of possible solutions, some of which work and some of which don't. \\
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
- The student is presented with a proposition or conjecture. The student is asked to identify or construct reasoning that justifies or refutes the proposition or conjecture.
\end{tabular} & 2 & 2 & 2 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 3 - Properties of Multiplication and Division (11 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Claim \begin{tabular}{c} 
Content \\
Category
\end{tabular}} & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & OA & \begin{tabular}{l}
B. Understand properties of multiplication and the relationship between multiplication and division. \\
- The student uses the properties of operations (Commutative Property of Multiplication, Associative Property of Multiplication, and Distributive Property of Multiplication) as strategies to multiply and divide. \\
- The student will represent division as an unknown-factor problem.
\end{tabular} & 1 & 9 & 9 \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- Mathematical information from the context is presented in a table, graph, or diagram, or is extracted from a verbal description or pictorial representation of the context.
\end{tabular} & 2 & 1 & 1 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
D. Use the technique of breaking an argument into cases. \\
- Items either present an exhaustive set of cases to consider or expect students to consider all possible cases in turn in order to distinguish it from items in other targets.
\end{tabular} & 2 & 1 & 1 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

GRADE 3 - Multiply and Divide within 100 (14 items)
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & OA & \begin{tabular}{l}
C. Multiply and divide within 100 . \\
- The student accurately multiplies single-digit factors within 100. \\
- The student accurately divides within 100 using single-digit divisors and single-digit quotients. \\
- The student connects multiplication and division to target fluencies.
\end{tabular} & 1 & 14 & 14 \\
\hline
\end{tabular}

GRADE 3 - Number and Operations - Fractions (14 items)
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & NF & \begin{tabular}{l}
F. Develop understanding of fractions as numbers. \\
- The student identifies a fraction \(1 / b\) as 1 part of a whole that is partitioned into \(b\) equal parts, and a fraction \(a / b\) as the quantity formed by a parts of size \(1 / b\) using a model. For this evidence statement, \(a / b\) may be greater than, less than, or equal to 1. \\
- The student identifies and represents fractions on a number line using the interval 0-1 as the whole with or without partitioning. \\
- The student identifies two fractions as equal if they are the same size or the same point on a number line. \\
- The student generates simple equal fractions using a visual fraction model. \\
- The student expresses whole numbers as fractions and recognizes fractions equal to whole numbers. \\
- The student compares two fractions with the same numerator or the same denominator using the symbols <, =, >.
\end{tabular} & 1, 2 & 13 & 13 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
C. State logical assumptions being used. \\
- Items for this target focus on the core mathematical work that students are doing around numbers and operations, with mathematical content from other domains playing a supporting role in setting up the reasoning contexts.
\end{tabular} & 3 & 1 & 1 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 3 - Number and Operations in Base Ten (14 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & NBT & \begin{tabular}{l}
E. Use place value understanding and properties of operations to perform multi-digit arithmetic. \\
- The student solves non-contextual problems using place value understanding to round whole numbers to the nearest 10 or 100. \\
- The student solves non-contextual problems by adding and/or subtracting within 1000, using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. \\
- The student solves non-contextual computation problems by multiplying one-digit whole numbers by multiples of 10 in the range \(10-90\) using strategies based on place value and properties of operations.
\end{tabular} & 1 & 12 & 12 \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- Mathematical information from the context is presented in a table, graph, or diagram, or is extracted from a verbal description or pictorial representation of the context. \\
- Understandings from geometry or measurement may be needed to determine the operations to be performed.
\end{tabular} & 2 & 2 & 2 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
— Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 3 - Geometry (12 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & G & \begin{tabular}{l}
K. Reason with shapes and their attributes. \\
- The student identifies, draws, and classifies shapes (e.g., rhombuses, rectangles, and others) according to their attributes (e.g., having four sides), and recognizes that shared attributes can define a classification category. \\
- The student partitions shapes into parts with equal areas and can express the area of each part as a unit fraction of the whole.
\end{tabular} & 1 & 12 & 12 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 4 - Four Operations: Interpret, Represent, and Solve (14 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & OA & \begin{tabular}{l}
A. Use the four operations with whole numbers to solve problems. \\
- The student solves contextual problems involving multiplicative comparisons, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. \\
- The student solves straightforward, contextual problems using the four operations.
\end{tabular} & 1,2 & 11 & 11 \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- The student interprets base-ten numbers in terms of the context.
\end{tabular} & 2 & 1 & \\
\hline 4. Modeling and Data Analysis & Modeling and Data Analysis & \begin{tabular}{l}
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas). \\
- The student is asked to solve a problem that may require the integration of concepts and skills from multiple domains.
\end{tabular} & 2 & 1 & 2 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
C. State logical assumptions being used. \\
- Items focus on the core mathematical work that students are doing around numbers and operations, with mathematical content from other domains playing a supporting role in setting up the reasoning contexts.
\end{tabular} & 2 & 1 & 1 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 4 - Fraction Equivalence and Ordering (13 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & NF & \begin{tabular}{l}
F. Extend understanding of fraction equivalence and ordering. \\
- The student recognizes when two or more fractions are equivalent. \\
- The student generates equivalent fractions given an initial fraction or fraction model. \\
- The student uses the symbols < , > , and = to compare fractions with different numerators and different denominators.
\end{tabular} & 1, 2 & 10 & 10 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
- Items probe the key mathematical structures that students at that grade-level are studying, such as the structure of base-ten numbers, fractions, or the four operations and their properties. \\
B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. \\
- The student is asked a mathematical question and is asked to identify or construct reasoning that justifies his or her answer. \\
D. Use the technique of breaking an argument into cases. \\
- The student is given a proposition and an exhaustive list of cases and asked to determine in which of those cases the proposition is true.
\end{tabular} & 2, 3 & 3 & 3 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
— Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 4 - Fractions and Decimal Notation (13 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Claim \begin{tabular}{c} 
Content \\
Category
\end{tabular}} & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & NF & \begin{tabular}{l}
H. Understand decimal notation for fractions, and compare decimal fractions. \\
- The student expresses a fraction with denominator 10 as an equivalent fraction with denominator 100. \\
- The student adds two fractions with respective denominators 10 and 100. \\
- The student uses decimal notation to represent fractions with denominators 10 or 100 . \\
- The student locates decimal numbers to the hundredths place on a number line. \\
- The student compares two decimals to the hundredths place by reasoning about their size, using the symbols <, > , or \(=\).
\end{tabular} & 1,2 & 11 & 11 \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- Items the student to identify quantities of interest and map their relationships, often via diagrams or equations.
\end{tabular} & 2 & 1 & 1 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
D. Use the technique of breaking an argument into cases. \\
- The student is given a problem that has a finite number of possible solutions, some of which work and some of which don't.
\end{tabular} & 2 & 1 & 1 \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

\section*{GRADE 4 - Geometry (11 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & G & \begin{tabular}{l}
L. Draw and identify lines and angles, and classify shapes by properties of their lines and angles. \\
- The student draws points, lines, line segments, rays, and angles and identifies these in two-dimensional figures. \\
- The student classifies two-dimensional figures based on the presence or absence of parallel/perpendicular line segments and angles of a specified size, including identifying right triangles. \\
- The student identifies and draws lines of symmetry in line-symmetric figures, and distinguishes line-symmetric figures from line-asymmetric figures.
\end{tabular} & 1,2 & 11 & 11 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 5 - Numerical Expressions (14 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & OA & \begin{tabular}{l}
A. Write and interpret numerical expressions. \\
- The student writes or identifies a numerical expression that records a calculation represented with words. \\
- The student interprets numerical expressions in words without evaluating them. \\
- The student evaluates numerical expressions with grouping symbols.
\end{tabular} & 1,2 & 14 & 14 \\
\hline
\end{tabular}

GRADE 5 - Operations with Whole Numbers and Decimals (12 items)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Claim \begin{tabular}{c} 
Content \\
Category
\end{tabular}} & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & NBT & \begin{tabular}{l}
D. Perform operations with multi-digit whole numbers and with decimals to hundredths. \\
- The student multiplies multi-digit whole numbers. \\
- The student determines whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. \\
- The student adds, subtracts, multiplies, and divides decimals to the hundredths using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
\end{tabular} & 1, 2 & 11 & 11 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
C. State logical assumptions being used. \\
- The student will be given one or more definitions or assumptions and be asked to reason from that set of definitions and assumptions.
\end{tabular} & 3 & 1 & 1 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 5 - Add and Subtract with Equivalent Fractions (15 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & NF & \begin{tabular}{l}
E. Use equivalent fractions as a strategy to add and subtract fractions. \\
- The student adds or subtracts fractions with unlike denominators (including mixed numbers) by using visual fraction models or equations to represent the problem. \\
- The student identifies and explains the use of equivalent fractions when adding or subtracting fractions with unlike denominators (including mixed numbers).
\end{tabular} & 1, 2 & 13 & 13 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is. \\
- Items for this target focus on the core mathematical work that students are doing around numbers and operations, with mathematical content from other domains playing a supporting role in setting up the reasoning contexts. \\
- The student is presented with valid or invalid reasoning and asked to determine its validity. If the reasoning is flawed, the student will explain or correct the flaw.
\end{tabular} & 2 & 2 & 2 \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

GRADE 5 - Geometry (13 items)
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & G & \begin{tabular}{l}
J. Graph points on the coordinate plane to solve real-world and mathematical problems. \\
- The student interprets coordinate values of points graphed on a coordinate plane, or in the context of a given situation. \\
- The student graphs points on the coordinate plane representing realworld or mathematical problems.
\end{tabular} & 1 & 5 & \multirow[t]{2}{*}{9} \\
\hline 1. Concepts and Procedures & G & \begin{tabular}{l}
K. Classify two-dimensional figures into categories based on their properties. \\
- The student classifies two-dimensional figures into categories and/or subcategories based on their properties.
\end{tabular} & 2 & 4 & \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- Items require the student to identify quantities of interest and map their relationships, often via diagrams or equations.
\end{tabular} & 2 & 1 & \multirow[b]{2}{*}{2} \\
\hline 4. Modeling and Data Analysis & Modeling and Data Analysis & \begin{tabular}{l}
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas). \\
- The student is asked to solve a problem that may require the integration of concepts and skills from multiple domains.
\end{tabular} & 2 & 1 & \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is. \\
- The student is presented with valid or invalid reasoning and asked to determine its validity. If the reasoning is flawed, the student will explain or correct the flaw. \\
C. State logical assumptions being used. \\
- The student is asked to identify an unstated assumption that would make the problem well-posed or allow them to solve a problem using a given method.
\end{tabular} & 2, 3 & 2 & 2 \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

\section*{GRADE 6 - Divide Fractions by Fractions (14 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & NS & \begin{tabular}{l}
B. Apply and extend previous understandings of numbers to the system of rational numbers. \\
- The student interprets quotients of fractions using visual fraction models, equations, and the relationship between multiplication and division. \\
- The student solves real-world and mathematical one-step problems involving division of fractions by fractions.
\end{tabular} & 1, 2 & 12 & 12 \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- Solving the problem requires understanding of and proficiency with ratios, rates and proportional relationships, the number system, or expressions and equations.
\end{tabular} & 2 & 1 & \multirow[t]{2}{*}{2} \\
\hline 4. Modeling and Data Analysis & Modeling and Data Analysis & \begin{tabular}{l}
D. Interpret results in the context of a situation. \\
- The student interprets the solution to the problem in terms of the model or compares the results of the model with the real-world data it represents.
\end{tabular} & 3 & 1 & \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

\section*{GRADE 6 - One-Variable Expressions and Equations (14 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & \begin{tabular}{l}
Content \\
Category
\end{tabular} & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & EE & \begin{tabular}{l}
F. Reason about and solve one-variable equations and inequalities. \\
- The student uses substitution in one-variable equations and inequalities. \\
- The student writes one-variable equations and inequalities and solves onevariable equations in real-world and mathematical problems. \\
- The student represents solutions of inequalities in real-world and mathematical problems on a number line.
\end{tabular} & 1, 2 & 13 & 13 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
C. State logical assumptions being used. \\
- The student will be given one or more definitions or assumptions and be asked to reason from that set of definitions and assumptions.
\end{tabular} & 2 & 1 & 1 \\
\hline
\end{tabular}

GRADE 6 - Dependent and Independent Variables (11 items)
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & EE & \begin{tabular}{l}
G. Represent and analyze quantitative relationships between dependent and independent variables. \\
- The student writes an equation to express one quantity versus another quantity using dependent and independent variables. \\
- The student identifies the relationship between dependent and independent variables from graphs and tables and relates them to equations.
\end{tabular} & 2 & 9 & 9 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is. \\
- Two or more approaches or chains of reasoning are given and the student is asked to identify the correct method and justification OR identify the incorrect method/reasoning and the justification. \\
G. Determine conditions under which an argument does and does not apply. \\
- Items for this target focus on the core mathematical work that students are doing around ratios and proportional relationships, the rational number system, and equations and expressions.
\end{tabular} & 3 & 2 & 2 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 6 - Ratios and Proportional Relationships (13 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Claim \begin{tabular}{c} 
Content \\
Category
\end{tabular}} & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & RP & \begin{tabular}{l}
A. Understand ratio concepts and use ratio reasoning to solve problems. \\
- The student uses ratio language to describe a ratio relationship. \\
- The student determines the unit rate associated with a real-world ratio. \\
- The student finds missing values in tables of equivalent ratios. \\
- The student plots coordinate pairs to represent equivalent ratios. \\
- The student makes tables of equivalent ratios relating quantities with whole-number measurements. \\
- The student solves real-world problems involving unit rate. \\
- The student solves mathematical problems involving finding the whole, given a part and the percent. \\
- The student solves real-world and mathematical problems involving finding a percent of a quantity as a rate per 100. \\
- The student uses ratio reasoning to manipulate and transform units appropriately when multiplying or dividing quantities.
\end{tabular} & 1, 2 & 11 & 11 \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- Students use ratios, rates or proportional relationships to solve a problem arising in a real-world context.
\end{tabular} & 2 & 1 & 1 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
G. Determine conditions under which an argument does and does not apply. \\
- Items for this target focus on the core mathematical work that students are doing around ratios and proportional relationships, the rational number system, and equations and expressions.
\end{tabular} & 2 & 1 & 1 \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

\section*{GRADE 6 - Geometry (14 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & G & \begin{tabular}{l}
H. Solve real-world and mathematical problems involving area, surface area, and volume. \\
- The student determines the area of triangles, special quadrilaterals, and polygons using composition and decomposition in solving real-world and mathematical problems. \\
- The student determines the volume of right rectangular prisms with fractional edge lengths in solving real-world and mathematical problems. \\
- The student draws polygons in the coordinate plane, given coordinates for the vertices in the context of solving real-world and mathematical problems. \\
- The student determines the length of a side of a polygon in the coordinate plane, given coordinates for the vertices in the context of solving real-world and mathematical problems. \\
- The student determines the surface area of three-dimensional figures formed by nets of polygons in the context of solving real-world and mathematical problems.
\end{tabular} & 2 & 11 & 11 \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- Mathematical information from the context is presented in a table, graph, or diagram, or is extracted from a verbal description or pictorial representation of the context.
\end{tabular} & 2 & 1 & \multirow[t]{2}{*}{2} \\
\hline 4. Modeling and Data Analysis & Modeling and Data Analysis & \begin{tabular}{l}
B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. \\
- The student is presented with a multi-step problem with little or no scaffolding.
\end{tabular} & 2 & 1 & \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
G. Determine conditions under which an argument does and does not apply. \\
- The student is asked a mathematical question and is asked to identify or construct reasoning that justifies his or her answer.
\end{tabular} & 3 & 1 & 1 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 6 - Statistics and Probability (13 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & SP & \begin{tabular}{l}
I. Develop understanding of statistical variability. \\
- The student recognizes a statistical question as one that anticipates variability. \\
- The student identifies statements that describe the center and/or spread, and/or overall shape of a set of data. \\
- The student recognizes that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.
\end{tabular} & 2 & 3 & \\
\hline 1. Concepts and Procedures & SP & \begin{tabular}{l}
J. Summarize and describe distributions. \\
- The student displays numerical data on line plots, dot plots, histograms, and box plots. \\
- The student summarizes numerical data sets by describing the nature of the attribute under investigation, including how it was measured, its units of measurement, and number of observations. \\
- The student summarizes numerical data sets by determining quantitative measures of center (median and/or mean) and variability (interquartile range, range, and/or mean absolute deviation).
\end{tabular} & 1,2 & 10 & 13 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 7 - Equivalent Expressions (10 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & EE & \begin{tabular}{l}
C. Use properties of operations to generate equivalent expressions. \\
- The student adds and subtracts linear expressions with rational coefficients. \\
- The student factors linear expressions with rational coefficients. \\
- The student expands linear expressions with rational coefficients. \\
- The student generates equivalent linear expressions using a combination of addition and subtraction, factoring, and expansion.
\end{tabular} & 1, 2 & 8 & 8 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
- Items focus on the core mathematical work that students are doing around ratios and proportional relationships, the rational number system, and equations and expressions. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is. \\
- Some flawed reasoning or student work is presented and the student identifies and/or corrects the error or flaw.
\end{tabular} & 3 & 2 & 2 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 7 - Algebraic Expressions and Equations (13 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & EE & \begin{tabular}{l}
D. Solve real-life and mathematical problems using numerical and algebraic expressions and equations. \\
- The student identifies equivalency between two rational numbers. \\
- The student applies properties of operations to evaluate numeric expressions, including converting between different forms of rational numbers. \\
- The student solves word problems leading to equations of the form \(p x+q=r\) and \(p(x+q)=r\), where \(p, q\), and \(r\) are specific rational numbers. \\
- The student solves word problems leading to inequalities of the form \(p x+q>r\) and \(p x+q<r\), where \(p, q\), and \(r\) are specific rational numbers. \\
- The student graphs the solution set of an inequality on a number line.
\end{tabular} & 1,2 & 11 & 11 \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- Mathematical information from the context is presented in a table, graph, or diagram, or is extracted from a verbal description or pictorial representation of the context.
\end{tabular} & 2 & 2 & 2 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 7 - Geometric Figures (11 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & G & \begin{tabular}{l}
E. Draw, construct, and describe geometrical figures and describe the relationships behind them. \\
- The student creates scale drawings. \\
- The student solves problems involving scale drawings using proportional reasoning. \\
- The student draws, constructs, or describes geometric shapes given certain conditions. \\
- The student describes a two-dimensional figure resulting from slicing a three-dimensional figure by a plane.
\end{tabular} & 1,2 & 9 & 9 \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- Understandings from statistics, probability, and geometry may be needed to set up the problem, but are not the primary focus of the problem. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas). \\
- The student is asked to solve a problem that may require the integration of concepts and skills from multiple domains.
\end{tabular} & 1,2 & 2 & 2 \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

GRADE 7 - Ratios and Proportional Relationships (13 items)
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & RP & \begin{tabular}{l}
A. Analyze proportional relationships and use them to solve real-world and mathematical problems. \\
- The student computes unit rates and finds the constant of proportionality of proportional relationships in various forms. \\
- The student determines whether two quantities, shown in various forms, are in a proportional relationship. \\
- The student represents proportional relationships between quantities using equations. \\
- The student interprets specific values from a proportional relationship in the context of a problem situation. \\
- The student computes with percentages in context.
\end{tabular} & 2 & 10 & 10 \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems in pure mathematics and those arising in everyday life, society, and the workplace. \\
- Solving the problem requires understanding of and proficiency with ratios, rates and proportional relationships, the number system, or expressions and equations.
\end{tabular} & 1 & 1 & \multirow[t]{2}{*}{2} \\
\hline 4. Modeling and Data Analysis & Modeling and Data Analysis & \begin{tabular}{l}
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon. \\
- Students construct an expression, equation, proportional relationship, linear function, or geometric figure that models a given problem.
\end{tabular} & 3 & 1 & \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
D. Use the technique of breaking an argument into cases. \\
- The student is given a problem that has a finite number of possible solutions, some of which work and some of which don't.
\end{tabular} & 2 & 1 & 1 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

GRADE 7 - The Number System (14 items)
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & NS & \begin{tabular}{l}
B. Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. \\
- The student interprets rational number values on a number line, including modeling addition and subtraction expressions. \\
- The student applies properties of operations as strategies to add and subtract rational numbers. \\
- The student applies properties of operations as strategies to multiply and divide rational numbers. \\
- The student converts from a fractional form of rational numbers to a decimal form of rational numbers. \\
- The student solves real-world and mathematical problems involving the four operations with rational numbers.
\end{tabular} & 1,2 & 10 & \multirow[t]{2}{*}{11} \\
\hline 1. Concepts and Procedures & EE & \begin{tabular}{l}
D. Solve real-life and mathematical problems using numerical and algebraic expressions and equations. \\
- The student identifies equivalency between two rational numbers. \\
- The student applies properties of operations to evaluate numeric expressions, including converting between different forms of rational numbers. \\
- The student solves word problems leading to equations of the form \(p x+q=r\) and \(p(x+q)=r\), where \(p, q\), and \(r\) are specific rational numbers. \\
- The student solves word problems leading to inequalities of the form \(p x+q>r\) and \(p x+q<r\), where \(p, q\), and \(r\) are specific rational numbers. \\
- The student graphs the solution set of an inequality on a number line.
\end{tabular} & 1 & 1 & \\
\hline 4. Modeling and Data Analysis & Modeling and Data Analysis & \begin{tabular}{l}
E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon. \\
- The student constructs a mathematical model to solve the problem.
\end{tabular} & 3 & 1 & 1 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
D. Use the technique of breaking an argument into cases. \\
- The student is given a problem that has a finite number of possible solutions, some of which work and some of which don't. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
- The student uses concrete referents to help justify or refute an argument.
\end{tabular} & 2,3 & 2 & 2 \\
\hline
\end{tabular}

\section*{GRADE 7 - Statistics and Probability (15 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & SP & \begin{tabular}{l}
G. Use random sampling to draw inferences about a population. \\
- The student determines whether a sample is representative of a population. \\
- The student draws inferences about a population using data from a random sample.
\end{tabular} & 1, 2 & 3 & \multirow{3}{*}{13} \\
\hline 1. Concepts and Procedures & SP & \begin{tabular}{l}
H. Draw informal comparative inferences about two populations. \\
- The student makes comparisons between two numerical data distributions.
\end{tabular} & 2 & 4 & \\
\hline 1. Concepts and Procedures & SP & \begin{tabular}{l}
I. Investigate chance processes and develop, use, and evaluate probability models. \\
- The student understands the likelihood of an event as a probability between 0 and 1 . \\
- The student finds probabilities of simple events. \\
- The student compares predicted probabilities to observed frequencies. \\
- The student finds probabilities of compound events.
\end{tabular} & 1, 2 & 6 & \\
\hline 4. Modeling and Data Analysis & Modeling and Data Analysis & \begin{tabular}{l}
C. State logical assumptions being used. \\
- The student provides a reasoned estimate of a quantity needed to solve the problem. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas). \\
- The student is asked to solve a problem that may require the integration of concepts and skills from multiple domains.
\end{tabular} & 2, 3 & 2 & 2 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 8 - Proportional Relationships, Lines, and Linear Equations (10 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & EE & \begin{tabular}{l}
C. Understand the connections between proportional relationships, lines, and linear equations. \\
- The student graphs proportional relationships. \\
- The student interprets the unit rate as the slope of the graph of a proportional relationship. \\
- The student compares two different proportional relationships represented in different formats. \\
- The student finds the equation \(y=m \mathrm{x}\) or \(y=m \mathrm{x}+b\) for a line.
\end{tabular} & 2 & 8 & 8 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is. \\
- The student is presented with valid or invalid reasoning and asked to determine its validity. If the reasoning is flawed, the student will explain or correct the flaw. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
- The student uses concrete referents to help justify or refute an argument.
\end{tabular} & 2 & 2 & 2 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

GRADE 8 - Analyze and Solve Linear Equations (12 items)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Claim \begin{tabular}{c} 
Content \\
Category
\end{tabular}} & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & EE & \begin{tabular}{l}
D. Analyze and solve linear equations and pairs of simultaneous linear equations. \\
- The student identifies and writes examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. \\
- The student solves linear equations in one variable with rational coefficients, including equations with solutions that require expanding expressions using the distributive property and collecting like terms. \\
- The student estimates solutions by graphing systems of two linear equations in two variables. \\
- The student recognizes when a system of two linear equations in two variables has one solution, no solution, or infinitely many solutions. \\
- The student solves a system of two linear equations in two variables algebraically, or solves real-world and mathematical problems leading to two linear equations in two variables.
\end{tabular} & 1,2 & 7 & 7 \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- Mathematical information from the context is presented in a table, graph, or diagram, or is extracted from a verbal description or pictorial representation of the context. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas). \\
- The student is asked to solve a problem that may require the integration of concepts and skills from multiple domains.
\end{tabular} & 2,3 & 2 & 2 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
D. Use the technique of breaking an argument into cases. \\
- The student is given a problem that has a finite number of possible solutions, some of which work and some of which don't. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is. \\
- Some flawed reasoning or student work is presented and the student identifies and/or corrects the error or flaw.
\end{tabular} & 2, 3 & 3 & 3 \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

\section*{GRADE 8 - Congruence and Similarity (12 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & G & \begin{tabular}{l}
G. Understand congruence and similarity using physical models, transparencies, or geometry software. \\
- The student verifies that rigid transformations preserve distance and angle measures. \\
- The student describes sequences of rotations, reflections, translations, and dilations that can verify whether two-dimensional figures are similar or congruent to each other. \\
- The student constructs a new figure that is the result of dilating, rotating, reflecting, or translating the original figure. \\
- The student describes the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.
\end{tabular} & 1, 2 & 7 & 7 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
D. Use the technique of breaking an argument into cases. \\
- The student is given a problem that has a finite number of possible solutions, some of which work and some of which don't. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is. \\
- Some flawed reasoning or student work is presented and the student identifies and/or corrects the error or flaw. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
- Items for this target focus on graphs of linear equations and systems of linear equations and geometric contexts related to transformations of the plane or the Pythagorean Theorem. \\
- The student uses concrete referents to help justify or refute an argument.
\end{tabular} & 2, 3 & 5 & 5 \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

GRADE 8 - Expressions and Equations II (13 items)
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & EE & \begin{tabular}{l}
D. Analyze and solve linear equations and pairs of simultaneous linear equations. \\
- The student identifies and writes examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. \\
- The student solves linear equations in one variable with rational coefficients, including equations with solutions that require expanding expressions using the distributive property and collecting like terms. \\
- The student estimates solutions by graphing systems of two linear equations in two variables. \\
- The student recognizes when a system of two linear equations in two variables has one solution, no solution, or infinitely many solutions. \\
- The student solves a system of two linear equations in two variables algebraically, or solves real-world and mathematical problems leading to two linear equations in two variables.
\end{tabular} & 1,2 & 5 & \multirow[t]{2}{*}{10} \\
\hline 1. Concepts and Procedures & SP & \begin{tabular}{l}
J. Investigate patterns of association in bivariate data. \\
- The student interprets patterns of association between two quantities in a scatter plot (clustering in reference to the line of best fit, positive or negative association, linear association, nonlinear association, and the effect of outliers) and interprets the slope and y-intercept in terms of the context. \\
- The student identifies the slope (rate of change) and intercept (initial value) of a line suggested by examining bivariate measurement data in a scatter plot. \\
- The student constructs and interprets a two-way table summarizing data on two categorical variables collected from the same subjects. \\
- The student uses relative frequencies calculated for rows or columns to describe possible association between the two variables.
\end{tabular} & 1, 2 & 5 & \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- The student solves a real world and mathematical problems using expressions, equations, and functions.
\end{tabular} & 2 & 1 & \multirow[t]{2}{*}{2} \\
\hline 4. Modeling and Data Analysis & Modeling and Data Analysis & \begin{tabular}{l}
C. State logical assumptions being used. \\
- The student identifies information or assumptions needed to solve the problem.
\end{tabular} & 2 & 1 & \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
D. Use the technique of breaking an argument into cases. \\
- The student is given a proposition and asked to determine in which cases the proposition is true.
\end{tabular} & 2 & 1 & 1 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

\section*{GRADE 8 - The Number System (13 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & NS & \begin{tabular}{l}
A. Know that there are numbers that are not rational, and approximate them by rational numbers. \\
- The student classifies real numbers as rational or irrational. \\
- The student converts repeating decimals to fractions. \\
- The student writes approximations of irrational numbers as rational numbers. \\
- The student compares the sizes of irrational numbers by using rational approximations of irrational numbers. \\
- The student approximates the locations of irrational numbers on the number line by using rational approximations of irrational numbers.
\end{tabular} & 1, 2 & 13 & 13 \\
\hline
\end{tabular}
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.

Mathematics Focused Interim Assessment Blocks
Blueprint
as of July 2020
GRADE 8 - Functions (15 items)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\begin{tabular}{ll} 
Claim & Content \\
Category
\end{tabular}} & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & F & \begin{tabular}{l}
E. Define, evaluate, and compare functions. \\
- The student recognizes that a function is a rule that assigns to each input exactly one output. \\
- The student identifies or produces input and output pairs for given functions. \\
- The student recognizes the same function written in different functional forms (algebraic, graphic, tabular, or verbal). \\
- The student compares properties of two functions, each represented in a different way (algebraic, graphic, tabular, or verbal). \\
- The student recognizes and gives examples of functions that are not linear.
\end{tabular} & 1, 2 & 6 & \multirow[b]{2}{*}{11} \\
\hline 1. Concepts and Procedures & F & \begin{tabular}{l}
F. Use functions to model relationships between quantities. \\
- The student constructs a function to model a linear relationship between two quantities. \\
- The student determines the rate of change and initial value of a function, either from a description of a relationship or from two \((x, y)\) values, including reading the rate of change and/or the value of the function from a table or a graph. \\
- The student interprets the rate of change and the initial value of a linear function in terms of the situation it models, its graph, or a table of values. \\
- The student qualitatively describes the functional relationship between two quantities by analyzing a graph (e.g., whether the function is increasing or decreasing, or whether the graph is linear or nonlinear). \\
- The student draws a graph that exhibits the qualitative features of a function that has been described in writing.
\end{tabular} & 1, 2 & 5 & \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas). \\
- The student is asked to solve a problem that may require the integration of concepts and skills from multiple domains.
\end{tabular} & 2 & 1 & \multirow[b]{2}{*}{2} \\
\hline 4. Modeling and Data Analysis & Modeling and Data Analysis & \begin{tabular}{l}
D. Interpret results in the context of a situation. \\
- The student interprets the solution to the problem in terms of the model or compares the results of the model with the real-world data it represents.
\end{tabular} & 2 & 1 & \\
\hline \begin{tabular}{l}
3. \\
Communicating Reasoning
\end{tabular} & Communicating Reasoning & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
- The student is presented with a proposition or conjecture and asked to give one or more supporting examples for a claim that is always true without concluding that the example(s) establish that truth. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is. \\
- Some flawed reasoning or student work is presented and the student identifies and/or corrects the error or flaw.
\end{tabular} & 3
2 & 2 & 2 \\
\hline
\end{tabular}

\section*{High School - Equations and Reasoning (11 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & A & \begin{tabular}{l}
H. Understand solving equations as a process of reasoning and explain the reasoning. \\
- The student solves radical and/or simple rational equations in one variable, including identifying the number and type of real solutions that might exist for the equation (e.g., one, two, infinite, or no real). \\
- The student evaluates proposed solutions to radical or simple rational equations, and recognizes where extraneous solution(s) might arise during the solving of the equation. \\
- The student solves radical or rational equations in multiple variables. \\
- The student identifies equivalent equations to an equation with rational or radical expressions.
\end{tabular} & 1, 2 & 9 & 9 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is. \\
- Items for this target focus on the core mathematical work that students are doing around the real number system, algebra, functions, and geometry.
\end{tabular} & 3 & 2 & 2 \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

\section*{High School - Solve Equations and Inequalities: Linear and Exponential (12 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items
per Reporting
Category \\
\hline 1. Concepts and Procedures & A & \begin{tabular}{l}
I. Solve equations and inequalities in one variable. \\
- The student solves linear equations in one variable with numeric coefficients. \\
- The student solves linear inequalities in one variable with numeric coefficients. \\
- The student solves linear inequalities in one variable with letter coefficients or identifies appropriate value(s) of a letter coefficient given specific information about a variable in a linear equation or inequality. \\
- The student recognizes equivalent equations to given linear or quadratic equations in one variable.
\end{tabular} & 1, 2 & 10 & 10 \\
\hline 4. Modeling and Data Analysis & Modeling and Data Analysis & \begin{tabular}{l}
D. Interpret results in the context of a situation. \\
- The student interprets the solution to the problem in terms of the context, in terms of the model, or compares the results of the model with the realworld data it represents.
\end{tabular} & 3 & 1 & 1 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is. \\
- Some flawed reasoning or student work is presented and the student identifies and/or corrects the error or flaw.
\end{tabular} & 3 & 1 & 1 \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

\section*{High School - Solve Equations and Inequalities: Quadratic (10 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & \begin{tabular}{l}
Content \\
Category
\end{tabular} & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & A & \begin{tabular}{l}
I. Solve equations and inequalities in one variable. \\
- The student solves quadratic equations in one variable by taking square roots, completing the square, using the quadratic formula, or by factoring. \\
- The student recognizes when the quadratic formula gives complex solutions (no real solutions). \\
- The student writes complex solutions for the quadratic formula in the form \(a \pm b i\) where \(a\) and \(b\) are real numbers. \\
- The student recognizes equivalent equations to given linear or quadratic equations in one variable.
\end{tabular} & 2 & 9 & 9 \\
\hline 2. Problem Solving & \begin{tabular}{l}
Problem \\
Solving
\end{tabular} & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- The student is asked to solve a well-posed problem arising in a purely mathematical context, in a thin context, which is defined to be a context that is nominally from outside mathematics but in reality serves a purely mathematical purpose, or in a context from everyday life, society, or the workplace.
\end{tabular} & 2 & 1 & 1 \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

\section*{High School - Geometry and Right Triangle Trigonometry (15 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Claim Content} & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & G & \begin{tabular}{l}
O. Define trigonometric ratios and solve problems involving right triangles. \\
- The student uses the definitions of trigonometric ratios for acute angles in a right triangle. \\
- The student uses similar triangles to define and determine trigonometric ratios in right triangles. \\
- The student explains and uses the relationship between the sine and cosine of complementary angles. \\
- The student uses the Pythagorean Theorem and trigonometric ratios to solve problems involving right triangles in mathematical or real-world context.
\end{tabular} & 1,2 & 11 & 11 \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- Solving the problem requires either using units, setting up and solving an equation or system of equations, building and interpreting equations or functions that represent relationships between quantities, finding or calculating geometric measures, or reasoning about geometric figures in the plane.
\end{tabular} & 3 & 1 & 1 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
A. Test propositions or conjectures with specific examples. \\
- The student is presented with a proposition or conjecture and asked to give a counterexample if the claim is false. \\
C. State logical assumptions being used. \\
- The student will be given one or more definitions or assumptions and will be asked to reason from that set of definitions and assumptions. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
- Some flawed reasoning or student work is presented and the student identifies and/or corrects the error or flaw.
\end{tabular} & 2, 3 & 3 & 3 \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

\section*{High School - Number and Quantity (15 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\begin{tabular}{ll} 
Claim & Content \\
Category
\end{tabular}} & Assessment Targets & DOK & Number of Items & \(\qquad\) \\
\hline 1. Concepts and Procedures & NQ & \begin{tabular}{l}
A. Extend the properties of exponents to rational exponents. \\
- The student rewrites expressions in radical form into an equivalent expression with rational exponents. \\
- The student will be able to rewrite expressions with rational exponents into an equivalent expression in radical form. \\
- The student uses the properties of exponents to write equivalent expressions involving radicals and rational exponents. \\
- The student solves equations that require an understanding of the definitions of radicals and rational exponents. \\
- The student finds exact or approximate values of numeric expressions involving rational exponents or radicals. \\
- The student compares expressions involving rational exponents or radicals with other numbers.
\end{tabular} & 1,2 & 4 & \\
\hline 1. Concepts and Procedures & NQ & \begin{tabular}{l}
B. Use properties of rational and irrational numbers. \\
- The student provides examples of addition or multiplication problems that will have sums or products of a specified type (rational or irrational). \\
- The student determines whether the sum of two numbers is a rational number or an irrational number. \\
- The student determines whether the product of two numbers is a rational number or an irrational number. \\
- The student provides an abstract generalization that the sum or product of any two rational numbers is rational, the sum of a rational number and an irrational number is irrational, and the product of a nonzero rational number and an irrational number is irrational.
\end{tabular} & 1, 2 & 2 & 11 \\
\hline 1. Concepts and Procedures & NQ & \begin{tabular}{l}
C. Reason quantitatively and use units to solve problems. \\
- The student chooses units consistently in formulas. \\
- The student chooses the scales for graphs and data displays. \\
- The student chooses appropriate quantities for answering a question in a real-world context.
\end{tabular} & 1,2 & 5 & \\
\hline 4. Modeling and Data Analysis & Modeling and Data Analysis & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- The student solves a multi-step problem involving number and quantity, algebra, functions, or geometric modeling of real-world phenomena.
\end{tabular} & 2 & 1 & 1 \\
\hline
\end{tabular}

\section*{High School - Number and Quantity (Cont.)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
D. Use the technique of breaking an argument into cases. \\
- The student is given a problem that has a finite number of possible solutions that need to be treated on a case-by-case basis. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is. \\
- The student is presented with valid or invalid reasoning and asked to determine its validity. If the reasoning is flawed, the student will explain or correct the flaw. \\
G. At later grades, determine conditions under which an argument does and does not apply. \\
- Items for this target focus on the core mathematical work that students are doing around the real number system, algebra, functions, and geometry.
\end{tabular} & 2, 3 & 3 & 3 \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

Smarter
Balanced
Mathematics Focused Interim Assessment Blocks
Blueprint
as of July 2020
High School - Interpreting Functions (14 items)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Claim Content} & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & NQ & \begin{tabular}{l}
K. Understand the concept of a function and use function notation. \\
- The student understands that a function from one set (the domain) to another set (the range) assigns to each element of the domain exactly one element of the range (e.g., distinguish between functions and nonfunctions). \\
- The student understands that the graph of \(f\) is the graph of the equation \(y=f(x)\). \\
- The student recognizes that sequences are functions whose domain is a subset of the integers.
\end{tabular} & 1,2 & 3 & \multirow[b]{2}{*}{10} \\
\hline 1. Concepts and Procedures & NQ & \begin{tabular}{l}
L. Interpret functions that arise in applications in terms of the context. \\
- The student interprets key features of a graph or a table representing a function modeling a relationship between two quantities. \\
- The student sketches graphs showing key features given a verbal description of a relationship between two quantities that can be modeled with a function. \\
- The student relates the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. \\
- The student calculates and interprets the average rate of change of a function presented symbolically or as a table and estimates the rate of change of a function from a graph.
\end{tabular} & 1, 2 & 7 & \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
C. Interpret results in the context of a situation. \\
- Mathematical information from the context is presented in a table, graph, or diagram, or is extracted from a verbal description or pictorial representation of the context.
\end{tabular} & 2 & 1 & \\
\hline 4. Modeling and Data Analysis & Modeling and Data Analysis & \begin{tabular}{l}
A. Apply mathematics to solve problems arising in everyday life, society, and the workplace. \\
- The student is asked to solve a problem arising in everyday life, society, or the workplace using functions, geometric modeling, probability, or statistics. \\
D. Interpret results in the context of a situation. \\
- The student interprets the solution to the problem in terms of the model or compares the results of the model with the real-world data it represents.
\end{tabular} & 3 & 2 & 3 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
G. At later grades, determine conditions under which an argument does and does not apply. \\
- Items for this target focus on the core mathematical work that students are doing around the real number system, algebra, functions, and geometry.
\end{tabular} & 3 & 1 & 1 \\
\hline
\end{tabular}

High School - Seeing Structure in Expressions/Polynomial Expressions (15 items)
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & A & \begin{tabular}{l}
D. Interpret the structure of expressions. \\
- The student uses the structure of an expression to identify ways of rewriting it.
\end{tabular} & 1, 2 & 4 & \\
\hline 1. Concepts and Procedures & A & \begin{tabular}{l}
E. Write expressions in equivalent forms to solve problems. \\
- The student understands that the factored form of a quadratic expression reveals the zeros of the function it defines. \\
- The student understands that completing the square for a quadratic expression reveals the maximum or minimum value of the function it defines. \\
- The student uses the properties of exponents to transform exponential expressions.
\end{tabular} & 1, 2 & 2 & 11 \\
\hline 1. Concepts and Procedures & A & \begin{tabular}{l}
F. Perform arithmetic operations on polynomials. \\
- The student adds or subtracts polynomials. \\
- The student multiplies polynomials.
\end{tabular} & 2 & 5 & \\
\hline 4. Modeling and Data Analysis & Modeling and Data Analysis & \begin{tabular}{l}
D. Interpret results in the context of a situation. \\
- The student interprets the solution to the problem in terms of the model or compares the results of the model with the real-world data it represents.
\end{tabular} & 3 & 1 & 1 \\
\hline 3. Communicating Reasoning & Communicating Reasoning & \begin{tabular}{l}
D. Use the technique of breaking an argument into cases. \\
- The student is given a problem that has a finite number of possible solutions that need to be treated on a case-by-case basis. \\
- The student is given a proposition and asked to determine in which cases the proposition is true. \\
E. Distinguish correct logic or reasoning from that which is flawed, and-if there is a flaw in the argument-explain what it is. \\
- The student is presented with valid or invalid reasoning and asked to determine its validity. If the reasoning is flawed, the student will explain or correct the flaw. \\
F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions. \\
- The student uses concrete referents to help justify or refute an argument.
\end{tabular} & 3 & 3 & 3 \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

\section*{High School - Statistics and Probability (12 items)}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Claim & Content Category & Assessment Targets & DOK & Number of Items & Total Items per Reporting Category \\
\hline 1. Concepts and Procedures & SP & \begin{tabular}{l}
P. Summarize, represent, and interpret data on a single count or measurement variable. \\
- The student will be able to represent data on the real number line with a dot plot, histogram, or box plot. \\
- The student will be able to use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. \\
- The student will be able to interpret the differences in shape, center, and spread in the context of the data sets. \\
- The student will be able to interpret the effects of outliers on the shape, center, and spread of a data set.
\end{tabular} & 2 & 6 & 6 \\
\hline 2. Problem Solving & Problem Solving & \begin{tabular}{l}
A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. \\
- Mathematical information from the context is presented in a table, graph, or diagram, or is extracted from a verbal description or pictorial representation of the context. \\
B. Select and use appropriate tools strategically. \\
- Mathematical information is presented in a table, graph, diagram, or equation or is extracted from a verbal description or pictorial representation of a context. \\
D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas). \\
- The student interprets the solution to the problem in terms of the model or compares the results of the model with the real-world data it represents.
\end{tabular} & 2 & 3 & \\
\hline 4. Modeling and Data Analysis & Modeling and Data Analysis & \begin{tabular}{l}
D. Interpret results in the context of a situation. \\
- The student interprets the solution to the problem in terms of the context, in terms of the model, or compares the results of the model with the real-world data it represents. \\
C. State logical assumptions being used. \\
- Students solve problems that involve using stated assumptions, definitions, and previously established results in developing their reasoning. \\
F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas). \\
- Students are presented with a mathematical problem in a real-world context where the quantities of interest are not named explicitly, are named but represented in different ways, or the relationship between the quantities is not immediately clear.
\end{tabular} & 2, 3 & 3 & 6 \\
\hline
\end{tabular}

\footnotetext{
- Claim 1 Target Descriptions are illustrated by the Evidence Required statements which are provided comprehensively.
- Claim 2, 3, and 4 Targets Descriptions are illustrated by the Task Model Expectations which are aligned to individual interim items.
}

Appendix VIII

\title{
Algebra?!
}

\section*{Predict success} that students will have in algebra

he Orleans-Hanna Algebra Prognosis Test, Third Edition, helps confirm teachers' opinions about a student's readiness for algebra, providing teachers, counselors, students, and parents with information for making decisions about course placement. This version includes infordecisions about course placement. This version includes infor-
mation to predict the success students in grades 7 through 11 will have in first-year algebra courses.

> Assess with

> ProblemSolving

Lessons

Included in
this edition:
- Non-routine problemsolving items (charts and graphs similar to those specified in the NCTM Curriculum and Evaluation Standards for School Mathematics) were added to make the test a more accurate assessment of students' ability to handle new situations.
- Norms are based on a large sample of 15,938 students representative of the national school population.
- Test validity was confirmed by correlation of prognosis test scores with final algebra grades and algebra end-of-course achievement test scores.

Administer the Orleans-Hanna Algebra Prognosis Test, Third Edition, in just one 50 - to 60 -minute class period. Five lessons introduce information and require students to use their reasoning skills to discover answers to the problems that follow. A review test assesses very general middle-school mathematics objectives.


Questions are in the format of lessons that include charts and graphs and cover algebra topics such as expressions, exponents, and integers.

Classroom teachers can use a scoring key for immediate results. Student answer sheets include self-reported report card grades in Mathematics, English, Science, and Social Studies. Extensive Assists with Career Planning

Test results can give students an opportunity to explore mathematics-related occupations as they begin planning their high school curriculum. The test is also a valuable component to include in your district's selection of career exploration tools because it fulfills the School to Work law's requirement of exposing students to career exploration no later than grade seven.


\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & & \multicolumn{2}{|l|}{Percentage of Students in Weighted Sample} & \multirow[b]{3}{*}{Ethnicity (85.6\% Reporting) African American} & \multirow[b]{3}{*}{16.1} & \multicolumn{2}{|l|}{Percentage of Students in Weighted Sample} \\
\hline \begin{tabular}{l}
SES Strata \\
Low
\end{tabular} & 31.3 & \[
\text { Grade } 7
\]
\[
31.3
\] & Grade 8
\[
31.3
\] & & & Grade 7 & Grade 8 \\
\hline Middle & 35.9 & 35.9 & 35.9 & & & 15.0 & 14.8 \\
\hline High & 32.8 & 32.8 & 32.8 & Hispanic & 12.7 & 11.5 & 11.4 \\
\hline Urbanicity & & & & White & 66.6 & 68.8 & 69.4 \\
\hline Urban & 31.3 & 26.8 & 26.8 & Other & 4.7 & 4.7 & 4.4 \\
\hline Suburban & 35.9 & 48.0 & 48.1 & Nonpublic Schools & & & \\
\hline Rural & 32.8 & 25.2 & 25.1 & Catholic & 5.4 & 5.4 & 5.4 \\
\hline & & & & Private & 4.9 & 4.9 & 4.9 \\
\hline
\end{tabular}
*National Center for Education Statistics, United States Department of Education, I992-I993.

Don't delay! The Orleans-Hanna Algebra Prognosis Test, Third Edition can help you and your students make wise decisions and improve the success of your algebra program.

To order or for more information, please call 800-2||-8378 or contact your local Measurement Consultant.
HarcourtAssessment.com

Scenario Five: Here are the latest recommendations based on the data and other information we currently have available. It ensures only students with a Level 3 or higher get recommended to Algebra or Honors.

\section*{Algebra:}
- Orleans Hanna 30 to 35 and SBA >=2679 (high level 4)
- Orleans Hanna 36 to 40 and SBA >=2624 (moderate level 4)
- Orleans Hanna 41 to 45 and SBA \(>=2574\) (high level 3 to moderate level 4 )

Orleans Hanna 46 to 50 and SBA >=2528 (low to moderate level 3)

\section*{Honors:}

Orleans Hanna 22 to 25 and Smarter Balanced \(>2578\) (high level 3)
- Orleans Hanna >26 and Smarter Balanced >=2528 (low to moderate level 3)

Scenario One: A sliding scale utilizing the mean Smarter Balanced (SB) score of successful algebra students and a score of 30 on Orleans Hanna (OH).
Historically, a 30 on OH has been considered the minimum criterion.
- OH of 30-35 with SBA>2685 (high level 4)
- OH of 36-40 with >2629 (moderate level 4)
- OH of \(41-45\) with \(>2581\) (low level 4)
- OH of \(46-50\) with \(>2537\) (low level 3 )

This procedure identified \(67 \%\) of students previously recommended for algebra.
Scenario Two: Similar theory as above, but required scores on SB were lowered. Algebra:
- 30 to \(35>2664\) (high level 4)
- 36 to \(40>2595\) (moderate level 4 )
- 41 to \(45>2531\) (low level 3)
- 46 to \(50>2472\) (moderate level 2)

Honors:
- 22 to \(25>=2577\)
- \(>=26>=2490\)

This kept \(81 \%\) of all recommendations the same. \(11 \%\) were lower and \(8 \%\) higher. While algebra recommendations remained at \(24 \%\) of the population, honors would move from \(36 \%\) to \(29 \%\) and grade 7 math from \(40 \%\) to \(48 \%\).

Scenario Three: developed Z scores and matrix scores using the means and standard deviations for all students for the past four years. In order to keep about the same percentage of students being recommended for algebra and honors as have been in the past, the cut for algebra was 13 ( \(22 \%\) of the population) and 8 for honors ( \(30 \%\) of the population).

This kept \(81 \%\) of all recommendations the same. \(13 \%\) were lower and \(6 \%\) higher.

\section*{Scenario Four:}

Algebra:
- 30 or higher on OH and Level 4 on SB
- 40 or higher on OH and 2553 or higher (moderate level 3)

Honors:
- Level 4 on SB, no minimum OH requirement
- 30 or higher on OH and Level 3 on SB

This kept \(73 \%\) of all recommendations the same. \(16 \%\) were lower and \(11 \%\) higher. Like the \(2^{\text {nd }}\) scenario, this has honors taking the hit, going from \(36 \%\) to \(16 \%\) while algebra goes up slightly from \(24 \%\) to \(28 \%\).

In all of these scenarios, some students who ultimately did take either honors or algebra and were successful would now be recommended for lower classes. Depending on the scenario, \(7 \%\) to \(10 \%\) of successful students would be recommended for lower level classes.

There is virtually no change in the demographics.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & & Total & \multicolumn{3}{|l|}{Current Recommendations} & \multicolumn{3}{|c|}{Scenario 2} & \multicolumn{3}{|c|}{Scenario 3} \\
\hline & & & \[
\begin{array}{|c}
\hline \text { Math } \\
7 \\
\hline
\end{array}
\] & Hon ors & \[
\begin{gathered}
\text { Alge } \\
\text { bra }
\end{gathered}
\] & \[
\begin{gathered}
\text { Math } \\
7 \\
\hline
\end{gathered}
\] & Hono rs & Alge
bra & \[
\begin{gathered}
\hline \text { Math } \\
7 \\
\hline
\end{gathered}
\] & Hono rs & \[
\begin{array}{|c}
\hline \text { Alge } \\
\text { bra }
\end{array}
\] \\
\hline \multirow{2}{*}{Gender} & Female & 48\% & 51\% & 49\% & 43\% & 51\% & 51\% & 44\% & 52\% & 51\% & 43\% \\
\hline & Male & 52\% & 49\% & 51\% & 57\% & 49\% & 49\% & 56\% & 48\% & 49\% & 57\% \\
\hline \multirow{6}{*}{Ethnicity} & American Indian/Alas kan & 1\% & 1\% & 0\% & 0\% & 1\% & 1\% & 0\% & 1\% & 0\% & 0\% \\
\hline & Asian/Pacif ic Islander & 14\% & 11\% & 16\% & 23\% & 11\% & 15\% & 22\% & 13\% & 15\% & 22\% \\
\hline & Black, Non-Hispa nic & 6\% & 6\% & 6\% & 4\% & 7\% & 7\% & 3\% & 7\% & 6\% & 3\% \\
\hline & Hispanic & 21\% & 28\% & 15\% & 8\% & 32\% & 15\% & 8\% & 27\% & 15\% & 8\% \\
\hline & Two or more races & 11\% & 10\% & 11\% & 10\% & 11\% & 11\% & 10\% & 11\% & 11\% & 10\% \\
\hline & White & 47\% & 44\% & 52\% & 55\% & 39\% & 52\% & 57\% & 41\% & 52\% & 57\% \\
\hline \multirow[t]{2}{*}{MealSta tus} & F/R Meal & 47\% & 56\% & 39\% & 21\% & 60\% & 40\% & 22\% & 55\% & 39\% & 22\% \\
\hline & Not F/R & 53\% & 44\% & 61\% & 79\% & 40\% & 60\% & 78\% & 45\% & 61\% & 78\% \\
\hline \multirow[t]{2}{*}{ELL} & ESL No & 90\% & 88\% & 97\% & 99\% & 83\% & 97\% & 99\% & 90\% & 97\% & \[
\begin{gathered}
100 \\
\% \\
\hline
\end{gathered}
\] \\
\hline & ESL Yes & 10\% & 12\% & 3\% & 1\% & 17\% & 3\% & 1\% & 10\% & 3\% & 0\% \\
\hline \multirow[t]{2}{*}{SpEd} & IEP No & 87\% & 92\% & 97\% & 98\% & 83\% & 97\% & \[
\begin{aligned}
& \hline 98 \\
& \%
\end{aligned}
\] & 91\% & 97\% & 98\% \\
\hline & IEP Yes & 13\% & 8\% & 3\% & 2\% & 17\% & 3\% & 2\% & 9\% & 3\% & 2\% \\
\hline
\end{tabular}

Scenario Two is likely the best recommendation to move forward as the district creates a plan to develop a vision and philosophy of math placement.
Scenario Two is seen as the best recommendation because:
- It eliminates the use of \(Z\) scores and matrices.
- Is easier and clearer to understand how to get into honors math and early placement into algebra.
- Out of the scenarios, it comes closest to mirroring who has been placed into each category over the past couple of years.

The main drawback of Scenario 2 is what to do with the approximately 93 current \(6^{\text {th }}\) graders that don't have \(5^{\text {th }}\) grade Smarter Balanced results. Below is a demographic run-down on who those 93 students are. When considering overall district demographics, students of color and students in special programs are disproportionately impacted from not having \(5^{\text {th }}\) grade SB scores.
\begin{tabular}{|c|c|c|c|}
\hline & & Count & Column N \% \\
\hline \multirow[t]{2}{*}{Gender} & F & 32 & 34\% \\
\hline & M & 61 & 66\% \\
\hline \multirow[t]{6}{*}{FederalEthnicityRac e} & Asian & 12 & 13\% \\
\hline & Black/African American & 18 & 19\% \\
\hline & Hispanic & 26 & 28\% \\
\hline & Native Hawaiian/Other Pacific Islander & 4 & 4\% \\
\hline & Two or more races & 2 & 2\% \\
\hline & White & 31 & 33\% \\
\hline \multirow[t]{2}{*}{BilingualEducation} & No & 63 & 68\% \\
\hline & Yes & 30 & 32\% \\
\hline \multirow[t]{2}{*}{SpecialEducation} & No & 72 & 77\% \\
\hline & Yes & 21 & 23\% \\
\hline \multirow[t]{2}{*}{Meal Status} & F/R & 54 & 58\% \\
\hline & Not F/R & 39 & 42\% \\
\hline
\end{tabular}

A potential recommendation is to place these 93 students after receiving results from the \(6^{\text {th }}\) grade Smarter Balanced assessment, sometime in June (varies due to variations in elementary scheduling of SB assessments).

Orleans Hanna Algebra Prognosis Assessment (March of current school year) - 50 points possible
A Math Matrix Score is created with the Orleans-Hanna " \(z\)-score" \(x 2\) and their \(5^{\text {th }}\) grade SBA " \(z\)-score" \(x 1\).
Three SBA Interim Assessment Blocks (IAB) are used as the final screener for Algebra Placement.
- \(7^{\text {th }}\) grade Number Systems.
- \(7^{\text {th }}\) grade Ratio and Proportions
- \(8^{\text {th }}\) grade Expressions and Equations w/Statistics.
\begin{tabular}{|c|c|c|c|c|c|}
\hline & Scores on Measures & Notes & SBA Interim Assessment Blocks (used to determine algebra placement). & \(7{ }^{\text {th }}\) grade math recommendation & \\
\hline \multirow[t]{5}{*}{\(6{ }^{\text {th }}\) grade students} & Matrix score <=9 & & & Math 7 & \multirow[t]{5}{*}{If student was in Challenge program in \(6^{\text {th }}\) grade, they get recommended for Math 8 if don't meet recommendati on requirements for Algebra.} \\
\hline & \multirow[t]{2}{*}{Matrix score >=10 and/or L4 on 5th grade SBA} & \multirow[t]{2}{*}{May opt in to test for Algebra} & All 2's on the IAB's with \(\mathrm{OH}<40\) or Scored any 1 's on any of the IAB's or declines to take IAB's & Math 7 Honors (honors is also opt-in) & \\
\hline & & & \begin{tabular}{l}
Any combination of at least one 3 on an IAB and 2's on other IAB's or \\
All 2's on the \(I A B\) 's with \(O H>=40\)
\end{tabular} & Algebra (students who don't meet algebra requirement are recommended for honors) & \\
\hline & \[
\begin{aligned}
& \text { Matrix score >=12 } \\
& \text { Or Matrix score >= } 8 \text { for }
\end{aligned}
\] & Invited to test for Algebra & All 2's on the IAB's with \(\mathrm{OH}<40\) or Scored any 1 's on any of the IAB's or declines to take IAB's & Math 7 Honors (honors is also opt-in) & \\
\hline & students w/o SBA scores. & placement & \begin{tabular}{l}
Any combination of at least one 3 on an IAB and 2's on other IAB's Or \\
All 2's on the IAB's with \(O H>=40\)
\end{tabular} & Algebra (students who don't meet algebra requirement are recommended for honors) & \\
\hline
\end{tabular}
*The matrix score is defined as:
\(5=\) a score that is at least one standard deviation (SD) above the mean
- 40 to 50 correct on OH. Mid to upper L4 on SBA
\(4=\mathrm{a}\) score that is between \(1 / 2 \mathrm{SD}\) above the mean and 1 SD above
the mean
- 34 to 39 correct on OH. Upper L3 to lower L4 on SBA
\(3=\) a score that is between the mean and \(1 / 2\) SD above the mean
- 29 to 33 correct on OH. Upper L2 to mid/upper L3 on SBA
\(2=\) a score that is between the mean and \(1 / 2\) SD below the mean
- 22 to 27 correct on OH. Mid to Upper L2 on SBA
\(1=\) a score that is between \(1 / 2\) SD below the mean and 1 SD below
8 Possible Combinations to be invited for final phase of algebra testing (IAB's)
- SBA Matrix \(=5\) and OH Matrix \(=8\)
- SBA Matrix \(=5\) and OH Matrix \(=10\)
- SBA Matrix \(=4\) and \(O H\) Matrix \(=8\)
- SBA Matrix \(=4\) and OH Matrix \(=10\)
- SBA Matrix \(=3\) and \(O H\) Matrix \(=10\)
- SBA Matrix \(=2\) and OH Matrix \(=10\)
- OR IF STUDENT DOES NOT HAVE SBA SCORES
- \(\mathrm{OH}=10\)
the mean
- \(\mathrm{OH}=8\)
- 15 to 21 correct on OH. Upper L1 to lower L2 on SBA
\(0=a\) score that is more than 1 SD below the mean
- Zero to 14 correct on OH. Low to mid L1 on SBA

SCORE RANGES ABOVE ARE BASED ON SCHOOL YEAR 2017-18 Z-SCORE ANALYSIS. TEST SCORES THAT EQUATE TO EACH MATRIX SCORE GAN SHIFT WITH EACH COHORT OF TESTED STUDENTS.


\section*{Follow-Up to "Math Data Regarding Grade 7 Placements"}

Following the early algebra students contained in your report through to 12th grade, how many failed a semester or more of math in high school and what math class was it that was failed?

Of the 651 students who started in grade 7 algebra and were still in the district for grade 12 in 2017 or 2018, 111 received an \(F\) in second semester math at least once.
- 20 in Grade 7
- 22 in Grade 8
- 10 in Grade 9
- 15 in Grade 10
- 48 in Grade 11
- 29 in Grade 12

Number of Grade 7 Algebra Students Receiving F's Second Semester by Course and Grade Level
\begin{tabular}{|l|c|c|c|c|c|c|c|}
\hline & \begin{tabular}{c} 
Grad \\
e 7
\end{tabular} & \begin{tabular}{c} 
Grad \\
e 8
\end{tabular} & \begin{tabular}{c} 
Grad \\
e 9
\end{tabular} & \begin{tabular}{c} 
Grade \\
10
\end{tabular} & \begin{tabular}{c} 
Grade \\
11
\end{tabular} & \begin{tabular}{c} 
Grade \\
12
\end{tabular} & \begin{tabular}{c} 
Tot \\
al
\end{tabular} \\
\hline MATH 8 & & 1 & & & & & 1 \\
\hline Algebra & 20 & 11 & & & & & 31 \\
\hline Geometry & & 10 & 4 & & & & 14 \\
\hline IB MTH STD & & & & & & 1 & 1 \\
\hline Algebra II & & & & 2 & 7 & 1 & 10 \\
\hline Algebra II H & & & 6 & & 2 & & 8 \\
\hline FINANCL ALG & & & & & & 1 & 1 \\
\hline PRE CALC & & & & 5 & 10 & 3 & 18 \\
\hline PRE CALC H & & & & & 2 & 1 & 3 \\
\hline \begin{tabular}{l} 
MATH\&142 \\
PCALC2
\end{tabular} & & & & & & 1 & 1 \\
\hline CALCULUS & & & & & 2 & 4 & 6 \\
\hline AP CALC AB & & & & & 15 & 5 & 20 \\
\hline AP CALC BC & & & & & & 2 & 2 \\
\hline AP STATS & & & & & 2 & 3 & 5 \\
\hline \begin{tabular}{l} 
RS MATH IN \\
SOC
\end{tabular} & & & & & & 10 & 1 \\
\hline
\end{tabular}
\begin{tabular}{|l|c|c|c|c|c|c|c|}
\hline \begin{tabular}{l} 
RS INT TO \\
STATS
\end{tabular} & & & & & 1 & & 1 \\
\hline RS PRE-CALC I & & & & & & 3 & 3 \\
\hline RS PRE-CALC I & & & & & 2 & & 2 \\
\hline \begin{tabular}{l} 
RS PRE-CALC \\
II
\end{tabular} & & & & & 1 & & 1 \\
\hline \begin{tabular}{l} 
RS CALCULUS \\
I
\end{tabular} & & & & & 3 & 3 & 6 \\
\hline
\end{tabular}

Related to the above question, the data in the report shows \(34 \%\) of the 651 grade 7 algebra students enrolled in Calculus AB in 12th grade. Presumably that's because those students took AP stats in 10th grade instead of pre-calc. I want to confirm that assumption.

Actually, the report says \(34 \%\) of the grade 7 algebra students took Calculus \(A B\) in Grade 11 or Grade 12. This is indicating the last course they took. Only \(23 \%\) (149) of the students actually took it in Grade 12. These students did a wide variety of things in grades 10 and 11 . The largest grouping, 59 students, took IB PR-Calc in grade 10 and IB Math SL in Grade 11.

Have I coded these kids wrong???!!!! Should IB Math SL been coded as Calculus AB? What about MATH\& 153 CALC3I or MATH\& 152 CALC2A?

This may be a total disaster. I mentioned somewhere that kids took over 360 different paths. That was based on grouping courses. If I grouped things incorrectly, then things are wrong. What does one do with...
- RS BUS PRECALC
- MATH\&152 CALC2A
- RS CALCULUS I
- RS CALCULUS II
- RS CALCULUS III
- RS CALCULUS IV

Prior to taking RS Calculus IV, students took, and passed:
- AP CALC BC S2
- AP CALC AB S2
- RS CALCULUS II

Prior to taking RS Calculus III, students took and passed:
- AP CALC AB S2
- RS CALCULUS I
- RS MATH IN SOC
- RS PRE-CALC I
- RS PRE-CALC II

And, for the \(27 \%\) who were enrolled in "other" in 12th grade, what math course were they enrolled in during their 11th grade year?

Again, the report says \(27 \%\) of the grade 7 algebra students took an Other course in Grade 11 or Grade 12. This is indicating the last course they took. 143 grade grade 12 students took an Other class. In the \(11^{\text {th }}\) grade they took.
\begin{tabular}{|l|r|}
\hline Gr11Sem2Course & \begin{tabular}{c} 
Coun \\
\(\mathbf{t}\)
\end{tabular} \\
\hline \begin{tabular}{l} 
No Gr 11 Sem 2 \\
Course
\end{tabular} & 4 \\
\hline ALGEBRA 2 H S1 & 1 \\
\hline ALGEBRA 2 S2 & 6 \\
\hline AP CALC AB S2 & 55 \\
\hline AP CALC BC S2 & 3 \\
\hline BR COLL MTH S2 & 2 \\
\hline CALCI-II CHS S2 & 2 \\
\hline CALCULUS S2 & 16 \\
\hline IB MATH SL S2 & 17 \\
\hline IB MTH STD S2 & 5 \\
\hline IB PR-CALC S2 & 1 \\
\hline PRE CALC CHS S2 & 1 \\
\hline PRE CALC H S2 & 11 \\
\hline PRE CALC S2 & 4 \\
\hline RS BUSN CALC & 2 \\
\hline RS CALCULUS I & 2 \\
\hline RS CALCULUS II & 5 \\
\hline RS CALCULUS III & 2 \\
\hline
\end{tabular}
\begin{tabular}{|l|r|}
\hline RS INT TO STATS & 1 \\
\hline RS MATH IN SOC & 1 \\
\hline RS PRE-CALC II & 1 \\
\hline STATISTICS S2 & 1 \\
\hline
\end{tabular}

\section*{Math Data Regarding Grade 7 Placements}

\section*{Algebra Success}

As we know, \(93 \%\) of \(7^{\text {th }}\) grade students who take algebra are successful'. Even if dropped students are factored in as being unsuccessful, which they may or may not have been, the percentage only drops to \(92 \%\).
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|c|}{\(\begin{array}{c}\text { Grade 7 Algebra Success } \\
\text { Received } \\
\text { Grad } \\
\text { Year }\end{array}\)} \\
\(\begin{array}{c}\text { \% } \\
\text { Successf } \\
\text { ul }\end{array}\) & \(\begin{array}{c}\text { A C } \\
\text { both } \\
\text { semester } \\
\text { s }\end{array}\)
\end{tabular} \(\left.\begin{array}{c}\text { Received } \\
\text { a D or F }\end{array}\right]\)

\section*{SBA by Math Course}

In the three Classes of students, only \(35 \%\) of regular students met standard in the \(7^{\text {th }}\) grade and \(33 \%\) in the \(8^{\text {th }}\).
\begin{tabular}{|c|c|c|c|c|}
\hline & \multicolumn{4}{|l|}{\begin{tabular}{l}
Classes of 2021, 2022 and 2023 \\
SBA 7 Met Standard \% \\
Meeting \\
Standard No
\end{tabular}} \\
\hline \multirow{6}{*}{\[
\begin{gathered}
\text { Gr } 7 \\
\text { Sem } \\
2 \\
\text { Class }
\end{gathered}
\]} & \[
\begin{aligned}
& \hline \text { LS or } \\
& \text { SpEd }
\end{aligned}
\] & 9\% & 281 & 28 \\
\hline & \begin{tabular}{l}
Gr 7 \\
Math
\end{tabular} & 35\% & 1395 & 749 \\
\hline & Honors 7 & 92\% & 70 & 841 \\
\hline & \begin{tabular}{l}
Gr 8 \\
Math
\end{tabular} & 83\% & 22 & 104 \\
\hline & Algebra & 99\% & 3 & 552 \\
\hline & Geometr y & 100\% & 0 & 5 \\
\hline \multicolumn{5}{|c|}{\begin{tabular}{l}
Class of 2021 and 2022 \\
SBA 8 Met Standard
\end{tabular}} \\
\hline
\end{tabular}

\footnotetext{
\({ }^{1}\) Success is defined as earning an A-C both semesters.
Ic -- DraftlNovember 7, 2018
}
\begin{tabular}{|c|c|c|c|c|}
\hline & & \begin{tabular}{l}
Meeting \\
Standard
\end{tabular} & No & Yes \\
\hline \multirow{4}{*}{\[
\begin{gathered}
\mathrm{Gr} 8 \\
\mathrm{Sem} \\
2 \\
\text { Class }
\end{gathered}
\]} & LS or SpEd & 6\% & 170 & 10 \\
\hline & \[
\begin{aligned}
& \hline \text { Gr } 8 \\
& \text { Math }
\end{aligned}
\] & 33\% & 896 & 442 \\
\hline & Algebra & 90\% & 72 & 661 \\
\hline & \begin{tabular}{l}
Geometr \\
y
\end{tabular} & 99\% & 3 & 291 \\
\hline
\end{tabular}

\section*{Alg. Il Grades}

As expected, the older students are the lower their grades. For students in algebra in \(7^{\text {th }}\) grade, \(99 \%\) met standard in \(7^{\text {th }}, 99 \%\) met standard in \(8^{\text {th }}\) and \(97 \%\) got an A - C in Alg. II.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{8}{|c|}{ Percent of Students Receiving an A - C in Algebra II by } \\
Grade Level of Students \\
\hline Grade & Total & \(\mathbf{2 0 1 4}\) & \(\mathbf{2 0 1 5}\) & \(\mathbf{2 0 1 6}\) & \(\mathbf{2 0 1 7}\) & \(\mathbf{2 0 1 8}\) & \# of Students \\
\hline 9 & \(97 \%\) & \(96 \%\) & \(97 \%\) & \(97 \%\) & \(98 \%\) & \(98 \%\) & & 2643 \\
\hline 10 & \(88 \%\) & \(88 \%\) & \(90 \%\) & \(82 \%\) & \(88 \%\) & \(93 \%\) & 3489 \\
\hline 11 & \(69 \%\) & \(70 \%\) & \(67 \%\) & \(66 \%\) & \(68 \%\) & \(74 \%\) & & 5327 \\
\hline 12 & \(55 \%\) & \(58 \%\) & \(61 \%\) & \(47 \%\) & \(57 \%\) & \(52 \%\) & & 1167 \\
\hline
\end{tabular}

\section*{Demographics}

There is not a large difference between the recommendation's and the enrollment's demographics. Gender for regular and honors math are representative of the population, but males are over-represented in algebra. Hispanics and students on F/R meal are under-represented in both advanced courses.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{10}{|l|}{\begin{tabular}{l}
Demographics for the Classes of 2021, 2022 and 2023 by Grade math class \\
Grade 7 Semester 1 Course \\
Grade 7 \\
Recommendations
\end{tabular}} \\
\hline &  & Three Paths Combin ed & \[
\begin{aligned}
& \text { Gra } \\
& \text { de } 7
\end{aligned}
\] & \begin{tabular}{l}
Grade 7 \\
Hono rs
\end{tabular} & Alge bra & Three Paths Combin ed & \[
\begin{aligned}
& \text { Gra } \\
& \text { de } 7
\end{aligned}
\] & \begin{tabular}{l}
Grade 7 \\
Hono rs
\end{tabular} & Alge bra \\
\hline & Total & 3895 & 226
9 & 980 & 646 & 3974 & 183
9 & 1365 & 770 \\
\hline Gende & Female & 48\% & 50\% & 51\% & 41\% & 49\% & 51\% & 49\% & 43\% \\
\hline r & Male & 52\% & 50\% & 49\% & 59\% & 51\% & 49\% & 51\% & 57\% \\
\hline & American Indian/Alas kan & 1\% & 1\% & 1\% & 0\% & 0\% & 1\% & 0\% & 0\% \\
\hline & Asian/Pacifi c Islander & 16\% & 13\% & 18\% & 23\% & 15\% & 11\% & 16\% & 24\% \\
\hline Ethnic ity & Black, Non-Hispan ic & 6\% & 7\% & 6\% & 4\% & 6\% & 6\% & 6\% & 4\% \\
\hline & Hispanic & 20\% & 28\% & 14\% & 6\% & 20\% & 28\% & 16\% & 6\% \\
\hline & Two or more races & 10\% & 10\% & 10\% & 11\% & 11\% & 10\% & 11\% & 10\% \\
\hline & White & 47\% & 42\% & 52\% & 57\% & 49\% & 44\% & 51\% & 55\% \\
\hline Meal & Not F/R & 55\% & 42\% & 67\% & 80\% & 56\% & 44\% & 59\% & 79\% \\
\hline Status & F/R Meal & 45\% & 58\% & 33\% & 20\% & 44\% & 56\% & 41\% & 21\% \\
\hline ELI & ESL No & 92\% & 87\% & 99\% & 99\% & 94\% & 88\% & 97\% & 99\% \\
\hline ELL & ESL Yes & 8\% & 13\% & 1\% & 1\% & 6\% & 12\% & 3\% & 1\% \\
\hline & IEP No & 95\% & 93\% & 98\% & 99\% & 95\% & 92\% & 97\% & 99\% \\
\hline SpEd & IEP Yes & 5\% & 7\% & 2\% & 1\% & 5\% & 8\% & 3\% & 1\% \\
\hline
\end{tabular}

\section*{Math Paths}

For the students who were in the \(12^{\text {th }}\) grade in either 2017 or 2018, 2,344 of them were here for \(7^{\text {th }}\) grade. These students have 364 different math paths. That is only looking at \(2^{\text {nd }}\) semester courses; combining, for example, geometry and honors geometry; and Ic -- Draft3November 7, 2018
creating an "Other" category for statistics, advanced quantitative methods, bridge to college math, financial algebra, IB math HL and SL, IB math study, math in society, etc. Without these reductions and consolidations, the number of paths would be exponentially increased with tiny numbers of students following each one.
"Other" is quite broad, but when viewed in light of what it follows, you can get a sense of what it is. For example, when it follows pre-calculus, it is undoubtedly statistics or one of the IB courses. When it follows Algebra II, it is more likely to be bridge, business math or financial algebra.

Only 39 paths had 10 or more students on them, accounting for just 1,745 (74\%) of the population.

Grade 7 algebra students, who started in 2012 or 2013, took 82 different paths. When looking at all grade 7 algebra students for whom we have records through grade 12 and comparing them to the paths of the classes of 2021 and 2022, we see student paths have changed over time.
\begin{tabular}{|c|c|c|}
\hline \(\mathbf{7}^{\text {th }}\) to \(\mathbf{8}^{\text {th }}\) grade path & \begin{tabular}{c} 
Grade 12 in 2017 or 2018 \\
(651 students)
\end{tabular} & \begin{tabular}{c} 
Classes of 2021 and 2022 \\
(286 students)
\end{tabular} \\
\hline Algebra to geometry & \(86 \%\) & \(96 \%\) \\
\hline Algebra to algebra & \(11 \%\) & \(3 \%\) \\
\hline Algebra to grade 8 math & \(2 \%\) & \(0 \%\) \\
\hline
\end{tabular}

Grade 7 Honors students, who started in 2012 or 2013, took 35 different paths, only three of which had ten or more students. Looking at all grade 7 honors students for whom we have records through \(12^{\text {th }}\) grade and comparing them to the Classes of 2021 and 2022, we again see a change in patterns.
\begin{tabular}{|c|c|c|}
\hline \(\mathbf{7}^{\text {th }}\) to \(\mathbf{8}^{\text {th }}\) grade path & \begin{tabular}{c} 
Grade \(\mathbf{1 2}\) in 2017 or 2018 \\
(136 students)
\end{tabular} & \begin{tabular}{c} 
Classes of 2021 and 2022 \\
(584 students)
\end{tabular} \\
\hline Honors to Gr. 8 Math & \(17 \%\) & \(10 \%\) \\
\hline Honors to algebra & \(82 \%\) & \(89 \%\) \\
\hline
\end{tabular}

Where a student starts their math journey in grade 7 impacts how far they are able to travel.

Grade 12 in 2017 or 2018
\begin{tabular}{|c|c|c|c|}
\hline \begin{tabular}{c} 
Highest Semester 2 Course \\
in Grade 11 or 12
\end{tabular} & \begin{tabular}{c} 
Gr. 7 algebra \\
(651 students)
\end{tabular} & \begin{tabular}{c} 
Gr 7 Honors \\
(136 students)
\end{tabular} & \begin{tabular}{c} 
Gr 7 Math \\
(1,315 students)
\end{tabular} \\
\hline Calculus BC & \(22 \%\) & \(0 \%\) & \(0 \%(2\) students) \\
\hline Calculus AB \(_{\text {Other }^{2}}\) & \(34 \%\) & \(29 \%\) & \(9 \%\) \\
\hline & \(27 \%\) & \(25 \%\) & \(27 \%\) \\
\hline
\end{tabular}

2
Most Common Grade 12 "Other" Courses by Grade 7 Course
Grade 7 Math
Grade 7 Honors
Grade 7 Algebra
AP STATS S2

BR COLL MTH S2
111

BUS130 BUS MATH

FINANCL ALG S2
51
8
IB MTH STD S2

RS INT TO STATS

RS MATH IN SOC
\begin{tabular}{|c|c|c|c|}
\hline Pre-Calculus & \(8 \%\) & \(26 \%\) & \(24 \%\) \\
\hline Algebra II & \(2 \%\) & \(15 \%\) & \(26 \%\) \\
\hline No record of math class & \(7 \%\) & \(5 \%\) & \(10 \%\) \\
\hline
\end{tabular}

\section*{Appendix IV}

\section*{Grade 7 Math Placement}

There seems to be considerable confusion and misinformation as to how decisions have been made and what brought about those changes in the criteria for placement. The criteria for algebra placement has not been changed because of teachers saying students were not prepared. Things have changed in an attempt to improve equity and to try to get every child into the most challenging class possible. The success of students is reviewed regularly and adjustments made based on findings. Adjustments also had to be made with the shift from MSP to our pilot year to SBA and the transition to Common Core. While teachers were involved in the selection of which IAB's would best represent grade 7 and 8 content, changes to placement criteria have always been made based on the available data.

Adjustments were not made because it was felt the Orleans-Hanna Algebra Prognosis Test ( OH ) wasn't a good indicator of algebra success. Nor were the IAB's added to determine who would do well in algebra. They were added to determine who had some grasp of \(7^{\text {th }}\) and \(8^{\text {th }}\) grade content and could thus skip two years of math without suffering down the line.

I believe teachers are remembering back to when algebra and pre-algebra classes, which represented about \(20 \%\) of the population, were \(96 \%\) Asian or White, \(6 \% \mathrm{~F} / \mathrm{R}\) and \(85 \%\) of students got A's or B's. Now honors and algebra classes serve about \(34 \%\) of the students and are \(74 \%\) Asian or White, \(20 \%\) F/R and \(87 \%\) got A's or B's last year. There is a fundamental difference in thinking. Schools seem to believe all advanced students should get A's. The district doesn't have philosophical problems with B's and C's.

One of the most significant changes was the shift from using either just candidates or prior algebra students, as the cohort off which Z-scores were derived. Using prior algebra students or candidates provided a stability in the numbers. With the introduction of SBA and the shift to using all grade 6 students from the given year, the means and standard deviations are subject to annual variation and matrix scores from different years can represent different ability levels. Now that we have some history of SBA scores, modifications to increase stability will be discussed.

Long ago schools only gave the OH to students they considered candidates for algebra. This "consideration" was basically totally subjective and if the student did not have an advocate they were not considered. Students also had to write a letter of commitment. It wasn't the content of the letter that was important, simply the fact that the student was interested enough (or their parent was) in taking algebra that they would put pen to paper. The OH was combined in a matrix with either the Level Tests or Iowa data. OH was weighted twice and the other once. As this was done school-by-school when they happened to get their OH scores submitted, Z-scores were based off candidates from prior years
combined. As only "candidates" were considered, their means and standard deviations would have been higher than standard for their grade-level. As it was based off a combination of prior year, there was stability in the numbers.

Schools were sent a rank-ordered list and made their placements. Nancy reminded them that an OH of 35 or better was a strong determiner of algebra success, though lower scores had certainly been successful. One school was notorious for always taking the top 20 students, regardless of the scores of the cohort. There was no common cut score across the district.

2006 (Class of 2012):
Assessments and weights: OH (3x), Grade 5 District Math Assessment (1x) and Grade 4 WASL (1x). Less than \(30 \%\) of grade 6 students took the OH .

Cohort on which Z-scores were based: that year's candidates
Guidance: Schools were reminded of the 35 and that the most important determinant of success was motivation so they should make certain the letter of commitment had been submitted.

\section*{2007:}

Assessments and weights: OH ( \(3 x\) 's), Grade 5 math WASL ( \(2 x\) 's) and the Grade 5 District Math Assessment (1x). To be more data-driven and not rely only on teachers and parents identifying "candidates", almost 60\% of grade 6 students were given the OH .

Cohort on which Z-scores were based: Z-scores for OH and Gr 5 District Math Assessment were based on candidates from the prior 3 years. As the Gr 5 math WASL was new and schools didn't send in their candidates at the same time, the \(z\)-scores were based off all district students with a score of 390 or higher.

Guidance: Schools were told an OH of 30 or better is a strong determiner of algebra success. In a meeting with the principals it was agreed that OH scores between 25 and 34 could also be successful in algebra. Ultimate decisions on cuts frequently came down to staffing. Teacher recommendations would be considered for purposes of inclusion, not exclusion. The commitment letter was changed to more of a form.

For the first time, the matrix included all \(6^{\text {th }}\) grade students, even though commitment letters still determined who were "candidates". Schools were urged to follow-up with students with high scores to encourage them to take higher level math.

\section*{2008:}

Cohort on which Z-scores were based: candidates from the previous 4 years, with the exception of Gr 5 WASL which used the candidates' scores from just 2007.

Over \(70 \%\) of grade 6 students were given the OH .

\section*{2009:}

Cohort on which Z-scores were based: candidates from the previous 5 years and 2 years for WASL

Over \(75 \%\) of grade 6 students were given the OH .
\(90 \%\) of students who were placed into algebra in this year got a C or better. 47 students with OH scores of less than 29 were placed into algebra and \(85 \%\) of them were successful.

\section*{2010:}

Assessments and weights: OH (2x), Gr 5 WASL (1x), Number Sense grade (1x)

Cohort on which Z-scores were based: candidates for the past 6 years for OH, 3 years for WASL and 2 years for Number Sense.

Guidance: The principals and Nancy met as a group and compared students' incoming data from previous years with their success in the Honors programs (as measured by making a "C" or above in the course). Based on the data review and discussion, they agreed to some common matrix cut-off scores to use as guidelines for making placement decisions in 2011.

Over \(80 \%\) of grade 6 students were given the OH .
2011 (Class of 2017):
Cohort on which Z-scores were based: past years' candidates
Guidance: Principals were asked to use the agreed-to cut scores. For students with complete data (a possible matrix of 20) the cut was 12 for algebra. For student with only the OH (possible matrix of 10 ) the cut was 6.

\section*{2012:}

Cohort on which Z-scores were based: past years' candidates
MDM stops doing commitment letters and moves to an opt-out system.

\section*{2013:}

Cohort on which Z-scores were based: Without commitment letters from MDM, there is no longer a group of "candidates" so the same means and standard deviations were used as in 2012

Guidance: I believe this is the first class of students who had options for math 7 , honors and algebra. Students/parents can opt-in to honors or algebra after a conversation with the principal. For students with complete data (a possible matrix of 20) the cut was 14 for algebra and 7 for honors. For student with only the OH (possible matrix of 10) the cut was 7 for algebra and 3 for honors.

\section*{2014:}

Cohort on which Z-scores were based: same means and standard deviations were used as in 2012

Guidance: For students with complete data (a possible matrix of 20) the cut was 16 for algebra and 7 for honors. For student with only the OH (possible matrix of 10) the cut was 8 for algebra and 3 for honors.

\section*{2015:}

Assessments and weights: OH (2x), Gr 4 MSP (1x) and Number Sense (1x)
Cohort on which Z-scores were based: past five years of honors and algebra students (not candidates)

Guidance: For students with complete data (a possible matrix of 20) the cut was 11 for honors and 16 for algebra testing. For student with only the OH (possible matrix of 10) the cut was 5 for honors and 8 for algebra testing.

Placement into algebra was based on:
- A score of 3 in all three Interim Assessment Blocks, OR
- A score of 3 in two Interim Assessment Blocks and a score of 2 in the other, OR
- A score of 3 in one Interim Assessment Block, a score of 2 in the other two IABs, and a score of 43 or higher on the OH

All the schools had stopped using commitment letters.
With the new scope and sequence developed to align with CCSS there was concern that students who went into 7th grade Algebra would miss several large chunks of math learning. Students who did very well on the OH and other matrix indicators, plus any student who self-selected (or were selfselected by their parents), took 3 Interim Blocks.
1. Grade 7 Ratio and Proportional Relationships
2. Grade 7 Number System
3. Grade 8 Expressions \& Equations II

Any student could opt-in to honors or algebra testing. Only students recommended for algebra were to be enrolled in it.

2016 (Class of 2022):
Assessments and weights: OH (2x), SBA (1x)
Cohort on which Z-scores were based: entire population testing that year. As a result, the mean OH score was considerably lower.

Guidance: Cuts were set at 10 for honors wait list, 11 for honors, and 13 for algebra testing for students with complete scores. 8, 8 and 10 for students with OH only.

An analysis of the success of the previous cohort brought about revised algebra placement criteria.
- A score of 3 in all three Block Assessments, OR
- A score of 3 in two Block Assessments and a score of 2 in the other Block, OR
- A score of 3 in one Block Assessment, a score of 2 in the other two Blocks, and a score of 40 or higher on the OH .

As many student did not have number sense grades and there is considerable differences amongst teachers, the grade was dropped. That changed the total possible matrix score to 15 . As this was the first cohort with SBA scores, we could not base the Z-scores off past candidates or honors students.

An analysis was done of 2015 placement by OH and MSP performance level and then compared to the same OH scores and SBA levels with an eye to keeping about the same number of students to develop the cut scores for this year.

\section*{2017:}

Cohort on which Z-scores were based: entire population testing that year.
Guidance: Cuts were set at 10 or L4 on Gr 5 SBA for honors, and 12 for algebra testing for students with complete scores. 8 and 8 for students with OH only.

An analysis of the success of the previous cohort brought about revised algebra placement criteria. Students were placed in algebra if they received any IAB combination of 2's and 3's or all 2's with an \(\mathrm{OH}>=40\).

IAB's used: The Grade 8 IAB was changed
1. Grade 7 Ratio and Proportional Relationships
2. Grade 7 Number System
3. Grade 8 Expressions \& Equations I

\section*{2018:}

Cohort on which Z-scores were based: no change
Guidance: no change

IAB's used: The Grade 8 IAB was changed back to what it was in 2015 and 2016.
4. Grade 7 Ratio and Proportional Relationships
5. Grade 7 Number System
6. Grade 8 Expressions \& Equations II

\section*{2019:}

Z-scores and the matrix were discontinued. In 2016, 2017 and 2018 Zscores were calculated based off of each year's cohort of students meaning the values changed each year. To provide consistency across years, the SBA and Orleans-Hanna scores of previously successful students were analyzed to develop placement recommendations for various score combinations. A student's grade 6 SBA score was only used to move them up, never to lower the recommendation.

\section*{Guidance}

While past practice always held all students to the same standards, students in the Challenge program, regardless of SBA scores, were recommended for Algebra. Challenge students did not take the OrleansHanna. All other students were held to the following criteria.

Algebra
\begin{tabular}{cccc} 
Orleans Hanna & & Gr 5 SBA & Gr 6 SBA \\
\cline { 1 - 1 } 30 to 35 & & 2679 & 2709 \\
\(36-40\) & 2624 & 2654 \\
41 to 45 & & 2574 & 2604 \\
46 to 50 & & 2528 & 2552
\end{tabular}

Honors
\begin{tabular}{ccc}
22 to 25 & 2578 & 2609 \\
\(>=26\) & 2528 & 2552 \\
Any & Level 4 & Level 4
\end{tabular}

\section*{Appendix IV}

IABs
Based on evolving understanding of IABs and their scoring, IABs were dropped from the selection process.

\section*{Intensified Algebra - Classes of 2020 and 2021}

The Edmonds School District has used Intensified Algebra (IA) curriculum for some of its most-struggling \(9^{\text {th }}\) grade students for two years.

IA is a double-period math course that is intended to help general education students be successful in passing Algebra I on their first attempt. The IA curriculum is specifically designed to help students who traditionally struggle in math to achieve success in Algebra I. The curriculum uses elements of growth mindset to help students recognize their potential for growth and scaffolding of concept development that helps students catch up on math concepts while still moving forward on gradelevel content.

In 2017148 students took some form of intensified algebra, but 48 were in a schooldesigned support program and the teacher for 43 retired mid-year and was replaced by a teacher who had not benefited from the IA Training. As a result, only 57 students from that year will be included in this review. 138 students took IA in 2018.

SLH has had 24 students in IA, but only 10 were \(9^{\text {th }}\) graders thus having similar data points to the other participants.

\section*{Evaluating the performance of IA students is problematic.}
I. There is no common assessment given to both IA and algebra students. Only 74 IA and 69 algebra students took the Algebra and Functions I Interim Assessment Block.
II. Though the two courses are to be equivalent, it is unclear as to if, for example, an "A" in one denotes the same level of learning as an "A" in the other.
III. Grading practices vary by teacher and there are only four teacher who have had 9th graders in both courses.

\section*{Main Findings:}

Priority I and II students, those that were the most needy, were more successful in IA than algebra and thus ended up with higher GPA's and more credits, putting them closer to track for graduation. Many high priority students, though, were not placed into IA and there needs to be a better understanding of how these placement decisions were made.

These students will continue to be studied through geometry, SBA and algebra II to see if their higher grades in IA carry over to increased success later in their math careers.

\section*{Identification}

In the winter and summer high schools were given placement recommendations based on math performance and SBA. Those recommended for IA were prioritized. Priority was based on the number of "Placement Points" a student received divided by how many Placement Points that student could have earned (i.e. Students new to the
district have fewer data points and thus the opportunity to earn fewer Placement Points than those who have been here since \(3^{\text {rd }}\) grade). Students received:
- 2 points for each gr 8 event:

0 Failing \(1^{\text {st }}\) semester math
0 Failing \(2^{\text {nd }}\) semester math
o Not meeting standard on the SBA
- 1.5 points for each gr 7 event:

0 Failing \(1^{\text {st }}\) semester math
o Failing \(2^{\text {nd }}\) semester math
o Not meeting standard on the SBA
- 1 point for not meeting standard in each of grades \(3-6 \mathrm{SBA} / \mathrm{MSP}\)

Students with greater than \(66 \%\) of their possible points were Priority I. Priority II students had \(33-66 \%\) of their possible points. Students with fewer than \(33 \%\) of their possible points were Priority III.

Some students who were not recommended for IA were placed in it, while other top priority candidates were not.

\section*{Figure 1}

Number of Students Placed in Each Course by Priority Level for IA
\begin{tabular}{|lcc|}
\hline & MAT201/202 & IA \\
\hline \hline Not Recommended for IA & 1,054 & 32 \\
Top Priority for IA & 42 & 62 \\
2nd Priority & 217 & 93 \\
3rd Priority & 80 & 8 \\
\hline
\end{tabular}

It is unclear how schools made the final decision to include some students and not others that appeared to have a higher need.
"Prioritized Students" refers to those students recommended for IA and thus a priority was assigned to them, even though they may have ultimately taken algebra.

\section*{Demographics}

Students who met standard are more likely to be Asian and not F/R, ELL or SpEd than students who did not meet standard. When compared to the population that did not meet standard, those placed into IA are more likely to be male, Black, Hispanic, F/R Meal, ELL and SpEd than those placed in algebra.

As students get older, their attendance rates tend to get slightly worse. For all students, from \(8^{\text {th }}\) to \(9^{\text {th }}\) grade the attendance rate drops from \(93 \%\) to \(92 \%\). Students who met standard have better attendance than those that didn't. While students who did not meet standard, yet were in algebra, also dropped by \(2 \%\), those in IA dropped by \(1 \%\).

Figure 2

\section*{Demographics}
\begin{tabular}{|ll|c|c|ccc|}
\hline & & \begin{tabular}{c} 
School \\
District
\end{tabular} & \begin{tabular}{c} 
Met \\
standard \(\mathbf{G r}\) \\
\(\mathbf{8 ~ S B A}\)
\end{tabular} & \begin{tabular}{c} 
Did not \\
meet \\
standard Gr \\
8 SBA
\end{tabular} & \begin{tabular}{c} 
Didn't meet \\
standard 8 \\
in Algebra \\
(MAT201/ \\
202)
\end{tabular} & \begin{tabular}{c} 
In IA \\
(MAT085/ \\
086)
\end{tabular} \\
\hline \hline Total & & & 1,435 & 1,297 & 694 & 195 \\
\hline Gender & F & \(48 \%\) & \(50 \%\) & \(46 \%\) & \(50 \%\) & \(38 \%\) \\
& M & \(52 \%\) & \(50 \%\) & \(54 \%\) & \(50 \%\) & \(62 \%\) \\
\hline & Am Ind & \(1 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) \\
& Asian & \(13 \%\) & \(20 \%\) & \(8 \%\) & \(9 \%\) & \(7 \%\) \\
& Black & \(6 \%\) & \(5 \%\) & \(7 \%\) & \(7 \%\) & \(12 \%\) \\
Ethnicity & Hispanic & \(20 \%\) & \(13 \%\) & \(30 \%\) & \(27 \%\) & \(33 \%\) \\
& White & \(49 \%\) & \(51 \%\) & \(43 \%\) & \(45 \%\) & \(35 \%\) \\
& Pac Isl & \(1 \%\) & \(0 \%\) & \(1 \%\) & \(2 \%\) & \(2 \%\) \\
& Multi & \(10 \%\) & \(10 \%\) & \(10 \%\) & \(10 \%\) & \(11 \%\) \\
\hline F/R Meal & \(36 \%\) & \(25 \%\) & \(47 \%\) & \(44 \%\) & \(52 \%\) \\
\hline ELL & & \(14 \%\) & \(2 \%\) & \(13 \%\) & \(11 \%\) & \(15 \%\) \\
\hline SpEd & & \(15 \%\) & \(3 \%\) & \(21 \%\) & \(6 \%\) & \(12 \%\) \\
\hline Gr 8 Attendance Rate & \(93 \%\) & \(95 \%\) & \(92 \%\) & \(93 \%\) & \(92 \%\) \\
Gr 9 Attendance Rate & \(92 \%\) & \(92 \%\) & \(90 \%\) & \(91 \%\) & \(91 \%\) \\
\hline
\end{tabular}

\section*{Outcomes}

\section*{Grade 9 Grades}

When students are grouped by priority, IA students received higher grades at each priority level than those placed into algebra.

\section*{Figure 3}

Gr 9 Semester 2 Grades Based on Priority Level for IA
\begin{tabular}{|c|ccc|ccc|}
\hline & \multicolumn{3}{|c|}{ MAT202 } & \multicolumn{3}{c|}{ IA } \\
& A - C & D & F & A - C & D & F \\
\hline \hline Priority I & \(21 \%\) & \(18 \%\) & \(61 \%\) & \(34 \%\) & \(24 \%\) & \(42 \%\) \\
Priority II & \(43 \%\) & \(28 \%\) & \(29 \%\) & \(51 \%\) & \(27 \%\) & \(22 \%\) \\
Priority III & \(58 \%\) & \(26 \%\) & \(16 \%\) & & & \\
\hline
\end{tabular}

\section*{GPA and Credits}

As IA students are more likely to pass their class, IA Priority I and II students have more credits and higher GPA's than MAT202 students, thus keeping them closer to the track for graduation.

\section*{Figure 4}

GPA and Credits by Priority Level for IA
\begin{tabular}{|c|cc|cc|}
\hline & \multicolumn{2}{|c|}{ Priority I Students } & \multicolumn{2}{c|}{ Priority II Students } \\
& MAT202 & IA & MAT202 & IA \\
\hline \hline Grade 9 GPA & 1.4 & 1.5 & 2.0 & 2.0 \\
Grade 9 Credits & 3.7 & 4.3 & 5.1 & 5.2 \\
Grade 10 GPA & 1.4 & 1.3 & 2.2 & 2.1 \\
Grade 10 Credits & 7.4 & 8.2 & 10.6 & 11.1 \\
\hline
\end{tabular}

\section*{Grade 10 Grades and Priority}

Three students who failed algebra as \(9^{\text {th }}\) graders, passed IA as \(10^{\text {th }}\). Two who failed IA as \(9^{\text {th }}\) took algebra as \(10^{\text {th }}\). One passed, the other did not. 134 Class of 2020 prioritized students took geometry in 2018. Once broken out by grade 9 course and priority, the group sizes become too small for all but Priority II students. For Priority II students, those that took algebra in grade 9 were more likely to be successful in geometry than IA students.

Grade 10 SBA and Priority
175 Class of 2020 prioritized students took the SBA in 2018. Students who took algebra did better than those in IA.

Figure 5
Gr 10 SBA Results Based on Priority Level for IA
\begin{tabular}{|c|ccc|ccc|}
\hline & \multicolumn{2}{|c|}{\begin{tabular}{c} 
SBA Levels for those in MAT202 in Gr \\
9
\end{tabular}} & \multicolumn{2}{c|}{ SBA Levels for those in IA in Gr } \\
& Level 3 & Level 2 & Level 1 & Level 3 & Level 2 & Level 1 \\
\hline \hline Priority I & & \(33 \%\) & \(67 \%\) & & \(16 \%\) & \(84 \%\) \\
Priority II & \(9 \%\) & \(38 \%\) & \(53 \%\) & \(43 \%\) & \(57 \%\) \\
Priority III & \(16 \%\) & \(45 \%\) & \(39 \%\) & & \\
\hline
\end{tabular}

\section*{Algebra and Functions I IAB in Grade 9 and Priority}

79 Class of 2020 prioritized students took this IAB as grade 9 students. The numbers become tiny when disaggregated. When grouping all prioritized students together, those that took MAT201/202 did better than those IA students.

\section*{Recommendations}
A. All IA teachers need to participate in training.
B. There needs to be a better understanding of how students were ultimately placed in these courses.
C. Priority I students need to be placed into IA.
D. A common assessment needs to be identified for algebra and IA courses so that we are not relying on the SBA which is one year removed.
E. A better understanding is needed of how the authors of the curriculum defined " 1 to 3 years behind" to determine if our placement system is aligned.
F. We need to continue to track all of these students through geometry, high school SBA and algebra II to determine their ultimate success.

This decision making matrix is intended to guide placement decisions. Schools should look at second semester grades and 8 \({ }^{\text {th }} \underline{\text { Grade Math }}\) MBA \(^{\text {Scores to make final placement decisions. }}\) Intensified Algebra is designed for students that are at least one to three years behind in mathematical content.
\(8^{\text {th }}\) grade students in Learning Support and ELL Math will go to appropriate courses at the High School as determined by the teachers involved.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Grade 8 Math Class} & \multicolumn{2}{|c|}{February Criteria} & \multicolumn{2}{|l|}{Summer Final Placement Criteria} & \multirow[b]{2}{*}{Recommended Grade 9 Math Placement} \\
\hline & \[
\begin{gathered}
1^{\text {st }} \text { Semester Grade } 8 \\
\text { Math Grade }
\end{gathered}
\] & Grade 7 Math SBA Level & \(2^{\text {nd }}\) Semester Grade 8 Math Grade & Grade 8 Math SBA Level & \\
\hline \multirow{6}{*}{Regular Grade 8 Math: DMA800, 801 or 802} & A or B & 1-4 & A or B & 1-4 & Algebra \\
\hline & C & 3 or 4 & C & 3 or 4 & Algebra \\
\hline & C & 1 or 2 & C & 1 or 2 & Intensified Algebra \\
\hline & D & 3 or 4 & D & 3 or 4 & Algebra \\
\hline & D & 1 or 2 & D & 1 or 2 & Intensified Algebra \\
\hline & F & Any & F & Any & Intensified Algebra \\
\hline \multirow{8}{*}{\begin{tabular}{l}
Algebra: \\
DMA810, 811 or 812
\end{tabular}} & A & 3 or 4 & A & 3 or 4 & Honors Geometry \\
\hline & A & 1 or 2 & A & 1 or 2 & Geometry \\
\hline & B & 4 & B & 4 & Honors Geometry \\
\hline & B & 3,2 or 1 & B & 3, 2 or 1 & Geometry \\
\hline & C & 3 or 4 & C & 3 or 4 & Geometry \\
\hline & C & 1 or 2 & C & 1 or 2 & Teacher/Student/Parent joint decision Algebra or Geometry \\
\hline & D & Any & D & Any & Teacher/Student/Parent joint decision Algebra or Geometry \\
\hline & F & Any & F & Any & Algebra \\
\hline \multirow{7}{*}{\begin{tabular}{l}
Geometry: \\
DMA820, 821 or 822
\end{tabular}} & A & 3 or 4 & A & 3 or 4 & Honors Algebra 2 \\
\hline & A & 1 or 2 & A & 1 or 2 & Algebra 2 \\
\hline & B & 4 & B & 4 & Honors Algebra 2 \\
\hline & B & 3,2 or 1 & B & 3, 2 or 1 & Algebra 2 \\
\hline & C & 3 or 4 & C & 3 or 4 & Algebra 2 \\
\hline & C & 1 or 2 & C & 1 or 2 & Teacher/Student/Parent joint decision Geometry or Algebra 2 \\
\hline & D & Any & D & Any & Teacher/Student/Parent joint decision Geometry or Algebra 2 \\
\hline
\end{tabular}


\section*{Appendix XI}

\section*{Grade 6 Math Path for the Class of 2023}

Step 1: All students test \& receive a matrix score \& initial recommendation.

Grade 6 Student (1,062 students)

\section*{Grade 6} Challenge Student ( 60 Students)


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\section*{Please rate the following based on your perceptions of the student experience.}


For any items marked "disagree" or "somewhat disagree" in the previous section, please explain:36 responses

Students had trouble completing some problems and/or had to complete certain problems multiple times.
Students did not really enjoy the test. They were a bit confused about the game times and would have preferred to go on with the test. The spanish version of the diagnostic took some time to get.

It was just taking too long and they got a little tired of it . .

For some reason, students had trouble with the birthdate format for passcodes

I didn't use any accommodations so I don't know.

My students complained about having to take the test on the second and third days of testing. There were two instances where the students were confused about how to proceed. It turned out they had to scroll down.

Not being able to log in was frustrating for all students. The length of time that it took to complete the test was not enjoyable.

It was so long! I think most students did finish the test in under 2 hours, which makes more sense since it's the first time. I had a handful of kids who tested way longer. If the district wants tests like these given, we need to work into the system a place for kids to go finish like we do for SBA.

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We also kept consistently getting frozen test screens or moments when it would not let the students advance. We had to close the session and resume testing many times in my room. Kids weren't sure if their answer was recorded.

Enjoy testing...
The first time we tried to log in we were unable to take the placement test. After working with support and being given different passwords we were able to log on a few days later. Some of my Life Skills students found the directions confusing. A couple of them asked for help, but based on the inaccuracy of the scores compared to other measures, many students just guessed about what was expected. As mentioned above some students asked for help while others just tried to figure it out.

They weren't sure what to do when it was something they didn't know or ever been taught.

Sometimes students had to scroll down to see how to proceed and was hard to understand a question if you didn't realize you had to scroll for further info.

Test is taking way longer than advertised. I am on my 3 rd 30 minute session and have approx \(50 \%\) of the students completed. They should also not have to play the games this was frustrating to several of the students.

Students ran in to connection issues while testing, disrupting their test. Test was taken over several days, adding to test fatigue and frustration.

Students, along with me, felt the initial test took too long.
I had many ELL students and it was very difficult for them to access the materials. Even the students who are not ELL grew very frustrated with feeling dumb \(1 / 2\) of the time. I understand how the test works and how it intentionally adjusts to find their level, but it was pretty demoralizing for my kids. Also, many of my kids took over a week to finish and some never did finish.

Initial issues with connectivity to platform greatly impacted students login experience. Some tools were distracting. For example, initially, most 2nd grade learners are not going to need the graphing tool, however it was introduced with the other tools. It would be more effective if tools were introduced as appropriate problem types were introduced.

Logging in: not all students could figure out which link to click as they had never seen the icons before (iReady, Amplify, Imagine Learning).

My students (historically struggle with math) didn't enjoy the aspect of being tested, and also felt like the graphics, etc., were directed towards students younger than them.

My 7th grade students Clever passwords were incorrect. Once we changed their clever passwords, based on the updated information, then we got in fine the next day. There were some students who had questions were the

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screen didn't allow you to scroll to select "done." (which I do know was one common problem, but in this instance there wasn't even a scroll bar.) We had to refresh the test.

It was difficult for students who are on a super filter. They had access to the test but it paused when they were given a break. The games were took them to a site that is restricted due to the filter.

It was frustrating for students to encounter problems that they did not know how to solve. Even after talking extensively about the adaptive system, it was still frustrating for students. Additionally, for many students it took 3-4 40 minutes sessions for them to finish, which was exhausting for them.
kids had trouble logging in through Clever. I just recently learned the format for entering the password for my 7th graders was different and no one here knew what was wrong. I had to give them individual Back Door codes.

There was a technical problem with i-Ready on our first day of testing, causing the students to get errors. Once it was fixed, the process was smooth.

Some students did not want to take brain breaks and found it frustrating that it was the same game each time

There should always be an answer option of "I don't know." I really don't know if they utilized tools or struggled to understand. The fact that nobody asked me about it doesn't mean anything really. they may or may not have understood.

Students had to scroll down to press done.
logging in was difficult due to the issues iReady was having

Students struggle with their 8 digit bday. Not a big deal, just took extra time. Students HATE the breathing exercises. This only frustrated them. Students felt bad when missing so many problems.

Students were frustrated that the diagnostic took so much time.
Some of the questions look different from what the kids are use to doing so they needed help figuring out what the question was asking.
because the test was new, some of the directions and tools needed to be repeated for students

The only issues for my students were for a longer questions where they could not see the "next" button. We found the scroll bar, but it was hard for the students to find.

I had a student 'miss' the instructions and get right into the test - how can this happen? She needed to see the instructions, of course, and then i had to go over the instructions the best I could.
iReady was having some problems with logging in access as we were testing

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\section*{Please rate the following based on your personal and individual experience.}


\section*{For any items marked "disagree" or "somewhat disagree" in the previous question, please explain:46 responses}

Beginning ELL students had a tough time. I couldn't find how to switch to Spanish so I used google translate for all of the questions for my student who is new to the country.

It took up to 5 days for students to finish!
Again, it just took too long. We have lots to cover in Math 8 as our standards are very rigorous. It is hard to take this much time from the learning environment for testing.

The test took a long time to administer.
From what I saw, some of the questions appeared way above their current math level
Some students finished the assessment in 30 minutes and for some students it took multiple days to finish the assessment.

After 130 minutes of time, \(90 \%\) of my students had completed the assessment. This was essentially full class periods. Not a sustainable model if you are looking at administering it 3 times per year.

The test took many of my 9th - 12th grade special education students three 45 minute sessions.
Assessments took several hours for most students. Some of this was due to the system not allowing them to log in, kicking them out, and losing data.

If we had to take 2-3 hours three times a year, then I don't think it is a reasonable amount of time when you consider how many other tests we take. However, if the second test goes faster because it only tests deficit areas, then i think it is reasonable. If we get good diagnostic data to help reach the needs of our struggling

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students, then the 2-3 hours in the fall is definitely worth it. Tricky question to answer without knowing how long the subsequent times will be.

It has taken almost 4 days for some students.
It was a long test-hard for first graders to focus
It took most students around 2 hours to complete, some took as long as 4 or 5 hours

The questions were to difficult for several of my students.

Took 2-3 hours for some students.
The test took students about 90 minutes- 45 minutes over two days. That's like taking the SBA.
The assessment to some students a very long time.
It took students much longer than we were told. This could have been from the encouragement to "try your best" and "give it your all" which made them struggle for long periods of time on questions they had no idea how to solve. I think that I gave them mixed messages by saying "do your very best" at the beginning, and then at the end saying it was okay to move on. I think that made it a bit confusing and frustrating.

It took much longer than expected

Taking way too long, can't have 3 or 4 class periods dedicated to testing 3 times a year.

It took a total of \(3 \times 45\) minutes for everyone to get done. Overall the majority were done in ~90mins. Hopefully times go down.

Took up too much class time.

I had many ELL students and it was very difficult for them to access the materials. Even the students who are not ELL grew very frustrated with feeling dumb \(1 / 2\) of the time. I understand how the test works and how it intentionally adjusts to find their level, but it was pretty demoralizing for my kids. Also, many of my kids took over a week to finish and some never did finish.

I think it will take less time for students to take the test next time... it was a brand new system, so I'm not surprised it took so much time to test.

I dedicated 4, 30 minute work times to this assessment and still had learners that did not complete it. An additional challenge for \(2 n d\) grade is that the kids have not had to login to their computers using a username and password before this experience. The kids have always used a Clever badge to access their computer profiles. This additional obstacle, created by our district norms, was time consuming for many learners. There was one

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ELL student that could not navigate the test. The student continually ended up on random screens that were not part of the iReady test, ie RazKids, Chrome, etc.

I have 4 students that are having trouble finishing the assessment still. 3 are ELL and 1 has some processing difficulities. One of the ELL students is very high and as the test got harder he just did not know what to do. and he would go back to it day after day and now it cancelled and he has to start over. One other is just struggling with it, I cannot tell if it is language of not but he just keeps losing interest and his cancelled also.

Accessing the test: many students could not relate to the questions because they did not understand what the question was asking them.

I was walking around the room monitoring students, I wasn't able to see if problems were culturally responsive or if the questions were ones students could relate to.

I already have a tight schedule, and this assessment took at least 2 class periods for students. Doing this 2-3 times per year, I can easily lose a week of instructional time.

I was monitoring test taking, but not reading the questions. I can't comment on the content or the culturally relevancy.

My students are nearly 4 grade levels behind. It took students more time to complete. Some are not yet finish after 3 full class periods.

The amount of time it took for most students to finish the test was 340 minute periods. The administrators estimated 45 minutes.

Some of my students took several days to finish. Most were able to do it in two but a good portion took 5 to 6 days, no matter how much I encouraged them. I also had a few students who struggled with understanding the questions, especially my ELL and low readers.

It took many students 4-5 days to complete the assessment (some even longer!). If it always takes that long, I would definitely say it isn't worth it, but I think if this test became a requirement and students took it multiple times each year, they would get used to taking it and therefore the amount of time required to finish it would decrease.

I thought that 2-45 minute sessions meant they would complete it in that time. I did not realize that this meant I had to keep them paced. I was later told that I should encourage them to be at a certain percent by a certain time. That would have been helpful information to have prior.

Again, I am not really sure, just guessing. I would like to see the assessment but short of standing over a kid's shoulder and watching the whole time, I really have no way of knowing. Unless I am missing something a teacher can't examine the assessment which I would say is a flaw in the system. Maybe on the August training

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day we were able to see the test? I'm afraid if I did, I don't remember it. I think I saw a high school level test and my students mostly tested into 3rd grade levels.

It took way to long!! I can't see using that much time 2-3 times per year
The diagnostic took WAY too much class time.
It has taken some of my students many sessions and I have one still not done.

Too long to be used more than as a one-time-not-during-the-school-day placement test. The test seems too simple or could be more scaleable for advanced learners for a more realistic level. I find it hard to believe the correlation of the grade level placement for our kids who are 1 to 2 years ahead. Really have no idea on content without getting to take the test myself. But it looked pretty elementary particularly the followup lessons. And there is nothing beyond 8th grade for lessons anyway.

It took most of the class a week ( 5 math 45 minute periods) to complete. It took 3 students 2 or more weeks.
I am not clear what content was covered. I walked around helping students, but did not have time to read all of the questions.

The way the test is setup they are to run into 'issues' as they hit questions they don't know.

\section*{What is your overall rating of this assessment? 84 responses}

On a scale of 1 to 10, with 1 representing: "Don't like it at all" to 10 representing "Like it very much."


Please provide additional feedback here:49 responses
We used the data from the test to group our kids for differentiated instruction. Having the strands represented in the data was very helpful. Also, I printed the reports for parents and they appreciated seeing clear data like this.

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I wish it just was shorter. The feedback from it is good and real time which is helpful
I am optimistic that the diagnostic advice and next steps are going to be great with this program. I wonder how we could better help students to complete the assessment in a reasonable amount of time. The interface was good, easy for the students to use. Students did not grumble about disliking the questions like l've sometimes heard in the past (particularly with Moby Max).
1) Approximately \(20 \%\) of my students received error messages at least once during the testing. To get back to the test they had to refresh the web page and then click the diagnostic test button. 2) The brain breaks weren't timed well. On the second and third days of testing, some students encountered brain breaks within the first couple minutes of testing.

My students are doing the targeted intervention lessons and have already expressed that they like it better than Moby Max, which feels babyish to them. I have had several students ask if they can do iReady at home. I feel it is critical that we have a program with adaptive and individualized interventions built in. Even with a math workshop model, it is hard to meet all the varying needs. This year, my range is smaller (grade 3 to 6 ). Last year, my range in Moby Max was grades 1 to 8 . We kill ourselves trying to meet all the needs in a large grade range and it is very difficult.

If we get to keep the instructional part that comes with diagnostic portion, I would rate this a 10.
So far, I like what i-ready has to offer. The thing that is questionable is the student independent practice work. Can it be customized to skill students are currently working in math as well as practice for your own growth? Some students reported that it starts at a very low level. If a teacher can customize it to their needs, it will look more serious work. There is a feedback around the embedded tools that they were not present in all the questions. They should be present but not active if the tool must not used for them question. Additionally, some questions did not fit in one screen. It was a bit hard to navigate the button they should click next. It creating a little anxiety in some students.

I do not like the assessment for several reasons. First, the results seem inaccurate compared to other measures and therefore placed students at inappropriate levels in the on-line content. Since I cannot change a students level, this made it so several students could not use the online content because it was either too easy or too hard. Also, I have had students start in my program between the assessment window and I am not allowed to give them the assessment until the next open window.

Was good for an adaptive test. Some students found out about the game portion and tried to guess on questions to make it come back.

I like the data it provides and the automatic targeted instruction. I haven't assigned work yet, but that feature looks good too.

Easy, engaging and informative!

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Students need more experience taking adaptive tests to really make results valuable. Some students possibly made too many guesses and scored low placing them in a lower than necessary skill level.

I don't know if the content was appropriate. I didn't have a good chance to view any of the items on the test and/or see how it was adapting to their answers. In training, I only got to see a test in which the person experimenting with it had gone way beyond 6th grade. I feel I have no idea.

It took us three 45 minute segments to do, but the kids who finished early were happy to go onto the lessons once done.

Making sure the questions are understandable to all students, particularly a way for kids to get the follow-up question/feedback if the initial question didn't make sense.

Overall I am pretty pleased with it. It's a lot of information. I am not happy with the parent report! It is not written in a friendly way. The graphics are very small.

The diagnostic results differed from other math assessments to varying degrees. i-ready seemed to elevate my students' grade level compared to wwww.freckle.com and Math Expressions' assessments same strands. If I could see what the questions were in advance and then see which questions the students missed, I would be better able to analyze how to help them target their learning and shore up the holes in their math learning.

It will be different when I can access the data and I hope that the next assessments will be shorter but this is taking way too long to administer.

The instruction groupings were not informative enough and the parent feedback was not specific. Because my students work a year ahead in math when you get to out of level placement, it does not differentiate between "Early-Mid-Late" grade level placement which is unfortunate.

I agree with the academic, individual results of the test. The results lined up with SBA and Moby Max scores.
there needs to be a way for students to access a language dictionary or translation within the test. Also, little pop ups that say "you are doing great keep it up" if they are working at a reasonable pace regardless of whether or not they are getting the questions right (because of the nature of the test) would help keep up moral.

Students commented that they enjoyed taking the test. They liked that there wasn't a time limit, and enjoyed the game (or brain break).

For the most part is is wonderful and my students are happy to go on it day after day. My ELL kids are struggling.

Knowing the cut-offs between grade levels (ex: 2nd grade vs. 3rd grade) would be beneficial.

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It was hard to tell how much time the assessment would take because we originally had technical issues and it was new to the students. I am curious to see how long the assessment will take in January as it will not be a new assessment for students and hopefully there will be no technical issues.

I'm hoping to see some student growth using the differentiated lessons. I do have some concerns about the accuracy of the test results, and will be interested in seeing the results after the 2nd diagnostic in December.

Easy experience for myself as well as my students. We had minimal to no issues/concerns. Students worked hard and persevered.

I have previous experience with iReady and it is a great program
I think that this has been a great test. It has been nice to be able to see where students are in different domains instead of just one overall grade level score. The data has been great to use with parent conferences as well. Students haven't been doing a lot with the lessons, however, those that have done the lessons have enjoyed them.

I feel like it is just one more test. But it went well.

Some of my students scored grade levels below their IEP level (aka a 7th grader, IEP says 3/4th grade math, iReady said 1st), but it didn't "flag" them. I would still like them to try the diagnosis again. Is this my discretion? How does the "flagging" system work? I liked the immediate feedback, and the Do wells and Next steps. Most of the lessons (I know this is just about the diagnosis, but most of the lessons seem auditory and I'm not sure would be a good fit for Deaf and Hard of Hearing learners. I would need to explore more.)

Since not all of my students have completed the assessment, I have not looked at the data. I am interested in looking at the lessons attached based upon their outcomes.

I really liked the information that the assessment supplied for each individual.
It is important to note that all students need headphones for the test. Also, although it is available in Spanish, as a teacher I did not have the power to change the language on the test, so for my 3 students who don't speak English, their data does not reflect what they know. I would like the ability to change the language on the test.

Overall I think this is a good assessment. I think there needs to be more low academic reader material that is still appealing to middle schoolers.

I feel this program gives us great results on where are students are at. We can easily group them and teach at their appropriate level.

I really like the feedback it has provided and that it provides an individualized study plan for each student with assigned lessons. I think it could really benefit our students if we used it long term.

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I like all of the ways to view the results and how the lessons look for the students after the assessment. I believe the instructional groups will be useful as well.

I honestly need more time to explore it. I don't see this system as being much different from Moby Max. I can already say that we should definitely go with STAR just because we already use the STAR reading assessment stuff. Although I don't remember if STAR has lessons to complete to make progress.

The way diagnostic data is collected and organized is really useful for teachers. The reports generated can be used to inform instruction for individuals, small groups, and whole group. It was also very useful for parents and helpful during conferences!

My main problem with it is the time it took to administer. If it was a more reasonable time commitment I would like it.

I would not know if students could relate to the material or if it was culturally appropriate as teachers don't read the questions. I do not know if content covered was appropriate for the same reason. Do you want us reading the questions? How would we do this?

No one rushed and the results I received were valuable and will be lovely at conferences to boot.
Students are actively engaged. I do appreciate that might kids that need a challenge get one regularly when using this program. I also appreciate that my students who are below expectations are getting the review they need as well.

I would like to know what kids thought of these questions. It could be used one time like a Orleans Hanna but not as an ongoing many times test throughout the school year without doing their lessons and online curriculum.

I am very excited about iReady. My students are very excited when we have iReady time in our math groups. The iReady reports and ways to extrapolate different groupings will help inform my teaching. For years, we have been asking for common assessments besides the SBA to help with math groupings. I also hope this will help our district support Title services in mathematics. Please feel free to contact me if you need further information or would like to come into a classroom to see iReady in action. Krista Rios

The test took longer than expected, but I appreciated that the data was available instantly. I wish I could look back at the questions to see how language heavy they are.

Because this test is an 'assessment', not graded, and ALSO not timed, my gifted students were not anxious testing. They often will over analyze and panic if timed. My experience has taught me that to really know their abilities, the time factor needs to be removed. While time appears to be a problem for others piloting, my experience is actually about the amount of time that was projected. I had an orientation session which took us about 30 minutes. We then tested 30 minutes for 3 days with \(81 \%\) of my students finishing the assessment. My remaining students will finish in another 30 minute block. As a teacher it was great to monitor their work and see results as they finished. I had already done my BOY Expressions SBA assessments pencil/paper and it is helpful

\title{
Appendix XII iReady Math Assessment - Phase 1 Instructor survey results
}

\section*{84 Total responses recorded}
comparing these to the results from i-Ready. For my students who have completed the assessment, the system identified 4 student groupings along with recommended next steps. The level of detail for strands/concepts is what should be part of the SBA standardized test. Knowing which strands, grade, and continuum within the grade for an individual child is exciting and I am hopeful will allow for greater differentiation, leading to greater growth. My students were really disappointed they couldn't start lessons yet! I told them we will hopefully begin mid-October. My parents that attended curriculum night are also excited to see how the students grow using this tool. I sent them a letter, just prior to testing, with the family link. During our curriculum night discussion they were interested to know whether it was a point-in-time only measurement or multiples across the year. I shared that with our pilot, we wanted to test within the first \(2-3\) weeks, prior to instruction. That we will be looking at the DATA and designing instruction from this initial assessment. They were happy to learn that the system is not just another data collection point but is used for targeted interactive learning too. I advised them that we plan to conduct a second assessment just prior to winter break. From this we hope to evaluate the impact of the targeted lessons on student learning.

\title{
iReady Math Assessment - Phase 2 Instructor survey results
}

52 total responses recorded

\begin{abstract}
A short survey is going to be developed to get feedback from students on their experience with the iReady diagnostic and the Online Instruction. Please list below your ideas for questions that should be asked and/or what we need to learn from students about the iReady phase of the assessment pilot. 22 responses
\end{abstract}

Do you feel like iReady helped you to learn things that you didn't already know?

How did they feel about the length of the test?
Did they try their best?
How many questions did they guess on?
Was it stressful?
Did they feel it was worth their time?
Did they like the game/break?
Were the questions reasonable for what they have learned?

What suggestions do you have for the i-ready program?
Did you enjoy the brain breaks? Suggestions?
How helpful did you find the individual lessons?
I'm really not sure.
I would like the students' perspective on the following:
Were the lessons easy to understand?
How it could be improved.
Did the practice seem "just right?" (not too hard/too easy)
Did they feel like they learned from iReady lessons/practice.
And something about if it felt babyish. Many of my 5th graders thought the characters and such were too babyish.

I found that the I-Ready placement test did not accurately place my students. Therefore the instruction was too easy or too hard for most of them. The fact that I could not manually override or retest made it so I only used the online instruction for two students.

You should ask them...
if the brain break games were helpful
if they understood how to use the tools/calculator
If the questions were asked in clear, straightforward ways so they knew what they were being asked to do if they felt like they were asked too many or too few questions of the same topic
if they felt like they were able to show what they knew during the diagnostic
if the test was too long/too short or just right to give a snapshot of their knowledge.

\title{
iReady Math Assessment - Phase 2 Instructor survey results
}

\section*{52 total responses recorded}

Were the lessons helpful in learning new concepts?
Did you enjoy going on iReady?
I think the toughest part for the students was the length. Maybe ask if students understood how much time it would take and if they felt like they tried their best during the whole test.
-level of effort students put in
-did they use the tools provided (including pencil/paper to work out equations),
-did looking at scores and setting goals on on the first diagnostic impact their effort on the second diagnostic, or did they find it useful
-if students did any of the lessons, did they enjoy the interactive aspect...more than MobyMax?
I have notice inconsistent data from the 1st assessment to 2nd assessment for the same student. Is this what I should be seeing or is there a curriculum sequence gap from Expressions to iReady?

Did you like iready? Why or why not?
My students might not be able to access the survey, unless it is written about the 2nd grade level.

I did a google form asking my students about their i-Ready experience as an entry task this week. I would be happy to send you the questions/answers.

How well did you understand the questions being asked?

I think open ended questions like, "What did you like about iReady?, What didn't you like about iReady?" allow students to write about their experiences. I think that kind of feedback would be useful.

Do you enjoy working on the iReady lessons?
how they felt about the length of the diagnostic test

How well could you understand the question?
Do you feel iReady has helped you understand math better? What do you enjoy about iReady? What do you dislike about iReady? If your teacher told you, you could go on any math website, how likely are you to go on iReady?

I would want to know if my students valued receiving their results, what they plan to do with the information, and how many times during the school year they would be open to having a diagnostic assessment in math.

\title{
iReady Math Assessment - Phase 2 Instructor survey results
}

52 total responses recorded
Please rate the following based on your own experience.


For any items marked "disagree" or "somewhat disagree" in the previous section, please explain: 11 responses

I haven't had the time to actually sit and look at the data and to get comfortable with the tool. There just isn't time to get that done along with creating valuable lesson plans. I also just don't feel like it is a good representation of what the kids know. The test took FOREVER and I was just encouraging them to finish quickly; take only one minute per question. I just don't see that it is a good representation of what they know or that they took it seriously enough for it to be of value.

Not sure how looking at their data will encourage students. format? growth?
I can use the data to inform instruction. However, most of the features (like Instructional Groupings and Diagnostic Growth) provided no information because all of the students in my learning support classes were more than 2 grade levels below standard.

There isn't a short report that can be used to give families information about their student's needs and what to do next. 7 page reports are too long.

I did not use this to help with instruction and did not use the data to encourage students. Many were "below grade level" according to the assessment, but they aren't necessarily according to other statistics.

As the placement data did not align with other assessments I had used, it was difficult to use the data with students or parents.

It was hard to group my students because most of them ended up at the same instructional level and since I teach a year ahead it did not separate their strengths/areas of need within the grade level above, only that of their actual grade level.

\title{
iReady Math Assessment - Phase 2 Instructor survey results
}

\section*{52 total responses recorded}

I am teaching 9th grade Algebra 1 and my students scored so low that the material they were missing had no place in the Algebra 1 curriculum. When they spent time on the iReady instructional materials they felt it was geared towards students much younger than them and they were resentful and felt like their time was being wasted.

Moving with Math assessments provide much clearer data on informing instruction and informing parents on student needs and gaps

Many of my students went down in score on the second assessment. I am not sure how accurate the data was, therefore I am a little hesitant to share this with the parents.

Please rate the following based on your perceptions of the student experience.


For any items marked "disagree" or "somewhat disagree" in the previous section, please explain: 30 responses
what middle schooler enjoys taking a test?

Do 8th graders really enjoy taking a test?

I don't think that many students actually enjoy the testing experience no matter what the test is.

Too hard for some students (EL?) to log in; students could not 'fast forward' through some of the videos and were frustrated by that; same with games, but they seemed to enjoy them for the most part

Students experienced frustration in regards to the length of the diagnostic tests. They also got frustrated when they couldn't skip the brain breaks.

\title{
iReady Math Assessment - Phase 2 Instructor survey results
}

\section*{52 total responses recorded}

Students were frustrated by the brain breaks. Sometimes a brain break would appear at the very beginning of a session before the student had answered any problems. Based on the collective groan and plethora of complaints I received every day we tested I would have to say the students did not enjoy the testing experience.

Seriously? Students have never in my opinion enjoyed a testing experience. We had numerous issues with the system kicking students out during testing (the first time).

The test was very long the first time and still somewhat long the second time. Only 13 students finished within an hour from the first time.

Students appeared to enjoy the test experience? No one was jumping with joy in my classroom...
Used this program with Spec Ed students who often have issues reading and following directions. They sometimes don't want to use the text to speech accommodation. Often they just want to be "finished" and hurry through so need an adult to sit next to them to slow down and keep on task.

Students did not like this test and did not find value in it, so they did not try.
My students needed a lot of guidance and some of them just guessed as they did not want to wait for help.
The test took a LOOOOONG time. They got very sick of it. enjoy testing? Some frustration with difficult problems.

When students did the second diagnostic, there was much more frustration than the first time. Students encountered problems with the scroll bars and had to use arrow keys. A few times when students wanted to change their answer, it would not let them change it. The screen froze, then it restarted. Students had to click on "resume diagnostic," and then it reloaded the page, but took them to different questions and they couldn't change the ones they wanted to. One student unplugged his headphones and it froze the introductory video. He had to completely close out and restart four times. He could only progress if the headphones were in. One student's calculator wouldn't work and it froze everything. He had to reload the whole page. Another student just got "unexpected error" and had no choice but to log out and log in. Students were frustrated when they knew their answers were wrong but had no means to change it.

When I asked I-ready for help with logins, they said, sorry, can't help and it didn't feel positive. It felt dismissive. I eventually figured it out myself because my district tech person didn't know either.

Some of the questions required students to scroll down to move forward but it was not clear and they would get "stuck"

Students were burned out after the first hour or so.

The testing timeframe was the only negative.

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iReady Math Assessment - Phase 2 Instructor survey results
}

\section*{52 total responses recorded}

Kids got frustrated, because if they didn't play the entire beginning video they would have to watch the video again. A couple of kids would make it through most of the video, click off of it and then have to watch the video again.

Again, my 9th grade students felt the iReady assessment and materials were geared towards a much younger audience. My students have many gaps in their math foundations, but I think the experience made them feel even more negative towards math due to the more childish approach (animations, brain breaks, etc.)

There's really only so much that students will enjoy a test.

Students felt frustration at many of the questions that were too hard for them, even with the talks about how the test worked. (Although I understand this is necessary to find their level) Language accommodations were difficult to use with kids and couldn't be altered by the teacher. A Spanish version needs to be more readily available to kids (as advertised)

Some of the kids experienced "freezing" of their computers during the testing and it was very frustrating for them.
Tools seemed unavailable when the students wanted to use them. Students were very frustrated with the slow pace. They had to play entire videos before moving on and they felt the videos were too slow and took too long to view. Brain breaks were imposed at various times that may or may not have coincided with student's need for a break. Lots of issues with glitches that required logging out and back in to get past.
the test was so long they were tired and bored with it

The test was way too long. They became frustrated with the long videos and the breathing exercise.

We had wifi issues the first time administering the test and students were unable to get in to the test.

They are sixth graders - they rarely enjoy testing in any subject matter.
Students were frustrated with the testing game breaks interrupting/slowing their progress and literally breaking their rhythm.
Students thought that the platform context was a little childish (I have Alg and Geo students in 7th and 8th grades).

\section*{iReady Math Assessment - Phase 2 Instructor survey results}

52 total responses recorded
Please rate the following based on your personal and individual experience.


For any items marked "disagree" or "somewhat disagree" in the previous question, please explain: 32 responses

It took students too long!

This took way too long. I have too many standards to address in the 8th grade and I just can't give up the time from instruction to administer this test.

The test took students quite a long time to complete.

Test was too long; it took too much time from instruction

On average, my students took 90-120 minutes to complete the diagnostic test.

It took three half hour sessions for most students to finish the test in December and even longer in October.
The assessment took far too long. I had students complain that they were "forced" to play a game when they wanted to continue pushing forth; also the timer to give them a "break" did not reset if the test was paused. We had students log in for a second time and they were given a "break" right away.
see response above about length of testing.

If the building can find the support for the test takers who are taking more than anyone else. It feels a little daunting to wait for slow students three times a year and not being able to keep going with math.

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iReady Math Assessment - Phase 2 Instructor survey results
}

\section*{52 total responses recorded}

THIS TOOK TOO LONG! Students spent 2 weeks on it. I rushed it the second time, and students did way worse than they did during the first time when they took their time. It is not worth it.

They time to take the assessment was not the issue. The assessment did not provide data or placements that were useful for my classroom.

It takes far too long.
initial testing took too long; post test went faster, but still took two 45-minnute sessions for some students
ELL students, predictably, struggled.
It took my students less time to complete the second diagnostic, but it was still about 3 extended math periods (and still more time had to be given to IEP students who were extremely unmotivated to see it through). It really does impact regular teaching time.

My students took too much time. I need to limit them to two hours because it took hours and hours over days to finish. Not ok. I could give this assessment three times a year but if they take days to finish, I would lie to them and tell them they get only two hours.
second round took me 5 days to administer and still are missing multiple students, I am hopeful that it will get quicker if we move forward. I am a big fan of the data we get and the practice component

It took considerably longer than 45 minutes for everyone to complete, \(\sim 60 \%\) of students took about 60-90 minutes, had to do three 45 minutes to get everyone done.

Some of my students took over 3 hours to complete the test which is unreasonable, and not proportional to the amount of data it provides for my instruction.

I wouldn't mind giving the long test. I feel the data is more accurate than what I see of the renaissance pretest. I would rather test longer and have the correct information.

It took the kids two days to take the assessment both times. I think the data I got was good, but I'm not sure it was worth 4 days of learning...

I lost a good portion of four class periods administering this assessment. My students were already struggling and this assessment made them feel more negative about the class and their abilities. Since I was the only one in my PLC participating in this pilot, I am now several days behind the other teachers/classes, which is also frustrating.
1) The test took my students about 1.5 hours to complete. 2) I was concerned when I looked at the results from my second diagnostic and they didn't show the sort of growth l'd hoped to see. A lot of my students who started the year at "early 5th" remained at that level for the December diagnostic. However, when I looked at their

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iReady Math Assessment - Phase 2 Instructor survey results
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\section*{52 total responses recorded}
domain specific scores, they had advanced in the numbers and operations domain, which I where most of the first half of the Math Expressions curriculum focuses. While their scores had stayed the same or slid back slightly for the geometry and measurement and data domains, which aren't covered in Math Expressions until later in the year. I don't think this is a problem with the iReady test, but just something for teachers/district folks to keep in mind when comparing beginning of year and mid-year results.
Students on Super filter were unable to access test. The time frame for my students to complete the test was underestimated.

Many students still struggle with reading, and though it was read aloud to them, it was difficult to comprehend. Also, I didn't see all the questions on the assessment, so I don't know if the questions were appropriate

Many students had a hard time with the length of the test. They got frustrated that there were so many questions.

The content may have been appropriate but the presentation was not age appropriate. I realize I am working with a special population but the material was overly juvenile and my students felt babied and offended. The tests were too long.
it takes way too long to give multiple times per year

The test was too long. I had 20 of my 56 students not complete it and took a poor grade in class based on completion because it was too long.

I had a student from Cambodia with no English and they were unable to access the test.

It takes too much time to administer multiple times throughout the school year. Is the data that much more valid with so many questions? Why are so few of my students at 1 to 2 grade levels advanced in math just at grade level and below grade level? Can we test them for the course level that they are taking instead of the grade level? Then what would the same student's score be - would they be evaluated higher level or be brought down that much more back to the level originally grade level tested at?

It took several students 3-5 class periods to complete (most of a week of instruction). Across the curriculum though this year students in my class are taking 2-3x longer than in previous years though so it may just be my class. The other issue is students who speak other languages had a difficult time taking this. I had a difficult time getting the Spanish version to run for one of my students and I'm still not sure it is resolved.

How strongly do you agree with this statement: I would likely support a recommendation to implement iReady Math as a district-wide assessment in the 2020-21 school year. 52 responses

On a scale of 1 to 10 , with 1 representing "I would never recommend this assessment" to 10 representing "I would be in full support of recommending this assessment."

\title{
iReady Math Assessment - Phase 2 Instructor survey results
}

52 total responses recorded


What is your overall rating of this assessment? 52 responses
On a scale of 1 to 10 , with 1 representing "Don't like it at all" to 10 representing "Like it very much."


Please provide additional feedback here: 29 responses
I have given results to Learning Support teachers and parents and they have found it helpful. Students are motivated to improve their skills because l'm using the sticker charts provided at the second training. Although some students are resistant to working on it, most enjoy it. Overall, I am very happy with this software!

The data is good it seems however it was too long. This assessment coupled with SBA is too much time from instruction and learning

I need to see the value in doing these assessments. I want to be able to use the information to help my students but I just feel too pressed for time to cover all the math 8 standards. I honestly don't know the solution to helping kids that are below standard. I just know that I feel required to finish all the standards and never feel like there is enough time to cover them all completely let alone try to get kids caught up from standards they are lacking in.

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iReady Math Assessment - Phase 2 Instructor survey results
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\section*{52 total responses recorded}

I like the data but cannot justify the time commitment required for this assessment. The data matched up fairly well with the data I get from Moby Max (except when a student has a \(2+\) grade level difference between their subtest scores) and the placement test in Moby Max is much quicker.

I had students who "did their best" and scored at Kindergarten levels on both assessments even though I was able to assign them lessons at grades 2 and 3 and they did fine on them. Other students scored highly on the assessment and then couldn't pass the lessons they were given.

I based my ratings on the whole package deal of assessment plus adaptive intervention. I would not find it as beneficial if we only receive data and none of the intervention resources and/or adaptive lessons and practice.

I enjoyed what i-ready had to offer to teachers, students and families. The diagnostic test gives a hope to improve. The lessons are very interactive!

This is not advantageous enough to use. The only advantage is to use their "grade level" when discussing IEP/504 information.

Students enjoyed the brain breaks but were frustrated with the assessment and likely did not demonstrate their true abilities.

Overall, I think this was a good diagnostic and the students were okay with doing the online lessons. I appreciated that my Spanish speaking student was able to take the tests in Spanish. All of the online lessons, however, were in English. That was not helpful, as he was coming out at a level K-1 and being able to "catch up" in Spanish would have been a very good use of time.

I didn't think the information provided for the parents was very friendly. The layout didn't show me the information I wanted for the parents.

The only drawback I see is the amount of time it takes to administer.
As an assessment it was okay. It seemed to take too long to do the assessments. Some students skipped over the games when we took the second assessment. For the length of time iReady took, might as well use interim SBA math blocks assessments. Really liked the self directed piece, but it is going to take some time to sync it up with Expressions. Liked the iReady self directed work better than Mobymax (maybe because it was just newer).

I am interested to compare the two at the end of the year.
I feel if iReady is selected, it should be geared towards students younger than 9th grade. My struggling 9th graders did not enjoy the test at all and I don't feel like they got much out of the instructional materials (Many were scoring at a 4th grade level and at this point I don't think it makes sense to spend lots of class time on 4th grade topics.) I think the teachers of younger students had a more positive response. I think it would also help if whatever we do is implemented across the district. It was challenging to be part of a small pilot and having my class fall behind other like classes in the district.

\title{
iReady Math Assessment - Phase 2 Instructor survey results
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\section*{52 total responses recorded}

Overall, I thought iReady was a helpful program.

Just wanted to note that I was very pleased with the assessment, but not the individual learning strands and lessons that we also had access to. The assessment had closed captioning accommodations, but the lesson activities and videos were not accessible to my students. Without closed captions, the lessons are not appropriate for ELL learners, visual learners, or our regional Deaf program students. Thanks!

I believe that Moving with Math assessment provides more detailed data.
Is there a way to re-asses someone who admittedly did not do their best? I have a couple students that had that happen.

I liked the administration of the test and it gives more than enough information on the reports, however I am a little concerned with possible discrepancies in the results students got.

I like the data that is provided by the assessment and would definitely use the as well. My biggest concern is the amount of time that the test takes. Even if it only took 2 days per test, that is 6 total days that I wouldn't be able to teach regular lessons, which is a huge chunk of lost time. After 2 days of testing, I didn't even have half of my kids done (even with me nagging them to work quickly). It ended up taking many of my students 3-4 additional days during our Advisory period to finish it. I'm not sure if the amount of time required to take the test outweighs the data that we actually get.

My students hate it and feel offended by it. I personally wouldn't use it. I would continue to use Moby Max if we had access to it or switch to Kahn Academy or Easy CBM.

I don't actually know if the test is culturally responsive as I did not read the questions (much like the SBA).

I love the reports and the lessons. I would love to see Edmonds choose to do the reading assessment too. : )

I felt the assessment info and lesson info was very helpful to present to parents.
I do not like this assessment for advanced math students. The reports are very cool but I wonder of their validity/applicability for advanced students. Are we assessing where they could/should be for an SBA or where they are right now in the course level content that they are studying.

I love this program!

Because I teach gifted students that are taught a grade above level, the lessons do not assign for above grade level. The STAR presentation indicated that teachers can assign lessons based upon CCSS. If it is able to allow me to test and assess students at their actual instructional, rather than age group, this would be of interest. It would also be more informative because with I-Ready I need to look at their end-of-year as age grade 5 for my beginning of year assessment. For students in my room that have struggles with attending (ADD, ADHD) their

\section*{iReady Math Assessment - Phase 2 Instructor survey results}

52 total responses recorded
ability to remain testing to show true abilities was not effective. They rushed through - and one became completely frustrated and slammed the Chromebook closed. They tended o finish within the estimated 45 minutes not enough for the system to flag them but rushed to be done. They scored lowere the second assessment than the first. The students that worked for 3 to 4 ( 45 minute sessions each) had greater growth the more time they took. My longest testing student had \(279 \%\) growth and well exceeded stretch goal.

\title{
Appendix XIII STAR Math Assessment - Phase 1 Instructor survey results
}

50 Total responses recorded

\begin{abstract}
A short survey is going to be developed to get feedback from students on their experience with the assessment pilots. Please list below your ideas for questions that should be asked and/or what we need to learn from students about the assessment pilots. 19 responses
\end{abstract}

Which assessment (iReady or Star) is the best measurement of your current math skills?, Which assessment (iReady or Star) best matched you with lessons (iReady or Freckle) that help you learn things that you didn't understand before?

Our students provided the following feedback: 1. Assessment went from easy to hard very quickly; 2. Like the multiple choice format; 3. Assessment is similar to iReady; 4. Did not like the timed aspect/felt rushed.

How did you feel about the length of the test?

I think that they are going to say that they like the shorter one better because they don't like long tests.

Did you use/enjoy the individual lessons? How did you feel about the diagnostic?
i think the same questions should be used for both surveys (iReady \& Freckle)
Experience with timed test, interactive tools, practices on freckle etc.
Did you try your best on every question?
too long/too short; frustration/enjoyment level; how much they know about their results; are results helpful or harmful to them

Being timed/results student friendly

Did they understand what was being asked?

Did having timed questions help you to keep focused or increase your stress? Was the little clock an effective way to warn you that your time was running out? How straightforward were the questions and answers? Were they written in a way that was easy to understand? How did you like the format of the test? Do you feel that the computer effectively adapted the test to find your current level of understanding?

Make them yes or no answers

Which assessment did you feel more confident on?
Ease of use (logging in, navigating website), aligned with what we're doing in class, is it fun?

\section*{Appendix XIII STAR Math Assessment - Phase 1 Instructor survey results}

50 Total responses recorded

Which test lines up better with SBA data and classroom based assessments. Therefore, which test we believe is more valid. Time to assess. Ease of logging on students and retrieving information. The quality of the informational reports provided by the two companies for parents, students, and for teachers. Student perceptions of the two tests.

I am having trouble linking STAR to Freckle. My colleague also has the same issue. They can do Freckle, but the STAR info is not linked. When trying to link it, all students get an error message. Very difficult to navigate. Scores are unbelievably inflated.

Ease of use, how helpful are video lessons, frustration level

Please rate the following based on your own experience.


For any items marked "disagree" or "somewhat disagree" in the previous section, please explain: 31 responses

There are too many reports and they are a bit unfriendly. I couldn't figure out how to print reports for parents that are reasonable in length and/or user friendly.

I haven't really had a chance to look at the data yet so not sure how I will use it.

The information is very hard to retrieve and understand. It is also less accurate.
The assessment data does not reflect what I am seeing on in-class assessments or on the i-Ready math assessment. It places the kids significantly higher than what other assessments are showing me.

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Appendix XIII STAR Math Assessment - Phase 1 Instructor survey results
}

\section*{50 Total responses recorded}

The data does not align with SBA, Moby Max, iReady or classroom assessments. The data seems skewed to show more students doing well, which means i would miss intervening with students who really needed it.

Website was difficult to navigate. It was also difficult to select which classrooms to run the report on as it was just Treadway-Number, which included electives I teacher and had each semester as a different class. I could tell students whether they did well or note but could not say which areas were in need of improvement from the report that I ran. Overall score was not sorted into domains.

The results seem somewhat contradictory. One report lists a student as "Level 2" based on the state benchmark, yet another report has him at 6.1 grade level equivalent (a fifth grader). One report is telling me that intervention is needed, and the other is telling me that he is working above grade level.

Many different reports. Took time to look through each one and figure out which was best. It wasn't difficult just time consuming. A quick guide for which reports are best for what would have been nice.

Data seems to show that most of my class is on track to be at grade level and there isn't much differentiation between them. Based on assignments, I know that this isn't exactly true, so I am unsure of how they are leveled. Based on this it might be hard to inform parents of student levels.
data was complicated to access; still working on understanding and accessing details of data; don't really trust how much one measure of data such as this accurately reflects students' learning in the classroom.

The data was hard to find and difficult to quickly interpret it

Accessing the actual test was confusing and fraught with technical problems.
Info is a little generic
Some of the data is hard to see how it could help in class instruction. Because all of my students are above grade-level I'm having hard time really breaking down the data into 7th grade strands to see their proficiency. I'm still trying to sort students by individual CCSS skill level, in order to form groups.
\#1 I had to watch a video for over 50 minutes to find out how to do this. It should not have taken that long as most of the information I didn't need because our district has the students sign in with Clever. \#3 I feel that the results are not accurate. The results are skewed. The results show that some of my struggling students don't actually have math academic gaps. I have more than 3 students who have However, the SBA results from last year, iReady, classwork and assessments, and Moby Max assessments say otherwise. Again, I feel the information \#5 I don't think the results are accurate so I will not talk to families about them.

Very confusing and difficult to use
I had an extremely hard time getting logged into the teacher dashboard. So much so that I haven't even tried to retrieve their results as l've been pretty bogged down with report cards.

\title{
Appendix XIII STAR Math Assessment - Phase 1 Instructor survey results
}

\section*{50 Total responses recorded}

I feel like the data is not very clear in that it doesn't give specifics of where students excel or struggle.

Most of our students need urgent intervention, which is why we are piloting. The "red' bar graph that shows how low students are performing is not helpful to show most students.

I believe the Moving With Math Assessment provides more detailed data and clear talking points with students and parents.

It is not easy to figure out what is in reports and what is in goals. I also really disliked having to have the students create the link between the assessment and Freckle.

I didn't like the options for finding the data. It required too many steps. The data was also very general so it didn't really help me to know what my students need help on.

I feel like the data was presented in a confessing and not student friendly way.

The data from the diagnostic is limited and doesn't break down the individual math strands that students struggled with. I didn't see a time shown, which would indicate if students rushed through the test. Now that l've given the test and collected scores, I am stumped on what to do next and I have spent a lot of time trying to figure it out! I'm sure there is a way to print a report for parents somewhere, but I haven't been able to locate it and am frustrated with the amount of time l've spent finding dead ends.

The scaled score does not tell me what grade level. It is just a random number.

Navigating STAR was time consuming and frustrating. I had to do several live chats to finally locate information for testing.

The scores didn't seem to match up with their Moby Max, iReady, and SBA information. I had 7 kids that showed they were above a 9th grade level, and let me assure you...they are not. Research has showed timed tests are not a quality assessment, but yet this test is timed. Some of my brighter students were in the middle of really thinking when they missed their question due to time. The timing of the test created so much anxiety that a lot of kids had to use the bathroom all of a sudden. It just wasn't a healthy test and their scores do not seem to match what I believe is more accurate and trustworthy.

It has been very difficult for me to set up classes and get my students to the right spot.

For the advanced math student this test and data and supports are not useful at all. But really the iReady test has the same issue. The data might say something about how prepared a student is for their grade level content/SBA.

I do not think the data in valid. There is little to learn in 30 about a students capabilities. I find the website to be very hard to navigate. Too many charts, graphs, etc.

\section*{Appendix XIII STAR Math Assessment - Phase 1 Instructor survey results}

50 Total responses recorded

The percentile rankings are too low for distinguished, proficient. \(40 \%\) would not be considered passing or even nearing grade level.

Please rate the following based on your perceptions of the student experience.


For any items marked "disagree" or "somewhat disagree" in the previous section, please explain: 28 responses

We didn't know that we needed to have students type "admin" when asked for a password. I tried the chat feature to get help and got an error message twice saying the system was too busy and to try back later. I called Brandon for help and unfortunately he wasn't available either. I frantically searched the system and told my kids to read while I figured it out. It was a frustrating experience for me and for them!
spanish speakers and many students needed help
Many more students had questions on this test about what words meant and what questions were asking. There were many more problems with the star test than there were with the iReady test.

I would have liked to offer the Spanish version to some of my students, but I did not know how to do that.
The students did not enjoy the test, but they did like it better than iReady.
Students don't enjoy taking tests.

\section*{Appendix XIII STAR Math Assessment - Phase 1 Instructor survey results}

\section*{50 Total responses recorded}

I had several students very worried about the timed portion of it. One was actually distraught and had to be calmed down before we could attempt it another day. Even though it was longer, students enjoyed the brain breaks in iReady and it seemed to lighten the mood a bit during that test.

I still can not say that taking a diagnostic assessment brings joy into the life of my students.

The student login being their lunch number was a bit cumbersome.

Students struggled with understanding how to answer several questions and needed additional support. Students also appeared to be stressed by the levels of reading without any breaks.

Students report assessments like this are stressful.

Lots of grumbles during the test. Super low kids reached frustration quickly

Students don't like assessments generally.
I had to help several students figure out how to scroll around to get to the answer. We had some problems with the test not allowing them to click or change answers, getting stuck, logging them out and then signing in again. When they did, the current question was gone. Many were frustrated that their wrong answer was probably recorded and that they couldn't fix it.

Timed questions were a stressor

Login directions were unclear and we had issues at first, but they were easily resolved.
\#1 I had to make sure to read the directions very carefully! I posted the link onto my Google Classroom for them for easy access. Once the pretest was done, they could access the lessons easily. My students were timed out on the pretest. I thought they were supposed to be.

It took me forever to get all of the kids on the test, because I had to look up usernames and passwords individually.

Students went through the test quickly- many just guessing at answers.
I teach a cohort of struggling students and any time they see questions they don't understand, it affects their confidence level.

It was not intuitive how for students to log in.

Enjoy- students did not enjoy the taking of this assessment. Accomodation were not part of the webinars, I only knew how to add extended time because I also use the STAR Reading assessment.

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50 Total responses recorded

There was not a neutral option.

The first time my students logged in, they didn't have any content available to them, which I tried to troubleshoot in the moment and then ended up solving the issue days later, but the initial attempt was a complete waste of time. I didn't know of any embedded accommodations that were available and I don't believe the students did either.

No testing tickets were available for students, so they had to wait for me to help student by student to get logged in. Many students did not get their email address typed in correctly and they did not know their student ID as they don't purchase school lunch. Students did not appear to enjoy the test and were overwhelmingly relieved when they were finished. They did like that it was shorter.

Part of this was my fault - I forget how many students do not know their student ID, which created this long, awkward moment for me to give more than half of the class their number. Then I missed the monitor password email somewhere in the mix of everything. I thought I was all prepared with my notes, the TAM printed and ready to read aloud...but then another awkward moment as I had to shuffle around and try to find out how to find the password. I finally called another teacher and was good to go. Although I read that I couldn't help them, the timing of the test did create more anxiety and the kids were constantly begging me to tell them what a word meant or what a question meant...I didn't tell them, but the test environment felt tense to me and they were frustrated as well.

It was difficult for students
We initially did not know about the admin password. I have no idea about the tools.

\section*{Please rate the following based on your personal and individual experience.}


\title{
Appendix XIII STAR Math Assessment - Phase 1 Instructor survey results
}

\section*{50 Total responses recorded}

\section*{For any items marked "disagree" or "somewhat disagree" in the previous question, please explain: 22 responses}

This section was hard to answer because I didn't read the questions.
Most students said many of the problems were too difficult.

It was challenging to administer the test because I was unable to see the progress the students were making during the test. Some of the questions on the test were not even math questions. One of them asked which vegetable is below the pot? The results were much less accurate! The results on the iReady test appeared to be much more accurate.

I think the kids moved through the assessment too quickly.

It was more steps. there are multiple links to use and the one we needed to use for testing was in the TAM. There was an error that we had to have a separate password. In my building, \(2 / 3\) of my students don't know their lunch numbers and we no longer have cards for it. We had to use a roster and write it down for most students. It does not feel like the content was appropriate if only 3 of my students showed up as needing support when the other assessments we have are showing 8-10.

I did not get a chance to look at all kinds of questions.

It took me a decent amount of time to prepare information for student log ins plus any additional passwords needed. I am also unsure of the content as student levels do not seem to fully reflect how they perform at grade level work.

I do not know what was covered in the assessment, only that their were no complaints bout culturally offensive content and that many questions appeared to be content they had not been taught yet in 5th grade.

See my response in section 1

The test ended up being pretty short and it makes me question if the student scores were trustworthy. The results showed several of my students who struggle daily with math at grade level. Perhaps they are good at guessing multiple choice questions. I do not know if all my students found the questions relevant. One student took the test in Spanish and I do not know how successful he was. His scores are not showing up with the rest of my class.

A lot of the content assessed had not been taught yet in the curriculum

I am unsure about the content of the assessment for above-grade level....how adaptive was the test?

It struggled to get all of the students on the system. I would have liked a copy of my student list with user names and passwords, so I didn't have to worry about it.

\section*{Appendix XIII STAR Math Assessment - Phase 1 Instructor survey results}

50 Total responses recorded

Many students only took 15 min to do it

We had a really hard time getting logged in as I thought I had figured out how to log them in only to find out it was a much more involved process.

I had trouble getting on and trying to monitor the students. Next, my students did uniformly awful in geometry because it assessed items we do not teach.
there were questions on percents that are not in our curriculum

It took me several hours to wade through the website to find all the information I needed to administer the test. Thank goodness for live chat! I have no idea if students related to the questions and do not know if the material covered was appropriate.

See my above comments regarding the ease of administering the test. I, however, feel that a test that can be done in 20-30 minutes to find your grade equivalent in mathematics should not be trusted.

Too low and/or not enough build to an advanced question without jumping from a adding fraction question to a law of cosines questions back to back.

I do not believe the data is valid. There was not enough time to assess them properly.
Need to be able to assess students for a math level and not by expected age level standards.

How strongly do you agree with this statement: I would likely support a recommendation to implement Star Math as a district-wide assessment in the 2020-21 school year. 50 responses

On a scale of 1 to 10 , with 1 representing "I would never recommend this assessment" to 10 representing "I would be in full support of recommending this assessment."


\section*{Appendix XIII STAR Math Assessment - Phase 1 Instructor survey results}

50 Total responses recorded

What is your overall rating of this assessment? 50 responses

On a scale of 1 to 10 , with 1 representing "Don't like it at all" to 10 representing "Like it very much."


Please provide additional feedback here: 27 responses
I don't feel that the test results are as valid as iReady. The test was much shorter which provides less data, of course. Many of my students scored at or approaching the 9th grade level. I don't think that it is an accurate reflection of their actual abilities based up on SBA scores and other assessments. Yes, in general, my higher kids scored higher on the test while others who are lower scored lower, but I think the data isn't completely accurate.

The kids' assessment results do not align with other assessment results; STAR placement was much higher than other results.

I appreciate that this test takes less time to administer, but I think that it is only worth doing the assessment if we get accurate results. That is why I support the implementation of the iReady test, not the star test.

I didn't feel like the data was accurate.

We haven't yet used the lessons, so I'm not sure about a recommendation yet. The initial support was not good. I did not feel ready to give the assessment without a bunch of reading and research on my own time. I appreciated that the diagnostic test only took one period, not 3 or 4 .

The assessment was quick and easy to administer. However, the reporting is not as user friendly as the iReady Assessment. In the Renaissance Learning Reports my class names don't make any sense and I have a difficult time figuring out which class to select.

I feel that whatever program we choose that we need to adopt the intervention to go with it.

\title{
Appendix XIII STAR Math Assessment - Phase 1 Instructor survey results
}

\section*{50 Total responses recorded}

I am not so much impressed with STAR assessment as much since I did not get time to look at the data in collaborative group. Being responsive to my students I have to say that I am not for a timed test. Freckle adaptive practice is not as much interactive as I-ready

I appreciated the feedback I received from iReady more than from Star as well as additional support for lesson ideas/online lessons in iReady. I also liked how iReady had a break built into a test. However, Star did not need these breaks considering how quickly students could finish the test.

There were major errors about whether my students had taken the assessment; too many steps finding data
I am undecided at this point. I need more time to explore the assessment, see if it informs the Freckle portion like it says it does, and to see how easy it is for me to muck around with the data, form intervention groups, etc. I haven't had much time with it being end of semester/report cards.

I do not have much confidence or faith in this program due to the issues faced prior to the assessment. I still find their names to be unclear. Are they Renaissance or Star or Freckle? Who do I go to for help? Their identity and their branding is not clear or straightforward adding to my mistrust of them.

It is ok but not nearly as robust as iReady
Prefer live training over webinars
I don't think they were timed out, and I truely believe the results are in their favor. The result are positively skewed. Again..the students like the lessons, but I don't think the assessment is accurate. The students like the pig picture. It is fun to say, "go to the pig".

I really like how much faster this assessment is. However, I don't think we've received adequate training, and finding information in their system is not intuitive.

The STAR platform feels difficult to navigate. Many of different classes were coded the same.

I like that we already use STAR Reading. I like that it is 35 questions only and adaptive.

The students really enjoy the coin gathering in Freckle.
Mg only concern is that students tended to score higher than compatible tests si their Freckle assignments are very challenging to many.

While it was much shorter than the iReady diagnostic, I felt I got more useful data from iReady so would be in support of adopting that program. I also like the lessons on iReady more than those on Freckle adn think its an important feature of iReady that could really help our students in the future.

\section*{Appendix XIII STAR Math Assessment - Phase 1 Instructor survey results}

\section*{50 Total responses recorded}

I am still struggling to integrate the freckle math and have bungled the integration by not figuring out how to link it with Freckle. I started watching the webinar but have run out of time. I still need to fit it in so I can get my student's scores in star linked to Freckle. One class launched Freckle without it and it was a mess. Now I am holding back the other class until I figure it out. I feel the launch of this program was much less smooth but I am in the end going to recommend this program over iReady for sure. The fact that we already have STAR reading is a big part of my preference. Also, even though I lunched Freckle incorrectly, I think, the kids like it way way more than iReady.

It would be helpful to know what the SS scores meant for grade levels.
The format of the training was unhelpful. The website was hard to navigate. There was not real time progress so I could see how students were progressing during the test or if they were moving too quickly (guessing). The results of this test do not support the data I have collected from other assessments. This test rated my students much higher then other data suggests. I will not be using these results to share with students or parents as I do not feel they are accurate.

I am hoping some more training would sway me to have more faith in this test, but at the moment iReady is the clear winner out of the two diagnostic tests.

The assessment overall was not good. I prefer the iReady assessment \(1000 \%\) over STAR.

To use to inform my instruction.....need to test students for standard level and not standard based on gradeband. Need to have benchmark cut scores editable for higher passing percentile range. \(40 \%\) is TOO LOW. Students can blow of to earn coins and buy without much though or learning occurring.

\section*{STAR Math Assessment - Phase 2 Instructor survey results 37 total responses recorded}

Please rate the following based on your own experience.


For any items marked "disagree" or "somewhat disagree" in the previous section, please explain: 21 responses

The other test's data was much easier to retrieve.

I found the reports page to be a little unclear, and not super user friendly.
I found that the data retrieved from the STAR assessment was easy to find, but not easy to find the results you were looking for. There were too many options, and not an easy way to show a whole comprehensive outlook. Also, the reports were not presented in a way that was accessible to present to families and students.

There are way too many steps required to find the data for my students. I wasn't ever able to find any data that was helpful. It was all very general.

I was not able to see in real time students' progress.

The data seems very simplified and many of my students who struggle with Math are meeting standard on this assessment while not meeting standard on our work in the classroom. Because of this, it is not as helpful in helping them grow or showing parents how they are doing.

I struggled to use the online seminars to help me retrieve and use data in a useful and time conscientious way.
I have had several kids score above a 9th grade level. I fear that this will confuse both students and parents about their actual level. It doesn't seem accurate to me.

I would love to know what grade level they are at.

I wouldn't show this to my students who are frequently 3 grade levels or more behind.

\section*{STAR Math Assessment - Phase 2 Instructor survey results 37 total responses recorded}

There are too many reports and none of them are super clear. It's hard to share that data with parents, especially those with limited English. The parent report is awful. I ended up snipping and emailing 81 separate emails to families about how their children did, including a paragraph about what the numbers meant. It took me many, many hours of work, but I felt it was important because kids and parents wanted to see the results. They know that this may be one of the tools that is used to place kids in 7th grade math next year. It's important for them to know how their children did on the test.

The data is not as intuitive as iReady.

It wasn't very clear to me what to do with the data. I spent weeks trying to figure it out, I reached out to colleagues to see what they were doing, and they weren't using it beyond the assessment either. I eventually got the kids using Freckle, but didn't understand how to connect that resource to the Star diagnostic results.

I see grade levels of greater than 8th grade on many students results- that doesn't seem like an accurate representation of their skills.

I really stuggled with finding the right reports to get the data I was looking for and I still couldn't find anything that really broke down the information by standard strands. Maybe I just missed them. I also struggled with the Professional Development for this one. It seemed like we had way more helpful instruction with i-Ready. Maybe if we had more PD around STAR Math I would feel better about using it. I really didn't get much from the videos and online trainings and came away more frustrated after.

I feel this assessment does not provide clear explanation of areas of concern and areas of progress.

Data was not easy to access or show to students.

The data is not properly calibrated and nearly all of my 5th/6th grade students scored at above 9th grade, not broken down by domain or content area. This, in turn, was not reliable or useful data to share with students or parents. It did not provide for appropriate instructional groupings.

Not easy to access, it took several steps just to try and find out who has completed the test.

I found specific reports very difficult to find.

I had a very difficult time accessing the STAR data. It took a week of back and forth emails before I was finally able to login. Also starting the assessment was really difficult and non-intuitive. It took multiple tries in class to get the students logged in.

\section*{STAR Math Assessment - Phase 2 Instructor survey results 37 total responses recorded}

Please rate the following based on your perceptions of the student experience.


For any items marked "disagree" or "somewhat disagree" in the previous section, please explain: 23 responses

My students did not appear to enjoy the test, but they never appear to enjoy any test so I'm not concerned about that. At least they didn't actively dislike the test as they did with iReady.

I don't think any student generally enjoys tests.

Students do not typically "enjoy" tests.

Some students found frustrations when they had to take a break from the test, and then restart all over again. The second time taking the test, they did not try their best.

There should be an option to say "I don't know". I don't really know if tools were easy for my students to use.

Many students were frustrated with the time limit. Some questions required extended time to answer it and as soon as they would get the answer, the question would get skipped.

I was not able to observe since they took the test remotely

Had some struggles with logging in due to passwords and \(\log\) in information.
I only had questions about logging on, but since they took the test from home, I really don't know if they had any other issues.

\section*{STAR Math Assessment - Phase 2 Instructor survey results \\ 37 total responses recorded}

The log in would be very helpful if the password was there normal password. This confused them and caused issue when doing distance learning.

Because students took the test remotely, I can only go by the feedback I got from a few students.

I teach a class of struggling math students and no assessment is really enjoyable for them at this point.

Students appreciated that the test didn't take too long, but they did not find it enjoyable.

I think there was communication problems between the district and myself about the login procedure, mostly to do with the format of the username.

I had a few students struggle with the way the questions were worded. I did really like that the kids could access and have the questions read to them as an embedded accommodation. That was helpful.

Since the students took the test at home, I don't have a lot of information about their experiences.

I am not aware of any tools or accommodations that are embedded in the test.

None of my students completed the assessment. Even though it was assigned, no one did it. Since my students have been home due to Covid-19, we have been getting very little participation in math assignments. Most of my answers reflected my experience during the previous test.
students kept getting disconnected from the test and then the monitor password didn't work

Students did not like timed aspect, also it started hard and got easier which increased student frustration

I have no idea how the student experience went, because I wasn't in the room with my students, so these are hard to answer.

See the above comment. I had a lot of difficulty getting kids logged in during class.

Several emails about the admin password. Still waiting for tears of joy when a student completes a test.

\section*{STAR Math Assessment - Phase 2 Instructor survey results \\ 37 total responses recorded}

Please rate the following based on your personal and individual experience.


For any items marked "disagree" or "somewhat disagree" in the previous question, please explain: 13 responses

Some students were unable to get to the test because they did not have the edmonds bookmarks on their chromebooks.

Again, I'm not sure about the last question above, just guessing.

I was not able to observe since they took the test remotely

Some students struggled with understanding what questions were asking, while others didn't even try to understand and just rushed through.

Don't know--administered remotely.

The test was accessed at students' homes, so content can't be judged past the stands being assessed.

I heard back from some students that some questions did not make sense to them (material they hadn't learned etc.)
students who are on Super Filter were unable to access

The same reasons for the previous comment. I think some of my students are still having difficulty assessing assignments online, not just Freckle.

I am unsure that a 30-40 minute assessment has enough questions to accurately cover content areas, particularly when adapting out of grade level.

For students below grade level in math it was frustrating.

\section*{STAR Math Assessment - Phase 2 Instructor survey results 37 total responses recorded}

Accessing the teacher dashboard wasn't intuitive. I was able to \(\log\) in to Freckle easily through Clever, and there's a button in Freckle that appears to be a button link to the STAR assessment, but when I tried following it, it didn't take me to the correct STAR dashboard. It was really confusing.

Some of scores were equivalent to 8 th grade level. I was not sure how it was testing 6 th graders for a math learning standard and assess that their level is equivalent to an 8th grade. It was very misleading for students and families.

How strongly do you agree with this statement: I would likely support a recommendation to implement Star Math as a district-wide assessment in the 2020-21 school year. 37 responses

With 1 being "I would never recommend this assessment" and 10 being "I would be in full support of recommending this assessment"


What is your overall rating of this assessment? 37 responses
With 1 being "Don't like it at all" and 10 being "Like it very much"


\title{
STAR Math Assessment - Phase 2 Instructor survey results \\ 37 total responses recorded
}

Please provide additional feedback here: 25 responses

My students overwhelmingly preferred this test to iReady. They also overwhelmingly prefer Freckle to iReady.

I don't think this test's results were as accurate as the iReady test.
This assessment was fine. For the amount of time it took for students to take the assessment, the results were as expected. It was frustrating that I could not reset a students test on my own as I know the results I got from the test were not an accurate representation of the students capabilities. This should be an option that teachers can do on their own without having to call for district support.

If we are only doing assessment, STAR would be preferred. If we are doing the total package, iReady would be preferred.
After using both STAR and iReady, I found that iReady has more of the features and ease of use that I would want for my students. Even through the test administration is longer, I feel that the added benefits make it worth while.

I would like to know what it costs. is it expensive? More than Moby Max? I like STAR because it is a system we already use for Reading. That makes it more easily accessible and understood by all of us. I don't think the training provided by STAR was very good and I would want better training if we adopted it. I never really got into Freckle at all and would have liked to. Some of my students did however and said they liked it way more than Moby Max. It was more fun for them.

If we are taking this test remotely harder to monitor.
Time is of the essence, STAR versus alternative, uses significantly less instructional time to administer. Student engagement with the daily lessons - system \& teacher - is much greater using Freckle. I also receive feedback as a teacher that is beneficial for adjusting instruction and small groups. The reporting system is still semi-confusing but this may be more the result of circumstances out of our control - weather, pandemics, etc. Inconsistency in ability to consistently screen...

I much prefer iReady with the additional math lesson support. The assessment provided better feedback on student learning as well as giving students proper lessons from where they should start their practicing. I also appreciated that iReady had breaks built into it's diagnostic.

Training for administration and data retrieval was minimal. Lot's of time spent self teaching/exploring to find what was needed.

It doesn't seem like a reliable test. I especially dislike this test for being a timed test.
I like that we would be using the same tools for reading and math- I think that makes sense for students and parents. I like the "focus skill" break out and then I can create or find approrpiate lessons for in class or Freckle.

I like that the test is quick, but don't like the multiple choice format and feel like the results aren't very valid in many cases. We were never able to connect STAR to FRECKLE so that aspect of the pilot program was not useful.

\section*{STAR Math Assessment - Phase 2 Instructor survey results \\ 37 total responses recorded}

It took so much less time than the iReady assessment that I question its accuracy - are students getting enough questions with STAR to do a comprehensive assessment of their skills? If so, this was much less time consuming (a plus) and was better geared for my 9th grade students (the iReady assessment seems more childish and geared towards a younger population.)

This questioner does not reflect that we are in a quarantine and many of the questions don't pertain to teachers answering.

I see results that fairly closely match what I've seen in the classroom. I'm unfamiliar with the supporting instruction and I mistrust assessments that students can compete in less than 20 minutes.

Thank you for the opportunity to try something new. It was well overdue.

I like how quick and simple the testing was, but I feel like other assessment systems dig deeper and give me better information.

I know our students are familiar with STAR assessments if they qualify for learning support English. This made the access to the assessment easier for students. I really prefer to have an assessment that will drive areas of practice to support gaps.

I'm not sure if it is because we used iReady for a longer time in the classroom, I felt that the kids and I liked iReady better. I also co-teach and share a classroom with Ioanna Grose, so this form is for both of us. Thank
you.

I don't think that this is something that we need as a district, this is an expensive product that it seems is only going to be implemented half way. The assessment, unless it has been updated is misleading and uses standardized assessment under the guise of individual assessment. I.e students who scored at this level usually struggle with \(\mathrm{x}, \mathrm{y}\), and z .

Not a great tool, better than nothing but not much.

I liked Freckle. The kids seemed really engaged with it. But STAR was really difficult to use. I was never really sure if their Freckle pathways every synced with their STAR results. So I ended up relying on the domain specific diagnostics within Freckle instead of STAR.

I would like to give feed back from two perspectives: Teacher and student/family 1. From teacher's perspective, administering timed STAR test, accessing reports, setting up learning goal was very impressive. I have used Freckle for almost four years and absolutely love it for math learning. But during the pilot, freckle was not linked. If i would be a teacher who does not know Freckle very well, having to use two platforms (one for testing and one for learning) may be frustrating especially when they are not linked. Also, having a wide range of report display did prove lame for me since there was not much meaning to offer in terms of student report.
From student's perspective, the testing time and tools were very favorable except for some students who would want to take their own time and work on their own pace. The scores with grade level equivalency may prove a false information for student and family since it only allows multiple choice questions and does not test the understanding in depth. During practice on freckle, students felt stuck at one level and gave up easily on adaptive practice. I would like to be able to assign work via freckle and have students work on each strand of a math standard for mastery. There is room for improvements for STAR math.

STAR Math Assessment - Phase 2 Instructor survey results
37 total responses recorded
There was a weird glitch that had the students enter a password for it to go away, minor, but nice if it was fixed

In October and/or December, you took a math assessment called iReady. Do you remember taking this assessment?
952 responses

eves
e No
e Not Sure
1. Did you enjoy the iReady math assessment? iReady is the assessment you took in October and December

948 responses

2. Did your teacher share the results of your iReady math assessment with you?

946 responses

e Yes
e No
e Not Sure
3. Did your teacher give you opportunities to work on the Online Instruction in iReady? The Online Instruction is computerized lessons to strengthen your math skills.
950 responses

e Yes
e No
e Maybe
4. Did you look forward to the iReady Online Instruction lessons?

947 responses


\footnotetext{
e ves
e No
e Not Sure
}

\section*{iReady Math Assessment - Student Survey Results}
5. Would you recommend that the school district provides the iReady math assessment to all students in the Edmonds School District?
950 responses


Yes, I would recommend that all students should have the iReady assessment.
- No, I would not recommend the iReady math assessment to be provided to all students.
- am not sure.

\section*{iReady Math Assessment - Student Survey Results}

954 Total responses recorded
6. Is there anything else you'd like us to know about the iReady Assessments?

207 did not respond to this question
394 responded with "no" or some other rendition

Other comments:
\begin{tabular}{|l|}
\hline i dont like taking the tests \\
\hline Why did you make it so that we had to go threw every single special thing (calculator and other things) and listen on how \\
to do it. \\
\hline it was the best math site I ever had and kone \\
\hline I-Ready was fun and I enjoyed it! \\
\hline the lessons looked like they were for 1st or kindergarteners \\
\hline it did not up date my math skills \\
\hline i like I ready but its kinda baby-ish. \\
\hline I's helpful in some different stages of math \\
\hline It is really educational, but the images were baby-ish. \\
\hline Iready took the lesson by slow so i knew what was going on. \\
\hline the lessons kind of looked babiesh and loved iready \\
\hline i keep getting put in a kinder garden grade or the third grade, even though i am a five'th grader \\
\hline The lessons were sometimes not your level. \\
\hline \begin{tabular}{l} 
when the video came on for somethings it made me feel like i was a baby cause the people were like a kindergartner \\
figure. \\
\hline It's talking was kinda badyish, and but one of the fun thing was the games (sort of) \\
\hline the math is a little easy and it was epic \\
\hline the lessons were really baybish and easy \\
\hline I liked it but sometimes it was vary frustrating But it was fun. \\
\hline I love the breaks \\
\hline Almost each question is only 2\%. It's just long, but it is challenging and it does help us think so I would recommend it. \\
\hline I think it was a good way for education. \\
\hline You should have the 5th graders use this app \\
\hline iready is the best!!!! \\
\hline Please bring it back for the next kids. \\
\hline I think that after the students take the first test put them a bit behind the current level they are in so they get a freshER \\
start. \\
\hline make it more entertaining \\
\hline It helps a lot of kids learn and for me it is the best math website. \\
\hline sometimes when were practicing i would recomend them to put hints to help them remmember. \\
\hline no i just didn't like how it was slow when they would talk to you \\
\hline was iReady for more than just to help strength math \\
\hline Its was ok \\
\hline
\end{tabular} \\
\hline
\end{tabular}

\section*{iReady Math Assessment - Student Survey Results}

\section*{954 Total responses recorded}
\begin{tabular}{|l|} 
I really liked iReady and i really looked forward doing it every day. I think the next \\
6th graders are going to enjoy iReady. \\
\hline it was kinda boring you should make coin and make charecters for the iready people. \\
\hline I think that iReady was good but the fact that if you got a questions wrong you had to start the lesson over again. \\
\hline i feel like it was missing mutiple things like a pace thing that you oculd ajust to you. \\
\hline It stops durning our assigments and I don't like that part . \\
\hline I think the iready assesments are ready \\
\hline They can sometimes be annoying \\
\hline I think that all student because there are pictures that help learn easly. \\
\hline I'm not really sure but I don't really like IReady its not my favorite but It could be for other kids. \\
\hline Can we get iReady back i really liked it !! :) \\
\hline I like IReady but I prefer freckle \\
\hline It was fun i want it back i learned a lot from it and i liked it. \\
\hline I loved i ready it was a great opportunity. \\
\hline that to go slowly \\
\hline am sure. \\
\hline I like I ready but some things I don't like something about I ready like for example if your on a low level the assignments \\
would be easy so you would finish so much faster than other people. I also don't like it because after you fail the \\
assignment after 2 tries you cant retry so I don't like I ready that much. \\
\hline I like Freckle better because you choose what to work on \\
\hline it says it saved your spot but then i losed all the queston i answerd \\
\hline \begin{tabular}{l} 
This does not work as well as other websites. we would have to watch 6 short videos before we would be able to do a \\
test.
\end{tabular} \\
\hline I like the learning style on Renaissance math more. \\
\hline Ilike the piggy program for math \\
\hline the first day i did it i was already doing double digit multiplication \\
\hline i like piggy math more \\
\hline I like the Renaissance math app better but iReady was ok \\
\hline What I didnt like about I-Ready was the little videos that said like, "Super!" or the little videos \\
\hline I like it better than freckle because it saves your progress unlike freckle and because it actually teaches lessons while \\
freckle just gives you problems to solve. \\
\hline \begin{tabular}{l} 
I did not really like it because if you got a problem wrong it does not show you what you did wrong so you do not know \\
how to fix your mistake. \\
\hline it stressed me to know what percent I was on, on the test. \\
\hline i like Renascence better \\
\hline Renaissance, in my personal opinion is better. \\
\hline
\end{tabular} \\
\hline
\end{tabular}

\title{
iReady Math Assessment - Student Survey Results
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I would like to use Renaissance better because iReady didn't like really give you the information you need to do for the lesson that's why I would recommend Renaissance more than iReady. sorry:\}
It was helpful

I would not recommend it because it doesn't push you to a different level and it doesn't really challenge you ( not at all pretty much). Plus, I think Renaissance Math Academe is better because it is more funner with the piggy store and learning wise it pushes you out of your comfort zone, which is really helpful to be and my learning.

I did not like how we had to look at a video for every tool even though we did not use it. I like renaissance better and would recommend renaissance. Also in iReady there were "iReady commercials" in the middle of my math interrupting my brain waves.
super boring
it is a wast of time
was not ready
Its ok
No not really just to be in a quiet area so you can focus.
I was anxious the whole time taking it.
I like it
There is nothing that I would like you to know about the iReady Assesment
the voice is annoying
I like the star test better
Please put in off switch for the voice.
I don't know
Nope. The program is just fine the way it is.
yes, the voice is lrritating and there is no off switch.
The IReady assessment took a long time to finish.
Its designed for younger kids not high schoolers
Stop. It Doesn't Help. Half the time the website breaks. and its so slow. Fix it then maybe il like it
yes i think when i due the question
it had bugs and was slow
i really enjoyed it.
what is my score from my last i-ready test
It was very confusing.
I wish the questions didnt get harder because i hate not knowing what to answer for a question and it should just have questions that are at are level.

What I would like to know about the iready assesment, is maybe why is there only one game break? or could there be more? or maybe why you cant go back to the questions that you have already answered.
i really liked that it gave you game breaks.
did i do great

\section*{iReady Math Assessment - Student Survey Results}

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\section*{iReady Math Assessment - Student Survey Results}

\author{
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}
\begin{tabular}{|l|}
\hline After the Diagnostic, the lessons seem like there from the early 2010 s, and are bugggy and are filled with slow and \\
useless animations that YOU CAN'T TURN OFF. \\
\hline graphic pictures \\
\hline I like IxI \\
\hline IDon't Like It.. \\
\hline no, but it was stressful \\
\hline ya like jazz \\
\hline i mean no i really did not like iready \\
\hline iReady sucKs!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!! \\
\hline The game breaks were cool. \\
\hline The games should have chooses or a chance to skip it and save the time for the end of the Assement \\
\hline I prefer iReady Assesments over the Star tests. \\
\hline It took to long, if there were less questions I think it would have been more enjoyable. \\
\hline Make it shorter. \\
\hline \begin{tabular}{l} 
The game breaks should include a skip button in case someone taking an iReady Assessment doesn't want to play the \\
game. \\
\hline There is only one brain break - a game. It is unskippable and boring and repetitive. \\
\hline There should be more games and the part were it shows u how far in u are is good \\
\hline It is a little to long (maybe 80 instead of 100 questions would be a better balance). I did like how it told you how close to \\
being done you where. \\
\hline Though the iReady was helpful in finding the level that people are on, it was very long. \\
\hline They are better than Star \\
\hline i ready is one of the most best learning apps i like how it gives you what you need and the lessons are fun \\
\hline Stop making it sound like I am a baby because I am a 6th grader and the lessons make me feel small and harmless. \\
\hline no but I do love it \\
\hline Are we doing anymore diagnostics this year? \\
\hline The games are fun, add more. \\
\hline better games \\
\hline Might say yes if the games were better. \\
\hline The games are better than the real test. \\
\hline Nope. It was fun! \\
\hline It's too long. \\
\hline I think that their should be less questions because it takes so long to complete and it makes it kind of stressful. \\
\hline Brain Breaks need to be optional \\
\hline i dont think the games should be mandatory but should be optional \\
\hline The assesment took a long time to finish witch was not enjoyable \\
\hline Why did we do this again?? \\
\hline I found the iReady math assessment was very stressful. \\
\hline
\end{tabular} \\
\hline
\end{tabular}

\title{
iReady Math Assessment - Student Survey Results
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954 Total responses recorded
\begin{tabular}{|l|}
\hline iReady is bad and should not be used. \\
\hline lessons don't give much room for mistakes \\
\hline i readys trash it has bad games, its hella boring like can you not find any fun math websites? \\
\hline add different games \\
\hline They were pretty good it's just they are so longggggg. \\
\hline I don't like them. \\
\hline \\
The I ready assessment was way too long. It takes a long time to finish for people like me because it is so long and it \\
takes me long time to process the answer. Star is much more efficient even though it is a limited time to take the \\
assessment. It makes me think faster, type in my answer, and then submit, next thing you know your on the next \\
question. \\
\hline \\
\\
I just want a consistent math class. We're constantly trying out new programs, and the inconsistency becomes very \\
annoying. In my opinion, notes should not be graded because some people have an easier time learning things and \\
notes aren't necessary for them to do good, while other people need their notes to do good. Also, can we please stick \\
with prodigy and not switch it out? I enjoy prodigy and would hate to switch to another program another time. Also, I feel \\
like all this iReady and Diagnostic stuff is really pointless, since we are currently working on prodigy, which already in \\
itself is a diagnostic of your intelligence. Please just provide us with a consistent class instead of this bs. \\
\hline Ididn't enjoy l-Ready mostly because I am not a big fan of math, but yes it was somewhat helpful to me yet also \\
stressful. \\
\hline There is nothing else I'd like to know about the iReady Assessments. \\
\hline it actually does hepls \\
\hline i hate it, its boring. k bye \\
\hline i hate it \\
\hline i dont like iready \\
it is kinda complacaited \\
\hline no not really I like the games and stuff but its really long \\
\hline made you should give there score at the end of the Assessment \\
\hline On the 3rd question I just want to say she shared our results with only us \\
\hline they are fun and almost like a game but they are still educational \\
\hline nothing but that the test was falty and did not help at all \\
\hline I like your fun assignments! I wish there were more characters though. \\
\hline it is fun though it felt like I already new everything in the assessments \\
\hline I would like to know what would happen if you got so stressed out that you did not get the right lessons. \\
\hline Not really. The assessment was a little bit stressful, but when you finish it, the lessons are fun and funny. \\
\hline
\end{tabular}

\title{
iReady Math Assessment - Student Survey Results
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}

The i Ready assessments were fun in my mind, being able to solve hard and easy problems.
I really liked the little brain breaks! They are a nice way to take a short break during your assessment, and they are quite fun.
iReady assessments are (in my opinion) is like a fun test because there are break times so you dont stress out and it gets you to the point where you are in math.

If there are any online math sites in the future that you use, I recommend getting one which has small breaks in between every few problems like the iReady assessment did! They helped me refresh during the assessment to make it less stressful.
for number 5 I don't know if the students will like it because It's like doing homework in there, and it's like doing the missing homework too. I don't know if they will like it or not.
idk I probably failed it.
get rid of the stupid cartoon crap
tready is too long
TMNOT READY!!!
Everyone should take the iReady Assessments.
it is horrible and if i have to take it again im not going to school or ill skip and im serious or im going to drop out im serious with you guys
it takes a really long time to do.
Nope it was not bad it was kind of fun.
I'm not sure if I like it or not, I like it better then some things but it is definitely not my favorite
iReady is a good learning source, but some times they test you on things that are too easy!
The submit button was really close to the answers so I pressed that instead of the answer
you will need whiteboard
If you do an assessment, it il score you at the end.
The iReady test helped me improve on a lot of skills
some problems where challenging.
I like iready because it take break when it what to take a break to I like that and the math is fun because you can make a background to it and the games are fun.
i think that iready is a fun math learning site that can help you with your math skills
tilked the brain breaks.
Tlike math
That this program is good for learning math
1 gained information yassss
Tthink iready is the best math ever and it is really fun to do.
This is not very important, but maybe make the graphics a little better and make it more interesting and easy.
Igot a higher score.
I want them to know that I would love seeing what grade math I'm working on

\section*{iReady Math Assessment - Student Survey Results}

954 Total responses recorded
\begin{tabular}{|l|}
\hline The animations are bad \\
\hline I feel like the break time made me want to rush more. \\
\hline No not really, I like freckle. \\
\hline i wish that it would tell you if you got the problem incorrect \\
\hline Its kinda boring. Also when you don't finish your lesson, it starts over. \\
it made me smart \\
\hline it was kinda annoying when you had to restart the lesson if you didn't finish the lesson and the storys were annoying for a \\
6th grader it was like it was we where 1st graders. \\
\hline show the correct answer after i guess \\
\hline the i ready test and some lessons would sometimes make me start over and for the test it gave the same game over and \\
over for the breaks and it got very boring. \\
\hline it was kinda annoying when you had to restart the lesson if you didn't finish the lesson and the storys were annoying for a \\
6th grader it was like it was we where 1st graders. \\
\hline If you don't finish the lesson and leave, it will restart you. \\
\hline \begin{tabular}{l} 
No. I liked it but i could never tell wen i passed a level because once i finished a lesson i wasn't sure if i did or not so it \\
was a little confusing. but everything else was ok. \\
\hline why dose it reset yoiu back when you close it \\
\hline \begin{tabular}{l} 
I do not like i ready every time you are doing a test it dose NOT save your work and when you are doing lessons it dose \\
the same. \\
\hline \begin{tabular}{l} 
There was one thing that annoyed me was that when you got the answer wrong it would not tell you how they got the \\
answer or how they go it. \\
\hline I want to be able to have lessons on the things i need work on. \\
\hline it was annoying to have to restart the lesson when you didn't finish and the storys were boring it was like i was a 1st \\
grader instead of 6th grader
\end{tabular} \\
\hline
\end{tabular} \\
\hline
\end{tabular} \\
\hline
\end{tabular}

The last time I took the iReady assessment I went away and then when I came back it said that I took to long and that it will start me over. This id really upsetting because lets say that you were so close to being done, but then it just goes all away. And it's not just like you can zoom through the questions, it takes AWHILE!!!
about the question 5 I know most students have iready

The reason I don't like the lessons and would not recommend I-ready is because i barely made any progress after the diagnostic. What happened is after an entire hour of work, i was close to the end of the lesson, but had to stop and couldn't finish. I would close out, but the next time I logged in, it restarted me back at the beginning of the lesson. IT DOESN'T SAVE MY PROGRESS!!!!!!!!!!!
for quetion 5. I know most people in school have iready
que la evaluciones de matematematicas eran mejor para aprender asi que ireadiy me ayudo mucho grasias. Translation: math tests were better to learn so ireadiy helped me a lot.

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if you didn't finish the lesson it would make you restart and the test also gives math problems that you never did in class also very boring, and \(100 \%\) to finish real boring way too long, the lessons were not helpful at all. So no I don't recommend i-ready to any one until they fix all the problems with it. But still I wouldn't want to ever do i-ready ever again and maybe they should put game choices instead of the same game for the break times cause it gets very boring like real boring. I'm serious like really serious

I despise the company because the tests took to long in my opinion. I lose my focus and it is almost like the SBA. Also since this is a computer adaptive test sometimes it gives you really hard questions that sometimes I don't even understand. I took my October diagnostic test and some of the questions did not even make sense. At times when you are trying to finish a lesson and you run out time to finish it in class, when you come back it will take you all the way back to the beginning. And if you do not get all the lessons done, you will not be able to grow. I also do not like how when you get a question wrong it does not tell you what you did wrong so you end up doing the same thing over and over and over again and it keeps you from growing and knowing the right thing to do. Also on some of the lessons they give after you take the tests they are either WAY to easy or WAY to hard. Also the games are so unnecessary because I found after playing the game I lose my focus on what I am doing on and in the test. It is just way to long for me to focus. Sometimes I will just zone out because the tests are way to long. Also the lessons are not fun. They are not even engaging to the point where you don't want to do it anymore. Sometimes the lessons don't even make sense and are not fun to do. And when you get a question wrong they do not even TELL YOU WHAT YOU GOT WRONG!!!!! So then when you try the question again I would usually GET IT WRONG!!!!! Only because they won't tell me what I got wrong. And that is why I think I have been not making much progress when you compare my October test and my December test. Also I think that the tests are unnecessarily long. It took most of the people including me longer than an hour of a day to finish. When you get a low grade on a certain subject on the test, sometimes the lessons that they give you after the test are not even about the subject that you got a low grade on and need to work on more. And sometimes on the tests that they give you they give you questions that you have not even covered in class or on the i-Ready lessons. On the tests when they give a hard question on the test it will give me a question that is below my grade level and that can disrupt my learning opportunities. It is also the same for when they give me a easy question etc. Also when you submit a question for your test to move on to the next question on you test, it gives off a really loud and annoying SHRIEK. So that is all I have to say and now you must change EVERYthing that i spoke of in this message. If you do change EVERYthing than you might get a nice letter back. This will definitely improve your program and it will been seen better in front of all children that will be useing this program. Thank you for the time.

\section*{iReady Math Assessment - Student Survey Results}

954 Total responses recorded
\begin{tabular}{|l|}
\hline Its boring, Don't give it to people, your wasting your time \\
\hline I found it to be really slow and I did not get alot of the things that it was asking me. Also I did not like the brain breaks. \\
\hline iReady assessment was pretty boring. \\
\hline it sucks \\
\hline it sucks \\
\hline i did not like that you had to restart a lessen if you did not fully finshed it. i did likethe brain breaks. \\
\hline IReady sucks \\
\hline It is way to long \\
\hline I really liked how it was set up, but it takes a really long time to complete. \\
\hline It seem very slow. Like it takes way way way way way way too long. \\
\hline It took FOREVER to complete. \\
\hline Star is really bad \\
\hline Its a pretty cool assessment and I like how it gives you a game to play mid game called a "brain break" \\
\hline I think I ready is took to long. I think it was good besides that. \\
\hline It took a long time, but it was made up for by the occasional games. I would like it if they give a wider variety of games \\
throughout the assessment, though. \\
\hline The only thing i don't really like is how slow it is. If you can't do anything about that, then that's ok. But if can make it so \\
that it responds faster, that would be great. \\
\hline I prefer the iReady assessment over Star \\
\hline I feel like I got a grade level too low for me. All the assignments I get are too easy for me. \\
\hline Is there a way to shorten the tests? Many people seem to be rushing because they think it is very long. I honestly think \\
that it is quite long myself, so I prefer doing the STAR assessment. \\
\hline I don't like math at all, but it's a good program. Also it took forever to finish. \\
\hline It seemed very efficient, you do the test, an in-between break, and keep working. \\
\hline \\
I think that this is a great way to know where your students are in math. It did take a long time but the games in between \\
helped my brain relax. I like to see where I'm at in and so do my parents. I think this is a great program. \\
\hline I didn't particularly like the iReady Assessments because it was pretty long and it got pretty stressful toward the end \\
when I didn't finish very quickly and felt sort of pressured to go faster and finish. I prefer the Star Assessment because it \\
only took thirty minutes and you couldn't take longer than that. \\
\hline \\
While I respect the time and consideration put into whoever made iReady, I find that iReady was more respectfully not \\
that interesting compared to just a normal lesson. I also did not enjoy STAR as it had a time period, and there are kids \\
who like to slow down instead of be worked at a pace. \\
\hline They are too long \\
\hline The breaks were nice. Good way to separate the work. \\
\hline
\end{tabular}

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iReady Math Assessment - Student Survey Results
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No they were fine
The game should be upgraded
I feel that the test was unnecessary because it took up multiple days of class time and took out time from our learning from the book.

Don't do it and if you continue to do it make a different game or make it so you can skip it because the game is really bad and hurts us more then it helps to play it.

I found their brain breaks annoying and focus breaking, as well as time consuming. There was no option to skip them, either. It was also a bit lengthy considering the time I was given to complete it.

The brain break seemed more like a waste of time than an actual break. I was not looking forward to it.

The test should have been shorter because it was hard to have it stretched between a few days.
It is a long test that seem unnessary and just not wanted
I don't like how rushed it feels trying to complete it on time. I either took way to long but got an awnser, or was forced to make a random guess because I had a time restriction.
Also, the brain break is more frustrating than fun.

Its presentation is a disconnect with its students and its general appearance is a flaw. The idea is to entertain the student taking the test, but ends up being extremely monotonous and boring, just taking our time away from the test. It seems like the test is quite useless as we don't use the program itself, and the animations presented on it take ages to complete and again, is boring. If I were to suggest one thing, it would be removing its usage in the district as it serves little purpose and consumes education time.
I don't think I ever finished
it is not fun
It was fun but boring...
The iReady assesment was super boaring and i wish i could have skipped it
It took too long to complete and the calculator tool wasn't there when needed.
it wasn't very helpful in my opinion, it was mostly stuff i already knew
not being able to skip the game with a low amount of time was annoying.
I think there should be different games for brain breaks, not just Galaxy Sprint.
How many more will we have?
It was horrible

I ready was boring, and way to long. Also I did not like the way they showed your grades.
The brain breaks were good, but it takes a lot of time. Also it is stressful and I felt bad when I got my score back
I feel like the breaks were fun. However it was really long and it placed me at a level I am \(100 \%\) sure I should not be at. I wish the test was on paper.

\title{
iReady Math Assessment - Student Survey Results
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954 Total responses recorded
\begin{tabular}{|c|}
\hline After awhile your brain falls asleep \\
\hline I was never able to finish my December I-Ready test, therefore I never received a score and was wondering how much that mattered. Also, I love how I-Ready has the galaxy run game every 25 questions or so. I like how it adjusts with the questions based on your previous answers and the level that you're on. \\
\hline My favorite and least favorite thing is the brain breaks in the diagnostic exams. they provide relief from math, but the one thing I would have liked better is if the game were switched up a bit, for some variety. \\
\hline The assesments are fine. I like the brain breaks. I don't think think the lessons are very helpful. \\
\hline I thought it was alright. I mean, it was a test. I didn't dread it but I wasn't ecstatic about it. \\
\hline I enjoy that they understand that they are people, and they give us breaks in between because the test is so long. I also like how the lessons are like an interactive story problem, it helps it feel more real, and I understand how I could use the information in the real world. \\
\hline \begin{tabular}{l}
its so \\
10000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000 0000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000 00000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000 00000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000 000000000000000000000000000000000000000000000000000000000000 ng
\end{tabular} \\
\hline I would like it more if there were more breaks and a choice of which game to play, and several different games to play. That is it. Thank you. \\
\hline The questions challenge you in your own little way. It was fun, but also a little bit tedious at times, (For the lessons) but its way is interactive and challenged us a lot (for the assessment). Overall, I liked it more than disliked it. Strongly more fun than boring. If anything to change, I feel like the lessons I got on the Instruction lessons were my weakest subject, and it was something I already knew. Overall, I was happy and It was great! :) \\
\hline Inever finished. \\
\hline This was my opinion, and other people may have other opinions, but I feel like the questions jumped around a little bit too much. I also did not like that it did not tell me if I got them right, or wrong. If it showed me what exact problems I got wrong I could practice more on those types of questions. I like the idea of these types of tests, but I believe they need more work put into them, and should still be in beta. \\
\hline
\end{tabular}

\section*{iReady Math Assessment - Student Survey Results}

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The iReady lessons didn't really help me, because I already knew all of the stuff, and I remember feeling really annoyed that the lessons took so long to get to the point and give the problems that I had to do. I got some of them wrong, but I always learned the entire lesson in the end. Also, the graphic characters that explained the situation were SO SLOW. They talked, like, half as fast as normal people. I think that those lessons would help some people, but not for me. Also, after the test at the start of the year, the iReady lessons that they said were "chosen for me" so I could "work on the parts I need to work on" were so simple, and I don't think I got any of the questions that they gave me in the practice wrong in the test. I was kinda scared that I got a really low score on the test because the practice problems weren't very helpful for me.
I dont like the test but it is a good program
i didn't like it because it was long and additional homework
they make questions much harder when you get them right and to easy when you get them wrong.
It just takes a reeeaaally long time to complete, like 4 hours
I liked the interactive game that the assements provided during the test. The test was a good way to relax our brains before going back to the test.

Even though I didn't like the tests, I think it is still something that people need to take, like a pretest. I don't recommend the lessons though, because they force you to take the entire lesson over again if you don't pass it, which takes long to get through in the first place.
I really like the break times.
The iReady assements were pretty long, but the lessons that came after that, was fun. I looked forward to doing the lessons.

The game break in between was fun because after working, it is nice to have a relaxing and fun game to play.

I think that the breaks during the i-Ready assessment were annoying, and I would rather go straight through the test. However, the test was pretty good and not to boring. However, the lessons were always excruciating and I always hated them, so I basically never did them.
It sucks
What is iReady?
It was not good
The iReady game was bad
The games need work.
This test has absolutely no value, and prepares us for lessons that we in fact never do. Please consider removing iReady to save time for other more important opportunities.

IReady tests suckkkkkkkkkkkk bc they make u play this stupid game
Never do it again, it is a waste of time and doesn't affect the rest of the class. It takes up 2 days that we could've used for much more productive activities /lessons.
It was great. It should be reuqired worldwide.
The galaxy game is a waste of time and not fun whatsoever.

\title{
iReady Math Assessment - Student Survey Results
}

954 Total responses recorded
A skip button on the game cause it won't let you skip.
We should be able to skip the introduction and the games

On the diagnostics, the iReady gives you a game every quarter of the test you finish, which isn't skip-able, which is kind of annoying when you're trying to finish the test in a time frame. They also fail in making it visually pleasing when compared against Star, Tenmarks, and Khan Academy, which is kind of distracting.
Ability to skip 5 minute long intro and games.
Change the game to a different one.

In the environment I took the test I felt pressured to go really quickly and not take my time in answering and thinking through my problems. (2 minutes per problem was what was recommended by the teacher). This is a good for not taking too long but for the way I think this made the test a lot more stressful and difficult to show my accurate potential. If this test was to be taken again, I would want to not be pressured by a time limit.

I did not enjoy the experience. This was a complete waste of my time

The "Galaxy Sprint" game has numerous problems. The music is grating and incredibly repetitive. There's no penalty for hitting the obstacles, and you slow down, so it's better to hit every bar. The power-ups prevent you from doing this and actually speed you up, so they end up doing more harm than good. The speed power-up is the same as the shield one, just faster. The only power up that's worth it is the double points. Finally, there is no indication of depth, so it's impossible to tell which lane the high up stars are in. Hopefully you can improve this or entirely rewrite it.
its trash, its pointless, i learned nothing, lessons too easy, test too retarded to do anything ( would go from fractions to complicated algebra in 1 problem, "adaptive test" smh) star sounds even worse tho ngl like that name just sounds pushy and all r/fellowkids, like they gon be saying cool beans or something every transition through problems, they should prob not have any adaptive trash bcuz ima be lazy and get 2nd grade asingments even though i need 7-8th grade stuff( no flexin, thats what challenge is supposed to be), they better have set levels for me to pick, otherwise its also trash.cyка блять!
it was terrible. the questions were always to hard or twoeasy and never balanced. it took a long time and the "brain breaks" were more annoying than fun. plus the questions got really hard when you got them right and really easy if you got them wrong.

\section*{iReady Math Assessment - Student Survey Results}

954 Total responses recorded
\begin{tabular}{|l}
\hline \\
I thoroughly disliked this unimportant assignment. Personally, I believe that there are much better ways to teach \\
mathematics to middle schoolers than some worthless assessment. The time spent doing this "assessment" could have \\
been used to deepen my understandings of geometry. I am extremely disappointed when I think that the district would \\
ever assign such an extraneous and unimportant assignment. Absolutely unacceptable. \\
Additionally, I believe that future students should be able to go to school without being held back by insanely irrelevant \\
assessment that do not encourage learning but boredom. With only so much time in school I would like to ACTUALLY \\
learn rather than be engulfed in absolute boredom. In this day and age learning in school should be to the point and \\
effective rather than unimportant and utterly irrelevant. \\
\hline it's not that good \\
\hline what I don't like about iReady is that there are a lot of ads and because you had to where headphones. \\
\hline Explain's way too much \\
\hline iready sucks \\
\hline iReady has way to many videos and animations \\
\hline iReady was not my favorite \\
\hline iready has to many videos and distractions \\
\hline ithink that every school should be able to do iReady, i shows alot of detail it gives you clues this webs site is one of my \\
favrote. \\
\hline It wasted alot of time, and gave too much of a story, sometimes it would last for like 2 minutes! \\
\hline The test were long \\
\hline dont add as much videos \\
\hline it is awesome!!! \\
\hline I like star math better then iready but I do have a suggestion to make iready better. \\
\hline
\end{tabular}

\section*{iReady Math Assessment - Student Survey Results}

I thoroughly disliked this unimportant assignment. Personally, I believe that there are much better ways to teach mathematics to middle schoolers than some worthless assessment. The time spent doing this "assessment" could have been used to deepen my understandings of geometry. I am extremely disappointed when I think that the district would ever assign such an extraneous and unimportant assignment. Absolutely unacceptable.
Additionally, I believe that future students should be able to go to school without being held back by an insanely irrelevant assessment that does not encourage learning but boredom. With only so much time in school, I would like to ACTUALLY learn rather than be engulfed in absolute boredom. In this day and age learning in school should be to the point and effective rather than unimportant and utterly irrelevant. This type of education is utterly unacceptable.
it's slow

\section*{STAR Math Assessment - Student Survey Results}

686 Total responses recorded
In January and/or April, you took a math assessment called Star. Do you remember taking this assessment? 682 responses

1. Did you enjoy the Star math assessment? 683 responses

2. Did your teacher share the results of your Star math assessment with you? 680 responses

- Yes
- No
- Not Sure

\section*{STAR Math Assessment - Student Survey Results}

686 Total responses recorded
3. Did your teacher give you opportunities to work on the Online Instruction system from Star called Freckle? Freckle is the pig icon in Clever. 681 responses

4. Did you look forward to the Freckle Online Instruction lessons? 682 responses


\title{
STAR Math Assessment - Student Survey Results \\ 686 Total responses recorded
}

\section*{5. Would you recommend that the school district provides the Star math assessment to all students in} the Edmonds School District? 680 responses


Is there anything else you'd like us to know about the Star Assessments? 528 responses

159 did not respond to this question

383 responded with "no" or some other rendition

Other comments:
do we take another one later?
I do not like how the Star assessment is timed. If the assessment wasn't timed, I might have gotten a better score.
I don't like how it has to time you and when you go to the next question you can't go back
i don't like how the questions are timed
I don't like how you can't go back to the answer and you are being timed and I think that just puts more pressure on some students
I don't really know how i feel about it
I don't really remember that assignment
i hope i did good
i love it
i think i missed this or i don't remember
I think that the Star Assements were great, and they made it more enjoyable. Freckle is the part I like because we get to learn in a fun way, like when we get to dress up our icon while also earning coins.
I think they should be a little bit longer so the student can think.
iReady is really fun, especially the learning games. it would be nice if the teachers would be able to assign them to us. There are these 2 games where you have to fill in orders and find which market has the cheapest price for the ingredients, and how much money you get per item, +more. It would be nice if the teachers could assign those games to us every once in a while, and set goal for us. I am not sure if the teachers have an option to do that, though.

\title{
STAR Math Assessment - Student Survey Results \\ 686 Total responses recorded
}

Is there a reason why between each question, it has a time limit?
Is there a way to know how many you got correct out of all the questions?
It is a very great website for tests.
It is a very quick math test
IT IS EPIC
it is very fun
it sucks wast of time. \(T^{\wedge} T\)
It was a good learning site I loved it
It was a tad bit annoying because it asks some really basic questions from about 3rd grade, then all the sudden it was jumping to topics I had no idea how to solve. It made me mad because I kinda felt like I should know how to do the problems.
it was short and had some ez vthing that where said to be hard
Its better than math expressions
Its hard to answer questions when there are time limit.
It's really boring.
Our teacher did not share our april results because of quarintine
Some of the questions were very advanced, and I did not understand about half of it, but it was still fun to try. I think that because of the school closures, we are all a little behind in math, and that there were some things in the test we should be learning, but will in the future. Thank you.
Sometimes when I am trying to answer a hard problem, it will say that I used all my time before I have a chance to answer.

\section*{Star Math}

That it sould be more tested to our grade leval so we can learn more and test out into regular math
The only problem I have with the assessment is that it quickly times out.
the questions get very easy if you get them wrong
The Star Assessments are good other than the 3 minutes only per question, if that was changed then the Star Assessments would be very good.
The start assessment was very organized and very clear for the instructions.
the time limit for qestions is annoying
They are long and boring.
this test was way too easy I want a harder test next time
Well we just took the test and I don't what is going to happen next and I didn't really like how it timed out, timed math is scary
whats the highest score
What's the point of it? Is it just to see what level we are?
When i say im not sure i mean either i forgot or maybe
when was the time when we got it?
When you take a break like I was asked to do every twenty minutes, the questions automatically scrolled through so I couldn't answer half of the test.
Why are there a ton of hard questions?
Why do we take the Star Assessment
will we do another one
yes
Yes
Yes
Yes
bad
It was boring.

\section*{STAR Math Assessment - Student Survey Results \\ 686 Total responses recorded}

I am not sure where my score is, or what they mean by Freckle online insruction lesson.
I like the star assessments because you get to collect coins for every question you get right and I think that was a good touch to get kids motivated and learning more. I also like that they give you videos to help you if you get a question wrong a couple of times. I also like you can ask other students for help. I also think a smart move that the star freckle people did was when you were customizing your character you only get 1:30 seconds. But what kinda sucks about that is because you don't get enough time but I get why they would give you a time limit
I did not like this assesment as much as the Iready assesment. Glad we tested them though.
The Star assessments were a lot better and quicker then the old assessments from earlier in the year.
Some contents in the test that I haven't learned from school as my 8th grade.
Nope
There is nothing else I would like you to know.
They are dumb and there is no reason for them. I don't like them and don't see a reaon for taking them.
nope
I like this much more then the i ready and would rather do this than that
Each question is timed so it's kind of annoying
I just don like the time limit
For the first few questions it kept on telling me "time is up" and for the next questions I got super simple addition like 10+2.
I liked the star assessment because it wasn't a super long test. It was only 35 questions. With the I-Ready assessments, they took me a few hours to complete, but this test only took me 40 minutes.
No Just When Do We Go Back To Highschool?
The star assessment is that I tested me, which was good. I have only good things to say about the star assessment. It was nice to do it and was much more fun.
I think that while the Star Assessments are helpful in knowing what students skills are, teachers should keep in mind that a lot of students get stressed out when under a strict time limit (since the questions are timed).
A lot of my problems ran out of time because I tried different methods because I was not sure how to do the problem.
Is the Star test questions/problems things that we have already learned or not?
Why do we do them, what's the point?
its so repetitive
The game breaks are fun.
I like the Star Assessments because they let you know specifically how many questions you have so it doesn't seem like it goes on for ever.
i didn't like that the problems were timed
if possible i would like to know my score.
There is nothing else I would like you to know about the Star Assessments.
the math assement is nice, but it's annoying and kind of a jumpscare when all of a sudden as soon as you click next a monotone voice just starts saying the problem
The reason I would not recommend the star math assessment is its time limit because some kids know the process(How to solve) but take awhile to solve the problem.
i might have failed
It was better then the diagnostic.
It is very fun, and I love how you get coins and get to buy cool things.
The timer makes my friends and I stressed out because I always feel like I will run out of time.
\(i\) am not sure what it is.
The questions adapt well to the answers you put in. It was a good experience.
I wasn't able to finish the test because it didn't let me back in but and when i was doing it kicked me out when I was almost done.
I was not able to take it because of an error and a password that didn't work when I tried ot re-enter the test.
No, but I still haven't gotten back the most recent star test grade.

\title{
STAR Math Assessment - Student Survey Results \\ 686 Total responses recorded
}
it was boring
Their boring but i like it more than i-ready
what was my grade for my star assesment?
I wan to see my score
It does take a while
I don't like how the timer is so fast
There is nothing I would like to know about the Star Assessment.
I just completed the Star assesment on May 5th 4:20pm.
I don't like how there's a limited time for each question. For me, it put more pressure to do well and finish faster. I feel like I worried more about the time limit than the actual problem.
The star assessments are just to see where we are in math, right?
Maybe another program?
Is questions on Star Assessments based on your math skill or is it just ramdom questions?
I think its a good way for teachers to know how students are doing even with the long distance.
Well the way you grade it isn't the best. Like I think I got ninth grade and I'm in sixth and that just doesn't seem right.
It was simple and easy to use.
I don't like how it times us for each question. When I last took the star test, it had taken me a while to figure out how to answer the equation and then when it came to actually finding the answer, the timer ran out before I could even start figuring things out so that frustrated me.
no i would not cahnge anthing
can you pause it because it skipped some problems when I went to the washroom
Needs more game variety. They have one game that is fun one time then it gets boring. I would love to see new games.
No not really. But if I think some people should have the option to compare their scores and look at them
The Star assesment was good it's just very time consuming.
I think that if all students where to take the star assessment then the math SPA should be taken down.
star is stupid
its kinda stressful and i don't enjoy doing the star assessments because when you do a question and don't answer in a certain amount of time it move on from the question
That's it!
I love Freckle!!!!!!!!!!!!!!!!!!!!!!!!!!!!!1

In my opinion, I don't like that the test has a time limit for each question. It makes it harder for me to focus and do my best, and it effects my performance. This is just my opinion, I'm sure there is a good reason for why there is a time limit. Not able to access Freckle. Needed a class code I believe.
I don't like that the questions are timed, you only have about 3-5 minutes to do each question before it skips it.
The time limit on the questions made everything very stressful. I would suggest taking it off, or adding more time to harder questions.
its very difficult

\footnotetext{
Well, I hate math tests in general, so that's why my answers were no. l'd kinda like to be told the results of my test so I know I didn't completly fail, though I suppose it's an adaptive test so it's impossible to fail. And yes, I did check out Freckle. It was ok. Like I said, I'm not a huge fan of math. The thing that irritates me is that there are no white girls on the avatar thingie. Then my friends found out that after you get enough coins you can change your looks AFTER I had chosen the penguin, and I can't figure out how to change it. I know it's kinda stupid, but it's still annoying. And I think that students should use Freckle. You should warn them about the avatar thing though. Freckle is WAY better that iready.
i couldnt do it because i couldnt find it im sorry
I think I failed the recent one.
I personally feel whiteboard teaching where the teacher talks is better.
}

\section*{STAR Math Assessment - Student Survey Results}

686 Total responses recorded
There is nothing I would like to say related to the star math assessment.
They are timed so if you take too long you'll go to another problem.
In some questions when I have the answer to it then the time runs off and I don't get to put it in.
It's math and I love math
it was good
Its tedious and can be discouraging but it works great.
The questions came to fast \(i\) would suggest that they tell you that you have a certain amount of time left and then hive you 5 seconds when your time is up just in case you got the answer but was a little late on writing it down It just isn't of any use I believe
I would like you to know that it would really help if you let me know there is a timer and how long will the timer last for each problem.
What is it and why did I do it?
that I don't remember it
If you could remove the time limit per question it would be great. I got no warning that there was a time limit and no warning it was nearly up.
They should have a longer time for each problem.
its a good website but also i disliked it also
it sucks
yes
It was ok

\section*{Community Input - Survey Results - iReady and STAR}

68 Total responses recorded

On a scale of 1-4, how strong is your preference in selecting the Curriculum Associates iReady Assessment System as our district-wide, common math assessment system? 67 responses


On a scale of 1-4, how strong is your preference in selecting the Renaissance Star Math Assessment system as our district-wide, common math assessment system?
67 responses


\title{
Community Input - Survey Results - iReady and STAR
}

68 Total responses recorded

\section*{What are your impressions of the Curriculum Associates iReady Math Assessment System?}

\section*{68 total responses}

\section*{5 left the question blank}

I think it is a helpful testing and learning source.
It was good.
It seems like a good math program.
I like that it adapts to the student's needs and level
I think it's good and it looks fun and friendly to kids.
The assessment feedback is very comprehensive. It feeds directly into the online instruction platform. i-Ready seems to have a user-friendly interface, has a method of tracking student progress, and various assessments.
It is pretty accurate and easy to use.
It's rather boring and slow paced and isn't very good at explaining things.
I appreciate the instant adaptable data and individualized next-steps learning identifications
I feel for Kindergarten it is very remedial. The characters and math questions are very minimal and basically dull, colored circles. They have made up names, like, goopers, or goobers. I was underwhelmed with the practice sessions for my students.
I was so impressed with the iReady program. The assessment took awhile, but was not unduly long - reminded me of the length of time that the MobyMax assessments would take. But the feedback from student assessments was amazingly specific, which greatly helped in seeing trends not only across classes, but within classes, allowing for more targeted differentiation.

I love it. Easy to use and read. Kid friendly-they enjoy doing it.
It includes a lot. They were very thoughtful about a lot of what must be considered in teaching math, they obviously are familiar with curriculum and instruction.

It is student \& staff friendly. Students are able to progress on their own much easier.
This is a thorough assessment, but it takes way to long and the students would not want to do this 3 times a year. I was given great data that was easy to use.
I believe it is pretty accurate and covers all of the common core standards. I believe it may grade students slightly
lower just die to children's familiarity with the format and technology but overall it is very useful!
Easy to use and navigate. Understandable assessment data for teachers, students and families. Engaging for students.
The assessments are long, often taking two or three sessions for the students, you get really good feedback on their strengths and weaknesses.
I enjoyed the fact that it was very detailed. I did not enjoy the fact that it took SO very long to take the assessment the first time. The lessons were short and easy to follow. Students enjoyed doing this one day per week and saw growth.
the diagnostic is pretty accurate but take way too much time to do.
It was very intuitive to use as a teacher. The feedback and instructional groupings were also helpful.
Screen friendly for the students with game and easy to read questions; however it took WAY too long to take the pretest which caused students to rush and get on a level that wasn't appropriate for them; great lessons once their placement was determined
easy to use for students and teachers; lessons helpful to students, data easy to find for teachers it is sometimes difficult to teach the Math Expressions curriculum and have the students on the iReady program the recommended time of an hour a week. Therefore, the iReady program does not always keep pace with where the students are really at in the continuum. I have had to assign lessons to my students in order that they feel challenged and not bored with the level they are on. I would be curious to see what progress they have made after being reassessed in the fall.
I found it easy to use with my students and it gave specific feedback on my students progress.
I find it relatively easy to navigate as a teacher. The system provides me with accurate and quick data that helps inform classroom instruction and individual needs for support.

\section*{Community Input - Survey Results - iReady and STAR}

\author{
68 Total responses recorded
}

Easy to navigate for students and teachers, high level of engagement, sometimes lacking particular specific data points that I wanted throughout the year
iReady seemed to be teacher friendly giving very specific feedback on students performance. Teachers could then use this information to access tools that would allow to differentiate instruction.
The assessment takes too long to administer and the students did not like the "brain breaks."
I think the assessment falls right in line with the SBA scores which is good. I also think the information for parents is good.
I LOVE it!
Great!! Easy to use
Very helpful for my students.
It is easy to use and seems to focus right on the gaps students need to work on
It is easy to use and seems to focus right on the gaps students need to work on
I like iReady better than STAR! The captions are clearer and lessons are nice.
I love iReady. It is easy to implement and navigate. My students also preferred it when asked with at least 20 out of 23 preferring it.
It seems very thorough but takes way too much time to administer. We tell kids to move on quickly if they don't know how to do a certain problem, but some of them just can't do that. The rest of the time we teach them to persevere and try to figure things out and then for this test we tell them to skip it and move on and it's a confusing message.
We love it!
iReady looks professional. Their video tour was well planned out and provided transparent information about their program.
iReady has a strong correlation to a student's SBA success rate. IReady is adaptive and can be targeted for differentiation and practice.
It seem fairly comprehensive. The information should be useful for teachers of Gen Ed kids. I'm not sure how accessible it will be for our IS students in Primary who require paper/pencil for the SBA.
I like that the test is a diagnostic test that gets easier or harder however, it is a long test for first graders to do. I found that I had many students guess or buzz through the test and this wasn't an accurate depiction of what they could do.
Some students enjoyed doing i-ready and some did not enjoy doing it. Since kids knew how to change their backgrounds and play games, I found them "playing around" more often then working. I also did not have adequate headphones for students to use, which I believe was important for the kids to have headphones to focus. It was difficult to find a way to have my first graders meet that 45-60 minute recommended time on i-ready as we are not 1-to- 1 in first grade. I do like all of the resources available. The lessons can be helpful to use for small groups though I think you have to pick and choose to find which ones are appropriate for your class. The data is fascinating and each area is broken down really well that you could see what are students strengths and which ones are challenges.
iReady is an engaging and motivational tool for my child.
I like the content provided. The diagnostic assessment was detailed and gave clear feedback on students. The work that loads for students after the diagnostic seems to be on pace and allows students to work at their pace and have appropriate support. It feels in these times of COVID and so much unknown it would be a really great resource for all students in the district. Having students work at a pace that is right for them and also close gaps is priceless.
I had the chance to pilot iReady Math this year and think that kindergarten should have done the initial testing in November and not waited until January. It was difficult for some students and placed our students WELL BELOW where they were because they had trouble with the actual testing format. Waiting that late in the year to test did not really help students at all. Teachers in other grade levels were able to get data that matched where their kids were much better than kindergarten.
As a teacher, I find this program very confusing. The diagnostics are not easy to find. Being able to assign tasks to students is impossible. The skills covered do not align with what we teach in class. The placement test takes forever. As a student, it is engaging for a time since it is heavy on game play. I can learn far more by giving paper and pencil or talking with my students. I'm a no for this.
Not very good. The system is not user friendly at all. Was very frustrating to my child. It was set up in a way that is discouraging. The questions asked are set up in a way that ends up taking away students confidence by forcing them to solve problems the iReady way instead of other ways of solving problem. It forces you to analyze problems one way only - the student is not given an opportunity to think on their own. Methods used to solve problems are forced on students. Hard to figure out progress.
I believe the test is thorough, accurate, and an effective diagnostic tool.

\section*{Community Input - Survey Results - iReady and STAR}

68 Total responses recorded
I really like iReady because learning and having fun at the same time and I really learned after you take the lesson you have a quiz and you can take a diagnostic Test every month or so and that will help get the lessons that are for you anything you got wrong you will learn it and best of all teachers can check progress about how did the student they can take the test any time
The leveling by students ability is a great option for the growth and challenge. The reports and breaking down of skills per criteria was extremely helpful for planning per student.
It helped me out as as student because it gave me certain lessons and once I finish it I go on to a new lesson
It is a very helpful learning tool.
I thought it was a complete program. I liked that it was easy to access information about the kids and how well they were doing in the different strands. I also liked the ease of seeing what lessons they were working on and how well they were doing on those lessons. I liked that the assessment had built in game time and that the reward for working was also game time.
I liked the feedback the test gave. My students didn't like the games in the middle, they thought they were too babish for middle school, but overall the feedback in what specifically my students needed to work on was much clearer and easy to use. I sent individual reports to my students families so they could see how they were doing and what they needed specifically to work on.
I have good impressions of the iReady Math Curriculum. The students enjoy the math lessons/activities and I like the feedback it provides.
I think it's another option for information on our students in the elementary classroom. I appreciate the daily use of Iready to strengthen students math skills.
It was not very engaging.
It was easy to use, most students liked it, I love that it meets students at their level, I like it as an assessment tool, though I need more training for assessing
It is just part of the daily math routine, easy to access, easy to use, challenges my child
I like iReady

\section*{What questions do you have about the Curriculum Associates iReady Assessment System?}

\section*{68 responses}

\section*{20 left the question blank}

\section*{21 responded with none, or I have no questions}

I don't have any questions.
None at the moment.
Can we take a sample test to see how it would be for the students?
How much time does it take? How often is it used? Is it easy for the teachers?
I have no questions.
I need to have access to it as a special Ed teacher. Right now I have to rely on teachers. I cannot direct instruction for my students without the classroom teacher. I think this is more a district issue than an iReady issue.
Is there a way to test the program out?
None
none
Is it truly engaging for kids when it can't be very hands on (though I liked what looked like hands-on resources)? If we were limited to online, can it really boost individual students' strengths? How does it show students their individual progress and growth regularly? (I saw it shows teachers and provides teachers ways to recognize student growth, that's good).
None
I'm wondering if the format of the questions is also in the I Ready lessons so students are more prepared and feel confident about the format.
When can we start? :)

\section*{Community Input - Survey Results - iReady and STAR}

\author{
68 Total responses recorded
}

Is it possible to see exactly what questions the students missed and how they missed it?
Could they create a simpler "parent letter" that shows where the student placed in the four strands? Sending home a 21-page report is not feasible.
Is there a way to break up the diagnostic into groups so that students can take it diagnostic in sections rather than all in one sitting. For instance number systems, geometry etc.
My only question/concern with iReady was that the assessment took multiple class periods to complete.
none
None
If implemented with the diagnostic component, how would this effect teachers and the academic calendar? How can we gain access to questions that students got correct/incorrect on the assessments? How can the system narrow down exact breakdown of where gaps are in learning?
Does Edmonds have access to the instructional pieces in iReady?
none
I want it available all the time for students
None
None
Is there high interest - low reading level options in iReady. I have students with reading levels from \(\mathrm{k}-8\) and some of the lower level seems elementary like and some of my students would prefer it to look their age. I hope that's clear?
None.
Is there a way they can set it to move on automatically if the student doesn't? Like STAR has a time limit.
None
How long is the assessment that students take? Renaissance mentioned that they can assess a student in just 20 questions.
None right now. Most questions I had were answered by the presentation.
Will there be more training for the teacher who piloted the curriculum? Will i-ready be placed in year-at-a-glance documents for each grade level? Will students have access to i-ready at home next year during the school year? Will we have eventually have access to student's year by year progress or does information reset each year? For example, I am a first grade teacher. Will I be able to see my student's progress and activity during kindergarten?
n/a
None. I am hopeful we can use this resource in the Fall and assign lessons from it and allow students to catch up on their learning gaps.
no questions
Why were teachers only told of the pilot when we moved to distance learning? Did this pilot go through the rigorous process that the reading adoption was put through? Is it culturally diverse? Why do we need to spend more money on another program for online math? Don't we pay for Moby Max already???
What is the reason behind your decision to be so rigid about how to solve problems? How do you or are we supposed to determine progress levels?
None
can iReady be in homes so parents or guardian can sign up for them or pay if need to
We gave three big measurement points through the year.. wondering why those are the measuring points as the 'big' focal points of student growth... we have the SBA that is also a measuring point for progress, is CA/Edmonds going to plan in concert with this 'other' baseline test?
I don't have any quastions
None.
Will there be a better game break for older kids?
None
No
I have no questions.

\title{
Community Input - Survey Results - iReady and STAR
}

68 Total responses recorded
What are your impressions of the Renaissance Star Math Assessment system?

\section*{68 total responses}

\section*{16 left the question blank}

\section*{3 responded with \(n / a\) or none}

I think it's overall is good, but if their was more than 3 minutes per question that would be less stressful and more beneficial to students who like to take their time.

It was great.
Star reading is great - a matching math assessment system would be great!
This seemed a little more test like to me.
Even though it doesn't look fun and it's timed, I think it still has good questions to test our brain.
The assessment feedback isn't as strong in my opinion. It does not feed directly into the online platform. The user interface is clean and easy to follow. The questions seem to be appropriate for the grade level. It also gives an overview of student progress for teachers and administrators.
It is not as accurate and difficult to retrieve results.
It's okay I guess.
I love it. !! It is user friendly and my students really like it. We have been using it just recently with the school closure. Every comment has been positive from families. I like the structure and the characters. It is engaging and well thought out.
I have heard very favorable review of the Star program in elementary grades, but found that it was simply not as specific and user friendly as the iReady program.
Students not as invested in taking this one. Finished very quickly- guessing at many anwers. Not as easy to manuever and read results. Training was lacking at the beginning.
Mostly just an assessment tool, didn't necessarily spend a lot of time on the marketing side of their product (not necessarily a bad thing).

Difficult to navigate for both students \& staff.
This is a faster assessment that my students can do 3 times a year. It was not as in depth, but did give me data I could use for instruction and planning interventions.
I don't believe my students took this unless there was a different contracted out assessment before I ready.
Hard to navigate especially when trying to find data for teacher, students and families. Not as engaging.
The students like the shorter assessment and the activities. I found the linking between Ren., Star and Freckle to be very difficult and, since the teacher is unable to do it, to dependent on the students.
I enjoyed the fact that it was a short-ish assessment. I did not enjoy having to dig to find grade-level equivalents for students. The syncing with Freckle was awkward and we found it bothersome that only SOME areas in Freckle were assessed in STAR so students had to take "another" assessment if they wanted to work in a specific area.
I like the system and the students seem to like it better than Iready
It was extremely difficult to use as a teacher. While the test itself can be complete in one class period, it took me multiple class periods to get all my kids logged in. After the kids were finished with the test, it was extremely difficult for me to access their results.
The pre test was quick and easy; I didn't have the time to look at Freckles or see what the follow up had to offer Quicker assessment, results consistent with classroom work, but data stating student results are comparable to an average 7th grader is misleading- parents might think that their student is capable of being in a 7th grade math, where it appears from classroom experience that it more likely means that the average 7th grader should be in a 5th grade math class.
I haven't used it sorry.
N/A
Too much time analyzing the data and not enough information to guide instruction.
The assessment doesn't provide as much detail as iReady, but it's sufficient to monitor growth and group students. My students preferred this assessment.
It was fine, not as informative as iReady

\title{
Community Input - Survey Results - iReady and STAR
}

68 Total responses recorded
did not use
I only have experience with iReady because our student uses it now
Very good
No thanks!!!!! Not a good fit for my students.
It seemed to give inflated assessment results and I was never able to link it to Freckle. I do like Freckle, but linked with Star....l couldn't tell you. The kids did not prefer this model.
I like how quick it is to administer and could easily do that multiple times per year.
I found their website hard to navigate with no real direction where to look. Each time I clicked a link to explore something, I was prompted to create a free account. Why can't they just give me the information without having me create a login and explore. Unlike iReady's virtual tour of their products, there was nothing on the Renaissance website to compare with the tour.
The presentation gave me no detailed information about what the tests look like, accommodations for special needs.. Looks like you have similar options for Renaissance Star Math as you do i-ready. I think it is nice to be able to have data to track students especially based on standards. The student view doesn't look as user friendly as i-ready.
n/a
the website was not easy to navigate
It is like STAR reading but for math. Giving kids a time limit for answering questions only raises anxiety, especially in students who are already struggling. This is a terrible way to collect data. I would rather use paper and pencil or interview my students. I'm a no for Star math.
Did not use it.
I believe the test is too quick, timed, and not at all accurate to use as a diagnostic test. Students do like the Freckle lessons as they can buy things with the coins they earn.
good the bad thing is that there are limited quizz and lessons and i don't understand the reason for putting animals so you can buy them clothes from the *piggy store students will focus on that more than learning but i like the star test because it will progress anything you are supposed to do after taking the test anything you got wrong or didn't know but there isn't a lot of questions what if the student is done from them all I think it's good but i don't prefer for students
Only what l've read, not by using... marketing sounds solid and will allow for student growth toward understanding. I didn't like it because it gave me freedom over what my chose so I could do kindergarten math on there because it gave me that much freedom.
I liked the program, but for many of my students it became all about their avatar. Instead of doing lessons at their level, they would do K lessons in order to get more coins so they could dress their avatar in outfits. I found it harder to see who was doing what and the progress they were making. For those who were doing the lessons I assigned and the ones based on the assessment, I thought they made good progress.
It is nice that we already use STAR for Reading and I have used this Assessment system before so I was familiar with it's framework. It is also a test platform I could give once a month for progress monitoring.

None
I liked it better than iReady
I did not try it
I dont like it

\section*{What questions do you have about the Renaissance Star Math Assessment system?}

\section*{68 total responses}

\section*{29 left this question blank}

\section*{14 responded with none or I have no questions}

I don't have any questions.
None at the moment.
Can we try an assessment to see what it would be like for the students? Can students use the same login as for the STAR reading?

\section*{Community Input - Survey Results - iReady and STAR}

68 Total responses recorded
Does it help the kids gain confidence in their learning abilities?
I have no questions.
None
At the moment, I have no questions yet.
None
none, good, easy to use
How does it engage students? Are the assessments available and comprehensive enough for families to follow their student's progress as well?
none
Who took this assessment? I think my kids only took I Ready but it's requiring me to answer these questions.
Why can't everything just link together or why can't the teacher link the accounts?
Could they create a better report for seeing grade-level equivalents for all students at the same time.
Will we be offered more training rather than just the webinars?
If it were adopted, would we have a more thorough scheduled training on how to use it? I know STAR has the videos, but as a teacher, it's difficult to carve out time to watch an hour long video unless there is time specifically allotted for it in our work days.
N/A
What resources/tools does Renaissance Star have to help teachers with instruction?
none
did not use
One
Is there high interest - low reading level options in iReady. I have students with reading levels from \(\mathrm{k}-8\) and some of the lower level seems elementary like and some of my students would prefer it to look their age. I hope that's clear?
None
Is the data STAR provides as accurate as the data from iReady since the test is so much shorter? Why isn't the curriculum directly linked with star (Freckle?)
What kinds of math questions do you ask? Is it interactive? Does it continually adapt to a students responses? How do teachers use this data? Are there resources for teachers beyond making recommendations? Can teachers dictate which Freckle exercises come up?
Do you have a better presentation that ais very specific about what you offer, what the measurements look like, how do you accommodate special needs students...?
How long do the tests take for students to complete? What are the reward or incentives like on Star Math? Kids can get coins to do what with? Will there be more training for the teacher who piloted the curriculum? Will the star assessment be placed in year-at-a-glance documents for each grade level? Will students have access to star math at home next year during the school year? Will we have eventually have access to student's year by year progress or does information reset each year? For example, I am a first grade teacher. Will I be able to see my student's progress and activity during kindergarten?
n/a
is there anything for kindergarten? I didn't see it
Why were teachers only told of the pilot when we moved to distance learning? Did this pilot go through the rigorous process that the reading adoption was put through? Is it culturally diverse? Why do we need to spend more money on another program for online math? Don't we pay for Moby Max already???
None. Did not know about this.
Why a timed test?
Why does it have really a little amount of lessons and why does it have that *piggy store
No quations
Will they have a booklet or other reference source to go to so I'm not looking through videos trying to find what I need to know?

\section*{Community Input - Survey Results - iReady and STAR}

68 Total responses recorded
STAR Math seemed harder to navigate and I don't feel that the feedback was as benefitial as i-Ready. I would not use STAR Math (other than the overall grade equivalent) to report progress on an IEP. It doesn't drill down enough on specific skills to be of use for me.
Will your company be willing to do a more thorough hands on training system with staff if we purchase.
What is it? How does it differ from I Ready? How can I rate my preference on the the next question when I have no idea what it is?

No questions

\section*{Appendix XVI}

\section*{iReady Math}

\section*{Assessment System}

Report to the Edmonds School District Board of Directors - August 25, 2020

Brandon Lagerquist - Director of Assessment, Research, and Evaluation Nicole Hill - Meadowdale Elementary Learning Support Teacher Tanya King - Beverly Elementary Teacher

\section*{Work of Math Task Force in 2018-19}

Math Task Force Membership
- Peggy Aguilar - Highly Capable Coach
- Kristina Brown - Challenge Elementary
- Lynn Caulkins - Data and Assessment Specialist
- Aaron Claar - High School English Learner Teacher
- Angel Ericksen - Middle School Teacher
- Roberto Figueroa - Middle School Administrator
- Nicole Hill - Meadowdale Elementary Specialist
- Jennifer Hyppa - College Place Middle Teacher
- Sara Lowes - High School Administrator
- Teresa Lynd - Secondary Math Content Lead
- Shannon McKenzie - College Place Elementary Teacher
- Kristen Tollefsen - Instructional Technology Coach
- Ryan Treadway - Brier Terrace Middle Teacher
- Celeste Yeisley - Lynnwood High Teacher

\section*{Identified Gaps in Current Data and Assessment System}
- Algebra readiness indicator for middle school students.
- "Years behind" indicator for Intensified Algebra placement.
- Common assessment to evaluate impact of Intensified Algebra.
- Progress monitoring tools for School Improvement Planning.
- Identifying students in need of specific supports and interventions and monitoring the effectiveness of the supports and interventions.
- Common set of data that follows a student from school to school.
- Fine grained data to identify specific gaps and strengths.
- Monitoring growth during the school year.

\section*{Examples of Data Studied by Math Task Force}


\section*{Comparison District and Common Math Assessment Systems}
\begin{tabular}{|l|l|}
\hline School District & District-Wide Common Math Assessment System \\
\hline Clover Park & MAP and Star \\
\hline Edmonds & iReady \\
\hline Everett & iReady \\
\hline Evergreen & Star \\
\hline Marysville & Star \\
\hline Mukilteo & iReady \\
\hline Northshore & MAP and CenterPoint \\
\hline Seattle & iReady \\
\hline Shoreline & iReady \\
\hline Tacoma & iReady \\
\hline Vancouver & \\
\hline
\end{tabular}

\section*{Analysis by American Institutes of Research}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & are Tools & Reset Chart & & Classific & Accuracy & Technic & tandards & Usa & eatures & & \\
\hline All & Title & Area & Age/Grade & Criterion 1 Fall & \begin{tabular}{l}
Criterion 1 \\
Winter
\end{tabular} & \[
\frac{\text { Criterion } 1}{\text { Spring }}
\] & Criterion 2 Fall & \[
\frac{\text { Criterion } 2}{\text { Winter }}
\] & \[
\frac{\text { Criterion } 2}{\text { Spring }}
\] & Reliability & Validity \\
\hline \(\square\) & \begin{tabular}{l}
i-Ready \({ }^{(8)}\) \\
Diagnostic
\end{tabular} & Mathematics & Grade 3 & O & - &  &  &  &  & - & - \\
\hline \(\square\) & i-Ready \({ }^{(8)}\) Diagnostic & Mathematics & Grade 4 & - & - &  &  &  & \[
0
\] & & \\
\hline \(\square\) & \begin{tabular}{l}
i-Ready \({ }^{(3)}\) \\
Diagnostic
\end{tabular} & Mathematics & Grade 5 & - & - & - & \[
0
\] & - &  & - & - \\
\hline \(\square\) & i-Ready \({ }^{(8)}\) Diagnostic & Mathematics & Grade 6 & - & - & - & - & - & \[
0
\] & & \\
\hline \(\square\) & i-Ready \({ }^{(8)}\) Diagnostic & Mathematics & Grade 7 & - & - & - & - & - & - & - & - \\
\hline \(\square\) & i-Ready \({ }^{(8)}\) Diagnostic & Mathematics & Grade 8 & & & , & - & & - & & \\
\hline \multicolumn{3}{|l|}{Legend \(\begin{aligned} & \text { Convincing } \\ & \text { evidence }\end{aligned}\)} & \multicolumn{2}{|l|}{Partially convincing evidence} & \multicolumn{2}{|r|}{Unconvincing evidence} & \multicolumn{2}{|l|}{Data unavailable d} & Disaggregated data available & & \\
\hline
\end{tabular}

\section*{Why Not Use SBA Interim Assessments?}
\begin{tabular}{|l|l|l|}
\hline Feature & SBA Interim Assessments & iReady Assessment System \\
\hline Adaptive & No & Yes \\
\hline Provides "years behind" indicator & No & Yes \\
\hline Growth Measure & No & Yes \\
\hline Automatic Scoring & Mostly & \begin{tabular}{l} 
Yes \\
Scale Score \\
govawth goal.
\end{tabular} \\
\hline Level Score & No & \begin{tabular}{l} 
Overall level for each domain - Tier \\
1, Tier 2, Tier 3. \\
Grade level indicator for each of 4 \\
domains.
\end{tabular} \\
\hline Percentile Score & Overall level - below, at/near, abovected \\
\hline Personalized Online Instruction & No & Yes \\
\hline Ready for use during remote & No & Yes \\
\hline learning & No & Yes \\
\hline
\end{tabular}

\section*{2019-2020 Pilot Participation Data}
- August 2019-80 teachers across 25 schools.
- October 2019-159 teachers across 25 schools.
- April 2020-267 teachers across 33 schools.
- Elementary - 245 teachers.
- Middle School-16 teachers.
- High School-6 teachers.
- Students Assessed - 5,143 students completed at least one diagnostic.
- 5,143 equals about \(25 \%\) of entire student population.
- 4,913 students assessed in grades K-8 - approximately \(36 \%\) of all students in grades K-8.

\section*{The Value of Data from iReady}
- Tanya King - Beverly Elementary 6th Grade Teacher

\section*{iReady Math Assessment System - Components}
- Diagnostic Assessment
- K-12
- Adaptive
- Personalized Online Instruction
- K-8
- Auto-assigned and/or Teacher assigned
- Learning Games
- K-8
- PDF Lesson Plans
- K-12
- Standards Mastery Assessments
- K-8

\section*{The iReady System as an Intervention Tool}
- Nicole Hill - Meadowdale Elementary Learning Support Teacher

\section*{Math Assessment Steering Committee}
- Peggy Aguilar - Highly Capable Coach
- Abbey Alessi - English Learner Teacher
- Leah Bracken - Cedar Valley Principal
- Kristina Brown - Challenge Elementary Teacher
- Aaron Claar - Meadowdale High School English Learner Teacher
- Kelly Dack - English Learner Lead
- Deb Caldwell - Terrace Park Elementary Teacher
- Angel Ericksen - Alderwood Middle Teacher
- Pam Espinosa - Lynnwood Elementary Teacher
- Patti Hathaway - Elementary Coach
- Nicole Hill - Meadowdale Elementary Learning Support
- Jennifer Hyppa - College Place Middle Teacher
- Tanya King - Beverly Elementary Teacher
- Sara Lowes - Lynnwood High School Administrator
- Shannon McKenzie - College Place Elementary Teacher
- Julie Paddock - Instructional Technology Coach
- Kate Pothier - Special Services Manager
- Marsha Scott - Mountlake Terrace Elementary Teacher
- Dawn Withee-Hurd - Lynnwood High School Teacher
- Celeste Yeisley - Lynnwood High School Teacher
- Student Feedback
- Teacher Feedback
- Community Feedback
- Vendor Presentations
- Analysis of student data

\section*{Community, Teacher, and Committee Feedback}

On a scale of 1-4, how strong is your preference in selecting the Curriculum Associates iReady Assessment System as our district-wide, common math assessment system?
67 responses


On a scale of 1-4, how strong is your preference in selecting the Renaissance Star Math Assessment system as our district-wide, common math assessment system? 67 responses


What system do you recommend the district move forward for implementation in Fall 2020.
19 responses


Curriculum Associates - iReady diagnostic and online instruction
- Renaissance - Star diagnostic and Freckle online instruction
I am still not sure

\section*{Funding for the iReady System}
\begin{tabular}{|l|l|}
\hline Category & Cost \\
\hline Professional Development K - 10 & \(\$ 111,000\) (one time cost, 2020-2021 only) \\
\hline Math Licenses K-8 & \(\$ 275,184\) (annual expense) \\
\hline Math Licenses 9-10 & No charge \\
\hline Tax & \(\$ 28,713.94\) \\
\hline
\end{tabular}
\begin{tabular}{|l|l|}
\hline School Year & Funding Source \\
\hline \(2020-2021\) & Assessment carryover (PD) and reserves in current technology levy budget. \\
\hline \(2021-2022\) & Technology Levy (passed in February 2020) \\
\hline \(2022-2023\) & Technology Levy (passed in February 2020) \\
\hline \(2023-2024\) & Technology Levy (passed in February 2020) \\
\hline \(2024-2025\) & Technology Levy (passed in February 2020) \\
\hline
\end{tabular}

\section*{Questions?}

\section*{Dates and Groups of Presentations and Feedback}
EAACH
March 52019 - Board Study Session
October 152019 - Board Study Session
PEC November 21
ELT and SLT January 2019
EAACH February 4
MDE Board Presentation February 19
IMC March10

\section*{Why Common Assessments Across the District?}
- Along with a Comprehensive System of Common District-Wide Assessments being research based best practice, school building closures have highlighted the urgency for more common structures across the district.
- Data Gap - Our reliance on SBA, which we have no control over, has caused a multitude of issues for our district:
- LAP identification.
- Placement into Algebra in middle school.
- Placement into Intensified Algebra in high school.
- Meeting a graduation pathway requirement.

\title{
A Model of a Comprehensive System of District-Wide Common Assessments \\ \section*{Summative - Data}
} Collected Once per Year

Screening
Data Collected - 1 to 3
times per year.

Diagnostic
Data Collected - 2 to 3 times per year.

Progress Monitoring - Benchmarks and Interim Assessments.

Data Collected - beginning and/or end of units, monthly.

Informal Assessments - observation, checks for understanding.
Data Collection - daily, weekly.

\section*{Q1 What school does your student attend?}


\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
ANSWER CHOICES \\
Alderwood Middle
\end{tabular}} & \multicolumn{2}{|l|}{RESPONSES} \\
\hline & 1.28\% & 14 \\
\hline Beverly Elementary & 4.04\% & 44 \\
\hline Brier Elementary & 5.78\% & 63 \\
\hline Brier Terrace Middle & 3.12\% & 34 \\
\hline Cedar Valley Community & 1.47\% & 16 \\
\hline Cedar Way Elementary & 3.49\% & 38 \\
\hline Chase Lake Elementary & 2.66\% & 29 \\
\hline College Place Elementary & 2.02\% & 22 \\
\hline College Place Middle & 0.64\% & 7 \\
\hline Edmonds Elementary & 3.30\% & 36 \\
\hline Edmonds Heights K-12 & 0.92\% & 10 \\
\hline Edmonds-Woodway High & 1.56\% & 17 \\
\hline Hazelwood Elementary & 2.66\% & 29 \\
\hline Hilltop Elementary & 4.68\% & 51 \\
\hline Lynndale Elementary & 4.77\% & 52 \\
\hline Lynnwood Elementary & 1.65\% & 18 \\
\hline Lynnwood High & 3.49\% & 38 \\
\hline Madrona K-8 & 5.69\% & 62 \\
\hline Maplewood K-8 & 3.85\% & 42 \\
\hline Martha Lake Elementary & 2.66\% & 29 \\
\hline Meadowdale Elementary & 2.48\% & 27 \\
\hline Meadowdale High & 1.01\% & 11 \\
\hline Meadowdale Middle & 2.39\% & 26 \\
\hline Mountlake Terrace Elementary & 2.29\% & 25 \\
\hline Mountlake Terrace High & 0.64\% & 7 \\
\hline Oak Heights Elementary & 3.12\% & 34 \\
\hline Scriber Lake High & 0.28\% & 3 \\
\hline Seaview Elementary & 5.50\% & 60 \\
\hline Sherwood Elementary & 4.22\% & 46 \\
\hline Spruce Elementary & 2.48\% & 27 \\
\hline Terrace Park/Challenge Elementary & 12.84\% & 140 \\
\hline Westgate Elementary & 3.03\% & 33 \\
\hline TOTAL & & 1,090 \\
\hline
\end{tabular}

\title{
Q2 What is your student's current grade level?
}

\begin{tabular}{ll|l}
\hline ANSWER CHOICES & RESPONSES & \\
\hline Kindergarten & \(15.50 \%\) & 169 \\
\hline Grade 1 & \(17.52 \%\) & 191 \\
\hline Grade 2 & \(12.39 \%\) & 135 \\
\hline Grade 3 & \(11.56 \%\) & 126 \\
\hline Grade 4 & \(10.83 \%\) & 118 \\
\hline Grade 5 & \(8.07 \%\) & 88 \\
\hline Grade 6 & \(8.07 \%\) & 88 \\
\hline Grade 7 & \(5.41 \%\) & 59 \\
\hline Grade 8 & \(3.85 \%\) & 42 \\
\hline Grade 9 & \(1.83 \%\) & 20 \\
\hline Grade 10 & \(1.28 \%\) & 14 \\
\hline Grade 11 & \(2.57 \%\) & 28 \\
\hline Grade 12 & \(1.10 \%\) & \\
\hline TOTAL & & \\
\hline
\end{tabular}

\title{
Q3 Which i-Ready Diagnostic Assessments has your student taken this school year?
}

Answered: 1,090
Skipped: 0

\begin{tabular}{l|ll}
\hline ANSWER CHOICES & RESPONSES & \\
\hline Math & \(85.87 \%\) & 936 \\
\hline Reading & \(73.12 \%\) & 797 \\
\hline Neither & \(3.67 \%\) & 40 \\
\hline I don't know & \(8.99 \%\) & 98 \\
\hline
\end{tabular}

Total Respondents: 1,090

\title{
Q4 Has your student's teacher shared your student's i-Ready Diagnostic Assessment data with you?
}


\title{
Q5 Is the i-Ready Diagnostic Assessment data helpful for understanding your student's academic performance?
}


\title{
Q6 What is your overall rating of the i-Ready Diagnostic Assessments?
}


\section*{Q7 Has your student worked on i-Ready Online Instruction lessons? The Online Instruction is also known as My Path.}


\title{
Q8 Which i-Ready Online Instruction lessons has your student worked on?
}


Total Respondents: 661

\title{
Q9 Is the Online Instruction an effective and useful support for your student?
}

\author{
Answered: 659 Skipped: 431
}


\title{
Q10 About how many minutes per week does your student use the Online Instruction?
}

\author{
Answered: 659 Skipped: 431
}

\begin{tabular}{l|ll}
\hline ANSWER CHOICES & RESPONSES & \\
\hline Over one hour & \(32.02 \%\) & 211 \\
\hline 45 to 60 minutes & \(29.29 \%\) & 193 \\
\hline 30 to 45 minutes & \(21.09 \%\) & 139 \\
\hline Less than 30 minutes & \(11.99 \%\) & 79 \\
\hline I don't know & \(5.61 \%\) & 37 \\
\hline TOTAL & & 659 \\
\hline
\end{tabular}

\section*{Q11 Would you recommend that the Edmonds School District continue to use i-Ready?}


\title{
Q12 What is going well for your student when using i-Ready this school year?
}

Answered: 756 Skipped: 334
\begin{tabular}{|c|c|c|}
\hline \# & RESPONSES & DATE \\
\hline 1 & It keeps her interest & 5/7/2021 1:46 PM \\
\hline 2 & He enjoys the math but the leveling of reading has been very problematic. He is an advanced reader for his age but not at the same level of comprehension. & 5/7/2021 1:29 PM \\
\hline 3 & Consistent work & 5/7/2021 1:12 PM \\
\hline 4 & Consistent but not enjoyed & 5/7/2021 1:10 PM \\
\hline 5 & It keeps her focused & 5/7/2021 8:29 AM \\
\hline 6 & It gives the teachers a break and is tailored to the kids ability (in theory) & 5/6/2021 7:15 PM \\
\hline 7 & It shows how much progress until the lesson is finished. It is predictable and let's you know immediately if they get something wrong and then explains how to find the answer. & 5/6/2021 6:33 PM \\
\hline 8 & She will do it as she knows the format. & 5/6/2021 6:30 PM \\
\hline 9 & It is predictable. & 5/6/2021 10:37 AM \\
\hline 10 & He's participating. That's about it. & 5/6/2021 7:51 AM \\
\hline 11 & really really bad & 5/6/2021 12:31 AM \\
\hline 12 & An extra tool to help reiterate what they have learned. & 5/5/2021 12:42 PM \\
\hline 13 & They at least have some tools to keep them on track. & 5/5/2021 12:40 PM \\
\hline 14 & They are exposed to something I guess... & 5/5/2021 12:38 PM \\
\hline 15 & Nothing. He hates it. It is a poor excuse for real instruction. & 5/4/2021 8:00 PM \\
\hline 16 & He has a great attitude about using i-Ready and gets excited to show me the lessons & 5/4/2021 6:09 PM \\
\hline 17 & N/A & 5/4/2021 3:35 PM \\
\hline 18 & Practicing past skills & 5/4/2021 3:31 PM \\
\hline 19 & She feel more comfortable with a Math and Readind & 5/4/2021 3:30 PM \\
\hline 20 & Learning & 5/4/2021 8:09 AM \\
\hline 21 & Vocabulary learning in reading lessons & 5/4/2021 5:25 AM \\
\hline 22 & Reading with iReady gives variety. & 5/3/2021 3:31 PM \\
\hline 23 & she just have start to to use this. & 5/2/2021 10:08 PM \\
\hline 24 & Not a fan of iReady & 5/2/2021 9:20 PM \\
\hline 25 & Math is okay & 5/2/2021 9:01 PM \\
\hline 26 & Prepares for upcoming in person lessons & 5/2/2021 6:40 PM \\
\hline 27 & He is not a fan of iready and hates having to use it. & 5/2/2021 6:05 PM \\
\hline 28 & Easy to understand. & 5/2/2021 5:34 PM \\
\hline 29 & It's interesting and interactive ; she enjoys doing it & 5/2/2021 2:15 PM \\
\hline 30 & Good practice sometimes, shows how to do things in new (sometimes more difficult) ways, every now and then teaches something new. Mostly practice though. & 5/2/2021 1:23 PM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 31 & My student feels motivated because he feels like it's "screen time" or a game & 5/2/2021 1:15 PM \\
\hline 32 & I like that it shows exactly how many minutes have been spent and how many lessons passed and the dates-it makes it easy for parents to check on what work has been completed for the week. With Xtra Math, it is not possible to tell if your student did the assignment or not and you never know how much more they need to do to complete the section they are on. With iReady, the student can always see if they are \(50 \%\) done with a lesson or \(90 \%\) done. & 5/2/2021 12:42 PM \\
\hline 33 & nothing. & 5/2/2021 12:20 PM \\
\hline 34 & sometimes good for challenging thinking & 5/2/2021 12:16 PM \\
\hline 35 & Learning some things independently & 5/2/2021 10:01 AM \\
\hline 36 & Seems to learn some new concepts & 5/2/2021 9:58 AM \\
\hline 37 & Easy to navigate through & 5/2/2021 9:31 AM \\
\hline 38 & Independent practice. They think it's fun and funny. The lessons are building skills at their level. & 5/2/2021 6:29 AM \\
\hline 39 & Good extra practice. Independent instruction. & 5/2/2021 6:27 AM \\
\hline 40 & She is happy to learn from iReady and likes the characters. & 5/1/2021 6:42 PM \\
\hline 41 & It's fun for my child so it's an enjoyable way to learn & 5/1/2021 2:48 PM \\
\hline 42 & My student likes the animation and characters & 5/1/2021 1:57 PM \\
\hline 43 & My student is above level so it's a good way to challenge him outside of regular instruction. & 5/1/2021 12:15 PM \\
\hline 44 & She tests well & 5/1/2021 11:28 AM \\
\hline 45 & They enjoy the games but it becomes to repetitive then they become bored & 5/1/2021 9:47 AM \\
\hline 46 & math & 5/1/2021 9:32 AM \\
\hline 47 & Her teacher explained it well. & 5/1/2021 7:40 AM \\
\hline 48 & She likes some of the reading activities. & 5/1/2021 7:38 AM \\
\hline 49 & It is engaging with animation & 5/1/2021 6:51 AM \\
\hline 50 & Student is growing in her reading skills & 4/30/2021 8:22 PM \\
\hline 51 & It is a tool that allows him to proceed at his own pace especially during these remote times but don't feel it is the best way to educate students & 4/30/2021 8:10 PM \\
\hline 52 & He enjoys using the i-ready program! & 4/30/2021 7:41 PM \\
\hline 53 & Engagement & 4/30/2021 6:09 PM \\
\hline 54 & Engagement & 4/30/2021 6:07 PM \\
\hline 55 & Prodigy was cut off so IReady was recommended. & 4/30/2021 5:34 PM \\
\hline 56 & It's pretty fun & 4/30/2021 4:59 PM \\
\hline 57 & That she could log on anytime of the day and stop whenever & 4/30/2021 4:54 PM \\
\hline 58 & He is highly motivated by the game like format. The skills presented and the practice sessions are excellent and he has significantly improved in both reading and math. Of course, this is only one of the ways he has learned this year. But it is worth the money. & 4/30/2021 3:34 PM \\
\hline 59 & She hates it, says she's not learning with it and it just adds extra stress & 4/30/2021 2:28 PM \\
\hline 60 & She is engaged & 4/30/2021 1:56 PM \\
\hline 61 & Math & 4/30/2021 1:45 PM \\
\hline 62 & Reading & 4/30/2021 1:38 PM \\
\hline 63 & The Reading has been very helpful & 4/30/2021 1:11 PM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 64 & Repetition/practice some & 4/30/2021 12:35 PM \\
\hline 65 & She got the hang of it herself after a few months & 4/30/2021 11:03 AM \\
\hline 66 & she can usually finish it very quickly & 4/30/2021 10:53 AM \\
\hline 67 & Is helping her in the development. & 4/30/2021 10:12 AM \\
\hline 68 & I find that it is very helpful that my kid is constantly learning/work on new lessons. Since every student is at a different level, this keeps him from getting bored with things he already knows. & 4/30/2021 10:01 AM \\
\hline 69 & I find that it is very helpful that my kid is constantly learning/work on new lessons. Since every student is at a different level, this keeps him from getting bored with things he already knows. & 4/30/2021 9:59 AM \\
\hline 70 & Keeping up on the subject while not being able to be in school & 4/30/2021 9:35 AM \\
\hline 71 & It is engaging and fun & 4/30/2021 9:26 AM \\
\hline 72 & Keep them busy and keep them thinking & 4/30/2021 9:18 AM \\
\hline 73 & Great homework tool good for extra work and instruction & 4/30/2021 9:16 AM \\
\hline 74 & Keep them busy and make them think & 4/30/2021 9:13 AM \\
\hline 75 & Putting in the time on his own to try and complete assignments & 4/30/2021 9:07 AM \\
\hline 76 & Reading & 4/30/2021 7:45 AM \\
\hline 77 & Teacher has been able to adjust level manually. & 4/30/2021 7:27 AM \\
\hline 78 & Teacher has been able to adjust level manually. & 4/30/2021 7:26 AM \\
\hline 79 & Unknown & 4/30/2021 7:24 AM \\
\hline 80 & Getting her in the routine of completing 1 lesson per day, and offering to get her a toy when she reached 40 lessons. & 4/30/2021 6:15 AM \\
\hline 81 & My son has fun using the program and makes steady progress learning. & 4/30/2021 4:52 AM \\
\hline 82 & She's learning new things and every time she finishes a lesson, she always wants to do another. & 4/29/2021 10:06 PM \\
\hline 83 & Math and Reading & 4/29/2021 8:56 PM \\
\hline 84 & It is a way to get practice on a subject. & 4/29/2021 7:44 PM \\
\hline 85 & She likes the cat stacker. Other than that she says is just ok & 4/29/2021 4:52 PM \\
\hline 86 & He has to remember what was said or what he reads. & 4/29/2021 4:18 PM \\
\hline 87 & Learning the materials was only somewhat helpful. & 4/29/2021 4:13 PM \\
\hline 88 & We like the competitive level challenge that encourages him to keep striving! & 4/29/2021 3:48 PM \\
\hline 89 & I dont like the program and I don't like how the district pushed this program on students this year. & 4/29/2021 3:01 PM \\
\hline 90 & Nice to advance, good supplement during online learning & 4/29/2021 2:40 PM \\
\hline 91 & - & 4/29/2021 2:17 PM \\
\hline 92 & She enjoys doing I-ready. & 4/29/2021 2:17 PM \\
\hline 93 & I don't know & 4/29/2021 1:52 PM \\
\hline 94 & Keep them practicing math daily & 4/29/2021 12:21 PM \\
\hline 95 & Easy to use and she enjoys doing it. & 4/29/2021 11:32 AM \\
\hline 96 & No & 4/29/2021 10:55 AM \\
\hline 97 & Being able to be challenged at his level while doing school virtually. We like the flexibility of being able to fit it into our day when it's convenient. & 4/29/2021 10:45 AM \\
\hline 98 & It is a great reinforcement and review tool. & 4/29/2021 10:41 AM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 99 & It's pretty easy for the student to use indepently & 4/29/2021 10:37 AM \\
\hline 100 & Great reinforcement and review tool & 4/29/2021 10:35 AM \\
\hline 101 & It is good practice. & 4/29/2021 10:23 AM \\
\hline 102 & She gets excited and feels accomplished when she gets to another level and sees something new. & 4/29/2021 10:16 AM \\
\hline 103 & She likes the characters. They entice her to use it. & 4/29/2021 10:14 AM \\
\hline 104 & I have seen much improvement on his additions, subtraction and it have nice ways of adding teen numbers that my son found enjoyable while learning at the same time. He loves i-ready. It's a great math learning app. & 4/29/2021 10:06 AM \\
\hline 105 & It helps with remote learning as student has spare time at home. & 4/29/2021 10:01 AM \\
\hline 106 & not sure & 4/29/2021 9:48 AM \\
\hline 107 & He enjoys it! & 4/29/2021 9:46 AM \\
\hline 108 & The layered approach with text on screen and ability to click a button to hear the material gives immediate learning traction. & 4/29/2021 9:44 AM \\
\hline 109 & She enjoys the lessons (mostly because of the fun characters) and seems to be learning valuable skills. & 4/29/2021 9:28 AM \\
\hline 110 & Math & 4/29/2021 8:16 AM \\
\hline 111 & it is easy to access and first grader likes reward games & 4/29/2021 7:57 AM \\
\hline 112 & More understanding to math problems and reading & 4/29/2021 7:57 AM \\
\hline 113 & extra math or reading to to do & 4/29/2021 7:51 AM \\
\hline 114 & it keeps my child engaged in online learning & 4/29/2021 6:43 AM \\
\hline 115 & Math & 4/29/2021 12:58 AM \\
\hline 116 & Math & 4/29/2021 12:53 AM \\
\hline 117 & Likes the book choices and math stuff & 4/29/2021 12:02 AM \\
\hline 118 & Building and retaining skills & 4/28/2021 11:21 PM \\
\hline 119 & he can do it independently & 4/28/2021 10:09 PM \\
\hline 120 & Learning more concepts & 4/28/2021 10:09 PM \\
\hline 121 & He enjoys using i-ready. & 4/28/2021 8:54 PM \\
\hline 122 & n/a & 4/28/2021 8:14 PM \\
\hline 123 & gives well detailed lessons & 4/28/2021 8:13 PM \\
\hline 124 & Yea & 4/28/2021 7:47 PM \\
\hline 125 & Math lessons that challenge them progressively & 4/28/2021 7:26 PM \\
\hline 126 & Enjoyed learning games and easy to understand & 4/28/2021 7:14 PM \\
\hline 127 & They enjoy the learning games & 4/28/2021 7:12 PM \\
\hline 128 & Lessons at current pace and reviewing concepts & 4/28/2021 7:05 PM \\
\hline 129 & The Reading may be okay. & 4/28/2021 6:49 PM \\
\hline 130 & Nothing! He hated it. Struggle every week to get him to do. & 4/28/2021 6:22 PM \\
\hline 131 & The iready is NOT going well for my student. & 4/28/2021 6:19 PM \\
\hline 132 & Interactive fun and easy to use & 4/28/2021 5:58 PM \\
\hline 133 & Interactive fun learning and easy to use & 4/28/2021 5:57 PM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 134 & Student quote: "It's teaching me new things and reviewing things from class" & 4/28/2021 5:42 PM \\
\hline 135 & Structured learning content & 4/28/2021 5:36 PM \\
\hline 136 & He is doing better in school. & 4/28/2021 5:09 PM \\
\hline 137 & Interactive fun & 4/28/2021 5:05 PM \\
\hline 138 & Convenient, easy, helpful & 4/28/2021 4:32 PM \\
\hline 139 & She can learn at her own pace, lessons are taught in a fun way. With very little instruction/assiginments from the teacher, i-Ready has significantly increased skills gained this school year. & 4/28/2021 3:57 PM \\
\hline 140 & Able to learn without pressure and in a fun way & 4/28/2021 3:47 PM \\
\hline 141 & The ability to learn ahead. & 4/28/2021 3:45 PM \\
\hline 142 & My student likes the characters so it keeps his interest. Lessons are a good length for my student's attention span. & 4/28/2021 3:26 PM \\
\hline 143 & Reading lessons & 4/28/2021 2:56 PM \\
\hline 144 & It helps with practicing skills learned. & 4/28/2021 2:50 PM \\
\hline 145 & The diagnostics are helpful & 4/28/2021 2:35 PM \\
\hline 146 & He's earning money to do it. & 4/28/2021 2:24 PM \\
\hline 147 & Reasonable replacement of o in person instruction for this year only. Self paced is good. & 4/28/2021 2:15 PM \\
\hline 148 & It's easy to track his progress and see where he is doing well/struggling & 4/28/2021 2:13 PM \\
\hline 149 & She likes that the lessons are quick & 4/28/2021 2:08 PM \\
\hline 150 & A decent tool during COVID. The immediate feedback that the student gets is useful. My student prefers online lessons opposed to written worksheets. & 4/28/2021 2:05 PM \\
\hline 151 & Extra practice but the activities are ones he already knows and he is bored, he needs iREADY assignments that are easy and some that are challenging to keep him engaged. & 4/28/2021 1:44 PM \\
\hline 152 & It helped her understand difficult topics in Math & 4/28/2021 1:43 PM \\
\hline 153 & There is not much going well. & 4/28/2021 1:16 PM \\
\hline 154 & The teaching itself was great, I could see the improvement as she progressed. & 4/28/2021 1:13 PM \\
\hline 155 & Reading & 4/28/2021 1:06 PM \\
\hline 156 & my student has trouble writing on paper so having the instruction online makes it very easy for him. he will readily jump into iReady when a hand-written assignment he wouldn't want to start. & 4/28/2021 12:50 PM \\
\hline 157 & Helps improve understanding And gives the chance to correct mistakes before moving forward & 4/28/2021 12:41 PM \\
\hline 158 & Not much. He hates doing it and therefore, usually doesn't. & 4/28/2021 12:19 PM \\
\hline 159 & The program allows for multiple attempts before demonstrating/explaining the correct answers. Visuals \& interactive nature of the app are helpful & 4/28/2021 12:12 PM \\
\hline 160 & Reading & 4/28/2021 11:20 AM \\
\hline 161 & Making a habit to study & 4/28/2021 10:59 AM \\
\hline 162 & He seems to be progressing & 4/28/2021 10:42 AM \\
\hline 163 & It's another learning resource & 4/28/2021 10:42 AM \\
\hline 164 & Knowing that more learning tools are available & 4/28/2021 10:40 AM \\
\hline 165 & With being remote it is something that she can do on her own without needing help. She likes doing it so that also helps. & 4/28/2021 10:22 AM \\
\hline 166 & Not much. & 4/28/2021 10:20 AM \\
\hline 167 & Has built confidence and is also engaging. & 4/28/2021 10:10 AM \\
\hline
\end{tabular}
i-Ready Spring 2021 Feedback Survey - Families/English
\begin{tabular}{|c|c|c|}
\hline 168 & iReady has made subjects that normally are hard to practice more fun and engaging. & 4/28/2021 10:07 AM \\
\hline 169 & Good review of math & 4/28/2021 10:03 AM \\
\hline 170 & Good review of math & 4/28/2021 10:00 AM \\
\hline 171 & My son hates to read, but he enjoys doing iReady Reading. & 4/28/2021 9:59 AM \\
\hline 172 & He has fun with some of the lessons. & 4/28/2021 9:56 AM \\
\hline 173 & Practice and learn about math and reading on I-ready help her learn more beside from an actual class & 4/28/2021 9:53 AM \\
\hline 174 & My student can work on their own and is able to have some interactive learning when not in person with a teacher. & 4/28/2021 9:52 AM \\
\hline 175 & He used math supplemental books & 4/28/2021 9:30 AM \\
\hline 176 & accountability and consistency - game like makes it fun. & 4/28/2021 9:21 AM \\
\hline 177 & Reading, a little bit & 4/28/2021 9:20 AM \\
\hline 178 & Nothing. The math teacher ignores students' request to send the diagnostic feedback to them. My kid doesn't have the "my path" and only has a message saying "your teacher hasn't assigned any work". & 4/28/2021 9:17 AM \\
\hline 179 & Seems like a time filler vs. in-person instruction or zoom meetings. & 4/28/2021 9:15 AM \\
\hline 180 & There may be some benefit to some of the math exercises but this does not work well for my child & 4/28/2021 9:12 AM \\
\hline 181 & not sure & 4/28/2021 9:09 AM \\
\hline 182 & not sure & 4/28/2021 9:06 AM \\
\hline 183 & Not much, she doesn't seem to like the program & 4/28/2021 8:56 AM \\
\hline 184 & Math & 4/28/2021 8:52 AM \\
\hline 185 & 2021 & 4/28/2021 8:51 AM \\
\hline 186 & He is excited to complete the lessons and progress through the story. And play the games. & 4/28/2021 8:48 AM \\
\hline 187 & His reading has gotten a lot better and he's understanding math more & 4/28/2021 8:45 AM \\
\hline 188 & It has allowed the students to get some extra practice after there assigned lesson & 4/28/2021 8:34 AM \\
\hline 189 & It's good practice. & 4/28/2021 8:34 AM \\
\hline 190 & He enjoys i Ready selections in comparison to Raz Kids. & 4/28/2021 8:27 AM \\
\hline 191 & "My Path" section because you can move ahead or be behind the class & 4/28/2021 8:23 AM \\
\hline 192 & easy to access & 4/28/2021 8:21 AM \\
\hline 193 & He hates it and thinks it is boring & 4/28/2021 8:17 AM \\
\hline 194 & They are excited to use it & 4/28/2021 8:06 AM \\
\hline 195 & Covers missed math topics & 4/28/2021 8:00 AM \\
\hline 196 & Variety of books and games & 4/28/2021 7:37 AM \\
\hline 197 & The games and activities & 4/28/2021 7:35 AM \\
\hline 198 & Helped him learn to read and math. He loves the games at the end of each. Helps calms him when frustrated with other activities or being home school in general. & 4/28/2021 7:34 AM \\
\hline 199 & He would choose to not do anything if he could! He is good and I think he has fun with it when he uses it & 4/28/2021 7:21 AM \\
\hline 200 & He is learning new vocabulary and gaining confidence. & 4/28/2021 7:17 AM \\
\hline 201 & good use of time & 4/28/2021 7:10 AM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 202 & It's simple for the student to do on their own & 4/28/2021 7:09 AM \\
\hline 203 & He likes the characters and games and collecting points. It's motivating for him. & 4/28/2021 6:57 AM \\
\hline 204 & She really enjoys it & 4/28/2021 6:43 AM \\
\hline 205 & My son hates using iReady. Nothing going well. & 4/28/2021 6:36 AM \\
\hline 206 & It's engaging because of the graphics, but it's also something he can do mostly on his own. & 4/28/2021 6:05 AM \\
\hline 207 & Ok & 4/28/2021 4:46 AM \\
\hline 208 & he can study at his own pace & 4/28/2021 4:00 AM \\
\hline 209 & Nothing & 4/28/2021 2:08 AM \\
\hline 210 & Both math and reading getting improved & 4/28/2021 1:49 AM \\
\hline 211 & He is reading and doing Math staying on task because he knows his teacher will check the time he have spend & 4/28/2021 1:02 AM \\
\hline 212 & Reading and math & 4/27/2021 11:50 PM \\
\hline 213 & Math & 4/27/2021 11:41 PM \\
\hline 214 & B & 4/27/2021 11:28 PM \\
\hline 215 & They enjoy it and it goes at a speed that works well for my son & 4/27/2021 11:27 PM \\
\hline 216 & Reading format and reward system & 4/27/2021 11:24 PM \\
\hline 217 & Learning that uses fun activities so it's not boring & 4/27/2021 11:19 PM \\
\hline 218 & Hopefully everything needed & 4/27/2021 10:46 PM \\
\hline 219 & work at your own pace & 4/27/2021 10:45 PM \\
\hline 220 & work at your own pace & 4/27/2021 10:42 PM \\
\hline 221 & My student understands her goals for math. & 4/27/2021 10:32 PM \\
\hline 222 & - & 4/27/2021 9:53 PM \\
\hline 223 & He enjoys interacting with the program and it holds his attention & 4/27/2021 9:50 PM \\
\hline 224 & Improved writing skills & 4/27/2021 9:48 PM \\
\hline 225 & Learning new words, improving math & 4/27/2021 9:47 PM \\
\hline 226 & Nothing. Wasted time. & 4/27/2021 9:47 PM \\
\hline 227 & I like being able to monitor my child's progress. & 4/27/2021 9:43 PM \\
\hline 228 & Fun and interactive & 4/27/2021 9:33 PM \\
\hline 229 & I-Ready is a waste of time for my child. & 4/27/2021 9:26 PM \\
\hline 230 & It can be done independently, likes the reading, likes the format with the games and characters & 4/27/2021 9:19 PM \\
\hline 231 & Math & 4/27/2021 9:16 PM \\
\hline 232 & it's an engaging independent learning activity & 4/27/2021 8:51 PM \\
\hline 233 & I personally think it make learning a little more fun that straight work but my son hates it and insists he doesn't learn anything. & 4/27/2021 8:46 PM \\
\hline 234 & Reading & 4/27/2021 8:46 PM \\
\hline 235 & He can do it on his own time. He enjoys the reading portion. & 4/27/2021 8:42 PM \\
\hline 236 & He gets to play fun games when he does enough math, he's progressing in math fine on the site. & 4/27/2021 8:41 PM \\
\hline 237 & She enjoys the lessons and I love that it shows me her progress & 4/27/2021 8:39 PM \\
\hline
\end{tabular}
i-Ready Spring 2021 Feedback Survey - Families/English
\begin{tabular}{|c|c|c|}
\hline 238 & flexible, good content, quick feedback & 4/27/2021 8:32 PM \\
\hline 239 & flexible, good content, quick feedback & 4/27/2021 8:31 PM \\
\hline 240 & it's self-paced and provides prompt feedback on what she got correct and did not get correct & 4/27/2021 8:27 PM \\
\hline 241 & Math skills for all of them & 4/27/2021 8:06 PM \\
\hline 242 & Easy to login to & 4/27/2021 8:00 PM \\
\hline 243 & Its an easy way to get points when the instructor assigns a half an hour of iready & 4/27/2021 7:54 PM \\
\hline 244 & It always has lessons ready. & 4/27/2021 7:54 PM \\
\hline 245 & She's learning a lot, and enjoys it & 4/27/2021 7:45 PM \\
\hline 246 & She can learn at her own pace. & 4/27/2021 7:44 PM \\
\hline 247 & My 5th grader likes that it reads to him & 4/27/2021 7:29 PM \\
\hline 248 & My son does his work independently; not sure what his experience is & 4/27/2021 7:28 PM \\
\hline 249 & Neutral, she does it, but it feels redundant. The lessons are repetitive & 4/27/2021 7:26 PM \\
\hline 250 & Na & 4/27/2021 7:13 PM \\
\hline 251 & Math & 4/27/2021 7:11 PM \\
\hline 252 & Math is helpful for reinforcing topics & 4/27/2021 7:11 PM \\
\hline 253 & Reinforce math that he is already learned & 4/27/2021 7:09 PM \\
\hline 254 & Ratio & 4/27/2021 7:09 PM \\
\hline 255 & She likes the math and earning points for the games & 4/27/2021 7:07 PM \\
\hline 256 & Reading and math & 4/27/2021 7:07 PM \\
\hline 257 & He seems to really enjoy doing it. & 4/27/2021 7:06 PM \\
\hline 258 & The diagnostic of finding out what my son needs to work on the most. & 4/27/2021 6:56 PM \\
\hline 259 & Online learning has been challenging, recommended teachers actually teaching course material even if just by zoom & 4/27/2021 6:53 PM \\
\hline 260 & Gives him something to do. & 4/27/2021 6:51 PM \\
\hline 261 & One kid was given too low of a reading level and has been so bored. The other doesn't like the format of iReady. Khan Academy is just as effective and free. This is not a productive way for the district to spend money. & 4/27/2021 6:49 PM \\
\hline 262 & Keep her busy & 4/27/2021 6:45 PM \\
\hline 263 & She is so sick of it. It's a battle everyday. & 4/27/2021 6:45 PM \\
\hline 264 & She seems to be doing well & 4/27/2021 6:40 PM \\
\hline 265 & just leaning on her own. & 4/27/2021 6:39 PM \\
\hline 266 & Olaf just had to take a placement test, was not asked to do anything else & 4/27/2021 6:36 PM \\
\hline 267 & He is excited when working on I ready activities & 4/27/2021 6:35 PM \\
\hline 268 & It tracks their progress & 4/27/2021 6:34 PM \\
\hline 269 & Karma likes the reading, not the math & 4/27/2021 6:33 PM \\
\hline 270 & Easy to use and good for grade level practice & 4/27/2021 6:31 PM \\
\hline 271 & I like how it keeps track of each students progress. & 4/27/2021 6:31 PM \\
\hline 272 & Easy to learn & 4/27/2021 6:28 PM \\
\hline 273 & Learned pre algebra & 4/27/2021 6:28 PM \\
\hline 274 & My daughter took the math test on iReady. Her math teacher hasn't shared the test score with & 4/27/2021 6:25 PM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
us yet, my daughter and her friends emailed the math teacher multiple times and there's still no response yet. I'm not sure it's just because of the irresponsible teacher, the whole experience with iReady was not good.
\begin{tabular}{|c|c|c|}
\hline 275 & Nothing, my child despises it. Also why is my child's teacher using iready instruction while my child is on campus?! & 4/27/2021 6:22 PM \\
\hline 276 & Gives my student something to do & 4/27/2021 6:20 PM \\
\hline 277 & she likes it & 4/27/2021 6:11 PM \\
\hline 278 & Nothing & 4/27/2021 6:10 PM \\
\hline 279 & My student has learned fractions and complex multiplication with the system. Spelling and reading skills have been improved as well. & 4/27/2021 6:10 PM \\
\hline 280 & Self paced, simple to understand & 4/27/2021 6:09 PM \\
\hline 281 & Learning about writing expressions & 4/27/2021 6:08 PM \\
\hline 282 & It matches what is being taught in class and shows what is understood and/or needs more work. & 4/27/2021 6:01 PM \\
\hline 283 & It's just a tool that's available, but my student does not enjoy using it. & 4/27/2021 5:49 PM \\
\hline 284 & It's just a tool that's available, but my student does not enjoy using it. & 4/27/2021 5:46 PM \\
\hline 285 & Reading tasks are good in that program. & 4/27/2021 5:45 PM \\
\hline 286 & He understands the system now. & 4/27/2021 5:44 PM \\
\hline 287 & It's definitely fun way if learning instead of on paper and pencil. He has shown lots of improvement. & 4/27/2021 5:42 PM \\
\hline 288 & self paced and guided difficulty level & 4/27/2021 5:40 PM \\
\hline 289 & She likes the games, but she says the lessons are too easy for her and I think this has something to do with the assessments not being accurate. & 4/27/2021 5:24 PM \\
\hline 290 & Thinks it's fun & 4/27/2021 5:19 PM \\
\hline 291 & Practice & 4/27/2021 5:18 PM \\
\hline 292 & Counting and solve the problem & 4/27/2021 5:18 PM \\
\hline 293 & Easy to use & 4/27/2021 5:14 PM \\
\hline 294 & Progression of moving forward in Math / Reading & 4/27/2021 5:10 PM \\
\hline 295 & Nothing. If he is not in a physical classroom, he does not pay attention to any of lessons. & 4/27/2021 5:03 PM \\
\hline 296 & Nothing it does not clock the correct time limit & 4/27/2021 5:00 PM \\
\hline 297 & It allows him to work ahead of his grade level curriculum. & 4/27/2021 4:54 PM \\
\hline 298 & nothing & 4/27/2021 4:52 PM \\
\hline 299 & There break and fun stuff so he is not board. & 4/27/2021 4:42 PM \\
\hline 300 & It's a good review & 4/27/2021 4:36 PM \\
\hline 301 & Gets to understand the meanings of words. & 4/27/2021 4:35 PM \\
\hline 302 & My child is very engaged with the math lessons-it's animated and a fun change from his workbook. I like how the lesson format varies and the quiz helps to see what he needs more work on. He also really likes the reading portion. Again presenting material in many ways(his teacher, us worksheets, stories, flash cards, etc) is helpful for students as they all learn in different ways. I appreciate if he struggles with a concept or word, the program recognizes that and provides more practice on that skill before advancing. & 4/27/2021 4:35 PM \\
\hline 303 & He enjoys it! & 4/27/2021 4:34 PM \\
\hline 304 & Extra knowledge & 4/27/2021 4:32 PM \\
\hline
\end{tabular}
i-Ready Spring 2021 Feedback Survey - Families/English
\begin{tabular}{|c|c|c|}
\hline 305 & Don't know. & 4/27/2021 4:32 PM \\
\hline 306 & Extra knowledge & 4/27/2021 4:30 PM \\
\hline 307 & Nothing & 4/27/2021 4:29 PM \\
\hline 308 & Math & 4/27/2021 4:24 PM \\
\hline 309 & learn more about the topics and have a good place to study & 4/27/2021 4:23 PM \\
\hline 310 & Reading level growing up. & 4/27/2021 4:21 PM \\
\hline 311 & Doing good at school & 4/27/2021 4:17 PM \\
\hline 312 & My son has become very confident solving pretty complex math problems. He also has gained very good knowledge in deciphering reading texts and learned a great deal of vocabulary. & 4/27/2021 4:15 PM \\
\hline 313 & User friendly & 4/27/2021 4:14 PM \\
\hline 314 & Doing good at school & 4/27/2021 4:13 PM \\
\hline 315 & Academic performance & 4/27/2021 4:08 PM \\
\hline 316 & Academic performance & 4/27/2021 4:05 PM \\
\hline 317 & Less Zoom and more video game like play learning programs. iReady is big hit in our house for K and 2nd grade. & 4/27/2021 4:04 PM \\
\hline 318 & He can mostly work on his own and learn from his mistakes & 4/27/2021 4:04 PM \\
\hline 319 & Helps her with reading skills and math skills & 4/27/2021 4:02 PM \\
\hline 320 & Academic performance & 4/27/2021 4:01 PM \\
\hline 321 & Nothing & 4/27/2021 3:55 PM \\
\hline 322 & My son can complete a single reading lesson in (usually) under 25 minutes. & 4/27/2021 3:52 PM \\
\hline 323 & Easy and quick to login to. Very convenient to tell them to login and spend time doing math or reading iReady. & 4/27/2021 3:51 PM \\
\hline 324 & He loves it, the lessons are fun and cute and he is engaged & 4/27/2021 3:49 PM \\
\hline 325 & She has fun, is challenged to win points, improves skills & 4/27/2021 3:49 PM \\
\hline 326 & Quick manageable lessons, easy for me to instruct and help with, they like it and find it enjoyable & 4/27/2021 3:48 PM \\
\hline 327 & It gives her something to do when not able to do direct learning w/ her teacher and provide practice. & 4/27/2021 3:48 PM \\
\hline 328 & It gives him something to do when not able to do direct learning w/ his teacher. & 4/27/2021 3:45 PM \\
\hline 329 & Loves the math but reading is difficult for him & 4/27/2021 3:43 PM \\
\hline 330 & Pretty easy to do remotely without assistance & 4/27/2021 3:40 PM \\
\hline 331 & Setting a routine & 4/27/2021 3:37 PM \\
\hline 332 & she enjoys doing math & 4/27/2021 3:35 PM \\
\hline 333 & Some of the visuals in the math are helpful & 4/27/2021 3:34 PM \\
\hline 334 & Likes the animation & 4/27/2021 3:33 PM \\
\hline 335 & Personalized lessons & 4/27/2021 3:32 PM \\
\hline 336 & Helps with Math and Reading comprehension & 4/27/2021 3:26 PM \\
\hline 337 & not sure & 4/27/2021 3:24 PM \\
\hline 338 & The helpers and limit amount each day & 4/27/2021 3:22 PM \\
\hline 339 & Discovery of accelerated learning & 4/27/2021 3:17 PM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 340 & Good focus on the lessons and leveling up as encouragement. & 4/27/2021 3:17 PM \\
\hline 341 & My son is doing well on it. & 4/27/2021 3:16 PM \\
\hline 342 & Easy to use, fun for them to stay engaged. & 4/27/2021 3:14 PM \\
\hline 343 & Able to do math at his speed & 4/27/2021 3:11 PM \\
\hline 344 & Increase of understanding of subjects & 4/27/2021 3:11 PM \\
\hline 345 & Practicing & 4/27/2021 3:10 PM \\
\hline 346 & She likes the characters and counting games & 4/27/2021 3:05 PM \\
\hline 347 & Fun animations and characters, variety of work assignments & 4/27/2021 3:03 PM \\
\hline 348 & Engagement with material & 4/27/2021 3:03 PM \\
\hline 349 & It is easy to use. & 4/27/2021 3:02 PM \\
\hline 350 & It is pretty easy to use. & 4/27/2021 3:00 PM \\
\hline 351 & improve and good while remotely learning & 4/27/2021 2:53 PM \\
\hline 352 & I can see how it can be good for reinforcing lessons & 4/27/2021 2:53 PM \\
\hline 353 & It's easily accessible. & 4/27/2021 2:52 PM \\
\hline 354 & I guess it gives them a concrete metric for their performance. & 4/27/2021 2:51 PM \\
\hline 355 & ? & 4/27/2021 2:46 PM \\
\hline 356 & There are aspects of iready that are positive but it cannot replace in person instruction. My son hates it and it causes challenges in our household. If it was not such a large part of his education this year (ie, if it was in a limited way in the classroom in person) I could see some value in it. First graders should not receive the majority of their education through a tool like this. & 4/27/2021 2:46 PM \\
\hline 357 & 2021 & 4/27/2021 2:42 PM \\
\hline 358 & The Repetition is good practice & 4/27/2021 2:41 PM \\
\hline 359 & They are learning to read a wide variety of text and advancing in math by supplementing classroom learning & 4/27/2021 2:40 PM \\
\hline 360 & Great & 4/27/2021 2:36 PM \\
\hline 361 & The assessment was reasonable and adaptive. We're able to access the my path. & 4/27/2021 2:33 PM \\
\hline 362 & Both subjects - math \& reading. & 4/27/2021 2:31 PM \\
\hline 363 & Reading more faster . & 4/27/2021 2:30 PM \\
\hline 364 & Math and reading. & 4/27/2021 2:25 PM \\
\hline 365 & Lessons. Assessment is not accurate, in my opinion. & 4/27/2021 2:25 PM \\
\hline 366 & yes but better in person will be better this school year & 4/27/2021 2:17 PM \\
\hline 367 & Having practice available even when the teacher is not. & 4/27/2021 2:17 PM \\
\hline 368 & It makes it fun. It also walks him through things that he is not getting correct. & 4/27/2021 2:16 PM \\
\hline 369 & Ability to self-direct & 4/27/2021 2:14 PM \\
\hline 370 & She is learning reading concepts and skills. & 4/27/2021 2:13 PM \\
\hline 371 & She hates iready & 4/27/2021 2:12 PM \\
\hline 372 & It is a good reference point and course refresher & 4/27/2021 2:10 PM \\
\hline 373 & Gaps in learning are being filled. & 4/27/2021 2:09 PM \\
\hline 374 & It is a good way to keep the little ones independently focused & 4/27/2021 2:08 PM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 375 & She is learning and comprehension is better for sure & 4/27/2021 2:08 PM \\
\hline 376 & Useful for independent learning time. & 4/27/2021 2:05 PM \\
\hline 377 & N/A & 4/27/2021 2:02 PM \\
\hline 378 & Challenging & 4/27/2021 2:01 PM \\
\hline 379 & Nothing & 4/27/2021 1:55 PM \\
\hline 380 & Math and reading & 4/27/2021 1:54 PM \\
\hline 381 & Lots of reading & 4/27/2021 1:52 PM \\
\hline 382 & Nothing. & 4/27/2021 1:51 PM \\
\hline 383 & Math & 4/27/2021 1:47 PM \\
\hline 384 & It stays below the level my child is at. It is not challenging and is very frustrating for my child. & 4/27/2021 1:46 PM \\
\hline 385 & Not much & 4/27/2021 1:45 PM \\
\hline 386 & He liked it for the first few times, but it felt like the last thing he wanted or needed was more computer time. It's not an effective way for him to learn math concepts. & 4/27/2021 1:45 PM \\
\hline 387 & I think he's benefiting particularly from the math instruction. & 4/27/2021 1:44 PM \\
\hline 388 & Content is consistent and mostly manageable as independent practice. & 4/27/2021 1:44 PM \\
\hline 389 & Nothing, all frustration and the learning is a joke & 4/27/2021 1:39 PM \\
\hline 390 & N/A - Haven't seen any communication about this from teacher nor has my student told me about it. Therefore it doesn't seem to be useful. & 4/27/2021 1:39 PM \\
\hline 391 & she is very engaged and reports liking it, seems like a very effective learning tool. & 4/27/2021 1:38 PM \\
\hline 392 & Nothing is going well with it. Frustration and not enough learning & 4/27/2021 1:37 PM \\
\hline 393 & Back fill older topics. Extra reading practice & 4/27/2021 1:30 PM \\
\hline 394 & Following instructions & 4/27/2021 1:29 PM \\
\hline 395 & Math & 4/27/2021 1:28 PM \\
\hline 396 & My student stays engaged in the i-ready program & 4/27/2021 1:26 PM \\
\hline 397 & My student knows that each of his teachers (Math \& English) assign a specific amount of time for each iReady every week. He knows it is expected and he tends to stay on task while in an iReady lesson. & 4/27/2021 1:20 PM \\
\hline 398 & It's fun for them while learning & 4/27/2021 1:19 PM \\
\hline 399 & He engages well with online tools and this has been a great help to his other learning tools. & 4/27/2021 1:19 PM \\
\hline 400 & She gets excited about iReady and genuinely enjoys it & 4/27/2021 1:18 PM \\
\hline 401 & The ability to supplement curriculum for online schooling. & 4/27/2021 1:18 PM \\
\hline 402 & I like that there is a timer that helps my student monitor how long he has been working. & 4/27/2021 1:16 PM \\
\hline 403 & It's something he is able to do independently without parental/teacher help, and he likes the independence. & 4/27/2021 1:16 PM \\
\hline 404 & He likes doing it. & 4/27/2021 1:12 PM \\
\hline 405 & They don't need my instruction. They can do it on their own. & 4/27/2021 1:11 PM \\
\hline 406 & Every time we go in I-ready we are put back in a diagnostic. We have spent so much time doing a test over the year and never actually doing regular work. Once when we were placed it was on super easy place value and then that was boring. It takes way too long to listen to the instructions and click on all their boxes. It is babyish and there is no option to move forward if you understand the concept. So nothing is going well. I would much rather use Prodigy or Kahn or something more effective. & 4/27/2021 1:10 PM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 407 & The time and some of instruction. & 4/27/2021 1:09 PM \\
\hline 408 & Once on the path has good work to do. & 4/27/2021 1:08 PM \\
\hline 409 & This a great resource for independent learning on Asynchronous days. She can be independent while learning. & 4/27/2021 1:05 PM \\
\hline 410 & My student is motivated by the games that come sometimes during iready. & 4/27/2021 1:03 PM \\
\hline 411 & It makes learning fun with the little characters & 4/27/2021 1:00 PM \\
\hline 412 & She enjoys it more than doing work on paper because it's more engaging. & 4/27/2021 12:59 PM \\
\hline 413 & Reading & 4/27/2021 12:58 PM \\
\hline 414 & I want him to have extra work to do & 4/27/2021 12:58 PM \\
\hline 415 & Reading & 4/27/2021 12:55 PM \\
\hline 416 & Improving Math skills & 4/27/2021 12:54 PM \\
\hline 417 & Difficult to specify & 4/27/2021 12:52 PM \\
\hline 418 & Improving math skills and understand the questions & 4/27/2021 12:50 PM \\
\hline 419 & I like he can learn math and improve reading skills & 4/27/2021 12:49 PM \\
\hline 420 & Can do at her own pace and when she is in her best frame of mind to do so. & 4/27/2021 12:48 PM \\
\hline 421 & It is an independent activity my child can do and feel somewhat confident. & 4/27/2021 12:47 PM \\
\hline 422 & Consistent tool to use that seems more engaging then just worksheets & 4/27/2021 12:45 PM \\
\hline 423 & It's allowing independent study that seems helpful. & 4/27/2021 12:45 PM \\
\hline 424 & He's engaged, he likes to do the work and play the game afterwards & 4/27/2021 12:44 PM \\
\hline 425 & Overview & 4/27/2021 12:43 PM \\
\hline 426 & In person learning. & 4/27/2021 12:40 PM \\
\hline 427 & Can use it independently of waiting for teacher assignment & 4/27/2021 12:37 PM \\
\hline 428 & Can do it on their own & 4/27/2021 12:36 PM \\
\hline 429 & Fun & 4/27/2021 12:35 PM \\
\hline 430 & I have three kids in district. All HATE iReady. & 4/27/2021 12:34 PM \\
\hline 431 & Reading & 4/27/2021 12:34 PM \\
\hline 432 & I-Ready has kept my son engaged, interested and excited to do his math \& reading lessons every week. It seems to be fun and "game" like with interactive learning, which is PERFECT for my son's learning style. & 4/27/2021 12:34 PM \\
\hline 433 & Enjoys not being in a zoom & 4/27/2021 12:33 PM \\
\hline 434 & Lessons are good... practice then testing & 4/27/2021 12:32 PM \\
\hline 435 & My son is very excited to use I-ready math. It doesn't feel like he's doing school work. & 4/27/2021 12:32 PM \\
\hline 436 & My child liked it at the beginning of school with a teacher who did about an hour per week per subject (math/reading). We moved teachers and my child now does about 2.5 hours per week for each subject! 5 hours total on iready. & 4/27/2021 12:32 PM \\
\hline 437 & It is convenient and engaging & 4/27/2021 12:31 PM \\
\hline 438 & From what I can see it is clear instruction and easy to use. If I were the kid taking it I would be burning through it, but not all kids are motivated like that. & 4/27/2021 12:30 PM \\
\hline 439 & Reading and math & 4/27/2021 12:30 PM \\
\hline 440 & The teaching instructions in Math are good but I wish it went with what they were learning in class. Reading assessments don't really align to my child's reading capability so the lessons are just okay. & 4/27/2021 12:29 PM \\
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\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 441 & having fun with the games & 4/27/2021 12:28 PM \\
\hline 442 & He likes it, but he has trouble regulating his computer use and behavior. Once he is on it, it is very difficult for him to stop using his computer. More than 20 minutes of computer use leads to dysregulated behavior, and conflict. & 4/27/2021 12:26 PM \\
\hline 443 & It is fairly easy to sign in and follow the instructions - not confusing like some other applications. & 4/27/2021 12:25 PM \\
\hline 444 & The format is very user friendly. & 4/27/2021 12:23 PM \\
\hline 445 & independent work & 4/27/2021 12:23 PM \\
\hline 446 & There is nothing good I can say about this program. & 4/27/2021 12:22 PM \\
\hline 447 & Iready is helping my child to learn more as being 5th I felt the learning is not enough to go to middle school so I encourage my son to finish math and reading everyday & 4/27/2021 12:22 PM \\
\hline 448 & The program is very user friendly for both students and parents checking progress. & 4/27/2021 12:21 PM \\
\hline 449 & Nothing & 4/27/2021 12:20 PM \\
\hline 450 & The math is great. Easy to understand and follow along for my student. & 4/27/2021 12:20 PM \\
\hline 451 & Reading is sometimes fun. & 4/27/2021 12:20 PM \\
\hline 452 & Supports what was learned in class & 4/27/2021 12:20 PM \\
\hline 453 & another tool & 4/27/2021 12:20 PM \\
\hline 454 & The format and opportunity for game breaks & 4/27/2021 12:16 PM \\
\hline 455 & Nothing. He barely pays attention while on iReady. It's hard to get him to start iReady. He usually throws a fit when asked to do iReady. I don't believe the program works. & 4/27/2021 12:14 PM \\
\hline 456 & Keeps my child continuing math and reading. & 4/27/2021 12:14 PM \\
\hline 457 & Different examples shown on how to complete math problems. With reading it is engaging . & 4/27/2021 12:14 PM \\
\hline 458 & He enriches his vocabulary and knowledge & 4/27/2021 12:12 PM \\
\hline 459 & Review & 4/27/2021 12:12 PM \\
\hline 460 & Diagnosis is quite different that she is. & 4/27/2021 12:11 PM \\
\hline 461 & Reading has been going well. It progresses well and keeps my child engaged. Math i-ready has a very slow progression and my child becomes very frustrated with the speed. The questions take a long time individually and the program stays on the same thing longer than I-ready reading. & 4/27/2021 12:11 PM \\
\hline 462 & She enriches her vocabulary & 4/27/2021 12:10 PM \\
\hline 463 & Easy to use and complete the lessons & 4/27/2021 12:09 PM \\
\hline 464 & Good at using up time & 4/27/2021 12:06 PM \\
\hline 465 & Yes & 4/27/2021 12:06 PM \\
\hline 466 & Easy for him to access on his own. & 4/27/2021 12:06 PM \\
\hline 467 & another way to access instruction & 4/27/2021 12:04 PM \\
\hline 468 & Everything & 4/27/2021 12:04 PM \\
\hline 469 & Math is very helpful & 4/27/2021 12:03 PM \\
\hline 470 & Immediate feedback & 4/27/2021 12:03 PM \\
\hline 471 & Dependable platform & 4/27/2021 12:02 PM \\
\hline 472 & Able to navigate easily without help. & 4/27/2021 12:02 PM \\
\hline 473 & I don't know & 4/27/2021 12:01 PM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 474 & My son likes the stories in the reading section & 4/27/2021 12:01 PM \\
\hline 475 & It helps him see where he is with math and helps make learning more interesting. & 4/27/2021 11:59 AM \\
\hline 476 & Math reading & 4/27/2021 11:58 AM \\
\hline 477 & I like how it adapts to current level. The math seems to do this especially well and encourage growth. & 4/27/2021 11:57 AM \\
\hline 478 & Able to log in and navigate alone. & 4/27/2021 11:57 AM \\
\hline 479 & I'm sure he has learned and improved his reading, etc & 4/27/2021 11:57 AM \\
\hline 480 & Filling gaps and helping with non-fiction text comprehension. Useful on Asynchronous days. & 4/27/2021 11:56 AM \\
\hline 481 & Earning credits are great incentives for my child & 4/27/2021 11:56 AM \\
\hline 482 & It's individual to their progress and she likes the practice learning games. & 4/27/2021 11:55 AM \\
\hline 483 & It is easy for them to sign on, and instructions are clear, so there is not a lot of troubleshooting. & 4/27/2021 11:55 AM \\
\hline 484 & He is progressing with reading & 4/27/2021 11:54 AM \\
\hline 485 & She prefers I ready reading to Lexia. The content is usually more interesting and motivating. & 4/27/2021 11:52 AM \\
\hline 486 & Easier program to navigate. Optional examples assist with learning skills. & 4/27/2021 11:52 AM \\
\hline 487 & My daughter does well in math, but gets easily frustrated on the reading portion. & 4/27/2021 11:52 AM \\
\hline 488 & My child likes that there is the reward of a game for answering questions. & 4/27/2021 11:51 AM \\
\hline 489 & Learns new information and hels with thr reading process, new words etc. Also math is a well based explain. & 4/27/2021 11:51 AM \\
\hline 490 & Works great with at home learning. & 4/27/2021 11:50 AM \\
\hline 491 & Very good examples and engaging activities. Also able to move at his pace. & 4/27/2021 11:50 AM \\
\hline 492 & Math & 4/27/2021 11:50 AM \\
\hline 493 & Works great with at home learning! & 4/27/2021 11:49 AM \\
\hline 494 & Easy to follow, seems like a game. & 4/27/2021 11:46 AM \\
\hline 495 & Fun way to learn math concepts and vocabulary. & 4/27/2021 11:46 AM \\
\hline 496 & Easy to use & 4/27/2021 11:45 AM \\
\hline 497 & Diagnostics ok, easy to use & 4/27/2021 11:44 AM \\
\hline 498 & They really enjoy using it. It keeps him motivated. & 4/27/2021 11:43 AM \\
\hline 499 & My daughter LOVES this program for both math and reading. & 4/27/2021 11:43 AM \\
\hline 500 & He likes to do math more than reading & 4/27/2021 11:43 AM \\
\hline 501 & Seems to support reading more than math. She likes the characters and the interactivity keeps it fun. & 4/27/2021 11:43 AM \\
\hline 502 & He learned fractions in i-ready which is not yet discussed in his Math class & 4/27/2021 11:42 AM \\
\hline 503 & Nothing. Its a huge stressor for my student. & 4/27/2021 11:41 AM \\
\hline 504 & How proficient he is at math/reading now & 4/27/2021 11:40 AM \\
\hline 505 & How the platform operates is nice and easy for my daughter to follow along. The instruction, practice and then quiz is nice. & 4/27/2021 11:40 AM \\
\hline 506 & He seems to like it. I do not like how its an app and that parents need a user name and password. That's too much to ask. & 4/27/2021 11:39 AM \\
\hline 507 & Nothing. Its a huge stressor for my student. & 4/27/2021 11:39 AM \\
\hline 508 & I don't care for the style that iReady uses, nor does it seem to be very engaging for my son's & 4/27/2021 11:39 AM \\
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\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
learning style. It doesn't actually seem to teach much. Last year, our kindergarten teacher gave us access to Moby Max. I wish we still were using that program. There were lessons followed by exercises. It seemed age appropriate and even my preschooler was engaged and learned a lot! My son learned so much and I was surprised at what he was able to retain from the lessons. For instance, he learned how to tell time, which is something they are just now being introduced to at the end of first grade. I would love if we had access to Moby Max once again. I do not care for iReady and do not think the school district should spend money on continued use.
\begin{tabular}{|c|c|c|}
\hline 509 & Extra practice & 4/27/2021 11:38 AM \\
\hline 510 & nothing. It is not engaging and the problems to not match what is covered in class. It has been assigned as a replacement to instruction. & 4/27/2021 11:37 AM \\
\hline 511 & nothing & 4/27/2021 11:36 AM \\
\hline 512 & Allows for independent working. And captured metrics. & 4/27/2021 11:36 AM \\
\hline 513 & Extra practice & 4/27/2021 11:36 AM \\
\hline 514 & Nothing. The kids need to be in school without masks on. & 4/27/2021 11:35 AM \\
\hline 515 & I haven't noticed anything & 4/27/2021 11:34 AM \\
\hline 516 & Consistent usage has been good & 4/27/2021 11:34 AM \\
\hline 517 & Treats it like a game. Seems enthusiastic & 4/27/2021 11:33 AM \\
\hline 518 & Becoming faster at math facts & 4/27/2021 11:33 AM \\
\hline 519 & Targeted instruction & 4/27/2021 11:33 AM \\
\hline 520 & I-Ready supports the learning program her teacher utilizes. & 4/27/2021 11:33 AM \\
\hline 521 & He enjoys the reading passages as there is something different to learn in each passage. & 4/27/2021 11:32 AM \\
\hline 522 & Better reading skills & 4/27/2021 11:30 AM \\
\hline 523 & It's helpful practice that keeps my electronically inclined child engaged & 4/27/2021 11:30 AM \\
\hline 524 & Individualized, targeted instruction. Move at her own pace & 4/27/2021 11:29 AM \\
\hline 525 & Easy to use & 4/27/2021 11:29 AM \\
\hline 526 & My son likes doing math in I-ready & 4/27/2021 11:29 AM \\
\hline 527 & My student likes the iReady reading. I'd continue using if the teachers think it's best. & 4/27/2021 11:28 AM \\
\hline 528 & She is able to complete the lessons by herself with no instruction from me. & 4/27/2021 11:28 AM \\
\hline 529 & My child does not like i-Ready. He finds it boring and is tired of being taught by computer programs and not the teacher. & 4/27/2021 11:27 AM \\
\hline 530 & Reading skill & 4/27/2021 11:27 AM \\
\hline 531 & It helps teach my daughter reading and math without having me intervene & 4/27/2021 11:26 AM \\
\hline 532 & Math & 4/27/2021 11:25 AM \\
\hline 533 & He really likes the monsters in i-Ready. He enjoys using the program. & 4/27/2021 11:25 AM \\
\hline 534 & Vocabulary building & 4/27/2021 11:25 AM \\
\hline 535 & Comprehension mostly & 4/27/2021 11:24 AM \\
\hline 536 & Nothing. & 4/27/2021 11:23 AM \\
\hline 537 & He enjoys playing the games & 4/27/2021 11:23 AM \\
\hline 538 & Helps in improving her skill levels & 4/27/2021 11:23 AM \\
\hline 539 & Reading & 4/27/2021 11:22 AM \\
\hline 540 & It helped his his reading comprehension and math as well. & 4/27/2021 11:22 AM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 541 & He enjoys the characters & 4/27/2021 11:22 AM \\
\hline 542 & they like the games, but hate the computer time & 4/27/2021 11:21 AM \\
\hline 543 & It's come thing they can do at their own pace and not feel rushed. & 4/27/2021 11:21 AM \\
\hline 544 & My daughter just seems to enjoy using iready. I think its fun and engaging for her. When I listened in it seemed like she was learning something. & 4/27/2021 11:21 AM \\
\hline 545 & Both her math and reading comprehension has improved based on the personalized lessons for her & 4/27/2021 11:21 AM \\
\hline 546 & My student did not enjoy this program at all. She felt it was childish for her grade level (8th), repetitive, and did not correlate to what they were learning in class. & 4/27/2021 11:20 AM \\
\hline 547 & n/a & 4/27/2021 11:19 AM \\
\hline 548 & The online school in general didn't really help her as she struggled to keep up with assignments and tasks & 4/27/2021 11:19 AM \\
\hline 549 & She understands how to login and likes the math and reading lessons. :-) & 4/27/2021 11:19 AM \\
\hline 550 & I actually don't see any benefits. & 4/27/2021 11:18 AM \\
\hline 551 & Another outlet for learning when in-person wasn't available & 4/27/2021 11:17 AM \\
\hline 552 & Not repetitive & 4/27/2021 11:16 AM \\
\hline 553 & lessons & 4/27/2021 11:16 AM \\
\hline 554 & She thinks it's fun which helps with learning. She likes the characters and that they make it entertaining. She has progressed a lot because of iready & 4/27/2021 11:16 AM \\
\hline 555 & She has fun while using it. & 4/27/2021 11:16 AM \\
\hline 556 & Not repetitive & 4/27/2021 11:15 AM \\
\hline 557 & It is great to have targeted instruction & 4/27/2021 11:14 AM \\
\hline 558 & It is great to have targeted instruction & 4/27/2021 11:13 AM \\
\hline 559 & Easy to follow & 4/27/2021 11:12 AM \\
\hline 560 & Math practice & 4/27/2021 11:11 AM \\
\hline 561 & Consistency using the same program as fifth grade. The fact that iReady can be assigned by teachers or kids can work on their own path. & 4/27/2021 11:11 AM \\
\hline 562 & Fun \& Educational & 4/27/2021 11:11 AM \\
\hline 563 & Nothing. They find the lessons uninformative \& repetitive & 4/27/2021 11:11 AM \\
\hline 564 & Very easy for kids to understand instructions & 4/27/2021 11:10 AM \\
\hline 565 & Unsure. She does not enjoy using the program. & 4/27/2021 11:10 AM \\
\hline 566 & He enjoys the games and I don't find them detrimental. & 4/27/2021 11:10 AM \\
\hline 567 & We hold him to the recommended requirements, but we find the math is often lagging what instruction he is focused on in class. He has learned to pay better attention during the reading modules in order to get correct answers & 4/27/2021 11:10 AM \\
\hline 568 & My daughter who has struggled in math has used iReady all year. It's helped her understand place value and how numbers change. It's been great for intervention for her. & 4/27/2021 11:09 AM \\
\hline 569 & It fills part of their at-home learning day. & 4/27/2021 11:09 AM \\
\hline 570 & My fifth grader is in an intensive support class and her fine motor skills don't allow her to show what she understands and get adequate practice on new skills if she doesn't have an app that provides touchscreen capacity to engage with a program. iReady gives her a high quality, motivating, and personal skill-level appropriate access to math. & 4/27/2021 11:08 AM \\
\hline 571 & Lessons are at her level & 4/27/2021 11:07 AM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 572 & continues learning & 4/27/2021 11:07 AM \\
\hline 573 & He has learned some things through it. & 4/27/2021 11:07 AM \\
\hline 574 & Nothing. I-ready takes much too ling and frustrates my daughter, also the quantifying of questions is too ling for one setting. Even as an adult trying to support my daughters questions, I-ready is very frustrating & 4/27/2021 11:07 AM \\
\hline 575 & The assessments are tough going for this age and were not accurate in placement. However, since the level was adjusted by my child's teacher (more advanced), it has been a great tool. We love iReady here! & 4/27/2021 11:07 AM \\
\hline 576 & Keeps them busy & 4/27/2021 11:07 AM \\
\hline 577 & If they did well on teh diagnostic it might challenge them with new learning. & 4/27/2021 11:06 AM \\
\hline 578 & Ability to learn at own pace and level & 4/27/2021 11:06 AM \\
\hline 579 & After demanding that he put effort into iready otherwise I will take away all his electronics, I finally got him to pay attention long enough to pass 1 lesson. He got an \(82 \%\), which means that he's fully capable of understanding the content, he just hates iready SO MUCH that he skips though it and fails. & 4/27/2021 11:06 AM \\
\hline 580 & It gives him something to do when working remotely. & 4/27/2021 11:05 AM \\
\hline 581 & Extra learning on asynchronous days & 4/27/2021 11:05 AM \\
\hline 582 & I think it effectively gives your child lessons based on their comprehension & 4/27/2021 11:05 AM \\
\hline 583 & He enjoys it and it keeps getting harder as he goes & 4/27/2021 11:05 AM \\
\hline 584 & She can competently complete all My Path activities. & 4/27/2021 11:05 AM \\
\hline 585 & According to my student, past learning refreshers are helpful and consistent & 4/27/2021 11:05 AM \\
\hline 586 & Progressing and learning. & 4/27/2021 11:04 AM \\
\hline 587 & The extra learning on asynchronous days & 4/27/2021 11:04 AM \\
\hline 588 & It has fun characters that help her keep engaged in an online setting. Other online tools are not as much fun. & 4/27/2021 11:03 AM \\
\hline 589 & My son enjoys the program and it's structure works well for him and encourages him to engage with it & 4/27/2021 11:03 AM \\
\hline 590 & provides practice for what he already learned in class & 4/27/2021 11:03 AM \\
\hline 591 & Reading stamina has improved & 4/27/2021 11:03 AM \\
\hline 592 & The diagnostic tests placed my son inaccurately twice now and teacher says only way to fix is to re do the test. Which is torture. Once it placed him accurately the lessons are good supplemental practice in skills he needs to improve. & 4/27/2021 11:03 AM \\
\hline 593 & He enjoys the different activities & 4/27/2021 11:02 AM \\
\hline 594 & He has fun with it & 4/27/2021 11:02 AM \\
\hline 595 & They like the math games & 4/27/2021 11:02 AM \\
\hline 596 & Out of all of the subscription programs this one seems to actually evaluate, adapt to student and PRODUCE results. & 4/27/2021 11:02 AM \\
\hline 597 & Help her to become independent & 4/27/2021 11:02 AM \\
\hline 598 & He likes some activities there (learning games) & 4/27/2021 11:01 AM \\
\hline 599 & It's not going well. I can elaborate. & 4/27/2021 11:01 AM \\
\hline 600 & Understanding math problem & 4/27/2021 11:00 AM \\
\hline 601 & Great & 4/27/2021 11:00 AM \\
\hline 602 & Good practicing testing skills & 4/27/2021 11:00 AM \\
\hline
\end{tabular}
i-Ready Spring 2021 Feedback Survey - Families/English
\begin{tabular}{|c|c|c|}
\hline 603 & the constant practice of concepts & 4/27/2021 11:00 AM \\
\hline 604 & iReady makes learning feel like a game, which my child responds to & 4/27/2021 10:59 AM \\
\hline 605 & Nothing - they both would rather have IXL which worked for them better. & 4/27/2021 10:59 AM \\
\hline 606 & They like the math games & 4/27/2021 10:59 AM \\
\hline 607 & Understanding math problem & 4/27/2021 10:59 AM \\
\hline 608 & it is good practice of skills & 4/27/2021 10:59 AM \\
\hline 609 & I think my child need scheduled a time to keep work on it. & 4/27/2021 10:59 AM \\
\hline 610 & My student enjoys math and this program is interactive which makes the process of counting fun for them & 4/27/2021 10:59 AM \\
\hline 611 & Nothing- My son hates iReady & 4/27/2021 10:59 AM \\
\hline 612 & The "fun" aspect & 4/27/2021 10:58 AM \\
\hline 613 & Maintaining readiness in math and reading. & 4/27/2021 10:57 AM \\
\hline 614 & he likes the graphics & 4/27/2021 10:57 AM \\
\hline 615 & I can say what's not going well is my daughter says I ready isn't counting her minutes so that has been frustrating for her. It makes it look to her teacher that she has done less work than she actually did & 4/27/2021 10:57 AM \\
\hline 616 & Math is going ok but the reading is not. The reading levels do not accuratly give a true picture of where my son is at and \(i\) find that it is more frustrating than helpful & 4/27/2021 10:57 AM \\
\hline 617 & It makes her do something. & 4/27/2021 10:57 AM \\
\hline 618 & It seems pretty easy to use on his own & 4/27/2021 10:56 AM \\
\hline 619 & It is helping them to be self sufficient to learn on their own & 4/27/2021 10:56 AM \\
\hline 620 & My daughter enjoys the little silly characters especially. I have my daughter complete at least 1 of each lesson each weekday and some days she decides that she wants to do more of one or the other. It took her a while to find her rhythm but she seems to be really enjoying the lessons now. & 4/27/2021 10:56 AM \\
\hline 621 & It gives my daughter extra work to help her understand on how to do the work that she is doing in class. & 4/27/2021 10:54 AM \\
\hline 622 & Not wo well in both math and reading. Prefer MobyMaxx for math. & 4/27/2021 10:54 AM \\
\hline 623 & It's easy to use and help maintain accountability & 4/27/2021 10:53 AM \\
\hline 624 & lessone & 4/27/2021 10:53 AM \\
\hline 625 & Helps supplement work during non-live instruction days & 4/27/2021 10:53 AM \\
\hline 626 & Nothing & 4/27/2021 10:53 AM \\
\hline 627 & The math she did okay with & 4/27/2021 10:53 AM \\
\hline 628 & Reinforcement of lessons; learning how to do independent learning & 4/27/2021 10:53 AM \\
\hline 629 & He says it's fun and engaging. & 4/27/2021 10:52 AM \\
\hline 630 & Additional practice time, reinforcing what he learnt in the past & 4/27/2021 10:52 AM \\
\hline 631 & It was going well to use I-Ready on independent study days. & 4/27/2021 10:52 AM \\
\hline 632 & Works independently and efficiently. Enjoys the program & 4/27/2021 10:51 AM \\
\hline 633 & Not much really- I think she likes the Math better than the Reading & 4/27/2021 10:51 AM \\
\hline 634 & Something to do on asynchronous days & 4/27/2021 10:51 AM \\
\hline 635 & My kindergartener likes the games you can earn by using I-Ready. & 4/27/2021 10:51 AM \\
\hline 636 & She really enjoys it a lot. It's nice that she is enthusiastic about a learning program. & 4/27/2021 10:50 AM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 637 & My second grader says it's too easy and she hates it. & 4/27/2021 10:50 AM \\
\hline 638 & It allows my son to learn at his own pace and he retains the information. & 4/27/2021 10:50 AM \\
\hline 639 & She hates doing it. Especially Math. For reading it's a little better but she prefers Lailo. The visual piece of math can help but sometimes the questions are confusin and she has to ask me what she is supposed to do. & 4/27/2021 10:50 AM \\
\hline 640 & I don't think it's useful. & 4/27/2021 10:50 AM \\
\hline 641 & My children didn't learn anything from I-Ready. Just waist of there learning time. & 4/27/2021 10:50 AM \\
\hline 642 & Easy to access and get into the current path & 4/27/2021 10:50 AM \\
\hline 643 & It's fun like a game so she likes it & 4/27/2021 10:49 AM \\
\hline 644 & That it is at her level so she is less likely to get frustrated. & 4/27/2021 10:49 AM \\
\hline 645 & My student enjoys Yupe and Plory. & 4/27/2021 10:49 AM \\
\hline 646 & She likes the feedback she gets with iReady. And it's easy for me to do a quick check of how many minutes a week she's completed. I think it's a great supplementary program. It gives so much I sight for the teacher to determine what they should focus on in class & 4/27/2021 10:49 AM \\
\hline 647 & Good timing and games to keep attention. & 4/27/2021 10:48 AM \\
\hline 648 & It adapts to what they know and parts they don't know so well. It is nice to be able to get extra practice in areas they don't know and be able to quickly review and move on from the areas they already know and understand. & 4/27/2021 10:48 AM \\
\hline 649 & Nothing. It is frustrating and makes my child feel alone in their learning. & 4/27/2021 10:48 AM \\
\hline 650 & Reading help & 4/27/2021 10:47 AM \\
\hline 651 & Repetition helps understanding the concepts & 4/27/2021 10:47 AM \\
\hline 652 & They enjoy the games. & 4/27/2021 10:47 AM \\
\hline 653 & nothing & 4/27/2021 10:47 AM \\
\hline 654 & That there is always some work to do. when paper assignments are completed then there's nothing else to do but with i-ready, my child can work more if necessary as there's work available to do. & 4/27/2021 10:46 AM \\
\hline 655 & We have not seen the diagnostic data yet so it's difficult to tell. & 4/27/2021 10:46 AM \\
\hline 656 & Nothing & 4/27/2021 10:45 AM \\
\hline 657 & Math & 4/27/2021 10:45 AM \\
\hline 658 & They advanced in their abilities well with the program. I like that the difficulty adjusts to their abilities. & 4/27/2021 10:45 AM \\
\hline 659 & it's an easy filler for remote learning. & 4/27/2021 10:45 AM \\
\hline 660 & My student is more aware of how much he knows, how much he is learning and what he needs to work on. & 4/27/2021 10:45 AM \\
\hline 661 & Encouragement to learn in fun way & 4/27/2021 10:45 AM \\
\hline 662 & Nothing & 4/27/2021 10:44 AM \\
\hline 663 & ? & 4/27/2021 10:44 AM \\
\hline 664 & Nothing. & 4/27/2021 10:44 AM \\
\hline 665 & Able to work independently, measure progress. Would love to have this as a summer resource for kids to reduce brain drain!!! & 4/27/2021 10:44 AM \\
\hline 666 & Nothing, he hates the program & 4/27/2021 10:44 AM \\
\hline 667 & Kids hate it & 4/27/2021 10:44 AM \\
\hline
\end{tabular}
i-Ready Spring 2021 Feedback Survey - Families/English
\begin{tabular}{|c|c|c|}
\hline 668 & Ease of access & 4/27/2021 10:44 AM \\
\hline 669 & My daughter found I ready more engaging than the previous Ixel for math & 4/27/2021 10:44 AM \\
\hline 670 & They enjoy the games after completing a lesson. & 4/27/2021 10:44 AM \\
\hline 671 & Evelyn has made big progress in areas she was behind in using iReady Reading. & 4/27/2021 10:44 AM \\
\hline 672 & She likes the games associated with it & 4/27/2021 10:44 AM \\
\hline 673 & The reading portions are somewhat interesting & 4/27/2021 10:44 AM \\
\hline 674 & Practicing skills & 4/27/2021 10:43 AM \\
\hline 675 & not much except that it's some instruction compared to no instruction & 4/27/2021 10:43 AM \\
\hline 676 & I think this can be really helpful for kids who don't have as much parent support at home. & 4/27/2021 10:43 AM \\
\hline 677 & He likes the little games. I like that it adjusts to his abilities. & 4/27/2021 10:43 AM \\
\hline 678 & It gives her practice & 4/27/2021 10:43 AM \\
\hline 679 & Helping her Learn to read & 4/27/2021 10:43 AM \\
\hline 680 & Helped him a lot understanding the math problems & 4/27/2021 10:43 AM \\
\hline 681 & My student tested out of her grade level, so she did not do many lessons. & 4/27/2021 10:42 AM \\
\hline 682 & She is comfortable with the platform and doesn't require assistance & 4/27/2021 10:42 AM \\
\hline 683 & During tests there are games so my daughter likes that there is a break. & 4/27/2021 10:42 AM \\
\hline 684 & nothing & 4/27/2021 10:42 AM \\
\hline 685 & Reading and math skills seem to be improving. & 4/27/2021 10:42 AM \\
\hline 686 & Able to self pace and work independently, feeling accomplished & 4/27/2021 10:41 AM \\
\hline 687 & I think it's effective for visual learning. & 4/27/2021 10:41 AM \\
\hline 688 & Hi learn easy & 4/27/2021 10:41 AM \\
\hline 689 & She enjoys using i-Ready in the classroom setting, but not at all at home. & 4/27/2021 10:41 AM \\
\hline 690 & She enjoys the games and she's learned the basics & 4/27/2021 10:41 AM \\
\hline 691 & She likes the mini games she can earn with the tool & 4/27/2021 10:41 AM \\
\hline 692 & The interaction the site provides for the kids is fun & 4/27/2021 10:40 AM \\
\hline 693 & My son really likes the program, he has fun learning ! & 4/27/2021 10:40 AM \\
\hline 694 & Simple to use & 4/27/2021 10:40 AM \\
\hline 695 & She learned little ahead than school. & 4/27/2021 10:40 AM \\
\hline 696 & Her understanding and comprehension has improved & 4/27/2021 10:40 AM \\
\hline 697 & Diagnostic placed him into material that was way too easy, so doing it was quick. & 4/27/2021 10:40 AM \\
\hline 698 & Short lessons & 4/27/2021 10:39 AM \\
\hline 699 & Keeps them on their level and works on what is lacking & 4/27/2021 10:39 AM \\
\hline 700 & Good explanations & 4/27/2021 10:39 AM \\
\hline 701 & Some of the lessons are fun & 4/27/2021 10:39 AM \\
\hline 702 & She is getting better at math & 4/27/2021 10:39 AM \\
\hline 703 & nothing & 4/27/2021 10:39 AM \\
\hline 704 & Math & 4/27/2021 10:39 AM \\
\hline 705 & It's effective with visual learning. & 4/27/2021 10:39 AM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 706 & My son really enjoys iReady. I rarely have to cajole him into using it, and he seems to be making progress in it. The games are a big motivator for him. & 4/27/2021 10:39 AM \\
\hline 707 & Can work at his own pace. Feels a sense of accomplishment \& this encourages him to keep going with the lessons. & 4/27/2021 10:39 AM \\
\hline 708 & Easy to use & 4/27/2021 10:38 AM \\
\hline 709 & The learning & 4/27/2021 10:38 AM \\
\hline 710 & High level scores & 4/27/2021 10:38 AM \\
\hline 711 & Math & 4/27/2021 10:38 AM \\
\hline 712 & It's consistent and better than an online assignment because it meets each kid at their level so they aren't bored with stuff that's too easy & 4/27/2021 10:38 AM \\
\hline 713 & It gives her a solid assignment to complete. & 4/27/2021 10:38 AM \\
\hline 714 & They are still learning. But could use less game and more learning & 4/27/2021 10:38 AM \\
\hline 715 & It's convenient, fun, and engaging. & 4/27/2021 10:38 AM \\
\hline 716 & Quick way to practice mental math & 4/27/2021 10:38 AM \\
\hline 717 & Not sure & 4/27/2021 10:37 AM \\
\hline 718 & Consistency & 4/27/2021 10:37 AM \\
\hline 719 & breaking down math problems & 4/27/2021 10:37 AM \\
\hline 720 & Variety of ways lessons are presented & 4/27/2021 10:37 AM \\
\hline 721 & Repetition helps, but on easy lessons it is frustrating & 4/27/2021 10:37 AM \\
\hline 722 & Helping them to learn beyond classroom materials & 4/27/2021 10:37 AM \\
\hline 723 & It is an interactive way for them to get in math and reading throughout the week. I never get any pushback when I ask my 2nd grader to complete iready during the week. It seems very easy to use, he's never asked for my help. & 4/27/2021 10:37 AM \\
\hline 724 & I like the quizzes at the end of each lesson to test how well the concepts were understood. & 4/27/2021 10:37 AM \\
\hline 725 & I'm not sure, my youngest is struggling with a learning disability that we are still learning about. & 4/27/2021 10:36 AM \\
\hline 726 & 2020 & 4/27/2021 10:36 AM \\
\hline 727 & Practice is helping my son improve. & 4/27/2021 10:36 AM \\
\hline 728 & Helping them know what words mean and where to put them. & 4/27/2021 10:36 AM \\
\hline 729 & Math & 4/27/2021 10:35 AM \\
\hline 730 & I guess it's helping them as much as it can given the circumstances & 4/27/2021 10:35 AM \\
\hline 731 & She is tired of it, but then again she is tired of computers in general with so much remote schooling. & 4/27/2021 10:35 AM \\
\hline 732 & The challenge of the lessons & 4/27/2021 10:35 AM \\
\hline 733 & My student is in the classroom only 2 days a week and no instruction the other 3 days, so i Ready is much needed to reinforce what is being taught in the classroom. & 4/27/2021 10:35 AM \\
\hline 734 & It has helped improve her reading \& math skills & 4/27/2021 10:35 AM \\
\hline 735 & I'm not sure. & 4/27/2021 10:34 AM \\
\hline 736 & Not sure & 4/27/2021 10:34 AM \\
\hline 737 & It meets my student where they are at. & 4/27/2021 10:34 AM \\
\hline 738 & She enjoys the activities & 4/27/2021 10:34 AM \\
\hline 739 & It is moving fast enough for my child to keep her interest. & 4/27/2021 10:34 AM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 740 & Math & 4/27/2021 10:34 AM \\
\hline 741 & Reinforce skills & 4/27/2021 10:34 AM \\
\hline 742 & Focused math work & 4/27/2021 10:34 AM \\
\hline 743 & Reading & 4/27/2021 10:34 AM \\
\hline 744 & they can independently get to and access the program and is making progress with math and reading skills & 4/27/2021 10:34 AM \\
\hline 745 & Engaging and keeps her attention & 4/27/2021 10:34 AM \\
\hline 746 & Studies & 4/27/2021 10:33 AM \\
\hline 747 & Little assistance needed from parents to complete tasks. & 4/27/2021 10:33 AM \\
\hline 748 & A set curriculum based on needs after the test & 4/27/2021 10:33 AM \\
\hline 749 & Reading & 4/26/2021 9:49 PM \\
\hline 750 & They can do this within a self led format - I like that component of it & 4/26/2021 2:22 PM \\
\hline 751 & Easy to use and good for grade level practice & 4/26/2021 12:57 PM \\
\hline 752 & It is easy for my student to do independently and they enjoy the games they get to play when they complete lessons. & 4/26/2021 9:14 AM \\
\hline 753 & They utilize the program during asynchronous instruction days so it provides them an expectation of completing this task for both reading and math. & 4/24/2021 4:31 AM \\
\hline 754 & Good practice & 4/23/2021 9:38 PM \\
\hline 755 & It was consistent and they needed it to back up the zoom sessions. They needed math and reading. & 4/20/2021 7:02 PM \\
\hline 756 & It's easy to use. The kids got in the habit of doing it and still quite facts and things they learned from it. The kids liked the characters and explanations. & 4/20/2021 6:55 PM \\
\hline
\end{tabular}

\title{
Q13 What is not going well for your student when using i-Ready this school year?
}

Answered: 743 Skipped: 347
\begin{tabular}{|c|c|c|}
\hline \# & RESPONSES & DATE \\
\hline 1 & Not being able to fast forward the prerecorded stuff or when it's something she already knows frustrates her & 5/7/2021 1:46 PM \\
\hline 2 & The diagnostic testing is stressful and not a great use of our time. Asking predominantly questions that are above and beyond my child's grade level only demoralizes and frustrates him. & 5/7/2021 1:29 PM \\
\hline 3 & Does not enjoy, monotonous & 5/7/2021 1:12 PM \\
\hline 4 & Does not enjoy & 5/7/2021 1:10 PM \\
\hline 5 & It moved too slow between lessons & 5/7/2021 8:29 AM \\
\hline 6 & The gamification is baloney. Also if the kid makes a mistake they have to go through the whole lesson. It's a joke. & 5/6/2021 7:15 PM \\
\hline 7 & The time it takes to complete a lesson. Assigning lessons they have not yet done. & 5/6/2021 6:33 PM \\
\hline 8 & The cartoons make it take longer than it has to. The cartoons are supposed to be relatable but are really distracting. & 5/6/2021 6:30 PM \\
\hline 9 & Maybe during a typical school year with in person learning, this tool would be better utilized. Having my child do this program, without teacher support or a quiet classroom, and consistently, it is more of a cause for frustration than learning. & 5/6/2021 2:06 PM \\
\hline 10 & She finds the program very boring and is not engaged with it at all. Also, since the diagnostic was done during remote learning, she did not do her best and was placed at a level too low for her, resulting in boredom. & 5/6/2021 10:37 AM \\
\hline 11 & He doesn't feel like he learns very much using it. & 5/6/2021 7:51 AM \\
\hline 12 & bad & 5/6/2021 12:31 AM \\
\hline 13 & They expressed that the lessons are very lengthy and not fun to do; in addition, they do not feel the review questions at the end of lessons are sufficient enough to ensure they have grasped the material & 5/5/2021 12:42 PM \\
\hline 14 & They expressed that the lessons are very lengthy and not fun to do; in addition, they do not feel the review questions at the end of lessons are sufficient enough to ensure they have grasped the material & 5/5/2021 12:40 PM \\
\hline 15 & They expressed that the lessons are very lengthy and not fun to do; in addition, they do not feel the review questions at the end of lessons are sufficient enough to ensure they have grasped the material. & 5/5/2021 12:38 PM \\
\hline 16 & The diagnostic tests are not appropriate for first graders to complete on their own and the results do not accurately reflect ability. I certainly hope this is ditched for real instruction when kids get back in the classroom. & 5/4/2021 8:00 PM \\
\hline 17 & Child hates it. The program rated her lower then the teachers rated her. (They tested her without the I-Ready as well) & 5/4/2021 3:35 PM \\
\hline 18 & Math is too easy. Reading too hard. Child doesn't like using I-Ready & 5/4/2021 3:31 PM \\
\hline 19 & n/a & 5/4/2021 3:30 PM \\
\hline 20 & Na & 5/4/2021 8:09 AM \\
\hline 21 & N/A & 5/4/2021 5:25 AM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 22 & Math is not challenging, even after it has been adjusted by teacher. & 5/3/2021 3:31 PM \\
\hline 23 & Not right now & 5/2/2021 10:08 PM \\
\hline 24 & He gets really frustrated using this tool. & 5/2/2021 9:20 PM \\
\hline 25 & The reading isn't interesting & 5/2/2021 9:01 PM \\
\hline 26 & Not sure & 5/2/2021 6:40 PM \\
\hline 27 & He hates iready. I'm not exactly sure why. & 5/2/2021 6:05 PM \\
\hline 28 & If you don't pass the test that's after every lesson, you have to redo the entire lesson all over again. & 5/2/2021 5:34 PM \\
\hline 29 & I can't think of anything. It's been a useful tool. & 5/2/2021 2:15 PM \\
\hline 30 & Access to iReady reading has been cut off for months. Lessons are often too easy, sometimes a little too hard though. Doesn't teach things in an interesting way, teaches things in a way that seems harder to the student than ways she has learned previously. & 5/2/2021 1:23 PM \\
\hline 31 & The diagnostic tests were awful. As a first grader, in the very beginning of remote learning, he was in tears every time he had to do it. It completely brought his self esteem down as a learner. As a teacher myself, I saw more damage than good in the testing system. I also don't feel that any of his learning path was acurate with his current level, BOTH times he took the diagnostic. I was really disappointed with the program, and didn't feel it was the best choice for encouraging these young learners, who really had no experience with "testing" prior to this. It was a nightmare as a parent trying to support my child to do "his best", when the test was designed to have him fail \(50 \%\) of the time, or be faced with paragraphs of reading that he knew he couldn't read and understand. & 5/2/2021 1:15 PM \\
\hline 32 & My student would like to know what it means to be on Level F or Level G as it corresponds to grade level. She is always excited to move up a level, but still doesn't know what it means & 5/2/2021 12:42 PM \\
\hline 33 & The lessons are too easy because they cover material the students have already learned but the diagnostic tests are worded in a very confusing way so it is hard to advance to a level where the class is currently at. & 5/2/2021 12:20 PM \\
\hline 34 & the lessons seem to be geared at a level below where he is currently learning, so it doesn't feel like it is giving him the opportunity to work on new skills to reinforce what the class is currently learning. The math diagnostic tests are very confusing in the way they are worded, so he ends up being given lessons that put him back at lower levels than the units that the teacher is currently teaching. & 5/2/2021 12:16 PM \\
\hline 35 & It can be boring and slow. Also the diagnostic was very difficult for a kindergartener who's just learning to read. He sped through and was moved back in level which made it more boring. & 5/2/2021 10:01 AM \\
\hline 36 & It can be very slow l.e. take a long time between questions they need to answer. Also, after the mid-year diagnostic it moved him back in level with lessons he already completed. Diagnostics can be hard for kindergarteners to follow. & 5/2/2021 9:58 AM \\
\hline 37 & Need to be able to see progress as a parent. I cannot tell what they have completed and what gains have been made. & 5/2/2021 6:29 AM \\
\hline 38 & I cannot track lessons and progress as a parent. & 5/2/2021 6:27 AM \\
\hline 39 & Assessment can be frustrating. & 5/1/2021 6:42 PM \\
\hline 40 & Sometimes some of the lessons seem a little too easy for where she's currently at & 5/1/2021 2:48 PM \\
\hline 41 & After the diagnostic, which was frustrating, the level the program put her at were too low. We asked her teacher about it and nothing was ever done about changing it or what to do to get her at the right level. She didn't like it as much since she had already done a lot of it before the diagnostic so it wasn't interesting anymore. & 5/1/2021 1:57 PM \\
\hline 42 & He doesn't not seem to enjoy it, not sure why. & 5/1/2021 12:15 PM \\
\hline 43 & Most subjects require in person instruction to be succsessful & 5/1/2021 11:28 AM \\
\hline 44 & Repetitive even when the student keeps getting the answers correct (it should get harder) & 5/1/2021 9:47 AM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 45 & eading & 5/1/2021 9:32 AM \\
\hline 46 & She told me she felt "really dumb" during the diagnostics. & 5/1/2021 7:40 AM \\
\hline 47 & The diagnostics were very stressful. She felt incapable. & 5/1/2021 7:38 AM \\
\hline 48 & - the diagnostic experience was extremely hard (told expected to miss half etc doesn't make kids feel good about how they're doing very negative to confidence). 2. It is not connected to teachers instruction specifically so it's practice but not exactly what we are tied into classroom 3. The test results//scores mean nothing when it's just data points, I want to see he problems type they are successful on and what they are missing to understand what they know and need help on & 5/1/2021 6:51 AM \\
\hline 49 & He says it's too easy. & 5/1/2021 6:04 AM \\
\hline 50 & Everything is good & 4/30/2021 8:22 PM \\
\hline 51 & I am not sure I ready is integrated into daily education and class activity & 4/30/2021 8:10 PM \\
\hline 52 & Too easy sometimes & 4/30/2021 6:09 PM \\
\hline 53 & Nothing & 4/30/2021 6:07 PM \\
\hline 54 & They have not learned anything in their grade requirements. & 4/30/2021 5:34 PM \\
\hline 55 & It's too easy & 4/30/2021 4:59 PM \\
\hline 56 & The need for constant reminder to work on i-Ready & 4/30/2021 4:54 PM \\
\hline 57 & Nothing & 4/30/2021 3:34 PM \\
\hline 58 & It gives her problems that are way beyond her knowledge even being an A student in the challenge program. And then she melts down saying she's supposed to know the answers. It's terrible & 4/30/2021 2:28 PM \\
\hline 59 & nothing that i know of. & 4/30/2021 1:56 PM \\
\hline 60 & Nothing & 4/30/2021 1:45 PM \\
\hline 61 & Taking the time. & 4/30/2021 1:38 PM \\
\hline 62 & When my child gets too many wrong on a quiz he has to start from the very beginning and watch everything again. It is VERY frustrating to my child. & 4/30/2021 1:11 PM \\
\hline 63 & The math program asks a question which in the beginning my son would answer not realizing the new question breaking the problem down into many steps when he wanted to give the final answer. & 4/30/2021 12:35 PM \\
\hline 64 & There must be a better platform outthere. In person instruction is so much better . I don't think iReady is a FPS replacement & 4/30/2021 11:03 AM \\
\hline 65 & it didn't engage her in the way that working with a real person does - she can finish a list of tasks but doesn't "learn" or engage her curiosity without human interaction & 4/30/2021 10:53 AM \\
\hline 66 & i-Ready has been a great addition to my student's studies. & 4/30/2021 10:01 AM \\
\hline 67 & i-Ready has been a great addition to my student's studies. & 4/30/2021 9:59 AM \\
\hline 68 & n/a & 4/30/2021 9:35 AM \\
\hline 69 & The assessments were awful! Very stressful and demoralizing & 4/30/2021 9:26 AM \\
\hline 70 & He likes it & 4/30/2021 9:16 AM \\
\hline 71 & Does not track time correctly & 4/30/2021 9:07 AM \\
\hline 72 & If they don't know an answer to just choose an answer & 4/30/2021 7:45 AM \\
\hline 73 & Complaints of repetitiveness. & 4/30/2021 7:27 AM \\
\hline 74 & Complaints of repetitiveness. & 4/30/2021 7:26 AM \\
\hline 75 & They assign stuff that is not relevant. & 4/30/2021 7:24 AM \\
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\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 76 & After a while she got bored with it, we had to think of new incentives to encourage her. & 4/30/2021 6:15 AM \\
\hline 77 & Nothing really. & 4/29/2021 10:06 PM \\
\hline 78 & N/A & 4/29/2021 8:56 PM \\
\hline 79 & Monotonous and repetitive in instructions and tasks. Also the diagnostic is stressful. It is not efficient neither effective way to study. & 4/29/2021 7:44 PM \\
\hline 80 & Doesn't actually teach anything. Why did they stop using khan academy? & 4/29/2021 4:52 PM \\
\hline 81 & Nothing & 4/29/2021 4:18 PM \\
\hline 82 & It does not really help to understand the materials. & 4/29/2021 4:13 PM \\
\hline 83 & So far nothing. We really liked iReady reading in K too! & 4/29/2021 3:48 PM \\
\hline 84 & The diagnostics scored my son in math low and his lessons were to easy. Math is actually what he is best at and his other class assignments and tests showed that i-ready had him at low level. Sadly because of this the time that he was assigned to do i-ready was a waste of time. He could of used this time actually learn new something new. & 4/29/2021 3:01 PM \\
\hline 85 & Nothing & 4/29/2021 2:40 PM \\
\hline 86 & he doesn't like the fact that it is always talking and he can't concentrate so doesn't want to use it & 4/29/2021 2:17 PM \\
\hline 87 & Sometimes, it's too easy for her and cannot skip the lesson. & 4/29/2021 2:17 PM \\
\hline 88 & I don't know & 4/29/2021 1:52 PM \\
\hline 89 & Helped build vocabulary & 4/29/2021 12:38 PM \\
\hline 90 & Motivation to do it at times. & 4/29/2021 11:32 AM \\
\hline 91 & No & 4/29/2021 10:55 AM \\
\hline 92 & Not as fun as working with fellow students and a live teacher. & 4/29/2021 10:45 AM \\
\hline 93 & My son gets frustrated with the slow pace of the questions asked and would like less lag time between questions. & 4/29/2021 10:41 AM \\
\hline 94 & Sometimes she can't find the 'done' button & 4/29/2021 10:37 AM \\
\hline 95 & My son is frustrated with the pace of questions asked... He doesn't like to wait as long as the application takes to prompt the next question. & 4/29/2021 10:35 AM \\
\hline 96 & He loves reading and math, but is always reluctant to use iReady. He is turned off of being on the computer more. It does not interest him. It should be extra curricular at best, or supplementary if a student needs extra support, but it shouldn't be widely emphasized for students successfully performing. And if assessment is needed, it should be used periodically. & 4/29/2021 10:23 AM \\
\hline 97 & She is bored. She does not want to be on the computer, using it. She loves learning from teachers and educators and pracitcing with paper and pencil. Kindergarten is too early to introduce an emphasis on computer programs to teach content and concepts. My kids don't like learning this way. & 4/29/2021 10:16 AM \\
\hline 98 & It is no substitute for a teacher. She does not like using it, getting on the computer and "pressing the buttons" to use it. Kindergarten is too young to have them navigate this computer program and learn concepts. It should be supplementary, at best, perhaps starting in 1st grade or up. Let's let Kindergarteners learn how to do school without technology. & 4/29/2021 10:14 AM \\
\hline 99 & We prefer on-site learning and group learning for my kid. & 4/29/2021 10:01 AM \\
\hline 100 & N/a & 4/29/2021 9:46 AM \\
\hline 101 & No complaints. & 4/29/2021 9:44 AM \\
\hline 102 & The length of the diagnostic tests, and the more advanced questions on them, have tested her patience! Otherwise it's been good. & 4/29/2021 9:28 AM \\
\hline 103 & The lessons are too repetitive and do not seem to adjust to her learning. she gets very bored with it and is not challenged through this. Khan academy works better for her. & 4/29/2021 8:56 AM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 104 & None & 4/29/2021 8:16 AM \\
\hline 105 & program is slow to load each question & 4/29/2021 7:57 AM \\
\hline 106 & N/A & 4/29/2021 7:57 AM \\
\hline 107 & My son says it not tracking his progress & 4/29/2021 7:51 AM \\
\hline 108 & When he doesn't pass the first time it record the same lesson again and he stops paying attention & 4/29/2021 7:05 AM \\
\hline 109 & computer glitches & 4/29/2021 6:43 AM \\
\hline 110 & Non & 4/29/2021 12:58 AM \\
\hline 111 & None & 4/29/2021 12:53 AM \\
\hline 112 & Not sure & 4/29/2021 12:02 AM \\
\hline 113 & I would like answer's to appear on one screen, without the need to scroll.. Also an I don't know option & 4/28/2021 11:21 PM \\
\hline 114 & he doesn't enjoy it & 4/28/2021 10:09 PM \\
\hline 115 & Nothing & 4/28/2021 10:09 PM \\
\hline 116 & Nothing & 4/28/2021 8:54 PM \\
\hline 117 & the math is teaching things that have already been taught in the past & 4/28/2021 8:14 PM \\
\hline 118 & nothing that i can think of & 4/28/2021 8:13 PM \\
\hline 119 & No & 4/28/2021 7:47 PM \\
\hline 120 & It's hard to keep him on task & 4/28/2021 7:26 PM \\
\hline 121 & Did not learn too much with reading & 4/28/2021 7:14 PM \\
\hline 122 & The longer lessons can be a challenge and repeating or getting stuck on a lesson (prefer not to repeat more than once to go on) & 4/28/2021 7:05 PM \\
\hline 123 & The math program was terrible. My daughter needed to practice her multiplication for 3rd grade but it kept giving addition questions instead. After 3 weeks of trying and helping her out, we could not advance to the multiplication. I told my daughter's teacher that we were abandoning iReady and moving onto Prodigy Math instead. i-Ready was very unhelpful as it did not provide any tools for either the parent or the teacher to advance past addition and have my daughter practice multiplication instead. & 4/28/2021 6:49 PM \\
\hline 124 & Everything! Nothing like forcing a child to do something they hate because their grade is based off of completing it. & 4/28/2021 6:22 PM \\
\hline 125 & She finds it very frustrating. In her words: "the way that the questions are asked is confusing." It seems like another standardized test. The results come in, and then it seems that nothing is done with the results? There have been no changes to instruction, that we are aware of. My student does much better with a syllabus and a good teacher, which she already has. Tell her what she needs to do and she will do it. Don't we take enough standardized tests already to have the data that we need? & 4/28/2021 6:19 PM \\
\hline 126 & Nothing & 4/28/2021 5:58 PM \\
\hline 127 & Nothing & 4/28/2021 5:57 PM \\
\hline 128 & Student quote: "The one thing I don't like is that it repeats things even if you already know it. In ready reading in the beginning it say - if you don't know what this is press the question mark, if you do know what it means click picture that shows it. That is annoying because every time you start a new lesson it repeats it even though you know this instruction because you have heard it a thousand times. & 4/28/2021 5:42 PM \\
\hline 129 & Nothing & 4/28/2021 5:36 PM \\
\hline 130 & He doesn't do it every day. & 4/28/2021 5:09 PM \\
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\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 131 & Na & 4/28/2021 5:05 PM \\
\hline 132 & They are required to do 2 hours a week. That is a lot on top of their school work. I am not sure how connected I-Ready is to the curriculum they are learning in class. I feel like this is just something extra and places extra pressure on the students. & 4/28/2021 4:53 PM \\
\hline 133 & None & 4/28/2021 4:32 PM \\
\hline 134 & N/A & 4/28/2021 3:57 PM \\
\hline 135 & N/A & 4/28/2021 3:47 PM \\
\hline 136 & Neither my son nor I can find a measurement of where he is in the lessons and how many more he needs to complete to finish a grade level. He is going into middle school in the fall, and he would like to take Algebra. His 6th grade teacher believes he is capable of doing it. But placement will be based primarily on the i-Ready diagnostic. We have been doing My Path math lessons to prepare, but we can't see where he is on the spectrum of lessons between 6th grade and 9th grade. It seems there's no tracking available to users. It would be nice to be able to see progress and how many more lessons he has in a specific grade level, etc. & 4/28/2021 3:45 PM \\
\hline 137 & The diagnostic tests do not seem to line up with what my student is learning. The diagnostics are very frustrating and don't accurately measure what my student knows. The diagnostics often cover material that my student has not yet learned. & 4/28/2021 3:26 PM \\
\hline 138 & Trouble getting on or doing work is to easy not interesting & 4/28/2021 2:56 PM \\
\hline 139 & It doesn't help when iready is asking for skills that the student hasn't learned yet. This leads to frustration and guessing. & 4/28/2021 2:50 PM \\
\hline 140 & The end quizzes & 4/28/2021 2:35 PM \\
\hline 141 & The characters do so much talking that it gets extremely boring. He said it feels like adults trying too hard to be fun for kids and it feels disingenuous. & 4/28/2021 2:24 PM \\
\hline 142 & When student clicks in an answer it often selects another answer than the one aiming for and is glitchy. Student scored low on Initial assessment due to being unfamiliar how it worked and what the test was looking for so was out at a low reading level. Once student understood how test worked, my student scored very high, but all the lessons seemed to be far too easy and was not challenge whatsoever. Very disappointing. & 4/28/2021 2:15 PM \\
\hline 143 & Nothing & 4/28/2021 2:13 PM \\
\hline 144 & The assessment placed them in a too easy math level. she thinks it is because she was midlesson prior to the test. & 4/28/2021 2:08 PM \\
\hline 145 & The individual lessons are too long and tedious. & 4/28/2021 2:05 PM \\
\hline 146 & I Ready reading does not have a way for the instructions to be read to my son, therefore I have to read the instructions to him since he can't read yet & 4/28/2021 1:44 PM \\
\hline 147 & Nothing. It's going great. & 4/28/2021 1:43 PM \\
\hline 148 & The math is too easy. & 4/28/2021 1:16 PM \\
\hline 149 & The speed of the transitions in the program were not great. It was hard to keep my daughter's attention because the program moved so slowly. There was a lot of waiting between problems and lessons. & 4/28/2021 1:13 PM \\
\hline 150 & Reading & 4/28/2021 1:06 PM \\
\hline 151 & there have been some glitches in advancing to the next slide or section, but it's been rare. We also didn't know how to save so he was doing an hour at a time when the teacher assigned 20 minutes because it appeared his work would be lost if he stopped and that was stressful to him. & 4/28/2021 12:50 PM \\
\hline 152 & Nothing to report & 4/28/2021 12:41 PM \\
\hline 153 & He hates i Ready. & 4/28/2021 12:19 PM \\
\hline 154 & The diagnostic test was extremely lengthy for a kindergartener's attention span. Some questions were way too advanced for her grade level possibly due to her 'random' correct answers to the previous questions. & 4/28/2021 12:12 PM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 155 & Nothing & 4/28/2021 11:20 AM \\
\hline 156 & Nothing & 4/28/2021 10:59 AM \\
\hline 157 & Nothing & 4/28/2021 10:42 AM \\
\hline 158 & Not interested at all. & 4/28/2021 10:42 AM \\
\hline 159 & He eventually blindly answers so the level he ends up with is wrong. & 4/28/2021 10:40 AM \\
\hline 160 & Her diagnostic was higher than what she reads at. This has caused problems since the school Phycologist is only going off of this test score and not listening to us her parents and her teachers saying that she needs more help. Based on that I don't really trust the diagnostic testing since those are multiple choice. & 4/28/2021 10:22 AM \\
\hline 161 & He hates iReady because of the slow pace and the way it penalizes students by redoing the entire segment for missing a few questions. He does not work well with this program. & 4/28/2021 10:20 AM \\
\hline 162 & Frustration when not understanding what to do or when not knowing the answer. & 4/28/2021 10:10 AM \\
\hline 163 & Frustration when something gets too hard. & 4/28/2021 10:07 AM \\
\hline 164 & A lot of talking and not enough interactive instruction/lessons. It doesn't always track completed minutes or lessons correctly. My student finds it very boring and it's hard for him to stay focused with the pace of the lesson. & 4/28/2021 10:03 AM \\
\hline 165 & My student says it's very boring, there is a lot of talking rather than interactive lessons. Most of the time it does not track completed lessons or minutes correctly. & 4/28/2021 10:00 AM \\
\hline 166 & The math is set way below his level. It's too easy for him. & 4/28/2021 9:59 AM \\
\hline 167 & reluctance to engage in it. & 4/28/2021 9:56 AM \\
\hline 168 & She tends to just guess sometimes and start clicking everything without learning anything & 4/28/2021 9:53 AM \\
\hline 169 & I'm not sure how much feedback they get when they do something wrong. It seems like the animation just shakes and they can try a different answer. & 4/28/2021 9:52 AM \\
\hline 170 & The lesson is a little bit slow and easy & 4/28/2021 9:30 AM \\
\hline 171 & not sure & 4/28/2021 9:21 AM \\
\hline 172 & Math, the program is very slow, takes a long time to finish teaching the lessons, very easy & 4/28/2021 9:20 AM \\
\hline 173 & We don't have any feedback from the teacher. & 4/28/2021 9:17 AM \\
\hline 174 & Seems like a time filler vs. in-person instruction or zoom meetings. & 4/28/2021 9:15 AM \\
\hline 175 & I'm very disappointed in the assessments my child took in the fall. I was told that the test was intentionally made more difficult and students were not expected to be familiar with some of the concepts asked. While this may be okay for some students, it is extremely discouraging for any students that are struggling. This is especially the case when we have been in remote learning for over a year. The assessments were very frustrating for my child and resulted in a lot of anxiety and tears. & 4/28/2021 9:12 AM \\
\hline 176 & not sure & 4/28/2021 9:09 AM \\
\hline 177 & not sure & 4/28/2021 9:06 AM \\
\hline 178 & She mentions it goes from really hard to really easy & 4/28/2021 8:56 AM \\
\hline 179 & Ready & 4/28/2021 8:52 AM \\
\hline 180 & 2021 & 4/28/2021 8:51 AM \\
\hline 181 & The diagnostic test was too long for his attention span. & 4/28/2021 8:48 AM \\
\hline 182 & Nothing that I know of & 4/28/2021 8:45 AM \\
\hline 183 & My student has complained about how long the diognostic is and then they make silly mistakes & 4/28/2021 8:34 AM \\
\hline 184 & It is buggy, and the tools needed to complete lessons are not working. They also talk to me & 4/28/2021 8:34 AM \\
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\end{tabular}
like I am a 2 year old.
\begin{tabular}{|c|c|c|}
\hline 185 & Nothing & 4/28/2021 8:27 AM \\
\hline 186 & the diagnostic felt long and never ending and the regular work was not that great & 4/28/2021 8:23 AM \\
\hline 187 & lessons have nothing to do with what he is learning in class. It does not help him know how to do his assignments better so he STILL has to go to office hours or have a parent help answer his questions & 4/28/2021 8:21 AM \\
\hline 188 & hates it. feels like it is torture to do lessons & 4/28/2021 8:17 AM \\
\hline 189 & Unsure of its helpfulness on learning and growth & 4/28/2021 8:06 AM \\
\hline 190 & Not enough time to complete. & 4/28/2021 8:00 AM \\
\hline 191 & NA & 4/28/2021 7:37 AM \\
\hline 192 & NA & 4/28/2021 7:35 AM \\
\hline 193 & Nothing, he likes them, however, not using as much lately. He uses on independent study day, Wednesdays. & 4/28/2021 7:34 AM \\
\hline 194 & He just says he doesn't like it & 4/28/2021 7:21 AM \\
\hline 195 & The first math diagnostic placed him at a math level far below what he was capable of. & 4/28/2021 7:17 AM \\
\hline 196 & not enough communication & 4/28/2021 7:10 AM \\
\hline 197 & Repeating the same thing over and over. It would be better if you could set a timer on it when they have completed their work time for the day...trying to make sure they get their minutes in is a pain & 4/28/2021 7:09 AM \\
\hline 198 & She occasionally needs help with the app & 4/28/2021 6:43 AM \\
\hline 199 & The math lessons make the kids wait and listen to instructions over and over and won't let them work at their own pace if they want to go faster. My son has a meltdown every time he has to do iReady math. & 4/28/2021 6:36 AM \\
\hline 200 & Knowing whether or not teachers are using this as a tool to make sure kids are up to speed. & 4/28/2021 6:05 AM \\
\hline 201 & Communication with parents & 4/28/2021 4:46 AM \\
\hline 202 & sometimes he has problems understanding the assignment & 4/28/2021 4:00 AM \\
\hline 203 & Teachers relying on i-ready to teach content. Content confusing and not conclusive enough for students to pick the right answers. This leads to frustration. Long lessons lead to more screen time, which is not condusive for learning & 4/28/2021 2:08 AM \\
\hline 204 & Nothing & 4/28/2021 1:49 AM \\
\hline 205 & Some times the report is not accurate & 4/28/2021 1:02 AM \\
\hline 206 & Nothing & 4/27/2021 11:50 PM \\
\hline 207 & N/a & 4/27/2021 11:41 PM \\
\hline 208 & He complained how long the diagnostic process was & 4/27/2021 11:28 PM \\
\hline 209 & Not built into school day because remote doesn't allow for as much chance than if done in class & 4/27/2021 11:27 PM \\
\hline 210 & Certain lessons drag on and if you don't get certain \% answered correctly, it repats on and on & 4/27/2021 11:24 PM \\
\hline 211 & Occasionally, there are glitches/freezing. Other than that, it's been ok. & 4/27/2021 11:19 PM \\
\hline 212 & N/a & 4/27/2021 10:46 PM \\
\hline 213 & 7th grader feels like it is redundant and not relevant to her diagnostic test & 4/27/2021 10:45 PM \\
\hline 214 & not relevant to class lessons & 4/27/2021 10:42 PM \\
\hline 215 & My student does not understand the goal for reading and the lessons take longer then estimated. & 4/27/2021 10:32 PM \\
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\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 216 & It doesn't grade accurately & 4/27/2021 9:53 PM \\
\hline 217 & The teacher will assign one lesson (should be 40 mins) but at times the lesson never ends and keeps going for over an hour. We've had to restart computer and it helps sometimes. & 4/27/2021 9:48 PM \\
\hline 218 & Going well & 4/27/2021 9:47 PM \\
\hline 219 & It's a terrible system based on a laughably, tragically terrible diagnostic system. & 4/27/2021 9:47 PM \\
\hline 220 & The teacher will assign one lesson (should be 40 mins ) but at times the lesson never ends and keeps going for over an hour. We've had to restart computer and it helps sometimes. & 4/27/2021 9:47 PM \\
\hline 221 & My concern is that iready is not effective if the child doesn't understand the work. & 4/27/2021 9:43 PM \\
\hline 222 & Sometimes repetitive & 4/27/2021 9:33 PM \\
\hline 223 & Lessons get stuck and my son will pass a lesson with \(100 \%\) and have to repeat the whole lesson multiple times. The assessments take too long and makes for a loss of instruction. The teacher didn't use the assessment to design instruction. & 4/27/2021 9:26 PM \\
\hline 224 & Math is boring, repetitive and seems below his level & 4/27/2021 9:19 PM \\
\hline 225 & Social studies & 4/27/2021 9:16 PM \\
\hline 226 & It doesn't line up with what is being taught in class at the time & 4/27/2021 9:04 PM \\
\hline 227 & Seem like she complains that it will not advance her and that she continually does the same lesson & 4/27/2021 8:59 PM \\
\hline 228 & the reading diagnostic was terrible - none of the reading comprehension read the prompts for my student and I was told not to help in any way, so she just wildly guessed on all of them and it was useless data (and a waste of time). I also don't think that the lessons respond to feedback very well as the math seems to be advancing very slowly and my student is getting bored. She does love the reading though with the books. Also it has just been hard this year with having yet another screen time activity. I also wish the reading had more phonics and tracked more with what she is learning in class. & 4/27/2021 8:51 PM \\
\hline 229 & My son hates it & 4/27/2021 8:46 PM \\
\hline 230 & Math & 4/27/2021 8:46 PM \\
\hline 231 & He gets bored with the math portion. & 4/27/2021 8:42 PM \\
\hline 232 & He gets super bored and doesn't enjoy it. & 4/27/2021 8:41 PM \\
\hline 233 & Nothing this far & 4/27/2021 8:39 PM \\
\hline 234 & frustrating when they get a wrong answer and have to go back & 4/27/2021 8:32 PM \\
\hline 235 & frustrating when they get a wrong answer and have to go back & 4/27/2021 8:31 PM \\
\hline 236 & it's a repetitive format and that can get boring. It's not clear how many sections the student needs to complete in order to move up a level, which also makes it less motivational than it could be. & 4/27/2021 8:27 PM \\
\hline 237 & Haven't noticed anything yet & 4/27/2021 8:06 PM \\
\hline 238 & Assessment was way to long, current math path is too easy and teacher won't change path because they don't know how to & 4/27/2021 8:00 PM \\
\hline 239 & The initial testing was so extensive and it took my child so long that eventually the test reset itself back to the beginning, which was extremely frustrating & 4/27/2021 7:54 PM \\
\hline 240 & iready is designed for a younger audience not for older kids. It is cartoony, uses high voices, and has character conversation which is not necessary. & 4/27/2021 7:54 PM \\
\hline 241 & N/a & 4/27/2021 7:45 PM \\
\hline 242 & The assessment for kindergartners was totally inappropriate and should not have included grade level material for such higher grades. Was very discouraging for her. & 4/27/2021 7:44 PM \\
\hline 243 & I wish the program could tell when he was just sitting there and NOT count that time & 4/27/2021 7:29 PM \\
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\end{tabular}
i-Ready Spring 2021 Feedback Survey - Families/English
\begin{tabular}{|c|c|c|}
\hline 244 & N/a & 4/27/2021 7:28 PM \\
\hline 245 & Repetitive & 4/27/2021 7:26 PM \\
\hline 246 & Na & 4/27/2021 7:13 PM \\
\hline 247 & Reading & 4/27/2021 7:11 PM \\
\hline 248 & My child has a reading learning disability and the reading lessons are not appropriate for them. & 4/27/2021 7:11 PM \\
\hline 249 & Doesn't enjoy it. & 4/27/2021 7:09 PM \\
\hline 250 & Calculating perimeter area & 4/27/2021 7:09 PM \\
\hline 251 & Needs parent support to complete lessons & 4/27/2021 7:07 PM \\
\hline 252 & Some times math & 4/27/2021 7:07 PM \\
\hline 253 & We don't have access to the reading & 4/27/2021 7:06 PM \\
\hline 254 & He finds it incredibly boring. & 4/27/2021 6:56 PM \\
\hline 255 & Not sure & 4/27/2021 6:53 PM \\
\hline 256 & Inaccuracy in placement level. & 4/27/2021 6:51 PM \\
\hline 257 & Waste of time in repeating already learned concepts. & 4/27/2021 6:45 PM \\
\hline 258 & "I'm so sick of it." & 4/27/2021 6:45 PM \\
\hline 259 & The levels of the assessments at her level \((\mathrm{K})\) require student to read the instructions : * Uf they cannot read well it is a guessing game not an assessment of skills. & 4/27/2021 6:40 PM \\
\hline 260 & Olaf was rather board, he is doing higher level math on other programs & 4/27/2021 6:36 PM \\
\hline 261 & Too much screen time to complete activities & 4/27/2021 6:35 PM \\
\hline 262 & I wish I can compare previous lessons to current ones to see their growth & 4/27/2021 6:34 PM \\
\hline 263 & Math is not easy for Karma to understand, especially online & 4/27/2021 6:33 PM \\
\hline 264 & Not terribly engaging/exciting & 4/27/2021 6:31 PM \\
\hline 265 & I wish I could see their past lessons and how well they did to compare. & 4/27/2021 6:31 PM \\
\hline 266 & Nothing & 4/27/2021 6:28 PM \\
\hline 267 & Videos not helpful & 4/27/2021 6:28 PM \\
\hline 268 & My daughter took the math test on iReady. Her math teacher hasn't shared the test score with us yet, my daughter and her friends emailed the math teacher multiple times and there's still no response yet. I'm not sure it's just because of the irresponsible teacher, the whole experience with iReady was not good. & 4/27/2021 6:25 PM \\
\hline
\end{tabular}
\begin{tabular}{l|l|l}
\hline 269 & All of it & \(4 / 27 / 20216: 22\) PM \\
\hline 270 & Not differentiated very well for my student's ability level & \(4 / 27 / 20216: 20\) PM \\
\hline 271 & Nothing & \(4 / 27 / 20216: 10\) PM \\
\hline 272 & Not easy to tell when lesson is over & \(4 / 27 / 20216: 09\) PM \\
\hline 273 & Nothing & \(4 / 27 / 20216: 08\) PM \\
\hline 274 & Takes too long a time for simple knowledge. & \(4 / 27 / 20216: 04\) PM \\
\hline 275 &. & \(4 / 27 / 20216: 01\) PM \\
\hline 276 & My student says it's hard to use. & \(4 / 27 / 20215: 49\) PM \\
\hline 277 & I feel that iready is not a good judge of how well our students are performing in school & \(4 / 27 / 20215: 49\) PM \\
\hline 278 & My student says the program "talks too much." & \(4 / 27 / 20215: 46\) PM \\
\hline 279 & Math tasks are weak. And too many games are included to the program. Students prefer to & \(4 / 27 / 20215: 45\) PM \\
\hline
\end{tabular}
play games, not to study.
\begin{tabular}{|c|c|c|}
\hline 280 & Some lessons are very cheesy and feel too young/patronizing/cartoony. & 4/27/2021 5:44 PM \\
\hline 281 & It's hard having another task added to a schedule that's pretty full. So hard to get it done weekly. & 4/27/2021 5:42 PM \\
\hline 282 & nothing that I know of & 4/27/2021 5:40 PM \\
\hline 283 & See last question & 4/27/2021 5:24 PM \\
\hline 284 & Nothing & 4/27/2021 5:18 PM \\
\hline 285 & NA & 4/27/2021 5:18 PM \\
\hline 286 & Boring and doesn't hold kid's attention & 4/27/2021 5:14 PM \\
\hline 287 & Consistent feedback from the teachers about how the progression is going. & 4/27/2021 5:10 PM \\
\hline 288 & Not being in a classroom & 4/27/2021 5:03 PM \\
\hline 289 & There are inconsistencies with the time limits & 4/27/2021 5:00 PM \\
\hline 290 & I can't think of anything. & 4/27/2021 4:54 PM \\
\hline 291 & Sometimes the lessons are so slow, especially for high cap students who generally move quickly. & 4/27/2021 4:54 PM \\
\hline 292 & everything & 4/27/2021 4:52 PM \\
\hline 293 & It's pace is really slow for my student. Mood would change when it was time to do iReady. It was a battle getting it done & 4/27/2021 4:46 PM \\
\hline 294 & The lessons are based on tests and if you test poorly or really well, the lessons are too hard or way too easy. I think the test questions need to be redone. & 4/27/2021 4:36 PM \\
\hline 295 & Starts too low and does not advance quickly enough. & 4/27/2021 4:35 PM \\
\hline 296 & The only thing that would be helpful is if more practice or at least an equal amount of time was spent on a skill/word regardless of them understanding. For example, with the power words-if he recognizes them and gets almost all of the questions(about 5) correct then he gets a new word, but if he gets a few answers wrong then more time is spent practicing the word. Even though he recognizes most words I'd like to see more practice on each word vs moving on so quickly. Getting a few answers correctly doesn't necessarily equal a solid understanding or mastery. Overall, I really like the program(math \& reading) and hope it remains available over summer and in the future. & 4/27/2021 4:35 PM \\
\hline 297 & None & 4/27/2021 4:34 PM \\
\hline 298 & Time & 4/27/2021 4:32 PM \\
\hline 299 & Starts too low and does not advance quickly enough, & 4/27/2021 4:32 PM \\
\hline 300 & Time & 4/27/2021 4:30 PM \\
\hline 301 & Annoying. Math keeps repeating itself and takes too long to move onto the next skill. & 4/27/2021 4:29 PM \\
\hline 302 & None & 4/27/2021 4:24 PM \\
\hline 303 & All is all right & 4/27/2021 4:21 PM \\
\hline 304 & Distraction & 4/27/2021 4:17 PM \\
\hline 305 & MY SON HAS GAINED STRENGTH IN MATH AND READING. & 4/27/2021 4:15 PM \\
\hline 306 & Would prefer in-person full time & 4/27/2021 4:14 PM \\
\hline 307 & Nothing & 4/27/2021 4:13 PM \\
\hline 308 & Distraction & 4/27/2021 4:08 PM \\
\hline 309 & Distraction & 4/27/2021 4:05 PM \\
\hline 310 & Too many assignments mid-week. & 4/27/2021 4:04 PM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 311 & Nothing & 4/27/2021 4:04 PM \\
\hline 312 & N/A & 4/27/2021 4:02 PM \\
\hline 313 & Distraction & 4/27/2021 4:01 PM \\
\hline 314 & The lessons have an excessive amount of oral instruction and not nearly enough active participation. I have sat through the lessons with Jack, in order to motivate him and even I'm bored. & 4/27/2021 3:55 PM \\
\hline 315 & The lessons have WAY, WAY too much talking and not nearly enough active participation. My son gets bored right away and does not want to continue with the lessons. & 4/27/2021 3:52 PM \\
\hline 316 & . & 4/27/2021 3:51 PM \\
\hline 317 & N/A & 4/27/2021 3:49 PM \\
\hline 318 & things are fine & 4/27/2021 3:49 PM \\
\hline 319 & N/a & 4/27/2021 3:48 PM \\
\hline 320 & She's not sure if the activities she performs count toward the 60 minutes goal/week. & 4/27/2021 3:48 PM \\
\hline 321 & It keeps him busy. He likes the fun learning activities. & 4/27/2021 3:45 PM \\
\hline 322 & The diagnostic test are very discouraging for student engagement I. Their education. My student was very frustrated and it increased her test anxiety & 4/27/2021 3:45 PM \\
\hline 323 & Too many things to do & 4/27/2021 3:43 PM \\
\hline 324 & IAfter the winter diagnostic it makes them repeat lessons that they have already passed causing them to lose interest & 4/27/2021 3:40 PM \\
\hline 325 & None & 4/27/2021 3:37 PM \\
\hline 326 & Reading is not interactive or engaging and only focuses on comprehension & 4/27/2021 3:34 PM \\
\hline 327 & Starting to get bored of it & 4/27/2021 3:33 PM \\
\hline 328 & After learning the advanced units in class, i-Ready's level is too low. So my child wants more frequent assessments. & 4/27/2021 3:32 PM \\
\hline 329 & Sometimes it's glitchy. & 4/27/2021 3:26 PM \\
\hline 330 & Long exercises & 4/27/2021 3:22 PM \\
\hline 331 & Access to detailed statistics not availiable & 4/27/2021 3:17 PM \\
\hline 332 & Sometimes you have to restart the intro to get the lessons to start. It takes up learning time. & 4/27/2021 3:17 PM \\
\hline 333 & It was sometime stuck working when my son worked on his assignment. & 4/27/2021 3:16 PM \\
\hline 334 & Some issues identifying assignments vs. other activities, so we can ensure assignemnts are done before fun. & 4/27/2021 3:14 PM \\
\hline 335 & Diagnostic test for reading scored him high but the lessons started him really low so he got bored quickly and we quit doing the reading lessons & 4/27/2021 3:11 PM \\
\hline 336 & Bored easily & 4/27/2021 3:11 PM \\
\hline 337 & Takes too long & 4/27/2021 3:10 PM \\
\hline 338 & Assessment was not accurate especially for math & 4/27/2021 3:03 PM \\
\hline 339 & Things are going good, no problems & 4/27/2021 3:03 PM \\
\hline 340 & He is not learning much new material and strongly dislikes using the program. & 4/27/2021 3:02 PM \\
\hline 341 & He is not learning a lot of new material and he does not enjoy the program. & 4/27/2021 3:00 PM \\
\hline 342 & more screens time & 4/27/2021 2:53 PM \\
\hline 343 & It is somewhat being used as the main teaching platform during asynchronous learning. & 4/27/2021 2:53 PM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 344 & It's self paced and directed. Zero instruction around it. & 4/27/2021 2:52 PM \\
\hline 345 & My son leveled out of the reading iReady and had to come up with stuff to do on his own during iReady time. He's a strong reader, so he just read his own books, but it wasn't actual instruction, it was just him reading. & 4/27/2021 2:51 PM \\
\hline 346 & ? & 4/27/2021 2:46 PM \\
\hline 347 & It would help if progress through a lesson was much clearer die kids and parents. We are supposed to do 1 lesson per day on asynchronous days. But it's really hard to tell if he has \(5 \%\) left or \(50 \%\) left ( 5 min or a half hour). If we could help him see progress in a better way that would help with time management and pushing throw frustrations. & 4/27/2021 2:46 PM \\
\hline 348 & 2021 & 4/27/2021 2:42 PM \\
\hline 349 & It's always been too easy for her so she doesn't enjoy it. Teachers have adjusted it a few times, but always still to easy. & 4/27/2021 2:41 PM \\
\hline 350 & Some of it can be lengthy & 4/27/2021 2:40 PM \\
\hline 351 & No & 4/27/2021 2:36 PM \\
\hline 352 & The my path is wildly mismatched with my students current learning level and the teachers are either unwilling or unable to adjust it. The math asks for the next number in a series starting 1 , 2, 3, \(\qquad\) While the reading reads TO my student then asks questions. This is a total waste of time. Kindergartners are well beyond those lessons by the end of the year. As such, we just have decided to ignore iready entirely and have told the teacher as much. & 4/27/2021 2:33 PM \\
\hline 353 & Nothing & 4/27/2021 2:30 PM \\
\hline 354 & N/A & 4/27/2021 2:25 PM \\
\hline 355 & Assessment isn't accurate or grade appropriate for Kinder & 4/27/2021 2:25 PM \\
\hline 356 & I don't know what said & 4/27/2021 2:17 PM \\
\hline 357 & iReady does not have enough variety, or the teachers are not taking the time to cater each practice to the student's specific needs. I'd love to see more effort by the teachers to do this. I believe this program has more potential benefits with specialization from the teacher. & 4/27/2021 2:17 PM \\
\hline 358 & Some of the stories are very long for him to sit through. & 4/27/2021 2:16 PM \\
\hline 359 & She thinks it's boring & 4/27/2021 2:14 PM \\
\hline 360 & She does not like iReady at all. It is a chore. & 4/27/2021 2:13 PM \\
\hline 361 & She hates it & 4/27/2021 2:12 PM \\
\hline 362 & She hates doing it. It is a chore that does not make learning fun. & 4/27/2021 2:09 PM \\
\hline 363 & The questions are often way above her grade level and comprehension, resulting in her being very discouraged and feeling inadequate & 4/27/2021 2:08 PM \\
\hline 364 & Math is too easy and a lot of the time is spent listening to talking instead of activities that he participated in. Also put him at a lower level so too simple. He hasn't complained about the reading module. & 4/27/2021 2:05 PM \\
\hline 365 & N/A & 4/27/2021 2:02 PM \\
\hline 366 & Focus & 4/27/2021 2:01 PM \\
\hline 367 & Everything & 4/27/2021 1:55 PM \\
\hline 368 & N/A & 4/27/2021 1:54 PM \\
\hline 369 & As parents we cannot see how long they use it & 4/27/2021 1:52 PM \\
\hline 370 & Stays well below my students level and never really advances. Poses no challenge and is very frustrating for my child. My child dreads every moment of this program and he usually really enjoys learning. & 4/27/2021 1:51 PM \\
\hline 371 & Reading & 4/27/2021 1:47 PM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 372 & It is staying below the level my child is at. It is not challenging at all and causes a lot of frustration for her. & 4/27/2021 1:46 PM \\
\hline 373 & Student can't choose subjects to work on & 4/27/2021 1:45 PM \\
\hline 374 & Just seems like a waste of time. He is learning more math through his interactions with his teacher and assignments, not i-Ready. & 4/27/2021 1:45 PM \\
\hline 375 & Content does not match what my child is learning in class. & 4/27/2021 1:44 PM \\
\hline 376 & Nothing! This and Zearn are the worst & 4/27/2021 1:39 PM \\
\hline 377 & The math that it covers is not related to the curriculum he is learning day to day. & 4/27/2021 1:39 PM \\
\hline 378 & na & 4/27/2021 1:38 PM \\
\hline 379 & Nothing & 4/27/2021 1:37 PM \\
\hline 380 & Bad roll out for high school & 4/27/2021 1:30 PM \\
\hline 381 & Nothing & 4/27/2021 1:20 PM \\
\hline 382 & We had a little struggle with the assessment and work beyond his level but once we realized this was part of the test, we were able to keep moving forward. & 4/27/2021 1:19 PM \\
\hline 383 & The diagnostic testing seemed a bit much for a Kindergartener and was far too long in my opinion for her age group. & 4/27/2021 1:18 PM \\
\hline 384 & The math lessons are far below his level. He gets bored and it is hard to keep him focused on the lesson. When he knows the correct answer, the system will not allow him to answer until they have read all of the options. This causes my student to disengage and lose focus. & 4/27/2021 1:16 PM \\
\hline 385 & The math lessons look done, but then don't show up as finished on his summary until he does more of them. & 4/27/2021 1:16 PM \\
\hline 386 & The math doesn't seem to move along with his abilities as well as the reading does. & 4/27/2021 1:12 PM \\
\hline 387 & They are unmotivated at home. & 4/27/2021 1:11 PM \\
\hline 388 & See above. & 4/27/2021 1:10 PM \\
\hline 389 & He really needs to see and hear from the teacher, not just online or virtual & 4/27/2021 1:09 PM \\
\hline 390 & the assessment is extremely long and frustrating for my child with ADHD. She has a hard time finishing the assessment even within the days. It would be great if they could do part of the assessment then access some of the path as they finish the sections so they are not doing an assessment the whole time. & 4/27/2021 1:08 PM \\
\hline 391 & The level of where the student was placed after the diagnostic test was not necessarily where the student's level was. It was grueling to sit and have a kindergartner do the the diagnostic test. One she learned she had to skip and move on if she couldn't read or no the answer to the question, she would do that for some she could answer. She had to do a lot of lessons to get to where i-ready was at her level. & 4/27/2021 1:05 PM \\
\hline 392 & The assessment was so long and arduous that he began guessing and it put him at a level way below where he should have been. Also, with all the zooms and other online learning, it was not beneficial for him to be in front of a computer for more time & 4/27/2021 1:03 PM \\
\hline 393 & My student has complained that it is repetitive and that he is just now getting to a place where he is learning \(g\) new concepts (April), which I assume means he didn't test accurately at the beginning of the year. & 4/27/2021 1:03 PM \\
\hline 394 & Child says they have to do the same lessons repeatedly before it levels up. Not sure if thats an iReady issue or a teacher/admin issue tho & 4/27/2021 1:00 PM \\
\hline 395 & N/A & 4/27/2021 12:59 PM \\
\hline 396 & Math. Strange ways to subtract. Way too many ways to do it & 4/27/2021 12:58 PM \\
\hline 397 & Not sure & 4/27/2021 12:54 PM \\
\hline 398 & Says it is too simple and repetitive & 4/27/2021 12:52 PM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 399 & Not sure yet & 4/27/2021 12:50 PM \\
\hline 400 & Nothing & 4/27/2021 12:48 PM \\
\hline 401 & The fact that every time my child takes an diagnostic, it keeps placing my child back at the kindergarten level and this is not accurate & 4/27/2021 12:47 PM \\
\hline 402 & Always motivating them to go on and not really sure what kind of progress they are making & 4/27/2021 12:45 PM \\
\hline 403 & It's a lot of time on-screen. He gets frustrated with lessons that repeat the same concepts over and over again. & 4/27/2021 12:45 PM \\
\hline 404 & In the beginning it was hard for him & 4/27/2021 12:44 PM \\
\hline 405 & He doesn't like listening to the instructions/ reading part, it's long & 4/27/2021 12:43 PM \\
\hline 406 & Remote learning. & 4/27/2021 12:40 PM \\
\hline 407 & My child does not engage in learning at all with it, just clicks buttons & 4/27/2021 12:37 PM \\
\hline 408 & Doesnt count all of time spent using program & 4/27/2021 12:37 PM \\
\hline 409 & Confusing on the lesson progress for the child. If not all the way through the lesson it keeps starting over. & 4/27/2021 12:36 PM \\
\hline 410 & Sometimes it doesnt count all her time & 4/27/2021 12:35 PM \\
\hline 411 & The lessons feel like filler/busy work. In a world where they are already staring at screens multiple hours in the day they don't need more screen-based learning. It is lazy teaching. & 4/27/2021 12:34 PM \\
\hline 412 & I don't know actually & 4/27/2021 12:34 PM \\
\hline 413 & I believe there hasn't been a moment where I-ready hasn't been working well for my son. He is progressing more than anything & 4/27/2021 12:34 PM \\
\hline 414 & It seems that i ready only sometimes correctly calculates minutes spent on it & 4/27/2021 12:33 PM \\
\hline 415 & The timer!!!! The program decides how long the lessons are worth not the child pace. It needs to track per day not per week!! & 4/27/2021 12:32 PM \\
\hline 416 & He likes getting answers right so he gets frustrated during the assessment portions when there are questions beyond his level of ability. & 4/27/2021 12:32 PM \\
\hline 417 & The fact that she is not using this program a total of 5 hours per week for 1st grade & 4/27/2021 12:32 PM \\
\hline 418 & The assessment was stressful for my daughter and she performed poorly so her math level was lowered to basic math and she was no longer challenged & 4/27/2021 12:31 PM \\
\hline 419 & I just have no idea how much my daughter is actually doing on there, and if she is keeping up with the rest of the class. & 4/27/2021 12:30 PM \\
\hline 420 & Geometry & 4/27/2021 12:30 PM \\
\hline 421 & Our teacher wants specific minutes a day but it doesn't track per day or even how long they are actually working. The computer decides how long each thing should take. I dislike this feature... it can take my child 50 plus minutes to do their 40 minute lessons. Bad time keeping for sure!! & 4/27/2021 12:29 PM \\
\hline 422 & too easy & 4/27/2021 12:28 PM \\
\hline 423 & See previous response. Also, I'm not sure how much he is getting from it. Especially with reading, it seems like he can get through with a lot of guesswork it's probably a good program for a normally activity child. & 4/27/2021 12:26 PM \\
\hline 424 & He doesn't like it. He gets frustrated when he inputs an answer and then doesn't have a chance to change it. He is sick of having to do things on the computer all the time. Working on paper and in person is much better. & 4/27/2021 12:25 PM \\
\hline 425 & The diagnostic seems a bit off. Difficulty could be more customizable. & 4/27/2021 12:23 PM \\
\hline 426 & nothing & 4/27/2021 12:23 PM \\
\hline 427 & I feel that this program has not helped and even in some cases my son has fell behind & 4/27/2021 12:22 PM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
because he scored low and his lessons were to easy. I no longer have him doing this program and he is doing much better with out it. In the future I will request him to not use this program at all. He in intensive support and I think this program was not a good fit. I went ahead and bought programs on my own that were more helpful. I also did not like that this programs results were used in his iep. This computer program is what the district used to tell me how my son is doing in class and it was all so far from the truth.
\begin{tabular}{|c|c|c|}
\hline 428 & Not known & 4/27/2021 12:22 PM \\
\hline 429 & The math assessment and assignments don't seem to adequately increase in difficulty. & 4/27/2021 12:21 PM \\
\hline 430 & My child complains every-time he has to do iReady. I don't think he has retained any information from iReady. & 4/27/2021 12:20 PM \\
\hline 431 & The reading is a little funky-my daughter eventually got to a point where she couldn't understand what was being asked of her and it didn't adjust her lessons even though she was getting every question wrong. For my 3rd grader, he suddenly wasn't able to access either reading or math lessons one day and the tech department at school seemed at a loss with how to fix it. I would suggest a comprehensive training for IT workers should this program continue to be used. & 4/27/2021 12:20 PM \\
\hline 432 & Lessons keep repeating, math is way too easy, not very helpful & 4/27/2021 12:20 PM \\
\hline 433 & The long and drawn out and boring & 4/27/2021 12:20 PM \\
\hline 434 & i don't know & 4/27/2021 12:20 PM \\
\hline 435 & The program seems behind where my child is at in class math and reading. & 4/27/2021 12:14 PM \\
\hline 436 & Testing and assessments cause a significant amount of anxiety with our child. Even if it's not weighted or doesn't count against our student grade wise. The placement tools should be renamed. & 4/27/2021 12:14 PM \\
\hline 437 & N/a & 4/27/2021 12:12 PM \\
\hline 438 & He said it's boring & 4/27/2021 12:12 PM \\
\hline 439 & Slow & 4/27/2021 12:11 PM \\
\hline 440 & I-ready math is extremely slow to progress in each individual problem and with each lesson. The program also remains on the same type problems for a long time. & 4/27/2021 12:11 PM \\
\hline 441 & Younger kids get very frustrated during the diagnostic. They do not understand why the questions are so hard and this can affect them being able to be confident about what they do know. Tears for both diagnostics in our household. & 4/27/2021 12:10 PM \\
\hline 442 & N/a & 4/27/2021 12:10 PM \\
\hline 443 & Nothing & 4/27/2021 12:09 PM \\
\hline 444 & The diagnostic is terrible. Kids do not understand why they are being given such hard questions and my daugther would get so frustrated shed being making mistakes on items she knew. Last year and this year her teacher had to manually move her to a higher level because the diagnostic did not capture what she knew or her current abilities at all. There were tears both years during the diagnostic. & 4/27/2021 12:08 PM \\
\hline 445 & Does not enjoy, doesn't seem to serve much of a purpose for her, she feels like it is "fluff" & 4/27/2021 12:06 PM \\
\hline 446 & All going well & 4/27/2021 12:06 PM \\
\hline 447 & The assessment test was pretty difficult for him and caused discouragement to get it done. & 4/27/2021 12:06 PM \\
\hline 448 & none & 4/27/2021 12:04 PM \\
\hline 449 & Sometimes instructions aren't clear & 4/27/2021 12:04 PM \\
\hline 450 & Reading is hardly used. Sections are too long. Lexia was a much better platform. & 4/27/2021 12:03 PM \\
\hline 451 & Inability to learn the concept taught & 4/27/2021 12:03 PM \\
\hline 452 & Assessment tools are infrequent- math is currently too easy for our child so it's less engaging. I'm assuming she hurried through LONG assessment so it placed her lower than her ability. & 4/27/2021 12:02 PM \\
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\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 453 & Diagnostic tests are frustrating and student doesn't want to do lessons. Lessons are not at an appropriate level. Lessons are not helping practice current classroom work. & 4/27/2021 12:02 PM \\
\hline 454 & Nothing & 4/27/2021 12:01 PM \\
\hline 455 & Program moves too slowly & 4/27/2021 12:01 PM \\
\hline 456 & It can take a very long time for the assessments and he can get frustrated and not do his best. & 4/27/2021 11:59 AM \\
\hline 457 & Na & 4/27/2021 11:58 AM \\
\hline 458 & The reading is too difficult. It discourages my son. & 4/27/2021 11:57 AM \\
\hline 459 & Doesn't seem to be progressing very quickly. Lessons move too slowly. & 4/27/2021 11:57 AM \\
\hline 460 & he HATES iready. I think it was probably overused. Had it been once a week or on occasion, that might be different. However, his teacher required 10-15 minutes a day and he was burned out. I let the teacher know, but the iready time requirement was not adjusted. I think it's probably a great tool, but kids are fried on screen time this year. Please please please don't make it a daily requirement again. & 4/27/2021 11:57 AM \\
\hline 461 & They think it's boring & 4/27/2021 11:56 AM \\
\hline 462 & Son doesn't say he gets stuck on anything yet & 4/27/2021 11:56 AM \\
\hline 463 & The length of the lessons is variable. & 4/27/2021 11:55 AM \\
\hline 464 & They don't enjoy it. They prefer reading printed materials or listening to audiobooks on their own, and they seem to learn more from actual reading and in-person instruction than from online games. & 4/27/2021 11:55 AM \\
\hline 465 & Difficulties associated with school at home- due to covid & 4/27/2021 11:54 AM \\
\hline 466 & Just general distraction like any online learning situation. & 4/27/2021 11:52 AM \\
\hline 467 & An example of how to calculate a problem at the beginning of the lesson would be helpful & 4/27/2021 11:52 AM \\
\hline 468 & Reading. For some reason she says she doesn't like the voices they make & 4/27/2021 11:52 AM \\
\hline 469 & My child will guess at answers without reading the question to get to the games quicker. & 4/27/2021 11:51 AM \\
\hline 470 & All is ok & 4/27/2021 11:51 AM \\
\hline 471 & He has completed i-Ready language and will soon complete i-Ready math. The problem is that ESD does not offer another program beyond i-Ready for students moving at an advanced pace. & 4/27/2021 11:50 AM \\
\hline 472 & Not sure & 4/27/2021 11:50 AM \\
\hline 473 & Nothing. & 4/27/2021 11:46 AM \\
\hline 474 & None & 4/27/2021 11:45 AM \\
\hline 475 & Math instruction is hard to understand. If you already know something, you can't skip. & 4/27/2021 11:44 AM \\
\hline 476 & Nothing & 4/27/2021 11:43 AM \\
\hline 477 & N/A & 4/27/2021 11:43 AM \\
\hline 478 & Sometimes he feels bored & 4/27/2021 11:43 AM \\
\hline 479 & Her teacher stopped listing I-ready as a daily assignment and has seemed to replace it with other seesaw activities so we havent been doing I-ready for about a month now. We miss it, but we don't have time to add it in on top of the other activities. Her teacher is assigning up to 8 assignments a day. & 4/27/2021 11:43 AM \\
\hline
\end{tabular}
\begin{tabular}{lll|l|}
\hline 480 & \begin{tabular}{l} 
He did not like the characters' voices in i-ready. He wishes that he can mute them or have \\
option to change voice.
\end{tabular} & 4/27/2021 11:42 AM \\
\hline 481 & Frustration. Sometimes when my vhild answers correctly it will tell her she is wrong. & \(4 / 27 / 2021\) 11:41 AM \\
\hline 482 & \begin{tabular}{l} 
Too slow - kids spending too much time clicking on the interface to proceed. The animations \\
are slowing down the progress and kids can sometimes become impatient. Some illustrations
\end{tabular} & \(4 / 27 / 2021\) 11:41 AM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
requires additional explanation by a parent.
\begin{tabular}{|c|c|c|}
\hline 483 & N/a & 4/27/2021 11:40 AM \\
\hline 484 & The instruction is very slow and you can't speed up the process so the lessons take more time than needed. & 4/27/2021 11:40 AM \\
\hline 485 & Allowing parents to see what is happening. & 4/27/2021 11:39 AM \\
\hline 486 & Frustration. Sometimes when my vhild answers correctly it will tell her she is wrong. & 4/27/2021 11:39 AM \\
\hline 487 & Oops! Answered above. & 4/27/2021 11:39 AM \\
\hline 488 & Replaced instruction because of switching to hybrid & 4/27/2021 11:38 AM \\
\hline 489 & nothing. It is not engaging and the problems do not match the class curriculum. It is assigned in place of class instruction. & 4/27/2021 11:37 AM \\
\hline 490 & Communication & 4/27/2021 11:37 AM \\
\hline 491 & they want the least amount of online time possible, this just adds to screen time after school is over & 4/27/2021 11:36 AM \\
\hline 492 & Sometimes the scores make my student anxious & 4/27/2021 11:36 AM \\
\hline 493 & The diagnostics that set their level put him really low, so he was very bored and didn't get much out of it. & 4/27/2021 11:36 AM \\
\hline 494 & Young kids should have a pencil in their hands. Not a cheap computer & 4/27/2021 11:35 AM \\
\hline 495 & she thinks the animation sequences take too long to get to the point. She is good at just clicking until it tells her she has the right answer instead of understanding the problem. & 4/27/2021 11:34 AM \\
\hline 496 & The requirement to complete weekly instruction using Iready. It is not intuitive y & 4/27/2021 11:34 AM \\
\hline 497 & Don't know & 4/27/2021 11:33 AM \\
\hline 498 & When she picks the wrong answer it just keeps letting her pick until she gets the right one. & 4/27/2021 11:33 AM \\
\hline 499 & He sometimes skipped lessons he was supposed to do while working in the remote format. & 4/27/2021 11:33 AM \\
\hline 500 & Many times the correct answer is "read" as incorrect confusing the student. & 4/27/2021 11:33 AM \\
\hline 501 & He doesn't want to do the math I-ready lessons... he gets bored as they are so repetitive. In some areas he has gotten a lot of practice for example "adding up to 5 " and they keep on repeating similar lessons and he just doesn't want to do it & 4/27/2021 11:32 AM \\
\hline 502 & When he read and record a story most of the time has to record 3 times. After finished recording, next day when login, it ask to read and record again. My son get upset recording same story again and again. & 4/27/2021 11:30 AM \\
\hline 503 & Not sure yet & 4/27/2021 11:30 AM \\
\hline 504 & Frustration if needing to repeat things & 4/27/2021 11:29 AM \\
\hline 505 & Seemed to be geared towards younger kids. Too much like a video game. & 4/27/2021 11:29 AM \\
\hline 506 & My son doesn't like doing reading in I-ready, it is always stressful for him. I think it is because every time when he does a mistake there, it says "too bad" or similar. I wish it didn't give any feedback like that to him, just collected his responses for the teacher. & 4/27/2021 11:29 AM \\
\hline 507 & It's going fine. & 4/27/2021 11:28 AM \\
\hline 508 & I don't know how she is doing. I haven't received any feedback from her teacher. & 4/27/2021 11:28 AM \\
\hline 509 & It' boring and he gets tired of it. He would much rather have a lesson from a teacher. & 4/27/2021 11:27 AM \\
\hline 510 & I am not sure & 4/27/2021 11:27 AM \\
\hline 511 & It seems to be too slow for my daughter. She often sits and have to wait for the lesson to finish talking before she can respond, even though she is able to read the content and decide on an answer. & 4/27/2021 11:26 AM \\
\hline 512 & Gets tired using it for longer periods & 4/27/2021 11:26 AM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 513 & Reading was little challenging. & 4/27/2021 11:25 AM \\
\hline 514 & The math is way too easy. i know that it's based of the diagnostic, but I think teachers should be able to adjust a student's level. He's doing counting, which he is definitely more than proficient in. It's likely he rushed through the diagnostic. Plus, it was very word-problem heavy, and since he isn't an independent reader yet, it was hard for him to do those problems. Keeping all the information for a word problem in your head by reading it is taxing for a kid. & 4/27/2021 11:25 AM \\
\hline 515 & It's hard to move up in math (too easy, too many lessons before moving up) & 4/27/2021 11:25 AM \\
\hline 516 & the repetition & 4/27/2021 11:24 AM \\
\hline 517 & It's pointless & 4/27/2021 11:23 AM \\
\hline 518 & We are unable to re-do the assessment to update where he is at in his learning & 4/27/2021 11:23 AM \\
\hline 519 & Nothing that I know of & 4/27/2021 11:23 AM \\
\hline 520 & n/a & 4/27/2021 11:22 AM \\
\hline 521 & It was all good & 4/27/2021 11:22 AM \\
\hline 522 & Extremely repetitive, doesn't progress fast enough, time consuming & 4/27/2021 11:22 AM \\
\hline 523 & the amount of time expected to use it & 4/27/2021 11:21 AM \\
\hline 524 & Something else on the never ending to do list & 4/27/2021 11:21 AM \\
\hline 525 & I don't really have any negative feedback. & 4/27/2021 11:21 AM \\
\hline 526 & Making sure she does 30 minutes separately for math and reading & 4/27/2021 11:21 AM \\
\hline 527 & She found it boring, repetitive, and unrelated to class concepts. & 4/27/2021 11:20 AM \\
\hline 528 & remembering to \(\log\) in \& do lessons & 4/27/2021 11:19 AM \\
\hline 529 & She struggled a lot to keep on top of assignments and tasks & 4/27/2021 11:19 AM \\
\hline 530 & Sometimes she would forget how to find it and login but after repetition she's got it! & 4/27/2021 11:19 AM \\
\hline 531 & I don't see any benefits or improvements from using i-Ready. & 4/27/2021 11:18 AM \\
\hline 532 & My child doesn't like it much. It's slow and you can't skip forward if you understand the concepts. & 4/27/2021 11:17 AM \\
\hline 533 & Understandable & 4/27/2021 11:16 AM \\
\hline 534 & n/a & 4/27/2021 11:16 AM \\
\hline 535 & N/A & 4/27/2021 11:16 AM \\
\hline 536 & Nothing & 4/27/2021 11:16 AM \\
\hline 537 & Can be confusing & 4/27/2021 11:15 AM \\
\hline 538 & My student does not enjoy it. & 4/27/2021 11:14 AM \\
\hline 539 & My student does not enjoy it. & 4/27/2021 11:13 AM \\
\hline 540 & Student complains lessons are too long. Parents think they're just right. & 4/27/2021 11:13 AM \\
\hline 541 & Too much computer time & 4/27/2021 11:12 AM \\
\hline 542 & Gets stuck in one area & 4/27/2021 11:11 AM \\
\hline 543 & The format is frustrating, they can't see how they've done past lessons & 4/27/2021 11:11 AM \\
\hline 544 & No issues & 4/27/2021 11:10 AM \\
\hline 545 & She gets frustrated because she doesn't feel it offers instruction on what she doesn't understand & 4/27/2021 11:10 AM \\
\hline 546 & I do not want this to become my a part of my childs core instruction. It is a good supplement but not an instructional tool like his teacher. ild & 4/27/2021 11:10 AM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 547 & He is at pace to complete the reading requirements for the year which is good. On the math though he is beyond the recommendation and it is still lagging what has been taught in remote learning & 4/27/2021 11:10 AM \\
\hline 548 & Nothing & 4/27/2021 11:09 AM \\
\hline 549 & She does not like doing iReady at all. She was thrilled the week that it was not assigned. & 4/27/2021 11:09 AM \\
\hline 550 & See comments above. An additional point would be the building on a skill set to attain proficiency versus a one lesson introduction that doesn't solidify a given concept. iReady is a quality math app! & 4/27/2021 11:08 AM \\
\hline 551 & N/A & 4/27/2021 11:07 AM \\
\hline 552 & n/a & 4/27/2021 11:07 AM \\
\hline 553 & Sometimes things are very confusing. It has jumped around in math for him quite a bit. It also explains instructions over and over and there's no way to skip it and he gets really annoyed. If you get things wrong, the lessons don't end. They end up taking 40-45 minutes for one lesson. They can also be very repetitive, where it doesn't seem to match his level. & 4/27/2021 11:07 AM \\
\hline 554 & The app takes too much time. The fact that when the thermometer bar has Gina LoL the way across the screen,AND THEN starts over a second time is a huge de-motivator. As a parent, I absolutely hate, hate, hate I-ready. There are better programs out there. This one needs to go. Thanks! & 4/27/2021 11:07 AM \\
\hline 555 & The assessment. Only the assessment. Everything else about it is great. & 4/27/2021 11:07 AM \\
\hline 556 & They hate that they ha s to sit through some of the videos that they already feel like they have learned the material & 4/27/2021 11:07 AM \\
\hline 557 & They DO NOT like doing it. It can be an argument to get it done. & 4/27/2021 11:06 AM \\
\hline 558 & When this is the only firm of instruction or when an assigned lesson from the teacher is too easy it is boring, not engaging & 4/27/2021 11:06 AM \\
\hline 559 & My son HATES this program. It's agonizing for both of us to sit and listen to these cartoon characters teach to him. He has ADHD and cannot focus on their long drawn out lessons over the internet. It's been a total fail. His assessment came back 2 years under his current grade level because he rushed through it. So either his teacher, or the system, reset the program so he could take it again.. and now he's had to start the entire "path" over again. So now all those lessons that he already HATED, he has to do again. It's a total \(F^{* * *}\) ING joke. He is fully capable of learning, just not with this program. & 4/27/2021 11:06 AM \\
\hline 560 & He hates it, it's slow and boring. & 4/27/2021 11:05 AM \\
\hline 561 & N/A & 4/27/2021 11:05 AM \\
\hline 562 & It started much much too easy for him. Also never getting the results from the diagnostic was frustrating. & 4/27/2021 11:05 AM \\
\hline 563 & The diagnostic was a bear. Tears, feeling like she was failing, etc. Terrible way to begin a school year. The My Path is boring, and my student would rather read a book, write a book, play a math game, etc. & 4/27/2021 11:05 AM \\
\hline 564 & According to my student, it's redundant and not helping him learn new material. Seems to be teaching things he learned in elementary school. & 4/27/2021 11:05 AM \\
\hline 565 & N/a & 4/27/2021 11:04 AM \\
\hline 566 & Difficulty understanding what to do & 4/27/2021 11:03 AM \\
\hline 567 & More than 10 minutes per session can be overwhelming. & 4/27/2021 11:03 AM \\
\hline 568 & The diagnostic needs to be broken down into stages, by the end of the diagnostic he was rushing through answers that I know he knew, but he just wanted to be done & 4/27/2021 11:03 AM \\
\hline 569 & the questions are too repetitive, which makes it boring. & 4/27/2021 11:03 AM \\
\hline 570 & Lessons are to drawn out and loses child's interest & 4/27/2021 11:03 AM \\
\hline 571 & It's very repetitive/ parents and teacher should have the option to skip skills they know the & 4/27/2021 11:03 AM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
student has already mastered. It is often a waste of time.
\begin{tabular}{|c|c|c|}
\hline 572 & N/a & 4/27/2021 11:02 AM \\
\hline 573 & Getting him motivated to do it & 4/27/2021 11:02 AM \\
\hline 574 & It moves slowly. She dreads doing it each week. & 4/27/2021 11:02 AM \\
\hline 575 & As always...sometimes hard to motivate student to do the work. & 4/27/2021 11:02 AM \\
\hline 576 & Nothing & 4/27/2021 11:02 AM \\
\hline 577 & Sometimes, there some long animation that you couldn't skip candy my son becoming bored & 4/27/2021 11:01 AM \\
\hline 578 & It's not going well, he scores grades below 6th grade level in both math and reading yet according to his teacher, in class he reads and understands his math assignments at above average levels. & 4/27/2021 11:01 AM \\
\hline 579 & Understanding reading & 4/27/2021 11:00 AM \\
\hline 580 & Don't know much & 4/27/2021 11:00 AM \\
\hline 581 & He tested well below grade level...not self motivated to do his best work independently. & 4/27/2021 11:00 AM \\
\hline 582 & some of the math concepts & 4/27/2021 11:00 AM \\
\hline 583 & I am unsure how well the time tracking feature works. & 4/27/2021 10:59 AM \\
\hline 584 & It moves very slowly. The diagnostics are long. & 4/27/2021 10:59 AM \\
\hline 585 & Understanding reading & 4/27/2021 10:59 AM \\
\hline 586 & My student does not like it because it is very boring and spends too much time on what he already knows & 4/27/2021 10:59 AM \\
\hline 587 & I don't know here, sorry & 4/27/2021 10:59 AM \\
\hline 588 & Sometimes my student wants to guess just to see what happens even when she knows the answer is incorrect & 4/27/2021 10:59 AM \\
\hline 589 & Everything- He finds it cheesy and boring (especially the reading) - It is a constant struggle to get him to use the program and the assessments three times a year just cause tears. Not a fan of this program at all. & 4/27/2021 10:59 AM \\
\hline 590 & They got "stuck" at a boring easy level and had to jump through the hoops (Reading). Wanted the teacher to use professional judgement to move them up manually. Became boring when too easy. & 4/27/2021 10:58 AM \\
\hline 591 & Can become repetitive at times. & 4/27/2021 10:57 AM \\
\hline 592 & we don't really know if we are using it correctly & 4/27/2021 10:57 AM \\
\hline 593 & See above & 4/27/2021 10:57 AM \\
\hline 594 & Reading, it is not a true assessment and is more frustrating than it is worth & 4/27/2021 10:57 AM \\
\hline 595 & She hates it. Her IEP is supposd to limit screen time, yet this is a huge tool shes required to do. She is a terrible tester so he math stuff is below her level (unless her teacher assigns work which is awesome) & 4/27/2021 10:57 AM \\
\hline 596 & Sometimes it doesn't save progress & 4/27/2021 10:56 AM \\
\hline 597 & He doesn't look forward to having to do iready & 4/27/2021 10:56 AM \\
\hline 598 & At the beginning of the year when my daughter's teacher had kids do the diagnostic he didn't explain that it was designed so that the students were not expected to know how to do all the problems presented. There were several tears of frustration and calling herself stupid. Thankfully she was more mentally prepared for the mid year diagnostic. & 4/27/2021 10:56 AM \\
\hline 599 & Nothing & 4/27/2021 10:54 AM \\
\hline 600 & Diagnostic didn't reflect my kid's academic level. Instruction videos are too long. & 4/27/2021 10:54 AM \\
\hline 601 & My student is disinterested and bored not helping her pay attention & 4/27/2021 10:53 AM \\
\hline
\end{tabular}
i-Ready Spring 2021 Feedback Survey - Families/English
\begin{tabular}{|c|c|c|}
\hline 602 & n/a & 4/27/2021 10:53 AM \\
\hline 603 & Can't repeat lessons & 4/27/2021 10:53 AM \\
\hline 604 & He is doing it because he has to do it, not because he like it or he learn. & 4/27/2021 10:53 AM \\
\hline 605 & The reading & 4/27/2021 10:53 AM \\
\hline 606 & None & 4/27/2021 10:53 AM \\
\hline 607 & I would like it more if the feedback to parents were more comprehensive. Not just minutes & 4/27/2021 10:52 AM \\
\hline 608 & Learning reinforcement, additional practice questions, keeps him busy, also enjoys tracking his scores & 4/27/2021 10:52 AM \\
\hline 609 & I feel like the audio speed is a bit too fast. Even I had a hard time understanding what was been said sometimes. Also, the quiz wouldn't give the correct answers or explanations when you made an error. It just moves onto the next question. & 4/27/2021 10:52 AM \\
\hline 610 & His program keeps glitching and not saving his progress/work. & 4/27/2021 10:52 AM \\
\hline 611 & Kindergarten doesn't use the program often enough to have any concerns & 4/27/2021 10:51 AM \\
\hline 612 & It is a cheesy program with annoying features. Both my kids hate it. It is a constant struggle to get them to use it. The diagnostic is LONG and extremely frustrating to young kids & 4/27/2021 10:51 AM \\
\hline 613 & Not as in depth as in person instruction/ boring & 4/27/2021 10:51 AM \\
\hline 614 & My student is frustrated by the lessons. They do not support current learning. Seems like busy work and a waste of time. & 4/27/2021 10:51 AM \\
\hline 615 & Ben is supposed to use iReady Reading and Math for a set amount of time each day of remote learning. It seems like it has been difficult to keep track of how many minutes he's actively using iReady. We set a timer for 20 minutes and when that is up, he's done with iReady Math for example. But, when his teacher tells us how long he was using iReady Math, it was significantly less than 20 minutes. Making it easier to track minutes or telling parents where to find that information would be helpful. In addition, Ben has had a hard time staying engaged with iReady. He initially liked the learning games, but has a difficult time staying engaged with the lessons. Ben is typically very focused when it comes to learning, so perhaps it is too easy. I actually think it is the platform. Being on the computer for him is too tempting for him not to do other computer things (YouTube, web searches, etc.) & 4/27/2021 10:51 AM \\
\hline 616 & The Reading program just reads all the text TO her in recorded voices. What is the point of a reading program that doesn't make her READ? It's testing her comprehension, not her reading ability. & 4/27/2021 10:50 AM \\
\hline 617 & She says it's too easy and she hates doing it because there is no challenge. & 4/27/2021 10:50 AM \\
\hline 618 & Nothing that I know of. & 4/27/2021 10:50 AM \\
\hline 619 & Some questions are worded confusing and she doesn't know what to do. & 4/27/2021 10:50 AM \\
\hline 620 & It's not useful. & 4/27/2021 10:50 AM \\
\hline 621 & Nothing good, I-Ready tech something totally different than what third teacher the teach them & 4/27/2021 10:50 AM \\
\hline 622 & She gets really frustrated with the techniques they use, and annoyed by the characters. Also it glitches and makes her repeat lessons. The other major issue is that the "path" does not correlate with what they are learning in class. & 4/27/2021 10:50 AM \\
\hline 623 & The assessment goes fast and she just guesses & 4/27/2021 10:49 AM \\
\hline 624 & She has not mentioned anything other than she doesn't always want to do it & 4/27/2021 10:49 AM \\
\hline 625 & The diagnostics don't have a progress indicator, which makes them feel way too long. & 4/27/2021 10:49 AM \\
\hline 626 & She says the online instruction is boring. The younger grades are more engaging. I don't like that there the feedback is basically minutes for parents. I'd like to know more details of what concepts she could use extra help with. (That's why I chose "not sure" because I don't know whether it's the online instruction that has been helpful or that she's applying concepts from class. & 4/27/2021 10:49 AM \\
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\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 627 & Nothing & 4/27/2021 10:48 AM \\
\hline 628 & I think kindergarten age is too young to be on a computer & 4/27/2021 10:48 AM \\
\hline 629 & It's been working great & 4/27/2021 10:48 AM \\
\hline 630 & Everything. This tool has continuously frustrated my student and they feel alone in their learning using this tool. & 4/27/2021 10:48 AM \\
\hline 631 & Nothing & 4/27/2021 10:47 AM \\
\hline 632 & The repetition gets boring & 4/27/2021 10:47 AM \\
\hline 633 & The diagnostic tool is very long and younger kids have a hard Tim focusing king enough to correctly complete the tool. They end up with levels too low for their actual abilities. & 4/27/2021 10:47 AM \\
\hline 634 & These math and reading programs have killed the joy of learning. We have had more battles over iReady than anything else related to school. Students should especially not be reading on a screen but be using books and having book discussions in groups. My child who was once proficient in Math (strongest skill) and reading now is struggling in those content areas and getting worse. Awful program! & 4/27/2021 10:47 AM \\
\hline 635 & The amount of time expected to use it everyday on top of zoom meetings & 4/27/2021 10:46 AM \\
\hline 636 & I'm just not sure exactly where he's at, like if he's behind, just where he should be or ahead. & 4/27/2021 10:46 AM \\
\hline 637 & The lessons are repetitive. If he doesn't actually understand he can just guess. He can "progress" just by doing the lesson over and over and remembering which answer is wrong. He isn't learning to read by doing this. He's learning how to avoid the difficult questions by guessing at the same multiple choice question until he gets the right answer. In the end he just doesn't want to do i-ready anymore because it's the same boring lesson over and over/just some more guessing. & 4/27/2021 10:46 AM \\
\hline 638 & Too slow, kids hate it & 4/27/2021 10:45 AM \\
\hline 639 & 1 dk & 4/27/2021 10:45 AM \\
\hline 640 & The lessons felt long. My student sometimes complained that it was too long. & 4/27/2021 10:45 AM \\
\hline 641 & the assessment process is not great. My child finds the lessons boring and slow for math. So it does not progress quickly enough or keep her that engaged. Prodigy was way more engaging - but the district blocked it for some reason. & 4/27/2021 10:45 AM \\
\hline 642 & Distractions at home. If and when he does I ready, he has to be alone and in a quiet place or he becomes distracted during the lessons & 4/27/2021 10:45 AM \\
\hline 643 & Gets bored when it's above his ability to perform, specially during diagnostic. & 4/27/2021 10:45 AM \\
\hline 644 & He didn't complete it & 4/27/2021 10:44 AM \\
\hline 645 & Boring & 4/27/2021 10:44 AM \\
\hline 646 & The time, the platform, the lack of attention span & 4/27/2021 10:44 AM \\
\hline 647 & No issue at all & 4/27/2021 10:44 AM \\
\hline 648 & Not keeping his focus, confusing questions & 4/27/2021 10:44 AM \\
\hline 649 & Too slow stupid cartoons in the middle a waste of their time & 4/27/2021 10:44 AM \\
\hline 650 & Lessons are slow and you can't skip through certain parts & 4/27/2021 10:44 AM \\
\hline 651 & With remote learning it has been challenging to get more work done on the computer. Her eyes are tired of looking at the screen & 4/27/2021 10:44 AM \\
\hline 652 & Evelyn is supposed to use iReady Reading and Math for a set amount of time each day of remote learning. It seems like it has been difficult to keep track of how many minutes she's actively using iReady. We set a timer for 20 minutes and when that is up, she's done with iReady Math for example. But, when her teacher tells us how long she was using iReady Math, it was significantly less. Making it easier to track minutes or telling parents where to find that information would be helpful. & 4/27/2021 10:44 AM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
\begin{tabular}{|c|c|c|}
\hline 653 & The lessons are VERY repetitive, long and boring for my student. She doesn't look forward to her time doing iready. She doesn't advance enough and gets frustrated easily. There's no way for parents to see what progress she's made or what she needs to work on. I don't find it helpful as a parent. & 4/27/2021 10:44 AM \\
\hline 654 & We are still at count 1-20 in the math portion. She is sooooo bored as this was pre k stuff. Also the assessments are way to long and jump from \(k\) material to like 3rd grade material with no skip option. This increased stress and actually led to her accidentally hitting the correct answer. About half the assessment was way above her head and a frustrating waste of time that led to meltdowns due to being frustrated and overwhelmed. & 4/27/2021 10:44 AM \\
\hline 655 & Staying motivated & 4/27/2021 10:43 AM \\
\hline 656 & She despises using it. I don't feel like its appropriate for her age level & 4/27/2021 10:43 AM \\
\hline 657 & My child has become bored by it. Perhaps not required as often or give the choice to do that if they don't have parent support to confirm that we are doing our own reading and/or math with them. & 4/27/2021 10:43 AM \\
\hline 658 & The lessons sometimes felt long. & 4/27/2021 10:43 AM \\
\hline 659 & I don't think he ended up using it very much because he said it was too easy. He's in second grade and it was having him do 1st grade concepts after the initial test to see where he was at. He is very good at math and scored \(100 \%\) on every test so it seemed odd that it had him going backwards. So he was just very bored with it. Splashmath ended up being a better fit for him. & 4/27/2021 10:43 AM \\
\hline 660 & She doesn't like it & 4/27/2021 10:43 AM \\
\hline 661 & She doesn't like it & 4/27/2021 10:43 AM \\
\hline 662 & N/A & 4/27/2021 10:43 AM \\
\hline 663 & My student did not have the current lessons at her level provide.d & 4/27/2021 10:42 AM \\
\hline 664 & N/A & 4/27/2021 10:42 AM \\
\hline 665 & She doesn't like using it. She prefers personal interaction over the computer. & 4/27/2021 10:42 AM \\
\hline 666 & It's not accurate. & 4/27/2021 10:42 AM \\
\hline 667 & What an awful way to introduce learning to a child. Young children should be practicing Math with papaer pencil and tools and reading should be exciting and kids should be using actual books to learn. The online reading programs get boring fast and my kindergartener refuses to learn to read it is a huge battle. In preschool I couldn't get him to put books down. & 4/27/2021 10:42 AM \\
\hline 668 & N/A & 4/27/2021 10:42 AM \\
\hline 669 & Nothing! & 4/27/2021 10:41 AM \\
\hline 670 & It's a little slow to allow responses. & 4/27/2021 10:41 AM \\
\hline 671 & Na & 4/27/2021 10:41 AM \\
\hline 672 & She likes the game rewards, like Cat Stacker when she completes a level. & 4/27/2021 10:41 AM \\
\hline 673 & It's really easy for her. The lessons don't seem to increase like it says it does. She gets bored after awhile. & 4/27/2021 10:41 AM \\
\hline 674 & It's placing her in kindergarten level but one on one with a teacher she's on level. She complains everything is too easy and I have no way to select grade 2 which is where she should be. The tests they make the kids take to place them are too long, so she loses interest and just guesses which is not effective. There should be a way to override this tool or make it match closer to the material being taught in class. & 4/27/2021 10:41 AM \\
\hline 675 & Not sure & 4/27/2021 10:40 AM \\
\hline 676 & Nothing & 4/27/2021 10:40 AM \\
\hline 677 & There's a bug in the program that doesn't allow my student to progress. & 4/27/2021 10:40 AM \\
\hline 678 & parents can not see how many hours/day kids did. & 4/27/2021 10:40 AM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 679 & Nothing is going wrong & 4/27/2021 10:40 AM \\
\hline 680 & Diagnostic placed him in material inappropriate for his level of understanding, wasting his and my time to complete non value added lessons. This caused him to dislike the platform, causing more friction as I attempted to be a part of his learning team and get him to do the work. When asked, the teacher was unable to change the assessment. I ready is the worst part of an already extremely challenging school year. & 4/27/2021 10:40 AM \\
\hline 681 & Annoying for child & 4/27/2021 10:39 AM \\
\hline 682 & Lacking personal instruction & 4/27/2021 10:39 AM \\
\hline 683 & Gets boring, my child reads faster than the lesson goes & 4/27/2021 10:39 AM \\
\hline 684 & She writes in the correct answer, and it says she is wrong. & 4/27/2021 10:39 AM \\
\hline 685 & She sometimes has to leave the lesson and it resets to the nearest checkpoint so some of her work is lost & 4/27/2021 10:39 AM \\
\hline 686 & My student hates Math and Reading now, They used to love it. Computers do not take the place of paper pencil practice and reading should be from a book not a screen! I am very disappointed with the way online reading especially has sucked the joy of reading from my child. & 4/27/2021 10:39 AM \\
\hline 687 & I dont no & 4/27/2021 10:39 AM \\
\hline 688 & I find it lags between when the question is asked and the ability to answer. Often my daughter is ready to answer waiting for the choices to become available. I wish it were quicker in that sense so she could move more efficiently through the program. & 4/27/2021 10:39 AM \\
\hline 689 & I don't have a clear picture of what he's learning or what level he's at. I can see how many modules he's passed and his success rate, but no context to see if he's on track, at or above grade level, being challenged, etc. & 4/27/2021 10:39 AM \\
\hline 690 & No problems to report. & 4/27/2021 10:39 AM \\
\hline 691 & Repetitive & 4/27/2021 10:38 AM \\
\hline 692 & There are lessons beyond her level which is confusing and upsetting for her not to know. & 4/27/2021 10:38 AM \\
\hline 693 & He is bored... & 4/27/2021 10:38 AM \\
\hline 694 & Reading & 4/27/2021 10:38 AM \\
\hline 695 & ? & 4/27/2021 10:38 AM \\
\hline 696 & Not knowing when she should stop & 4/27/2021 10:38 AM \\
\hline 697 & Not enough learning & 4/27/2021 10:38 AM \\
\hline 698 & The diagnostic test was frustrating for my daughter, but she is liking the lessons and activities & 4/27/2021 10:38 AM \\
\hline 699 & The reading assessment was very advanced for kindergarten. My student also prefers to read physical books. & 4/27/2021 10:38 AM \\
\hline 700 & Had hard time understanding & 4/27/2021 10:37 AM \\
\hline 701 & Sometimes boring & 4/27/2021 10:37 AM \\
\hline 702 & reading & 4/27/2021 10:37 AM \\
\hline 703 & Nothing comes to mind & 4/27/2021 10:37 AM \\
\hline 704 & . & 4/27/2021 10:37 AM \\
\hline 705 & I have not heard any complaints from my student regarding iready & 4/27/2021 10:37 AM \\
\hline 706 & Treated as a substitute to actual teaching. Doesn't work & 4/27/2021 10:37 AM \\
\hline 707 & I felt that the test was discouraging student. Harder it gets, less confidence to be developed & 4/27/2021 10:37 AM \\
\hline 708 & There's no substitute for in-person instruction. I understand why the school has needed to rely on i-Ready so much this year, but it's too bad more of this couldn't have been taught by the & 4/27/2021 10:37 AM \\
\hline
\end{tabular}

\section*{i-Ready Spring 2021 Feedback Survey - Families/English}
teacher even if it was on zoom.
\begin{tabular}{|c|c|c|}
\hline 709 & He does really well in class room settings and only partially well in online settings & 4/27/2021 10:36 AM \\
\hline 710 & Not sure & 4/27/2021 10:36 AM \\
\hline 711 & He doesn't enjoy it. It's slow and boring. It's been very hard to get him to put in the time. I watched over his shoulder once and thought that it was well-done in terms of breaking down concepts, but hard to watch because it felt slow and boring. & 4/27/2021 10:36 AM \\
\hline 712 & Not sure if the questions are upto 4th grade level. & 4/27/2021 10:36 AM \\
\hline 713 & It is a slow progress. Once you hear the question it reads it again after you answer the question. Some of the content is too easy. It sometimes seems like it is just busy work for kids. & 4/27/2021 10:36 AM \\
\hline 714 & Time & 4/27/2021 10:35 AM \\
\hline 715 & My student does not really like it. It feels like the same thing over and over to him and does not always log his minutes. & 4/27/2021 10:35 AM \\
\hline 716 & My child is ready to be back in school fulltime & 4/27/2021 10:35 AM \\
\hline 717 & it can be a little too linear, so when she gets stuck in a hard section she looses interest fast. & 4/27/2021 10:35 AM \\
\hline 718 & Getting him to use it consistently, because it is challenging. & 4/27/2021 10:35 AM \\
\hline 719 & Hard to encourage my child to do 20 min each day & 4/27/2021 10:35 AM \\
\hline 720 & the assessment was stressful for her when she didn't know the answers, but then the actual assignments seem too easy and bore her & 4/27/2021 10:35 AM \\
\hline 721 & I'm not sure. & 4/27/2021 10:34 AM \\
\hline 722 & Not sure & 4/27/2021 10:34 AM \\
\hline 723 & none & 4/27/2021 10:34 AM \\
\hline 724 & n/a & 4/27/2021 10:34 AM \\
\hline 725 & Sometimes it can get boring for my child & 4/27/2021 10:34 AM \\
\hline 726 & She's bored of doing it. & 4/27/2021 10:34 AM \\
\hline 727 & Math was way too easy and the teacher couldn't adjust it. & 4/27/2021 10:34 AM \\
\hline 728 & No feedback on how they are doing & 4/27/2021 10:34 AM \\
\hline 729 & Pronunciation & 4/27/2021 10:34 AM \\
\hline 730 & reminding them to actually do it. & 4/27/2021 10:34 AM \\
\hline 731 & Too easy to keep clicking until the right answer is provided & 4/27/2021 10:34 AM \\
\hline 732 & The courses not so helpful & 4/27/2021 10:33 AM \\
\hline 733 & She does not like using iReady. It is the only assignments that she fights doing. & 4/27/2021 10:33 AM \\
\hline 734 & Sometimes not enough lessons or repetitive & 4/27/2021 10:33 AM \\
\hline 735 & Not sure & 4/26/2021 9:49 PM \\
\hline 736 & The testing was too challenging. Asking questions the child clearly does not know created issues. Her confidence dropped and she was not as willing to participate. That seems really counter to what we are trying to accomplish. & 4/26/2021 2:22 PM \\
\hline 737 & Not terribly engaging/exciting & 4/26/2021 12:57 PM \\
\hline 738 & Assessments are tedious. & 4/26/2021 9:14 AM \\
\hline 739 & My student really dislikes iReady. As a parent, I can understand why - the lessons are slow and boring. & 4/26/2021 8:25 AM \\
\hline 740 & having to remind students to complete their expected daily standards & 4/24/2021 4:31 AM \\
\hline
\end{tabular}

Maybe as a third grader she got a little annoyed / bored with the characters but she got in the 4/20/2021 7:02 PM habit of doing 60' a week and it showed on her January retest that she improved and I think it was great feedback for the kids.

Q1
Answered: 1 Skipped: 0
\begin{tabular}{|c|}
\hline Alderwood \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
Beverly \\
Elementary
\end{tabular}} \\
\hline \\
\hline Brier \\
\hline Elementary \\
\hline Brier Terrace \\
\hline \multirow[t]{2}{*}{Cedar Valley Community} \\
\hline \\
\hline \multirow[t]{2}{*}{Cedar Way Elementary} \\
\hline \\
\hline \multirow[t]{2}{*}{Chase Lake Elementary} \\
\hline \\
\hline \multirow[t]{2}{*}{College Place Elementary} \\
\hline \\
\hline \multirow[t]{2}{*}{College Place
Middle} \\
\hline \\
\hline \multirow[t]{2}{*}{Edmonds Elementary} \\
\hline \\
\hline Edmonds \\
\hline Heights K-12 \\
\hline \multirow[t]{2}{*}{EdmondsWoodway} \\
\hline \\
\hline High \\
\hline \multirow[t]{2}{*}{Hazelwood Elementary} \\
\hline \\
\hline \begin{tabular}{l}
Hilltop \\
Elementary
\end{tabular} \\
\hline Lynndale Elementary \\
\hline \multirow[t]{2}{*}{Lynnwood Elementary} \\
\hline \\
\hline Lynnwood High \\
\hline Madrona K-8 \\
\hline Maplewood K-8 \\
\hline \multirow[t]{2}{*}{Martha Lake Elementary} \\
\hline \\
\hline
\end{tabular}
i-Ready Spring 2021 Feedback Survey Families/Amharic


ㄴ Families/Amharic
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
ANSWER CHOICES \\
Alderwood Middle
\end{tabular}} & \multicolumn{2}{|l|}{RESPONSES} \\
\hline & 0.00\% & 0 \\
\hline Beverly Elementary & 0.00\% & 0 \\
\hline Brier Elementary & 0.00\% & 0 \\
\hline Brier Terrace Middle & 0.00\% & 0 \\
\hline Cedar Valley Community & 0.00\% & 0 \\
\hline Cedar Way Elementary & 0.00\% & 0 \\
\hline Chase Lake Elementary & 0.00\% & 0 \\
\hline College Place Elementary & 0.00\% & 0 \\
\hline College Place Middle & 0.00\% & 0 \\
\hline Edmonds Elementary & 0.00\% & 0 \\
\hline Edmonds Heights K-12 & 0.00\% & 0 \\
\hline Edmonds-Woodway High & 0.00\% & 0 \\
\hline Hazelwood Elementary & 0.00\% & 0 \\
\hline Hilltop Elementary & 0.00\% & 0 \\
\hline Lynndale Elementary & 0.00\% & 0 \\
\hline Lynnwood Elementary & 0.00\% & 0 \\
\hline Lynnwood High & 0.00\% & 0 \\
\hline Madrona K-8 & 0.00\% & 0 \\
\hline Maplewood K-8 & 0.00\% & 0 \\
\hline Martha Lake Elementary & 0.00\% & 0 \\
\hline Meadowdale Elementary & 0.00\% & 0 \\
\hline Meadowdale High & 100.00\% & 1 \\
\hline Meadowdale Middle & 0.00\% & 0 \\
\hline Mountlake Terrace Elementary & 0.00\% & 0 \\
\hline Mountlake Terrace High & 0.00\% & 0 \\
\hline Oak Heights Elementary & 0.00\% & 0 \\
\hline Scriber Lake High & 0.00\% & 0 \\
\hline Seaview Elementary & 0.00\% & 0 \\
\hline Sherwood Elementary & 0.00\% & 0 \\
\hline Spruce Elementary & 0.00\% & 0 \\
\hline Terrace Park/Challenge Elementary & 0.00\% & 0 \\
\hline Westgate Elementary & 0.00\% & 0 \\
\hline TOTAL & & 1 \\
\hline
\end{tabular}



ㄴ Families/Amharic
\begin{tabular}{|c|c|c|}
\hline ANSWER CHOICES & RESPONSES & \\
\hline  & 0.00\% & 0 \\
\hline 10 1 [0] & 0.00\% & 0 \\
\hline 20000 & 0.00\% & 0 \\
\hline 30] & 0.00\% & 0 \\
\hline 4000 & 0.00\% & 0 \\
\hline 50 [0] & 0.00\% & 0 \\
\hline 60 [0] & 0.00\% & 0 \\
\hline 70 [ [ & 0.00\% & 0 \\
\hline 80 0 & 0.00\% & 0 \\
\hline 9000 & 0.00\% & 0 \\
\hline 100 0 & 100.00\% & 1 \\
\hline 110 [0] & 0.00\% & 0 \\
\hline 12] & 0.00\% & 0 \\
\hline TOTAL & & 1 \\
\hline
\end{tabular}

Answered: 1 Skipped: 0

\begin{tabular}{|c|c|c|}
\hline ANSWER CHOICES & \multicolumn{2}{|l|}{RESPONSES} \\
\hline [0] (Math) & 0.00\% & 0 \\
\hline 이 (Reading) & 0.00\% & 0 \\
\hline  & 0.00\% & 0 \\
\hline  & 100.00\% & 1 \\
\hline Total Respondents: 1 & & \\
\hline
\end{tabular}

Answered: 0 Skipped: 1

A No matching responses.
\begin{tabular}{|c|c|c|}
\hline ANSWER CHOICES & \multicolumn{2}{|l|}{RESPONSES} \\
\hline [ 0 (Yes) & 0.00\% & 0 \\
\hline [ 0 ( No ) & 0.00\% & 0 \\
\hline ใ & 0.00\% & 0 \\
\hline TOTAL & & 0 \\
\hline
\end{tabular}

Q5
Answered: \(0 \quad\) Skipped: 1

A No matching responses.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & \begin{tabular}{l}
( \\
ALL)
\end{tabular} & (SLIGHTLY) & \begin{tabular}{l}
 \\
(SOMEWHAT)
\end{tabular} & \[
\begin{aligned}
& \text { (VERY } \\
& \text { MUCH) }
\end{aligned}
\] & (SIGNIFICANTLY) & TOTAL & WEIGHTED AVERAGE \\
\hline (no & 0.00\% & 0.00\% & 0.00\% & 0.00\% & 0.00\% & & \\
\hline label) & 0 & 0 & 0 & 0 & 0 & 0 & 0.00 \\
\hline
\end{tabular}

\section*{}

A No matching responses.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline &  DISSATISFIED) & ใ & ใ & ำ (SATISFIED) & \begin{tabular}{l}
밀 \\
 SATISFIED)
\end{tabular} & TOTAL & WEIGHTED AVERAGE \\
\hline (no & 0.00\% & 0.00\% & 0.00\% & 0.00\% & 0.00\% & & \\
\hline label) & 0 & 0 & 0 & 0 & 0 & 0 & 0.00 \\
\hline
\end{tabular}

\section*{}

A No matching responses.
\begin{tabular}{|c|c|c|}
\hline ANSWER CHOICES & \multicolumn{2}{|l|}{RESPONSES} \\
\hline [ 0 (Yes) & 0.00\% & 0 \\
\hline [ 0 (No) & 0.00\% & 0 \\
\hline  & 0.00\% & 0 \\
\hline TOTAL & & 0 \\
\hline
\end{tabular}


A No matching responses.
\begin{tabular}{|c|c|c|}
\hline ANSWER CHOICES & \multicolumn{2}{|l|}{RESPONSES} \\
\hline 이 (Math) & 0.00\% & 0 \\
\hline 이 (Reading) & 0.00\% & 0 \\
\hline ใ & 0.00\% & 0 \\
\hline
\end{tabular}

Total Respondents: 0

\section*{}

\section*{Answered: \(0 \quad\) Skipped: 1}

A No matching responses.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \[
\begin{aligned}
& \text { AT (NOT } \\
& \text { AT AL }
\end{aligned}
\] & ] & \begin{tabular}{l}
प \\
(SOMEWHAT)
\end{tabular} & \begin{tabular}{l}
[ \\
प्व(VERY MUCH)
\end{tabular} & \begin{tabular}{l}
밍 \\
으(SIGNIFICANTLY)
\end{tabular} &  & TOTAL & WEIGH7 AVERA \\
\hline (Math) & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & 0 & ( \\
\hline [0] (Reading) & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & 0 & ( \\
\hline
\end{tabular}

\section*{Q10}

\author{
Answered: \(0 \quad\) Skipped: 1
}

A No matching responses.
\begin{tabular}{|c|c|c|}
\hline ANSWER CHOICES & \multicolumn{2}{|l|}{RESPONSES} \\
\hline  & 0.00\% & 0 \\
\hline  & 0.00\% & 0 \\
\hline  & 0.00\% & 0 \\
\hline  & 0.00\% & 0 \\
\hline  & 0.00\% & 0 \\
\hline TOTAL & & 0 \\
\hline
\end{tabular}

\section*{}

Answered: \(0 \quad\) Skipped: 1

A No matching responses.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline &  UNLIKELY) & (UNLIKELY) & \begin{tabular}{l}
ㅁำ \\
(NEUTRAL)
\end{tabular} & \begin{tabular}{l}
 \\
(LIKELY)
\end{tabular} & \begin{tabular}{l}
 \\
LIKELY)
\end{tabular} & TOTAL & WEIGHTED AVERAGE \\
\hline (no & 0.00\% & 0.00\% & 0.00\% & 0.00\% & 0.00\% & & \\
\hline label) & 0 & 0 & 0 & 0 & 0 & 0 & 0.00 \\
\hline
\end{tabular}

Q12
Answered: \(0 \quad\) Skipped: 1

There are no responses.

There are no responses.

\section*{Q1 당신 학생은 어느 학교에 다닙니까?}

Answered: 9 Skipped: 0



아이-레디 2021년 봄 피드백 설문조사-가족 i-Ready Spring 2021 Feedback Survey - Families/Korean
\begin{tabular}{|c|c|c|}
\hline ANSWER CHOICES & RESPON & \\
\hline Alderwood Middle & 0.00\% & 0 \\
\hline Beverly Elementary & 0.00\% & 0 \\
\hline Brier Elementary & 0.00\% & 0 \\
\hline Brier Terrace Middle & 11.11\% & 1 \\
\hline Cedar Valley Community & 0.00\% & 0 \\
\hline Cedar Way Elementary & 0.00\% & 0 \\
\hline Chase Lake Elementary & 0.00\% & 0 \\
\hline College Place Elementary & 0.00\% & 0 \\
\hline College Place Middle & 0.00\% & 0 \\
\hline Edmonds Elementary & 0.00\% & 0 \\
\hline Edmonds Heights K-12 & 0.00\% & 0 \\
\hline Edmonds-Woodway High & 22.22\% & 2 \\
\hline Hazelwood Elementary & 11.11\% & 1 \\
\hline Hilltop Elementary & 0.00\% & 0 \\
\hline Lynndale Elementary & 0.00\% & 0 \\
\hline Lynnwood Elementary & 0.00\% & 0 \\
\hline Lynnwood High & 11.11\% & 1 \\
\hline Madrona K-8 & 0.00\% & 0 \\
\hline Maplewood K-8 & 0.00\% & 0 \\
\hline Martha Lake Elementary & 0.00\% & 0 \\
\hline Meadowdale Elementary & 0.00\% & 0 \\
\hline Meadowdale High & 0.00\% & 0 \\
\hline Meadowdale Middle & 0.00\% & 0 \\
\hline Mountlake Terrace Elementary & 0.00\% & 0 \\
\hline Mountlake Terrace High & 0.00\% & 0 \\
\hline Oak Heights Elementary & 0.00\% & 0 \\
\hline Scriber Lake High & 0.00\% & 0 \\
\hline Seaview Elementary & 0.00\% & 0 \\
\hline Sherwood Elementary & 0.00\% & 0 \\
\hline Spruce Elementary & 0.00\% & 0 \\
\hline Terrace Park/Challenge Elementary & 33.33\% & 3 \\
\hline Westgate Elementary & 11.11\% & 1 \\
\hline TOTAL & & 9 \\
\hline
\end{tabular}

\section*{Q2 당신 학생은 현재 몇 학년입니까?}

Answered: 9 Skipped: 0


아이-레디 2021년 봄 피드백 설문조사-가족 i-Ready Spring 2021 Feedback Survey - Families/Korean
\begin{tabular}{lll} 
ANSWER CHOICES & RESPONSES & \\
\hline 유치원 & \(11.11 \%\) & 1 \\
\hline 1학년 & \(22.22 \%\) & 2 \\
\hline 2학년 & \(0.00 \%\) & 0 \\
\hline 3학년 & \(11.11 \%\) & 1 \\
\hline 4학년 & \(0.00 \%\) & 0 \\
\hline 5학년 & \(11.11 \%\) & 1 \\
\hline 6학년 & \(0.00 \%\) & 0 \\
\hline 7학년 & \(11.11 \%\) & 1 \\
\hline 8학년 & \(0.00 \%\) & 1 \\
\hline 9 학년 & \(11.11 \%\) & 0 \\
\hline 10학년 & \(11.11 \%\) & 1 \\
\hline 11학년 & \(11.11 \%\) & 1 \\
\hline 12학년 & \(0.00 \%\) & 1 \\
\hline TOTAL & & 0 \\
\hline
\end{tabular}

Q3 이번 학년에 당신 학생은 어느 아이-레디 진단 평가를 했습니까?
Answered: 9 Skipped: 0

\begin{tabular}{l|ll}
\hline ANSWER CHOICES & RESPONSES \\
\hline 수학 (Math) & \(44.44 \%\) & 4 \\
\hline 리딩 (Reading) & \(22.22 \%\) & 2 \\
\hline 어느 것도 아니다 (Neither) & \(0.00 \%\) & 0 \\
\hline 모릅니다 (I don't know) & \(55.56 \%\) & 5
\end{tabular}

Total Respondents: 9

\title{
Q4 당신 학생 교사가 당신 학생의 아이-레디 진단 평가 데이타를 당신에게 알려주었습니까?
}

Answered: 4 Skipped: 5

\begin{tabular}{l|ll}
\hline ANSWER CHOICES & RESPONSES \\
\hline 네 (Yes) & \(25.00 \%\) & 1 \\
\hline 아니요 (No) & \(75.00 \%\) & 3 \\
\hline 잘 모르겠습니다 (I'm not sure) & \(0.00 \%\) & 0 \\
\hline TOTAL & & 4
\end{tabular}

\title{
Q5 아이-레디 진단 평가 데이타가 당신 학생의 학업 성과를 이해하는데 도 움이 될까요?
}

\author{
Answered: 0 Skipped: 9
}

A No matching responses.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & 전혀NOT AT ALL & \begin{tabular}{l}
약간 \\
SLIGHTLY
\end{tabular} & 어느 정도 SOMEWHAT & \begin{tabular}{l}
매우VERY \\
MUCH
\end{tabular} & \begin{tabular}{l}
상당히 \\
SIGNIFICANTLY
\end{tabular} & TOTAL & WEIGHTED AVERAGE \\
\hline (no & 0.00\% & 0.00\% & 0.00\% & 0.00\% & 0.00\% & & \\
\hline label) & 0 & 0 & 0 & 0 & 0 & 0 & 0.00 \\
\hline
\end{tabular}

\section*{Q6 아이-레디 진단 평가에대한 당신의 전반적인 평가는 무엇입니까?}

Answered: 0 Skipped: 9
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & 매우 불만스러운VERY DISSATISFIED & 불만스러운 DISSATISFIED & 중립의 NEUTRAL & 만족하는 SATISFIED & 매우 만족하는VERY SATISFIED & TOTAL & WEIGHTED AVERAGE \\
\hline (no label) & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \(0.00 \%\)
0 & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & 0 & 0.00 \\
\hline
\end{tabular}

\title{
Q7 당신 학생은 아이-레디 온라인 지시 수업을 했습니까? 온라인 지시는
} 마이 패스라고도 알려져 있습니다.

Answered: 3 Skipped: 6

\begin{tabular}{l|ll}
\hline ANSWER CHOICES & RESPONSES \\
\hline 네 (Yes) & \(66.67 \%\) & 2 \\
\hline 아니요 (No) & \(33.33 \%\) & 1 \\
\hline 모릅니다 (I don't know) & \(0.00 \%\) & 0 \\
\hline TOTAL & & 3 \\
\hline
\end{tabular}

\section*{Q8 당신 학생는 어느 아이-레디 온라인 지시 수업을 했습니까?}

Answered: 2 Skipped: 7

\begin{tabular}{l|ll}
\hline ANSWER CHOICES & RESPONSES \\
\hline 수학 (Math) & \(100.00 \%\) & 2 \\
\hline 리딩 (Reading) & \(50.00 \%\) & 1 \\
\hline 모릅니다 (I don't know) & \(0.00 \%\) & 0
\end{tabular}

\footnotetext{
Total Respondents: 2
}

\title{
Q 9 온라인 지시가 당신학생에게 효과적이며 유용한 도움이 됩니까?
}

Answered: \(2 \quad\) Skipped: 7

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \begin{tabular}{l}
전혀 \\
NOT \\
AT \\
ALL
\end{tabular} & \begin{tabular}{l}
약간 \\
SLIGHTLY
\end{tabular} & 어느정도 SOMEWHAT & \begin{tabular}{l}
매우 \\
VERY \\
MUCH
\end{tabular} & \begin{tabular}{l}
상당히 \\
SIGNIFICANTLY
\end{tabular} & \begin{tabular}{l}
잘 모릅니다/내 학생은 \\
이 주제에서 수업을 완료 하지 않았습니다NOT SUREISTUDENT DID NOT WORK ON THIS SUBJECT
\end{tabular} & TOTAL & WEIGHTED AVERAGE \\
\hline 수학 & 0.00\% & 0.00\% & 0.00\% & 100.00\% & 0.00\% & 0.00\% & & \\
\hline Math & 0 & 0 & 0 & 2 & 0 & 0 & 2 & 4.00 \\
\hline 리딩 & 0.00\% & 0.00\% & 50.00\% & 50.00\% & 0.00\% & 0.00\% & & \\
\hline Reading & 0 & 0 & 1 & 1 & 0 & 0 & 2 & 3.50 \\
\hline
\end{tabular}

\section*{Q 10 당신 학생은 온라인 지시를 주당 약 몇분을 사용합니까?}

Answered: 2 Skipped: 7

\begin{tabular}{|l|l|l|}
\hline ANSWER CHOICES & RESPONSES \\
\hline 한시간 이상 (Over one hour) & \(0.00 \%\) & 0 \\
\hline 45 에서 60 분 (45 to 60 minutes) & \(0.00 \%\) & 0 \\
\hline \(30-45\) 분 (30 to 45 minutes) & \(50.00 \%\) & 1 \\
\hline 30 분 미만 (Less than 30 minutes) & \(50.00 \%\) & 1 \\
\hline 모릅니다 (I don't know) & \(0.00 \%\) & 0 \\
\hline TOTAL & & 2 \\
\hline
\end{tabular}

\title{
Q 11 당신은 에드먼즈 학군이 계속하여 아이-레디를 사용할 것을 권합니 까?
}


\title{
Q 12 당신 학생이 이번 학년에 아이-레디를 사용하는 때 잘 되고 있는 것이 무엇입니까?
}

Answered: 3 Skipped: 6
\begin{tabular}{l|l|l}
\(\#\) & RESPONSES & DATE \\
\hline 1 & Mathematical concept & \(4 / 27 / 20212: 32\) PM \\
\hline 2 & \(?\) & \(4 / 27 / 20212: 07\) PM \\
\hline 3 & Study ever day with i-Ready & \(4 / 27 / 2021\) 12:15 PM \\
\hline
\end{tabular}

\title{
Q13 당신 학생이 이번 학년에 아이-레디를 사용하는 때 잘 되고 있지 않는 것이 무엇입니까?
}

Answered: 3 Skipped: 6
\begin{tabular}{llll}
\(\#\) & RESPONSES & DATE \\
\hline 1 & bored & \(4 / 27 / 20212: 32\) PM \\
\hline 2 & \(?\) & \(4 / 27 / 20212: 07\) PM \\
\hline 3 & None & \(4 / 27 / 2021\) 12:15 PM \\
\hline
\end{tabular}

\section*{Q1 Học sinh của qúi vị theo học trường nào?}


Khảo sát Phản hồi i-Ready Mùa Xuân 2021 - Gia đình i-Ready Spring 2021 Feedback Survey Families/Vietnamese


Khảo sát Phản hôi i-Ready Mùa Xuân 2021 - Gia đình i-Ready Spring 2021 Feedback Survey -
FamiliesNietnamese
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
ANSWER CHOICES \\
Alderwood Middle
\end{tabular}} & \multicolumn{2}{|l|}{RESPONSES} \\
\hline & 36.36\% & 4 \\
\hline Beverly Elementary & 0.00\% & 0 \\
\hline Brier Elementary & 9.09\% & 1 \\
\hline Brier Terrace Middle & 9.09\% & 1 \\
\hline Cedar Valley Community & 0.00\% & 0 \\
\hline Cedar Way Elementary & 0.00\% & 0 \\
\hline Chase Lake Elementary & 0.00\% & 0 \\
\hline College Place Elementary & 18.18\% & 2 \\
\hline College Place Middle & 0.00\% & 0 \\
\hline Edmonds Elementary & 0.00\% & 0 \\
\hline Edmonds Heights K-12 & 0.00\% & 0 \\
\hline Edmonds-Woodway High & 0.00\% & 0 \\
\hline Hazelwood Elementary & 0.00\% & 0 \\
\hline Hilltop Elementary & 9.09\% & 1 \\
\hline Lynndale Elementary & 0.00\% & 0 \\
\hline Lynnwood Elementary & 0.00\% & 0 \\
\hline Lynnwood High & 0.00\% & 0 \\
\hline Madrona K-8 & 0.00\% & 0 \\
\hline Maplewood K-8 & 0.00\% & 0 \\
\hline Martha Lake Elementary & 0.00\% & 0 \\
\hline Meadowdale Elementary & 0.00\% & 0 \\
\hline Meadowdale High & 0.00\% & 0 \\
\hline Meadowdale Middle & 0.00\% & 0 \\
\hline Mountlake Terrace Elementary & 9.09\% & 1 \\
\hline Mountlake Terrace High & 0.00\% & 0 \\
\hline Oak Heights Elementary & 9.09\% & 1 \\
\hline Scriber Lake High & 0.00\% & 0 \\
\hline Seaview Elementary & 0.00\% & 0 \\
\hline Sherwood Elementary & 0.00\% & 0 \\
\hline Spruce Elementary & 0.00\% & 0 \\
\hline Terrace Park/Challenge Elementary & 0.00\% & 0 \\
\hline Westgate Elementary & 0.00\% & 0 \\
\hline TOTAL & & 11 \\
\hline
\end{tabular}


Khảo sát Phản hồi i-Ready Mùa Xuân 2021 - Gia đình i-Ready Spring 2021 Feedback Survey Families/Nietnamese
\begin{tabular}{llll}
\hline ANSWER CHOICES & RESPONSES & \\
\hline Mẫu giáo & \(36.36 \%\) & 4 \\
\hline Lớp 1 & \(0.00 \%\) & 0 \\
\hline Lớp 2 & \(0.00 \%\) & 0 \\
\hline Lớp 3 & \(18.18 \%\) & 2 \\
\hline Lớp 4 & \(0.00 \%\) & 0 \\
\hline Lớp 5 & \(9.09 \%\) & 1 \\
\hline Lớp 6 & \(9.09 \%\) & 1 \\
\hline Lớp 7 & \(9.09 \%\) & 1 \\
\hline Lớp 8 & \(18.18 \%\) & 2 \\
\hline Lớp 9 & \(0.00 \%\) & 0 \\
\hline Lớp 10 & \(0.00 \%\) & 0 \\
\hline Lớp 11 & \(0.00 \%\) & 0 \\
\hline Lớp 12 & \(0.00 \%\) & 0 \\
\hline TOTAL & & 0 \\
\hline
\end{tabular}

Khảo sát Phản hồi i-Ready Mùa Xuân 2021 - Gia đình i-Ready Spring 2021 Feedback Survey Families/Vietnamese

Q3 Đánh giá Chẩn đoán i-Ready nào mà học sinh của qúi vị đã thực hiện trong năm học này?

\begin{tabular}{|l|l|}
\hline ANSWER CHOICES & RESPONSES \\
\hline Toán học (Math) & \(72.73 \%\) \\
\hline Đọc (Reading) & \(63.64 \%\) \\
\hline Không môn nào (Neither) & \(18.18 \%\) \\
\hline Tôi không biết (I don't know) & \(9.09 \%\) \\
\hline
\end{tabular}

Total Respondents: 11

Khảo sát Phản hồi i-Ready Mùa Xuân 2021 - Gia đình i-Ready Spring 2021 Feedback Survey Families/Vietnamese

\section*{Q4 Giáo viên của học sinh có chia sẻ dữ liệu Đánh giá Chẩn đoán iReady của học sinh với qúi vị không?}


Khảo sát Phản hồi i-Ready Mùa Xuân 2021 - Gia đình i-Ready Spring 2021 Feedback Survey Families/Vietnamese

\section*{Q5 Dữ liệu Đánh giá Chẩn đoán i-Ready có hữu ích cho việc am hiểu thành tích học tập của học sinh của qúi vị không?}


Khảo sát Phản hồi i-Ready Mùa Xuân 2021 - Gia đình i-Ready Spring 2021 Feedback Survey Families/Vietnamese

\section*{Q6 Điểm tổng thể của qúi vị cho Đánh giá Chẩn đoán i-Ready là gì?}


\section*{Q7 Học sinh của qúi vị đã làm việc trên các bài học Hướng dẫn Trực tuyến i-Ready chưa? Hướng dẫn trực tuyến còn được gọi là My Path (Con đường của tôi.)}

Answered: 7 Skipped: 4

\begin{tabular}{l|ll}
\hline ANSWER CHOICES & RESPONSES \\
\hline Có (Yes) & \(71.43 \%\) \\
\hline Không (No) & \(28.57 \%\) \\
\hline Tôi không biết (I don't know) & 2 \\
\hline TOTAL & \(0.00 \%\) & 0 \\
\hline
\end{tabular}

Khảo sát Phản hồi i-Ready Mùa Xuân 2021 - Gia đình i-Ready Spring 2021 Feedback Survey Families/Vietnamese

\title{
Q8 Học sinh của qúi vị đã làm việc với những bài học Giảng dạy Trực tuyến i-Ready nào?
}


Khảo sát Phản hồi i-Ready Mùa Xuân 2021 - Gia đình i-Ready Spring 2021 Feedback Survey Families/Vietnamese

\section*{Q9 Hướng dẫn Trực tuyến có phải là một hỗ trợ hiệu quả và hữu ích cho học sinh của qúi vị không?}


Khảo sát Phản hồi i-Ready Mùa Xuân 2021 - Gia đình i-Ready Spring 2021 Feedback Survey Families/Vietnamese
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & KHÔNG(NOT AT ALL) & MỘT CHÚT(SLIGHTLY) & \begin{tabular}{l}
PHẦN \\
NÀO(SOMEWHAT)
\end{tabular} & \begin{tabular}{l}
RẤT \\
NHIỂU(VERY \\
MUCH)
\end{tabular} & \begin{tabular}{l}
ĐÁNG \\
KỂ(SIGNIFICANTLY)
\end{tabular} & \begin{tabular}{l}
KHôNG \\
CHẤC/HỌC \\
SINH CỦA \\
TÔI ĐÃ \\
KHÔNG \\
HOÀN \\
THÀNH \\
CÁC BÀI \\
HOC \\
TRONG \\
MÔN \\
NÀY(NOT \\
SURE/NOT \\
THIS \\
SUBJECT)
\end{tabular} & TOTAL & \begin{tabular}{l}
WEII \\
AVE
\end{tabular} \\
\hline Toán học (Math) & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
80.00 \% \\
4
\end{array}
\] & \[
\begin{array}{r}
20.00 \% \\
1
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & 5 & \\
\hline Đoc (Reading) & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & \[
\begin{array}{r}
80.00 \% \\
4
\end{array}
\] & \[
\begin{array}{r}
20.00 \% \\
1
\end{array}
\] & \[
\begin{array}{r}
0.00 \% \\
0
\end{array}
\] & 5 & \\
\hline
\end{tabular}

Khảo sát Phản hồi i-Ready Mùa Xuân 2021 - Gia đình i-Ready Spring 2021 Feedback Survey Families/Vietnamese

\section*{Q10 Khoảng bao nhiêu phút mỗi tuần học sinh của qúi vị sử dụng Hướng dẫn Trực tuyến?}

Answered: 5 Skipped: 6

\begin{tabular}{l|l}
\hline ANSWER CHOICES & RESPONSES \\
\hline Hơn một giờ (Over one hour) & \(80.00 \%\) \\
\hline 45 đến 60 phút (45 to 60 minutes) & \(0.00 \%\) \\
\hline \(30-45\) phút (30 to 45 minutes) & \(20.00 \%\) \\
\hline Dưới 30 phút (Less than 30 minutes) & \(0.00 \%\) \\
\hline Tôi không biết (I don't know) & \(0.00 \%\) \\
\hline TOTAL & 1 \\
\hline
\end{tabular}

Khảo sát Phản hồi i-Ready Mùa Xuân 2021 - Gia đình i-Ready Spring 2021 Feedback Survey Families/Vietnamese

\section*{Q11 Qúi vị có khuyến nghị Học khu Edmonds tiếp tục sử dụng i-Ready không?}


Khảo sát Phản hồi i-Ready Mùa Xuân 2021 - Gia đình i-Ready Spring 2021 Feedback Survey Families/Vietnamese

\section*{Q12 Điều gì tốt cho học sinh của qúi vị khi sử dụng i-Ready trong năm học này?}

\author{
Answered: 6 Skipped: 5
}
\begin{tabular}{ll|l}
\hline\(\#\) & RESPONSES & DATE \\
\hline 1 & Đến trường thì tốt hơn, nhưng vì sự an toàn của covid & \(4 / 27 / 2021 \mathrm{10:22} \mathrm{PM}\) \\
\hline 2 & Learning a lot & \(4 / 27 / 20215: 08 \mathrm{PM}\) \\
\hline 3 & Đến trường thì tốt hơn, nhưng vì sự an toàn của covid & \(4 / 27 / 20212: 06 \mathrm{PM}\) \\
\hline 4 & Chương trình toán quá dễ sợ với học lực của con. & \(4 / 27 / 2021 \mathrm{12:45} \mathrm{PM}\) \\
\hline 5 & Everything & \(4 / 27 / 2021 \mathrm{11:16AM}\) \\
\hline 6 & Helping more independent in learning! & \(4 / 27 / 2021 \mathrm{10:40} \mathrm{AM}\) \\
\hline
\end{tabular}

Khảo sát Phản hồi i-Ready Mùa Xuân 2021 - Gia đình i-Ready Spring 2021 Feedback Survey Families/Vietnamese

\section*{Q13 Điều gì không tốt cho học sinh của qúi vị khi sử dụng i-Ready trong năm học này?}

Answered: 6 Skipped: 5
\begin{tabular}{|c|c|c|}
\hline \# & RESPONSES & DATE \\
\hline 1 & Tất cả đều tốt & 4/27/2021 10:22 PM \\
\hline 2 & Nothing & 4/27/2021 5:08 PM \\
\hline 3 & Tất cả đều tốt & 4/27/2021 2:06 PM \\
\hline 4 & Không nên xen vào game trong bài học. & 4/27/2021 12:45 PM \\
\hline 5 & Nothing & 4/27/2021 11:16 AM \\
\hline 6 & I think it works well for my kids. & 4/27/2021 10:40 AM \\
\hline
\end{tabular}

\section*{Q1 ماهي المدرسة التي يرتادها طالبك ؟}


i-Ready استبيان العائلات لرببع 2021 لبرنامج i-Ready Spring 2021 Feedback Survey - Families/Arabic
\begin{tabular}{|c|c|c|}
\hline ANSWER CHOICES & RESPON & \\
\hline Alderwood Middle & 0.00\% & 0 \\
\hline Beverly Elementary & 0.00\% & 0 \\
\hline Brier Elementary & 0.00\% & 0 \\
\hline Brier Terrace Middle & 33.33\% & 1 \\
\hline Cedar Valley Community & 0.00\% & 0 \\
\hline Cedar Way Elementary & 0.00\% & 0 \\
\hline Chase Lake Elementary & 0.00\% & 0 \\
\hline College Place Elementary & 0.00\% & 0 \\
\hline College Place Middle & 0.00\% & 0 \\
\hline Edmonds Elementary & 0.00\% & 0 \\
\hline Edmonds Heights K-12 & 0.00\% & 0 \\
\hline Edmonds-Woodway High & 0.00\% & 0 \\
\hline Hazelwood Elementary & 0.00\% & 0 \\
\hline Hilltop Elementary & 0.00\% & 0 \\
\hline Lynndale Elementary & 0.00\% & 0 \\
\hline Lynnwood Elementary & 33.33\% & 1 \\
\hline Lynnwood High & 0.00\% & 0 \\
\hline Madrona K-8 & 0.00\% & 0 \\
\hline Maplewood K-8 & 0.00\% & 0 \\
\hline Martha Lake Elementary & 0.00\% & 0 \\
\hline Meadowdale Elementary & 0.00\% & 0 \\
\hline Meadowdale High & 0.00\% & 0 \\
\hline Meadowdale Middle & 0.00\% & 0 \\
\hline Mountlake Terrace Elementary & 0.00\% & 0 \\
\hline Mountlake Terrace High & 0.00\% & 0 \\
\hline Oak Heights Elementary & 0.00\% & 0 \\
\hline Scriber Lake High & 0.00\% & 0 \\
\hline Seaview Elementary & 0.00\% & 0 \\
\hline Sherwood Elementary & 0.00\% & 0 \\
\hline Spruce Elementary & 0.00\% & 0 \\
\hline Terrace Park/Challenge Elementary & 33.33\% & 1 \\
\hline Westgate Elementary & 0.00\% & 0 \\
\hline TOTAL & & 3 \\
\hline
\end{tabular}

\section*{Q2 ما هو مستوى صف الطالب الحالي ؟}

i-Ready استبيان العائلات لربيع 2021 لبرنامج i-Ready Spring 2021 Feedback Survey - Families/Arabic


\title{
Q3 التي أخذها الطالب فی هذا العام الدراسي ؟
}

Answered: 3 Skipped: 0

\begin{tabular}{|c|c|c|}
\hline ANSWER CHOICES & \multicolumn{2}{|l|}{RESPONSES} \\
\hline الرياضيات (Math) & 100.00\% & 3 \\
\hline القراءة (Reading) & 66.67\% & 2 \\
\hline ليس هذا ولا هذاك (Neither) & 0.00\% & 0 \\
\hline لااعرف (I don't know) & 0.00\% & 0 \\
\hline
\end{tabular}

Total Respondents: 3
i-Ready استبيان العائلات لربيع 2021 لبرنامج i-Ready Spring 2021 Feedback Survey - Families/Arabic

\section*{Q4 هل شارك مدرس الطالب بيانات التقييم التشخيصي للبرنامج معك ؟}

Answered: 3 Skipped: 0

\begin{tabular}{|c|c|c|}
\hline ANSWER CHOICES & \multicolumn{2}{|l|}{RESPONSES} \\
\hline (Yes) & 0.00\% & 0 \\
\hline لا (No) & 66.67\% & 2 \\
\hline لست متأكدا (I'm not sure) & 33.33\% & 1 \\
\hline TOTAL & & 3 \\
\hline
\end{tabular}

A No matching responses.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & مطلقاNOT AT ALL & \multicolumn{3}{|l|}{} & بشكل كبيركSIGNIFICANTLY & TOTAL & \multicolumn{2}{|l|}{WEIGHTED AVERAGE} \\
\hline (no & 0.00\% & 0.00\% & 0.00\% & 0.00\% & 0.00\% & & & \\
\hline label) & 0 & 0 & 0 & 0 & 0 & 0 & & 0.00 \\
\hline
\end{tabular}

\section*{Q6 ما هو تقييمك العام للتقييمات التشخيصية لبرنامج i-Ready ؟}

\author{
Answered: 0 Skipped: 3
}

A No matching responses.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & مستاء جداVERY DISSATISFIED & غاضراض & حياديNEU & ATIS & EDAVERY SATISFIED & TOTAL & WEIGHTED AVERAGE \\
\hline (no & 0.00\% & 0.00\% & 0.00\% & 0.00\% & 0.00\% & & \\
\hline label) & 0 & 0 & 0 & 0 & 0 & 0 & 0.00 \\
\hline
\end{tabular}

\title{
 عبر الانترنت در My Path
}

Answered: 3 Skipped: 0

\begin{tabular}{l|ll}
\hline ANSWER CHOICES & RESPONSES \\
\hline نعم (Yes) & \(100.00 \%\) & 3 \\
\hline\(y(N o)\) & \(0.00 \%\) & 0 \\
\hline (I don't know) & \(0.00 \%\) & 0 \\
\hline TOTAL & & 3
\end{tabular}

\title{
Q8 ماهي الدروس و التعليمات عبر الإنترنت لبرنامج i-Ready التي عمل بها الطالب ؟
}

Answered: 3 Skipped: 0

\begin{tabular}{l|ll}
\hline ANSWER CHOICES & RESPONSES \\
\hline (Math) & \(100.00 \%\) & 3 \\
\hline (Reading) & \(66.67 \%\) & 2 \\
\hline الرياضياءة ( don't know) & \(0.00 \%\) & 0
\end{tabular}

Total Respondents: 3

\section*{Q9 هل التعليم عبر الانترنت مؤثر و مفيد لدعم الطالب ؟}

Answered: 3 Skipped: 0


\title{
Q10 كم دقيقة تقريبا فى الاسبوع يستخدم الطالب التعليمات عبر الإنترنت ؟
}

Answered: 3 Skipped: 0

\begin{tabular}{|c|c|c|}
\hline ANSWER CHOICES & \multicolumn{2}{|l|}{RESPONSES} \\
\hline أكثر من ساعة & 66.67\% & 2 \\
\hline دقيقة 60-45 & 33.33\% & 1 \\
\hline دقيقة 45-30 & 0.00\% & 0 \\
\hline أقل من 30 دقيقة & 0.00\% & 0 \\
\hline لا اعلم & 0.00\% & 0 \\
\hline
\end{tabular}

TOTAL 3

\section*{Q11 هل توصي بأن تستمر منطقة ادموندز التعليمية فى استخدام برنامج i-Ready}

Answered: 3 Skipped: 0


\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & من المستبعد جداVERY UNLIKELY & من غير المرجح & \multicolumn{4}{|l|}{} & TOTAL & \begin{tabular}{l}
WEIGHTED \\
AVERAGE
\end{tabular} \\
\hline (no & 0.00\% & 0.00\% & 0.00\% & 0.00\% & & 100.00\% & & \\
\hline label) & 0 & 0 & 0 & 0 & & 3 & 3 & 5.00 \\
\hline
\end{tabular}

\title{
Q12 ما الذي يسير بسلاسة لطالبك عند استخدام برنامج i-Ready لهذا العام الدراسي ؟
}

\author{
Answered: 1 Skipped: 2
}

\title{
Q13 ما الذي لا يسير على ما يرام لطالبك عند استخدام برنامج i-Ready لهذا العام الدراسي ؟
}

Answered: 1 Skipped: 2

\section*{Q1 ¿En qué escuela está inscrito su estudiante?}

Answered: 46 Skipped: 0


Encuesta de primavera de iReady 2021 - para las familias i-Ready Spring 2021 Feedback Survey Families/Spanish


Encuesta de primavera de iReady 2021 - para las familias i-Ready Spring 2021 Feedback Survey Families/Spanish
\begin{tabular}{|c|c|c|}
\hline ANSWER CHOICES & RESPON & \\
\hline Alderwood Middle & 8.70\% & 4 \\
\hline Beverly Elementary & 0.00\% & 0 \\
\hline Brier Elementary & 0.00\% & 0 \\
\hline Brier Terrace Middle & 0.00\% & 0 \\
\hline Cedar Valley Community & 8.70\% & 4 \\
\hline Cedar Way Elementary & 4.35\% & 2 \\
\hline Chase Lake Elementary & 4.35\% & 2 \\
\hline College Place Elementary & 10.87\% & 5 \\
\hline College Place Middle & 0.00\% & 0 \\
\hline Edmonds Elementary & 0.00\% & 0 \\
\hline Edmonds Heights K-12 & 0.00\% & 0 \\
\hline Edmonds-Woodway High & 0.00\% & 0 \\
\hline Hazelwood Elementary & 10.87\% & 5 \\
\hline Hilltop Elementary & 0.00\% & 0 \\
\hline Lynndale Elementary & 4.35\% & 2 \\
\hline Lynnwood Elementary & 4.35\% & 2 \\
\hline Lynnwood High & 2.17\% & 1 \\
\hline Madrona K-8 & 0.00\% & 0 \\
\hline Maplewood K-8 & 0.00\% & 0 \\
\hline Martha Lake Elementary & 2.17\% & 1 \\
\hline Meadowdale Elementary & 8.70\% & 4 \\
\hline Meadowdale High & 0.00\% & 0 \\
\hline Meadowdale Middle & 2.17\% & 1 \\
\hline Mountlake Terrace Elementary & 6.52\% & 3 \\
\hline Mountlake Terrace High & 0.00\% & 0 \\
\hline Oak Heights Elementary & 6.52\% & 3 \\
\hline Scriber Lake High & 0.00\% & 0 \\
\hline Seaview Elementary & 0.00\% & 0 \\
\hline Sherwood Elementary & 2.17\% & 1 \\
\hline Spruce Elementary & 2.17\% & 1 \\
\hline Terrace Park/Challenge Elementary & 4.35\% & 2 \\
\hline Westgate Elementary & 6.52\% & 3 \\
\hline TOTAL & & 46 \\
\hline
\end{tabular}

\section*{Q2 ¿En qué grado está su estudiante en estos momentos?}

Answered: 46 Skipped: 0


Encuesta de primavera de iReady 2021 - para Ias familias i-Ready Spring 2021 Feedback Survey Families/Spanish
\begin{tabular}{|c|c|c|}
\hline ANSWER CHOICES & RESPONSES & \\
\hline Kínder & 19.57\% & 9 \\
\hline 1er grado & 26.09\% & 12 \\
\hline \(2{ }^{\circ}\) grado & 15.22\% & 7 \\
\hline \(3{ }^{\circ}\) grado & 10.87\% & 5 \\
\hline \(4^{\circ}\) grado & 4.35\% & 2 \\
\hline \(5^{\circ}\) grado & 10.87\% & 5 \\
\hline \(6^{\circ}\) grado & 4.35\% & 2 \\
\hline \(7^{\circ}\) grado & 4.35\% & 2 \\
\hline \(8^{\circ}\) grado & 2.17\% & 1 \\
\hline \(9^{\circ}\) grado & 0.00\% & 0 \\
\hline \(10^{\circ}\) grado & 0.00\% & 0 \\
\hline \(11^{\circ}\) grado & 0.00\% & 0 \\
\hline \(12^{\circ}\) grado & 2.17\% & 1 \\
\hline TOTAL & & 46 \\
\hline
\end{tabular}

\title{
Q3 ¿Sabe qué Pruebas de diagnóstico de i-Ready ha hecho su estudiante en este año escolar?
}

Answered: 46 Skipped: 0

\begin{tabular}{l|ll}
\hline ANSWER CHOICES & RESPONSES \\
\hline Matemáticas & \(76.09 \%\) & 35 \\
\hline Lectura & \(50.00 \%\) & 23 \\
\hline Ninguno & \(2.17 \%\) & 1 \\
\hline No sé & \(21.74 \%\) & 10
\end{tabular}

Total Respondents: 46

\title{
Q4 ¿Le dijo el/la maestro(a) los resultados que obtuvo su estudiante en la Prueba de Diagnóstico?
}


\title{
Q5 ¿Puede entender el rendimiento académico de su estudiante gracias a los datos de las Prueba de diagnóstico de i-Ready?
}


\title{
Q6 ¿Qué calificación general le daría a las Pruebas de diagnóstico de iReady?
}

Answered: 13 Skipped: 33

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & \begin{tabular}{l}
MUY \\
INSATISFECHO
\end{tabular} & INSATISFECHO & NEUTRAL & SATISFECHO & \begin{tabular}{l}
MUY \\
SATISFECHO
\end{tabular} & TOTAL & WEIGHTED AVERAGE \\
\hline (no & 0.00\% & 7.69\% & 15.38\% & 38.46\% & 38.46\% & & \\
\hline label) & 0 & 1 & 2 & 5 & 5 & 13 & 4.08 \\
\hline
\end{tabular}

\section*{Q7 ¿Su estudiante ha trabajado en las Lecciones en línea de i-Ready? También puede ver estas lecciones bajo el nombre de My Path.}


Encuesta de primavera de iReady 2021 - para Ias familias i-Ready Spring 2021 Feedback Survey Families/Spanish

\section*{Q8 ¿Sabe en qué lecciones de i-Ready ha trabajado su estudiante?}


Total Respondents: 20

\title{
Q9 ¿Cree usted que las Lecciones en línea son un apoyo efectivo y útil para su estudiante?
}

Answered: 20 Skipped: 26

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & PARA NADA & \[
\begin{aligned}
& \text { CASI } \\
& \text { NADA }
\end{aligned}
\] & UN POCO & MUCHO & BASTANTE & NO SÉ/MI ESTUDIANTE NO COMPLETÓ LAS LECCI & TOTAL & WEIGHTED AVERAGE \\
\hline \multirow[t]{2}{*}{Matemáticas} & 5.26\% & 0.00\% & 10.53\% & 42.11\% & 42.11\% & 0.00\% & & \\
\hline & 1 & 0 & 2 & 8 & 8 & 0 & 19 & 4.16 \\
\hline \multirow[t]{2}{*}{Lectura} & 0.00\% & 5.26\% & 21.05\% & 36.84\% & 26.32\% & 10.53\% & & \\
\hline & 0 & 1 & 4 & 7 & 5 & 2 & 19 & 3.94 \\
\hline
\end{tabular}

\section*{Q10 ¿Sabe cuántos minutos pasa su estudiante a la semana en estas lecciones de i-Ready?}

Answered: 20 Skipped: 26

\begin{tabular}{l|ll}
\hline ANSWER CHOICES & RESPONSES & \\
\hline Más de una hora & \(20.00 \%\) & 4 \\
\hline De 45 a 60 minutos & \(15.00 \%\) & 3 \\
\hline De \(30-45\) minutos & \(35.00 \%\) & 7 \\
\hline Menos de 30 minutes & \(25.00 \%\) & 5 \\
\hline No sé & \(5.00 \%\) & 1 \\
\hline TOTAL & & 20 \\
\hline
\end{tabular}

\section*{Q11 ¿Recomendaría que el Distrito Escolar de Edmonds continúe usando i-Ready?}


Encuesta de primavera de iReady 2021 - para Ias familias i-Ready Spring 2021 Feedback Survey Families/Spanish

\section*{Q12 Cuando su estudiante usa i-Ready ¿en qué le va bien?}

Answered: 27 Skipped: 19
\begin{tabular}{|c|c|c|}
\hline \# & RESPONSES & DATE \\
\hline 1 & The diagnostic testing got more challenging, but the lessons seem quite easy and I don't see the point of many of them. & 5/1/2021 6:30 PM \\
\hline 2 & Matematica & 4/28/2021 12:38 PM \\
\hline 3 & Matemáticas & 4/28/2021 12:54 AM \\
\hline 4 & Mathematics & 4/27/2021 11:53 PM \\
\hline 5 & En visualizar las palabras & 4/27/2021 9:44 PM \\
\hline 6 & Matematicas & 4/27/2021 8:56 PM \\
\hline 7 & EN MATEMATICAS & 4/27/2021 6:52 PM \\
\hline 8 & Matemáticas & 4/27/2021 6:11 PM \\
\hline 9 & Va mejorando sus lecciones & 4/27/2021 4:19 PM \\
\hline 10 & En las sumas & 4/27/2021 3:50 PM \\
\hline 11 & Aprende muchas cosas & 4/27/2021 2:35 PM \\
\hline 12 & Matematicas & 4/27/2021 2:34 PM \\
\hline 13 & Aprende muchas cosas & 4/27/2021 2:31 PM \\
\hline 14 & Lectura & 4/27/2021 2:16 PM \\
\hline 15 & En matemáticas & 4/27/2021 1:56 PM \\
\hline 16 & Cálculo & 4/27/2021 1:54 PM \\
\hline 17 & En las sumas & 4/27/2021 1:02 PM \\
\hline 18 & Matemáticas y lectura & 4/27/2021 12:11 PM \\
\hline 19 & Letura & 4/27/2021 11:43 AM \\
\hline 20 & Matemáticas & 4/27/2021 11:07 AM \\
\hline 21 & 1 & 4/27/2021 10:53 AM \\
\hline 22 & Le gusta más matemáticas & 4/27/2021 10:44 AM \\
\hline 23 & Matemáticas & 4/27/2021 10:41 AM \\
\hline 24 & Lellendo & 4/27/2021 10:39 AM \\
\hline 25 & Matematicas & 4/27/2021 10:37 AM \\
\hline 26 & En mathematica's & 4/27/2021 10:37 AM \\
\hline 27 & Matemáticas & 4/27/2021 10:36 AM \\
\hline
\end{tabular}

Encuesta de primavera de iReady 2021 - para las familias i-Ready Spring 2021 Feedback Survey Families/Spanish

Q13 Cuando su estudiante usa i-Ready ¿en qué no le va bien?
Answered: 26 Skipped: 20
\begin{tabular}{|c|c|c|}
\hline \# & RESPONSES & DATE \\
\hline 1 & n/a & 5/1/2021 6:30 PM \\
\hline 2 & Matemáticas & 4/28/2021 9:17 AM \\
\hline 3 & No se & 4/28/2021 12:54 AM \\
\hline 4 & Reading & 4/27/2021 11:53 PM \\
\hline 5 & Matematicas & 4/27/2021 8:56 PM \\
\hline 6 & TODO ESTA BIEN & 4/27/2021 6:52 PM \\
\hline 7 & Lecturas & 4/27/2021 6:11 PM \\
\hline 8 & Cuando es algo nuevo y apenas comenzará a aprender & 4/27/2021 4:19 PM \\
\hline 9 & Algunas sumas de numeros grandes aveces bataya & 4/27/2021 3:50 PM \\
\hline 10 & Le cuesta en tende pero así baa aprender & 4/27/2021 2:35 PM \\
\hline 11 & Read & 4/27/2021 2:34 PM \\
\hline 12 & Entender lo quedise pero así tiene que aprender & 4/27/2021 2:31 PM \\
\hline 13 & Todo bien & 4/27/2021 2:16 PM \\
\hline 14 & No se & 4/27/2021 1:56 PM \\
\hline 15 & rapidez para responder & 4/27/2021 1:54 PM \\
\hline 16 & Restas & 4/27/2021 1:02 PM \\
\hline 17 & pues si le va vien & 4/27/2021 12:11 PM \\
\hline 18 & Encontrar las cosas & 4/27/2021 11:43 AM \\
\hline 19 & Lectura & 4/27/2021 11:07 AM \\
\hline 20 & 1 & 4/27/2021 10:53 AM \\
\hline 21 & En lectura pero lo hace bien & 4/27/2021 10:44 AM \\
\hline 22 & Lectura & 4/27/2021 10:41 AM \\
\hline 23 & Matematicas & 4/27/2021 10:39 AM \\
\hline 24 & Ninguno & 4/27/2021 10:37 AM \\
\hline 25 & Todo va bien no mas que no le gusta hacerlo & 4/27/2021 10:37 AM \\
\hline 26 & Comprencion & 4/27/2021 10:36 AM \\
\hline
\end{tabular}

\section*{Q1 What school(s) do you work at?}

Answered: 319 Skipped: 0

iReady Spring 2021 Feedback Survey - Teachers


\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline ANSWER CHOICES & RESPO & \\
\hline Alderwood Middle & 3.45\% & 11 \\
\hline Beverly Elementary & 3.13\% & 10 \\
\hline Brier Elementary & 4.70\% & 15 \\
\hline Brier Terrace Middle & 2.19\% & 7 \\
\hline Cedar Valley Community & 4.39\% & 14 \\
\hline Cedar Way Elementary & 4.39\% & 14 \\
\hline Chase Lake Elementary & 3.45\% & 11 \\
\hline College Place Elementary & 2.51\% & 8 \\
\hline College Place Middle & 1.57\% & 5 \\
\hline Edmonds Elementary & 3.76\% & 12 \\
\hline Edmonds Heights K-12 & 0.00\% & 0 \\
\hline Edmonds-Woodway High & 1.25\% & 4 \\
\hline Hazelwood Elementary & 4.08\% & 13 \\
\hline Hilltop Elementary & 4.08\% & 13 \\
\hline Lynndale Elementary & 3.13\% & 10 \\
\hline Lynnwood Elementary & 0.94\% & 3 \\
\hline Lynnwood High & 2.19\% & 7 \\
\hline Madrona K-8 & 4.39\% & 14 \\
\hline Maplewood K-8 & 4.08\% & 13 \\
\hline Martha Lake Elementary & 3.13\% & 10 \\
\hline Meadowdale Elementary & 5.33\% & 17 \\
\hline Meadowdale High & 2.19\% & 7 \\
\hline Meadowdale Middle & 3.45\% & 11 \\
\hline Mountlake Terrace Elementary & 3.13\% & 10 \\
\hline Mountlake Terrace High & 0.63\% & 2 \\
\hline Oak Heights Elementary & 4.08\% & 13 \\
\hline Scriber Lake High & 0.31\% & 1 \\
\hline Seaview Elementary & 5.02\% & 16 \\
\hline Sherwood Elementary & 3.76\% & 12 \\
\hline Spruce Elementary & 2.51\% & 8 \\
\hline Terrace Park/Challenge Elementary & 6.90\% & 22 \\
\hline Westgate Elementary & 3.45\% & 11 \\
\hline Total Respondents: 319 & & \\
\hline
\end{tabular}

\section*{Q2 What grade level(s) do you currently teach?}

Answered: 319 Skipped: 0

iReady Spring 2021 Feedback Survey - Teachers
\begin{tabular}{llll}
\hline ANSWER CHOICES & RESPONSES & \\
\hline Kindergarten & \(15.36 \%\) & 49 \\
\hline Grade 1 & \(15.05 \%\) & 48 \\
\hline Grade 2 & \(13.79 \%\) & 44 \\
\hline Grade 3 & \(16.30 \%\) & 52 \\
\hline Grade 4 & \(17.87 \%\) & 57 \\
\hline Grade 5 & \(19.12 \%\) & 61 \\
\hline Grade 6 & \(16.30 \%\) & 52 \\
\hline Grade 7 & \(10.03 \%\) & 32 \\
\hline Grade 8 & \(8.46 \%\) & 37 \\
\hline Grade 9 & \(5.96 \%\) & 27 \\
\hline Grade 10 & \(5.96 \%\) & 19 \\
\hline Grade 11 & \(6.27 \%\) & 19 \\
\hline Grade 12 & \(5.64 \%\) & 20 \\
\hline
\end{tabular}

Total Respondents: 319

\section*{Q3 Have you administered any i-Ready Diagnostic Assessments this year?}


\title{
Q4 How useful is the data generated from the i-Ready Diagnostic Assessment?
}

\author{
Answered: 298 \\ Skipped: 21
}


\title{
Q5 What is your overall rating of the i-Ready Diagnostic Assessments?
}


\title{
Q6 Have you asked your students to work on the Online Instruction lessons in i-Ready?
}

\begin{tabular}{l|lr}
\hline ANSWER CHOICES & RESPONSES \\
\hline Yes & \(95.32 \%\) & 285 \\
\hline No & \(4.68 \%\) & 14 \\
\hline TOTAL & & 299 \\
\hline
\end{tabular}

\section*{Q7 How useful is the data generated from the i-Ready Online Instruction?}

Answered: 277 Skipped: 42


\title{
Q8 Is the Online Instruction an effective and useful support for your students?
}

\author{
Answered: 277 Skipped: 42
}


\title{
Q9 How many of your students are using the i-Ready Online Instruction this school year?
}

Answered: 278 Skipped: 41

\begin{tabular}{l|ll}
\hline ANSWER CHOICES & RESPONSES & \\
\hline All or almost all & \(50.36 \%\) & 140 \\
\hline About half & \(26.26 \%\) & 73 \\
\hline fewer than half & \(12.59 \%\) & 35 \\
\hline Just a few & \(9.35 \%\) & 26 \\
\hline None & \(0.72 \%\) & 2 \\
\hline I don't know & \(0.72 \%\) & 2 \\
\hline TOTAL & & 278 \\
\hline
\end{tabular}

\section*{Q10 About how many minutes per week do your students use the Online Instruction?}

Answered: 274 Skipped: 45

\begin{tabular}{l|ll}
\hline ANSWER CHOICES & RESPONSES & \\
\hline Over one hour & \(4.38 \%\) & 12 \\
\hline 45 to 60 minutes & \(22.99 \%\) & 63 \\
\hline 30 to 45 minutes & \(47.45 \%\) & 130 \\
\hline Less than 30 minutes & \(21.90 \%\) & 60 \\
\hline I don't know & \(3.28 \%\) & 9 \\
\hline TOTAL & & 274 \\
\hline
\end{tabular}

\title{
Q11 How would you rate the i-Ready Online Instruction?
}

Answered: 276 Skipped: 43


\section*{Q12 How useful is i-Ready for informing instruction?}

Answered: 284 Skipped: 35


\title{
Q13 Would you recommend that the Edmonds School District continues to implement the i-Ready Diagnostic Assessments?
}

Answered: 283 Skipped: 36


\section*{Q14 If the Edmonds School District continues to support the} implementation and use of i-Ready, how important is it to you to also have the Online Instruction tools in i-Ready?

iReady Spring 2021 Feedback Survey - Teachers
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & UNIMPORTANT & (NO LABEL) & UNDECIDED/NEUTRAL & (NO LABEL) & IMPORTANT & I DID NOT USE IREADY FOR THIS SUBJECT & TOTAL & WEIGHTED AVERAGE \\
\hline \multirow[t]{2}{*}{Math} & 8.86\% & 2.95\% & 26.20\% & 18.45\% & 40.96\% & 2.58\% & & \\
\hline & 24 & 8 & 71 & 50 & 111 & 7 & 271 & 3.82 \\
\hline \multirow[t]{2}{*}{Reading} & 7.39\% & 3.50\% & 22.57\% & 17.12\% & 38.13\% & 11.28\% & & \\
\hline & 19 & 9 & 58 & 44 & 98 & 29 & 257 & 3.85 \\
\hline
\end{tabular}

\section*{Q15 What is your overall impression of i-Ready?}


\title{
Q16 What is going well with the use of i-Ready this school year?
}

\author{
Answered: 264 Skipped: 55
}
\begin{tabular}{|c|c|c|}
\hline \# & RESPONSES & DATE \\
\hline 1 & Instruction at student's level & 5/7/2021 9:15 PM \\
\hline 2 & The lessons, assessments, and information available for instructional purposes as well as family communication. & 5/7/2021 7:11 PM \\
\hline 3 & It was wonderful to have a tool that was at the right level for each student for asynchronous days for those students that enjoyed it. I also liked it last year before the pandemic for a math center and reading center. & 5/7/2021 5:23 PM \\
\hline 4 & Students who access i-Ready at home are making progress. & 5/7/2021 4:57 PM \\
\hline 5 & Individualized instruction for asynchronous learning. I also appreciate the data from the diagnostics. & 5/7/2021 4:55 PM \\
\hline 6 & individualized pathway & 5/7/2021 4:28 PM \\
\hline 7 & My students who are already at grade level were more likely to do iReady than my struggling students. & 5/7/2021 3:51 PM \\
\hline 8 & It provides a consistent measure -but I am concerned about students working on their own without parent assistance. & 5/7/2021 3:51 PM \\
\hline 9 & It's differentiated; strong tool for asynchronous learning this year. & 5/7/2021 3:43 PM \\
\hline 10 & the diagnostic & 5/7/2021 3:25 PM \\
\hline 11 & The diagnostic tools are helpful for me as a teacher in informing instruction and communicating with parents. For my students who do actually do the iReady instruction, it's helpful for them. However... & 5/7/2021 3:24 PM \\
\hline 12 & (1) Serves as differentiated curriculum for beginner ELs testing in at 4th grade and below (2) Serves as formative assessment and supplemental lessons for phonetic development in Eng. 1 classes (beginners) (3) motivational tool and real-time accountability (4) universal tool for math, English and possibly science (5) universal data for intra/inter-departmental discussions about individual student progress & 5/7/2021 3:06 PM \\
\hline 13 & Able to track some progress & 5/7/2021 3:02 PM \\
\hline 14 & It is another learning I can use to work with students & 5/7/2021 2:59 PM \\
\hline 15 & I see growth in many of my students. the '30-40 minutes a week' is getting more normalized as i assign it as HW. & 5/7/2021 2:59 PM \\
\hline 16 & supplemental lessons & 5/7/2021 2:51 PM \\
\hline 17 & Students like it. & 5/7/2021 2:49 PM \\
\hline 18 & The kids like the lessons and games and are engaged and motivated to use the program. It is easy to assign the activities to the students and allows them to work at their own pace. & 5/7/2021 2:35 PM \\
\hline 19 & students really enjoy the program, lessons & 5/7/2021 2:25 PM \\
\hline 20 & When kids actually use it at home consistently, it provides helpful data. & 5/7/2021 2:10 PM \\
\hline 21 & I love that our remote kids have had something to do at home, with a math focus. They also seem to like it! & 5/7/2021 2:02 PM \\
\hline 22 & The instruction and lessons are good & 5/7/2021 1:38 PM \\
\hline 23 & I love that it is clear for the students and gives so much data for teachers and families & 5/7/2021 1:26 PM \\
\hline 24 & It is a good asynchronous activity. & 5/7/2021 1:25 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 25 & The online instuction has been a helpful tool for struggling students to get additional practice at their skill level. & 5/7/2021 1:25 PM \\
\hline 26 & It is nice for kids to have weekly guided lessons at their level. It is also nice to have the baseline assessments. & 5/7/2021 1:23 PM \\
\hline 27 & The program supports my studnets' learning. This year especially, it has been so valuable. & 5/7/2021 1:07 PM \\
\hline 28 & The diagnostics were very helpful at the beginning of the year, getting to understand my students as learners. It has provided a consistent source of practice, targeting their areas of need, which may or may not align with grade-level instruction. Those who use iReady show growth. Many students have not used it remotely, which is true of many online programs. & 5/7/2021 1:01 PM \\
\hline 29 & Completing lessons. & 5/7/2021 12:58 PM \\
\hline 30 & Students are able to get math instruction and practice in areas that we were not able to cover in class. & 5/7/2021 12:58 PM \\
\hline 31 & The students who are doing the lesson regularly are showing good growth and they like doing it. & 5/7/2021 12:51 PM \\
\hline 32 & Engagement. & 5/7/2021 12:43 PM \\
\hline 33 & Teacher assigned after instruction & 5/7/2021 12:42 PM \\
\hline 34 & Not a lot, however I was part of the pilot which is why I have a positive view of the program. & 5/7/2021 12:39 PM \\
\hline 35 & Some students like it & 5/7/2021 12:38 PM \\
\hline 36 & My students enjoy the math games, especially the new upgrades. Math diagnostics have been helpful for me. & 5/7/2021 12:37 PM \\
\hline 37 & It's a great piece of individualized learning for students. & 5/7/2021 12:36 PM \\
\hline 38 & it gives my remote K students some supplemental learning after coming to remote class and doing a seesaw activity. User friendly after initial shock of learning a new program. & 5/7/2021 12:36 PM \\
\hline 39 & Great support for students who are below grade level to practice skills at their level. It's also a useful tool for early finishers. & 5/7/2021 12:32 PM \\
\hline 40 & Even tough I don't know how to use all of the data it generates, or how to make students want to engage with the learning, when they do, it is benefitting them, and I get feedback on their progress from the data. & 5/7/2021 12:28 PM \\
\hline 41 & Some students are very motivated by passing lessons and seeing immediate feedback. When teaching lessons student exclaim that they have background knowledge because of iReading work. & 5/7/2021 12:19 PM \\
\hline 42 & Supplimenting for kids who finish early or need extra help on foundational skills & 5/7/2021 12:17 PM \\
\hline 43 & It is user friendly & 5/7/2021 12:15 PM \\
\hline 44 & The information from iReady is useful and practical for me. i wish I had more time to go deeper with it and apply it to the Math Expressions curriculum we are using. I would also like to use the iReady data for grouping which has been difficult this year with remote teaching. & 5/7/2021 12:10 PM \\
\hline 45 & It is something the students can do asynchronously. & 5/7/2021 12:09 PM \\
\hline 46 & Students who use i-ready at home are engaging in effective learning. & 5/7/2021 12:03 PM \\
\hline 47 & data, growth seen, differentiation & 5/7/2021 12:00 PM \\
\hline 48 & Good supplemental instruction & 5/7/2021 11:59 AM \\
\hline 49 & It is nice to have a consistent program for all grades and an at home resource to build their skills & 5/7/2021 11:53 AM \\
\hline 50 & It is a good tool for students to work on independently to keep their skills up & 5/7/2021 11:50 AM \\
\hline 51 & It is another resources for students to use while they are at home. & 5/7/2021 11:50 AM \\
\hline 52 & The diagnostic has given me such important data. It is so helpful that if forms small groups. & 5/7/2021 11:44 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 53 & Students are able to work on it independently and are able to work on it during their at home learning days. & 5/7/2021 11:44 AM \\
\hline 54 & nothing & 5/7/2021 11:41 AM \\
\hline 55 & Some students enjoyed seeing how may lessons they had completed. & 5/7/2021 11:40 AM \\
\hline 56 & Students are able to work at their own level and make progress toward a goal. & 5/7/2021 11:40 AM \\
\hline 57 & Excellent at filling in the holes & 5/7/2021 11:39 AM \\
\hline 58 & It is something students are able to access and do at home independently. & 5/7/2021 11:39 AM \\
\hline 59 & consistency with instruction and individualized lessons & 5/7/2021 11:37 AM \\
\hline 60 & It is an online tool to support reading in the remote learning situation. In the absence of STAR, it provides reading levels. We find that teacher support is needed to have students work effectively. Diagnostic is too long! & 5/7/2021 11:32 AM \\
\hline 61 & It is nice to see my students' scores, but I'm just not a fan of i-Ready. I would say about half of my class uses it - I have to constantly contact families to remind them to get on i-Ready - it is frustrating for me as a teacher. I feel like the i-Ready police. I am always very respectful with families, but it gets to be too much! & 5/7/2021 11:31 AM \\
\hline 62 & The individualized lessons target some of the skills students may not get enough of during class time. Also, I like the way teachers can reset lesson paths or redo lessons as needed for students. & 5/7/2021 11:30 AM \\
\hline 63 & For students who consistently engage in iReady, it is filling learning gaps. & 5/7/2021 11:28 AM \\
\hline 64 & I can adjust placement of students manually & 5/7/2021 11:24 AM \\
\hline 65 & The students who do use it, seem to enjoy it. I used it in Everett a few years ago and really liked it. I am looking forward to using it more in class when we are no longer hybrid. My students currently do not generally engage with their computers on asynchronous days. & 5/7/2021 11:22 AM \\
\hline 66 & Diagnostics & 5/7/2021 11:22 AM \\
\hline 67 & It gives some good data on skills in different areas. & 5/7/2021 11:22 AM \\
\hline 68 & It has been a useful tool for my students to practice their reading and math online for the asynchronous work at home & 5/7/2021 11:21 AM \\
\hline 69 & Very valuable data to use for small group instruction, rigorous academic tasks & 5/7/2021 11:18 AM \\
\hline 70 & Students can work at their own pace and move forward in skills. & 5/7/2021 11:18 AM \\
\hline 71 & EL learners are benefitting from the reading instruction. & 5/7/2021 11:15 AM \\
\hline 72 & My Path independent work & 5/7/2021 11:14 AM \\
\hline 73 & online instruction for remote learners & 5/7/2021 11:14 AM \\
\hline 74 & Having students work on assigned lessons for practice that correlates to in-class learning was helpful. & 5/7/2021 11:14 AM \\
\hline 75 & Use for parent teacher conferences & 5/7/2021 11:11 AM \\
\hline 76 & excellent tool for pinpointing student areas of need & 5/7/2021 11:10 AM \\
\hline 77 & There are remedial lessons that help my lower students. & 5/7/2021 11:10 AM \\
\hline 78 & It was helpful to get some kind of indication of levels for math and reading. & 5/7/2021 11:08 AM \\
\hline 79 & I like the common language that can be used between teachers. I also like that it gives me more specific information about the subtopics in each strand. This has been helpful, unlike SBA testing which is not. & 5/7/2021 11:06 AM \\
\hline 80 & The students like the games. & 5/7/2021 11:03 AM \\
\hline 81 & I set it up as an activity to complete on asynchronous days and most kids were active. & 5/7/2021 11:03 AM \\
\hline 82 & Students get into the routine with the programs. As logged in through clever, it is easy to & 5/7/2021 11:02 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline & access, and there are no headaches for parents in helping their special needs student access the program. Straight forward. Students are given tasks that are appropriate for their educational level. & \\
\hline 83 & Students seem to enjoy doing i-ready lessons on their asynchronous days. I think it's a good option for them to practice the skills they need. & 5/7/2021 10:58 AM \\
\hline 84 & I love the online instruction, it is the most important aspect for me. & 5/7/2021 10:56 AM \\
\hline 85 & I have used this program for several years and love it. It is also a great resource for students that are struggling. We refer to the scores at every PST meeting. & 5/7/2021 10:53 AM \\
\hline 86 & Few students use it, but there is not major difference in those that use it verses those that do not. & 5/7/2021 10:53 AM \\
\hline 87 & It is a supplement to my instruction, somethin they can do independently & 5/7/2021 10:51 AM \\
\hline 88 & It's giving us a way of assessing all of our students & 5/7/2021 10:51 AM \\
\hline 89 & More assessment information, especially for math; lessons tailored to each student's areas for growth; differentiation; asynchronous instruction & 5/7/2021 10:50 AM \\
\hline 90 & Useful tool to share with parents and students & 5/7/2021 10:49 AM \\
\hline 91 & It's another data point that corroborates my own data and helps me to identify students in need or students who need to be challenged. & 5/7/2021 10:45 AM \\
\hline 92 & Providing individualized leveled practice & 5/7/2021 10:44 AM \\
\hline 93 & i-Ready has helped me find the scaffolds and practice skills for students. & 5/7/2021 10:43 AM \\
\hline 94 & / & 5/7/2021 10:42 AM \\
\hline 95 & It can easily be used in remote teaching. & 5/7/2021 10:41 AM \\
\hline 96 & I use it for the gaps in the understanding. For example, we're learning about power of 10, but my students don't remember place value or have a great understanding, so this week I assigned a place value lesson on iReady. The kids who log on and give it actual effort are getting a type of individualized instruction. & 5/7/2021 10:41 AM \\
\hline 97 & When kids use it, there is a lot of growth & 5/7/2021 10:41 AM \\
\hline 98 & Not much, since we are remote and I cannot tell if students are being coached by someone at home & 5/7/2021 10:40 AM \\
\hline 99 & It's work that a couple of my students would only work on vs. other assignments & 5/7/2021 10:40 AM \\
\hline 100 & it's helping the students who are actually working hard on their lessons & 5/7/2021 10:40 AM \\
\hline 101 & It was a great support when I taught online and students worked on it during synchronous time in breakout rooms and I could monitor or sometimes assist. Now that I'm assigning it for asynchronous days very few students are using it. Its been frustrating trying to encourage use since we moved to hybrid. I liked the data I could access. As with everything else we are doing, if it's not synchronous it's rarely being used. & 5/7/2021 10:40 AM \\
\hline 102 & Taylored to each student & 5/7/2021 10:39 AM \\
\hline 103 & Since we have gone to hybrid, it is easier to monitor and encourage usage. More people are using the program. It did not work so well for remote learning. & 5/7/2021 10:38 AM \\
\hline 104 & the online instruction at just right student levels that they can do at home independently! & 5/7/2021 10:37 AM \\
\hline 105 & It's great to have a well built tool that adjusts to the students level. & 5/7/2021 10:37 AM \\
\hline 106 & The implementation of its use, and the overall student response is going well. & 5/7/2021 10:37 AM \\
\hline 107 & students who want to progress faster have a method & 5/7/2021 10:35 AM \\
\hline 108 & Its a good support. Its especially useful for kids who are lower or higher than what I'm teaching the whole class. & 5/7/2021 10:35 AM \\
\hline 109 & It has been a good source of Data when we aren't seeing the students in person. & 5/7/2021 10:34 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 110 & Were to start, data, tool for independent time. & 5/7/2021 10:33 AM \\
\hline 111 & Students learning at their own pace & 5/7/2021 10:33 AM \\
\hline 112 & Strong students continue to work in i-Ready & 5/7/2021 10:32 AM \\
\hline 113 & Now that we are back in school, it is working much better with them doing the My Path Lessons & 5/7/2021 10:30 AM \\
\hline 114 & When students use the program, instruction gaps are being practiced. The assessments help confirm student present levels of understanding. & 5/7/2021 10:30 AM \\
\hline 115 & I use it to guide my lesson planning and provide interventions. & 5/7/2021 10:30 AM \\
\hline 116 & using it during Asych Wednesdays with the intention of filling some gaps in knowledge & 5/7/2021 10:29 AM \\
\hline 117 & I like that is offers personalized instruction and activities. & 5/7/2021 10:29 AM \\
\hline 118 & I like the My path lessons it generates for students. & 5/7/2021 10:28 AM \\
\hline 119 & Nothing & 5/7/2021 10:26 AM \\
\hline 120 & Being able to differentiate the lessons based on student needs & 5/7/2021 10:26 AM \\
\hline 121 & This gives us standardized data, places to continue our work, and gives focus to teachers who do not know how to use assessment data. Or how to assess in general. & 5/7/2021 10:26 AM \\
\hline 122 & Not much to like. & 5/7/2021 10:26 AM \\
\hline 123 & N/A & 5/7/2021 10:25 AM \\
\hline 124 & another data point that is much better and more useful than moby max was & 5/7/2021 10:25 AM \\
\hline 125 & My students like the games and I like seeing how long they take on each question. & 5/7/2021 10:23 AM \\
\hline 126 & something kids can work on asynchronously at their level & 5/7/2021 10:23 AM \\
\hline 127 & Diagnostic Assessment, identifying grade level and growth & 5/7/2021 10:23 AM \\
\hline 128 & targeted instruction based on student needs. I can see their progress remotely. & 5/7/2021 10:17 AM \\
\hline 129 & It's nice to have a programs that assesses students and gives back detailed information. It's great to have another platform/ resource for students to practice math. & 5/7/2021 9:36 AM \\
\hline 130 & It gives me a general idea of what the students know. & 5/7/2021 9:08 AM \\
\hline 131 & It gets all the missed pieces of math that I am not aware of. & 5/7/2021 9:05 AM \\
\hline 132 & It's helpful to show students their progress and how their time is supporting their learning. & 5/7/2021 8:52 AM \\
\hline 133 & I think if students were doing the instruction, it would go well. But this year is so different and students haven't been able to engage in it regularly because they are at home. & 5/7/2021 8:42 AM \\
\hline 134 & Personalized independent student work; very helpful tool for remote teaching and learning & 5/7/2021 8:38 AM \\
\hline 135 & Great way for them to get instruction independently. & 5/7/2021 8:26 AM \\
\hline 136 & I can assign specific lessons to go along with my lessons. The fact that the kids are working at their own level. & 5/7/2021 8:24 AM \\
\hline 137 & Not much & 5/7/2021 8:08 AM \\
\hline 138 & It looks like it could be good/useful, with individualized instruction and a lesson path teachers can assign. But this was not the best year to launch and gather data about how well the program works. & 5/7/2021 7:59 AM \\
\hline 139 & It lets me know what to target and I can use the information for parents. Students are able to do it at home for homework. & 5/7/2021 7:47 AM \\
\hline 140 & For those who used it at home it provided a great additional resource for instruction! I appreciate it right now in the classroom as it allows our young students individualized instruction they can access independently while I can then work individually with students. & 5/7/2021 7:34 AM \\
\hline 141 & Hello! I am a school psychologist and having access to i-Ready is EXTREMELY VALUABLE. & 5/7/2021 7:27 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}

Apart from the STAR reading assessment of reading comp 3x a year, our learning support department (and school!) does NO progress monitoring. i-Ready is a valuable tool that students can complete in person or remotely. Moreover, it is a valuable source of interventions - something that is TRULY lacking in secondary.
\begin{tabular}{|c|c|c|}
\hline 142 & It provides data points and progress monitoring in a way we've never had before. & 5/7/2021 7:14 AM \\
\hline 143 & My path & 5/7/2021 6:37 AM \\
\hline 144 & Easy to see how students are doing. & 5/6/2021 9:50 PM \\
\hline 145 & kids are engaged (after they tearfully take the diagnostic) the program is engaging and seems supportive & 5/6/2021 9:12 PM \\
\hline 146 & iReady is a way to see where kids are stuck on certain skills. I like iReady because it supports the classroom with quiet work time while I can meet with small groups. I also like the data provided when conferencing with parents. I try to have the kids work on iReady twice a week for about an hour. & 5/6/2021 6:25 PM \\
\hline 147 & I feel like the Diagnostic Tests give one piece of feedback that is easy and valuable to share with families. I like that I can use this feedback to differentiate and plan instruction. & 5/6/2021 6:01 PM \\
\hline 148 & A constant support for individualized instruction with the ability for teacher to support struggling students remotely or in person. Students are excited with their own progress and happily acknowledge that they have seen that concept or skill in i Ready when we go into our class unit. & 5/6/2021 5:46 PM \\
\hline 149 & Great for using during small group times in person or at home learning days & 5/6/2021 5:45 PM \\
\hline 150 & The assessments gave me validation of my assumptions of skills when (in COVID times) । could not see student work or know for sure if they had help for learning activities. & 5/6/2021 5:40 PM \\
\hline 151 & I love that it targets very specific areas for the kids to work on. The math I-Ready is especially engaging. I love the data we get. & 5/6/2021 5:16 PM \\
\hline 152 & It has been a great tool for asynchronous time. I like that I can assign work to reinforce, reteach or practice a skill taught in class. The my path also gives access to meet kids where they currently are. Next year I think the gaps will be even larger. & 5/6/2021 5:15 PM \\
\hline 153 & Students can work on some topics they have gaps in. & 5/6/2021 5:06 PM \\
\hline 154 & Fills in learning gaps, individual to each student. & 5/6/2021 4:49 PM \\
\hline 155 & If students do it. it can be good info & 5/6/2021 4:45 PM \\
\hline 156 & Data shows when kids are passing their lessons. & 5/6/2021 4:45 PM \\
\hline 157 & Assessment information that is accessible to gen ed and sped teachers. & 5/6/2021 4:43 PM \\
\hline 158 & I liked iReady for some of my students. Some really benefited from it when they did the online lessons. & 5/6/2021 4:40 PM \\
\hline 159 & Nothing & 5/6/2021 4:38 PM \\
\hline 160 & I guess that it could be a useful tool for assessment or as a supplemental tool for students needing additional support or to move ahead. & 5/6/2021 4:28 PM \\
\hline 161 & Using diagnostic results to inform small group instruction. & 5/6/2021 4:22 PM \\
\hline 162 & The instructional groupings has been helpful & 5/6/2021 4:19 PM \\
\hline 163 & ? & 5/6/2021 4:16 PM \\
\hline 164 & Easy to prepare for asynchronous work. & 5/6/2021 4:15 PM \\
\hline 165 & It helps to fill in learning gaps. & 5/6/2021 4:15 PM \\
\hline 166 & Kids can log in through Clever, so it is easy to access. & 5/6/2021 4:13 PM \\
\hline 167 & it has been helpful to get more data while we are remote & 5/6/2021 4:12 PM \\
\hline 168 & It's been nice to have this for remote days. & 5/6/2021 4:12 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 169 & Having a math program that meets students individual needs & 5/6/2021 4:12 PM \\
\hline 170 & Students are logging in on their asynchronous days; provides differentiation & 5/6/2021 4:11 PM \\
\hline 171 & If the student has family support/expectations, I-Ready has been a useful supplemental learning program. & 5/6/2021 4:11 PM \\
\hline 172 & Some kids enjoy it. & 5/6/2021 4:06 PM \\
\hline 173 & It was useful for students to use for gap filling. & 5/6/2021 4:05 PM \\
\hline 174 & Math iReady seems to have a solid influence on student progress. & 5/6/2021 8:42 AM \\
\hline 175 & I just like giving students something that help them practice standards that they are not proficient with. & 5/5/2021 1:50 PM \\
\hline 176 & Really gives detailed information. Didn't really use it to its potential as far as getting into lessons with students. & 5/5/2021 1:49 PM \\
\hline 177 & I know where to find everything I need in terms of data. It's an easy 15 minute assignment on remote days. & 5/5/2021 9:19 AM \\
\hline 178 & It is good when I can find a math lesson that is slightly lower than what we are teaching to remind/introduce students to the concept. & 5/5/2021 9:05 AM \\
\hline 179 & A way to give students an extra resource for learning/ differentiation & 5/5/2021 8:00 AM \\
\hline 180 & It gives the district an assessment result. & 5/5/2021 7:41 AM \\
\hline 181 & The few students (3 out of 18) who are doing iReady like the games. & 5/4/2021 8:02 PM \\
\hline 182 & Some kids like it and it is easy to assign & 5/4/2021 7:36 PM \\
\hline 183 & For the most part I can just assign it and not worry about planning as many individualized lessons. & 5/4/2021 4:33 PM \\
\hline 184 & A few students like and use it. & 5/4/2021 3:58 PM \\
\hline 185 & Students have told me when I've introduced ideas "I am doing that in iReady too!" & 5/4/2021 3:26 PM \\
\hline 186 & I appreciate the desire for additional data, so I can see why i-ready seemed appealing. Students who are using the online instruction consistently are making gains. & 5/4/2021 2:47 PM \\
\hline 187 & Differentiated instruction and practice & 5/4/2021 1:25 PM \\
\hline 188 & Direct instruction at a students level (most of the time). Ability to pick up on gaps in instruction. Ability to pick up on students who are achieving above grade level who otherwise might have been missed. & 5/4/2021 1:02 PM \\
\hline 189 & I like that students are able to follow asynchronous learning that I assign for them. & 5/4/2021 12:33 PM \\
\hline 190 & At middle school, the videos and practice becomes redundant for a lot of my kids and the high end readers are able to test out. & 5/4/2021 12:15 PM \\
\hline 191 & Worked great for remote and hybrid learning & 5/4/2021 10:34 AM \\
\hline 192 & Personalized instruction through the MyPath lessons. & 5/4/2021 10:01 AM \\
\hline 193 & Being able to see the grow students are making. Which area a specific student may need to work on. & 5/4/2021 9:21 AM \\
\hline 194 & For student who do the work themselves they are learning and I can see how they are doing & 5/4/2021 8:39 AM \\
\hline 195 & A tool to direct families to when they ask "what can my child be working on" helpful in providing intervention/closing learning gaps, useful for students that need a challenge & 5/4/2021 8:38 AM \\
\hline 196 & Individualized instruction in targeted areas of need & 5/4/2021 8:36 AM \\
\hline 197 & Good to see my students progress through skills. It is a handy program for remote learning, especially. & 5/4/2021 8:16 AM \\
\hline 198 & I like that it uses the diagnostic to pinpoint areas of potential growth and then generates a path forward for that student. & 5/4/2021 8:09 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 199 & Computerized Feedback on students' skills & 5/3/2021 8:28 PM \\
\hline 200 & I love the self paced learning. I want to continue to use this to help me create my small groups and so I can further look into the lessons and data. & 5/3/2021 8:19 PM \\
\hline 201 & Diagnostics are the most useful in identifying students with specific needs and learning gaps. & 5/3/2021 5:52 PM \\
\hline 202 & It's a good tool to provide additional instruction during remote learning. & 5/3/2021 4:05 PM \\
\hline 203 & It allows the students to have access to math and reading practice at their instructional level that does not require a lot of teacher prep time during remote learning. & 5/3/2021 3:50 PM \\
\hline 204 & it is supposed to be additional, TAILORED instruction for students & 5/3/2021 3:42 PM \\
\hline 205 & It's nice to have something tailored to their individual level that can be done independently. & 5/3/2021 3:31 PM \\
\hline 206 & I like the idea of having personalized instructions for students in both reading and math. & 5/3/2021 3:29 PM \\
\hline 207 & I love having a common diagnostic across grades. If we continue using it, being able to look at past year data and growth across years would be beneficial. & 5/3/2021 3:03 PM \\
\hline 208 & If kids took the diagnostic seriously, the results have had in impact on their contonied efforts to work. I shared data with families and it helped in discussing reading habits and goals with individual families. The diagnostic is a bit too time consuming and kids tend to be burnt out; I imagine it would be different if the diagnostic was given under normal classroom circumstances. The kids who have followed up with completing I-ready tasks have found it to be useful. I also have other reading options which some kids prefer. & 5/3/2021 2:45 PM \\
\hline 209 & It was helpful to have in a remote learning year & 5/3/2021 2:37 PM \\
\hline 210 & The Diagnostic gives very detailed information about each student's performance. I've been able to use that information to inform my instruction for each student. In addition, the diagnostic provides excellent progress monitoring data for IEPs. & 5/3/2021 2:21 PM \\
\hline 211 & It does give good datat points. & 5/3/2021 2:16 PM \\
\hline 212 & We had some data to use. & 5/3/2021 2:06 PM \\
\hline 213 & My students increased one level from September to the end of the first quarter. This data allowed me to guide my instruction since we did not have any other instrument to assess students' reading levels. Additionally, this data was critical for our meetings with Special Education and parents. This was a useful tool to have during COVID as well. & 5/3/2021 1:53 PM \\
\hline 214 & The online instruction was something that students could do on their own with remote learning. & 5/3/2021 1:16 PM \\
\hline 215 & automatically generated practice lessons & 5/3/2021 1:11 PM \\
\hline 216 & Filling in gaps, differentiating & 5/3/2021 1:09 PM \\
\hline 217 & It is a consistent format, we are able to get daily information on their progress, and the diagnostics that we do three times a year are beneficial for giving us information where we can see growth, or areas for improvement. & 5/3/2021 12:54 PM \\
\hline 218 & extra practice that is not within the math ccurriculum & 5/3/2021 12:49 PM \\
\hline 219 & Students can work on remedial skills at their own pace and fill in gaps from the end of last year when school closed early. & 5/3/2021 12:42 PM \\
\hline 220 & It provides me with data to see student growth. & 5/3/2021 12:42 PM \\
\hline 221 & I love how it adjust to the needs of each child. & 5/3/2021 12:37 PM \\
\hline 222 & It is something that kids can do independently, it provides some practice of skills we are working on in class. & 5/3/2021 11:49 AM \\
\hline 223 & For the students who use the program, they have increased their math knowledge. & 5/3/2021 11:16 AM \\
\hline 224 & It has provided the kids something to do on asynchronous days. & 5/3/2021 11:11 AM \\
\hline 225 & Those who do it get some good practice at their level and it tells me their strengths and weaknesses. & 5/3/2021 11:06 AM \\
\hline 226 & It is something for them to do online independently. & 5/3/2021 11:06 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 227 & Great for remote, good information from the diagnostics. & 5/3/2021 10:34 AM \\
\hline 228 & How hands off, yet adaptive it is. Super easy to use for teachers. & 5/3/2021 9:48 AM \\
\hline 229 & good to get info on all the students & 5/3/2021 9:43 AM \\
\hline 230 & I am able to see where students have gaps and help them move forward. Students are able to engage with lessons that are just right for them. & 5/3/2021 7:02 AM \\
\hline 231 & Meaningful differentiated practice which is very hard to offer remotely & 5/2/2021 12:12 PM \\
\hline 232 & Students who I have had a hard time reaching and or differentiating well for have been able to work at their level on i-Ready and improve their proficiency. The diagnostic did give reasonable levels based on what I see from my students. & 4/30/2021 2:04 PM \\
\hline 233 & When students take the diagnositics seriously the results are useful to me and the lessons help students make progress. & 4/30/2021 12:55 PM \\
\hline 234 & Personalized, customized reading instruction - students need this & 4/30/2021 11:57 AM \\
\hline 235 & Individualized lessons and a gauge of skill levels & 4/30/2021 10:38 AM \\
\hline 236 & none & 4/30/2021 10:29 AM \\
\hline 237 & Can give diagonistic and get quick results & 4/30/2021 10:05 AM \\
\hline 238 & lessons can be assigned for asynchronous days & 4/30/2021 9:42 AM \\
\hline 239 & It was hard to get kids to participate. We all got frustrated that they had to restart tests. Things didn't load well. I was pretty exhausting. I'd rather create my own worksheets (especially if I received the money spent on this program) & 4/30/2021 9:33 AM \\
\hline 240 & baseline idea of where students are & 4/30/2021 9:19 AM \\
\hline 241 & It does provide a good snapshot of students progress toward grad-level reading. & 4/30/2021 9:13 AM \\
\hline 242 & Practice for those who need it & 4/29/2021 3:22 PM \\
\hline 243 & I like that is in an assessment tool. We were very much lacking this district-wide. I also like that it provides additional practice to students. & 4/28/2021 12:24 PM \\
\hline 244 & It's easy for students to do on their asynchronous day. & 4/26/2021 1:24 PM \\
\hline 245 & This was a good resource to use for at home learning during remote only instruction. & 4/26/2021 9:46 AM \\
\hline 246 & It is nice for students to have targeted instruction at their individual level. & 4/26/2021 9:29 AM \\
\hline 247 & It gives an repeated assessment that the district can easily access without me doing data entry for the district to look at. & 4/26/2021 8:41 AM \\
\hline 248 & Some students seems to enjoy using i-Ready. & 4/26/2021 8:40 AM \\
\hline 249 & The Diagnostic Assessments give me valuable data. & 4/25/2021 8:36 AM \\
\hline 250 & Having an online tool to support student learning. & 4/24/2021 12:44 PM \\
\hline 251 & Good for asynchronous work, MyPath instruction encourages students to do lessons independently & 4/24/2021 5:49 AM \\
\hline 252 & Those students who use it for practice have seen some increase in their math skills. & 4/23/2021 12:10 PM \\
\hline 253 & It is a helpful tool to have for students to have more differentiated instruction. Especially when we have less face-to-face time with them. & 4/23/2021 9:37 AM \\
\hline 254 & Easy to access at any time for the students & 4/23/2021 8:56 AM \\
\hline 255 & I use it to help fill in the gaps of understanding. & 4/22/2021 4:10 PM \\
\hline 256 & Great support for students. Was very targeted to students needs. & 4/22/2021 12:47 PM \\
\hline 257 & I refer to the data frequently to look at progress for my students. I also look for deficit areas where I can off additional teaching for some students. & 4/21/2021 4:47 PM \\
\hline 258 & Students find it easy to use & 4/21/2021 2:23 PM \\
\hline
\end{tabular}
\begin{tabular}{l|l|l}
\hline 259 & excellent tool for pinpointing student areas of need & \(4 / 21 / 20219: 43\) AM \\
\hline 260 & \begin{tabular}{l} 
For those children that are very far behind or advanced in math, it is meeting them at their \\
level and providing practice.
\end{tabular} & \(4 / 21 / 2021\) 7:29 AM \\
\hline 261 & Kids that have help at home and are being tracked on use it regularly. & \(4 / 20 / 20216: 40\) PM \\
\hline 262 & \begin{tabular}{l} 
Students can work on remedial skills at their own pace and fill in gaps from the end of last year \\
when school closed early.
\end{tabular} & \(4 / 20 / 2021\) 2:02 PM \\
\hline 263 & It has helped keep track of how much time the students are working asynchronously at home. & \(4 / 20 / 20219: 21\) AM \\
\hline 264 & It is an additional source of information for guiding instruction. & \(4 / 19 / 2021\) 11:36 AM \\
\hline
\end{tabular}

\title{
Q17 What is not going well with the use of i-Ready this school year?
}

\author{
Answered: 269 Skipped: 50
}
\begin{tabular}{|c|c|c|}
\hline \# & RESPONSES & DATE \\
\hline 1 & Time consuming & 5/7/2021 9:15 PM \\
\hline 2 & n/a & 5/7/2021 7:11 PM \\
\hline 3 & I am a teacher and a parent. Both my students and my child need an I don't know button/or I have not learned this yet button on the diagnostic. It causes so much stress and feeling of failure when a perfectionist type student does not know an answer and loses confidence or feels dumb when really it is not something they have been taught. & 5/7/2021 5:23 PM \\
\hline 4 & I have just started to administer the Spring diagnostic at school and I am seeing a discrepancy in scores since the winter diagnostic. The scores are going down which I wonder if the child received help on the diagnostic at home. I would also like to be able to hide the assessment for one cohort at a time so that when they are at school they can take the diagnostic and when they are at home they can access the instructional path. Even though I instructed the parents to not let their child on iReady while they were at home many started the diagnostic when they were at home. & 5/7/2021 4:57 PM \\
\hline 5 & If overdone, it makes the students groan. & 5/7/2021 4:55 PM \\
\hline 6 & Teacher vs. student view. I often feel unsure since I can't see what the students see. & 5/7/2021 4:28 PM \\
\hline 7 & The majority of my students are not motivated by or interested in iReady, despite my attempts to add incentives and rewards for using it. & 5/7/2021 3:51 PM \\
\hline 8 & There are students who do not access it despite encouragement/reminders (etc) to do so. & 5/7/2021 3:51 PM \\
\hline 9 & Administering i-Ready assessment at home possible obscured accurate results. Looking forward to giving end-of-year assessments in person. & 5/7/2021 3:43 PM \\
\hline 10 & Students are not interested in using it & 5/7/2021 3:25 PM \\
\hline 11 & iReady instruction can be a bit tedious for kids to use, so getting them to actually use it can be a bit challenging. & 5/7/2021 3:24 PM \\
\hline 12 & (1) Getting all students to finish all assignments which is a problem for all ages, topics, and programs. & 5/7/2021 3:06 PM \\
\hline 13 & Grouping not focussed enough & 5/7/2021 3:02 PM \\
\hline 14 & administering the diagnostic remotely with kinders---really challenging to keep parents from helping & 5/7/2021 2:59 PM \\
\hline 15 & Reports on Online Instruction are not easy to use at this point & 5/7/2021 2:59 PM \\
\hline 16 & The kids DO NOT like it at all, which means that they don't want to spend any time outside of school/asynchronous working on it. They dread working on iReady. & 5/7/2021 2:51 PM \\
\hline 17 & Need for more professional development for para eds. & 5/7/2021 2:49 PM \\
\hline 18 & In K, we did not administer the Diagnostic until January and are just now giving it for a second time so I can't accurately speak to the usefulness of the data for showing growth as I don't have all the points of comparison yet. Giving the diagnostic at-home was really challenging for kids and parents. Some of the results that came back made me curious... think they may have had an excess of parent help! & 5/7/2021 2:35 PM \\
\hline 19 & Being remote, I don't see the lessons they are working on so I don't feel like I have a good understanding of what they are working on other that the topics. I think it would be different if we were in class together. & 5/7/2021 2:25 PM \\
\hline 20 & Actually getting students to consistently use both iReady reading and math. & 5/7/2021 2:10 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 21 & We have had so much on our plates this year, that all I could do is give the diagnostic and tell the kids to use it on their remote days. Many have not participated, and I have not had a chance to use it to inform my instruction, or enforce that all kids use it! & 5/7/2021 2:02 PM \\
\hline 22 & students don't want to do it & 5/7/2021 1:38 PM \\
\hline 23 & It can be a little tricky if the students dont know how to do the assignment or test, but even that is easily fixed & 5/7/2021 1:26 PM \\
\hline 24 & It is difficult to navigate. & 5/7/2021 1:25 PM \\
\hline 25 & Used during Remote learning, the results of the Diagnostic were very inconsistent. It's hard for me to determine how much of that is the remote setting and how much is the diagnotic itself. I found it time-consuming to try to adjust student placements for the online instruction when the diagnostic placement did not seem accurate. In the future, I would not use the online instruction with all students. I think it is a helpful tool for students who are below grade-level, but I would not use it for the full class and I have this year. & 5/7/2021 1:25 PM \\
\hline 26 & Making everyone is getting their minutes in during asych time at home. & 5/7/2021 1:23 PM \\
\hline 27 & I don't know how to use the intruction part well. & 5/7/2021 1:07 PM \\
\hline 28 & I find myself nagging my students to get to the recommended minutes per week. Also, many students said that the reading diagnostic was repetitive and dull -- didn't engage them. & 5/7/2021 1:01 PM \\
\hline 29 & No comment & 5/7/2021 12:58 PM \\
\hline 30 & While kids are at home they rush through and/or don't give their best effort to complete the diagnostic. So their scores are incorrect and their placement is incorrect. & 5/7/2021 12:58 PM \\
\hline 31 & Not all students are engaged in the lessons which is not helping them move forward. & 5/7/2021 12:51 PM \\
\hline 32 & I don't feel that for our youngest learners an online assessment is appropriate. I also feel they need to have hands on practice and instruction. As something they can do for extra practice or as a choice I think it is fine. But it is not best practice to evaluate students' growth using this type of assessment at the kindergarten level and I do not think we should continue to use it with young students. & 5/7/2021 12:50 PM \\
\hline 33 & Participation. & 5/7/2021 12:43 PM \\
\hline 34 & Not enough actual practice of a concept--to many subtopics within a lesson without significant practice. Reading for higher readers is ridiculously hard. Concepts are not grade level appropriate & 5/7/2021 12:42 PM \\
\hline
\end{tabular}

35 iReady was not as helpful as it could have been this year since the students did the
5/7/2021 12:39 PM
diagnostics at home. I found that my results were not matching what I was seeing in class. I do have higher hopes for the results when we are able to give the diagnostic in person. I do not think this year is a year to base a decision on.
\begin{tabular}{l|l|l}
\hline 36 & It's hard to help the students that need help remotely & \(5 / 7 / 2021\) 12:38 PM \\
\hline 37 & The kids dislike the instructional lessons. & \(5 / 7 / 2021\) 12:37 PM \\
\hline 38 & The data from iReady is not specific enough to be used as formative assessment. & \(5 / 7 / 2021\) 12:36 PM \\
\hline 39 & \begin{tabular}{l} 
As a remote teacher, I cannot force some students to use the program. so the benefits of the \\
program only go to some of the students.
\end{tabular} & \(5 / 7 / 2021\) 12:36 PM \\
\hline 40 & \begin{tabular}{l} 
The 6th graders are feeling like it's a little childish for their age groups, particularly students \\
who are significantly below grade-level. They feel like it's glaringly obvious they are below \\
grade-level and while it's helping them improve, they feel frustrated that it feels super childish.
\end{tabular} & \(5 / 7 / 2021\) 12:32 PM \\
\hline 41 & Students don't want to stare at the screen so much, so they don't want to do it. & \(5 / 7 / 2021\) 12:28 PM \\
\hline 42 & I wish there was a way for the teacher to see the student facing experience. & \(5 / 7 / 2021\) 12:19 PM \\
\hline 43 & Ability to watch the kids work on it in class for most of the year & \(5 / 7 / 2021\) 12:17 PM \\
\hline 44 & The lessons for Kindergarten are not very engaging, other programs are better & \(5 / 7 / 2021\) 12:15 PM \\
\hline 45 & \begin{tabular}{ll} 
The students who use it are doing well. The difficult thing has been getting all students to \\
engage with it (and other subjects) remotely.
\end{tabular} & \(5 / 7 / 2021\) 12:10 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 46 & Many student don't participate. & 5/7/2021 12:09 PM \\
\hline 47 & The data from i-ready diagnostics students take at home is worthless. There is no way to tell if a student was helped by a family member during at home diagnostic assessments. & 5/7/2021 12:03 PM \\
\hline 48 & helping all students get their weekly minutes done & 5/7/2021 12:00 PM \\
\hline 49 & Students engaging in the learning & 5/7/2021 11:59 AM \\
\hline 50 & The diagnostic didn't match up to what I see in person as far as skills. It could be due to taking iReady assessments at home and having kindergarteners. I feel the data is not correct which meant extra work for me to align lessons to the appropriate learning for each child or it wasn't helpful at home due to being too hard or too easy for my students & 5/7/2021 11:53 AM \\
\hline 51 & Students are able to continue learning new material at home and practicing skills at home & 5/7/2021 11:52 AM \\
\hline 52 & the students do not find the reading as enjoyable as the math & 5/7/2021 11:50 AM \\
\hline 53 & Most students are not using it and the data is inaccurate since students took the diagnostic at home. In class the data can be inaccurate as well because students might not be very interested in taking the test especially the younger students and therefore just click through questions without actually trying to answer them. & 5/7/2021 11:50 AM \\
\hline 54 & Getting every student to log in and use it. & 5/7/2021 11:44 AM \\
\hline 55 & none & 5/7/2021 11:44 AM \\
\hline 56 & It does not accurately show where kids are at kindergarten or first grade. This year has been particularly difficult to not only get kids to do the diagnostic or to do the lessons. They don't like them and parents help to much. Even before the pandemic, I didn't feel like the results that I recieved for my students was accurate when the tests were done in front of me in school. I feel like the people who LOVE iReady are the ones who put their kids on it for hours and do not teach math any other way. I WOUD NOT support the district purchasing this program. & 5/7/2021 11:41 AM \\
\hline 57 & Lessons are cheesy. Too cartoonish for 6th graders. Most kids hate iReady and groan when I assign it. & 5/7/2021 11:40 AM \\
\hline 58 & Some kids are not getting the benefit of using iReady regularly since they use it as an at-home assignment. & 5/7/2021 11:40 AM \\
\hline 59 & Excellent at filling in the holes & 5/7/2021 11:39 AM \\
\hline 60 & The diagnostic assessment took a LONG time with kinders in January. They were very stressed and so were their parents. Some parents helped even when told not too and the results were invalid. Then kids had to retake the assessment. & 5/7/2021 11:39 AM \\
\hline 61 & lessons are long & 5/7/2021 11:37 AM \\
\hline 62 & Diagnostic too long, students find it uninspiring (reading). Many did not log in for required minutes. Better used during rotations in the classroom with para support. & 5/7/2021 11:32 AM \\
\hline 63 & The constant reminders I need to send to parents. & 5/7/2021 11:31 AM \\
\hline 64 & The initial diagnostic was done at home with obviously more parent help than intended. Many of the students couldn't get through the diagnostic so it took a lot of class time that could have been spent on instruction. Students were discouraged with the use of iReady because they thought it was always going to be that hard. It took a lot of coaxing, reteaching, and rewarding to get them into it on a mostly daily basis. When the midyear assessment was given, this went much better but many students' scores went down because they worked more independently the second time around. So the 2 assessments we should actually be using are the mid and final. Last thing, I have some very low EL students who needed even easier lessons than given in iReady. Things such as moving left to right across the screen to simulate reading direction, more/more/more letter practice instead of repeating the same lessons over and over, the iReady reading lessons have rhyming early on and it doesn't seem appropriately placed for ELs. & 5/7/2021 11:30 AM \\
\hline 65 & Not enough students are engaging in the lessons remotely and we have no way to hold them accountable. Also, the teacher management of iReady is time consuming and cumbersome. It's not a realistic ask during this time. I thought it was more auto run, but to use it well requires a lot of teacher time and attention. Time we don't have to spare. & 5/7/2021 11:28 AM \\
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\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 66 & It doesnt adjust to student needs. Assessments aren't accurate. Low quality of product. & 5/7/2021 11:24 AM \\
\hline 67 & Kids resist the practice sessions & 5/7/2021 11:22 AM \\
\hline 68 & The kids do not like how repetitive and childish the lessons are. I have middle schoolers that are on 3rd or 4th grade level. & 5/7/2021 11:22 AM \\
\hline 69 & It has been difficult to have the time to look at student results from their individual work at home, determine where they need extra help, and give them the individual instruction. Time has been the issue this year. & 5/7/2021 11:21 AM \\
\hline 70 & Many students do not like it :( & 5/7/2021 11:18 AM \\
\hline 71 & It can be confusing to use. & 5/7/2021 11:18 AM \\
\hline 72 & I did not get a chance to learn and implement the program with student in in-person learning. I feel that implementing the program while remote was very difficult when I had not had the chance to see the program in action. & 5/7/2021 11:17 AM \\
\hline 73 & Kids don't love using it. & 5/7/2021 11:15 AM \\
\hline 74 & Time on task & 5/7/2021 11:14 AM \\
\hline 75 & administering the diagnostic when in the remote setting & 5/7/2021 11:14 AM \\
\hline 76 & My Path placements did not match in-class/beginning of year assessments I use in my classroom (Glencoe). There is an overlap with My Path and assigned lessons- students have to redo lessons in Mypath even if they have been done in Assigned. Too much practice in order to get through a concept- students get bored and disengage. Students and parents should be able to automatically see their Diagnostic scores. It was hard to get scores out when we were remote. Diagnostic should not be pushed out automatically- there should be a default to "hidden". Most of my students are working a year ahead in math but very few are scoring in that grade level. I don't think the adjustments Iready makes are accurate. Also, for example, if my 6th grade students are doing 7th grade math I'd like to be able to see if they are beg/middle/end of 7th grade instead of just listing it as '7th grade" with no other reference point like it does with on-grade level. & 5/7/2021 11:14 AM \\
\hline 77 & Too long and not a true identifier of students reading and math levels. & 5/7/2021 11:11 AM \\
\hline 78 & Trying to get parents to utilize the resource on a regular basis & 5/7/2021 11:10 AM \\
\hline 79 & The lowest lessons move too slowly for my third-graders. They become bored and frustrated once they know the skill but aren't being moved on quickly enough. The diagnositic intro "you must click all the buttons..." is extremely annoying as well. Also, some of the language used on the diagnostic is not language their teachers are using at school. they get the wrong answer because the language is different. & 5/7/2021 11:10 AM \\
\hline 80 & There is no way that I could get students to do the lessons, or the personal learning paths, or even the diagnostics. The math diagnostic was okay, but students were not motivated to do the reading diagnostic because it was just so long and they said it was hard to focus. The stamina issues for learning this year were very evident in iReady. & 5/7/2021 11:08 AM \\
\hline 81 & I teach special ed and some parts are more challenging for them. In many cases, their assessment data doesn't fully line up to what their actual skills are. But it still was useful for many students and the additional practice at home/independent work was very nice to have. & 5/7/2021 11:06 AM \\
\hline 82 & i-Ready should not have been introduced this year with remote learning. It was extremely frustrating for the parents to help their child with the diagnostic. & 5/7/2021 11:03 AM \\
\hline 83 & I am not confident the diagnostic was done without parent help in several cases. I am trying to do it at school but several went ahead and worked on it at home. & 5/7/2021 11:03 AM \\
\hline 84 & Special needs students have some triggers, i.e. not liking cats, or other that impact their appreciation for certain "rewards" within the program. & 5/7/2021 11:02 AM \\
\hline 85 & It's been hard having the students do the diagnostic remotely. I think it will go better in person. & 5/7/2021 10:56 AM \\
\hline 86 & It was tricky due to being remote. When we are in the classroom there is more participation. & 5/7/2021 10:53 AM \\
\hline 87 & 1.) It is hard to do remotely. 2.) It does not give specific information on areas where students are struggling. I can see they failed a section, but there is no information as to why, or what & 5/7/2021 10:53 AM \\
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\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
the student needs to fix. Which makes it difficult to support individual students. I just know they failed place value - I have no idea what within the area they are struggling with (ie. double digits, single digits, etc).
\begin{tabular}{|c|c|c|}
\hline 88 & my students hate doing iReady & 5/7/2021 10:51 AM \\
\hline 89 & Having the students be remote with it. & 5/7/2021 10:51 AM \\
\hline 90 & Making sure the students are focused and taking the assessment seriously. & 5/7/2021 10:51 AM \\
\hline 91 & Some diagnostic results don't match student ability & 5/7/2021 10:50 AM \\
\hline 92 & Getting students to actually do the my path instruction lessons while teaching remotely. & 5/7/2021 10:49 AM \\
\hline 93 & I wish we had more time in class to allow iready, but we have time constraints. We do our best to encourage use at home. & 5/7/2021 10:45 AM \\
\hline 94 & None & 5/7/2021 10:44 AM \\
\hline 95 & My Path is too easy and boring for some. Students don't work on My Path as much as I want & 5/7/2021 10:43 AM \\
\hline 96 & Students not accessing it.... & 5/7/2021 10:42 AM \\
\hline 97 & Some of my students tested out and therefore could not do any instruction in i-Ready which meant some of my students would have nothing to do if I assigned it to be done during class. If I assign it for outside of class as homework they don't do it. & 5/7/2021 10:41 AM \\
\hline 98 & Getting kids to do it, but it's the nature of the beast this year. In person, I have such little time with the students I don't want them on the computer even more, otherwise I would be making them do it more often in the classroom. & 5/7/2021 10:41 AM \\
\hline 99 & Kids don't like using it, and when it is assigned don't complete the lessons. There needs to be either more of a game format or some type of incentive & 5/7/2021 10:41 AM \\
\hline 100 & Some students are being coached by people at home & 5/7/2021 10:40 AM \\
\hline 101 & Most students did not like it. Pacing was slow. Diagnostics had them repeating lessons. It was a frustration point for students and families & 5/7/2021 10:40 AM \\
\hline 102 & the diagnostic takes way too much classtime and the students get tired of it since it's so long so they don't try their best & 5/7/2021 10:40 AM \\
\hline 103 & See the above. & 5/7/2021 10:40 AM \\
\hline 104 & Students rushing or not taking it seriously. When they were home, support from families & 5/7/2021 10:39 AM \\
\hline 105 & Students would get help at home on the diagnostics and the results were not accurate. They ended up with programs that were way to hard. It is hard to monitor follow-through for students doing their instruction. & 5/7/2021 10:38 AM \\
\hline 106 & This isn't a great year to really gauge the effectiveness of this program. I have SO many students that simply don't do it when I assign it as remote work. I think it would be different if it was an in-person regular thing that we did. & 5/7/2021 10:37 AM \\
\hline 107 & There is a lot of information to digest, and a lot of tools I still need to become better acquainted with. & 5/7/2021 10:37 AM \\
\hline 108 & time & 5/7/2021 10:35 AM \\
\hline 109 & It is NOT an accurate assessment tool. This should not be used as any sort of formal assessment. It should be used as supplemental support only. & 5/7/2021 10:35 AM \\
\hline 110 & It is just really difficult remotely to control how much practice they are doing. This is not the fault of the program. I think if we were in person I could help the students be much more successful. It would not be a good decision to take this program away. We need more time to use it with our students. & 5/7/2021 10:34 AM \\
\hline 111 & Not enough time. & 5/7/2021 10:33 AM \\
\hline 112 & Some of the instructional slides take a long time and bore students & 5/7/2021 10:33 AM \\
\hline 113 & Majority do not like it and/or don't use it, even when instructed to do so & 5/7/2021 10:32 AM \\
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\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 114 & Remote students not using it. & 5/7/2021 10:30 AM \\
\hline 115 & Students are reluctant to use the program from home. & 5/7/2021 10:30 AM \\
\hline 116 & Having the students do it at home proved to be helpful for some but not all. I think some parents helped which skewed my scores. I also know some students received no support to access iReady at home. I view this as being much better next year when the students have time in class and can do the diagnostic in class. & 5/7/2021 10:30 AM \\
\hline 117 & students are inconsistent in completing assignments & 5/7/2021 10:29 AM \\
\hline 118 & For student that I work with (student on IEPs and in LAP) the diagnostic has not been an accurate representation of their skills. I have found the results to be very inaccurate most of the time compared to class work and my data collection. & 5/7/2021 10:29 AM \\
\hline 119 & As an EL teacher, many of my students are reading at grade 1-2 and some of the lessons are childish. & 5/7/2021 10:28 AM \\
\hline 120 & kids rushing, getting kids to complete any kind of iready in the first place, not being able to see their work/thinking/how they solved it, another tool on the computer that they can tune out & 5/7/2021 10:28 AM \\
\hline 121 & The whole process. & 5/7/2021 10:26 AM \\
\hline 122 & Getting remote kids to complete the assigned lessons and diagnostic tests & 5/7/2021 10:26 AM \\
\hline 123 & Teachers get a choice to use the programming; if we want a system to work, everyone needs to be on board. Every teacher in every school needs to be participating so we know where students are in the big picture. Some of the scores seem artificially high or low based on students proctoring themselves or with parents. I do know some parents assisted students taking the assessments. & 5/7/2021 10:26 AM \\
\hline 124 & Not user friendly for kinder students. Difficult to operate. Takes too long. Parents were helping kids solve problems on diagnostic. Diagnostic questions formatted strangely/questions asked in weird way. The tools were not "hands on" and more confusing than helpful. The "my path" was too easy for many kids. It was not engaging. Parents did not enjoy working with it. Kids cried and were frustrated over the self-leveling aspect (too hard). Not developmentally appropriate for kindergarten. What was done with the data? It did not help inform my instruction at all. & 5/7/2021 10:26 AM \\
\hline 125 & N/A & 5/7/2021 10:25 AM \\
\hline 126 & getting kids to consistently work on it at home & 5/7/2021 10:25 AM \\
\hline 127 & I find the iReady measurement of accuracy based on how long it takes students to complete the questions to be faulty-- a lot of my students are extremely high in math and iReady consistently flags their work because they finish it quickly. & 5/7/2021 10:23 AM \\
\hline 128 & students don't enjoy it & 5/7/2021 10:23 AM \\
\hline 129 & Concurrent Teaching & 5/7/2021 10:23 AM \\
\hline 130 & testing windows were a couple weeks early than I would like for mid/end of year and it was a hassle to put the tests on hold. Appreciated that district assigned diagnostics for us, just wish they had delayed it a week or two. & 5/7/2021 10:17 AM \\
\hline 131 & Not all students do iReady Practices when assigned. The Diagnostic test needs to be automatically turned off so students don't accidentally take it. & 5/7/2021 9:36 AM \\
\hline 132 & Results seem very off from what I see in my students. Students tend to just "click" through online assessments. It often says students don't know a skill that they can do in class. I wish I knew if the assessment was giving them 1 problem in each area or several. If they miss a subtraction problem, was it an honest mistake or do they not get the concept? I feel like these assessments show different results when done on paper rather than computers. & 5/7/2021 9:08 AM \\
\hline 133 & Occasionally not reliable data for the diagnostic. & 5/7/2021 9:05 AM \\
\hline 134 & The system for teacher assigned lessons is cumbersome and annoying. The data generated by the reading assessments is not always accurate when compared to \(95 \%\) or Acadience testing. & 5/7/2021 8:52 AM \\
\hline 135 & Having them do the diagnostic at home, as much as I told families not to help and for students & 5/7/2021 8:42 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
to do it on their own, it still was hard to tell whether the data/info was reliable. So hopefully if we can use it in class, it will be more useful in future years. Students who just did the diagnostic did not enjoy iReady because it was just a test for them and they didn't engage with the lessons. I think I'll have more of an idea of how students like it and if it's effective once we are together again and they can use it in class.
\begin{tabular}{|c|c|c|}
\hline 136 & Diagnostic data/scores does not always seem consistent with what I know about individual student skills & 5/7/2021 8:38 AM \\
\hline 137 & Kids wanting to complete their minutes.. & 5/7/2021 8:26 AM \\
\hline 138 & It's all great! & 5/7/2021 8:24 AM \\
\hline 139 & The students and I find it confusing and frustrating. & 5/7/2021 8:08 AM \\
\hline 140 & Students didn't engage in this work when it was a remote learning expectation. I don't trust the test data because despite telling parents not to help, they do. & 5/7/2021 7:59 AM \\
\hline 141 & My kids do not like it. Neither just the diagnostic but the lessons as well. Some of them refuse to do it without direct supervision. I know school does not always have to be fun but if something is this hated I think you should take that into consideration. & 5/7/2021 7:47 AM \\
\hline 142 & The diagnostic assessment does not always reflect their actual ability. I had students working at a much higher level getting \(100 \%\) on all lessons, then did the second diagnostic and it seemed to reset them to a much lower level. & 5/7/2021 7:34 AM \\
\hline 143 & It is not uniformly administered. Our principal has allowed departments and teachers to pick and choose if they want to use it. I personally find this illogical - especially when we know that many of our students are falling behind in their basic skills because of the pandemic and because of the comparative ineffectiveness of hybrid and remote instruction. I think it would be EXTREMELY wise for this to be a required assessment for ALL secondary students. We require universal academic assessment at elementary - why do we not require this at secondary? Do all students suddenly magically attain grade level skills when they arrive at 7th grade? & 5/7/2021 7:27 AM \\
\hline 144 & Needs to be consistent implementation across all students. & 5/7/2021 7:14 AM \\
\hline 145 & scores for reading & 5/7/2021 6:37 AM \\
\hline 146 & 25\% of my students do not use iReady on asyn. days & 5/6/2021 9:50 PM \\
\hline 147 & 1. The diagnostic is extremely hard and not age appropriate causing extreme tears and crushing confidence of many. 2. Wow, the data is too much, not a quick way to look at and see how kids are doing.. also scores mean nothing when you can't see the question types to really see understand the level 4 . I wish I could "easily" see the skill set what the problem/?s looked like to better assign or adjust scores 5 . I have very little way of knowing if the activity levels are appropriate, as a teacher I feel clueless to what they are learning/practicing (yes I can read the skill name they are working on but I need to see sample problems. 6. IXL was a fantastic math resource to quickly assign a skill that tied directly into our daily learning/lesson and also allowed student/teacher to hover over skill name and see if problems were appropriate (both in math level but reading level as well) and was so easy to assign higher/lower practice for that day, week etc to meet/adjust needs. Hard for teachers to buy into this program when we can't "see" it Would not recommend (even though I think there are some strengths the negatives out weigh and it's really hard to explain it in writing. I have never had more complaints from families about their frustration with this program, it's not well received! & 5/6/2021 9:12 PM \\
\hline 148 & I am still getting the hang of applying lessons to particular students. I generally look for patterns in overall data and then pull kids for small group work. & 5/6/2021 6:25 PM \\
\hline 149 & I feel like I need more training on how to use small group instruction with iReady. I would like to know how to set groups up and how to use iReady data for instruction. & 5/6/2021 6:01 PM \\
\hline 150 & It has been hard for parents not to intervene in lessons. Also it was hard to quickly touch base with struggling students when teaching remotely but it was useful. & 5/6/2021 5:46 PM \\
\hline 151 & Not enough students using the resource & 5/6/2021 5:45 PM \\
\hline 152 & There is limited time to learn about iReady when already learning a new science, new reading curriculums while also learning new platforms (Seesaw) and also learning new technology skills. & 5/6/2021 5:40 PM \\
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\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 153 & The diagnostic assessments cause a lot of frustration/anxiety for some kids because it gives them so many questions that are far above their level. Getting kids to do it from home is very challenging. & 5/6/2021 5:16 PM \\
\hline 154 & Some students do not access even when it is assigned. Parents who are "helping" during the diagnostics alter the results. & 5/6/2021 5:15 PM \\
\hline 155 & Students don't like it and it's disconnected from what we're working on in class. It takes time away from other practice that could reinforce current lessons. & 5/6/2021 5:06 PM \\
\hline 156 & Students don't like to use it. & 5/6/2021 4:49 PM \\
\hline 157 & Not all students do it remote. Parents have admitted to heling them when they struggle. Many kids express how much they do not like the program. & 5/6/2021 4:45 PM \\
\hline 158 & You can NOT specific assign A targeted strand in math. It's all lumped together. You can go assign a specific skill at a lower grade level. There is no option unlike MobyMax. & 5/6/2021 4:45 PM \\
\hline 159 & I would love to see further sorting/filtering and reporting abilities. & 5/6/2021 4:43 PM \\
\hline 160 & 1.Being online made iReady incredibly hard to manage. Some kids just wouldn't do the diagnostics or work in their path. 2. Three diagnostics a year is tough, especially because we got started so late. 3. iReady has some great features, but is missing a lot of important things in the instructional areas. I would like to see problems students are missing to determine if it is a misunderstanding of the subject/topic or a misunderstanding of the problem itself (vocabulary). iReady is not capable of allowing me to see this. & 5/6/2021 4:40 PM \\
\hline 161 & Little buy in due to remote learning & 5/6/2021 4:38 PM \\
\hline 162 & It is extremely difficult to use remotely. & 5/6/2021 4:28 PM \\
\hline 163 & Lack of enthusiasm for the lessons. & 5/6/2021 4:22 PM \\
\hline 164 & The students dread it, so it is hard to get them to use it. & 5/6/2021 4:19 PM \\
\hline 165 & kids don't like it, data difficult to figure out, track and utilize & 5/6/2021 4:16 PM \\
\hline 166 & I don't know what the kids are being asked. They're annoyed with the amount of text and the slowness of it being read aloud. Kids with reading problems are at a disadvantage. Kids with focus issues never move up because they rush and are stuck at a level they're bored with. The diagnostic is demoralizing for many students. It's expensive and not independently tested. & 5/6/2021 4:15 PM \\
\hline 167 & The problem is that not all kids do it at home. & 5/6/2021 4:15 PM \\
\hline 168 & Honestly, the diagnostic is very frustrating for kids. While giving it in person may be a different experience, kids have a tendency to randomly guess even when they know the answer because they are asked questions well above their current abilities. As a result, the diagnostic is not useful to inform classroom instruction, since many students are graded lower than they actually perform (and some are graded higher because of receiving help). Being new to it in a year where so much was already new was honestly not helpful either. & 5/6/2021 4:13 PM \\
\hline 169 & Kids don't seem to like it but I don't really know why & 5/6/2021 4:12 PM \\
\hline 170 & Hard to get all students to do it. & 5/6/2021 4:12 PM \\
\hline 171 & Starting the program for the first time virtually was very difficult. Admin the diagnostic for the first time over Zoom was exhaustign, overwhelming and did not lead to accurate results. I had many neutral responses not because I don't think iReady could be great, but because it was difficult to see how students were using it, how the lessons look, and to have students work on it when they were doing the majority of their iReady at home. I am excited to admin the next iReady math diagnostic in class to see how that affects results and to make sure all students are able to complete it. & 5/6/2021 4:12 PM \\
\hline 172 & Some kids HATE it and find the lessons boring. Motivation is low with some students to consistently log on and do the lessons. & 5/6/2021 4:11 PM \\
\hline 173 & Most first graders need family support to navigate through the test and the lessons. Unfortunately, few families are offering that support. & 5/6/2021 4:11 PM \\
\hline 174 & Some kids won't log on. & 5/6/2021 4:06 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 175 & Getting students to engage in it, though I think that was largely due to issues with remote learning. & 5/6/2021 4:05 PM \\
\hline 176 & IReady Reading seems to have them struggling more with the lessons and workload than i woul dhave expected. & 5/6/2021 8:42 AM \\
\hline 177 & n/a & 5/5/2021 1:50 PM \\
\hline 178 & Students simply get tired of doing it as they would any online program. & 5/5/2021 1:49 PM \\
\hline 179 & The students hate it because it isn't engaging like a real teacher can be. It's more a measure of attention than math understanding, and therefore it makes sense that students who are actively engaged for 40 minutes per week do better on standardized tests...which also test attention first and foremost. Districts who adopt i-Ready usually have to shove better math instruction to the side to make time for it. & 5/5/2021 9:19 AM \\
\hline 180 & The students DO NOT LIKE IT. It was impossible to get students to use it remotely. I'm assigning it for hybrid remote days- only \(5 / 19\) are doing the assignments. That makes it unreliable. I can't count on kids to use it so it is dumb to assign it. The reading lessons are very long and introduce too many concepts in one lesson. All of the lessons have too many spinning graphics that just make it take longer. Instead of being 20 minute it could be 16 if they'd get rid of the time fillers. I'm sure they think the kids think the graphics are cool- but really the kids don't like Iready so the graphics don't matter. & 5/5/2021 9:05 AM \\
\hline 181 & The diagnostics are not designed for 1st grade learners and caused immense stress. Students were not prepared for the challenging problems and model for how many questions they will get wrong. & 5/5/2021 8:00 AM \\
\hline 182 & The results don't always match student's abilities/knowledge. The lessons do not teach. Many students find it frustrating to use. & 5/5/2021 7:41 AM \\
\hline 183 & I am anxious to gather data for students who do the iReady assessment in class without their parents helping them. The data isn't accurate when students are remote. Also, the assessment time of 45 minutes is way too long for first graders to complete. They got frustrated and started guessing to be done with it. iReady assessment seem geared more toward the older grades & 5/4/2021 8:02 PM \\
\hline 184 & Many of my students and parents do not like it. They complain about the diagnostic and the speed of the lessons. It tends to become more of a problem than a helpful tool. & 5/4/2021 7:36 PM \\
\hline 185 & Very poor training and roll out. I couln't try the diagnostic even though I asked repeatedly. Kindergarten didn't do the first diagnostic so we were left out during mandatory trainings. The instructions on the diagnostic were unclear for my students, myself, and parents so I had a bunch of parents read the questions to kids. I had a bunch of kids end up at a third grade level which seemed inaccurate. I wanted to use i-Ready for attendance but it was very difficult to pull a report to see which students logged in on which day. Overall it felt very frustrating to have yet another new program thrown at me during a pandemic when I had to learn how to do so many new things. It felt like a big waste of time. & 5/4/2021 4:33 PM \\
\hline 186 & Most students do not like i-Ready. Many refuse to do their assigned instruction/practice. & 5/4/2021 3:58 PM \\
\hline 187 & I think that some students take the diagnostic and don't do their best and then they are stuck at that level for half a year. & 5/4/2021 3:26 PM \\
\hline 188 & Administering a pilot this year gives no realistic data about how we would actually use i-ready in a normal year. Comparing the data from Fall and Winter diagnostics shows incredible discrepancies with results. There is no way to make sure that students are doing the online instruction, even after MANY 1:1 conversations, motivators, emails to families, etc. And even students who are doing the instruction lesson consistently are expressing a strong dislike of i ready. I don't think it is worth the money we are spending. & 5/4/2021 2:47 PM \\
\hline 189 & Students can find ways to cheat the system by letting the clock run while the app just stays open on the screen or pretending to the lesson and failing many of them. & 5/4/2021 1:25 PM \\
\hline 190 & I struggled with figuring out how to cancel lessons in student progression, once they had showed me understanding in a different way. This frustrated some students when they were given lessons in I-Ready that they already understood. & 5/4/2021 1:02 PM \\
\hline 191 & The "My Pathway" especially in math tends to move much too slowly for my students and is way too easy for most of them & 5/4/2021 12:33 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 192 & The assessment takes a very long time and having to complete it 3 times a year if very difficult for my students, especially online. & 5/4/2021 12:15 PM \\
\hline 193 & Not able to assign the concepts to match those we are learning in class & 5/4/2021 10:34 AM \\
\hline 194 & The diagnostic assessments do not provide accurate data because they are administered at home and students are fatigued and not trying their best/not doing it at all. & 5/4/2021 10:01 AM \\
\hline 195 & When the level is too easy for a student figuring out how to get it to the right level. & 5/4/2021 9:21 AM \\
\hline 196 & Parents do the lessons for their students and try to help them with the diagnostic. It is not a true representation of student thinking or learning. I had one parent admit she took the diagnostic for her child because she didn't want to deal with his attitude about taking it. Even if administered in zoom the parents were helping from the sideline. & 5/4/2021 8:39 AM \\
\hline 197 & hard to monitor student engagement, many students not using instruction & 5/4/2021 8:38 AM \\
\hline 198 & Student feedback is that iReady is too immature for them, some like the lessons, most feedback is negative from students and parents & 5/4/2021 8:36 AM \\
\hline 199 & Getting students to engage when at home. & 5/4/2021 8:17 AM \\
\hline 200 & Some students are not excited about it. & 5/4/2021 8:16 AM \\
\hline 201 & Nothing & 5/4/2021 8:09 AM \\
\hline 202 & Keeping up with analyzing the data & 5/3/2021 8:28 PM \\
\hline 203 & I have no complaints & 5/3/2021 8:19 PM \\
\hline 204 & Students resist using iReady independently at home. They don't listen to the lessons and often fail the first time due to not paying attention to the videos. & 5/3/2021 5:52 PM \\
\hline 205 & Diagnostic tests are too long, and administered too many times. & 5/3/2021 4:05 PM \\
\hline 206 & The placement of my students in math does not seem to reflect what the students actually know and are capable of doing thus the personalized instruction lessons are much too easy. & 5/3/2021 3:50 PM \\
\hline 207 & too many irons in the fire to check into this very much & 5/3/2021 3:42 PM \\
\hline 208 & Some students "blew it off" and their assessment doesn't reflect their skills, so they keep complaining the instruction is too easy... I am new to this group of kids and I think that mostly happened while they were remote learning so I'm hoping they will do better in the hybrid model. & 5/3/2021 3:31 PM \\
\hline 209 & My students said the I-Ready lessons were way too easy for them or they had to complete multiple lessons on the same content area after already learning it. We were advised against going in and manually changing lessons, so this was tricky. The "buy-in" was hard from students because many of them felt like it was much too easy. & 5/3/2021 3:29 PM \\
\hline 210 & Being forced to only use iReady as a tool for learning when there are better ones out there. Not sure why the teachers are not asked what best supports their students' learning. & 5/3/2021 3:13 PM \\
\hline 211 & Many students are not completing the instruction even though I have assigned it for remote days. & 5/3/2021 3:03 PM \\
\hline 212 & current learning model, due to covid, cannot give great results in regards to the program and its potential. & 5/3/2021 2:45 PM \\
\hline 213 & The lessons are too long and taxing on students. The characters talk and talk and students disengage. It's not helpful for students with attention issues & 5/3/2021 2:37 PM \\
\hline 214 & 1) The test takes a long time to administer. 2) I teach special education math. Many of my students are 6 years behind in math and find the voices and presentation in the assigned lessons to be childish. & 5/3/2021 2:21 PM \\
\hline 215 & My main concerns are that the diagnostic takes so long that about a quarter of my students never finished it. Many of them were terribly frustrated with that and it timed some of them out. On the other hand, I had a few students that tested out right away and then I needed to find other things for them to do anyway. It also wasn't clear if they were actually getting work done, even if they put in the time. Some of them weren't finishing work, but still were making the time. Overall, most of my students did not like it and it was time consuming. & 5/3/2021 2:16 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 216 & Students said it was too easy. & 5/3/2021 2:06 PM \\
\hline 217 & Not all the students completed the iReady assignments. Now that they are in a hybrid schedule, the students are working on iReady during class. & 5/3/2021 1:53 PM \\
\hline 218 & It did not seem like the right environment for a long assessment. & 5/3/2021 1:19 PM \\
\hline 219 & The winter diagnostic placed many kids into lessons that they had already completed and passed. This made them disappointed in the process and many stopped using it as frequently. The use of it also really varied from class to class. So when classes were combined into new cohorts some students had done 25 lessons while others had only done 5 or 6 . & 5/3/2021 1:16 PM \\
\hline 220 & the diagnostics take up WAY too much instructional time & 5/3/2021 1:11 PM \\
\hline 221 & Lack of student engagement & 5/3/2021 1:09 PM \\
\hline 222 & Not all my students are doing this at home. & 5/3/2021 12:54 PM \\
\hline 223 & kids think it's boring, repetitive and hate doing it & 5/3/2021 12:49 PM \\
\hline 224 & The comprehension section on iReady reading doesn't provide enough scaffolding for students. & 5/3/2021 12:42 PM \\
\hline 225 & I don't like that I can't easily see how many minutes a student does in a day. & 5/3/2021 12:42 PM \\
\hline 226 & In remote setting the assessment is not accurate in many cases because it scored kids higher than I know they are therefore I know for a fact that parents helped. & 5/3/2021 12:37 PM \\
\hline 227 & Many of the kids just don't do it. I think many older kids find the videos too immature and the lessons aren't engaging. It does not work as a tool for kids to practice a targeted skill that we are working on in class. Students need to practice and get immediate feedback- especially when they are at home or in large classes. Resources like IXL allow a teacher to have students practice a very specific skill (ex: finding a common denominator) and assign different levels to different students. & 5/3/2021 11:49 AM \\
\hline 228 & Many students do not use the program at home. & 5/3/2021 11:16 AM \\
\hline 229 & Many of my students had home support when taking the diagnostics even while on Zoom with me. The data was not reflective of where they truly are. & 5/3/2021 11:11 AM \\
\hline 230 & Most kids are not bothering to do it. & 5/3/2021 11:06 AM \\
\hline 231 & The students are vocal about not liking to do it. They say is is babyish and boring. If there are students who are liking it, they have not spoken up yet. Parents have expressed that it is challenging to get their children to do it on their at home days. The assessment is not useful since the scores are not accurate this year. Several parents and students confessed to helping with the diagnostic. Some students who receive LAP tested at an upper elementary level. & 5/3/2021 11:06 AM \\
\hline 232 & Hard to follow up during remote & 5/3/2021 10:34 AM \\
\hline 233 & Students report both with the math and reading, but especially math, that the lessons were either not helpful or were hard to understand. & 5/3/2021 9:48 AM \\
\hline 234 & engaging kids via remote is tough & 5/3/2021 9:43 AM \\
\hline 235 & Sometimes it takes a long time to complete the diagnostic. I think this may be more individual students, but it impacts teaching. & 5/3/2021 7:02 AM \\
\hline 236 & It is hard to know how much support they received on the diagnostic at home. I am eager to see the difference when given in person. & 5/2/2021 12:12 PM \\
\hline 237 & The diagnostic is LONG, and difficult to administer virtually with any semblance of accountability. & 4/30/2021 2:04 PM \\
\hline 238 & The math videos and overall feel for 6th graders skews young. My students find them really annoying and it makes them dislike iReady more. Reading comprehension data is often scored higher by the diagnostic than my low or IEP students actual abilities. I have needed to manually reset lesson levels for several students in both math and reading because lessons have been too easy or too difficult. It has been hard to get all of my students to use it regularly, so I would like a chance to use the program when I can more easily get them to use the lessons. & 4/30/2021 12:55 PM \\
\hline 239 & Student engagement is low & 4/30/2021 11:57 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Teachers}
\begin{tabular}{|c|c|c|}
\hline 240 & The fact that students could cheat on the diagnostic & 4/30/2021 10:38 AM \\
\hline 241 & students are not interested, it is not friendly to work with for the teacher, accessing data by parents is none, tomuch stuff to get through the site, I like Mobymax easy to follow and assign, and access data by both parents and studnets etc.... & 4/30/2021 10:29 AM \\
\hline 242 & Getting student to complete the diagonstic and work on thier path. Lots of extra time added to my prep & 4/30/2021 10:05 AM \\
\hline 243 & student engagement during remote & 4/30/2021 9:42 AM \\
\hline 244 & not much if anything & 4/30/2021 9:33 AM \\
\hline 245 & diagnostic takes WAY TOO LONG & 4/30/2021 9:19 AM \\
\hline 246 & I cannot get many students to put in the time. Some students really dislike it. Especially when they take the same test over and over. & 4/30/2021 9:13 AM \\
\hline 247 & Complaints that reading is boring & 4/29/2021 3:22 PM \\
\hline 248 & nothing & 4/28/2021 12:24 PM \\
\hline 249 & It often repeats a concept too many times and students get bored before moving onto new content (Mainly in Math.) & 4/26/2021 1:24 PM \\
\hline 250 & Students more often do the math lessons for personalized instruction, but not as much for the reading. & 4/26/2021 9:46 AM \\
\hline 251 & The diagnostic, when administered remotely, was very challenging for students and families. & 4/26/2021 9:29 AM \\
\hline 252 & very few students use it, the assessment gave wild ranges of ability that don't match independent work in class, it is not easy to see what mistakes the students are making to improve their success rate. The lessons for students are long in set up but don't really give much direction for actual computation in math. It is costing money for data that I was able to get for free from Mobymax. There is not time to teach I-ready in class and the regular math curriculum and the students are not independent on I-ready. & 4/26/2021 8:41 AM \\
\hline 253 & Looking at reports is cumbersome and time consuming. It feels like one more thing I have to figure out. There is so much data that sifting through to help it inform instruction is overwhelming. & 4/26/2021 8:40 AM \\
\hline 254 & The My Path program is too simple for my students. They have trouble staying engaged. I didn't receive any training on how to assign particular lessons. & 4/25/2021 8:36 AM \\
\hline 255 & Being forced to only use iReady as a tool for learning when there are better ones out there. Not sure why the teachers are not asked what best supports their students' learning. & 4/24/2021 12:44 PM \\
\hline 256 & Diagnostic results can vary significantly from one test to the next, even within just a few days. I am not at all convinced that it provides an accurate representation of a student's abilities. I have noted significant differences in iReady diagnostic results and in-class performance on lessons and assessments. & 4/24/2021 5:49 AM \\
\hline 257 & Students don't like the lessons, they are slow and sometimes confuse students because things are taught in a different way then we do in class. & 4/23/2021 12:10 PM \\
\hline 258 & In math, our students frequently feel that it is not challenging enough. (Challenge school students generally need less repition than typical learners.) & 4/23/2021 9:37 AM \\
\hline 259 & Getting children to use it & 4/23/2021 8:56 AM \\
\hline 260 & Since we have been remote for the majority of the year, it is hard to tell if parents were helping their children with the diagnostic. & 4/22/2021 4:10 PM \\
\hline 261 & It was great! & 4/22/2021 12:47 PM \\
\hline 262 & It is a lot to take in regarding the learning curve, but a lot of that is because we are having to do a lot with things like Canvas, etc & 4/21/2021 4:47 PM \\
\hline 263 & Assigning specific lessons is hard to manage. Also, if students underperform or overperform on the diagnostic, adjusting their learning path is a pain to manage and frustrating for the kids. & 4/21/2021 2:23 PM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 264 & Trying to get parents to utilize the resource on a regular basis & 4/21/2021 9:43 AM \\
\hline 265 & Parents helped so much with the diagnostic that the lessons are too hard for the students but parents do not want the students to redo any lessons or have anything re-set. Also, although I assign 2 twenty minute sessions a week as SeeSaw activities, parents say that children are doing it, but I can see they are not always doing it. Parents say that it is one more thing keeping their child on a screen and they do not want this. In Kindergarten, I believe that the results are not as valid on the diagnostic (and I don't mean just this year) because of the age of the children. I also feel with WAKids and classroom based assessment, we have plenty of data to tell where the children are and work to meet their needs. I do like it for the children working beyond grade level as a way to supplement their instruction. For my very low students (preschool developmentally), the diagnostic does not go low enough and therefore just tells me everything I already know. I really think IReady is best used for first grade and up. & 4/21/2021 7:29 AM \\
\hline 266 & Some kids are not using it at all at home. Using chromebooks at school during hybrid seems counter productive. & 4/20/2021 6:40 PM \\
\hline 267 & The comprehension section on iReady reading doesn't provide enough scaffolding for students. & 4/20/2021 2:02 PM \\
\hline 268 & The students got placed either too low or too high after the mid-year assessment. Some just rushed through without reading and others had lots of help from parents. & 4/20/2021 9:21 AM \\
\hline 269 & I am a remote teacher and it is hard to know how much help is given to students. Also, I have never had a training that shows me what the students are seing and experiencing... I would like to know what the questions are and what the options are for answering the questions. I need to experience it from a child's perspective to know if it is a program that children can use on their own without help etc.. & 4/19/2021 11:36 AM \\
\hline
\end{tabular}

\section*{Q18 Why are you not using i-Ready this school year?}

Answered: 16 Skipped: 303

\begin{tabular}{|l|l|l}
\hline ANSWER CHOICES & RESPONSES \\
\hline I do not teach Math or Reading & \(37.50 \%\) & 6 \\
\hline I don't think i-Ready is appropriate for my students & \(18.75 \%\) & 3 \\
\hline It is too complicated to figure out & \(0.00 \%\) & 0 \\
\hline Other (please specify) & \(43.75 \%\) & 7 \\
\hline TOTAL & & 16 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \# & OTHER (PLEASE SPECIFY) & DATE \\
\hline 1 & I am a Title 1 Teacher and my Homeroom Teachers for Kindergarten and 1st Grade are the ones who administer the diagnostic tests. & 5/7/2021 11:25 AM \\
\hline 2 & I use it--but just to review data collected from classroom teachers. I serve kids in special ed. & 5/7/2021 11:09 AM \\
\hline 3 & Remote teaching, and my students that are impacted by their disability find it challenging too engage on the computer without in-person support. & 5/7/2021 11:08 AM \\
\hline 4 & I am a LAP teacher. I don't use iReady, but I use iReady data & 5/7/2021 10:46 AM \\
\hline 5 & This is not only not appropriate, but is inefficient, and in conversations with teachers in other districts it is considered universally inappropriate for high school students. This is also a huge WASTE OF MONEY when our staff receive absolutely zero support from the ESC, and we can better serve our students by not wasting money here and spending a similar amount on offering intervention classes along the way, or holding students back when they are not passing classes. The district is looking for ways to get teachers to fix problems they have created. & 5/7/2021 10:17 AM \\
\hline 6 & I am an instructional coach & 5/7/2021 8:56 AM \\
\hline 7 & I'm not a gen ed teacher & 5/6/2021 7:31 PM \\
\hline
\end{tabular}

\section*{Q1 What school do you attend?}

Answered: 1,513 Skipped: 4



\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
ANSWER CHOICES \\
Alderwood Middle
\end{tabular}} & \multicolumn{2}{|l|}{RESPONSES} \\
\hline & 20.42\% & 309 \\
\hline Beverly Elementary & 1.85\% & 28 \\
\hline Brier Elementary & 12.03\% & 182 \\
\hline Brier Terrace Middle & 9.52\% & 144 \\
\hline Cedar Valley Community & 0.13\% & 2 \\
\hline Cedar Way Elementary & 0.07\% & 1 \\
\hline Chase Lake Elementary & 0.00\% & 0 \\
\hline College Place Elementary & 1.06\% & 16 \\
\hline College Place Middle & 0.00\% & 0 \\
\hline Edmonds Elementary & 3.57\% & 54 \\
\hline Edmonds Heights K-12 & 0.00\% & 0 \\
\hline Edmonds-Woodway High & 0.00\% & 0 \\
\hline Hazelwood Elementary & 0.00\% & 0 \\
\hline Hilltop Elementary & 0.13\% & 2 \\
\hline Lynndale Elementary & 2.64\% & 40 \\
\hline Lynnwood Elementary & 1.65\% & 25 \\
\hline Lynnwood High & 0.00\% & 0 \\
\hline Madrona K-8 & 2.51\% & 38 \\
\hline Maplewood K-8 & 0.13\% & 2 \\
\hline Martha Lake Elementary & 0.13\% & 2 \\
\hline Meadowdale Elementary & 1.06\% & 16 \\
\hline Meadowdale High & 0.86\% & 13 \\
\hline Meadowdale Middle & 14.41\% & 218 \\
\hline Mountlake Terrace Elementary & 2.12\% & 32 \\
\hline Mountlake Terrace High & 0.07\% & 1 \\
\hline Oak Heights Elementary & 1.65\% & 25 \\
\hline Scriber Lake High & 0.00\% & 0 \\
\hline Seaview Elementary & 2.05\% & 31 \\
\hline Sherwood Elementary & 0.26\% & 4 \\
\hline Spruce Elementary & 1.06\% & 16 \\
\hline Terrace Park/Challenge Elementary & 20.62\% & 312 \\
\hline Westgate Elementary & 0.00\% & 0 \\
\hline TOTAL & & 1,513 \\
\hline
\end{tabular}

\section*{Q2 What is your current grade level?}

iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{llll}
\hline ANSWER CHOICES & RESPONSES & \\
\hline Kindergarten & \(0.20 \%\) & 3 \\
\hline Grade 1 & \(2.32 \%\) & 35 \\
\hline Grade 2 & \(3.58 \%\) & 54 \\
\hline Grade 3 & \(8.02 \%\) & 121 \\
\hline Grade 4 & \(8.55 \%\) & 129 \\
\hline Grade 5 & \(17.36 \%\) & 262 \\
\hline Grade 6 & \(14.65 \%\) & 221 \\
\hline Grade 7 & \(24.25 \%\) & 366 \\
\hline Grade 8 & \(20.08 \%\) & 303 \\
\hline Grade 9 & \(0.99 \%\) & 30 \\
\hline Grade 10 & \(0.00 \%\) & 15 \\
\hline Grade 11 & \(0.00 \%\) & 0 \\
\hline Grade 12 & \(0.00 \%\) & 0 \\
\hline TOTAL & & & 3 \\
\hline
\end{tabular}

Q3 Which i-Ready diagnostic assessments have you taken this school year?


\section*{Q4 Did your teacher share your i-Ready diagnostic data with you?}


\title{
Q5 Did the i-Ready data help you to understand your academic performance?
}


\title{
Q6 What i-Ready Online Instruction lessons did you work on?
}


\section*{Q7 About how many minutes per week did you use the Online Instruction?}

\begin{tabular}{l|ll}
\hline ANSWER CHOICES & RESPONSES & \\
\hline Over one hour & \(12.40 \%\) & 172 \\
\hline 45 to 60 minutes & \(23.86 \%\) & 331 \\
\hline 30 to 45 minutes & \(40.01 \%\) & 555 \\
\hline Less than 30 minutes & \(23.72 \%\) & 329 \\
\hline TOTAL & & 1,387
\end{tabular}

\section*{Q8 Please rate the i-Ready Program based on the following:}

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & STRONGLY DISAGREE & DISAGREE & NEITHER AGREE NOR DISAGREE & AGREE & \begin{tabular}{l}
STRONGLY \\
AGREE
\end{tabular} & TOTAL & WEIGHTED AVERAGE \\
\hline I enjoyed working through the iReady lessons. & \[
\begin{array}{r}
19.00 \% \\
258
\end{array}
\] & \[
\begin{array}{r}
22.24 \% \\
302
\end{array}
\] & \[
\begin{array}{r}
34.76 \% \\
472
\end{array}
\] & \[
\begin{array}{r}
19.96 \% \\
271
\end{array}
\] & \[
\begin{array}{r}
4.05 \% \\
55
\end{array}
\] & 1,358 & 2.68 \\
\hline I feel that the i-Ready lessons helped me understand the subject better. & \[
\begin{array}{r}
10.18 \% \\
138
\end{array}
\] & \[
\begin{array}{r}
13.65 \% \\
185
\end{array}
\] & \[
\begin{array}{r}
32.18 \% \\
436
\end{array}
\] & \[
\begin{array}{r}
37.27 \% \\
505
\end{array}
\] & \[
\begin{array}{r}
6.72 \% \\
91
\end{array}
\] & 1,355 & 3.17 \\
\hline Overall, I think the i-Ready program is a good one. & \[
\begin{array}{r}
11.84 \% \\
158
\end{array}
\] & \[
\begin{array}{r}
13.33 \% \\
178
\end{array}
\] & \[
\begin{array}{r}
33.71 \% \\
450
\end{array}
\] & \[
\begin{array}{r}
30.71 \% \\
410
\end{array}
\] & \[
\begin{array}{r}
10.41 \% \\
139
\end{array}
\] & 1,335 & 3.15 \\
\hline I think that the Edmonds School District should continue to use the i-Ready Online Instruction. & \[
\begin{array}{r}
17.71 \% \\
240
\end{array}
\] & \[
\begin{array}{r}
14.39 \% \\
195
\end{array}
\] & \[
\begin{array}{r}
32.77 \% \\
444
\end{array}
\] & \[
\begin{array}{r}
23.39 \% \\
317
\end{array}
\] & \[
\begin{array}{r}
11.73 \% \\
159
\end{array}
\] & 1,355 & 2.97 \\
\hline
\end{tabular}

\title{
Q9 What went well for you when using i-Ready this school year?
}

Answered: 1,309 Skipped: 208
\begin{tabular}{|c|c|c|}
\hline \# & RESPONSES & DATE \\
\hline 1 & Learning games & 5/10/2021 10:24 AM \\
\hline 2 & my english got better & 5/10/2021 8:51 AM \\
\hline 3 & Understanding the subect better. & 5/10/2021 8:26 AM \\
\hline 4 & none & 5/10/2021 8:24 AM \\
\hline 5 & it helped me in math and reading & 5/10/2021 8:21 AM \\
\hline 6 & nothing i diden't like it at all. & 5/10/2021 8:21 AM \\
\hline 7 & nothing went well & 5/10/2021 8:20 AM \\
\hline 8 & It was easier than I thought and 60 minutes felt like 30 minutes. & 5/10/2021 8:20 AM \\
\hline 9 & I understood everything better when I was confused & 5/10/2021 8:20 AM \\
\hline 10 & nothing much but it did show me somewhat of the new words and helped with meanings & 5/10/2021 8:20 AM \\
\hline 11 & I got better at math, and English, & 5/10/2021 8:19 AM \\
\hline 12 & Nothing & 5/10/2021 8:19 AM \\
\hline 13 & I learned a small bit of information & 5/10/2021 8:18 AM \\
\hline 14 & nothing & 5/10/2021 8:16 AM \\
\hline 15 & Well I think that doing the i-Ready helped me out in some of my assignments throughout the year so that was something that went well. & 5/10/2021 8:14 AM \\
\hline 16 & no opinion & 5/9/2021 4:01 PM \\
\hline 17 & Helped on my math & 5/7/2021 10:38 PM \\
\hline 18 & Nothing & 5/7/2021 7:33 PM \\
\hline 19 & that it tells you how many minutes you did & 5/7/2021 5:11 PM \\
\hline 20 & nothing & 5/7/2021 4:29 PM \\
\hline 21 & the math & 5/7/2021 4:29 PM \\
\hline 22 & Some of the lessons were pretty fun. & 5/7/2021 4:20 PM \\
\hline 23 & Understanding from my mistakes. & 5/7/2021 3:45 PM \\
\hline 24 & The thing that went well for me is the math learning. & 5/7/2021 3:20 PM \\
\hline 25 & It helped me understand math and reading more & 5/7/2021 3:10 PM \\
\hline 26 & Algebra? & 5/7/2021 2:45 PM \\
\hline 27 & It adapts to my level, so i'm not breezing through or struggling & 5/7/2021 2:28 PM \\
\hline 28 & Nothing but nothing went wrong. & 5/7/2021 2:28 PM \\
\hline 29 & It is easy to use and I was able to adapt to it quickly. & 5/7/2021 2:21 PM \\
\hline 30 & it was easy to understand how to use it & 5/7/2021 2:08 PM \\
\hline 31 & learned things & 5/7/2021 2:07 PM \\
\hline 32 & i learned more off of it and it helped me get better at what i needed help with & 5/7/2021 2:05 PM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 33 & Learning new stuff & 5/7/2021 2:04 PM \\
\hline 34 & is making me getting better in math & 5/7/2021 2:02 PM \\
\hline 35 & i dont know it helped a little & 5/7/2021 2:01 PM \\
\hline 36 & Well I learned some stuff more in depth & 5/7/2021 1:50 PM \\
\hline 37 & only lerning subejects & 5/7/2021 1:47 PM \\
\hline 38 & i was able to get a better understanding in my math lessons by using iReady as more practice this school year. & 5/7/2021 1:42 PM \\
\hline 39 & I don't really remember & 5/7/2021 1:39 PM \\
\hline 40 & it taught me a little math, but not much. & 5/7/2021 1:37 PM \\
\hline 41 & I pass most of the i-Ready assignments. It also helps me understand the subject more. & 5/7/2021 1:37 PM \\
\hline 42 & I learned many math concepts. & 5/7/2021 1:35 PM \\
\hline 43 & Understood the basics more and got to learn how these problems can be used day to day & 5/7/2021 1:35 PM \\
\hline 44 & i learned a little & 5/7/2021 1:35 PM \\
\hline 45 & It could be easy sometimes. & 5/7/2021 1:35 PM \\
\hline 46 & I could track my time. & 5/7/2021 1:34 PM \\
\hline 47 & I learned some things & 5/7/2021 1:34 PM \\
\hline 48 & I think helped me understand the subjects better. & 5/7/2021 1:33 PM \\
\hline 49 & I better understood topics that were confusing before. & 5/7/2021 1:32 PM \\
\hline 50 & It helped me understand things & 5/7/2021 1:31 PM \\
\hline 51 & It keeps letting you try until you get the answer correct. & 5/7/2021 1:31 PM \\
\hline 52 & nothing & 5/7/2021 1:31 PM \\
\hline 53 & Not much, but it might be better than other options. & 5/7/2021 1:30 PM \\
\hline 54 & not much & 5/7/2021 1:29 PM \\
\hline 55 & The lessons I guess. & 5/7/2021 1:28 PM \\
\hline 56 & The results. & 5/7/2021 1:28 PM \\
\hline 57 & ? & 5/7/2021 1:25 PM \\
\hline 58 & completing the lessons & 5/7/2021 1:23 PM \\
\hline 59 & i can not remember but notmuch i-ready douse not explaine what you need to do that well so i get a lot of things rong & 5/7/2021 1:21 PM \\
\hline 60 & we didn't have to do to much work & 5/7/2021 1:19 PM \\
\hline 61 & The last minute of every lesson & 5/7/2021 1:15 PM \\
\hline 62 & EvErYthiNg & 5/7/2021 1:15 PM \\
\hline 63 & learning and understanding math later & 5/7/2021 1:15 PM \\
\hline 64 & not a thing & 5/7/2021 1:14 PM \\
\hline 65 & I helped me understand math a lot & 5/7/2021 1:14 PM \\
\hline 66 & math & 5/7/2021 1:13 PM \\
\hline 67 & Learning & 5/7/2021 1:13 PM \\
\hline 68 & nothing & 5/7/2021 1:13 PM \\
\hline 69 & nothing & 5/7/2021 1:13 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 70 & Understanding from my mistakes. & 5/7/2021 1:13 PM \\
\hline 71 & math dinostic & 5/7/2021 1:06 PM \\
\hline 72 & i got confused & 5/7/2021 12:59 PM \\
\hline 73 & Nothing. & 5/7/2021 12:59 PM \\
\hline 74 & IReady is fun most of the time & 5/7/2021 12:59 PM \\
\hline 75 & Something- & 5/7/2021 12:58 PM \\
\hline 76 & I liked the learning games. & 5/7/2021 12:58 PM \\
\hline 77 & nothing & 5/7/2021 12:58 PM \\
\hline 78 & mostly just helping me struggle on questions i dont know not much tho & 5/7/2021 12:57 PM \\
\hline 79 & reading & 5/7/2021 12:57 PM \\
\hline 80 & how old is the animated characters are all telling you about math & 5/7/2021 12:56 PM \\
\hline 81 & r & 5/7/2021 12:52 PM \\
\hline 82 & I do need to get some done but pretty good. & 5/7/2021 12:48 PM \\
\hline 83 & I revived a lot that i did. & 5/7/2021 12:48 PM \\
\hline 84 & reading & 5/7/2021 12:48 PM \\
\hline 85 & Something that went well for me with i-Ready is the positive results that I got from the reading and math diagnostics. & 5/7/2021 12:48 PM \\
\hline 86 & help me get more knowledge and calculate faster. & 5/7/2021 12:47 PM \\
\hline 87 & I got better at math and reading, aslo spelling. & 5/7/2021 12:46 PM \\
\hline 88 & I stay focused & 5/7/2021 12:45 PM \\
\hline 89 & Nothing & 5/7/2021 12:44 PM \\
\hline 90 & I understood more in math for number sentences better & 5/7/2021 12:44 PM \\
\hline 91 & i did the test & 5/7/2021 12:27 PM \\
\hline 92 & Iready helped me understand more about the lesson that I was confused about. & 5/7/2021 12:11 PM \\
\hline 93 & it was very time consuming helped me focus more & 5/7/2021 12:11 PM \\
\hline 94 & I had an opportunity to get my grade up without risking points & 5/7/2021 12:10 PM \\
\hline 95 & just learning new things since of covid & 5/7/2021 12:09 PM \\
\hline 96 & it didnt really make a diffrence & 5/7/2021 12:08 PM \\
\hline 97 & Practice & 5/7/2021 12:07 PM \\
\hline 98 & Nothing & 5/7/2021 12:05 PM \\
\hline 99 & nothing & 5/7/2021 12:03 PM \\
\hline 100 & learned new things & 5/7/2021 12:00 PM \\
\hline 101 & It make me understand more about math and reading & 5/7/2021 11:59 AM \\
\hline 102 & i don't know & 5/7/2021 11:57 AM \\
\hline 103 & reminds me of old math i use to do & 5/7/2021 11:56 AM \\
\hline 104 & I ready lessons & 5/7/2021 11:56 AM \\
\hline 105 & most of it & 5/7/2021 11:56 AM \\
\hline 106 & learning more & 5/7/2021 11:55 AM \\
\hline 107 & It helped me understand certain things & 5/7/2021 11:54 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 108 & it helped me understand what i needed help with in class & 5/7/2021 11:53 AM \\
\hline 109 & I guess it gave me a little bit of a better understanding of my math & 5/7/2021 11:51 AM \\
\hline 110 & It helped me with math & 5/7/2021 11:50 AM \\
\hline 111 & Nothing has went well and nothing has gone wrong as far as I can remeber & 5/7/2021 11:49 AM \\
\hline 112 & I could just keep on learning new things with I-ready. & 5/7/2021 11:48 AM \\
\hline 113 & i don't know & 5/7/2021 11:47 AM \\
\hline 114 & I can understand the lessons better & 5/7/2021 11:47 AM \\
\hline 115 & It help me on my reading and math more and I learned new thing that I might not learned. & 5/7/2021 11:47 AM \\
\hline 116 & It helped me understand math & 5/7/2021 11:46 AM \\
\hline 117 & I learned new things & 5/7/2021 11:46 AM \\
\hline 118 & mostly everything & 5/7/2021 11:45 AM \\
\hline 119 & I understood the Units better & 5/7/2021 11:41 AM \\
\hline 120 & It helped me grow in math and reading & 5/7/2021 11:41 AM \\
\hline 121 & reading i-ready was fun when it had backround like a mystery to solve or books to read & 5/7/2021 11:40 AM \\
\hline 122 & Some of the reading lessons were fun. & 5/7/2021 11:40 AM \\
\hline 123 & It makes the math we do in class easier & 5/7/2021 11:39 AM \\
\hline 124 & I improved a lot. It just gives you a feeling like you are doing a test. It helped me to understand how to solve problems more. & 5/7/2021 11:39 AM \\
\hline 125 & it kind of help me doing math & 5/7/2021 11:38 AM \\
\hline 126 & grate & 5/7/2021 11:38 AM \\
\hline 127 & it hellped me with math & 5/7/2021 11:37 AM \\
\hline 128 & The Math lessons & 5/7/2021 11:37 AM \\
\hline 129 & it challenged me on the math lessons & 5/7/2021 11:37 AM \\
\hline 130 & It is a pretty good program for learning. & 5/7/2021 11:37 AM \\
\hline 131 & it heleped me with reading a little bit & 5/7/2021 11:37 AM \\
\hline 132 & I did not like it & 5/7/2021 11:36 AM \\
\hline 133 & It was very simple and was not confusing & 5/7/2021 11:33 AM \\
\hline 134 & It reminded many things to me & 5/7/2021 11:33 AM \\
\hline 135 & understanding certain matierals & 5/7/2021 11:32 AM \\
\hline 136 & I got to practice my reading and math skills. & 5/7/2021 11:32 AM \\
\hline 137 & Um fractions & 5/7/2021 11:28 AM \\
\hline 138 & memerizing my times tables & 5/7/2021 11:28 AM \\
\hline 139 & it helped me learn more tips & 5/7/2021 11:27 AM \\
\hline 140 & i dont like iready & 5/7/2021 11:26 AM \\
\hline 141 & math & 5/7/2021 11:26 AM \\
\hline 142 & um... The test math & 5/7/2021 11:25 AM \\
\hline 143 & It helped me understand more & 5/7/2021 11:25 AM \\
\hline 144 & nothing & 5/7/2021 11:24 AM \\
\hline 145 & everything & 5/7/2021 11:24 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 146 & It helped me understand some things better & 5/7/2021 11:24 AM \\
\hline 147 & iReady is helpful for me i many ways & 5/7/2021 11:24 AM \\
\hline 148 & lerning the subjects a little better & 5/7/2021 11:21 AM \\
\hline 149 & do not know & 5/7/2021 11:16 AM \\
\hline 150 & Nothing I REALLY dislike it & 5/7/2021 11:10 AM \\
\hline 151 & I like the Reading part better than math. & 5/7/2021 11:04 AM \\
\hline 152 & everything & 5/7/2021 10:57 AM \\
\hline 153 & I was able to learn 2 math units at a time (Our class's unit and the unit it was taking me through on Iready. & 5/7/2021 10:56 AM \\
\hline 154 & Fortnite JK LUL it went good & 5/7/2021 10:55 AM \\
\hline 155 & I learned more? & 5/7/2021 10:55 AM \\
\hline 156 & I got to practice what we're doing at school on iReady & 5/7/2021 10:55 AM \\
\hline 157 & I ready was a good education & 5/7/2021 10:55 AM \\
\hline 158 & I learned alot about not giving up and and alot about math. & 5/7/2021 10:54 AM \\
\hline 159 & I don't know & 5/7/2021 10:54 AM \\
\hline 160 & It isn't confusing & 5/7/2021 10:52 AM \\
\hline 161 & it was helpfor & 5/7/2021 10:52 AM \\
\hline 162 & Nothing. It teaches me nothing at all. It's just a hassle that I have to do in order to keep my grade high. & 5/7/2021 10:32 AM \\
\hline 163 & it helped me learn some things not many though & 5/7/2021 10:31 AM \\
\hline 164 & Nothing, it is a big waste of money. & 5/7/2021 10:31 AM \\
\hline 165 & It is an easy website to use & 5/7/2021 10:31 AM \\
\hline 166 & the reading and the math games & 5/7/2021 10:31 AM \\
\hline 167 & I understood more & 5/7/2021 10:30 AM \\
\hline 168 & Some I-ready lessons helped me understand what I was learning in math. & 5/7/2021 10:27 AM \\
\hline 169 & Not too much. IReady doesn't really explain everything clearly. & 5/7/2021 10:25 AM \\
\hline 170 & It was easy math & 5/7/2021 10:24 AM \\
\hline 171 & Not much & 5/7/2021 10:23 AM \\
\hline 172 & Everything went great, I learned about the things I didn't understand in class which was a lot of help. & 5/7/2021 10:22 AM \\
\hline 173 & It loads fast and i-Ready has an online pencil, calculator, and notebook, and these were all very useful. & 5/7/2021 10:21 AM \\
\hline 174 & i could get it done and some of the mini games were fun & 5/7/2021 10:20 AM \\
\hline 175 & I gained a lot of knowledge from the I-Ready lessons. Sometimes I didn't even notice that I was learning because the lessons were SO fun! & 5/7/2021 10:20 AM \\
\hline 176 & it helped me with fractions and percentages. & 5/7/2021 10:19 AM \\
\hline 177 & helping me pay more attention to what i was doing wrong and to double check my work & 5/7/2021 10:19 AM \\
\hline 178 & It helped better understand the unit we are learning & 5/7/2021 10:19 AM \\
\hline 179 & It helped me with math & 5/7/2021 10:19 AM \\
\hline 180 & it helps me with subjects & 5/7/2021 10:19 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 181 & Lessons & 5/7/2021 10:18 AM \\
\hline 182 & I learned some new content & 5/7/2021 10:18 AM \\
\hline 183 & I reviewed some lessons. & 5/7/2021 10:18 AM \\
\hline 184 & I can not think of anything. & 5/7/2021 10:18 AM \\
\hline 185 & it helped me with my area ans frachons & 5/7/2021 10:17 AM \\
\hline 186 & I guess I liked the lesson length and how it had a tutorial at the start of each new lesson & 5/7/2021 10:17 AM \\
\hline 187 & it made me a little happy when im getting stuff right. & 5/7/2021 10:17 AM \\
\hline 188 & it made me understand things & 5/7/2021 10:17 AM \\
\hline 189 & what went well for me is that i-ready helped me get better at understanding math and reading & 5/7/2021 10:17 AM \\
\hline 190 & everything & 5/7/2021 10:17 AM \\
\hline 191 & i ready math & 5/7/2021 10:16 AM \\
\hline 192 & The videos were fun but they went on for along time. & 5/7/2021 10:16 AM \\
\hline 193 & Nothing & 5/7/2021 10:15 AM \\
\hline 194 & It helped me better understand certain subjects & 5/7/2021 10:15 AM \\
\hline 195 & When I finally finished & 5/7/2021 10:15 AM \\
\hline 196 & It helped me with subjects I struggled at, so now i'm better in subjects I struggled in & 5/7/2021 10:15 AM \\
\hline 197 & I understanded things more, and it can even help others. & 5/7/2021 10:15 AM \\
\hline 198 & everything went very well, and I really loved it! its very nice, and helps me a lot better.:) & 5/7/2021 10:14 AM \\
\hline 199 & i don't know what this mean? & 5/7/2021 10:14 AM \\
\hline 200 & the lessons helped me understand the lessons in math & 5/7/2021 10:13 AM \\
\hline 201 & the math lessons & 5/7/2021 10:13 AM \\
\hline 202 & im better at math and reading & 5/7/2021 10:13 AM \\
\hline 203 & I learned so much at the start and really fun. & 5/7/2021 10:13 AM \\
\hline 204 & It help's me see what mistakes I make when doing math with decimals & 5/7/2021 10:13 AM \\
\hline 205 & I learned more about math and reading because of I-Ready & 5/7/2021 10:13 AM \\
\hline 206 & Some of the learning games made me understand fractions a little bit more & 5/7/2021 10:13 AM \\
\hline 207 & It helped me with my learning. & 5/7/2021 10:12 AM \\
\hline 208 & I learned more things & 5/7/2021 10:11 AM \\
\hline 209 & it made it easy to learn & 5/7/2021 10:11 AM \\
\hline 210 & It helps me with my learning. & 5/7/2021 10:11 AM \\
\hline 211 & telling me were i am at & 5/7/2021 10:09 AM \\
\hline 212 & I don't know & 5/7/2021 10:04 AM \\
\hline 213 & Nothing I already knew & 5/7/2021 10:02 AM \\
\hline 214 & It help me learn faster & 5/7/2021 9:58 AM \\
\hline 215 & math slightly though & 5/7/2021 9:53 AM \\
\hline 216 & I learn so much things on I-Ready & 5/7/2021 9:53 AM \\
\hline 217 & im not sure the games were not fun either way & 5/7/2021 9:52 AM \\
\hline 218 & math & 5/7/2021 9:51 AM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 219 & learning math. & 5/7/2021 9:51 AM \\
\hline 220 & I liked the reading lessons it help me learn more vocabulary. & 5/7/2021 9:51 AM \\
\hline 221 & What went well was I got to learn & 5/7/2021 9:51 AM \\
\hline 222 & I don't know & 5/7/2021 9:51 AM \\
\hline 223 & some problems went good & 5/7/2021 9:50 AM \\
\hline 224 & it teached me new stuff & 5/7/2021 9:49 AM \\
\hline 225 & The first diagnostic's & 5/7/2021 9:49 AM \\
\hline 226 & It went well it teach me more things. & 5/7/2021 9:49 AM \\
\hline 227 & finishing my test & 5/7/2021 9:49 AM \\
\hline 228 & Both subjects & 5/7/2021 9:48 AM \\
\hline 229 & We were able to catch up on things that we weren't able to learn last year & 5/7/2021 9:48 AM \\
\hline 230 & It helped me understand the subject better. & 5/7/2021 9:48 AM \\
\hline 231 & not sure & 5/7/2021 9:47 AM \\
\hline 232 & alot & 5/7/2021 9:43 AM \\
\hline 233 & I don,t know & 5/7/2021 9:38 AM \\
\hline 234 & helping me inprove in my reading & 5/7/2021 9:33 AM \\
\hline 235 & I learned perimeter and area & 5/7/2021 9:33 AM \\
\hline 236 & i made sense & 5/7/2021 9:30 AM \\
\hline 237 & learning & 5/7/2021 9:30 AM \\
\hline 238 & helped me understand things a bit better & 5/7/2021 9:30 AM \\
\hline 239 & nothing & 5/7/2021 9:29 AM \\
\hline 240 & not much i hated every second of iready that i had too do & 5/7/2021 9:29 AM \\
\hline 241 & what went well for me is I was able to get a better understanding about the subject & 5/7/2021 9:29 AM \\
\hline 242 & Nothing really. I don't get the same work that i do as homework. & 5/7/2021 9:28 AM \\
\hline 243 & It was challenging but no too extreme & 5/7/2021 9:28 AM \\
\hline 244 & reading & 5/7/2021 9:28 AM \\
\hline 245 & Passing stuff & 5/7/2021 9:28 AM \\
\hline 246 & I can understand better & 5/7/2021 9:28 AM \\
\hline 247 & nothing & 5/7/2021 9:27 AM \\
\hline 248 & nothing & 5/7/2021 9:27 AM \\
\hline 249 & Using i-Ready help me understand things better example when i get a question wrong it shows me a easy way to solve the problem & 5/7/2021 9:27 AM \\
\hline 250 & i feel like i did the math diagnostek better & 5/7/2021 9:27 AM \\
\hline 251 & I did math independently which is nice & 5/7/2021 9:26 AM \\
\hline 252 & I learned some new things and got reminders about math stuff. & 5/7/2021 9:26 AM \\
\hline 253 & I understood the Math a little better. & 5/7/2021 9:25 AM \\
\hline 254 & I passed a lot of lessons & 5/7/2021 9:17 AM \\
\hline 255 & idk & 5/7/2021 9:17 AM \\
\hline 256 & idk & 5/7/2021 9:17 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 257 & Well, in Reading I think it is just fine, its not too confusing. & 5/7/2021 9:15 AM \\
\hline 258 & not fun & 5/7/2021 9:15 AM \\
\hline 259 & nothing to be honest & 5/7/2021 9:14 AM \\
\hline 260 & not a lot & 5/7/2021 9:14 AM \\
\hline 261 & I pass most of the lessons & 5/7/2021 9:14 AM \\
\hline 262 & I didn't like I-Ready but it taught me to learn graphing but that is the only thing. & 5/7/2021 9:14 AM \\
\hline 263 & Well, I got to level G in reading (7th or 6th grade) and I got better at a bunch of the subjects throughout the school year & 5/7/2021 9:14 AM \\
\hline 264 & nothing & 5/7/2021 9:14 AM \\
\hline 265 & it helped me & 5/7/2021 9:13 AM \\
\hline 266 & i got better at paying attention & 5/7/2021 9:13 AM \\
\hline 267 & ? & 5/7/2021 9:13 AM \\
\hline 268 & Getting better at math and reading & 5/7/2021 9:12 AM \\
\hline 269 & idk & 5/7/2021 9:12 AM \\
\hline 270 & I just got better. Tho I kinda disliked the acpreince. & 5/7/2021 9:12 AM \\
\hline 271 & it helped me learn & 5/7/2021 9:12 AM \\
\hline 272 & Nothing & 5/7/2021 9:11 AM \\
\hline 273 & reading comp & 5/7/2021 9:11 AM \\
\hline 274 & I am not sure. & 5/7/2021 9:03 AM \\
\hline 275 & only thing i learn was somethings important some of it was a waste of time & 5/7/2021 9:01 AM \\
\hline 276 & It helped me learn a bit. & 5/7/2021 9:00 AM \\
\hline 277 & it was really easy so doing work was really easy and went well & 5/7/2021 8:59 AM \\
\hline 278 & it wasent to cofnusing & 5/7/2021 8:59 AM \\
\hline 279 & for me everything in i-ready was review & 5/7/2021 8:59 AM \\
\hline 280 & nothing & 5/7/2021 8:58 AM \\
\hline 281 & It's helped me understand subjects a bit more & 5/7/2021 8:58 AM \\
\hline 282 & I got a refresher through out the year of things I forgot. & 5/7/2021 8:58 AM \\
\hline 283 & it helped me understand things that i didnt understand in previous class lessons & 5/7/2021 8:58 AM \\
\hline 284 & i learned new stuff and it has little minigames to cool you off & 5/7/2021 8:57 AM \\
\hline 285 & nothing & 5/7/2021 8:56 AM \\
\hline 286 & nothing really & 5/7/2021 8:50 AM \\
\hline 287 & not really anything i was learning arrays & 5/7/2021 8:50 AM \\
\hline 288 & All of the lessons were easy so I got 100\% & 5/7/2021 8:49 AM \\
\hline 289 & um some what of it & 5/7/2021 8:40 AM \\
\hline 290 & One thing that went well for me was the math. I do well in reading too but in math I get high scores almost all of the time and am feeling good! & 5/7/2021 8:38 AM \\
\hline 291 & sort of easy to do lessons but annoying & 5/7/2021 8:20 AM \\
\hline 292 & when i was confused it took me thru it & 5/7/2021 8:20 AM \\
\hline 293 & the amount of time i had to do iready & 5/7/2021 8:18 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 294 & i learned a slightly amount of math from it but i was to lazy to do my minutes & 5/7/2021 8:18 AM \\
\hline 295 & I didnt like it so I didnt use it & 5/7/2021 8:17 AM \\
\hline 296 & I'm not sure, I think getting throught a lot of the lessons & 5/7/2021 8:17 AM \\
\hline 297 & I figured out where I am as a learner & 5/7/2021 8:15 AM \\
\hline 298 & I remembered some of the topics I forgot from elementary. & 5/7/2021 8:10 AM \\
\hline 299 & Lessons were fun with the animation & 5/7/2021 7:33 AM \\
\hline 300 & I liked having choices in answers. it shows me how & 5/6/2021 9:16 PM \\
\hline 301 & It took forever to learn because of the stories in place to make it more appealing. This is the most boring way to learn math from my experience. & 5/6/2021 8:29 PM \\
\hline 302 & I learned how to do more things and got help at understanding things that I couldn't figure out. & 5/6/2021 7:19 PM \\
\hline 303 & Learning about making a inference & 5/6/2021 6:47 PM \\
\hline 304 & It's been helpful in learning & 5/6/2021 6:35 PM \\
\hline 305 & the reading i ready program wasn't so bad and i liked that there where rewards to keep you motivated & 5/6/2021 6:32 PM \\
\hline 306 & it helped teach me multiplication and division and i think they did a good job & 5/6/2021 5:39 PM \\
\hline 307 & nothing & 5/6/2021 3:28 PM \\
\hline 308 & stuff & 5/6/2021 3:28 PM \\
\hline 309 & It made me understand more about math! & 5/6/2021 3:28 PM \\
\hline 310 & all of it & 5/6/2021 3:19 PM \\
\hline 311 & the lessons & 5/6/2021 2:56 PM \\
\hline 312 & Practecing & 5/6/2021 2:52 PM \\
\hline 313 & It was sort of easy & 5/6/2021 2:47 PM \\
\hline 314 & it is helping me read when i trey & 5/6/2021 2:00 PM \\
\hline 315 & somthing that went well was doing it every week and getting better and better & 5/6/2021 1:59 PM \\
\hline 316 & learning things in math in i ready & 5/6/2021 1:59 PM \\
\hline 317 & it was fun and kinda confuzing adout he lessons & 5/6/2021 1:57 PM \\
\hline 318 & It helped a little bit with my reading understanding & 5/6/2021 1:57 PM \\
\hline 319 & my progress as achieved higher momentum & 5/6/2021 1:57 PM \\
\hline 320 & i feel like im geting beter at the things i stugil at & 5/6/2021 1:56 PM \\
\hline 321 & I practiced old subjects so I remembered stuff & 5/6/2021 1:55 PM \\
\hline 322 & I learned so many things & 5/6/2021 1:55 PM \\
\hline 323 & i do pretty good on tests & 5/6/2021 1:54 PM \\
\hline 324 & everything & 5/6/2021 1:50 PM \\
\hline 325 & I learned some new stuff. & 5/6/2021 1:48 PM \\
\hline 326 & I had a pretty high pass rate & 5/6/2021 1:40 PM \\
\hline 327 & I was able to understand some things that I didn't understand before. & 5/6/2021 1:32 PM \\
\hline 328 & i-Ready Math went well this school year. & 5/6/2021 1:23 PM \\
\hline 329 & It helped me understand hard questions better. & 5/6/2021 1:21 PM \\
\hline 330 & Reading and math & 5/6/2021 1:16 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 331 & I like that itś a personalized lesson and I can go at my own pace & 5/6/2021 1:15 PM \\
\hline 332 & learning ways to subtract or add & 5/6/2021 1:15 PM \\
\hline 333 & Doing the diagnostic & 5/6/2021 1:14 PM \\
\hline 334 & it taught me how to read certain words and i got better at math & 5/6/2021 1:13 PM \\
\hline 335 & i was able to complete a one chance and got 100\% & 5/6/2021 1:11 PM \\
\hline 336 & It taught me a lot . & 5/6/2021 1:11 PM \\
\hline 337 & it helps me learn. & 5/6/2021 1:11 PM \\
\hline 338 & i dont know & 5/6/2021 1:09 PM \\
\hline 339 & The assignments my teacher put in for the class & 5/6/2021 1:09 PM \\
\hline 340 & My reading went up & 5/6/2021 1:08 PM \\
\hline 341 & i dont know & 5/6/2021 1:07 PM \\
\hline 342 & What went well for me is the i-ready math and reading because i barely knew about anything & 5/6/2021 1:07 PM \\
\hline 343 & It went good & 5/6/2021 1:05 PM \\
\hline 344 & i leraned some stuff & 5/6/2021 1:02 PM \\
\hline 345 & Not much but maybe it told me about my scores & 5/6/2021 1:00 PM \\
\hline 346 & Reading & 5/6/2021 12:55 PM \\
\hline 347 & not that much & 5/6/2021 12:54 PM \\
\hline 348 & That it wasn't laggy like learning on zoom & 5/6/2021 12:52 PM \\
\hline 349 & What went well was I had feedback when I got something wrong. & 5/6/2021 12:51 PM \\
\hline 350 & It helped me prepare for what lesson we were working on next. & 5/6/2021 12:50 PM \\
\hline 351 & idk & 5/6/2021 12:50 PM \\
\hline 352 & Some of the lessons helped me during the math year & 5/6/2021 12:50 PM \\
\hline 353 & It was easy to use and Helped me understand the lessons & 5/6/2021 12:49 PM \\
\hline 354 & I know geomagry & 5/6/2021 12:49 PM \\
\hline 355 & I don't know & 5/6/2021 12:49 PM \\
\hline 356 & It was easy to navigate & 5/6/2021 12:49 PM \\
\hline 357 & It was very interesting when I first started & 5/6/2021 12:49 PM \\
\hline 358 & getting it done & 5/6/2021 12:48 PM \\
\hline 359 & the questions & 5/6/2021 12:48 PM \\
\hline 360 & I understood the lesson better. & 5/6/2021 12:48 PM \\
\hline 361 & it was easy to use & 5/6/2021 12:48 PM \\
\hline 362 & I'm not sure & 5/6/2021 12:47 PM \\
\hline 363 & Nothing & 5/6/2021 12:46 PM \\
\hline 364 & It was easy sometimes & 5/6/2021 12:40 PM \\
\hline 365 & idk & 5/6/2021 12:33 PM \\
\hline 366 & What went well was when we do I-ready it gives the answer on the second time you get it wrong & 5/6/2021 12:33 PM \\
\hline 367 & It made me curious about new math skills & 5/6/2021 12:31 PM \\
\hline 368 & Nothing & 5/6/2021 12:31 PM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 369 & I learned some things. & 5/6/2021 12:30 PM \\
\hline 370 & When they helped me out when I got it wrong. & 5/6/2021 12:30 PM \\
\hline 371 & Reading & 5/6/2021 12:30 PM \\
\hline 372 & Understanding math & 5/6/2021 12:28 PM \\
\hline 373 & That I learned my math when I did not understand it & 5/6/2021 12:28 PM \\
\hline 374 & nothing & 5/6/2021 12:28 PM \\
\hline 375 & EVERY THING & 5/6/2021 12:25 PM \\
\hline 376 & Helped me understand school problems better. & 5/6/2021 12:21 PM \\
\hline 377 & idk & 5/6/2021 12:00 PM \\
\hline 378 & The diagnostic & 5/6/2021 11:59 AM \\
\hline 379 & creating characters & 5/6/2021 11:44 AM \\
\hline 380 & For reading it introduced me to new and different books. For math it reviewed lessons I didn't really remember. & 5/6/2021 11:37 AM \\
\hline 381 & I got to do some reading and math for 30 minutes and when taking the diagnostic it gave you a brain break every ten minutes. & 5/6/2021 11:36 AM \\
\hline 382 & Learning new things in math & 5/6/2021 11:35 AM \\
\hline 383 & the skills it taught me & 5/6/2021 11:35 AM \\
\hline 384 & It helped me do my reading and math. & 5/6/2021 11:34 AM \\
\hline 385 & i under stud it well & 5/6/2021 11:34 AM \\
\hline 386 & math & 5/6/2021 11:21 AM \\
\hline 387 & I learned a lot and grew more confident in my reading and math. & 5/6/2021 11:16 AM \\
\hline 388 & Not really anything & 5/6/2021 11:07 AM \\
\hline 389 & every thing & 5/6/2021 10:56 AM \\
\hline 390 & learning math & 5/6/2021 10:56 AM \\
\hline 391 & Mostly everything & 5/6/2021 10:44 AM \\
\hline 392 & I was able to complete all my iReady time this year. & 5/6/2021 10:33 AM \\
\hline 393 & Learning the new subjects and understanding them & 5/6/2021 10:32 AM \\
\hline 394 & math. & 5/6/2021 10:32 AM \\
\hline 395 & it help me learn and understand the math i struggle in & 5/6/2021 10:32 AM \\
\hline 396 & Everything & 5/6/2021 10:32 AM \\
\hline 397 & I got better at understanding the subject & 5/6/2021 10:32 AM \\
\hline 398 & I was a little in head in fractions & 5/6/2021 10:31 AM \\
\hline 399 & I learned multiplication and fractions & 5/6/2021 10:30 AM \\
\hline 400 & the math the reading is to loung & 5/6/2021 10:30 AM \\
\hline 401 & it's fun & 5/6/2021 10:30 AM \\
\hline 402 & I got to revisit some subjects that I still needed improvmetn in. & 5/6/2021 10:30 AM \\
\hline 403 & I got some practice in math and reading strategies I guess & 5/6/2021 10:30 AM \\
\hline 404 & I was always learning new things. & 5/6/2021 10:29 AM \\
\hline 405 & It was easier without the small animations or movies, especially the math ones with just the & 5/6/2021 10:29 AM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
prblems
\begin{tabular}{|c|c|c|}
\hline 406 & It helped me understand what we learned in class & 5/6/2021 10:29 AM \\
\hline 407 & it's easy to use & 5/6/2021 10:28 AM \\
\hline 408 & I was able to get through the lessons and learn from my mistakes. & 5/6/2021 10:28 AM \\
\hline 409 & I was learning new information & 5/6/2021 10:28 AM \\
\hline 410 & I could make up IReady minutes so I got and A in english & 5/6/2021 10:28 AM \\
\hline 411 & that i could go my own pace and take as many tries as i need & 5/6/2021 10:27 AM \\
\hline 412 & nothing its boring sajknzvoldbnos & 5/6/2021 10:27 AM \\
\hline 413 & It helped me understand some math concepts better. & 5/6/2021 10:26 AM \\
\hline 414 & It gave me a reason to do english & 5/6/2021 10:26 AM \\
\hline 415 & Something that went well for me was I was able to finish the iReady minutes every week it was assigned. & 5/6/2021 10:26 AM \\
\hline 416 & I learned more vocabulary & 5/6/2021 10:26 AM \\
\hline 417 & I learned a few things in the lessons & 5/6/2021 10:26 AM \\
\hline 418 & It kind of helped me. & 5/6/2021 10:16 AM \\
\hline 419 & Iready math lessons were somewhat helpful, but overall Its more helpful for me to understand a lesson when it is being taught in person. & 5/6/2021 10:14 AM \\
\hline 420 & learning new things. & 5/6/2021 10:14 AM \\
\hline 421 & I don't know. & 5/6/2021 10:13 AM \\
\hline 422 & got some lessons done & 5/6/2021 10:12 AM \\
\hline 423 & I started to understand things I had problems with. & 5/6/2021 10:12 AM \\
\hline 424 & Not sure. & 5/6/2021 10:12 AM \\
\hline 425 & more practice on skills & 5/6/2021 10:10 AM \\
\hline 426 & my grades & 5/6/2021 10:10 AM \\
\hline 427 & mtah & 5/6/2021 10:09 AM \\
\hline 428 & I learned more about writing and using strong words & 5/6/2021 9:55 AM \\
\hline 429 & i"m not sure & 5/6/2021 9:52 AM \\
\hline 430 & hmmmmmmmmmmm. idk & 5/6/2021 9:48 AM \\
\hline 431 & the i ready math & 5/6/2021 9:44 AM \\
\hline 432 & I don't know & 5/6/2021 9:43 AM \\
\hline 433 & reading & 5/6/2021 9:41 AM \\
\hline 434 & I learned new skills & 5/6/2021 9:26 AM \\
\hline 435 & I completed lots of things in iReady. & 5/6/2021 9:10 AM \\
\hline 436 & I think it was good when I was doing math assignments because it gives you step by step explaination. & 5/6/2021 9:08 AM \\
\hline 437 & Most, but it did not help much. & 5/6/2021 9:07 AM \\
\hline 438 & i understand more subjects now because of I-Ready. & 5/6/2021 9:07 AM \\
\hline 439 & It went well because I didn't have to read a book. & 5/6/2021 9:07 AM \\
\hline 440 & it gave me a general idea of what my reading level was and what i needed to improve on & 5/6/2021 9:05 AM \\
\hline 441 & It was only 45 minutes per subject & 5/6/2021 9:05 AM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 442 & I don't know & 5/6/2021 9:05 AM \\
\hline 443 & i grew in certain subjects. & 5/6/2021 9:05 AM \\
\hline 444 & it was easy to use & 5/6/2021 9:04 AM \\
\hline 445 & It help practice skills & 5/6/2021 9:04 AM \\
\hline 446 & I think sometimes the I ready helped & 5/6/2021 9:03 AM \\
\hline 447 & nothing & 5/6/2021 9:03 AM \\
\hline 448 & nothing well or bad happened & 5/6/2021 9:03 AM \\
\hline 449 & Nothing & 5/6/2021 9:03 AM \\
\hline 450 & Understanding the lessons & 5/6/2021 9:03 AM \\
\hline 451 & I learned what different types of words are and some stuff I forgot about & 5/6/2021 9:03 AM \\
\hline 452 & The lessons were very informative and i liked having a small brain break during the diagnostics. & 5/6/2021 9:03 AM \\
\hline 453 & Getting the basic problems done, and passing lessons. & 5/6/2021 9:03 AM \\
\hline 454 & nothing & 5/6/2021 9:02 AM \\
\hline 455 & the diagnostic & 5/6/2021 9:02 AM \\
\hline 456 & Nothing, I didn't really like using i-Ready. & 5/6/2021 9:02 AM \\
\hline 457 & I mean I guess the website works good atleast? & 5/6/2021 9:02 AM \\
\hline 458 & i learned about more things and i got more practice in. & 5/6/2021 9:02 AM \\
\hline 459 & Not much lag when i was doing i-Ready in a zoom meeting & 5/6/2021 8:57 AM \\
\hline 460 & I learned the main part of the lesson fairly quickly. & 5/6/2021 8:55 AM \\
\hline 461 & better at reading & 5/6/2021 8:47 AM \\
\hline 462 & I don't really know what iReady did for me & 5/6/2021 8:45 AM \\
\hline 463 & it helped me with some of my school work & 5/6/2021 8:43 AM \\
\hline 464 & it helped me and got me a strong brain and made me think to not give up on i- redy & 5/6/2021 8:43 AM \\
\hline 465 & it helped me understand better & 5/6/2021 8:43 AM \\
\hline 466 & It helped me understand pre-algerbra a bit better. & 5/6/2021 8:43 AM \\
\hline 467 & The voice acting was terrible so i had lots of laughs & 5/6/2021 8:42 AM \\
\hline 468 & nothing & 5/6/2021 8:41 AM \\
\hline 469 & nothing & 5/6/2021 8:41 AM \\
\hline 470 & It works well as a review of lessons. but it not enjoyably. & 5/6/2021 8:40 AM \\
\hline 471 & doing it each week & 5/6/2021 8:35 AM \\
\hline 472 & working on line numebrs helped & 5/6/2021 8:34 AM \\
\hline 473 & I got to do extra credit I ready so that raised my grade. & 5/6/2021 8:32 AM \\
\hline 474 & nothing, i didn't learn anything from this program and i don't think that i ready should be a thing. It is a horrible program if i were to rate it from 1-10 it would get a 1. & 5/6/2021 8:21 AM \\
\hline 475 & It helped my understand some topics I didn't really know very well & 5/6/2021 8:15 AM \\
\hline 476 & I felt like I was learning new things. & 5/6/2021 8:02 AM \\
\hline 477 & Nothing & 5/5/2021 11:19 PM \\
\hline 478 & I think I did learn some things and worked out some of my problems. & 5/5/2021 9:54 PM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 479 & I don't know. & 5/5/2021 9:25 PM \\
\hline 480 & The work I get is just right for me & 5/5/2021 9:16 PM \\
\hline 481 & I got to understand my math lessons better & 5/5/2021 8:56 PM \\
\hline 482 & i learned new stuff & 5/5/2021 7:58 PM \\
\hline 483 & I understood more things with it. I understand things now that I wouldn't without i-Ready. & 5/5/2021 7:17 PM \\
\hline 484 & It helped me understand some lessons in different subjects. & 5/5/2021 7:13 PM \\
\hline 485 & I learnt a lot & 5/5/2021 6:53 PM \\
\hline 486 & using it for practice & 5/5/2021 6:53 PM \\
\hline 487 & nothing I hate it & 5/5/2021 5:42 PM \\
\hline 488 & The English I Ready helped me a lot. & 5/5/2021 5:40 PM \\
\hline 489 & math & 5/5/2021 4:49 PM \\
\hline 490 & The lessons are somewhat enjoyable. & 5/5/2021 4:45 PM \\
\hline 491 & N/A & 5/5/2021 4:11 PM \\
\hline 492 & doing 30 min per week & 5/5/2021 3:46 PM \\
\hline 493 & I got some of the lessons correct. & 5/5/2021 3:42 PM \\
\hline 494 & The diagnostic for math and reading & 5/5/2021 3:33 PM \\
\hline 495 & Made me understand subjects better. & 5/5/2021 3:29 PM \\
\hline 496 & The minute counter was right & 5/5/2021 3:16 PM \\
\hline 497 & I understood some new concepts in math. & 5/5/2021 3:09 PM \\
\hline 498 & Something that went well for me was i-Ready helping me with positive and negative numbers. & 5/5/2021 3:07 PM \\
\hline 499 & Nothing & 5/5/2021 3:07 PM \\
\hline 500 & Math & 5/5/2021 2:53 PM \\
\hline 501 & It helped me with things I needed help with & 5/5/2021 2:53 PM \\
\hline 502 & Something that went well when I used i-Ready was I increased my math level. & 5/5/2021 2:42 PM \\
\hline 503 & I-Ready is a good practice website and helped remember things I learned last year. & 5/5/2021 2:14 PM \\
\hline 504 & being able to have a set schedule each week and doing my iready each week at the same time & 5/5/2021 2:00 PM \\
\hline 505 & It challenged my brain. & 5/5/2021 1:53 PM \\
\hline 506 & I think i-Ready helped a little when I was in school. & 5/5/2021 1:26 PM \\
\hline 507 & It helped me understand some subjects better & 5/5/2021 1:25 PM \\
\hline 508 & I was able to understand what it taught me well. & 5/5/2021 1:25 PM \\
\hline 509 & Not much that I can think of. & 5/5/2021 1:15 PM \\
\hline 510 & It helps me understand math and reading better. & 5/5/2021 1:11 PM \\
\hline 511 & I'm not even sure my self, but I can say with confidence that I dont like I-ready very much & 5/5/2021 1:11 PM \\
\hline 512 & Nothing & 5/5/2021 1:10 PM \\
\hline 513 & The lessons were sort of at my level & 5/5/2021 1:09 PM \\
\hline 514 & I don't need help from the teachers while using it & 5/5/2021 1:06 PM \\
\hline 515 & The fact that it is an online program was helpful because I have been doing online school this year. & 5/5/2021 12:58 PM \\
\hline 516 & It helped me understand some of my work better. & 5/5/2021 12:55 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 517 & One of the English lessons & 5/5/2021 12:52 PM \\
\hline 518 & I was able to finish all my assignments on I-Ready & 5/5/2021 12:51 PM \\
\hline 519 & It did help me a little bit on catching up with math & 5/5/2021 12:50 PM \\
\hline 520 & I'm not really sure & 5/5/2021 12:49 PM \\
\hline 521 & I learned a few things from i-Ready that my class hasn't yet. & 5/5/2021 12:33 PM \\
\hline 522 & Gave me learning practice & 5/5/2021 12:19 PM \\
\hline 523 & its helped me a little bit to understand math home work that i have & 5/5/2021 12:16 PM \\
\hline 524 & The games that you can use points to play. & 5/5/2021 12:09 PM \\
\hline 525 & it helped me do the things i do in class & 5/5/2021 12:05 PM \\
\hline 526 & Nothing much. I would say the only thing was the satisfaction of getting it over with. & 5/5/2021 12:05 PM \\
\hline 527 & Understanding the Lessons & 5/5/2021 12:04 PM \\
\hline 528 & Reading & 5/5/2021 11:55 AM \\
\hline 529 & non & 5/5/2021 11:47 AM \\
\hline 530 & I sort of liked reading for the few past lessons but not really still & 5/5/2021 11:41 AM \\
\hline 531 & Only the reading part. I strongly hated math. & 5/5/2021 11:36 AM \\
\hline 532 & I don't have many praises for it. & 5/5/2021 11:35 AM \\
\hline 533 & What I was reading & 5/5/2021 11:33 AM \\
\hline 534 & I liked the ones where they do the words and I get to move to the place they need to go. I learned a lot. & 5/5/2021 11:32 AM \\
\hline 535 & NOTHING & 5/5/2021 11:30 AM \\
\hline 536 & I was able to understand math and reading problems. The instructions and information given were clear and fun to learn. & 5/5/2021 11:22 AM \\
\hline 537 & I liked rollie pollie math & 5/5/2021 11:17 AM \\
\hline 538 & help me with reading & 5/5/2021 11:13 AM \\
\hline 539 & it teaches me more about math and reading. It's fun to learn and write. & 5/5/2021 11:13 AM \\
\hline 540 & The only thing i-Ready really helped me with was teaching how to find the area of some shapes. & 5/5/2021 11:10 AM \\
\hline 541 & It teach me a lot of things & 5/5/2021 11:00 AM \\
\hline 542 & The math part was very helpful. & 5/5/2021 10:55 AM \\
\hline 543 & When I got to level c which teachs me more stuff about math and reading and it helps me learn better. & 5/5/2021 10:52 AM \\
\hline 544 & something that wnt we was not really any thing i did not under stand any of the lessons & 5/5/2021 10:52 AM \\
\hline 545 & helped me read more and understand words more. & 5/5/2021 10:45 AM \\
\hline 546 & lessons & 5/5/2021 10:37 AM \\
\hline 547 & What went well for me in using i-Ready this school year was, understanding concepts before I learned them in class. & 5/5/2021 10:35 AM \\
\hline 548 & It was fun w the characters & 5/5/2021 10:29 AM \\
\hline 549 & math & 5/5/2021 10:29 AM \\
\hline 550 & I enjoyed the math. & 5/5/2021 10:25 AM \\
\hline 551 & The i-ready tools helped me learn better. & 5/5/2021 10:13 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 552 & A lot, as I was able to learn more about some things in math & 5/5/2021 10:11 AM \\
\hline 553 & I leared new ways to cite evidence. & 5/5/2021 10:09 AM \\
\hline 554 & I learned more math skills & 5/5/2021 10:08 AM \\
\hline 555 & The quizes went pretty well for me when I was using i-Ready this school year. & 5/5/2021 10:06 AM \\
\hline 556 & nothing & 5/5/2021 10:05 AM \\
\hline 557 & a lot of thing & 5/5/2021 10:02 AM \\
\hline 558 & heped with math & 5/5/2021 10:01 AM \\
\hline 559 & Easy to use & 5/5/2021 9:59 AM \\
\hline 560 & It taught me stuff that was ahead of my class. & 5/5/2021 9:59 AM \\
\hline 561 & it helped me learn better & 5/5/2021 9:57 AM \\
\hline 562 & I Ready Reading. & 5/5/2021 9:52 AM \\
\hline 563 & That it let me start and stop as needed. & 5/5/2021 9:51 AM \\
\hline 564 & It helped me understand reading and understanding the subject i'm reading about. For math, it helped me understand word problems & 5/5/2021 9:51 AM \\
\hline 565 & It helped me understand the subject by giving me more than one practice problem. & 5/5/2021 9:49 AM \\
\hline 566 & I learned a few things that I might've missed when I jumped to challenge. & 5/5/2021 9:49 AM \\
\hline 567 & It taught me different ways to do reading and math. It was a fun way to learn and practice. & 5/5/2021 9:48 AM \\
\hline 568 & learning more & 5/5/2021 9:46 AM \\
\hline 569 & it made it fun & 5/5/2021 9:43 AM \\
\hline 570 & I don't think anything did. & 5/5/2021 9:43 AM \\
\hline 571 & I did learn Math and reading at which level I should because everything is normally easy & 5/5/2021 9:39 AM \\
\hline 572 & it was a way for the teacher to not have to spend a lot of time but still get students to learn & 5/5/2021 9:38 AM \\
\hline 573 & I was pretty good teaching the subject & 5/5/2021 9:38 AM \\
\hline 574 & reading & 5/5/2021 9:38 AM \\
\hline 575 & not really anything, & 5/5/2021 9:37 AM \\
\hline 576 & geometry & 5/5/2021 9:37 AM \\
\hline 577 & I somewhat found out where I was placed in my math skills & 5/5/2021 9:36 AM \\
\hline 578 & nothing & 5/5/2021 9:35 AM \\
\hline 579 & Most of the time I was doing lessons that had to do with what we were doing in school. & 5/5/2021 9:34 AM \\
\hline 580 & I understood most of the topics it taught. & 5/5/2021 9:31 AM \\
\hline 581 & something that went well using i-Ready was i learn new stuff & 5/5/2021 9:31 AM \\
\hline 582 & The math went well. & 5/5/2021 9:30 AM \\
\hline 583 & Nothing much & 5/5/2021 9:29 AM \\
\hline 584 & I like doing fractions and math in i-ready. I didn't like the reading, it was always boring and there was hardly any fun topics & 5/5/2021 9:19 AM \\
\hline 585 & I don't know & 5/5/2021 9:17 AM \\
\hline 586 & it help me a lot & 5/5/2021 9:17 AM \\
\hline 587 & math & 5/5/2021 9:16 AM \\
\hline 588 & None & 5/5/2021 9:13 AM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 589 & I could practice more academically & 5/5/2021 9:13 AM \\
\hline 590 & nothing & 5/5/2021 9:09 AM \\
\hline 591 & I learned a bit ahead of my grade & 5/5/2021 9:09 AM \\
\hline 592 & nothing & 5/5/2021 9:08 AM \\
\hline 593 & I got to practice my math skills. & 5/5/2021 9:08 AM \\
\hline 594 & it helped me understand more of a subject. & 5/5/2021 9:08 AM \\
\hline 595 & games & 5/5/2021 9:07 AM \\
\hline 596 & Nothing. everything the i-ready has taught me I already knew. & 5/5/2021 9:05 AM \\
\hline 597 & Helped me practice my skills. & 5/5/2021 9:03 AM \\
\hline 598 & Doing the practice lessons on iready. & 5/5/2021 9:03 AM \\
\hline 599 & Nothing, for some reason the lessons I got were all ones I knew and I never learned anything & 5/5/2021 9:01 AM \\
\hline 600 & I recently go an lesson about volume and surface area. The next week I had a pretest on that. I got a high score and passed the pretest. & 5/5/2021 9:00 AM \\
\hline 601 & I think what went well was that I actually had to do things and not just listen. & 5/5/2021 8:59 AM \\
\hline 602 & Fractions sorta? & 5/5/2021 8:58 AM \\
\hline 603 & I don't know & 5/5/2021 8:55 AM \\
\hline 604 & I learned about how to use variables, and I learned adding, subtracting, multiplying and dividing negatives. & 5/5/2021 8:55 AM \\
\hline 605 & good & 5/5/2021 8:52 AM \\
\hline 606 & I don't know, it wasn't good, but it wasn't bad ether. & 5/5/2021 8:48 AM \\
\hline 607 & I understood most of the lessons. & 5/5/2021 8:48 AM \\
\hline 608 & I hate it so much, I would never eat their power pasta & 5/5/2021 8:43 AM \\
\hline 609 & I- Ready healped me learn and advance my skills after my teacher teachees us the basic stuff. & 5/5/2021 8:42 AM \\
\hline 610 & When I got a question wrong, having I-ready give me step by step instructions. & 5/5/2021 8:40 AM \\
\hline 611 & i-ready helped me get better at certain things & 5/5/2021 8:34 AM \\
\hline 612 & a+ & 5/5/2021 8:31 AM \\
\hline 613 & its easy to work with the website and you can learn how to use it very quick & 5/5/2021 8:31 AM \\
\hline 614 & I was a little ahead than what we were learning so I was good at pretests. & 5/5/2021 8:26 AM \\
\hline 615 & it helped me learn a few things i had forgoten & 5/5/2021 8:25 AM \\
\hline 616 & I learned more about things I didn't understand & 5/5/2021 8:20 AM \\
\hline 617 & i dont know :) & 5/5/2021 8:17 AM \\
\hline 618 & It helped me know what I am doing & 5/5/2021 8:05 AM \\
\hline 619 & one thing that went well was that i-ready helped me learn about all of my subjects & 5/5/2021 8:00 AM \\
\hline 620 & easy to use & 5/5/2021 7:42 AM \\
\hline 621 & I learned all sorts of types of math, i'm currently learning geometry. & 5/5/2021 7:35 AM \\
\hline 622 & \(i\) understood a small portion of the math & 5/5/2021 6:52 AM \\
\hline 623 & Learning the new subjects and understanding them & 5/4/2021 9:58 PM \\
\hline 624 & i-Ready adjusts to my level after I take the assessment. & 5/4/2021 8:45 PM \\
\hline 625 & English & 5/4/2021 7:25 PM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 626 & i went up in math and reading & 5/4/2021 3:28 PM \\
\hline 627 & it helped we with a lesson & 5/4/2021 3:27 PM \\
\hline 628 & Helped me with math & 5/4/2021 3:25 PM \\
\hline 629 & everything went well & 5/4/2021 3:24 PM \\
\hline 630 & math & 5/4/2021 3:23 PM \\
\hline 631 & Not having a plain worksheet format, more of a interactive story type game that in the end still taught you something new. & 5/4/2021 3:22 PM \\
\hline 632 & The readying is ok & 5/4/2021 3:11 PM \\
\hline 633 & I only used it once. & 5/4/2021 3:08 PM \\
\hline 634 & It help me understand better in math and reading & 5/4/2021 3:01 PM \\
\hline 635 & Makes me practice more & 5/4/2021 2:55 PM \\
\hline 636 & What went well for I-Ready was: Some of the practice lessons went fast, and the quiz was fast, I liked it. & 5/4/2021 2:53 PM \\
\hline 637 & It raise my grades from Early 4th to Late 5th in both Reading and Math & 5/4/2021 2:50 PM \\
\hline 638 & I have learned a lot of different thing in i-ready & 5/4/2021 2:50 PM \\
\hline 639 & I think the vocabulary lessons helped me. & 5/4/2021 2:49 PM \\
\hline 640 & It made math and reading more sense & 5/4/2021 2:49 PM \\
\hline 641 & Something that went well was when they explained everything well. & 5/4/2021 2:49 PM \\
\hline 642 & I feel like i got better alot ot math and when a lesson comes and if we are acltly doing it in class \(i\) understand and reading helps get alot of practice of race & 5/4/2021 2:49 PM \\
\hline 643 & I improved in some subjects in Math. & 5/4/2021 2:48 PM \\
\hline 644 & math & 5/4/2021 2:48 PM \\
\hline 645 & I learn a lot & 5/4/2021 2:48 PM \\
\hline 646 & i learnd more math & 5/4/2021 2:22 PM \\
\hline 647 & i-Ready helped me understand the topic more. & 5/4/2021 2:20 PM \\
\hline 648 & I learned to add, subtract, multiply, and divide fractions & 5/4/2021 2:19 PM \\
\hline 649 & math & 5/4/2021 2:18 PM \\
\hline 650 & learnning & 5/4/2021 2:17 PM \\
\hline 651 & it's helped me i was confused over things my actual teacher has taught before. and the teacher is Mrs.Berger & 5/4/2021 2:16 PM \\
\hline 652 & i- Ready reading went well for me. & 5/4/2021 2:15 PM \\
\hline 653 & i don't know & 5/4/2021 2:15 PM \\
\hline 654 & both math and reading & 5/4/2021 2:14 PM \\
\hline 655 & The Math & 5/4/2021 2:14 PM \\
\hline 656 & the games & 5/4/2021 2:14 PM \\
\hline 657 & it helped me to get stronger at math & 5/4/2021 2:14 PM \\
\hline 658 & Going through the lessons easy to put down my answers. & 5/4/2021 2:13 PM \\
\hline 659 & some lessens where easy & 5/4/2021 2:12 PM \\
\hline 660 & I learned a lot more than I used to know & 5/4/2021 2:11 PM \\
\hline 661 & really good & 5/4/2021 2:11 PM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 662 & math and reading & 5/4/2021 2:10 PM \\
\hline 663 & Helping me understand subjects even more & 5/4/2021 2:10 PM \\
\hline 664 & ???????? & 5/4/2021 2:10 PM \\
\hline 665 & tbh i dont know & 5/4/2021 2:09 PM \\
\hline 666 & it helped me understand math somewhat better & 5/4/2021 2:09 PM \\
\hline 667 & hellping me undrstan & 5/4/2021 2:08 PM \\
\hline 668 & it somwaht helped me & 5/4/2021 2:07 PM \\
\hline 669 & MATH & 5/4/2021 2:05 PM \\
\hline 670 & Math & 5/4/2021 2:05 PM \\
\hline 671 & it helped me get better at reading and math & 5/4/2021 2:05 PM \\
\hline 672 & the tests were easy to understand & 5/4/2021 2:00 PM \\
\hline 673 & not much & 5/4/2021 1:59 PM \\
\hline 674 & the layout of the assignments & 5/4/2021 1:58 PM \\
\hline 675 & i it really helped me with math & 5/4/2021 1:58 PM \\
\hline 676 & math & 5/4/2021 1:42 PM \\
\hline 677 & nothing because it kept on doing the same lesson and when i got one problem wrong it kept on doing easier problems & 5/4/2021 1:30 PM \\
\hline 678 & What went well was my lessons because it was the perfect level for me. & 5/4/2021 1:29 PM \\
\hline 679 & Everything but there was a problem where it made me go back to addition and subtraction. & 5/4/2021 1:29 PM \\
\hline 680 & nothing & 5/4/2021 1:29 PM \\
\hline 681 & I didn't get frusterated like most other shoole apps made me rage & 5/4/2021 1:29 PM \\
\hline 682 & Learn more stuff i guess & 5/4/2021 1:29 PM \\
\hline 683 & the games & 5/4/2021 1:28 PM \\
\hline 684 & Well, I got to practice math problems and review them. & 5/4/2021 1:28 PM \\
\hline 685 & It helps me with a lot of things & 5/4/2021 1:28 PM \\
\hline 686 & I ready reading is helping but i ready math is not helping at all. & 5/4/2021 1:28 PM \\
\hline 687 & Somethings though none of them were fun nor entertaining (unless you count the games). ) & 5/4/2021 1:28 PM \\
\hline 688 & Nothing really & 5/4/2021 1:28 PM \\
\hline 689 & that I got to level D-E & 5/4/2021 1:27 PM \\
\hline 690 & the reading lesson & 5/4/2021 1:27 PM \\
\hline 691 & It Helped me with me with math and reading & 5/4/2021 1:27 PM \\
\hline 692 & I don't know & 5/4/2021 1:27 PM \\
\hline 693 & the math & 5/4/2021 1:25 PM \\
\hline 694 & the begining & 5/4/2021 1:25 PM \\
\hline 695 & lots & 5/4/2021 1:25 PM \\
\hline 696 & I learned about the bleeding tooth fungus & 5/4/2021 1:25 PM \\
\hline 697 & I was able to understand the subject a lot better and got much better grades. & 5/4/2021 1:25 PM \\
\hline 698 & I don't really know. I think something about math and something about reading. & 5/4/2021 1:25 PM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 699 & Every thing & 5/4/2021 1:25 PM \\
\hline 700 & it didn't really help that much & 5/4/2021 1:24 PM \\
\hline 701 & Doing the lessons. & 5/4/2021 1:23 PM \\
\hline 702 & the math games & 5/4/2021 1:23 PM \\
\hline 703 & i-Ready didn't glitch that much and it helped me. & 5/4/2021 1:23 PM \\
\hline 704 & i finished it & 5/4/2021 12:41 PM \\
\hline 705 & nothing & 5/4/2021 12:19 PM \\
\hline 706 & I don't really know.. not much went well. & 5/4/2021 12:03 PM \\
\hline 707 & Understanding the material. & 5/4/2021 12:01 PM \\
\hline 708 & i learned about absolute values and some other stuff & 5/4/2021 11:48 AM \\
\hline 709 & Sometimes it helped me understand things better. & 5/4/2021 11:17 AM \\
\hline 710 & the fraction. & 5/4/2021 11:17 AM \\
\hline 711 & i loved it & 5/4/2021 11:10 AM \\
\hline 712 & Everything. & 5/4/2021 11:10 AM \\
\hline 713 & Reading & 5/4/2021 11:09 AM \\
\hline 714 & i-Ready reading & 5/4/2021 11:08 AM \\
\hline 715 & Math and Reading & 5/4/2021 11:07 AM \\
\hline 716 & It helped me with reviewing some stuff & 5/4/2021 11:06 AM \\
\hline 717 & everything & 5/4/2021 11:06 AM \\
\hline 718 & reading and math & 5/4/2021 11:06 AM \\
\hline 719 & Reading & 5/4/2021 11:06 AM \\
\hline 720 & I learned how to read better & 5/4/2021 11:04 AM \\
\hline 721 & The assignments boosted my grade a little. & 5/4/2021 11:03 AM \\
\hline 722 & everything & 5/4/2021 11:03 AM \\
\hline 723 & i like it because its perfect in minutes & 5/4/2021 11:03 AM \\
\hline 724 & it made math fun & 5/4/2021 11:01 AM \\
\hline 725 & Math and reading & 5/4/2021 11:00 AM \\
\hline 726 & math and reading & 5/4/2021 11:00 AM \\
\hline 727 & i ready was challanging and i did not enjoy using it. & 5/4/2021 10:57 AM \\
\hline 728 & I was able to practice my math and reading more & 5/4/2021 10:15 AM \\
\hline 729 & That I understood the lessons and it was very educational & 5/4/2021 10:15 AM \\
\hline 730 & I understood the lessons a lot more & 5/4/2021 10:14 AM \\
\hline 731 & When using i-ready this year it somewhat helped me understand the subject & 5/4/2021 10:14 AM \\
\hline 732 & that I was improving & 5/4/2021 10:13 AM \\
\hline 733 & I enjoyed that it got me ahead from what my teacher was teaching us. & 5/4/2021 10:13 AM \\
\hline 734 & It helped me understand things better. & 5/4/2021 10:13 AM \\
\hline 735 & nothing & 5/4/2021 10:12 AM \\
\hline 736 & I understood some subjects before my Teacher started teaching them & 5/4/2021 10:12 AM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 737 & I improved on my reading & 5/4/2021 10:12 AM \\
\hline 738 & i learned a couple new things & 5/4/2021 10:11 AM \\
\hline 739 & I reviewed topics I didn't understand that well. & 5/4/2021 10:02 AM \\
\hline 740 & My Teacher said I progressed alot in my math skills. & 5/4/2021 10:00 AM \\
\hline 741 & noting really & 5/4/2021 9:59 AM \\
\hline 742 & getting it done & 5/4/2021 9:56 AM \\
\hline 743 & I'm not to sure. & 5/4/2021 9:56 AM \\
\hline 744 & I got to learn more about the subjects I was working on. & 5/4/2021 9:54 AM \\
\hline 745 & it helped me understand what i need to improve on & 5/4/2021 9:54 AM \\
\hline 746 & some stuff & 5/4/2021 9:53 AM \\
\hline 747 & it helped me with math and was fun. & 5/4/2021 9:53 AM \\
\hline 748 & both & 5/4/2021 9:48 AM \\
\hline 749 & Good for practice & 5/4/2021 9:44 AM \\
\hline 750 & Its easy to use & 5/4/2021 9:42 AM \\
\hline 751 & if I had to retake a lesson I understood it better. & 5/4/2021 9:39 AM \\
\hline 752 & math & 5/4/2021 9:37 AM \\
\hline 753 & What went well was finally understanding something that i quite didnt understand before & 5/4/2021 9:37 AM \\
\hline 754 & I feel like I got better in different math skills & 5/4/2021 9:33 AM \\
\hline 755 & i learned a lot about word problems & 5/4/2021 9:30 AM \\
\hline 756 & i-Ready helped me understand math and reading better in class & 5/4/2021 9:30 AM \\
\hline 757 & idk & 5/4/2021 9:29 AM \\
\hline 758 & n/a & 5/4/2021 9:29 AM \\
\hline 759 & it helped me practice for my math and reading classes when i needed it. & 5/4/2021 9:29 AM \\
\hline 760 & It helped me understand some more things about math and reading. & 5/4/2021 9:29 AM \\
\hline 761 & I learned on things I had some knowledge on but i-Ready brought me all the way through understanding & 5/4/2021 9:21 AM \\
\hline 762 & being able to learn some things that would help me in my reading and math subjects & 5/4/2021 9:11 AM \\
\hline 763 & It helped me a lot in math & 5/4/2021 8:45 AM \\
\hline 764 & Allowing me to get better at specfic topics that I learned from I-Ready. & 5/4/2021 8:45 AM \\
\hline 765 & it helped me understand my class better and make a lot of progress & 5/4/2021 8:45 AM \\
\hline 766 & Using i-Ready went well for me because of what I have learned in the lessons. & 5/4/2021 8:44 AM \\
\hline 767 & I liked how they added characters, it made me understand a little bit better. & 5/4/2021 8:44 AM \\
\hline 768 & the iready lessons are educational & 5/4/2021 8:44 AM \\
\hline 769 & not a thing & 5/4/2021 8:44 AM \\
\hline 770 & to understand one problem & 5/4/2021 8:43 AM \\
\hline 771 & it helped learn a little & 5/4/2021 8:26 AM \\
\hline 772 & I learned a little more of different ways to solve problems. & 5/4/2021 8:22 AM \\
\hline 773 & math & 5/4/2021 8:21 AM \\
\hline 774 & It's not to difficult, but not super easy either. & 5/4/2021 8:21 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 775 & nothing really, I just dont like i-ready & 5/4/2021 8:20 AM \\
\hline 776 & I dont know & 5/4/2021 8:20 AM \\
\hline 777 & I didnt use it much but when I did it helped with some small things. & 5/4/2021 8:20 AM \\
\hline 778 & It helped me understand negatives better in math. & 5/4/2021 8:20 AM \\
\hline 779 & understanding the math problem a little better & 5/4/2021 8:20 AM \\
\hline 780 & It was another way the taught me math. & 5/4/2021 8:19 AM \\
\hline 781 & I understood one thing a little more clear & 5/4/2021 8:19 AM \\
\hline 782 & The i-Ready test was good & 5/4/2021 8:18 AM \\
\hline 783 & uhm i guess the diagnostic & 5/4/2021 8:18 AM \\
\hline 784 & nothing i never used it & 5/4/2021 7:37 AM \\
\hline 785 & nothing i didnt do it & 5/4/2021 7:26 AM \\
\hline 786 & the lessons & 5/4/2021 6:06 AM \\
\hline 787 & I can't really use iReady, my computer has issues with the diagnostic. & 5/3/2021 9:32 PM \\
\hline 788 & nothing & 5/3/2021 6:45 PM \\
\hline 789 & It was fun to challenge myself. & 5/3/2021 5:57 PM \\
\hline 790 & Its very interacting and makes you participate a lot & 5/3/2021 5:21 PM \\
\hline 791 & idk & 5/3/2021 4:54 PM \\
\hline 792 & it was easy, and it was a nice break from the things we were doing in class. & 5/3/2021 4:29 PM \\
\hline 793 & Something that went well, is that I understood most of what it was teaching me. & 5/3/2021 3:16 PM \\
\hline 794 & nothing really. & 5/3/2021 3:08 PM \\
\hline 795 & I learned new subjects that I would have no idea how to solve. & 5/3/2021 3:08 PM \\
\hline 796 & it had games for coins & 5/3/2021 2:24 PM \\
\hline 797 & nothing. & 5/3/2021 2:21 PM \\
\hline 798 & Getting my grades consistent & 5/3/2021 2:14 PM \\
\hline 799 & I improved my scores & 5/3/2021 2:08 PM \\
\hline 800 & The lessons & 5/3/2021 2:08 PM \\
\hline 801 & I got to work on some fun lessons. & 5/3/2021 2:08 PM \\
\hline 802 & learning & 5/3/2021 2:07 PM \\
\hline 803 & not much at all & 5/3/2021 2:07 PM \\
\hline 804 & I ready helped me understand learning more & 5/3/2021 2:07 PM \\
\hline 805 & I got to do math but then fun games that use math. & 5/3/2021 2:06 PM \\
\hline 806 & Not much & 5/3/2021 2:05 PM \\
\hline 807 & It helped me improve on Iready lessons I didn't already know. & 5/3/2021 2:05 PM \\
\hline 808 & there were some tests & 5/3/2021 2:03 PM \\
\hline 809 & Learning new stuff & 5/3/2021 1:59 PM \\
\hline 810 & I'm not sure & 5/3/2021 1:15 PM \\
\hline 811 & Umm, it's fairly simple to use & 5/3/2021 1:13 PM \\
\hline 812 & I felt like the reading I-ready was a bit easier than the math. & 5/3/2021 1:13 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 813 & not to many technical issues & 5/3/2021 1:12 PM \\
\hline 814 & It helped me see where I was struggling. & 5/3/2021 1:11 PM \\
\hline 815 & I could immediately go to the I-Ready lessons if I was having trouble understanding material, because my teacher would always have something posted that was related to the topic at hand and I didn't have to search online, on Youtube, or Khan Academy (which really helps by the way, Khan Academy is my favorite) because it was already there and setup for me on I-Ready. & 5/3/2021 1:11 PM \\
\hline 816 & When I don't understand a question, I-ready gives me multiple tries to solve it, then helps me step it out. I also like how they make it interactive with pictures and diagrams so I don't get too bored. & 5/3/2021 1:11 PM \\
\hline 817 & It helped me understand how to do some of the math. & 5/3/2021 1:11 PM \\
\hline 818 & slow speed & 5/3/2021 1:11 PM \\
\hline 819 & They explained the lesson well. & 5/3/2021 1:09 PM \\
\hline 820 & I was able to successfully review math this year. & 5/3/2021 1:09 PM \\
\hline 821 & The diagnostic had some tools & 5/3/2021 1:09 PM \\
\hline 822 & I think the explaining was ok, and there was also some practice which helped a bit. & 5/3/2021 1:09 PM \\
\hline 823 & the assessments went well & 5/3/2021 1:08 PM \\
\hline 824 & I got a little extra practice in just in case & 5/3/2021 1:08 PM \\
\hline 825 & i-ready helped study for test and understand the concept. & 5/3/2021 1:08 PM \\
\hline 826 & I was able to prepare for the tests some. & 5/3/2021 1:08 PM \\
\hline 827 & It helped me understand some concepts better & 5/3/2021 1:07 PM \\
\hline 828 & the math & 5/3/2021 1:07 PM \\
\hline 829 & I never had any technical issues with Iready & 5/3/2021 1:07 PM \\
\hline 830 & It helped me understand the concepts of math \& reading. & 5/3/2021 1:07 PM \\
\hline 831 & It helped me understand lessons better & 5/3/2021 1:07 PM \\
\hline 832 & It gave me practice & 5/3/2021 1:07 PM \\
\hline 833 & well, its good review, I guess & 5/3/2021 1:07 PM \\
\hline 834 & the games & 5/3/2021 1:07 PM \\
\hline 835 & the data & 5/3/2021 1:07 PM \\
\hline 836 & Because of I ready I learned more about my strengths and weaknesses in math. And helped strengthen my weaknesses & 5/3/2021 1:07 PM \\
\hline 837 & the assignments were fairly quick and didn't have much instruction needed & 5/3/2021 1:07 PM \\
\hline 838 & Nothing went super well, but nothing bad really happened either & 5/3/2021 1:07 PM \\
\hline 839 & The teacher was able to give us assingments & 5/3/2021 1:07 PM \\
\hline 840 & math & 5/3/2021 1:06 PM \\
\hline 841 & I don't know & 5/3/2021 1:06 PM \\
\hline 842 & it did not help me with school verymuch this year & 5/3/2021 1:06 PM \\
\hline 843 & I was able to catch up on math I missed when I skiped from 6th grade math to Algebra. & 5/3/2021 1:05 PM \\
\hline 844 & Things went smoothly though the lessons were long. & 5/3/2021 12:47 PM \\
\hline 845 & I passed all of my lessons. & 5/3/2021 12:46 PM \\
\hline 846 & I got better grades for doing the lessons. & 5/3/2021 12:45 PM \\
\hline 847 & I gained a slightly better understanding in some areas in math. & 5/3/2021 12:45 PM \\
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\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 848 & I don't really know.. not much went well. & 5/3/2021 12:43 PM \\
\hline 849 & I got a little quicker with solving problems. & 5/3/2021 12:43 PM \\
\hline 850 & I completed most lessons with 100\% & 5/3/2021 12:42 PM \\
\hline 851 & it was easy, and it was a nice break from the things we were doing in class. & 5/3/2021 12:41 PM \\
\hline 852 & nothing & 5/3/2021 12:38 PM \\
\hline 853 & nothing & 5/3/2021 12:35 PM \\
\hline 854 & I went over places where i had missed information & 5/3/2021 12:30 PM \\
\hline 855 & Some free points on my grade, I suppose. & 5/3/2021 12:19 PM \\
\hline 856 & What went well for me when using i-Ready this school year was learning more in depth about the subjects I was working on. & 5/3/2021 11:55 AM \\
\hline 857 & The video examples help me understand the topic better & 5/3/2021 11:53 AM \\
\hline 858 & It didn't glitch or lag. & 5/3/2021 11:52 AM \\
\hline 859 & I'm able to understand the problems better & 5/3/2021 11:50 AM \\
\hline 860 & nothing & 5/3/2021 11:49 AM \\
\hline 861 & Some of the lessons were a bit more fun than plain math worksheets I guess, and it never broke & 5/3/2021 11:49 AM \\
\hline 862 & It did end up teaching me more about certain subjects. & 5/3/2021 11:49 AM \\
\hline 863 & I-Ready helped me understand some topics in Math. & 5/3/2021 11:48 AM \\
\hline 864 & doing the diagnostic & 5/3/2021 11:35 AM \\
\hline 865 & everything but one thing & 5/3/2021 10:35 AM \\
\hline 866 & nothing went well but nothing went well & 5/3/2021 10:35 AM \\
\hline 867 & nothing much, just did some normal iready stuff ad grinded away at my minutes. & 5/3/2021 10:35 AM \\
\hline 868 & multiplucation & 5/3/2021 10:34 AM \\
\hline 869 & idk & 5/3/2021 10:33 AM \\
\hline 870 & Helping me understand subject & 5/3/2021 10:33 AM \\
\hline 871 & both my teacher and i understand my educational standing. & 5/3/2021 10:33 AM \\
\hline 872 & nothing & 5/3/2021 10:07 AM \\
\hline 873 & It was a good refresher for my subjects. & 5/3/2021 9:45 AM \\
\hline 874 & it goes threw the lessons with me and teaches me what to do & 5/3/2021 9:31 AM \\
\hline 875 & I got an average amount of I-Ready work done. & 5/3/2021 9:31 AM \\
\hline 876 & \(i\) learned a lot more than usual & 5/3/2021 9:28 AM \\
\hline 877 & Everything went well its just boring & 5/3/2021 9:16 AM \\
\hline 878 & It helped me with my comprehension skills & 5/2/2021 10:40 PM \\
\hline 879 & I passed almost every lesson. & 5/1/2021 11:35 AM \\
\hline 880 & I got my lessons done and got most of the things right. & 4/30/2021 2:57 PM \\
\hline 881 & I think it helped me review lessons and what I'm not the best at. & 4/30/2021 2:55 PM \\
\hline 882 & I get the practice so I can earn points toward many things. I-ready is more "meh" for me, but if I had to choose one way, I would be on the negative side. & 4/30/2021 2:54 PM \\
\hline 883 & Well they werent too hard and I learned new stuff & 4/30/2021 2:53 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 884 & Reading & 4/30/2021 2:30 PM \\
\hline 885 & I found some stuff fun about I-Ready i would use it whenever I needed some help & 4/30/2021 2:30 PM \\
\hline 886 & I feel like using i-Ready was a little more fun than just working on the subject in a packet or piece of paper. It helped me understand the subject better and made learning math and reading a little more fun. & 4/30/2021 2:30 PM \\
\hline 887 & \(i\) learned more & 4/30/2021 2:28 PM \\
\hline 888 & I liked how it explained the problems well & 4/30/2021 2:28 PM \\
\hline 889 & Not really anything & 4/30/2021 2:28 PM \\
\hline 890 & just helped in math and when i was bored & 4/30/2021 2:28 PM \\
\hline 891 & The instruction was very easy to learn with and to understand. & 4/30/2021 2:28 PM \\
\hline 892 & some stuff & 4/30/2021 2:28 PM \\
\hline 893 & It was somewhat super understanding. :) I could learn more than what other programs would teach. & 4/30/2021 1:57 PM \\
\hline 894 & helped me understand & 4/30/2021 1:06 PM \\
\hline 895 & Honestly nothing & 4/30/2021 12:51 PM \\
\hline 896 & easy to use but i dont like it it takes wayy to long & 4/30/2021 12:50 PM \\
\hline 897 & I learned and understood concepts I was unsure of. & 4/30/2021 12:49 PM \\
\hline 898 & nothing & 4/30/2021 12:47 PM \\
\hline 899 & Im not really sure, but if \(i\) had to say it would be that its a simply but effective way to get students to read and learn. & 4/30/2021 12:46 PM \\
\hline 900 & nothing did & 4/30/2021 12:46 PM \\
\hline 901 & nothing & 4/30/2021 12:46 PM \\
\hline 902 & They had creative ways of helping you learn the lesson. & 4/30/2021 12:46 PM \\
\hline 903 & IM not sure, it helped give me tips on reading things & 4/30/2021 12:44 PM \\
\hline 904 & nothing & 4/30/2021 12:43 PM \\
\hline 905 & It helps me get my grades up little by litte & 4/30/2021 12:43 PM \\
\hline 906 & it tought me meaning of words that i didnt know & 4/30/2021 12:43 PM \\
\hline 907 & it helpd a bit & 4/30/2021 12:43 PM \\
\hline 908 & Understanding concepts & 4/30/2021 12:42 PM \\
\hline 909 & Reading & 4/30/2021 12:42 PM \\
\hline 910 & i loved storys & 4/30/2021 12:42 PM \\
\hline 911 & I don't know & 4/30/2021 12:41 PM \\
\hline 912 & 1 learned a lot more. & 4/30/2021 12:41 PM \\
\hline 913 & Understanding some of the mechinams of the lesson & 4/30/2021 12:40 PM \\
\hline 914 & It kinda helps me & 4/30/2021 12:36 PM \\
\hline 915 & I finished it easily, everything went smooth and it wasn't confusing. & 4/30/2021 12:33 PM \\
\hline 916 & I understand the lessons more and I can learn new things your old things.. & 4/30/2021 12:32 PM \\
\hline 917 & Nothing to be honest it was just annoying & 4/30/2021 12:31 PM \\
\hline 918 & idk & 4/30/2021 12:27 PM \\
\hline 919 & nothing & 4/30/2021 12:27 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 920 & well I fell like maybe I might have learned some thing & 4/30/2021 12:26 PM \\
\hline 921 & I don't know & 4/30/2021 12:26 PM \\
\hline 922 & nothing & 4/30/2021 12:25 PM \\
\hline 923 & getting more credits for grades & 4/30/2021 12:25 PM \\
\hline 924 & nothing & 4/30/2021 12:25 PM \\
\hline 925 & I have no positive things to say about it or can think about anything good that has happened when using it. & 4/30/2021 12:25 PM \\
\hline 926 & Nothing & 4/30/2021 12:24 PM \\
\hline 927 & nothing & 4/30/2021 12:24 PM \\
\hline 928 & Nothing & 4/30/2021 12:24 PM \\
\hline 929 & I understood more & 4/30/2021 12:24 PM \\
\hline 930 & the technology and structure of the I-Ready app is easy to use & 4/30/2021 12:24 PM \\
\hline 931 & Nothing much & 4/30/2021 12:24 PM \\
\hline 932 & idk & 4/30/2021 12:23 PM \\
\hline 933 & really i dont know & 4/30/2021 12:23 PM \\
\hline 934 & in reading i ready i learned a lot of new word and the meaning and how to know the word meaning by looking around the sentence so that helped me a lot as an English learner. & 4/30/2021 12:05 PM \\
\hline 935 & Nothing i felt that it was completely useless and unnecessary especially because this year was already difficult enough. & 4/30/2021 12:03 PM \\
\hline 936 & Um i understand a little better. & 4/30/2021 12:01 PM \\
\hline 937 & Reading & 4/30/2021 11:59 AM \\
\hline 938 & some of my reading and math skills got better & 4/30/2021 11:59 AM \\
\hline 939 & help me catch up with work & 4/30/2021 11:58 AM \\
\hline 940 & I-ready worked fine this year, so no complaints. & 4/30/2021 11:57 AM \\
\hline 941 & game breaks on it fun & 4/30/2021 11:57 AM \\
\hline 942 & it helped me understand more things & 4/30/2021 11:57 AM \\
\hline 943 & it was easy & 4/30/2021 11:56 AM \\
\hline 944 & I ready helped me understand a bit more of lessons that were already taught in math class & 4/30/2021 11:56 AM \\
\hline 945 & nothing & 4/30/2021 11:56 AM \\
\hline 946 & nothing & 4/30/2021 11:55 AM \\
\hline 947 & I learned a couple of stuff & 4/30/2021 11:55 AM \\
\hline 948 & Its good & 4/30/2021 11:55 AM \\
\hline 949 & reminding me of what i learned the year before & 4/30/2021 11:55 AM \\
\hline 950 & it is improve my English knowledge & 4/30/2021 11:55 AM \\
\hline 951 & well it taught me a lot of thing both reading and math and it helped increased my knowledge. & 4/30/2021 11:54 AM \\
\hline 952 & The silence when doing it. & 4/30/2021 11:54 AM \\
\hline 953 & i didnt enjoy this site & 4/30/2021 11:54 AM \\
\hline 954 & Something that went well when using the i-Ready tests was how it helped me keep a good schedule since they were longer tests & 4/30/2021 11:54 AM \\
\hline 955 & nothing & 4/30/2021 11:54 AM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 956 & helped me with a little bit of math & 4/30/2021 11:54 AM \\
\hline 957 & Knowing how to complete the lessons. & 4/30/2021 11:54 AM \\
\hline 958 & it helped me & 4/30/2021 11:53 AM \\
\hline 959 & i like there learning games & 4/30/2021 11:53 AM \\
\hline 960 & the break game times & 4/30/2021 11:53 AM \\
\hline 961 & Helping the teachers know where I am at & 4/30/2021 11:53 AM \\
\hline 962 & I think the reading part of it was amazing. & 4/30/2021 11:53 AM \\
\hline 963 & Learning lessons easier. & 4/30/2021 11:53 AM \\
\hline 964 & understanding more & 4/30/2021 11:53 AM \\
\hline 965 & Learning new things. & 4/30/2021 11:53 AM \\
\hline 966 & Not alot, it was pretty boring & 4/30/2021 11:53 AM \\
\hline 967 & the tests & 4/30/2021 11:53 AM \\
\hline 968 & Everything it helped me more. To understand & 4/30/2021 11:53 AM \\
\hline 969 & I know which problems i understand and which ones I don't & 4/30/2021 11:53 AM \\
\hline 970 & i dont know & 4/30/2021 11:53 AM \\
\hline 971 & I understood what they wanted me to do. & 4/30/2021 11:53 AM \\
\hline 972 & every thing & 4/30/2021 11:53 AM \\
\hline 973 & My math assignments. & 4/30/2021 11:53 AM \\
\hline 974 & I got a good score so I guess that is good & 4/30/2021 11:52 AM \\
\hline 975 & It was easy to figure out. & 4/30/2021 11:52 AM \\
\hline 976 & I didn't use it & 4/30/2021 11:52 AM \\
\hline 977 & just completing the diagnostic for both reading and math & 4/30/2021 11:52 AM \\
\hline 978 & dont know & 4/30/2021 11:52 AM \\
\hline 979 & math & 4/30/2021 11:52 AM \\
\hline 980 & I don't know. & 4/30/2021 11:52 AM \\
\hline 981 & I have only done the diagnostic & 4/30/2021 11:52 AM \\
\hline 982 & Just learning more & 4/30/2021 11:52 AM \\
\hline 983 & It helped me relearn some stuff & 4/30/2021 11:52 AM \\
\hline 984 & nothing what i did on the diagnostic was above what i knew so i didnt do well. i then got lessons on how to add decimals & 4/30/2021 11:52 AM \\
\hline 985 & I didn't understand how to do some problems but then I watched the lesson and understood it. & 4/30/2021 11:52 AM \\
\hline 986 & i don't know & 4/30/2021 11:52 AM \\
\hline 987 & I only used it once it was fine & 4/30/2021 11:52 AM \\
\hline 988 & Just learning I guess. & 4/30/2021 11:52 AM \\
\hline 989 & not much I don't like the program. & 4/30/2021 11:52 AM \\
\hline 990 & It was already online, so there wasn't much of a transition needed for when we did it from home. & 4/30/2021 11:52 AM \\
\hline 991 & It was so long ago I don't remember lol & 4/30/2021 11:52 AM \\
\hline 992 & it was simple-ish to get through & 4/30/2021 11:52 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 993 & i didn't use i ready much & 4/30/2021 11:52 AM \\
\hline 994 & i got to work on some things i didn't know along with review on some things i already knew & 4/30/2021 11:52 AM \\
\hline 995 & I learned more & 4/30/2021 11:51 AM \\
\hline 996 & It helped understnad subejects better & 4/30/2021 11:51 AM \\
\hline 997 & The website itself wasn't that difficult to use. & 4/30/2021 11:51 AM \\
\hline 998 & i improved & 4/30/2021 11:51 AM \\
\hline 999 & I got to know what reading level I am & 4/30/2021 11:51 AM \\
\hline 1000 & good explanation & 4/30/2021 11:51 AM \\
\hline 1001 & Nothing & 4/30/2021 11:51 AM \\
\hline 1002 & I understood things & 4/30/2021 11:50 AM \\
\hline 1003 & I learned comprehension better & 4/30/2021 11:50 AM \\
\hline 1004 & I get a lot of good grades when finishing assessments on i-Ready. & 4/30/2021 11:49 AM \\
\hline 1005 & new more things & 4/30/2021 11:49 AM \\
\hline 1006 & nothing & 4/30/2021 11:49 AM \\
\hline 1007 & It helped me most of the time. & 4/30/2021 11:49 AM \\
\hline 1008 & Idk & 4/30/2021 11:48 AM \\
\hline 1009 & Helped me understand the lesson better. & 4/30/2021 11:48 AM \\
\hline 1010 & Something that went well was that I was able to recover my memory of past math lessons. & 4/30/2021 11:48 AM \\
\hline 1011 & I don't know & 4/30/2021 11:48 AM \\
\hline 1012 & x & 4/30/2021 11:47 AM \\
\hline 1013 & Math & 4/30/2021 11:47 AM \\
\hline 1014 & I got better at certain subjects. & 4/30/2021 11:47 AM \\
\hline 1015 & It was almost all the questions that we learned & 4/30/2021 11:47 AM \\
\hline 1016 & noy & 4/30/2021 11:47 AM \\
\hline 1017 & Nothing & 4/30/2021 11:47 AM \\
\hline 1018 & It was fast and challenging. & 4/30/2021 11:47 AM \\
\hline 1019 & It showed me different methods when I only knew 1 way to do something. & 4/30/2021 11:47 AM \\
\hline 1020 & I used it for 2 diagnostics and that's it. It was okay I guess. & 4/30/2021 11:47 AM \\
\hline 1021 & I was able to get to the diagnostics test fairly easily. & 4/30/2021 11:47 AM \\
\hline 1022 & nothing it was stressing & 4/30/2021 11:47 AM \\
\hline 1023 & Learning & 4/30/2021 11:47 AM \\
\hline 1024 & Helping teach lessons & 4/30/2021 11:47 AM \\
\hline 1025 & i understand more a little bit in english afetr i went reading on iready & 4/30/2021 11:46 AM \\
\hline 1026 & I didn't really use i-reaady that much & 4/30/2021 11:46 AM \\
\hline 1027 & nothing & 4/30/2021 11:46 AM \\
\hline 1028 & nothing waste of my time & 4/30/2021 11:46 AM \\
\hline 1029 & Some questions helped me understand better. & 4/30/2021 11:46 AM \\
\hline 1030 & I never had to start over again like I'm sure some people have & 4/30/2021 11:46 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 1031 & Nothing it was boring and Long and hurt my head & 4/30/2021 11:46 AM \\
\hline 1032 & It was good material to learn & 4/30/2021 11:46 AM \\
\hline 1033 & The lessons went very well for me. & 4/30/2021 11:46 AM \\
\hline 1034 & Nothing it only explained a little bit & 4/30/2021 11:46 AM \\
\hline 1035 & It helped me learn more & 4/30/2021 11:46 AM \\
\hline 1036 & I didnt use it. & 4/30/2021 11:45 AM \\
\hline 1037 & Get the information stuck in my head & 4/30/2021 11:45 AM \\
\hline 1038 & understanding more. & 4/30/2021 11:45 AM \\
\hline 1039 & Doing Vocabulary & 4/30/2021 11:45 AM \\
\hline 1040 & Nothing & 4/30/2021 11:45 AM \\
\hline 1041 & Overall, using i-ready, and getting through with it to help my grades & 4/30/2021 11:44 AM \\
\hline 1042 & It's pretty easy to use, and the math lessons are pretty good & 4/30/2021 11:41 AM \\
\hline 1043 & I got to play games and learn at the same time & 4/30/2021 11:39 AM \\
\hline 1044 & i learned geometry & 4/30/2021 11:37 AM \\
\hline 1045 & nothing & 4/30/2021 11:36 AM \\
\hline 1046 & fractions and multiplication. & 4/30/2021 11:36 AM \\
\hline 1047 & learning math & 4/30/2021 11:34 AM \\
\hline 1048 & I honestly don't know & 4/30/2021 11:34 AM \\
\hline 1049 & Nothing its a stupid website that takes 2 brain cells to do and I dont have time for that crap, its mearly busy work that no one needs. & 4/30/2021 11:34 AM \\
\hline 1050 & happy & 4/30/2021 11:33 AM \\
\hline 1051 & nothing & 4/30/2021 11:33 AM \\
\hline 1052 & Well, the program didn't have any technical issues. & 4/30/2021 11:32 AM \\
\hline 1053 & I understood things better & 4/30/2021 11:30 AM \\
\hline 1054 & I learned a few new things & 4/30/2021 11:30 AM \\
\hline 1055 & im not sure & 4/30/2021 11:29 AM \\
\hline 1056 & reading because it was fun & 4/30/2021 11:29 AM \\
\hline 1057 & Nothing & 4/30/2021 11:29 AM \\
\hline 1058 & Nothing & 4/30/2021 11:29 AM \\
\hline 1059 & Learning some more math, and new words. & 4/30/2021 11:29 AM \\
\hline 1060 & idk & 4/30/2021 11:10 AM \\
\hline 1061 & i understood more things when reading & 4/30/2021 11:10 AM \\
\hline 1062 & I learned a little more. & 4/30/2021 11:10 AM \\
\hline 1063 & I was able to understand my subjects & 4/30/2021 11:10 AM \\
\hline 1064 & Learned different things? & 4/30/2021 11:09 AM \\
\hline 1065 & It helped me understand soemthing I was struggling on. & 4/30/2021 11:09 AM \\
\hline 1066 & nothing & 4/30/2021 11:08 AM \\
\hline 1067 & Literally nothing & 4/30/2021 11:08 AM \\
\hline 1068 & It was online and better than other math or reading online programs & 4/30/2021 11:08 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 1069 & It explained instructions well. & 4/30/2021 11:08 AM \\
\hline 1070 & The directions are very straight forward & 4/30/2021 11:07 AM \\
\hline 1071 & it gave me 1st grade questions & 4/30/2021 11:07 AM \\
\hline 1072 & if you needed help they provided many things. & 4/30/2021 11:07 AM \\
\hline 1073 & it helped me learn & 4/30/2021 11:06 AM \\
\hline 1074 & i dont realy know & 4/30/2021 11:06 AM \\
\hline 1075 & nothing & 4/30/2021 11:06 AM \\
\hline 1076 & I like the games in the middle of the diagnostics & 4/30/2021 11:06 AM \\
\hline 1077 & It helped me get ahead on some things and understand stuff better. & 4/30/2021 11:06 AM \\
\hline 1078 & idk it dont really rememer but not much cuz it didnt really help my grade when the said it would & 4/30/2021 11:06 AM \\
\hline 1079 & It helped me learn a lot about Reading & 4/30/2021 11:05 AM \\
\hline 1080 & nothing & 4/30/2021 11:05 AM \\
\hline 1081 & it wasnt fun nor boring & 4/30/2021 11:05 AM \\
\hline 1082 & Other than the diagnostic, I don't think I've used it much. Sorry about that. But I used it a lot last year and liked it. & 4/30/2021 11:05 AM \\
\hline 1083 & didnt use it, other than the diagnostics, which were kinda meh. & 4/30/2021 11:05 AM \\
\hline 1084 & Improved my reading skills & 4/30/2021 11:05 AM \\
\hline 1085 & Smooth no tech issues & 4/30/2021 11:05 AM \\
\hline 1086 & I feel like i ready isn't really useful to be honest and the only reason i have grown in comprehension is mainly myself & 4/30/2021 11:05 AM \\
\hline 1087 & i got to understand a see a bit of what we were going to be taught this school year ahead of time & 4/30/2021 11:05 AM \\
\hline 1088 & When taking the test I felt like it was easy to use & 4/30/2021 11:05 AM \\
\hline 1089 & You got to take your time with the test & 4/30/2021 11:05 AM \\
\hline 1090 & Understanding what I do and don't know & 4/30/2021 11:05 AM \\
\hline 1091 & nothing it brought more stress & 4/30/2021 11:05 AM \\
\hline 1092 & getting the lessons through and the fact that the lessons are the same as class so it helps with class- math. English the lessons aren't all the same but it helps me with vocabulary and puntuation & 4/30/2021 11:05 AM \\
\hline 1093 & it helped me understand the subjects that were being taught & 4/30/2021 11:04 AM \\
\hline 1094 & Worked on focusing & 4/30/2021 11:04 AM \\
\hline 1095 & I liked the simplicity of the website. & 4/30/2021 11:04 AM \\
\hline 1096 & Nothing & 4/30/2021 11:04 AM \\
\hline 1097 & I did it a lot for english and it helped & 4/30/2021 11:04 AM \\
\hline 1098 & i dont know & 4/30/2021 11:04 AM \\
\hline 1099 & i didnt like it its just to much & 4/30/2021 11:04 AM \\
\hline 1100 & it was king of hard to do because it kept on making me do it over again when my screen is off & 4/30/2021 11:04 AM \\
\hline 1101 & I understood math better. & 4/30/2021 11:04 AM \\
\hline 1102 & it went good & 4/30/2021 11:03 AM \\
\hline 1103 & I learned a little bit of stuff from i-ready. & 4/30/2021 11:03 AM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 1104 & Nothing really & 4/30/2021 11:03 AM \\
\hline 1105 & The math learning games. & 4/30/2021 11:03 AM \\
\hline 1106 & idk & 4/30/2021 11:02 AM \\
\hline 1107 & nothing & 4/30/2021 11:02 AM \\
\hline 1108 & not really anything & 4/30/2021 11:02 AM \\
\hline 1109 & what went well was the diagnostic & 4/30/2021 11:02 AM \\
\hline 1110 & i know the digree of my understanding & 4/30/2021 11:02 AM \\
\hline 1111 & I don't know I guess it helped slightly & 4/30/2021 11:02 AM \\
\hline 1112 & I understood what I learned in the lessons & 4/30/2021 11:02 AM \\
\hline 1113 & i-ready help me understand the concept that it was teaching me. & 4/30/2021 11:02 AM \\
\hline 1114 & N/A & 4/30/2021 11:01 AM \\
\hline 1115 & It was pretty nuetral to me. & 4/30/2021 11:01 AM \\
\hline 1116 & Understanding what I can do and what I can't do. & 4/30/2021 11:01 AM \\
\hline 1117 & idk & 4/30/2021 11:01 AM \\
\hline 1118 & wasting my time & 4/30/2021 11:01 AM \\
\hline 1119 & Their instructions are well explained and organized & 4/30/2021 11:01 AM \\
\hline 1120 & nothing & 4/30/2021 11:01 AM \\
\hline 1121 & Working through the levels and earning coins. & 4/30/2021 11:01 AM \\
\hline 1122 & umm im not sure & 4/30/2021 11:01 AM \\
\hline 1123 & I got a good score on the diagnostic. & 4/30/2021 11:01 AM \\
\hline 1124 & I learned new math equations & 4/30/2021 11:01 AM \\
\hline 1125 & Reading & 4/30/2021 11:00 AM \\
\hline 1126 & I don't know & 4/30/2021 11:00 AM \\
\hline 1127 & It was simple, easy, and straight forward & 4/30/2021 11:00 AM \\
\hline 1128 & Learning and understanding the lessons more & 4/30/2021 11:00 AM \\
\hline 1129 & I got a better understanding of some advanced English concepts. & 4/30/2021 11:00 AM \\
\hline 1130 & I learned some things I didnt understand & 4/30/2021 11:00 AM \\
\hline 1131 & nothing i dont like the website its harder than you think to use. & 4/30/2021 11:00 AM \\
\hline 1132 & it went well and it was easy to use & 4/30/2021 11:00 AM \\
\hline 1133 & I was getting lessons personalized for my level, so I didn't feel like I wasn't learning anything. & 4/30/2021 11:00 AM \\
\hline 1134 & I-ready was running smoothly & 4/30/2021 11:00 AM \\
\hline 1135 & idk & 4/30/2021 10:59 AM \\
\hline 1136 & Being able to take my time on it & 4/30/2021 10:59 AM \\
\hline 1137 & Learn new words. & 4/30/2021 10:59 AM \\
\hline 1138 & Everything ig didnt really feel like it was much & 4/30/2021 10:59 AM \\
\hline 1139 & i learned some math & 4/30/2021 10:59 AM \\
\hline 1140 & I got better grades. & 4/30/2021 10:59 AM \\
\hline 1141 & Lessons were clear. & 4/30/2021 10:59 AM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 1142 & I don't know & 4/30/2021 10:59 AM \\
\hline 1143 & Nothing I never used I-Ready but based on my previous experiences it wasn't very helpful. & 4/30/2021 10:59 AM \\
\hline 1144 & we just used it for tests so I don't know & 4/30/2021 10:58 AM \\
\hline 1145 & It helped me learn somethings, but it sometimes I wouldn't really get what was something and I also get bored of it most of the time & 4/30/2021 10:58 AM \\
\hline 1146 & It somewhat helped my skills & 4/30/2021 10:58 AM \\
\hline 1147 & getting the answers in & 4/30/2021 10:58 AM \\
\hline 1148 & What went well for me was that it was quick and not too hard and not too easy. & 4/30/2021 10:57 AM \\
\hline 1149 & I learned stuff & 4/30/2021 10:57 AM \\
\hline 1150 & what went well is that I got to learn a new app & 4/30/2021 10:57 AM \\
\hline 1151 & I'm not sure. My teachers said it is helping, but I don't know. It doesn't seem to be helping, but if it is, I think we should keep it up. So, I guess what went well is the extra practice. & 4/30/2021 10:02 AM \\
\hline 1152 & It has given me a preview of what I will learn eventually. & 4/30/2021 9:59 AM \\
\hline 1153 & reading & 4/30/2021 9:24 AM \\
\hline 1154 & When I started doing those lessons that are kinda, sorta, algebra lessons. & 4/30/2021 9:20 AM \\
\hline 1155 & I got better at reading. & 4/30/2021 9:19 AM \\
\hline 1156 & I understood some subjects better. & 4/30/2021 9:18 AM \\
\hline 1157 & I don't know & 4/30/2021 9:18 AM \\
\hline 1158 & I recently read about Earth houses, and it inspired me to maybe live in a earthly home when I grow up. & 4/30/2021 9:18 AM \\
\hline 1159 & pretty much everything & 4/30/2021 9:18 AM \\
\hline 1160 & I don't know & 4/30/2021 9:18 AM \\
\hline 1161 & It's to easy & 4/30/2021 9:17 AM \\
\hline 1162 & I liked doing the first close reading thing. & 4/30/2021 9:17 AM \\
\hline 1163 & i learned some stuff & 4/30/2021 9:16 AM \\
\hline 1164 & Helped me learn more about a subect & 4/30/2021 9:10 AM \\
\hline 1165 & it was good practice & 4/30/2021 9:10 AM \\
\hline 1166 & doing the lessons & 4/30/2021 9:06 AM \\
\hline 1167 & I like the quiz after the lesson & 4/30/2021 9:04 AM \\
\hline 1168 & I knew the subject a little bit better. & 4/30/2021 9:00 AM \\
\hline 1169 & Nothing & 4/30/2021 8:27 AM \\
\hline 1170 & helped me learned a bit & 4/29/2021 2:53 PM \\
\hline 1171 & the diagnostic & 4/29/2021 2:53 PM \\
\hline 1172 & I am not a huge fan of iReady, but I think it was a decent practice. Although it was really slow and the voices and extra effects were very unnecessary & 4/29/2021 2:52 PM \\
\hline 1173 & I understood what we were doing in class & 4/29/2021 2:50 PM \\
\hline 1174 & I learned extra than only in class. & 4/29/2021 2:50 PM \\
\hline 1175 & Well, the subjects that I learned through the lessons helped me somewhat... & 4/29/2021 2:50 PM \\
\hline 1176 & I don't know & 4/29/2021 2:49 PM \\
\hline 1177 & Not sure & 4/29/2021 2:49 PM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 1178 & Not really anything. & 4/29/2021 2:49 PM \\
\hline 1179 & That the i-ready diagnostic lets me see my grade level & 4/29/2021 2:49 PM \\
\hline 1180 & I was able to learn some new things using i-Ready & 4/29/2021 2:47 PM \\
\hline 1181 & I did average on he diagnostic & 4/29/2021 2:45 PM \\
\hline 1182 & nothing went well & 4/29/2021 2:44 PM \\
\hline 1183 & Knowing where I am & 4/29/2021 2:42 PM \\
\hline 1184 & Not sure & 4/29/2021 2:42 PM \\
\hline 1185 & I completed I-ready assignments with ease & 4/29/2021 2:41 PM \\
\hline 1186 & It was fairly easy & 4/29/2021 2:40 PM \\
\hline 1187 & 1 kind fl learned a bit. & 4/29/2021 2:39 PM \\
\hline 1188 & \(i\) think it was really easy to access unlike other websites. & 4/29/2021 2:39 PM \\
\hline 1189 & The math diagnostic & 4/29/2021 2:30 PM \\
\hline 1190 & I learned some stuff but not as much as I would like. & 4/29/2021 2:30 PM \\
\hline 1191 & I learned just a very small amount of geometry & 4/29/2021 2:30 PM \\
\hline 1192 & \(i\) was fun & 4/29/2021 2:29 PM \\
\hline 1193 & It was fun and also made me learn new words & 4/29/2021 2:29 PM \\
\hline 1194 & the math & 4/29/2021 2:29 PM \\
\hline 1195 & i dont know. & 4/29/2021 2:28 PM \\
\hline 1196 & Math & 4/29/2021 2:28 PM \\
\hline 1197 & math & 4/29/2021 2:27 PM \\
\hline 1198 & yes & 4/29/2021 2:27 PM \\
\hline 1199 & it helped me & 4/29/2021 2:26 PM \\
\hline 1200 & it helped me understand certain things & 4/29/2021 2:26 PM \\
\hline 1201 & The thing that went well was the quiz! & 4/29/2021 2:25 PM \\
\hline 1202 & 3/5 & 4/29/2021 2:25 PM \\
\hline 1203 & my tests were fine for my math and reading but my last math i got distrsacted & 4/29/2021 2:25 PM \\
\hline 1204 & i got to understand more things in math & 4/29/2021 2:25 PM \\
\hline 1205 & nothing & 4/29/2021 2:24 PM \\
\hline 1206 & Most of the math i-Ready helped me with my math. & 4/29/2021 2:24 PM \\
\hline 1207 & learning new math & 4/29/2021 2:23 PM \\
\hline 1208 & Reading & 4/29/2021 2:23 PM \\
\hline 1209 & i got to do my level stuff & 4/29/2021 2:23 PM \\
\hline 1210 & math & 4/29/2021 10:51 AM \\
\hline 1211 & I guess I learned a bit more about topics I didn't understand. & 4/29/2021 10:25 AM \\
\hline 1212 & I learned a lot about degrees in math & 4/29/2021 10:01 AM \\
\hline 1213 & reading I-ready though not math I-ready & 4/29/2021 9:44 AM \\
\hline 1214 & Nothing & 4/29/2021 9:44 AM \\
\hline 1215 & Only aligabra & 4/29/2021 9:42 AM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 1216 & math and reading & 4/29/2021 9:42 AM \\
\hline 1217 & it was easy and boring & 4/29/2021 9:42 AM \\
\hline 1218 & NOTHINGNOTHINGNOTHINGNOTHINGNOTHINGNOTHINGNOTHINGNOTHINGNOTHINGNO THINGNOTHINGNOTHINGNOTHINGNOTHINGNOTHINGNOTHINGNOTHING & 4/29/2021 9:42 AM \\
\hline 1219 & nothing & 4/29/2021 9:41 AM \\
\hline 1220 & I think that the reading let me learn new things. & 4/29/2021 9:40 AM \\
\hline 1221 & I was able to understand and learn about Greek mytholagy. I also learned how to read and understand the subgect and learn from it. & 4/29/2021 9:27 AM \\
\hline 1222 & not that much of anything i think iready is a waste of time & 4/29/2021 9:26 AM \\
\hline 1223 & I learned a few new words & 4/29/2021 9:26 AM \\
\hline 1224 & Got me to do at least a little bit of school work even when i don't want to & 4/29/2021 9:26 AM \\
\hline 1225 & Honestly I dont know I learned nothing in Math and learned almost nothing in reading & 4/29/2021 9:25 AM \\
\hline 1226 & Nothing great just learning & 4/29/2021 9:24 AM \\
\hline 1227 & I learned about things that I was going to learn about so i'm ahead & 4/29/2021 9:22 AM \\
\hline 1228 & I learned a lot of new stuff that I didn't know before & 4/29/2021 8:18 AM \\
\hline 1229 & I don't know & 4/28/2021 1:47 PM \\
\hline 1230 & I learned a little bit of stuff from IReady but not a ton. & 4/27/2021 8:15 PM \\
\hline 1231 & I think maybe I learned a little more math? & 4/27/2021 4:36 PM \\
\hline 1232 & the my path was okay & 4/27/2021 4:30 PM \\
\hline 1233 & I don't know. & 4/27/2021 12:11 PM \\
\hline 1234 & I-ready help to understand reading & 4/27/2021 10:55 AM \\
\hline 1235 & nothing because it was going my level of math and then it made me do 2nd grade math & 4/27/2021 10:54 AM \\
\hline 1236 & I learned a lot of math in i - Ready & 4/27/2021 10:53 AM \\
\hline 1237 & Ummm.... I don't know & 4/27/2021 10:52 AM \\
\hline 1238 & I was able to use it to learn things like new words and ideas. & 4/27/2021 10:52 AM \\
\hline 1239 & I learned a few things like how the printing press was made and who made it but past that I didn't really learn anything on math all the lessons I already knew and they were too easy for me & 4/27/2021 10:52 AM \\
\hline 1240 & I became better at fractions. & 4/27/2021 10:51 AM \\
\hline 1241 & I learned about fractions some & 4/27/2021 10:51 AM \\
\hline 1242 & What went well for me using i-Ready this school year isn't very fun. It's just lessons that I mostly now. I've been hoping for some i-Ready Reading Games, but the i-Ready employees never added it. & 4/27/2021 10:51 AM \\
\hline 1243 & everything & 4/27/2021 10:50 AM \\
\hline 1244 & Pretty much a lot of it, enjoyed the learning games more than the lessons & 4/27/2021 10:48 AM \\
\hline 1245 & better in math & 4/27/2021 9:43 AM \\
\hline 1246 & What went well for me is that I learned lots of things with i-ready so far and it has been so fun. & 4/27/2021 9:43 AM \\
\hline 1247 & Math and Reading skills & 4/27/2021 9:41 AM \\
\hline 1248 & I liked it a lot, and it was fun to go through. & 4/27/2021 9:40 AM \\
\hline 1249 & reading is fun and I loved Plory and Upe & 4/27/2021 9:40 AM \\
\hline 1250 & i-Ready helped me read better & 4/27/2021 9:39 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 1251 & I-ready helped me with fractions & 4/27/2021 9:38 AM \\
\hline 1252 & some lessons were easy, & 4/27/2021 9:38 AM \\
\hline 1253 & reading and math & 4/27/2021 9:38 AM \\
\hline 1254 & i uderstanded some things beter & 4/27/2021 9:38 AM \\
\hline 1255 & math & 4/27/2021 9:37 AM \\
\hline 1256 & The kids were forced to do this every day. Let's make it a fun thing and challenge then to see which class can do the most I ready! & 4/27/2021 8:41 AM \\
\hline 1257 & Reading & 4/26/2021 2:00 PM \\
\hline 1258 & i learned a lot of math and reading & 4/26/2021 1:38 PM \\
\hline 1259 & nothing & 4/26/2021 12:05 PM \\
\hline 1260 & it kinda help me on reading, math wasn't too helpful. & 4/26/2021 11:14 AM \\
\hline 1261 & The learning games make it a little bit more enjoyable. & 4/26/2021 11:11 AM \\
\hline 1262 & everything i got fruster at sometimes but i worked through it with my family & 4/26/2021 11:04 AM \\
\hline 1263 & I was able to understand different things better & 4/26/2021 11:01 AM \\
\hline 1264 & I love iready and i wanna keep using it. I can learn alot in iready. & 4/26/2021 10:58 AM \\
\hline 1265 & I learn new things. & 4/26/2021 10:57 AM \\
\hline 1266 & ? & 4/26/2021 10:55 AM \\
\hline 1267 & everything & 4/26/2021 10:54 AM \\
\hline 1268 & everthing & 4/26/2021 10:53 AM \\
\hline 1269 & Reading & 4/26/2021 10:53 AM \\
\hline 1270 & everything & 4/26/2021 10:53 AM \\
\hline 1271 & not to laggy & 4/26/2021 10:53 AM \\
\hline 1272 & I don't know. & 4/26/2021 10:53 AM \\
\hline 1273 & It was at my level. & 4/26/2021 10:46 AM \\
\hline 1274 & math & 4/26/2021 10:08 AM \\
\hline 1275 & they let you do it on your own time. & 4/26/2021 9:53 AM \\
\hline 1276 & i understood the platform & 4/26/2021 9:20 AM \\
\hline 1277 & I could learn new things in new lessons & 4/26/2021 9:18 AM \\
\hline 1278 & They taught me new things & 4/26/2021 9:10 AM \\
\hline 1279 & nothing really & 4/26/2021 9:10 AM \\
\hline 1280 & I got to learn some stuff & 4/26/2021 8:34 AM \\
\hline 1281 & I was put at a very hard level after the diagnostic, and I felt dumb because I could not do it, but then when Iready figured out I could not, they changed my level. & 4/26/2021 8:20 AM \\
\hline 1282 & no & 4/25/2021 4:26 PM \\
\hline 1283 & The videos help me understand stuff better & 4/23/2021 6:42 PM \\
\hline 1284 & I got \(100 \%\) most of the time & 4/23/2021 2:27 PM \\
\hline 1285 & most stuff & 4/23/2021 12:43 PM \\
\hline 1286 & I learned some things & 4/23/2021 10:21 AM \\
\hline 1287 & i learned a little about stuff & 4/23/2021 9:47 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{lll}
1288 & Understanding the lessons & \(4 / 23 / 20219: 46\) AM \\
\hline 1289 & I learned more stuff that I did not know before. & \(4 / 23 / 20219: 40 \mathrm{AM}\) \\
\hline 1290 & I got better on my geometry skills & \(4 / 23 / 20219: 37 \mathrm{AM}\) \\
\hline 1291 & I don't know & \(4 / 23 / 20219: 37 \mathrm{AM}\) \\
\hline 1292 & i-Ready does not lag a lot, it teaches the subject clearly, and it is fun. & \(4 / 23 / 20219: 37 \mathrm{AM}\) \\
\hline 1293 & Something that went well for me when using I-ready is that I learned some things so when the & \(4 / 23 / 20219: 37 \mathrm{AM}\) \\
\hline 1294 & I did the lessons and they made sense & \(4 / 23 / 20219: 36\) AM \\
\hline 1295 & It gave me lots of practice of what I already know & \(4 / 23 / 20219: 35 \mathrm{AM}\) \\
\hline 1296 & I got to learn more algebra. & \(4 / 23 / 20219: 35 \mathrm{AM}\) \\
\hline 1297 & It helped me with my spelling & \(4 / 23 / 20219: 35 \mathrm{AM}\) \\
\hline 1298 & It helped me understand things more & \(4 / 23 / 20219: 35 \mathrm{AM}\) \\
\hline 1299 & In reading it helped me a little bit & \(4 / 23 / 20219: 35 \mathrm{AM}\) \\
\hline 1300 & It says the time you have worked on correctly. & \(4 / 23 / 20219: 34 \mathrm{AM}\) \\
\hline 1301 & doing maths & \(4 / 23 / 20219: 34 \mathrm{AM}\) \\
\hline 1302 & Math & \(4 / 23 / 20219: 34 \mathrm{AM}\) \\
\hline 1303 & I understanded and learned lots of new strategies for solving math problems (etc) & \(4 / 23 / 20219: 34 \mathrm{AM}\) \\
\hline 1304 & Learning some things I hadn't known. & \(4 / 23 / 20219: 34 \mathrm{AM}\) \\
\hline 1305 & I moved up a Letter & \(4 / 23 / 20219: 34 \mathrm{AM}\) \\
\hline 1306 & not sure & \(4 / 23 / 20219: 34 \mathrm{AM}\) \\
\hline 1307 & Learning to do math skills better as math is my strong point. & \(4 / 23 / 20219: 33 \mathrm{AM}\) \\
\hline 1308 & everything & \(4 / 23 / 20219: 32 \mathrm{AM}\) \\
\hline 1309 & I learned math better & \(4 / 23 / 20218: 59 \mathrm{AM}\) \\
\hline
\end{tabular}

\section*{Q10 What did not go well for you when using i-Ready this school year?}

Answered: 1,308 Skipped: 209
\begin{tabular}{|c|c|c|}
\hline \# & RESPONSES & DATE \\
\hline 1 & some of my grades & 5/10/2021 8:51 AM \\
\hline 2 & None, really. & 5/10/2021 8:26 AM \\
\hline 3 & It didn't help me understand more in the subjects & 5/10/2021 8:24 AM \\
\hline 4 & some of the lessons were hard & 5/10/2021 8:21 AM \\
\hline 5 & all of it i hated it & 5/10/2021 8:21 AM \\
\hline 6 & everything & 5/10/2021 8:20 AM \\
\hline 7 & That sometimes it will log me out of the page. & 5/10/2021 8:20 AM \\
\hline 8 & That most of the times I didn't understand the question and the i-ready didn't explain it well & 5/10/2021 8:20 AM \\
\hline 9 & it could to long to load and i prefer reading in person & 5/10/2021 8:20 AM \\
\hline 10 & It is very boring : \(P\) & 5/10/2021 8:19 AM \\
\hline 11 & Its too childish and I cant take it. & 5/10/2021 8:19 AM \\
\hline 12 & I didn't learn a lot of information from i-ready & 5/10/2021 8:18 AM \\
\hline 13 & the lessons were just boring and i feel like it did not help & 5/10/2021 8:16 AM \\
\hline 14 & Well, I didn't see any improvement this year in all of the tests that I took. I have stayed the same throughout the year. & 5/10/2021 8:14 AM \\
\hline 15 & i wish that there was a way to fast forward or skip over the characters talking & 5/9/2021 4:01 PM \\
\hline 16 & they only give you two chances & 5/7/2021 10:38 PM \\
\hline 17 & It takes too much time. A lot of the stuff were already taught last year. If I make a mistake on the quiz, I can't go back and fix it. & 5/7/2021 7:33 PM \\
\hline 18 & What didnt go well was that you cant use it if you are not in your Chromebook. & 5/7/2021 5:11 PM \\
\hline 19 & everything & 5/7/2021 4:29 PM \\
\hline 20 & I get's some wrong & 5/7/2021 4:29 PM \\
\hline 21 & In each lesson there is a tutorial and a quiz which are pretty much the same. The problem is that if you do really well on the tutorial but miss a few questions on the quiz then you have to do the entire lesson again & 5/7/2021 4:20 PM \\
\hline 22 & That it takes too long and is a bit hard. & 5/7/2021 3:45 PM \\
\hline 23 & The thing that I don't like is when you don't get the answer right it doesn't show you how to do it. & 5/7/2021 3:20 PM \\
\hline 24 & Whenever I make a mistake, it doesn't give me enough chances to retry, and it doesn't explain why I'm wrong & 5/7/2021 3:10 PM \\
\hline 25 & I don't like iReady reading & 5/7/2021 2:45 PM \\
\hline 26 & I don't really know & 5/7/2021 2:28 PM \\
\hline 27 & Nothing & 5/7/2021 2:28 PM \\
\hline 28 & Nothing much. & 5/7/2021 2:21 PM \\
\hline 29 & I found i-ready to be kinda boring & 5/7/2021 2:08 PM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 30 & It was very boring & 5/7/2021 2:07 PM \\
\hline 31 & nothing really cause i didn't do anyhting & 5/7/2021 2:05 PM \\
\hline 32 & nothing & 5/7/2021 2:04 PM \\
\hline 33 & I dont know & 5/7/2021 2:02 PM \\
\hline 34 & i dont know & 5/7/2021 2:01 PM \\
\hline 35 & nothing really it was ok & 5/7/2021 1:50 PM \\
\hline 36 & reading & 5/7/2021 1:47 PM \\
\hline 37 & there was nothing that did not go well for me using iReady this school year. & 5/7/2021 1:42 PM \\
\hline 38 & I wish I could continue using i-Ready even when I did not finish one thing. & 5/7/2021 1:39 PM \\
\hline 39 & its usually a hassle to use and the "brain breaks" dont help me much, it just slows me down. & 5/7/2021 1:37 PM \\
\hline 40 & Once I didn't pass a lesson, \& sometimes the lessons are pretty hard. & 5/7/2021 1:37 PM \\
\hline 41 & Everything went well. & 5/7/2021 1:35 PM \\
\hline 42 & nothing & 5/7/2021 1:35 PM \\
\hline 43 & it was all online & 5/7/2021 1:35 PM \\
\hline 44 & It sometimes had the wrong answer and the lessons seemed unnecessary. & 5/7/2021 1:35 PM \\
\hline 45 & It put me and a lot of kids I know in the wrong placement every time! & 5/7/2021 1:34 PM \\
\hline 46 & I'm not sure & 5/7/2021 1:34 PM \\
\hline 47 & Sometimes it did not record the work that I finished. & 5/7/2021 1:33 PM \\
\hline 48 & Something that didn't go well is that some of the lessons are repetive and some of them seem like they are teaching 2nd graders. & 5/7/2021 1:32 PM \\
\hline 49 & It's annoying & 5/7/2021 1:31 PM \\
\hline 50 & It does not change based off of what you learn. also glitches a lot. & 5/7/2021 1:31 PM \\
\hline 51 & they give me lessons that are too hard sometimes & 5/7/2021 1:31 PM \\
\hline 52 & The lessons I got were way to easy, and it was just very mind numbing. & 5/7/2021 1:30 PM \\
\hline 53 & it has issues with the finding the right answer sometime you put in the right answer and it says wrong also sometimes the word problems make little sense & 5/7/2021 1:29 PM \\
\hline 54 & The amount of time spent on the lessons. & 5/7/2021 1:28 PM \\
\hline 55 & It was that the lessons were boring. & 5/7/2021 1:28 PM \\
\hline 56 & ? & 5/7/2021 1:25 PM \\
\hline 57 & nothing really & 5/7/2021 1:23 PM \\
\hline 58 & they suck at explaning stuff so i got more than 1/2 rong & 5/7/2021 1:21 PM \\
\hline 59 & it was just really boring to use and I felt like I didnt learn much using it. & 5/7/2021 1:19 PM \\
\hline 60 & The first hour of I ready & 5/7/2021 1:15 PM \\
\hline 61 & EvErYtHiNg & 5/7/2021 1:15 PM \\
\hline 62 & it was a little slow when instructing & 5/7/2021 1:15 PM \\
\hline 63 & everything & 5/7/2021 1:14 PM \\
\hline 64 & Nothing & 5/7/2021 1:14 PM \\
\hline 65 & It made me do a lot of introductions & 5/7/2021 1:13 PM \\
\hline 66 & some took me more than an hour & 5/7/2021 1:13 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 67 & everything & 5/7/2021 1:13 PM \\
\hline 68 & ethring i hate it & 5/7/2021 1:13 PM \\
\hline 69 & That it takes too long and is a bit hard. & 5/7/2021 1:13 PM \\
\hline 70 & i had to log in every time i closed my laptop & 5/7/2021 1:06 PM \\
\hline 71 & reading was to hard & 5/7/2021 12:59 PM \\
\hline 72 & It takes forever because of the charcters and it gives you things that are too hard or too easy. Also it is boring. & 5/7/2021 12:59 PM \\
\hline 73 & If you get to many problems wrong you have to do the whole lesson over again & 5/7/2021 12:59 PM \\
\hline 74 & I didn't understand some of it, also it triggers me. & 5/7/2021 12:58 PM \\
\hline 75 & Most of it. Some of the lessons were VERY annoying, they sometimes say your answer's wrong even if it isn't, and if you miss like 3 problems on the test, then they make you start the whole thing over. & 5/7/2021 12:58 PM \\
\hline 76 & i never helped me the teacher could help me more & 5/7/2021 12:58 PM \\
\hline 77 & the sceenes are to long & 5/7/2021 12:57 PM \\
\hline 78 & Let's just say that i-ready is a very corny. & 5/7/2021 12:57 PM \\
\hline 79 & nothing & 5/7/2021 12:57 PM \\
\hline 80 & how if you get a problem wrong and you move the lesson you have to do it all over again and you can't just restart the problem & 5/7/2021 12:56 PM \\
\hline 81 & I'm not sure & 5/7/2021 12:48 PM \\
\hline 82 & I did not learn much. & 5/7/2021 12:48 PM \\
\hline 83 & i don't know & 5/7/2021 12:48 PM \\
\hline 84 & Some of the instruction lessons didn't really explain much about how to do the subject of the lesson. & 5/7/2021 12:48 PM \\
\hline 85 & nothing at all. & 5/7/2021 12:47 PM \\
\hline 86 & nothing bad all good & 5/7/2021 12:46 PM \\
\hline 87 & nothing & 5/7/2021 12:45 PM \\
\hline 88 & I just hate i-ready & 5/7/2021 12:44 PM \\
\hline 89 & in math giving me capacity once & 5/7/2021 12:44 PM \\
\hline 90 & nothing & 5/7/2021 12:27 PM \\
\hline 91 & Well, it was kind of boring. & 5/7/2021 12:11 PM \\
\hline 92 & i would get irattated that i could o back and change my answer when i made a mistake & 5/7/2021 12:11 PM \\
\hline 93 & I did not enjoy my lessons & 5/7/2021 12:10 PM \\
\hline 94 & lots of iready so english and math haha & 5/7/2021 12:09 PM \\
\hline 95 & it was pretty good i just dont think i learned anything & 5/7/2021 12:08 PM \\
\hline 96 & Not much the website is just a little odd and can be annoying sometimes I would much rather ixl. & 5/7/2021 12:07 PM \\
\hline 97 & they were boring & 5/7/2021 12:05 PM \\
\hline 98 & nothing & 5/7/2021 12:03 PM \\
\hline 99 & some of the questions i didnt know how to answer because i didnt learn them yet & 5/7/2021 12:00 PM \\
\hline 100 & nothing & 5/7/2021 11:59 AM \\
\hline 101 & nothing it was just boring & 5/7/2021 11:57 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 102 & break i wish i had a break & 5/7/2021 11:56 AM \\
\hline 103 & nothing & 5/7/2021 11:56 AM \\
\hline 104 & most of it went well & 5/7/2021 11:56 AM \\
\hline 105 & its not fun & 5/7/2021 11:55 AM \\
\hline 106 & It would sometimes glitch or make me restart & 5/7/2021 11:54 AM \\
\hline 107 & nothing & 5/7/2021 11:53 AM \\
\hline 108 & I felt that iready was really pressuring and as easy as it is to get it done I feel like they don't give alot of explanation as to why you get something wrong. & 5/7/2021 11:51 AM \\
\hline 109 & Nothing & 5/7/2021 11:50 AM \\
\hline 110 & Nothing has went well and nothing has gone wrong as far as I can remeber & 5/7/2021 11:49 AM \\
\hline 111 & I don't anything has really gone wrong with I-ready. & 5/7/2021 11:48 AM \\
\hline 112 & i don't know & 5/7/2021 11:47 AM \\
\hline 113 & nothing & 5/7/2021 11:47 AM \\
\hline 114 & because everything was all mine so I didn't like anything that was online and I had this bad mood every week because it was online and l've been getting homework and sometimes my zoom stops or I pop out of the zoom or it glitch and I didn't hear the lesson and I still have a bad mood every week. & 5/7/2021 11:47 AM \\
\hline 115 & nothing & 5/7/2021 11:46 AM \\
\hline 116 & being too long & 5/7/2021 11:45 AM \\
\hline 117 & Nothing really, its pretty good. & 5/7/2021 11:41 AM \\
\hline 118 & It expects us to know all of its lessons & 5/7/2021 11:41 AM \\
\hline 119 & having to do 6 lessons a week and i don't like math i-ready & 5/7/2021 11:40 AM \\
\hline 120 & The math lessons are so long. & 5/7/2021 11:40 AM \\
\hline 121 & Nothing really & 5/7/2021 11:39 AM \\
\hline 122 & Well in the beginning it was quite difficult. I didn't understand that much in the beginning but not particularly anything bad. & 5/7/2021 11:39 AM \\
\hline 123 & some are hard & 5/7/2021 11:38 AM \\
\hline 124 & nothing & 5/7/2021 11:38 AM \\
\hline 125 & it was verey chalnging some times & 5/7/2021 11:37 AM \\
\hline 126 & The reading lessons because it made me do 210 minutes before & 5/7/2021 11:37 AM \\
\hline 127 & Sometimes I had to spend a long time doing the app & 5/7/2021 11:37 AM \\
\hline 128 & There is too many unskippable cutscenes & 5/7/2021 11:37 AM \\
\hline 129 & some of the instructions are confusing & 5/7/2021 11:37 AM \\
\hline 130 & Everything & 5/7/2021 11:36 AM \\
\hline 131 & nothing & 5/7/2021 11:33 AM \\
\hline 132 & it was a bit buggy & 5/7/2021 11:33 AM \\
\hline 133 & the diagnostic & 5/7/2021 11:32 AM \\
\hline 134 & Lessons were too monotonous in that the activities did not vary enough. The more my son progressed through lessons, the less he wanted to. The same scenarios repeated over an over. It bored me! Additional choice in the activities would help, I suspect. & 5/7/2021 11:32 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
learn a little but did not enjoy it.
\begin{tabular}{|c|c|c|}
\hline 136 & it was kind of boring & 5/7/2021 11:28 AM \\
\hline 137 & nothing & 5/7/2021 11:27 AM \\
\hline 138 & math i ready & 5/7/2021 11:26 AM \\
\hline 139 & math & 5/7/2021 11:26 AM \\
\hline 140 & The long instructions & 5/7/2021 11:25 AM \\
\hline 141 & it was a bit boring & 5/7/2021 11:25 AM \\
\hline 142 & everything & 5/7/2021 11:24 AM \\
\hline 143 & nothing & 5/7/2021 11:24 AM \\
\hline 144 & It doesn't tell me what I did wrong & 5/7/2021 11:24 AM \\
\hline 145 & i did not have any problem with iReady & 5/7/2021 11:24 AM \\
\hline 146 & It takes some time & 5/7/2021 11:21 AM \\
\hline 147 & Everything, I hate weighing there protien pasta and stuff & 5/7/2021 11:10 AM \\
\hline 148 & math was too easy until the teacher finally moved it up several levels & 5/7/2021 11:04 AM \\
\hline 149 & nothing & 5/7/2021 10:57 AM \\
\hline 150 & If I pressed the wrong number and clicked enter It would make me wait a while untill It lets me re do the answer, and I think that there should be a confirm button for your answers just in case & 5/7/2021 10:56 AM \\
\hline 151 & a lot duh & 5/7/2021 10:55 AM \\
\hline 152 & it was borning & 5/7/2021 10:55 AM \\
\hline 153 & Everything went fine. & 5/7/2021 10:55 AM \\
\hline 154 & I didnt like how it was like kiddy and the people talked super weird and i didnt understand them & 5/7/2021 10:55 AM \\
\hline 155 & nothing & 5/7/2021 10:54 AM \\
\hline 156 & I don't know & 5/7/2021 10:54 AM \\
\hline 157 & I hate how they literally have a 5 minute explanation in between each question. I wish I could just rapidly go through it all. very time-consuming. & 5/7/2021 10:52 AM \\
\hline 158 & but it was not that helpfor at the same time & 5/7/2021 10:52 AM \\
\hline 159 & I lost my sanity. & 5/7/2021 10:32 AM \\
\hline 160 & it was super boring & 5/7/2021 10:31 AM \\
\hline 161 & Everything, it hasn't helped me learn. & 5/7/2021 10:31 AM \\
\hline 162 & noting really went wrong & 5/7/2021 10:31 AM \\
\hline 163 & the math lesons & 5/7/2021 10:31 AM \\
\hline 164 & nothing & 5/7/2021 10:30 AM \\
\hline 165 & I-ready was going good for me, then I was assigned new lessons and I have been failing Iready. This week I've spent 2+ hours on I-ready and failed my lessons. & 5/7/2021 10:27 AM \\
\hline 166 & I had to redo a lesson multiple times before it would let me pass. & 5/7/2021 10:25 AM \\
\hline 167 & Also the fact that it was easy math is also bad because i didn't really learn new things. & 5/7/2021 10:24 AM \\
\hline 168 & Not much either & 5/7/2021 10:23 AM \\
\hline 169 & Everything was great, nothing went wrong. & 5/7/2021 10:22 AM \\
\hline 170 & I really disliked how whenever I switch to a new tab and then go back to the i-Ready tab, it & 5/7/2021 10:21 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
says "Are you still there?". I literally left for one second to check something and it pops that message on the i-ready screen. It's so annoying.
\begin{tabular}{|c|c|c|}
\hline 171 & it was typically really boring since you cant really select the pace your going at, i wish the problems were one after another instead of having other things in between & 5/7/2021 10:20 AM \\
\hline 172 & Once in a while the lessons were quite confusing and not well explained. In the tutorial part of the lesson, I would sometimes get a question wrong and the program wouldn't explain why I got the question wrong and what I should do. & 5/7/2021 10:20 AM \\
\hline 173 & sometimes I didn't get their wording, like I didn't know what it was asking. & 5/7/2021 10:19 AM \\
\hline 174 & nothing really, i just dont like how we have to do 30 minutes & 5/7/2021 10:19 AM \\
\hline 175 & Nothing & 5/7/2021 10:19 AM \\
\hline 176 & for the beginning of some lessons it kind of gave away the answers & 5/7/2021 10:19 AM \\
\hline 177 & sometimes i get bored but its still fun & 5/7/2021 10:19 AM \\
\hline 178 & Lessons & 5/7/2021 10:18 AM \\
\hline 179 & Not being able to choose my lessons & 5/7/2021 10:18 AM \\
\hline 180 & Some of my lessons were very repetitive and I didn't feel like I needed to go through it that many times. & 5/7/2021 10:18 AM \\
\hline 181 & The material in the lessons is irrelevant to what we are learning currently. & 5/7/2021 10:18 AM \\
\hline 182 & some times it would glich & 5/7/2021 10:17 AM \\
\hline 183 & I dint really like the lesson animations, it wasnt that bad but I didnt really like having to sit through the little story parts. & 5/7/2021 10:17 AM \\
\hline 184 & it never really helped me at all its my teacher that really helps me more its like for me not really helpfull sometimes it would make me mad when get it wrong i dont really like it & 5/7/2021 10:17 AM \\
\hline 185 & nothing & 5/7/2021 10:17 AM \\
\hline 186 & nothing didn't go well while i was using i-ready & 5/7/2021 10:17 AM \\
\hline 187 & nothing & 5/7/2021 10:17 AM \\
\hline 188 & some of the i ready math and reading & 5/7/2021 10:16 AM \\
\hline 189 & The reading part of i ready is not explained but after 1 or 2 lessons i got the hang of it. & 5/7/2021 10:16 AM \\
\hline 190 & Everything & 5/7/2021 10:15 AM \\
\hline 191 & when it makes it so that you can't answer the question before the audio prompt is over it gets pretty annoying. & 5/7/2021 10:15 AM \\
\hline 192 & When I had to do it & 5/7/2021 10:15 AM \\
\hline 193 & Nothing really, although sometimes when I do work it says I haven't done anything, like when I check my progress its say's I only did 0-5 mins when I did 30 mins, but since its only sometimes I think its a glitch or something. & 5/7/2021 10:15 AM \\
\hline 194 & sometimes i would get confused or distracted because i dont really think the break is helping its just distracting & 5/7/2021 10:15 AM \\
\hline 195 & sometimes it would glitch, or some wouldn't let me press some buttons. & 5/7/2021 10:14 AM \\
\hline 196 & like i said i don't know what this mean & 5/7/2021 10:14 AM \\
\hline 197 & sometimes questions were unclear but overall it was good & 5/7/2021 10:13 AM \\
\hline 198 & nothing & 5/7/2021 10:13 AM \\
\hline 199 & i wish that ther was an apshon to tern off the vocieis & 5/7/2021 10:13 AM \\
\hline 200 & sometimes you have to log in and that it wasting your time. & 5/7/2021 10:13 AM \\
\hline 201 & It's not \(100 \%\) on it's math & 5/7/2021 10:13 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 202 & It was slightly glitchy from time to time and i had to start over assignments that i already finished & 5/7/2021 10:13 AM \\
\hline 203 & If you get something wrong it doesn't give you any hint it's really hard to do that when you're stuck on a big problem it makes me want to throw this computer & 5/7/2021 10:13 AM \\
\hline 204 & nothing & 5/7/2021 10:12 AM \\
\hline 205 & Each lesson of i-Ready takes a lot of time & 5/7/2021 10:11 AM \\
\hline 206 & . & 5/7/2021 10:11 AM \\
\hline 207 & Almost nothing, really. & 5/7/2021 10:11 AM \\
\hline 208 & nothing & 5/7/2021 10:09 AM \\
\hline 209 & I don't know & 5/7/2021 10:04 AM \\
\hline 210 & Almost nothing & 5/7/2021 10:02 AM \\
\hline 211 & having so many diffrent charecters & 5/7/2021 9:58 AM \\
\hline 212 & math & 5/7/2021 9:53 AM \\
\hline 213 & Idk & 5/7/2021 9:53 AM \\
\hline 214 & reaading & 5/7/2021 9:52 AM \\
\hline 215 & reading & 5/7/2021 9:51 AM \\
\hline 216 & How it tells you the answer in the my path but overall it's okay. & 5/7/2021 9:51 AM \\
\hline 217 & The video that shows about the diagnostic is pretty annoying. When I ready asks me to put my emotion it sometimes doesn't show the chart. & 5/7/2021 9:51 AM \\
\hline 218 & Something that did not go well was nothing & 5/7/2021 9:51 AM \\
\hline 219 & when the diognostic video would start sometimes it would freeze and you had to watch the video all over again & 5/7/2021 9:51 AM \\
\hline 220 & math a little & 5/7/2021 9:50 AM \\
\hline 221 & nothing :3 & 5/7/2021 9:49 AM \\
\hline 222 & Um I don't know & 5/7/2021 9:49 AM \\
\hline 223 & When there are difficult problems. & 5/7/2021 9:49 AM \\
\hline 224 & messing up some questions & 5/7/2021 9:49 AM \\
\hline 225 & None of them & 5/7/2021 9:48 AM \\
\hline 226 & I don't know & 5/7/2021 9:48 AM \\
\hline 227 & Not sure & 5/7/2021 9:48 AM \\
\hline 228 & not sure & 5/7/2021 9:47 AM \\
\hline 229 & i dont know & 5/7/2021 9:43 AM \\
\hline 230 & I did not go to in person school & 5/7/2021 9:38 AM \\
\hline 231 & to get trac and do my iready plus all my homework & 5/7/2021 9:33 AM \\
\hline 232 & I don't know & 5/7/2021 9:33 AM \\
\hline 233 & its was confusing tooe & 5/7/2021 9:30 AM \\
\hline 234 & nothing & 5/7/2021 9:30 AM \\
\hline 235 & nothing & 5/7/2021 9:30 AM \\
\hline 236 & everything & 5/7/2021 9:29 AM \\
\hline 237 & when i didnt have time to finish then my grade went down or when i get 1 answer wrong and & 5/7/2021 9:29 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
then have to do anthoer quiz that takes like 30-40 minutes to finish
\begin{tabular}{|c|c|c|}
\hline 238 & i usually end up getting it done under 30 min and im not supposed to do that & 5/7/2021 9:29 AM \\
\hline 239 & Nothing. & 5/7/2021 9:28 AM \\
\hline 240 & I did not learn that much & 5/7/2021 9:28 AM \\
\hline 241 & math & 5/7/2021 9:28 AM \\
\hline 242 & Not passing stuff & 5/7/2021 9:28 AM \\
\hline 243 & It did not help a lot & 5/7/2021 9:28 AM \\
\hline 244 & everything & 5/7/2021 9:27 AM \\
\hline 245 & everything & 5/7/2021 9:27 AM \\
\hline 246 & Everything did go well, i didnt have any problems with it. & 5/7/2021 9:27 AM \\
\hline 247 & some Questions are easy & 5/7/2021 9:27 AM \\
\hline 248 & It kept me on the same lesson for a while & 5/7/2021 9:26 AM \\
\hline 249 & I just don't like I-Ready overall, so I don't really like doing it. It's a bit stressful when you only get a couple questions wrong and you have to do the whole lession over again so I don't like Iready and thats what went wrong with it for me. & 5/7/2021 9:26 AM \\
\hline 250 & I didn't like all the stories included with the work. Could you maybe not add as much of a story? Thank you & 5/7/2021 9:25 AM \\
\hline 251 & I failed two lessons & 5/7/2021 9:17 AM \\
\hline 252 & idk & 5/7/2021 9:17 AM \\
\hline 253 & everything & 5/7/2021 9:17 AM \\
\hline 254 & Math did not go well for me, it is quite confusing right now. & 5/7/2021 9:15 AM \\
\hline 255 & idk & 5/7/2021 9:15 AM \\
\hline 256 & it was not fun & 5/7/2021 9:14 AM \\
\hline 257 & mostly everything & 5/7/2021 9:14 AM \\
\hline 258 & nothing & 5/7/2021 9:14 AM \\
\hline 259 & iReady isn't my favorite & 5/7/2021 9:14 AM \\
\hline 260 & I was annoying, frustrating, and horrible. & 5/7/2021 9:14 AM \\
\hline 261 & I can't really think about much, well I will say a goal I want to set. I want to get level F in math (6th or 5th grade) & 5/7/2021 9:14 AM \\
\hline 262 & I did not like it. It is not my favorite. It was sorta frustrating, had a lot of bugs. & 5/7/2021 9:14 AM \\
\hline 263 & it boring & 5/7/2021 9:13 AM \\
\hline 264 & i wish teachers gave more time & 5/7/2021 9:13 AM \\
\hline 265 & everying! & 5/7/2021 9:13 AM \\
\hline 266 & I don't know & 5/7/2021 9:12 AM \\
\hline 267 & idk & 5/7/2021 9:12 AM \\
\hline 268 & It was boring & 5/7/2021 9:12 AM \\
\hline 269 & niether agree or disagree & 5/7/2021 9:12 AM \\
\hline 270 & everything & 5/7/2021 9:12 AM \\
\hline 271 & I couldn't log in & 5/7/2021 9:11 AM \\
\hline 272 & i just dont like it much. & 5/7/2021 9:11 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 273 & math & 5/7/2021 9:11 AM \\
\hline 274 & They probably placed me wrongly because I am getting lessons that are way too easy. & 5/7/2021 9:03 AM \\
\hline 275 & some of the iready problems & 5/7/2021 9:01 AM \\
\hline 276 & I did not like doing it. & 5/7/2021 9:00 AM \\
\hline 277 & it was too easy & 5/7/2021 8:59 AM \\
\hline 278 & i dont think i had any problems this year & 5/7/2021 8:59 AM \\
\hline 279 & for me everything in i-ready was review & 5/7/2021 8:59 AM \\
\hline 280 & alot of stuff. & 5/7/2021 8:58 AM \\
\hline 281 & How long it takes & 5/7/2021 8:58 AM \\
\hline 282 & Nothing it went well for me this year & 5/7/2021 8:58 AM \\
\hline 283 & the character's voices are kind of annoying & 5/7/2021 8:58 AM \\
\hline 284 & sometimes my assignments restart & 5/7/2021 8:57 AM \\
\hline 285 & idk & 5/7/2021 8:56 AM \\
\hline 286 & nothing & 5/7/2021 8:50 AM \\
\hline 287 & the lessons...i was learning stuff i leard in 1-2ed grade & 5/7/2021 8:50 AM \\
\hline 288 & I hate it its soooo boring & 5/7/2021 8:49 AM \\
\hline 289 & somewhat of it & 5/7/2021 8:40 AM \\
\hline 290 & In some of the reading lessons the I ready program would teach you about multiple different words that are part of reading but only teach you them once or twice then expect you to know what they mean on the quiz. I can't just see six words once with their definitions then remember them. & 5/7/2021 8:38 AM \\
\hline 291 & too much time wasted on iready when i could get more from zoom, and that says something & 5/7/2021 8:20 AM \\
\hline 292 & trying to go for a long time & 5/7/2021 8:20 AM \\
\hline 293 & remembering to do the work & 5/7/2021 8:18 AM \\
\hline 294 & it felt slow and i rushed trought it so i got lessons i didnt need & 5/7/2021 8:17 AM \\
\hline 295 & I didnt like the siri voices in the program. & 5/7/2021 8:17 AM \\
\hline 296 & Reading & 5/7/2021 8:15 AM \\
\hline 297 & Nothing really. & 5/7/2021 8:10 AM \\
\hline 298 & My student had to start at the very beginner level and she was already doing 1st grade math so it was more busy work than learning because it wasn't set to her level and we had to work through about 40 lessons before it became a little challenging & 5/7/2021 7:33 AM \\
\hline 299 & the level feels too easy The diagnostic test was SOOOO hard & 5/6/2021 9:16 PM \\
\hline 300 & I only had negitive feed back. It's so time consuming and if you fail, you have to do the 45 minute lesson again, which is a real swift kick in the pants. I kinda stopped doing i Ready because of this. The credit just wan't worth the trouble. & 5/6/2021 8:29 PM \\
\hline 301 & Nothing did not go well for me. & 5/6/2021 7:19 PM \\
\hline 302 & In math its kinda hard & 5/6/2021 6:47 PM \\
\hline 303 & None & 5/6/2021 6:35 PM \\
\hline 304 & sometimes they didnt clearly state what i had to do in the lesson & 5/6/2021 6:32 PM \\
\hline 305 & some of it was wayyyy to easy and wayyyy to hard & 5/6/2021 5:39 PM \\
\hline 306 & gave me leon ive never done & 5/6/2021 3:28 PM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 307 & stuff & 5/6/2021 3:28 PM \\
\hline 308 & It's just it help's me a lot but I just forget about it I can't remember that that long & 5/6/2021 3:28 PM \\
\hline 309 & gliches & 5/6/2021 3:19 PM \\
\hline 310 & internet & 5/6/2021 2:56 PM \\
\hline 311 & some details were not good enough and confused me & 5/6/2021 2:52 PM \\
\hline 312 & It took a really long time & 5/6/2021 2:47 PM \\
\hline 313 & i did bad & 5/6/2021 2:00 PM \\
\hline 314 & something that didn't go well was the i-ready comprehension lessons because they were easy & 5/6/2021 1:59 PM \\
\hline 315 & not getting something on i ready and they cant explain it more when i dont get it & 5/6/2021 1:59 PM \\
\hline 316 & that it was kinda hard for me to do a lesson becusae i did not get it & 5/6/2021 1:57 PM \\
\hline 317 & It took a really long time to do. & 5/6/2021 1:57 PM \\
\hline 318 & it took up a lot of my time and it made me stressed out more & 5/6/2021 1:57 PM \\
\hline 319 & not much in the begining i thouht ah extra math and reading but i rellisd i got beter & 5/6/2021 1:56 PM \\
\hline 320 & I hated redoing the lessons when I didn't pass them & 5/6/2021 1:55 PM \\
\hline 321 & some times did not pass & 5/6/2021 1:55 PM \\
\hline 322 & the scores & 5/6/2021 1:54 PM \\
\hline 323 & nothing & 5/6/2021 1:50 PM \\
\hline 324 & Sometimes the lessons are hard. And sometimes the grading isn't very fair. & 5/6/2021 1:48 PM \\
\hline 325 & It takes the person speaking to long to explain & 5/6/2021 1:40 PM \\
\hline 326 & I sometimes forgot stuff and I got certain things wrong. & 5/6/2021 1:32 PM \\
\hline 327 & Nothing went wrong with i-Ready & 5/6/2021 1:23 PM \\
\hline 328 & not much went wrong. & 5/6/2021 1:21 PM \\
\hline 329 & Kicks me out when I'm not there & 5/6/2021 1:16 PM \\
\hline 330 & Sometimes it's hard to stay on task and concentrate when it's just me and the computer & 5/6/2021 1:15 PM \\
\hline 331 & something that didn't went well using i-Ready this school year is that i started getting hard lessons and long lessons & 5/6/2021 1:15 PM \\
\hline 332 & Nothing & 5/6/2021 1:14 PM \\
\hline 333 & too short of breaks & 5/6/2021 1:13 PM \\
\hline 334 & i did not complete a one chance and it went away & 5/6/2021 1:11 PM \\
\hline 335 & nothing it did nothing wrong & 5/6/2021 1:11 PM \\
\hline 336 & It had no problems. & 5/6/2021 1:11 PM \\
\hline 337 & nothing & 5/6/2021 1:09 PM \\
\hline 338 & I would say everything went well & 5/6/2021 1:09 PM \\
\hline 339 & Nothing & 5/6/2021 1:08 PM \\
\hline 340 & nothing & 5/6/2021 1:07 PM \\
\hline 341 & what went bad using I-ready is the alert & 5/6/2021 1:05 PM \\
\hline 342 & how alot of them were esay & 5/6/2021 1:02 PM \\
\hline 343 & it does not teach you how to do it it only asks question and that does not help me learn & 5/6/2021 1:00 PM \\
\hline 344 & Math & 5/6/2021 12:55 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 345 & i didint always get them in & 5/6/2021 12:54 PM \\
\hline 346 & It was confusing to use at first & 5/6/2021 12:52 PM \\
\hline 347 & The lessons don't really help me understand the topic. & 5/6/2021 12:51 PM \\
\hline 348 & Its hard to get done when you have other assignments to turn in. & 5/6/2021 12:50 PM \\
\hline 349 & idk & 5/6/2021 12:50 PM \\
\hline 350 & It was VERY annoying because they just kept talking and got 15 mins of work done. & 5/6/2021 12:50 PM \\
\hline 351 & Only that i had to to it for 30-45 mins i just felt that was a long time & 5/6/2021 12:49 PM \\
\hline 352 & in bad at laungueg & 5/6/2021 12:49 PM \\
\hline 353 & It was something that i had to get done so it took more time for me to get my class homework & 5/6/2021 12:49 PM \\
\hline 354 & Nothing & 5/6/2021 12:49 PM \\
\hline 355 & I got very bored of i-Ready and didn't want to do it anymore at all after 1 month. & 5/6/2021 12:49 PM \\
\hline 356 & I just don't like it & 5/6/2021 12:48 PM \\
\hline 357 & other questions & 5/6/2021 12:48 PM \\
\hline 358 & I wasn't very good at the I-Readies & 5/6/2021 12:48 PM \\
\hline 359 & it was hard for me to pay attention to i could get through a leaason & 5/6/2021 12:48 PM \\
\hline 360 & Just about everything & 5/6/2021 12:47 PM \\
\hline 361 & Boring, mean, cruel, everything. & 5/6/2021 12:46 PM \\
\hline 362 & If it was difficult you can't move on to the next & 5/6/2021 12:40 PM \\
\hline 363 & I don't like when you do a problem and get it wrong, it literally just tells you the answer and you don't learn anything. I also don't like how it takes forever just to do one lesson & 5/6/2021 12:33 PM \\
\hline 364 & Whta didn't go well is that I-ready doesn't explain how they do math, they just do it and it doesn't show how they do it & 5/6/2021 12:33 PM \\
\hline 365 & sometimes when I get something wrong it dose not help me understand what I did wrong and just gives me the answer. & 5/6/2021 12:31 PM \\
\hline 366 & I could go on for hours but here are two. The Math lessons seemed to be for 2nd graders and did not help at all. The Reading lessons were very hard and stressful and the answers they showed were not the actual answers. Overall: I HATE I READY & 5/6/2021 12:31 PM \\
\hline 367 & allmost every thing. & 5/6/2021 12:30 PM \\
\hline 368 & Sometimes the iReady leasons are not at the right leasons for me & 5/6/2021 12:30 PM \\
\hline 369 & Math didn't help me. & 5/6/2021 12:30 PM \\
\hline 370 & Everything & 5/6/2021 12:28 PM \\
\hline 371 & That I think they talk to much for the lessons & 5/6/2021 12:28 PM \\
\hline 372 & I am getting the answer right but it says its wrong. & 5/6/2021 12:28 PM \\
\hline 373 & NOTHING & 5/6/2021 12:25 PM \\
\hline 374 & Made me feel a bit insecure about myself when I got a question wrong. & 5/6/2021 12:21 PM \\
\hline 375 & evrything & 5/6/2021 12:00 PM \\
\hline 376 & how many times you do the same type of question over and over again & 5/6/2021 11:59 AM \\
\hline 377 & wasn't much fun to use & 5/6/2021 11:44 AM \\
\hline 378 & It was very stressful. It took up a lot of time. It wasn't very helpful. Most lessons were either too hard or too easy. & 5/6/2021 11:37 AM \\
\hline 379 & I mostly done geometry for math and not really anything else. & 5/6/2021 11:36 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 380 & Nothing went wrong & 5/6/2021 11:35 AM \\
\hline 381 & the slow lessons & 5/6/2021 11:35 AM \\
\hline 382 & How long the two-part lessons were. & 5/6/2021 11:34 AM \\
\hline 383 & it was harder becuese of the time asinment & 5/6/2021 11:34 AM \\
\hline 384 & nothing & 5/6/2021 11:21 AM \\
\hline 385 & It felt really hard sometimes and it also felt easy at times, but it rarely felt just right. & 5/6/2021 11:16 AM \\
\hline 386 & They talk to much & 5/6/2021 11:07 AM \\
\hline 387 & the voice of the girl and the guy & 5/6/2021 10:56 AM \\
\hline 388 & nothing & 5/6/2021 10:56 AM \\
\hline 389 & Nothing & 5/6/2021 10:44 AM \\
\hline 390 & Nothing. & 5/6/2021 10:33 AM \\
\hline 391 & Finding time to do iready but I always manage to do the number of minutes I have to & 5/6/2021 10:32 AM \\
\hline 392 & i ready reading lessons just take forever and i do not like it. & 5/6/2021 10:32 AM \\
\hline 393 & it giched a bit & 5/6/2021 10:32 AM \\
\hline 394 & Nothing & 5/6/2021 10:32 AM \\
\hline 395 & Doing my required time per week & 5/6/2021 10:32 AM \\
\hline 396 & I was a little in head in fractions & 5/6/2021 10:31 AM \\
\hline 397 & For math, it takes a lot of questions & 5/6/2021 10:30 AM \\
\hline 398 & iready & 5/6/2021 10:30 AM \\
\hline 399 & nothing & 5/6/2021 10:30 AM \\
\hline 400 & After a while, i-Ready started giving me repeats of the same lessons, and it became a waste of time. & 5/6/2021 10:30 AM \\
\hline 401 & It wasn't engaging and I do not feel like was getting any better at the subject I was learning & 5/6/2021 10:30 AM \\
\hline 402 & Sometimes, it was just the exact same thing as last time. & 5/6/2021 10:29 AM \\
\hline 403 & The animated people and explanations were very distracting for me and just annoying overall. I get that some kids like it and it makes it easier but \(i\) think it distracts from the actual problem. They occasionaly stray away from the original question or problem by having to break it down to each term used. & 5/6/2021 10:29 AM \\
\hline 404 & They talk so much and add stories that are unecessary & 5/6/2021 10:29 AM \\
\hline 405 & nothing & 5/6/2021 10:28 AM \\
\hline 406 & Doing the problems sometimes caused me anxiety and stress & 5/6/2021 10:28 AM \\
\hline 407 & It was confusing on some of the lessons, and its annoying. & 5/6/2021 10:28 AM \\
\hline 408 & I kept missing the turn in time for IReady so I almost got a D in math and english & 5/6/2021 10:28 AM \\
\hline 409 & i dont really know & 5/6/2021 10:27 AM \\
\hline 410 & its boring & 5/6/2021 10:27 AM \\
\hline 411 & Sometimes I struggled to focus using iReady & 5/6/2021 10:26 AM \\
\hline 412 & It added more work & 5/6/2021 10:26 AM \\
\hline 413 & I did not like that the iReady lessons were not based on what e were learning in class. It wsn't accurate on what I knew and what I didn't. & 5/6/2021 10:26 AM \\
\hline 414 & I didn't really like the characters, they scared me & 5/6/2021 10:26 AM \\
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\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 415 & I thought that the quizzes were tough, because the lessons were short sometimes, and was hard to learn. & 5/6/2021 10:26 AM \\
\hline 416 & I did not like how they did not let us skip through the talking and how they took so long to tell us what to do. This is because when they try to make if fun it is not at all. I am not saying that try not make it fun will make us want to do it, I just think it needs to just get to the point. I also do not like it how we had to do to parts, this is because if we need help while answering the quistions by our self we would just get it wrong and do the WHOLE thing over again. I also do not like the way the teach which is just my opinion. & 5/6/2021 10:16 AM \\
\hline 417 & Reading & 5/6/2021 10:14 AM \\
\hline 418 & solving tricky things on i-Ready. & 5/6/2021 10:14 AM \\
\hline 419 & nothing & 5/6/2021 10:13 AM \\
\hline 420 & I struggle on a few lessons and some of them make no sense to me at all. & 5/6/2021 10:13 AM \\
\hline 421 & I did 12 ireadys worth of 2 weeks and My teacher told me i did one iready. glitches, bugs, lag, robots talk for too long. & 5/6/2021 10:12 AM \\
\hline 422 & It takes too long and I don't really like it. & 5/6/2021 10:12 AM \\
\hline 423 & Not sure. & 5/6/2021 10:12 AM \\
\hline 424 & takes a long time, not much time to do it & 5/6/2021 10:10 AM \\
\hline 425 & it was boring & 5/6/2021 10:10 AM \\
\hline 426 & exponents & 5/6/2021 10:09 AM \\
\hline 427 & I think after 15 minutes it get kinda boring. & 5/6/2021 9:55 AM \\
\hline 428 & nothing was wong for me & 5/6/2021 9:52 AM \\
\hline 429 & i did not Irean & 5/6/2021 9:48 AM \\
\hline 430 & i ready reading & 5/6/2021 9:44 AM \\
\hline 431 & Some things i already know & 5/6/2021 9:43 AM \\
\hline 432 & math & 5/6/2021 9:41 AM \\
\hline 433 & Nothing & 5/6/2021 9:26 AM \\
\hline 434 & Somethings it didnt explain that well. & 5/6/2021 9:10 AM \\
\hline 435 & The assignments on reading don't give you the correct answer sometimes so you can't figure out why something is wrong. & 5/6/2021 9:08 AM \\
\hline 436 & Not much. & 5/6/2021 9:07 AM \\
\hline 437 & Sometimes the lesson felt really long which didn't fit well with me. & 5/6/2021 9:07 AM \\
\hline 438 & I had to waste 40 minutes of my time to go outside in the sun. & 5/6/2021 9:07 AM \\
\hline 439 & it got a little boring at times & 5/6/2021 9:05 AM \\
\hline 440 & It was a waste of time because I didn't learn anything and I could have done more productive work. & 5/6/2021 9:05 AM \\
\hline 441 & I don't know & 5/6/2021 9:05 AM \\
\hline 442 & i would get distracted. & 5/6/2021 9:05 AM \\
\hline 443 & it kept giving me lessons i already know about & 5/6/2021 9:04 AM \\
\hline 444 & nothing & 5/6/2021 9:04 AM \\
\hline 445 & The lessons were long. & 5/6/2021 9:03 AM \\
\hline 446 & nothing either & 5/6/2021 9:03 AM \\
\hline 447 & nothing go bad & 5/6/2021 9:03 AM \\
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\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 448 & I did not learn things related to class work & 5/6/2021 9:03 AM \\
\hline 449 & Not being interested in the lessons & 5/6/2021 9:03 AM \\
\hline 450 & It took a long time and got very boring at times & 5/6/2021 9:03 AM \\
\hline 451 & I was not motivated to do I-Ready practice at all and it just wasnt very fun. & 5/6/2021 9:03 AM \\
\hline 452 & It isn't very enjoyable to use, but apart from that, it would be that the video parts of the lessons won't let me keep going, without watching them. & 5/6/2021 9:03 AM \\
\hline 453 & everything & 5/6/2021 9:02 AM \\
\hline 454 & the lessons & 5/6/2021 9:02 AM \\
\hline 455 & It was boring, and not something fun for me to do. & 5/6/2021 9:02 AM \\
\hline 456 & the lessons were very dull and boring & 5/6/2021 9:02 AM \\
\hline 457 & i think everything went good. & 5/6/2021 9:02 AM \\
\hline 458 & The People who are voicing the people in the video clips can use more enthusiasm & 5/6/2021 8:57 AM \\
\hline 459 & It was very boring. & 5/6/2021 8:55 AM \\
\hline 460 & still bad at reaading & 5/6/2021 8:47 AM \\
\hline 461 & I did not like iready, because I felt like it was not doing anything for me. & 5/6/2021 8:45 AM \\
\hline 462 & nothing really went bad i did really good actual and i love i - redy & 5/6/2021 8:43 AM \\
\hline 463 & its hard when you have to do 3 lessons because i have to do it in one day or else i don't do it & 5/6/2021 8:43 AM \\
\hline 464 & Nothing, really... & 5/6/2021 8:43 AM \\
\hline 465 & the math and reading was a bit to easy even though i did my best on the diagnostic & 5/6/2021 8:42 AM \\
\hline 466 & everything & 5/6/2021 8:41 AM \\
\hline 467 & everything & 5/6/2021 8:41 AM \\
\hline 468 & Its not very motivating. and for diagnostics I HATE the brain breaks. & 5/6/2021 8:40 AM \\
\hline 469 & trying to do it for 30 min & 5/6/2021 8:35 AM \\
\hline 470 & it gets boring & 5/6/2021 8:34 AM \\
\hline 471 & I don't like doing it at all. & 5/6/2021 8:32 AM \\
\hline 472 & everything, the program is not very organized. And the lessons take way to long and \(i\) only learn a little bit from a 15 min lesson. & 5/6/2021 8:21 AM \\
\hline 473 & For some of the lessons it doesn't explain the topic very well and it's hard to understand the topic & 5/6/2021 8:15 AM \\
\hline 474 & The lessons are really boring and a quite a few times the math problems don't make sense. & 5/6/2021 8:02 AM \\
\hline 475 & It wasted time & 5/5/2021 11:19 PM \\
\hline 476 & The lessons are very long. & 5/5/2021 9:54 PM \\
\hline 477 & The lessons are way to long. & 5/5/2021 9:25 PM \\
\hline 478 & nothing & 5/5/2021 9:16 PM \\
\hline 479 & I didn't have the same lessons I was getting in class on i-ready & 5/5/2021 8:56 PM \\
\hline 480 & it was exhausting & 5/5/2021 7:58 PM \\
\hline 481 & I got tired of being in the same spot of vocabulary in reading and in a math addition section. I felt like I knew the information. I got frustrated and didn't want to do it anymore. & 5/5/2021 7:17 PM \\
\hline 482 & It was hard for me to do it every day because it was long. period of time. & 5/5/2021 7:13 PM \\
\hline 483 & Sometimes it did not go well & 5/5/2021 6:53 PM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 484 & nothing really & 5/5/2021 6:53 PM \\
\hline 485 & its boring, lessons take forever, gives too easy lessons even though I answer everything on the diagnostic the best I can. & 5/5/2021 5:42 PM \\
\hline 486 & I already understood all the lessons I Ready gave me for math. & 5/5/2021 5:40 PM \\
\hline 487 & the reading one is boring & 5/5/2021 4:49 PM \\
\hline 488 & The diagnostic and lesson is just too long. Most of the time, students don't learn much from these lessons. & 5/5/2021 4:45 PM \\
\hline 489 & N/A & 5/5/2021 4:11 PM \\
\hline 490 & when you finish a problem it does not take you to the next one right away & 5/5/2021 3:46 PM \\
\hline 491 & There to long so I don't feel motivated to do them, and it's not what is at my level of learning. & 5/5/2021 3:42 PM \\
\hline 492 & My teacher requires we pass 2 lessons on reading and math and for a while I was spending 3-6 on task hours on it and thats saying alot because I have ADHD and its hard for me to focus so I got sidetracked and distracted quite a bit. & 5/5/2021 3:33 PM \\
\hline 493 & I don't know & 5/5/2021 3:29 PM \\
\hline 494 & It glitched the lessons sometimes & 5/5/2021 3:16 PM \\
\hline 495 & Something that did not go well is that I-Ready kept glitching and it would give me some problems in the test that I never shown how to do in I-Ready and then I'd get them wrong failing the test. & 5/5/2021 3:09 PM \\
\hline 496 & Sometimes passing the lessons if I struggle with the concept it's stressful when I don't pass a lesson. & 5/5/2021 3:07 PM \\
\hline 497 & the work & 5/5/2021 3:07 PM \\
\hline 498 & Idk & 5/5/2021 2:53 PM \\
\hline 499 & I just don't like how the models are and how loud it is & 5/5/2021 2:53 PM \\
\hline 500 & Something that didn't go well when I used i-Ready is when I did the lessons with the characters, sometimes I would lose focus and fail the quiz. & 5/5/2021 2:42 PM \\
\hline 501 & Sometimes the animations of people take WAY too long. Other then that, nothing bad. & 5/5/2021 2:14 PM \\
\hline 502 & sometimes i forget & 5/5/2021 2:00 PM \\
\hline 503 & Sometimes what they were asking you did not make sense. & 5/5/2021 1:53 PM \\
\hline 504 & I thought it was really boring, I finished the lessons, but I didn't like sitting and then answering the questions one by one then waiting for the next question. & 5/5/2021 1:26 PM \\
\hline 505 & It was frustrating when I had to completely redo a lesson if i didn't do perfect on the "quiz" & 5/5/2021 1:25 PM \\
\hline 506 & Some lessons it gave me I already knew from the past. & 5/5/2021 1:25 PM \\
\hline 507 & I-ready just didn't teach me much and spent too much time dwelling on things I already know. & 5/5/2021 1:15 PM \\
\hline 508 & Some of the lessons are harder that others and that just is confusing. & 5/5/2021 1:11 PM \\
\hline 509 & Alot did not go well for me, ecspecially now that its online and the schedual is a weird. & 5/5/2021 1:11 PM \\
\hline 510 & It was super boring which caused me to not focus on them and get bad grades & 5/5/2021 1:10 PM \\
\hline 511 & I don't like the people that talk in the reading lessons. Their voices are really autotuned and makes my head hurt sometimes. & 5/5/2021 1:09 PM \\
\hline 512 & I can't get it on my personal computer so I have to use it on my chrome book & 5/5/2021 1:06 PM \\
\hline 513 & The actually program annoyes be because it takes such a long time to explain each problem, the characters and situations made it feel too childish. & 5/5/2021 12:58 PM \\
\hline 514 & Sometimes I would get a little bit stressed and frustrated while working on i-Ready because the assignments took a while to do. & 5/5/2021 12:55 PM \\
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\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 515 & A lot of the other lessons & 5/5/2021 12:52 PM \\
\hline 516 & I was not sure what I did good or bad on my diagnostic. & 5/5/2021 12:51 PM \\
\hline 517 & Iready can be challenging and doesn't always explain how you get a question wrong & 5/5/2021 12:50 PM \\
\hline 518 & It would keep doing lessons I already learned & 5/5/2021 12:49 PM \\
\hline 519 & Not much but I have trouble understanding sometimes. & 5/5/2021 12:33 PM \\
\hline 520 & I didn't like the characters. It was too easy. & 5/5/2021 12:19 PM \\
\hline 521 & that it some what is hard for me so i get stuck alot & 5/5/2021 12:16 PM \\
\hline 522 & The animations that you cannot skip, the person explaining the problem whether you solved it correctly or not, the long lesson that is full of problems that do not count towards your score, the quizzes that if you get 4 problems wrong on, you have to do the lesson and quiz all over again. & 5/5/2021 12:09 PM \\
\hline 523 & the dialog was to long & 5/5/2021 12:05 PM \\
\hline 524 & The pressure was quite exhilarating, not to mention the monotone voices and annoying characters & 5/5/2021 12:05 PM \\
\hline 525 & Nothing & 5/5/2021 12:04 PM \\
\hline 526 & Math, progressed slowly & 5/5/2021 11:55 AM \\
\hline 527 & the diagnostic is not fun & 5/5/2021 11:47 AM \\
\hline 528 & Same thing as last question but I didn't like the math too & 5/5/2021 11:41 AM \\
\hline 529 & Math & 5/5/2021 11:36 AM \\
\hline 530 & The lessons were on things that we were not going over in class which made it confusing. The tab would never play audio. & 5/5/2021 11:35 AM \\
\hline 531 & One very hard lesson & 5/5/2021 11:33 AM \\
\hline 532 & I do not like when I know what to do and it reminds me what to do. & 5/5/2021 11:32 AM \\
\hline 533 & everything & 5/5/2021 11:30 AM \\
\hline 534 & I felt it took a long time and we did too much of it. & 5/5/2021 11:22 AM \\
\hline 535 & I didn't like all the questions & 5/5/2021 11:17 AM \\
\hline 536 & it took a long time & 5/5/2021 11:13 AM \\
\hline 537 & I don't want to have to play the game to move to the next section. Not everyone likes games. When I get off iready it gets rid of my progress. & 5/5/2021 11:13 AM \\
\hline 538 & The lessons are really long and time consuming, a lesson can take up to 30 minutes sometimes. & 5/5/2021 11:10 AM \\
\hline 539 & You can't change the level that you want & 5/5/2021 11:00 AM \\
\hline 540 & I wasn't fond of the reading part of i-Ready. & 5/5/2021 10:55 AM \\
\hline 541 & When I messed up on my lessons. & 5/5/2021 10:52 AM \\
\hline 542 & mostly every thing becouse i under stood nothing & 5/5/2021 10:52 AM \\
\hline 543 & i didnt get all the questions right & 5/5/2021 10:45 AM \\
\hline 544 & nothing & 5/5/2021 10:37 AM \\
\hline 545 & What didn't go well for me this school year was, if I failed a lesson it felt like I couldn't grasp the concept fully. & 5/5/2021 10:35 AM \\
\hline 546 & The math was frustrating & 5/5/2021 10:29 AM \\
\hline 547 & reading & 5/5/2021 10:29 AM \\
\hline 548 & reading & 5/5/2021 10:25 AM \\
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\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 549 & Sometimes it glitched. & 5/5/2021 10:13 AM \\
\hline 550 & Not much & 5/5/2021 10:11 AM \\
\hline 551 & Some of the lessons were boring. & 5/5/2021 10:09 AM \\
\hline 552 & Most of the lessons that they would give us did not go well because the way the learning was presented seemed like it was meant for a younger audience with all of the animated characters. The iReady diagnostic also did not go well because it felt really long an painful. Also the nose that the done button makes is extremely annoying. & 5/5/2021 10:06 AM \\
\hline 553 & honestly nothing i didnt really like the program and didnt really understand it, i take the diagnostic pretty seriously but last year i ended up with 1st grade math and this year i ended up have 7th grade math. & 5/5/2021 10:05 AM \\
\hline 554 & some times it say wait! and i'm not that patient & 5/5/2021 10:02 AM \\
\hline 555 & everything went fine & 5/5/2021 10:01 AM \\
\hline 556 & Too long sometimes & 5/5/2021 9:59 AM \\
\hline 557 & In the lessons where there were people talking it took longer than it needed to because of the endless droning on about things they had repeated several times. & 5/5/2021 9:59 AM \\
\hline 558 & I Ready math. & 5/5/2021 9:52 AM \\
\hline 559 & Nothing went wrong. I love it. & 5/5/2021 9:51 AM \\
\hline 560 & It was too slow. Wish we could speed up the talking. & 5/5/2021 9:51 AM \\
\hline 561 & I am not sure & 5/5/2021 9:49 AM \\
\hline 562 & The Characters talked to much. I would've given very positive feedback, but the characters talk over \(75 \%\) of the time of the i - Ready lessons. & 5/5/2021 9:49 AM \\
\hline 563 & I don't know. & 5/5/2021 9:48 AM \\
\hline 564 & geting stars & 5/5/2021 9:46 AM \\
\hline 565 & sometimes it was hard to understand & 5/5/2021 9:43 AM \\
\hline 566 & All the lessons were either way too easy or way too hard, and they did not help me understand the subject any more. & 5/5/2021 9:43 AM \\
\hline 567 & It was very boring and the voices annoyed me, sometimes I wanted to stop I ready altogether. & 5/5/2021 9:39 AM \\
\hline 568 & The lessons did not have a fast forward button to the movies, and it made you complete every assignment in a course even if you understand all of the concepts in the course. The diagnostic also takes a long time to complete and is sometimes frustrating. & 5/5/2021 9:38 AM \\
\hline 569 & It was quite hard to focus in iready and i didnt like that when you got a question wrong it didnt tell you the answer somtimes & 5/5/2021 9:38 AM \\
\hline 570 & math & 5/5/2021 9:38 AM \\
\hline 571 & it caused me a bunch of stress & 5/5/2021 9:37 AM \\
\hline 572 & fractions \& decimals & 5/5/2021 9:37 AM \\
\hline 573 & The fact that you have to redo the whole thing with the same questions if you don't get most of them correct & 5/5/2021 9:36 AM \\
\hline 574 & nothing & 5/5/2021 9:35 AM \\
\hline 575 & Sometimes I got lessons that were too easy. & 5/5/2021 9:34 AM \\
\hline 576 & It was confusing when it did the "Continue Lesson" thing. & 5/5/2021 9:31 AM \\
\hline 577 & some of the lesson were boring & 5/5/2021 9:31 AM \\
\hline 578 & If I accidentally missed clicked or realized I chose the wrong answer, it wouldn't let me retry. Especially on the i-Ready Diagnostic. & 5/5/2021 9:30 AM \\
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\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 579 & Nothing much & 5/5/2021 9:29 AM \\
\hline 580 & the reading topics are not interesting & 5/5/2021 9:19 AM \\
\hline 581 & math & 5/5/2021 9:17 AM \\
\hline 582 & it took me a long time to finsh & 5/5/2021 9:17 AM \\
\hline 583 & nothing & 5/5/2021 9:16 AM \\
\hline 584 & The voices Are very annoying & 5/5/2021 9:16 AM \\
\hline 585 & Program was difficult to use and lessons became annoying & 5/5/2021 9:13 AM \\
\hline 586 & Nothing really except the times I got a bit loaded and I also had to iReady but it wasn't IReady's fault so nothing. & 5/5/2021 9:13 AM \\
\hline 587 & some stuff & 5/5/2021 9:09 AM \\
\hline 588 & I did not like how the characters are talking and talking and talking and never get to the point with the lesson, also, when I need it, i-Ready doesn't teach me enough. When I really don't need it, i-Ready keeps talking on and on about how to do something I already know how to do very well. But it did teach me a bit, but then got too confusing and too far in front of my grade. & 5/5/2021 9:09 AM \\
\hline 589 & evrything & 5/5/2021 9:08 AM \\
\hline 590 & Nothing. & 5/5/2021 9:08 AM \\
\hline 591 & nothing really & 5/5/2021 9:08 AM \\
\hline 592 & some lessons seem same & 5/5/2021 9:07 AM \\
\hline 593 & It takes to long and you cant skip the people from talking. & 5/5/2021 9:05 AM \\
\hline 594 & Sometimes it doesn't load. & 5/5/2021 9:03 AM \\
\hline 595 & Some of the lessons take like an hour or more to finish, and when you put progress into a long lesson and you don't do it until next week it restarts it for me. & 5/5/2021 9:03 AM \\
\hline 596 & Same as above & 5/5/2021 9:01 AM \\
\hline 597 & Sometimes the i-ready lessons are long, and that gets a little frustrating. & 5/5/2021 9:00 AM \\
\hline 598 & The story lines were cringy and made me feel odd while watching it. & 5/5/2021 8:59 AM \\
\hline 599 & I don't know & 5/5/2021 8:58 AM \\
\hline 600 & Nothing & 5/5/2021 8:55 AM \\
\hline 601 & There was this one lesson that felt impossible that I failed twice on my own path, than twice when it was teacher assigned. & 5/5/2021 8:55 AM \\
\hline 602 & nothing & 5/5/2021 8:52 AM \\
\hline 603 & It took up time. & 5/5/2021 8:48 AM \\
\hline 604 & I did not like how it usually takes so long. & 5/5/2021 8:48 AM \\
\hline 605 & everything & 5/5/2021 8:43 AM \\
\hline 606 & Something that did not go well was whenever you failed the test after each lesson you have to do the exact same lesson again and it is annoying. & 5/5/2021 8:42 AM \\
\hline 607 & I put in 0.5 but they only took 0.50 . I think that is it but there might be more & 5/5/2021 8:40 AM \\
\hline 608 & I did not like the characters that are sometimes in the lessons. & 5/5/2021 8:34 AM \\
\hline 609 & c+ & 5/5/2021 8:31 AM \\
\hline 610 & the brain breaks in the tests, i will be in the middle of problems and want to continue & 5/5/2021 8:31 AM \\
\hline 611 & Some lessons would take a long time. But then the next one is 10 minutes. & 5/5/2021 8:26 AM \\
\hline 612 & it took so long to go through the questions when I already knew the answer & 5/5/2021 8:25 AM \\
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\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 613 & I can't think of anything & 5/5/2021 8:20 AM \\
\hline 614 & it was boring & 5/5/2021 8:17 AM \\
\hline 615 & when i pressed something wrong and then i didn't get a 100\% & 5/5/2021 8:14 AM \\
\hline 616 & I dont know & 5/5/2021 8:05 AM \\
\hline 617 & i didn't like how it took so long & 5/5/2021 8:00 AM \\
\hline 618 & The math lessons I was put into all to easy & 5/5/2021 7:42 AM \\
\hline 619 & Once when i was learning decimals i have to re-take the lesson THREE times because it was so hard, i got so mad. & 5/5/2021 7:35 AM \\
\hline 620 & it was confusing to use the app, the math was confusing, and i don't feel that i have learned much from iReady & 5/5/2021 6:52 AM \\
\hline 621 & Finding time to do iready but I always manage to do the number of minutes I have to & 5/4/2021 9:58 PM \\
\hline 622 & Something that did not go well for me when using i-Ready this school year is that after I already learned the lesson in school, if I went back to i-Ready I would have to do the lessons I'd already learned and was used to. & 5/4/2021 8:45 PM \\
\hline 623 & Sometimes the math lessons & 5/4/2021 7:25 PM \\
\hline 624 & it takes SOOOOOOOOOOOOO long to do ONE problem & 5/4/2021 3:28 PM \\
\hline 625 & how long some take & 5/4/2021 3:27 PM \\
\hline 626 & Took me to long to finish & 5/4/2021 3:25 PM \\
\hline 627 & not much & 5/4/2021 3:24 PM \\
\hline 628 & reading & 5/4/2021 3:23 PM \\
\hline 629 & Although I think the interactive aspect of the program is an interesting feature, I don't think it's interesting enough for all users to be completely focused. & 5/4/2021 3:22 PM \\
\hline 630 & Nothing for the math because mosley the math is easy & 5/4/2021 3:11 PM \\
\hline 631 & It's trying to make me take the diagnostics again when I already took it literally TWO DAYS AGO!!! & 5/4/2021 3:08 PM \\
\hline 632 & It took so long to do just one half of a i-ready segment and when you do i-ready reading if you get a lot of questions right in the beginning it doesn't really matter because if you get the last questions wrong that's what really matters. & 5/4/2021 3:01 PM \\
\hline 633 & does not really help too much, kind of irrelevant & 5/4/2021 2:55 PM \\
\hline 634 & Math and Reading take so long to do, I dont know if its just me, but I take over 30 minutes or even over an hour. & 5/4/2021 2:53 PM \\
\hline 635 & The math kept giving me challenging lessons and after I would pass them, it would give my super easy ones. & 5/4/2021 2:50 PM \\
\hline 636 & it is really annoying when you have to do a long lesson all over again because you miss one to many questions & 5/4/2021 2:50 PM \\
\hline 637 & The Close-Reading comprehension are really long and sometimes stressful. & 5/4/2021 2:49 PM \\
\hline 638 & Sometimes it was to hard & 5/4/2021 2:49 PM \\
\hline 639 & It would take super long and sometimes they expected you to know it right away. & 5/4/2021 2:49 PM \\
\hline 640 & sometimes when you have to pause iready and your in a question sometimes in reading it happens alot a little in math & 5/4/2021 2:49 PM \\
\hline 641 & Nothing really. & 5/4/2021 2:48 PM \\
\hline 642 & nothing & 5/4/2021 2:48 PM \\
\hline 643 & nothing & 5/4/2021 2:48 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 644 & the reading ones are not very good & 5/4/2021 2:22 PM \\
\hline 645 & Sometimes it was a waste of time and I already knew what it was teaching me. & 5/4/2021 2:20 PM \\
\hline 646 & I don't know & 5/4/2021 2:19 PM \\
\hline 647 & reading kinda & 5/4/2021 2:18 PM \\
\hline 648 & it was not very un to do it. & 5/4/2021 2:17 PM \\
\hline 649 & Nothing really. If one of my lessons has a low grade iready makes me take it again so I think that's telling me to try again so yeah... & 5/4/2021 2:16 PM \\
\hline 650 & Nothing & 5/4/2021 2:15 PM \\
\hline 651 & i dont know & 5/4/2021 2:15 PM \\
\hline 652 & difficult lessons & 5/4/2021 2:14 PM \\
\hline 653 & Reading & 5/4/2021 2:14 PM \\
\hline 654 & the diagnostic gave me to easy problems & 5/4/2021 2:14 PM \\
\hline 655 & the Reading parts & 5/4/2021 2:14 PM \\
\hline 656 & Nothing. & 5/4/2021 2:13 PM \\
\hline 657 & nothing & 5/4/2021 2:12 PM \\
\hline 658 & I didn't like how they change the characters for math & 5/4/2021 2:11 PM \\
\hline 659 & nothing & 5/4/2021 2:11 PM \\
\hline 660 & nothing & 5/4/2021 2:10 PM \\
\hline 661 & Sometimes I for got to do i Ready & 5/4/2021 2:10 PM \\
\hline 662 & ????????? & 5/4/2021 2:10 PM \\
\hline 663 & idk either & 5/4/2021 2:09 PM \\
\hline 664 & It continued to do the same lesson repeatedly even if i finished it and got 100 percent & 5/4/2021 2:09 PM \\
\hline 665 & it is chalenging & 5/4/2021 2:07 PM \\
\hline 666 & ? & 5/4/2021 2:05 PM \\
\hline 667 & X4s & 5/4/2021 2:05 PM \\
\hline 668 & it had a few parts where got messed up and i had to re load & 5/4/2021 2:05 PM \\
\hline 669 & the lessons pause then restart & 5/4/2021 2:00 PM \\
\hline 670 & a lot of things & 5/4/2021 1:59 PM \\
\hline 671 & they try to make it fun but they make it confusing instead & 5/4/2021 1:58 PM \\
\hline 672 & it was really slow it just talked and talked even when i had the answer & 5/4/2021 1:58 PM \\
\hline 673 & long assingmets & 5/4/2021 1:42 PM \\
\hline 674 & it kept on playing easier lessons when i got ONE question wrong & 5/4/2021 1:30 PM \\
\hline 675 & I can't think of any because it's all good & 5/4/2021 1:29 PM \\
\hline 676 & Nothing but the same problem stated above & 5/4/2021 1:29 PM \\
\hline 677 & it tells me what I already know & 5/4/2021 1:29 PM \\
\hline 678 & nothing from what I can recall & 5/4/2021 1:29 PM \\
\hline 679 & It was too easy and I was on level C but then level D and then level E so fast. One week ago I hit level F and that is SO HARD I barely understand anything & 5/4/2021 1:29 PM \\
\hline 680 & math and reading & 5/4/2021 1:28 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 681 & It was a little bit wonky, and it was kind of cheesy. & 5/4/2021 1:28 PM \\
\hline 682 & I dont know & 5/4/2021 1:28 PM \\
\hline 683 & i ready math is asking me the same questions every time and those questions are below my level. & 5/4/2021 1:28 PM \\
\hline 684 & everything except the games & 5/4/2021 1:28 PM \\
\hline 685 & I didn't like it because it is trying to teach me things I already know. It always gives me information that I KNOW and it doesn't help me. & 5/4/2021 1:28 PM \\
\hline 686 & nothing really & 5/4/2021 1:27 PM \\
\hline 687 & i did not need the volume button, it was very distracting & 5/4/2021 1:27 PM \\
\hline 688 & everything went well while I was i-Ready there's nothing bad about it & 5/4/2021 1:27 PM \\
\hline 689 & it teachies some stuff i all ready know & 5/4/2021 1:27 PM \\
\hline 690 & the reading & 5/4/2021 1:25 PM \\
\hline 691 & the end & 5/4/2021 1:25 PM \\
\hline 692 & lots & 5/4/2021 1:25 PM \\
\hline 693 & Most of the stuff it asks me, I already know & 5/4/2021 1:25 PM \\
\hline 694 & Some questions were very hard, but then I realized that I was missing something about the question. & 5/4/2021 1:25 PM \\
\hline 695 & I don't know. & 5/4/2021 1:25 PM \\
\hline 696 & The internet & 5/4/2021 1:25 PM \\
\hline 697 & I didn't help. that much & 5/4/2021 1:24 PM \\
\hline 698 & Nothing. & 5/4/2021 1:23 PM \\
\hline 699 & nothing & 5/4/2021 1:23 PM \\
\hline 700 & Nothing & 5/4/2021 1:23 PM \\
\hline 701 & its boring and i dont feel like it helps & 5/4/2021 12:41 PM \\
\hline 702 & sometimes it would not be right and i would have to redo the entire lesson over again & 5/4/2021 12:19 PM \\
\hline 703 & The lessons are too long, and they don't explain very well & 5/4/2021 12:03 PM \\
\hline 704 & Time & 5/4/2021 12:01 PM \\
\hline 705 & i got some lessons that were too hard & 5/4/2021 11:48 AM \\
\hline 706 & Most of the time it was really complicated and not that helpful. & 5/4/2021 11:17 AM \\
\hline 707 & no & 5/4/2021 11:17 AM \\
\hline 708 & nothing & 5/4/2021 11:10 AM \\
\hline 709 & Uh...nothing? & 5/4/2021 11:10 AM \\
\hline 710 & the easy question & 5/4/2021 11:09 AM \\
\hline 711 & every one went well & 5/4/2021 11:08 AM \\
\hline 712 & Math and Reading & 5/4/2021 11:07 AM \\
\hline 713 & nothing i think & 5/4/2021 11:06 AM \\
\hline 714 & nothing & 5/4/2021 11:06 AM \\
\hline 715 & nothing it is all good & 5/4/2021 11:06 AM \\
\hline 716 & Math & 5/4/2021 11:06 AM \\
\hline 717 & I had to redo lessons & 5/4/2021 11:04 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 718 & Sometimes the page would crash and I would lose progress. & 5/4/2021 11:03 AM \\
\hline 719 & nothing & 5/4/2021 11:03 AM \\
\hline 720 & it is kinda easy & 5/4/2021 11:01 AM \\
\hline 721 & None & 5/4/2021 11:00 AM \\
\hline 722 & nothing & 5/4/2021 11:00 AM \\
\hline 723 & i did not enjoy it. & 5/4/2021 10:57 AM \\
\hline 724 & Sometimes the assignments were too easy & 5/4/2021 10:15 AM \\
\hline 725 & I dont think anything went wrong for me doing i-ready this year. & 5/4/2021 10:15 AM \\
\hline 726 & Nothing & 5/4/2021 10:14 AM \\
\hline 727 & When I would start a new subject in i-ready I don't think it explained how to do it very well I was often confused and didn't know what to do. & 5/4/2021 10:14 AM \\
\hline 728 & that it was a little too easy & 5/4/2021 10:13 AM \\
\hline 729 & I didn't like how it gave some boring things and it gives me stuff that I already learned. & 5/4/2021 10:13 AM \\
\hline 730 & some times things were a little bit confusing but eventually I would get it. I & 5/4/2021 10:13 AM \\
\hline 731 & how long they are & 5/4/2021 10:12 AM \\
\hline 732 & Sometimes it would get slightly confusing & 5/4/2021 10:12 AM \\
\hline 733 & I am still not very good at math & 5/4/2021 10:12 AM \\
\hline 734 & i dont know & 5/4/2021 10:11 AM \\
\hline 735 & a lot of stuff & 5/4/2021 10:02 AM \\
\hline 736 & I had to redo the same lesson again when I didn't pass a quiz. & 5/4/2021 10:02 AM \\
\hline 737 & Nothing comes too mind. & 5/4/2021 10:00 AM \\
\hline 738 & nothing really & 5/4/2021 9:59 AM \\
\hline 739 & having fun & 5/4/2021 9:56 AM \\
\hline 740 & I didn't learn the lessons very well, and I would rather learn lessons on Khan Academy. & 5/4/2021 9:56 AM \\
\hline 741 & Its kind of boring doing I-Ready for like and an hour. & 5/4/2021 9:54 AM \\
\hline 742 & i think that every thing went well & 5/4/2021 9:54 AM \\
\hline 743 & i dont know & 5/4/2021 9:53 AM \\
\hline 744 & i can't think of any thing bad. & 5/4/2021 9:53 AM \\
\hline 745 & neither & 5/4/2021 9:48 AM \\
\hline 746 & laggy, bad connection & 5/4/2021 9:44 AM \\
\hline 747 & i have to redo lessons when i fail them & 5/4/2021 9:42 AM \\
\hline 748 & I had to do 45 min for English and 30 min for math so it was a little bit much. & 5/4/2021 9:39 AM \\
\hline 749 & idk & 5/4/2021 9:37 AM \\
\hline 750 & what didnt go as well is sitting there for a while & 5/4/2021 9:37 AM \\
\hline 751 & The reading lessons took forever and I don't feel like I learned much & 5/4/2021 9:33 AM \\
\hline 752 & how many lessons i completed & 5/4/2021 9:30 AM \\
\hline 753 & i-ready would sometimes not load. & 5/4/2021 9:30 AM \\
\hline 754 & it was kinda boring i guess & 5/4/2021 9:29 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 755 & It gave me answers easier and easier even if I know I got the answer right & 5/4/2021 9:29 AM \\
\hline 756 & I dont think that i did it enough. & 5/4/2021 9:29 AM \\
\hline 757 & Some of the lessons took over an hour to complete. & 5/4/2021 9:29 AM \\
\hline 758 & Some of the time I was taught things I already knew. & 5/4/2021 9:21 AM \\
\hline 759 & when getting the answers wrong and having to retake the lesson & 5/4/2021 9:11 AM \\
\hline 760 & the diagnostic & 5/4/2021 8:45 AM \\
\hline 761 & Generallt getting angry at specfic lessons due to them having words that I don understand well. & 5/4/2021 8:45 AM \\
\hline 762 & the scores some times and the lessons are big and they take a long time to finish & 5/4/2021 8:45 AM \\
\hline 763 & One thing that didn't go well for me using i-Ready is how long the lessons are. & 5/4/2021 8:44 AM \\
\hline 764 & It was kinda confusing in some parts even though I was confident I had the correct answer. & 5/4/2021 8:44 AM \\
\hline 765 & its stressing using and listening to the same iready voice & 5/4/2021 8:44 AM \\
\hline 766 & not a thing & 5/4/2021 8:44 AM \\
\hline 767 & it just reapeats its self if you need help and or loops itself unless you get more then 70-80\% & 5/4/2021 8:43 AM \\
\hline 768 & it was to much of them talking so youi would wait for it to explain what to do in the slowest voice possible then repeat every question & 5/4/2021 8:26 AM \\
\hline 769 & It was glitching a lot and some times didn't work for me. & 5/4/2021 8:22 AM \\
\hline 770 & really long & 5/4/2021 8:21 AM \\
\hline 771 & Sometimes it would say the opposite of what my teachers taught me. & 5/4/2021 8:21 AM \\
\hline 772 & the lessons are to long & 5/4/2021 8:20 AM \\
\hline 773 & Very time consuming but it still helps me learn and practice & 5/4/2021 8:20 AM \\
\hline 774 & In my opinion the stuff was hard to understand, and I think I was better learning about the stuff from a video. & 5/4/2021 8:20 AM \\
\hline 775 & One thing that I had a hard time doing was keeping track of how many I-Ready's I had done. & 5/4/2021 8:20 AM \\
\hline 776 & personally for me, I got a little behind in iready so I have a lot of catching up to do & 5/4/2021 8:20 AM \\
\hline 777 & I could not control what I was doing. & 5/4/2021 8:19 AM \\
\hline 778 & most of the lessons are confusing to me and I dont like doing them & 5/4/2021 8:19 AM \\
\hline 779 & I hated the lessons because they were incredibly long, boring, and taught me things way below my grade level & 5/4/2021 8:18 AM \\
\hline 780 & the quizzes at the end and the whole lessons & 5/4/2021 8:18 AM \\
\hline 781 & the lessons had nothing to do with what we were learning in class and was a waste of time & 5/4/2021 7:37 AM \\
\hline 782 & Its super boring and i dont have the motivation to willingly do it & 5/4/2021 7:26 AM \\
\hline 783 & the quizzies & 5/4/2021 6:06 AM \\
\hline 784 & I can't really use iReady, my computer has issues with the diagnostic. & 5/3/2021 9:32 PM \\
\hline 785 & everything & 5/3/2021 6:45 PM \\
\hline 786 & It's boring. Sorry. & 5/3/2021 5:57 PM \\
\hline 787 & I think that they should add the answers to the questions we get wrong so we can rethink our thought process. & 5/3/2021 5:21 PM \\
\hline 788 & odk & 5/3/2021 4:54 PM \\
\hline 789 & it's kinda boring & 5/3/2021 4:29 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 790 & Something that didn't go well, is that on the quizzes, there aren't a lot of questions so one misclick could make you fail and redo the lesson.. & 5/3/2021 3:16 PM \\
\hline 791 & The diagonstic & 5/3/2021 3:08 PM \\
\hline 792 & It was a bit stressful at times. & 5/3/2021 3:08 PM \\
\hline 793 & I didn't like going to it through clever & 5/3/2021 2:24 PM \\
\hline 794 & it was really boring and long. & 5/3/2021 2:21 PM \\
\hline 795 & None & 5/3/2021 2:14 PM \\
\hline 796 & It took me a while to figure out how to submit & 5/3/2021 2:08 PM \\
\hline 797 & Well sometimes it really stresses me out. & 5/3/2021 2:08 PM \\
\hline 798 & I sometimes didn't understand what they were teaching me but there was no one to explain it to me because I was working asynchronously. & 5/3/2021 2:08 PM \\
\hline 799 & How long it takes to go through 1 lesson, the extra I-Ready lessons we have to do added on the the regular homework that we do in class. & 5/3/2021 2:07 PM \\
\hline 800 & some of the lessons were really long or boring & 5/3/2021 2:07 PM \\
\hline 801 & i couldnt log in alot, my lessons got scrambled, and i got lessons that where way to easy. & 5/3/2021 2:07 PM \\
\hline 802 & the lessons are a little easy & 5/3/2021 2:07 PM \\
\hline 803 & The lessons took around half an hour. & 5/3/2021 2:06 PM \\
\hline 804 & Technical difficulty & 5/3/2021 2:05 PM \\
\hline 805 & Nothing really either than at the start of the year the lessons were to easy. (they got fixed) & 5/3/2021 2:05 PM \\
\hline 806 & it was hard to keep it up & 5/3/2021 2:03 PM \\
\hline 807 & The dialogue isn't the best. & 5/3/2021 1:59 PM \\
\hline 808 & I'm not sure, it was fine & 5/3/2021 1:15 PM \\
\hline 809 & I occasionally forgot to do it. & 5/3/2021 1:13 PM \\
\hline 810 & Sometimes when I didn't understand something, sometimes it didn't explain why I got it wrong. & 5/3/2021 1:13 PM \\
\hline 811 & It repeates the same types of questions even when you get them right and its hard to do anything but mental math & 5/3/2021 1:12 PM \\
\hline 812 & I wasn't enjoying it very much. & 5/3/2021 1:11 PM \\
\hline 813 & It would take me a long time to get it done, I would spend over an hour on it, but then I started setting goals to finish a lesson by a certain time, and I got a bit better, still took me about 4560 min to finish one lesson but still working on it. & 5/3/2021 1:11 PM \\
\hline 814 & Sometimes when I would answer a question in a specific form, like a decimal, it would mark it incorrect just because it was in the wrong form, and I wouldn't know what I was messing up on until I asked to step it out. Then it would proceed to show me all the steps I did, but with a fraction instead of decimal as the answer. & 5/3/2021 1:11 PM \\
\hline 815 & It was a little bit boring for me because all you do is enter an answer to a math problem. & 5/3/2021 1:11 PM \\
\hline 816 & slow speed & 5/3/2021 1:11 PM \\
\hline 817 & Nothing went wrong. & 5/3/2021 1:09 PM \\
\hline 818 & The lessons took a while for the amount you learned, and they could get repetitive. & 5/3/2021 1:09 PM \\
\hline 819 & I don't really like I-Ready, they elongate lessons, the diagnostic takes a long time, and I don't like having assignments being a certain amount of time, just a certain amount of work & 5/3/2021 1:09 PM \\
\hline 820 & The explaining was often difficult to understand (when doing lessons) so I easily got confused. I also didn't think the I-Ready lessons were fun (in general) so I didn't seem to take much interest in it. & 5/3/2021 1:09 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 821 & the lessons are a bit slow & 5/3/2021 1:08 PM \\
\hline 822 & Nothing much & 5/3/2021 1:08 PM \\
\hline 823 & i-Ready is very glitchy and sometimes hard to understand. & 5/3/2021 1:08 PM \\
\hline 824 & the questions are very confusing sometimes. & 5/3/2021 1:08 PM \\
\hline 825 & Sometimes even though I completed a lesson on my path, the lesson came back and I had to do it again & 5/3/2021 1:07 PM \\
\hline 826 & The lessons and how they were stuctured & 5/3/2021 1:07 PM \\
\hline 827 & Iready is boring and takes to much time & 5/3/2021 1:07 PM \\
\hline 828 & During a Zoom meeting, the volume for iREADY would be so loud that I cannot hear the teachers directions. & 5/3/2021 1:07 PM \\
\hline 829 & I get bored of it, and I don't feel like doing it anymore. & 5/3/2021 1:07 PM \\
\hline 830 & It was just busywork and stressful & 5/3/2021 1:07 PM \\
\hline 831 & not much & 5/3/2021 1:07 PM \\
\hline 832 & Almost everything & 5/3/2021 1:07 PM \\
\hline 833 & diagnostics are too long & 5/3/2021 1:07 PM \\
\hline 834 & I ready is kind of slow and repetitive & 5/3/2021 1:07 PM \\
\hline 835 & the diagnostics were long and took a while to complete & 5/3/2021 1:07 PM \\
\hline 836 & Nothing went super well, but nothing bad really happened either & 5/3/2021 1:07 PM \\
\hline 837 & The my path lessons are HIGHLY inaccurate, the lessons are long and tedious. I'll do 45 minutes of I-Ready just for the system to say i only did 15 & 5/3/2021 1:07 PM \\
\hline 838 & social studies & 5/3/2021 1:06 PM \\
\hline 839 & the diagnostics take too long & 5/3/2021 1:06 PM \\
\hline 840 & it takes a very long time and does ont help me learn & 5/3/2021 1:06 PM \\
\hline 841 & i-Ready does no place students in the right section, it does not let students do enough of the work, it does not step enough stuff out, it will not let you try a question again or get a similar one, the characters are playing all of the games, we dont get a chance to try, AND it got pi wrong!! I have double checked! & 5/3/2021 1:05 PM \\
\hline 842 & Everything went well. & 5/3/2021 12:47 PM \\
\hline 843 & It was super slow and the noise of the characters usually grates on my ears. I dread having to do a lesson. & 5/3/2021 12:46 PM \\
\hline 844 & The lessons are always mind-numbingly slow, making it feel like a chore to sit through. & 5/3/2021 12:45 PM \\
\hline 845 & The lessons are too long, and they don't explain very well & 5/3/2021 12:43 PM \\
\hline 846 & I'm not sure. & 5/3/2021 12:43 PM \\
\hline 847 & The format is frustrating and I overall didn't like it. & 5/3/2021 12:42 PM \\
\hline 848 & it's kinda boring & 5/3/2021 12:41 PM \\
\hline 849 & everything. slow buggy lessons that foce you to take incredible amounts of time learning stuff, and makes you feel less motivated & 5/3/2021 12:38 PM \\
\hline 850 & everything & 5/3/2021 12:35 PM \\
\hline 851 & It was sometimes frustrating when there were robot voices, because i couldnt really understand them & 5/3/2021 12:30 PM \\
\hline 852 & Using i-Ready, in my opinion, is a waste of time. I take a diagnostic focusing on 7th to 8th grade math, and I do well on it, according to my teacher. The next week, i-Ready is making me add and subtract integers. & 5/3/2021 12:19 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 853 & What did not go well during i-Ready this school year was when I had trouble accessing the assignments. & 5/3/2021 11:55 AM \\
\hline 854 & nothing & 5/3/2021 11:53 AM \\
\hline 855 & The assignments I got were much too easy, and even though in the diagnostic I was getting trigonometry I got addition and subtraction for assignments. I didn't really learn anything from iReady. & 5/3/2021 11:52 AM \\
\hline 856 & They go though the lesson very slowly and sometimes it is very frustrating & 5/3/2021 11:50 AM \\
\hline 857 & everything & 5/3/2021 11:49 AM \\
\hline 858 & The lessons were overall usually really boring and I didn't feel motivated to do them. The lessons were also always about either things I'd already learned or things that were way past my grade level, which is odd considering the diagnostic is supposed to make it more personalized. & 5/3/2021 11:49 AM \\
\hline 859 & Sometimes the lessons went to slow or too fast and were a little confusing. & 5/3/2021 11:49 AM \\
\hline 860 & Some I-Ready lessons were reviews of what I already learned and understood. & 5/3/2021 11:48 AM \\
\hline 861 & the amount of times I use iready & 5/3/2021 11:35 AM \\
\hline 862 & eh & 5/3/2021 10:35 AM \\
\hline 863 & i had to redo a lesson 4 times & 5/3/2021 10:35 AM \\
\hline 864 & it was very, extremely hard to get through every week knowing that it was just going to be reset the next week. & 5/3/2021 10:35 AM \\
\hline 865 & some of the lessons where to easy and some where way to hard & 5/3/2021 10:34 AM \\
\hline 866 & idk & 5/3/2021 10:33 AM \\
\hline 867 & It was a little easy but overall it is good & 5/3/2021 10:33 AM \\
\hline 868 & it can get boring and stressful. & 5/3/2021 10:33 AM \\
\hline 869 & every thing it didn't help under stand anything better and it was hard for me to do it because i found it very boring & 5/3/2021 10:07 AM \\
\hline 870 & nothing? & 5/3/2021 9:45 AM \\
\hline 871 & nothing went wrong for me & 5/3/2021 9:31 AM \\
\hline 872 & I didnt like that the I-Ready lesson before we take the quiz takes like 20 min to complete. & 5/3/2021 9:31 AM \\
\hline 873 & having to do the exact same thing over again if i didn't do good the first time & 5/3/2021 9:28 AM \\
\hline 874 & BOREDOM & 5/3/2021 9:16 AM \\
\hline 875 & Nothing really did not go well & 5/2/2021 10:40 PM \\
\hline 876 & Lessons seemed too easy and a waste of time, I suppose some were good review though. & 5/1/2021 11:35 AM \\
\hline 877 & It was very repetitive and I didn't like doing it very much. I avoided it whenever I could. & 4/30/2021 2:57 PM \\
\hline 878 & They talk way to long because to me, it's only a program to help review so I don't want the bot to talk. & 4/30/2021 2:55 PM \\
\hline 879 & The lessons are long and annoying, they explain EVERYTHING if you get it wrong by doing something that they think is something else and it annoys me because it doesn't specify in what form you are supposed to answer. It is always something to look down to, so I postpone it quite often. & 4/30/2021 2:54 PM \\
\hline 880 & Its a little hard to drag myself to do it but its ok & 4/30/2021 2:53 PM \\
\hline 881 & Sometimes I answer the correct answer but i-Ready says I did it wrong, and then precedes to show me the answer I answered. & 4/30/2021 2:53 PM \\
\hline 882 & Math & 4/30/2021 2:30 PM \\
\hline 883 & there was some alot of I found kinda slow & 4/30/2021 2:30 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 884 & Sometimes I was a little confused on how I was supposed to answer the problem or what exactly they were asking me to do. & 4/30/2021 2:30 PM \\
\hline 885 & some was to easy & 4/30/2021 2:28 PM \\
\hline 886 & nothing & 4/30/2021 2:28 PM \\
\hline 887 & I got bored really easily & 4/30/2021 2:28 PM \\
\hline 888 & it went well & 4/30/2021 2:28 PM \\
\hline 889 & I sometimes got lessons that I have already mastered on my own. & 4/30/2021 2:28 PM \\
\hline 890 & some stuff & 4/30/2021 2:28 PM \\
\hline 891 & It 'gives' you learning skills just fine but I'd say there's better. It's decent. & 4/30/2021 1:57 PM \\
\hline 892 & nothing & 4/30/2021 1:06 PM \\
\hline 893 & I didnt learn much and it just made my school year a little harder because it just piled on more work & 4/30/2021 12:51 PM \\
\hline 894 & time for it its way to long and time consumeing and i have other classes & 4/30/2021 12:50 PM \\
\hline 895 & I am not sure if anything did not go well for me. & 4/30/2021 12:49 PM \\
\hline 896 & nothing & 4/30/2021 12:47 PM \\
\hline 897 & nothing really & 4/30/2021 12:46 PM \\
\hline 898 & becasue they were too long & 4/30/2021 12:46 PM \\
\hline 899 & everything & 4/30/2021 12:46 PM \\
\hline 900 & Sometimes I'll answer the question wrong and I can't re-do it. & 4/30/2021 12:46 PM \\
\hline 901 & Trying to keep up with it, and ive been doing reading in person instead & 4/30/2021 12:44 PM \\
\hline 902 & it was boring & 4/30/2021 12:43 PM \\
\hline 903 & Nothing yet to be honest & 4/30/2021 12:43 PM \\
\hline 904 & idk & 4/30/2021 12:43 PM \\
\hline 905 & it was hard long and anoying & 4/30/2021 12:43 PM \\
\hline 906 & It takes a lot of time for the program to explain the concept. & 4/30/2021 12:42 PM \\
\hline 907 & idk & 4/30/2021 12:42 PM \\
\hline 908 & it takes to long to do one assignment & 4/30/2021 12:42 PM \\
\hline 909 & I don't know & 4/30/2021 12:41 PM \\
\hline 910 & There were some things I do not understand as much. & 4/30/2021 12:41 PM \\
\hline 911 & Of how long they usually are & 4/30/2021 12:40 PM \\
\hline 912 & I just don't like doing it but not because I hate it. Its because it takes like 10 min and is boring & 4/30/2021 12:36 PM \\
\hline 913 & It was long and hard to stay motivated & 4/30/2021 12:33 PM \\
\hline 914 & I'm not sure but there's not much bad things that didn't go well using i-Ready this year. & 4/30/2021 12:32 PM \\
\hline 915 & A lot in the math survey as it is super confusing as some are super easy some are super hard and also one question I got I can give the screenshot if you want of the question of the problem being multiple choice and what happened was no answer was correct WHICH IS CONFUSING also it is quite bad at explaining how to do the material instead they are like oh your wrong this is the answer NO EXPLANATION ON WHAT TO DO while in another math site like Mobymax actually teaches you how to do it and gives you explanations on how to do it by showing the process if you need help which is way better then I ready so I recommend you take some advice from Mobymax and also fix the math problems you give us and also the like & 4/30/2021 12:31 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
story things you give us are not good and just make it more annoying and boring I would rather have a robotic voice give me question instead of a annoying one.
\begin{tabular}{|c|c|c|}
\hline 916 & nothing i guess its good & 4/30/2021 12:27 PM \\
\hline 917 & it didnt help & 4/30/2021 12:27 PM \\
\hline 918 & it would take forever to finish & 4/30/2021 12:26 PM \\
\hline 919 & it didn't help me with anything & 4/30/2021 12:26 PM \\
\hline 920 & everthing & 4/30/2021 12:25 PM \\
\hline 921 & wasting my time & 4/30/2021 12:25 PM \\
\hline 922 & everything & 4/30/2021 12:25 PM \\
\hline 923 & It didn't help em at all, made me more stressed, was very difficult to sue I understood how but there was no reason for little comics or brain breaks it gave it was just slowing me down. It never saved my work and said I had high level then would glitch and give me basic adding. & 4/30/2021 12:25 PM \\
\hline 924 & It took forever & 4/30/2021 12:24 PM \\
\hline 925 & i lont like it & 4/30/2021 12:24 PM \\
\hline 926 & It doesn't teach us anything & 4/30/2021 12:24 PM \\
\hline 927 & Nothing & 4/30/2021 12:24 PM \\
\hline 928 & I'm not able to see what I did wrong while using I-Ready, so can't really learn from it & 4/30/2021 12:24 PM \\
\hline 929 & The time spent doing it. I think kids could have been doing more important asssignments other than i-ready & 4/30/2021 12:24 PM \\
\hline 930 & idk & 4/30/2021 12:23 PM \\
\hline 931 & really i dont know & 4/30/2021 12:23 PM \\
\hline 932 & in math \(i\) think we need like an explanation how to solve the problems even tho our teacher explained it we can need a little more from i ready. so in math it didn't go so well . & 4/30/2021 12:05 PM \\
\hline 933 & Everything & 4/30/2021 12:03 PM \\
\hline 934 & Um i i dont really know? & 4/30/2021 12:01 PM \\
\hline 935 & nothing & 4/30/2021 11:59 AM \\
\hline 936 & nothing really some glitches once in a while but not a big deal for me & 4/30/2021 11:59 AM \\
\hline 937 & it wasnt the same from class & 4/30/2021 11:58 AM \\
\hline 938 & Nothing went wrong when using I-ready. & 4/30/2021 11:57 AM \\
\hline 939 & take long & 4/30/2021 11:57 AM \\
\hline 940 & the npc's or the people that gave the instructions were annoying talked way to much & 4/30/2021 11:57 AM \\
\hline 941 & Nothing & 4/30/2021 11:56 AM \\
\hline 942 & the long and kinda boring lessons in my opinion (I enjoy math class more) and the fact that it gives you a test at the end and if you fail you have to restart all over. & 4/30/2021 11:56 AM \\
\hline 943 & nothing & 4/30/2021 11:56 AM \\
\hline 944 & everthing & 4/30/2021 11:55 AM \\
\hline 945 & I didnt learn what i really needed this school year & 4/30/2021 11:55 AM \\
\hline 946 & Nothing its all fine & 4/30/2021 11:55 AM \\
\hline 947 & the English part took longer then the math one & 4/30/2021 11:55 AM \\
\hline 948 & nothing & 4/30/2021 11:55 AM \\
\hline 949 & I don't know & 4/30/2021 11:54 AM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 950 & nothing & 4/30/2021 11:54 AM \\
\hline 951 & everything because this site is childish and at most was made to k-6th grade students & 4/30/2021 11:54 AM \\
\hline 952 & I was very tired and annoyed at the test when I took it & 4/30/2021 11:54 AM \\
\hline 953 & everything & 4/30/2021 11:54 AM \\
\hline 954 & nothing is pretty fun to use & 4/30/2021 11:54 AM \\
\hline 955 & nothing & 4/30/2021 11:53 AM \\
\hline 956 & it's difficult nd The diagnosticts Takes weeks to finish way to long, make He Strongly dislike it & 4/30/2021 11:53 AM \\
\hline 957 & stress, resets, time, etc & 4/30/2021 11:53 AM \\
\hline 958 & Very long and tiring assesments & 4/30/2021 11:53 AM \\
\hline 959 & The fact that if you did bad on the assessment the work would be easy & 4/30/2021 11:53 AM \\
\hline 960 & nothing it was good & 4/30/2021 11:53 AM \\
\hline 961 & Having to redo a couple lesson. & 4/30/2021 11:53 AM \\
\hline 962 & It was really slow and annoying & 4/30/2021 11:53 AM \\
\hline 963 & the lessons & 4/30/2021 11:53 AM \\
\hline 964 & Nothing everything went well & 4/30/2021 11:53 AM \\
\hline 965 & working online is more hard for me & 4/30/2021 11:53 AM \\
\hline 966 & i don't know & 4/30/2021 11:53 AM \\
\hline 967 & It took a while & 4/30/2021 11:53 AM \\
\hline 968 & nothing & 4/30/2021 11:53 AM \\
\hline 969 & I'm not sure & 4/30/2021 11:53 AM \\
\hline 970 & it was really long and not that fun & 4/30/2021 11:52 AM \\
\hline 971 & I got frusterated by it & 4/30/2021 11:52 AM \\
\hline 972 & I didn't use it & 4/30/2021 11:52 AM \\
\hline 973 & me hating it & 4/30/2021 11:52 AM \\
\hline 974 & dont know & 4/30/2021 11:52 AM \\
\hline 975 & english & 4/30/2021 11:52 AM \\
\hline 976 & I don't know. & 4/30/2021 11:52 AM \\
\hline 977 & nothing & 4/30/2021 11:52 AM \\
\hline 978 & Its a lot of questions to answer & 4/30/2021 11:52 AM \\
\hline 979 & It showed me lots of stuff I didnt know & 4/30/2021 11:52 AM \\
\hline 980 & again, nothing i do not like i ready & 4/30/2021 11:52 AM \\
\hline 981 & Sometimes it was hard for me and I did not pass a few lessons. & 4/30/2021 11:52 AM \\
\hline 982 & nothing & 4/30/2021 11:52 AM \\
\hline 983 & Again, I only used it once it was fine & 4/30/2021 11:52 AM \\
\hline 984 & Sometimes the lessons are kinda boring an not the most entertaining thing to do. & 4/30/2021 11:52 AM \\
\hline 985 & everything with the way the i-ready math assignments are handled with "hip" people. & 4/30/2021 11:52 AM \\
\hline 986 & I don't know what my score was. Also, I think that because it was from home there was less accountability and I didn't do my absolute best. & 4/30/2021 11:52 AM \\
\hline 987 & I don't really use it so idk. I mean the tests are long & 4/30/2021 11:52 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 988 & it wasn't necessary in my classes & 4/30/2021 11:52 AM \\
\hline 989 & the website would glitch a lot causing me to be kicked out of lessons & 4/30/2021 11:52 AM \\
\hline 990 & EVerything was fine & 4/30/2021 11:51 AM \\
\hline 991 & Sometimes i get bored whie doing some lessosn & 4/30/2021 11:51 AM \\
\hline 992 & The content was lengthy, and from what I remember, the time put into it was not worth it. & 4/30/2021 11:51 AM \\
\hline 993 & too intense & 4/30/2021 11:51 AM \\
\hline 994 & none & 4/30/2021 11:51 AM \\
\hline 995 & the animation gives me anxiety and I find it weird. plus they repeat somethings too much. & 4/30/2021 11:51 AM \\
\hline 996 & Nothing & 4/30/2021 11:51 AM \\
\hline 997 & The work & 4/30/2021 11:50 AM \\
\hline 998 & Sometimes the questions are hard & 4/30/2021 11:50 AM \\
\hline 999 & Nothing really goes wrong, although, the voice overs who talk you through the lesson act like your 3 years old which is annoying. & 4/30/2021 11:49 AM \\
\hline 1000 & taking the dingostic & 4/30/2021 11:49 AM \\
\hline 1001 & It restarted the diagnostic several times & 4/30/2021 11:49 AM \\
\hline 1002 & nothing i just didnt really like using it a lot. & 4/30/2021 11:49 AM \\
\hline 1003 & idk & 4/30/2021 11:48 AM \\
\hline 1004 & Everything went fine. & 4/30/2021 11:48 AM \\
\hline 1005 & Something that didn't go well was that the test questions felt very repetitive and long. & 4/30/2021 11:48 AM \\
\hline 1006 & Time management & 4/30/2021 11:48 AM \\
\hline 1007 & x & 4/30/2021 11:47 AM \\
\hline 1008 & english & 4/30/2021 11:47 AM \\
\hline 1009 & I gave me more missing assignments. & 4/30/2021 11:47 AM \\
\hline 1010 & Questions that we didnt learn & 4/30/2021 11:47 AM \\
\hline 1011 & it was anoying & 4/30/2021 11:47 AM \\
\hline 1012 & the length i would rather have short hard questions than long easy ones & 4/30/2021 11:47 AM \\
\hline 1013 & My teachers never used I ready as an assignment. I also found it not really helpful to use the I ready assesment. & 4/30/2021 11:47 AM \\
\hline 1014 & The lessons sometimes repeated for me even though I got a passing score & 4/30/2021 11:47 AM \\
\hline 1015 & Same as number 9, nothing special. & 4/30/2021 11:47 AM \\
\hline 1016 & I did not use the i-Ready test this year other then when taking the diagnostics test. & 4/30/2021 11:47 AM \\
\hline 1017 & the minutes are to0 long that are assigned the diagnostic is too long & 4/30/2021 11:47 AM \\
\hline 1018 & nothing & 4/30/2021 11:47 AM \\
\hline 1019 & nothing & 4/30/2021 11:47 AM \\
\hline 1020 & math & 4/30/2021 11:46 AM \\
\hline 1021 & I still didn't use i-ready that much & 4/30/2021 11:46 AM \\
\hline 1022 & d & 4/30/2021 11:46 AM \\
\hline 1023 & nothing waste of time & 4/30/2021 11:46 AM \\
\hline 1024 & Some of the math questions were COLLEGE QUESTIONS and I am in 8th grade. & 4/30/2021 11:46 AM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 1025 & The i-Ready assignments were very slow paced & 4/30/2021 11:46 AM \\
\hline 1026 & EVERYTHING IT SUCKS BALLS & 4/30/2021 11:46 AM \\
\hline 1027 & It was glitchy & 4/30/2021 11:46 AM \\
\hline 1028 & I had trouble logging in and was late on the assesments. & 4/30/2021 11:46 AM \\
\hline 1029 & Took up a lot of time and didnt explain that much & 4/30/2021 11:46 AM \\
\hline 1030 & The people's voices are annoying & 4/30/2021 11:46 AM \\
\hline 1031 & I didnt use it. & 4/30/2021 11:45 AM \\
\hline 1032 & I took a while & 4/30/2021 11:45 AM \\
\hline 1033 & nothing. & 4/30/2021 11:45 AM \\
\hline 1034 & Doing hard things & 4/30/2021 11:45 AM \\
\hline 1035 & Everything & 4/30/2021 11:45 AM \\
\hline 1036 & Some of the lessons are long, which can kind of be stressful & 4/30/2021 11:44 AM \\
\hline 1037 & I don't like the reading lessons that much & 4/30/2021 11:41 AM \\
\hline 1038 & IDK & 4/30/2021 11:39 AM \\
\hline 1039 & idk & 4/30/2021 11:37 AM \\
\hline 1040 & everything & 4/30/2021 11:36 AM \\
\hline 1041 & reading & 4/30/2021 11:34 AM \\
\hline 1042 & I tried my best on the Diagnostic, yet got very easy questions & 4/30/2021 11:34 AM \\
\hline 1043 & It was a wast of time and I have better stuff to do the lessons are eassy an the diognostic test is too long so I just dont have any reasone to care about it. & 4/30/2021 11:34 AM \\
\hline 1044 & lives & 4/30/2021 11:33 AM \\
\hline 1045 & everything & 4/30/2021 11:33 AM \\
\hline 1046 & We had to do an hour a week! Also the perplexor music had me under the covers until morning. & 4/30/2021 11:32 AM \\
\hline 1047 & I ready went way below my level because it would not keep up with class & 4/30/2021 11:30 AM \\
\hline 1048 & a bit interesting but the i ready doesn't make me into the program. (not really interested either) & 4/30/2021 11:30 AM \\
\hline 1049 & im not sure either & 4/30/2021 11:29 AM \\
\hline 1050 & math cause it was not fun & 4/30/2021 11:29 AM \\
\hline 1051 & Having to waste my time doing it. & 4/30/2021 11:29 AM \\
\hline 1052 & Nothing (I am neutral) & 4/30/2021 11:29 AM \\
\hline 1053 & The characters, such as Swee T and PJ, are taking things too slow. & 4/30/2021 11:29 AM \\
\hline 1054 & the lessons were really repetitive and it didn't give lessons that where hard enough. & 4/30/2021 11:28 AM \\
\hline 1055 & I did not do enough I-ready so I was behind what my class was doing. & 4/30/2021 11:11 AM \\
\hline 1056 & idk & 4/30/2021 11:10 AM \\
\hline 1057 & the quizs & 4/30/2021 11:10 AM \\
\hline 1058 & Nothing. & 4/30/2021 11:10 AM \\
\hline 1059 & Some of the questions were difficult. & 4/30/2021 11:10 AM \\
\hline 1060 & Getting confused on certain questions & 4/30/2021 11:09 AM \\
\hline 1061 & Its boring. & 4/30/2021 11:09 AM \\
\hline
\end{tabular}
iReady Spring 2021 Feedback Survey - Students
\begin{tabular}{|c|c|c|}
\hline 1062 & evrything & 4/30/2021 11:08 AM \\
\hline 1063 & Nothing it just didnt help and was annoying doing it for no reason & 4/30/2021 11:08 AM \\
\hline 1064 & It was too easy for math & 4/30/2021 11:08 AM \\
\hline 1065 & Nothing that I can recall. & 4/30/2021 11:08 AM \\
\hline 1066 & Common mistakes with the lessons & 4/30/2021 11:07 AM \\
\hline 1067 & idk & 4/30/2021 11:07 AM \\
\hline 1068 & wifi & 4/30/2021 11:07 AM \\
\hline 1069 & idk & 4/30/2021 11:06 AM \\
\hline 1070 & i dont really know & 4/30/2021 11:06 AM \\
\hline 1071 & everything & 4/30/2021 11:06 AM \\
\hline 1072 & IT TAKES TOO LONG TO DO THE DIAGNOSTICS & 4/30/2021 11:06 AM \\
\hline 1073 & I don't know. & 4/30/2021 11:06 AM \\
\hline 1074 & i dont really understand the iready exams cuz it feels no different from a normal assighnment and aso i am not good at lerning thru computer and am only earn thru in person & 4/30/2021 11:06 AM \\
\hline 1075 & It only gives you 1 try to do a problem & 4/30/2021 11:05 AM \\
\hline 1076 & it was boring & 4/30/2021 11:05 AM \\
\hline 1077 & it was ok & 4/30/2021 11:05 AM \\
\hline 1078 & Again, I haven't really used it. & 4/30/2021 11:05 AM \\
\hline 1079 & it took forever. & 4/30/2021 11:05 AM \\
\hline 1080 & Got a bad reading level at the start. & 4/30/2021 11:05 AM \\
\hline 1081 & Iready was boring, it kept wasnt straight foward with the material. & 4/30/2021 11:05 AM \\
\hline 1082 & To be honest its just not helpful & 4/30/2021 11:05 AM \\
\hline 1083 & it was a bit difficult i guess & 4/30/2021 11:05 AM \\
\hline 1084 & I didn't do any of the lessons. & 4/30/2021 11:05 AM \\
\hline 1085 & it was a long inconsistent test that did not improve my understanding, it felt like a long pre test. & 4/30/2021 11:05 AM \\
\hline 1086 & It was kinda confusing & 4/30/2021 11:05 AM \\
\hline 1087 & the diagnostics & 4/30/2021 11:05 AM \\
\hline 1088 & getting used to doing both math and english was a challenge because I never kept up with both & 4/30/2021 11:05 AM \\
\hline 1089 & I just did not like it in general because it felt boring and that it took a while sometimes with all the people talking & 4/30/2021 11:04 AM \\
\hline 1090 & it was boring & 4/30/2021 11:04 AM \\
\hline 1091 & Nothing, I vaguely remember using it. & 4/30/2021 11:04 AM \\
\hline 1092 & Everything & 4/30/2021 11:04 AM \\
\hline 1093 & i would get bored easily & 4/30/2021 11:04 AM \\
\hline 1094 & i dont know & 4/30/2021 11:04 AM \\
\hline 1095 & i guess u learned some what but not really & 4/30/2021 11:04 AM \\
\hline 1096 & it was redoing it over and over & 4/30/2021 11:04 AM \\
\hline 1097 & Nothing. & 4/30/2021 11:04 AM \\
\hline 1098 & not getting good enough scores & 4/30/2021 11:03 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 1099 & It's long. & 4/30/2021 11:03 AM \\
\hline 1100 & Firstly, the lesson can be super confusing and even on the test. Sometimes the test will give you a certain question that they didn't even teach in that certain lesson!! & 4/30/2021 11:03 AM \\
\hline 1101 & What did not go well for me using i-Ready this school year is, I had to do a certain amount of minutes of i-Ready lessons, and for the diagnostic it made me feel Dumber and not feel good about myself. & 4/30/2021 11:03 AM \\
\hline 1102 & idk & 4/30/2021 11:02 AM \\
\hline 1103 & everything & 4/30/2021 11:02 AM \\
\hline 1104 & I'm not really interested in the program. & 4/30/2021 11:02 AM \\
\hline 1105 & The i-ready assignments & 4/30/2021 11:02 AM \\
\hline 1106 & some times when i worked alot then it becomes boring for me & 4/30/2021 11:02 AM \\
\hline 1107 & Its made like a 5 year old is using it. All the shapes and kids stuff it makes it hard to work but also when doing tests they never change the game and it gets so boring. Also if you pass a lesson with like \(75 \%\) it says you passed but still makes me re-do the whole lesson thing. & 4/30/2021 11:02 AM \\
\hline 1108 & It wasn't that interesting. & 4/30/2021 11:02 AM \\
\hline 1109 & Sometimes, i-ready was a bit glitchy and I had to reload the page. & 4/30/2021 11:02 AM \\
\hline 1110 & N/A & 4/30/2021 11:01 AM \\
\hline 1111 & nothing went wrong. & 4/30/2021 11:01 AM \\
\hline 1112 & How long the diagnostic went. & 4/30/2021 11:01 AM \\
\hline 1113 & idk & 4/30/2021 11:01 AM \\
\hline 1114 & i wasted my time & 4/30/2021 11:01 AM \\
\hline 1115 & not sure & 4/30/2021 11:01 AM \\
\hline 1116 & nothing & 4/30/2021 11:01 AM \\
\hline 1117 & Everytime you lose a lesson, it forces you to watch the tutorial again and you cannot even skip it which is so annoying. & 4/30/2021 11:01 AM \\
\hline 1118 & sometimes struggles & 4/30/2021 11:01 AM \\
\hline 1119 & It lagged and made me take a two hours test instead of a 45 minute on but I got it fixed also I dont like how you cant see the number of questions you have left & 4/30/2021 11:01 AM \\
\hline 1120 & One time i was doing i ready then it pause itself and then it went back to the front page of i ready, then I clicked on the assessment to continue but it restarted my lesson so I had to do it again. & 4/30/2021 11:01 AM \\
\hline 1121 & Diagnostic & 4/30/2021 11:00 AM \\
\hline 1122 & I don't know & 4/30/2021 11:00 AM \\
\hline 1123 & Nothing & 4/30/2021 11:00 AM \\
\hline 1124 & Taking more time when I get questions wrong & 4/30/2021 11:00 AM \\
\hline 1125 & It got a little repetitive at times and the diagnostic is so long its hard to concentrate the whole time. & 4/30/2021 11:00 AM \\
\hline 1126 & It was annoying having to be on the computer more & 4/30/2021 11:00 AM \\
\hline 1127 & the books are annoying and were no easy & 4/30/2021 11:00 AM \\
\hline 1128 & some time i got confused on the review at the end and i didn't know to use the iready some times & 4/30/2021 11:00 AM \\
\hline 1129 & I didn't use it too often so I didn't find anything that didn't go well. & 4/30/2021 11:00 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 1130 & Nothing & 4/30/2021 11:00 AM \\
\hline 1131 & nothing & 4/30/2021 10:59 AM \\
\hline 1132 & idk & 4/30/2021 10:59 AM \\
\hline 1133 & Didn't help me at all & 4/30/2021 10:59 AM \\
\hline 1134 & Read too much, I can't understand. & 4/30/2021 10:59 AM \\
\hline 1135 & It was soooo long & 4/30/2021 10:59 AM \\
\hline 1136 & some of the reading is confusing & 4/30/2021 10:59 AM \\
\hline 1137 & I don't like how the questions get really annoying. & 4/30/2021 10:59 AM \\
\hline 1138 & There was not anything that did not go well. & 4/30/2021 10:59 AM \\
\hline 1139 & the time and i get bored easily its too long and not easy to focus towards the end I got off topic and that is why it took me 7 hours to dol it & 4/30/2021 10:59 AM \\
\hline 1140 & What I learned wasn't helpful. & 4/30/2021 10:59 AM \\
\hline 1141 & It took so long & 4/30/2021 10:58 AM \\
\hline 1142 & Sometimes I would be confused and I would try my best to solve it and I get it wrong and I have to redo the entire lesson again & 4/30/2021 10:58 AM \\
\hline 1143 & nothing & 4/30/2021 10:58 AM \\
\hline 1144 & it kept timing out and \(i\) had to rewatch all the videos over again and the questions are boring and repetitive making the test even less enjoyable than normal state testing & 4/30/2021 10:58 AM \\
\hline 1145 & I had some trouble with questions but overall it was good & 4/30/2021 10:57 AM \\
\hline 1146 & It felt like it was too hard, more telling and less showing. & 4/30/2021 10:57 AM \\
\hline 1147 & the iready assignments are so long and childish. & 4/30/2021 10:57 AM \\
\hline 1148 & It takes a lot of time. I'm also not sure why we need it so much this year and not last year or the previous year. & 4/30/2021 10:02 AM \\
\hline 1149 & I did not like doing math lessons that do not have a story with the learning & 4/30/2021 9:59 AM \\
\hline 1150 & having to redo the assignments & 4/30/2021 9:24 AM \\
\hline 1151 & When "my path" was totally not my path at the start of the school year. & 4/30/2021 9:20 AM \\
\hline 1152 & Nothing & 4/30/2021 9:19 AM \\
\hline 1153 & i got bored sometimes. & 4/30/2021 9:18 AM \\
\hline 1154 & I don't know again & 4/30/2021 9:18 AM \\
\hline 1155 & Nothing. & 4/30/2021 9:18 AM \\
\hline 1156 & I kept doing lessons right but never went on to harder challenges & 4/30/2021 9:18 AM \\
\hline 1157 & nothing & 4/30/2021 9:18 AM \\
\hline 1158 & Nothing & 4/30/2021 9:18 AM \\
\hline 1159 & It's to easy & 4/30/2021 9:17 AM \\
\hline 1160 & It was really boring and I was learning things I knew. & 4/30/2021 9:17 AM \\
\hline 1161 & i got questions i already knew & 4/30/2021 9:16 AM \\
\hline 1162 & The leasons are too long & 4/30/2021 9:10 AM \\
\hline 1163 & it was repetitive and annoying when it would not save your progress. & 4/30/2021 9:10 AM \\
\hline 1164 & it was kind of easy and repetitive & 4/30/2021 9:06 AM \\
\hline 1165 & The i-ready diagnostic takes to long and isn't very accurate. & 4/30/2021 9:04 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 1166 & Took to much time and the lessons took to long. & 4/30/2021 9:00 AM \\
\hline 1167 & It was hard to to an hour a week & 4/30/2021 8:27 AM \\
\hline 1168 & its not that fun & 4/29/2021 2:53 PM \\
\hline 1169 & motivation & 4/29/2021 2:53 PM \\
\hline 1170 & I think its an extensive unnecessary thing sometimes. The effects for it were really slow and kind of boring. Its not too bad & 4/29/2021 2:52 PM \\
\hline 1171 & I can't think of anything that went wrong. & 4/29/2021 2:50 PM \\
\hline 1172 & It wasn't really motivating. & 4/29/2021 2:50 PM \\
\hline 1173 & the lessons didn't help me a lot though, not significantly... & 4/29/2021 2:50 PM \\
\hline 1174 & I don't know & 4/29/2021 2:49 PM \\
\hline 1175 & Not much & 4/29/2021 2:49 PM \\
\hline 1176 & The lessons seem like their made for 1st grade, It's super confusing, and I'm just stressed enough already I don't need this too. & 4/29/2021 2:49 PM \\
\hline 1177 & That the diagnostics are very long and it is tiring and boring once it has been a while & 4/29/2021 2:49 PM \\
\hline 1178 & The diagnostics didn't change the level of my path. It took a long time to do each lesson, because it was repeating the same thing over and over. Also, if you have a typo or click the wrong button, you have to spend even longer on the lesson. & 4/29/2021 2:47 PM \\
\hline 1179 & The lessons take too long and dont help me learn & 4/29/2021 2:45 PM \\
\hline 1180 & it gave me 1st grade math and it takes like 40 minutes per lesson because you have to wait for like 5 minutes for the people to talk and then wait a few seconds and then you can type the answer, but if you get it wrong it take ANOTHER 15 minutes for them to explain every single detail about how to answer the question even though you probably just put the wrong number my accident. it seems all right but it takes like 40 minutes to do a single lesson. & 4/29/2021 2:44 PM \\
\hline 1181 & remembering to do my lessons & 4/29/2021 2:42 PM \\
\hline 1182 & well it was boring, cheesy, didn't actually learn much. The setup of it is fine but I don't like the lessons. & 4/29/2021 2:42 PM \\
\hline 1183 & The diagnostic placed me in a level too low from "My Path" & 4/29/2021 2:41 PM \\
\hline 1184 & I always forgot to do it. It was boring. It was a pain & 4/29/2021 2:40 PM \\
\hline 1185 & Most of the stuff I learned is the stuff I already knew. It is more in my opinion un-needed work on top of the homework we already have a lot of. & 4/29/2021 2:39 PM \\
\hline 1186 & i think that the lessons could be shorter and more of them. & 4/29/2021 2:39 PM \\
\hline 1187 & i was confused about the reading diagnostic & 4/29/2021 2:30 PM \\
\hline 1188 & the lessons came up again after I did them. It was not fun for me. & 4/29/2021 2:30 PM \\
\hline 1189 & I-Ready would constantly refresh my progress even when I passed the quizzes and lessons. I also had to restart my progress when I maybe reached some sort of limit of lessons I could do. & 4/29/2021 2:30 PM \\
\hline 1190 & it was hard & 4/29/2021 2:29 PM \\
\hline 1191 & I had to redo lessons & 4/29/2021 2:29 PM \\
\hline 1192 & the close reading & 4/29/2021 2:29 PM \\
\hline 1193 & i don't know & 4/29/2021 2:28 PM \\
\hline 1194 & Nothing & 4/29/2021 2:28 PM \\
\hline 1195 & not knowing how to use it & 4/29/2021 2:27 PM \\
\hline 1196 & yes & 4/29/2021 2:27 PM \\
\hline 1197 & nothing & 4/29/2021 2:26 PM \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 1198 & the lessons were a bit long & 4/29/2021 2:26 PM \\
\hline 1199 & I don't know probly nothing! & 4/29/2021 2:25 PM \\
\hline 1200 & idk & 4/29/2021 2:25 PM \\
\hline 1201 & my last math test & 4/29/2021 2:25 PM \\
\hline 1202 & i didnt really learn much things for reading & 4/29/2021 2:25 PM \\
\hline 1203 & nothing & 4/29/2021 2:24 PM \\
\hline 1204 & Most of the reading i-Ready & 4/29/2021 2:24 PM \\
\hline 1205 & Nothing & 4/29/2021 2:23 PM \\
\hline 1206 & math & 4/29/2021 2:23 PM \\
\hline 1207 & almost nothing & 4/29/2021 2:23 PM \\
\hline 1208 & nothing & 4/29/2021 10:51 AM \\
\hline 1209 & It gets kinda annoying, and it's frustrating when you have to redo the lesson. & 4/29/2021 10:25 AM \\
\hline 1210 & Reading & 4/29/2021 10:01 AM \\
\hline 1211 & math I-ready & 4/29/2021 9:44 AM \\
\hline 1212 & IT WAS SO DUMB I WAS STUCK ON ONE PROBLEM FOR LIKE 1 MONTH AND THE PROGRESSION IS SOOOOOOOOO SLOWWWWWWWWW & 4/29/2021 9:44 AM \\
\hline 1213 & when I did bad on one of the diagnostics then had to do 60 mins of kindergarden-like work for a month & 4/29/2021 9:42 AM \\
\hline 1214 & nothing & 4/29/2021 9:42 AM \\
\hline 1215 & we had to do it a lot & 4/29/2021 9:42 AM \\
\hline 1216 & EVRYTHINGEVRYTHINGEVRYTHINGEVRYTHINGEVRYTHINGEVRYTHINGEVRYTHINGEV RYTHINGEVRYTHINGEVRYTHINGEVRYTHINGEVRYTHINGEVRYTHINGEVRYTHINGEVRY THINGEVRYTHINGEVRYTHINGEVRYTHINGEVRYTHINGEVRYTHINGEVRYTHINGEVRYTH INGEVRYTHINGEVRYTHINGEVRYTHINGEVRYTHINGEVRYTHINGEVRYTHINGEVRYTHIN GEVRYTHINGEVRYTHING & 4/29/2021 9:42 AM \\
\hline 1217 & it is boring and it does not help me and it is a wast of time & 4/29/2021 9:41 AM \\
\hline 1218 & It was SO BORING! & 4/29/2021 9:40 AM \\
\hline 1219 & Alot of the thing I learned in i-ready are things I learned in kindergarten and its too easy. Its also hard for me to do a whole 1 hr . & 4/29/2021 9:27 AM \\
\hline 1220 & nothing but i have not learned anything either & 4/29/2021 9:26 AM \\
\hline 1221 & Iready was repeating stuff that we had gone over in class and I was already good at it & 4/29/2021 9:26 AM \\
\hline 1222 & The lesson weren't right on my grade level so I was stuck on like 3 grade math & 4/29/2021 9:26 AM \\
\hline 1223 & Math and most of reading because it was too easy and felt like a waste of time & 4/29/2021 9:25 AM \\
\hline 1224 & Nothing bad & 4/29/2021 9:24 AM \\
\hline 1225 & My computer is really laggy and it takes a while for iReady to load & 4/29/2021 9:22 AM \\
\hline 1226 & I'm a little behind in math so it's teaching me stuff I already know & 4/29/2021 8:18 AM \\
\hline 1227 & I don't know & 4/28/2021 1:47 PM \\
\hline 1228 & I didn't learn as much as I wanted too, and sometimes it's very frustrating & 4/27/2021 8:15 PM \\
\hline 1229 & The diagnostic tests were hard. :( & 4/27/2021 4:36 PM \\
\hline 1230 & we didet really do aything else with it & 4/27/2021 4:30 PM \\
\hline 1231 & I don't know either. & 4/27/2021 12:11 PM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 1232 & Everything I learned in i-ready math was something that I had already learned & 4/27/2021 10:55 AM \\
\hline 1233 & the same thing for my 9 question & 4/27/2021 10:54 AM \\
\hline 1234 & nothing & 4/27/2021 10:53 AM \\
\hline 1235 & The boringness of it & 4/27/2021 10:52 AM \\
\hline 1236 & I am learning things in math I have already learned. & 4/27/2021 10:52 AM \\
\hline 1237 & I didn't learn anything in math and not much in reading & 4/27/2021 10:52 AM \\
\hline 1238 & The diagnostic. & 4/27/2021 10:51 AM \\
\hline 1239 & The voices didn't need to read to me. I am very angry about that. & 4/27/2021 10:51 AM \\
\hline 1240 & i-Ready is not fun anymore. I wanted MORE NEW i-READY MATH GAMES besides just Hungry Fish, Bounce, Zoom, Play Cupcake, Match, Play Pizza, and Cloud Machine & 4/27/2021 10:51 AM \\
\hline 1241 & nothing & 4/27/2021 10:50 AM \\
\hline 1242 & The lessons are long O-o & 4/27/2021 10:48 AM \\
\hline 1243 & nothing & 4/27/2021 9:43 AM \\
\hline 1244 & What did not go so well is that my i-ready always kept saying the same thing at least four times. & 4/27/2021 9:43 AM \\
\hline 1245 & Anger & 4/27/2021 9:41 AM \\
\hline 1246 & Sometimes it was hard for me to understand what to do, but overall, it was okay. & 4/27/2021 9:40 AM \\
\hline 1247 & some asingments were hard and it was kind of glitchy but not realy & 4/27/2021 9:40 AM \\
\hline 1248 & the math slime blocks were going out of controll & 4/27/2021 9:39 AM \\
\hline 1249 & Noisy & 4/27/2021 9:38 AM \\
\hline 1250 & some lessons were hard. & 4/27/2021 9:38 AM \\
\hline 1251 & nothing & 4/27/2021 9:38 AM \\
\hline 1252 & it was thery hard & 4/27/2021 9:38 AM \\
\hline 1253 & nothing & 4/27/2021 9:37 AM \\
\hline 1254 & It was kind of boring & 4/27/2021 9:36 AM \\
\hline 1255 & Sometimes my passwords didn't work & 4/27/2021 8:41 AM \\
\hline 1256 & Nothing & 4/26/2021 2:00 PM \\
\hline 1257 & nothing it all went well & 4/26/2021 1:38 PM \\
\hline 1258 & the person that kept on talking and it too kforever to do assignments & 4/26/2021 12:05 PM \\
\hline 1259 & subjects not right for me, too hard problems, too easy problems, it really didn't go too well with me this year. & 4/26/2021 11:14 AM \\
\hline 1260 & My lesson difficulty is wrong, so I am currently working on multiplying unit fractions in i-ready, which is easy for me. It will ask me a question, and I will already know the answer, but it makes me go through the whole process of figuring out the answer, when I don't need to! & 4/26/2021 11:11 AM \\
\hline 1261 & sometimes i would be working on things that did't have to go with the math we were doing in class and sometimes i did't know how to do something at all and i got flusterd & 4/26/2021 11:04 AM \\
\hline 1262 & The diagnostics were kind of hard, but I was able to get through it & 4/26/2021 11:01 AM \\
\hline 1263 & none & 4/26/2021 10:58 AM \\
\hline 1264 & Ready maybe do the same lesson for a while before I got to something new learn a new phone & 4/26/2021 10:57 AM \\
\hline 1265 & ? & 4/26/2021 10:55 AM \\
\hline 1266 & nothing & 4/26/2021 10:54 AM \\
\hline
\end{tabular}

\section*{iReady Spring 2021 Feedback Survey - Students}
\begin{tabular}{|c|c|c|}
\hline 1267 & nothing & 4/26/2021 10:53 AM \\
\hline 1268 & Math & 4/26/2021 10:53 AM \\
\hline 1269 & nothing & 4/26/2021 10:53 AM \\
\hline 1270 & nothing & 4/26/2021 10:53 AM \\
\hline 1271 & I don't know. & 4/26/2021 10:53 AM \\
\hline 1272 & Sometimes it was hard to make sure I did all of my minutes. & 4/26/2021 10:46 AM \\
\hline 1273 & hard and long lessons that i failed & 4/26/2021 10:08 AM \\
\hline 1274 & the lessons annoyed me because they where weird. it was hard to focus because of that. & 4/26/2021 9:53 AM \\
\hline 1275 & nothing & 4/26/2021 9:20 AM \\
\hline 1276 & Something that was harder was that if you get 70 percent or lower in your lesson then you would have to retake it and you would already know all the questions because you have already taken them & 4/26/2021 9:18 AM \\
\hline 1277 & The lessons are long and I don't really like them :/ & 4/26/2021 9:10 AM \\
\hline 1278 & i started with math two maybe three grades bellow me. & 4/26/2021 9:10 AM \\
\hline 1279 & I did some lessons that were too easy for me and the lessons take to long with the lessons, and then the quiz & 4/26/2021 8:34 AM \\
\hline 1280 & I got put in that really hard level for a while. & 4/26/2021 8:20 AM \\
\hline 1281 & mo & 4/25/2021 4:26 PM \\
\hline 1282 & When you get a bad grade on iready then you have to do the same exact lesson again. it is really boring when you have to do the same thing twice. Also, on iready reading, i am stuck on a part where it won't let me put a thing where the instructions say to put it. & 4/23/2021 6:42 PM \\
\hline 1283 & It gave me questions that were way to easy for me & 4/23/2021 2:27 PM \\
\hline 1284 & boring & 4/23/2021 12:43 PM \\
\hline 1285 & It usually took longer to do it the way they did it than to just to the question itself. & 4/23/2021 10:21 AM \\
\hline 1286 & everything. & 4/23/2021 9:47 AM \\
\hline 1287 & How long it took me to finish it & 4/23/2021 9:46 AM \\
\hline 1288 & I did not know some of the problems on the diagnostic but the fallowing week we learned them in zoom but iready still made me go through lessons about them so I spent hours of my time having iready try to teach me thing i already know & 4/23/2021 9:40 AM \\
\hline 1289 & Everything other than geometry felt a little too easy & 4/23/2021 9:37 AM \\
\hline 1290 & I don't know & 4/23/2021 9:37 AM \\
\hline 1291 & I only had problems once while I had bad internet connection. & 4/23/2021 9:37 AM \\
\hline 1292 & Something that might not of gone well is sometimes when my score is low on some of the lessons I have to redo them so that is kind of annoying & 4/23/2021 9:37 AM \\
\hline 1293 & They were too easy and all i heard some lessons were "solve the problem, good job!" the whole time, and it got obnoxious when I had to do it 30 min at a time & 4/23/2021 9:36 AM \\
\hline 1294 & It did not teach me anything. It was easy. My friends also think it is really easy for them to. & 4/23/2021 9:35 AM \\
\hline 1295 & It takes a long time explaining the subject. & 4/23/2021 9:35 AM \\
\hline 1296 & Often times when I used I-ready I was doing something I had already done at least a month before hand. & 4/23/2021 9:35 AM \\
\hline 1297 & My lessons are a little easy & 4/23/2021 9:35 AM \\
\hline 1298 & In math I got a lot of easy questions even though I tried my best in the diagnostic & 4/23/2021 9:35 AM \\
\hline
\end{tabular}
\begin{tabular}{lll|l}
\hline 1299 & The lessons are really long. & \(4 / 23 / 20219: 34\) AM \\
\hline 1300 & doing readings & \(4 / 23 / 20219: 34 \mathrm{AM}\) \\
\hline 1301 & It was boring because I knew everything & \(4 / 23 / 20219: 34 \mathrm{AM}\) \\
\hline 1302 & \begin{tabular}{l} 
Sometimes I feel like the introduction and middle talking parts are too long. \\
is very helpful for most cases.
\end{tabular} & \(4 / 23 / 20219: 34\) AM \\
\hline 1303 & Not much. & \(4 / 23 / 20219: 34 \mathrm{AM}\) \\
\hline 1304 & The practice was not fun it was just a lot of word problems. & \(4 / 23 / 20219: 34 \mathrm{AM}\) \\
\hline 1305 & It was boring and was to easy & \(4 / 23 / 20219: 34 \mathrm{AM}\) \\
\hline 1306 & Reading isn't really fun in iReady. & \(4 / 23 / 20219: 33 \mathrm{AM}\) \\
\hline 1307 & nothing & \(4 / 23 / 20219: 32 \mathrm{AM}\) \\
\hline 1308 & I got very easy meth problems & \(4 / 23 / 20218: 59 \mathrm{AM}\) \\
\hline
\end{tabular}

\section*{I-Ready Return on Investment Analysis}

The following report is the first phase of a return on investment (ROI) analysis for the i-Ready platform. This first phase of ROI analysis looks specifically at growth on the i-Ready diagnostic from fall to winter as a function of the amount of usage of the Online Instruction modules that are a part of the iReady system. The recommendation, based on research from i-Ready, is for students to utilize the Online Instruction for about 40 minutes per week and per content area. Thus, a total of about 80 minutes if students are engaged with both the reading content and math content from i-Ready. Forty minutes per week translates to roughly two online lessons per week. When data was pulled for the analysis, students had the Online Instruction modules available for 18 weeks. Eighteen weeks times 2 lessons per week is 36 lessons, which is why 36 lessons was used as the preferred goal for each student.

This analysis will be expanded upon once results are gathered from the spring assessment window which is scheduled to begin on May \(3^{\text {rd }}\) and end on June \(4^{\text {th }}\).

Major findings from this current analysis include:
- Across all elementary grade levels, students who completed 36 or more lessons in 18 weeks had significantly higher growth, from the fall diagnostic to the winter diagnostic, compared to students completing less than 36 lessons in 18 weeks (page \(5 \& 6\) ).
- There is a general linear relationship between number of lessons and progress towards achieving typical growth (page \(7 \& 8\) ).
- The two main challenges highlighted by the data are:
- It's a relatively small percentage of students that are completing at least two lessons per week.
- The high school version of the diagnostic assessments does not include growth metrics.

Last, but definitely not least, I'd like to thank Lynn Caulkins for her time, attention, and expertise with the development of this valuable report.

\section*{The Use of i-Ready Online Instruction and Growth}

\section*{Grades K to 8}

Fall to Winter 2021 student growth in English Language Arts (ELA) and Math by grade level and demographic were previously analyzed in the February 4, 2021 report, "i-Ready Growth". In that report we saw \(49 \%\) of the assessed grade 1 to 8 students were on-trackl for meeting their annual ELA growth goal and \(40 \%\) were on-track in math².

In addition to diagnostic assessments, i-Ready provides online lessons targeted to each student to address areas of personal difficulty in ELA and math. In ELA, \(48 \%\) of students completed at least one lesson and \(71 \%\) did so in math.
\begin{tabular}{llll} 
& & ELA & Math \\
Number of \(K\) to grade 8 students this year & 14,240 \\
Took at least one assessment & 9,565 & 12,178 \\
Took both fall and winter assessments \({ }^{3}\) & 6,514 & 9,056 \\
Completed at least one lesson & 6,882 & 10,111
\end{tabular}

I-Ready recommends students spend about 40 minutes a week per subject with the online instruction. On average, a lesson takes students 20 minutes to complete. This ranges from 7 minutes in ELA for kindergarten to 40 minutes in math for \(8^{\text {th }}\) graders.

If 720 minutes ( 40 minutes for 18 weeks), or 12 hours, were the goal, the median Edmonds student who used any of the online instruction is eight or nine hours short of that. This ranges from seven hours short for grade 3 math to nine and a half hours short for grade 6 ELA.

At two lessons per week, for the first half of the school year, ideally, the median student would have completed 36 lessons in each subject \({ }^{4}\). The median Edmonds student who completed any lessons, completed nine in ELA and 10 in math. This varies greatly by school and grade (see pages three and four).

\footnotetext{
li.e., they had achieved \(50 \%\) or more of their annual typical growth goal. This assumes growth to be linear.
\({ }^{2}\) Typical growth is the average annual growth for a student at their grade and placement level. These norms were established pre-pandemic and thus are based on normal instruction.
\({ }^{3}\) Kindergarten did not assess in the fall as they had WaKIDS.
\({ }^{4}\) For evaluation purposes, i-Ready uses completed lessons rather than time on task, as completed lessons measure whether the students are actually working through content.
}

The median student who did complete 36 or more lessons was \(68 \%\) of the way to their annual ELA typical growth goal and \(45 \%\) of the way in math. That is compared to \(43 \%\) and \(27 \%\) for those completing fewer than 36 lessons yet still took both diagnostic assessments (see pages five and six).

In general, when looking at students with both fall and winter assessments for whom growth can be calculated, for both ELA and math, the more lessons completed, the more growth a student made. Halfway through the year, in ELA, students who completed 50 or more ELA lessons were \(77 \%\) of the way to their annual typical growth goal compared with \(23 \%\) of the way for those completing no lessons. In math, those students who completed 50 or more math lessons were halfway to their annual goal, compared to just \(9 \%\) of the way for those completing no lessons (see pages seven and eight).

*Schools with fewer than 10 students participating are not included.

*Schools with fewer than 10 students participating are not included.
i-Ready Progress Towards Annual Typical Growth Goal as of February 2021


\footnotetext{
**Due to small numbers, grades 7 and 8 are not shown.
}
i-Ready Progress Towards Annual Typical Growth Goal as of February 2021

**Due to small numbers, grades 7 and 8 are not shown.
i-Ready ELA Percent of Annual Typical Growth, Fall to Winter, by Number of Online Lessons Completed and Grade Level

i-Ready Math Percent of Annual Typical Growth, Fall to Winter, by Number of Online Lessons Completed and Grade Level


\section*{High School}

Edmonds School District piloted i-Ready in math in the 2019-20 school year. In addition, Beverly Elementary utilized i-Ready reading with their students. This year, teachers from kindergarten to grade eight were encouraged to utilize it. ELA was made available as well as both ELA and math to the high schools.

While i-Ready is normed through \(12^{\text {th }}\) grade ELA and College and Career Ready (CCR) math, nationally it tends to be utilized at the high school level by limited populations. As a result, unlike with kindergarten to \(8^{\text {th }}\) grade, high school does not have annual typical growth goals against which progress can be measured. To gain an understanding of student progress and the use of online instruction, the changes in scale scores were analyzed. I-Ready utilizes a non-equidistant scale and thus this is not a perfect means of analysis, but given the absence of growth goals, this was the best available method.

\section*{Usage}
i-Ready was utilized by a very limited number of students in high school.
\begin{tabular}{lcc} 
& ELA & Math \\
Number of high school students this year & \multicolumn{2}{c}{6,915} \\
Took at least one assessment & 515 & 1,085 \\
Took both fall and winter assessments & 270 & 314 \\
Completed at least one online lesson & 126 & 340
\end{tabular}
i-Ready recommends students spend 40 minutes per week, per subject on online instruction. The median Edmonds high school student took 22 minutes to complete a lesson in ELA and 32 in math. Halfway through the year, the target would be 720 minutes ( 12 hours) or 33 ELA and 23 math lesson. The median Edmonds high school student completed three and four lessons, respectively, and was 10 or 11 hours shy of the target (see page 12).

\section*{Demographics}

Mirroring the nation, in Edmonds a small sub-section of the high school population utilized this resource. \(58 \%\) of those taking an ELA assessment were students with disabilities and \(35 \%\) were English language learners.

Demographics of students taking at least one diagnostic assessment
\begin{tabular}{|r|c|c|c|c|}
\hline & ELA & Math & ELA & Math \\
\hline & 515 & 1085 & & \\
\hline Grade 9 & 152 & 493 & \(30 \%\) & \(45 \%\) \\
\hline Grade 10 & 133 & 283 & \(26 \%\) & \(26 \%\) \\
\hline Grade 11 & 128 & 212 & \(25 \%\) & \(20 \%\) \\
\hline Grade 12 & 102 & 97 & \(20 \%\) & \(9 \%\) \\
\hline Gender X & 3 & 4 & \(1 \%\) & \(0 \%\) \\
\hline Female & 194 & 515 & \(38 \%\) & \(47 \%\) \\
\hline Male & 318 & 566 & \(62 \%\) & \(52 \%\) \\
\hline & & & & \\
\hline American Indian/Native Alaskan & 3 & 2 & \(1 \%\) & \(0 \%\) \\
\hline Asian & 62 & 133 & \(12 \%\) & \(12 \%\) \\
\hline Black/African American & 43 & 87 & \(8 \%\) & \(8 \%\) \\
\hline Hispanic/Latino of any race(s) & 170 & 332 & \(33 \%\) & \(31 \%\) \\
\hline Native Hawaiian/Other Pacific & 7 & 13 & \(1 \%\) & \(1 \%\) \\
\hline Two or more races & 37 & 88 & \(7 \%\) & \(8 \%\) \\
\hline White & 193 & 430 & \(37 \%\) & \(40 \%\) \\
\hline & & & & \\
\hline Students on Free/Reduced Meal & 259 & 523 & \(50 \%\) & \(48 \%\) \\
\hline English Language Learner & 181 & 229 & \(35 \%\) & \(21 \%\) \\
\hline Students with disabilities & 297 & 331 & \(58 \%\) & \(31 \%\) \\
\hline Students with 504 Plans & 13 & 65 & \(3 \%\) & \(6 \%\) \\
\hline Edmonds Heights & 5 & 6 & \(1 \%\) & \(1 \%\) \\
\hline Edmonds-Woodway & 66 & 149 & \(13 \%\) & \(14 \%\) \\
\hline eLearning & 1 & 12 & \(0 \%\) & \(1 \%\) \\
\hline Lynnwood & 272 & 422 & \(53 \%\) & \(39 \%\) \\
\hline Meadowdale & 76 & 402 & \(15 \%\) & \(37 \%\) \\
\hline Mountlake Terrace & 20 & 9 & \(4 \%\) & \(1 \%\) \\
\hline Scriber Lake & 75 & 85 & \(15 \%\) & \(8 \%\) \\
\hline \hline
\end{tabular}

\section*{Gains}

Given the limited utilization of the online instruction, it is difficult to determine if it was beneficial or not. It may have been (see page 13). While high school teachers were offered the same five hours of training (two in fall, two in winter and one is spring), few participated. A focus group with teachers to discuss why the online lessons were utilized in such a limited way, additional training and another year of study would assist in this effort.

*Schools with fewer than 10 students participating are not included.


\section*{i-Ready Diagnostic and Growth Monitoring Mathematics}

\section*{Bias Analysis}
\begin{tabular}{|l|l|l|l|l|l|} 
Grade & Grade 3 & Grade 4 & Grade 5 & Grade 6 & Grade 7 \\
\hline Rating & Yes & Yes & Yes & Yes & Yes \\
\hline
\end{tabular}

Have you conducted additional analyses related to the extent to which your tool is or is not biased against subgroups (e.g., race/ethnicity, gender, socioeconomic status, students with disabilities, English language learners)? Examples might include Differential Item Functioning (DIF) or invariance testing in multiple-group confirmatory factor models.

Yes
If yes,
a. Describe the method used to determine the presence or absence of bias:

DIF was investigated using WINSTEPS® (Version 3.92) by comparing item difficulty for pairs of demographic subgroups through a combined calibration analysis. This methodology evaluates the interaction of the person-level subgroups with each item, while fixing all other item and person measures to those from the combined calibration. The method used to detect DIF is based on the Mantel-Haenszel procedure (MH), and the work of Linacre \& Wright (1989) and Linacre (2012). Typically, the groups of test takers are referred to as "reference" and "focal" groups. For example, for analysis of gender bias, Female test takers are the focal group, and Male test takers are the reference group. More information is provided in section 3.4 of the i Ready Technical Manual. Consumers interested in more detailed information should contact the publisher of the i-Ready Technical Manual, Curriculum Associates.
b. Describe the subgroups for which bias analyses were conducted:

The latest large-scale DIF analysis included a random sample (20\%) of students from the 2015-2016 i Ready operational data. Given the large size of the 2015-2016 i Ready student population, it is practical to carry out the calibration analysis with a random sample. The following demographic categories were compared: Female vs. Male; African American and Hispanic vs. Caucasian; English Learner vs. non-English Learner; Special Ed vs. General Ed; Economically Disadvantaged vs. Not Economically Disadvantaged. In each pairwise comparison, estimates of item difficulty for each category in the comparison were calculated. The table below presents
the total number and percentage of students included in the DIF analysis. Subgroup n Percent Male 26720052 Female* 24700048 White 12640034.1 African American or Hispanic* 244100 65.9 Non-EL 262700 80.8 EL* 62400 19.2 General Education 181000 85.1 Special Education* 31600 14.9 Not Economically Disadvantaged 192100 67.1 Economically Disadvantaged* 9410032.9 *Denotes the focal group
c. Describe the results of the bias analyses conducted, including data and interpretative statements. Include magnitude of effect (if available) if bias has been identified.

All active items in the current item pool for the 2015-2016 school year are included in the DIF analysis. The total numbers of items are 3,103 for mathematics. WINSTEPS was used to conduct the calibration for DIF analysis by grade. To help interpret the results, the Educational Testing Service (ETS) criteria using the delta method was used to categorize DIF (Zwick, Thayer, \& Lewis, 1999) and is presented below. ETS DIF Category A (negligible): \(\mid\) DIF| < 0.43 B (moderate): \(\mid\) DIF \(\geq 0.43\) and |DIF| < 0.64 C (large): |DIF| \(\geq 0.64\) B- or Csuggests DIF against focal group B+ or C+ suggests DIF against reference group Tables reporting the numbers and percentages of items exhibiting DIF for each of the demographic categories are available, upon request, from the Center. The majority of reading items showed negligible DIF (at least 90 percent), and for very few categories did more than 3 percent of items show large DIF (level C) by grade.

\section*{i-Ready Diagnostic and Growth Monitoring Reading / English Language Arts}

\section*{Bias Analysis}
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\hline
\end{tabular}

Have you conducted additional analyses related to the extent to which your tool is or is not biased against subgroups (e.g., race/ethnicity, gender, socioeconomic status, students with disabilities, English language learners)? Examples might include Differential Item Functioning (DIF) or invariance testing in multiple-group confirmatory factor models.

Yes
If yes,

\section*{a. Describe the method used to determine the presence or absence of bias:}

Differential Item Function (DIF) was investigated using WINSTEPS® (Version 3.92) by comparing item difficulty for pairs of demographic subgroups through a combined calibration analysis. This methodology evaluates the interaction of the person-level subgroups with each item, while fixing all other item and person measures to those from the combined calibration. The method used to detect DIF is based on the Mantel-Haenszel procedure (MH), and the work of Linacre \& Wright (1989) and Linacre (2012). Typically, the groups of test takers are referred to as "reference" and "focal" groups. For example, for analysis of gender bias, Female test takers are the focal group, and Male test takers are the reference group. More information is provided in section 3.4 of the i Ready Technical Manual. Consumers interested in more detailed information should contact the publisher of the i-Ready Technical Manual, Curriculum Associates.
b. Describe the subgroups for which bias analyses were conducted:

The latest large-scale DIF analysis included a random sample (20\%) of students from the 2015-2016 i-Ready operational data. Given the large size of the 2015-2016 i-Ready student population, it is practical to carry out the calibration analysis with a random sample. The following demographic categories were compared: Female vs. Male; African American and Hispanic vs. Caucasian; English Learner vs. non-English Learner; Special Ed vs. General Ed; Economically Disadvantaged vs. Not Economically Disadvantaged. In each pairwise comparison, estimates of item difficulty for each category in the comparison were calculated. The table below presents the total number and percentage of students included in the DIF analysis. Subgroup n Percent Male 25840052 Female* 23880048 White 12920036.6 African American or Hispanic* 224200 63.4 Non-EL 250800 81.2 EL* 58200 18.8 General Education 165800 85.7 Special Education* 27600 14.3 Not Economically Disadvantaged 177800 69.0 Economically Disadvantaged* 8000031.1 *Denotes the focal group
c. Describe the results of the bias analyses conducted, including data and interpretative statements. Include magnitude of effect (if available) if bias has been identified.

All active items in the current item pool for the 2015-2016 school year are included in the DIF analysis. The total numbers of items are 3,649 for reading. WINSTEPS was used to conduct the calibration for DIF analysis by grade. To help interpret the results, the Educational Testing Service (ETS) criteria using the delta method was used to categorize DIF (Zwick, Thayer, \& Lewis, 1999) and is presented below: ETS DIF Category A (negligible): |DIF| < 0.43 B (moderate): \(\mid\) DIF \(\mid \geq 0.43\) and |DIF| < 0.64 C (large): \(\mid\) DIF \(\mid \geq 0.64\) B- or Csuggests DIF against focal group B+ or C+ suggests DIF against reference group Tables reporting the numbers and percentages of items exhibiting DIF for each of the demographic categories are available, upon request, from the Center. The majority of reading items showed negligible DIF (at least 90 percent), and for very few categories did more than 3 percent of items show large DIF (level C) by grade.

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Refyeranical Review Committees
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The Center's six Technical Review Committees are made up of national experts in academic and/or behavioral assessments and interventions and have strong methodological expertise.

\section*{TECHNICAL REVIEW COMMITTEES}
- Academic Screening TRC
- Academic Progress Monitoring TRC
- Academic Intervention TRC
- Behavior Screening TRC
- Behavior Progress Monitoring TRC
- Behavior Intervention TRC

\section*{Academic Screening TRC}

Selection criteria for the Academic Screening TRC were: (a) member has a background in measurement and strong methodological skills and (b) member has strong expertise related to academic screening. Special attention was paid to including members with expertise on culturally and linguistically diverse populations. Members of the Academic Screening TRC include:

Dr. Amy E. Barth is an Assistant Professor of Literacy at the Buena Vista University School of Education and Exercise Science. Dr. Barth's research and teaching focuses on reading and language development and preventing reading difficulties of at-risk children.

Dr. Hugh Catts is a Professor and Director of the School of Communication Science and Disorders at Florida State University. His research interests include the early identification and prevention of language-based reading disabilities. He is currently involved in three projects related to early identification of dyslexia and other reading/language disabilities. He is a past board member of the International Dyslexia Association and past President of the Society for the Scientific Study of Reading.

Dr. Craig Frisby is an Associate Professor of School Psychology and teaches in the School Psychology program at the University of Missouri-Columbia. He also serves as Associate Editor for the APA journal Psychological Assessment. His research interests lie in the measurement of cognitive test session behavior, multidimensional scaling applications, and multicultural issues in school psychology.

Dr. Dave Heistad served as a program evaluator and Executive Director of Research in Minneapolis Public Schools for 25 years and has worked as the Executive Director of the Research, Evaluation and Assessment for Bloomington Public Schools the past five years.
6PVJBhh \({ }^{2}\) Hintze is a Professor and Director of School Psychology training programs at the University of RESOURCESS (/supporting as with progress monitoring and decision-making accuracy of curriculum-based measurement. students-
Diteliafffany Hogan is the Director of the Speech and Language (SAiL) Literacy Lab and a Professor in the Deperdgnent of Communication Sciences and Disorders at MGH Institute. Dr. Hogan studies the genetic, nduribgic, and behavioral links between oral and written language development, with a focus on coGiovidid \({ }^{\text {Sp }}\) peech, language and literacy disorders. Her research is funded by the National Institutes of Health and the Institute of Education Sciences.

Dr. John L. Hosp is a professor of special education in the College of Education at the University of Massachusetts, Amherst. His research has examined the utility of screening measures across disaggregated subgroups of students as well as the use of screening data to plan instruction, particularly in elementary reading and middle school science. He has conducted numerous workshops and trainings on using data from screening measures and is a co-author of The ABCs of CBM-an introduction to the administration and use of curriculum-based measures as well as The ABCs of Curriculum-Based Evaluation: A Practical Guide to Effective Decision Making.

Dr. Evelyn S. Johnson is a Professor of Special Education at Boise State University, and the Scientific Director of Lee Pesky Learning Center. Her research focuses on examining the role of information processing, self-regulation and academic skills to develop more effective interventions for students with learning disabilities, and on developing special education teacher evaluation tools designed to improve the implementation of evidence-based practices in the classroom. She is the co-author of RTI: A Practitioner's Guide to Implementing Response to Intervention, and How RTI Works in Secondary Schools.

Dr. Leanne Ketterlin Geller is a Professor in the Department of Education Policy and Leadership at Southern Methodist University. Her research focuses on the development and validation of formative assessment systems in mathematics that provide instructionally relevant information to support teachers' decision-making for all students. Her work is centered on using technology to provide accessible assessment systems through the integration of accommodations and principles of universal design.

Dr. Kristen Ritchey is a professor of special education in the School of Education at the University of Delaware. Dr. Ritchey conducts research in identification and intervention for young children who are at risk for reading and writing disabilities.

Dr. Mabel Rivera is an Assistant Professor at the University of North Carolina at Pembroke and President of the NC Council for Exceptional Children state unit. She teaches Special Education and Birth-Kindergarten undergraduate courses. Her research interests include the education and prevention
of learning difficulties in English language learners and students with disabilities. In addition, she engages in local and national service activities related to professional development of teachers and related personnel.

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\section*{Academic Progress Monitoring TRC}

GOVIDi19 criteria for the Academic Progress Monitoring TRC were: (a) member has a background in RESOURCES
measurement and strong methodological skills and (b) member has strong expertise related to (/supporting-ertudents-monitoring. Special attention was paid to including members with expertise on culturally and liftersisticeally diverse populations. Members of the Academic Progress Monitoring TRC include:
Dreeds Branum-Martin is an Associate Professor in developmental psychology at Georgia State Uuried \({ }^{\text {dity. }}\). Dr. Branum-Martin has experience in modeling classroom and instructional effects in early fovid-19 and bilingualism in large-scale research projects. His interest in multilevel and longitudinal models includes scaling, factor analysis, and measurement equivalence.

Dr. John Hintze is an Associate Professor of School Psychology and teaches in the School Psychology program at the University of Missouri-Columbia. He also serves as Associate Editor for the APA journal Psychological Assessment. His research interests lie in the measurement of cognitive test session behavior, multidimensional scaling applications, and multicultural issues in school psychology.

Dr. Michelle Hosp is an Associate Professor of Special Education in the Department of Student Development at the University of Massachusetts, Amherst. Her background is in school psychology and special education. Her research interests are in reading and data-based decision making involving formative assessments.

Dr. Joseph R. Jenkinsis an Emeritus Professor of Special Education at the University of Washington. His research focuses on assessment and instruction of students with learning and reading disabilities.

Dr. Evelyn S. Johnson is a Professor of Special Education at Boise State University, and the Scientific Director of Lee Pesky Learning Center. Her research focuses on examining the role of information processing, self-regulation and academic skills to develop more effective interventions for students with learning disabilities, and on developing special education teacher evaluation tools designed to improve the implementation of evidence-based practices in the classroom. She is the co-author of RTI: A Practitioner's Guide to Implementing Response to Intervention, and How RTI Works in Secondary Schools.

Dr. Leanne Ketterlin Geller is a Professor in the Department of Education Policy and Leadership at Southern Methodist University. Her research focuses on the development and validation of formative assessment systems in mathematics that provide instructionally relevant information to support teachers' decision-making for all students. Her work is centered on using technology to provide accessible assessment systems through the integration of accommodations and principles of universal design.

Dr. Amanda Marcotte is an Associate Professor in the School Psychology Program at the University of Massachusetts Amherst. Her primary line of research is in the area of developmental reading theory for assessment and instruction, with research priorities extending to reading comprehension and early vocabulary assessment.

Dr. Benjamin Solomon is an Assistant Professor of School Psychology at the University at Albany. Prior to this, Dr. Solomon was a professor at Oklahoma State University, where he worked closely with other facuity and students building capacity for Response to Intervention statewide. His current research

RESQURCES
. Stecker is a Professor of Special Education at Clemson University in South Carolina. She (/supporting-vinvolved in research and development for progress monitoring tools and teacher decision students-
making since her graduate work in the mid-1980s at Peabody/Vanderbilt University. Pam has taught intensive-nheeds-us special education and general education teachers, both preservice and inservice, to use cburifingum-based measurement in reading/language arts and in mathematics to evaluate their ébvilentss) academic growth, to individualize instructional programs, and to implement intensive academic interventions.

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\section*{Academic Intervention TRC}

Selection criteria for the Academic Intervention TRC were: (a) member has strong methodological skills and (b) member has a background and expertise in the evaluation of K12 academic interventions in reading, mathematics or writing. Special attention was paid to including members with expertise on evaluating the effectiveness of interventions with culturally and linguistically diverse populations. Members of the Academic Intervention TRC include:

Dr. Scott Baker is a research professor at the Center on Research and Evaluation (CORE) at Southern Methodist University (SMU). He was the founding executive director of the center. Dr. Baker is interested in the role scientific research can play in improving policies and practices associated with child outcomes. He has been Principal Investigator on numerous education grants from the Institute of Education Sciences and other federal agencies. Currently, Dr. Baker is interested in the impact of interventions on child outcomes, mechanisms that underlie effective interventions, and how intervention impact varies by factors intrinsic and extrinsic to the child.

Dr. Mindy Sittner Bridges is an Assistant Professor at the University of Kansas Medical Center. Her research interests include the connection between language and reading disabilities, the use of language-intensive interventions with young children to aid later reading comprehension, and the use of Response to Intervention in educational settings.

Dr. Diane Pedrotty Bryant is a Professor of Special Education in the College of Education at The University of Texas at Austin and holds the Mollie Villeret Davis Professorship in Learning Disabilities. She serves as the Project Director for the Mathematics Institute in The Meadows Center for Preventing Educational Risk and Principal Investigator for an IES funded Goal 3 grant on algebra-readiness
interventions. Dr. Bryant's research interests focus on the development and validation of mathematics interventions at the elementary and secondary levels for students with mathematics difficulties and learning disabilities in mathematics.

Dr. Ben Clarke is an Associate Professor in the School Psychology Program at the University of Oregon and Associate Director of the Center on Teaching and Learning. His work is focused on the development and efficacy testing of mathematics intervention programs spanning the K-6th grade spectrum in both traditional and technology based formats. His work has been supported through Cơki®lqgrants from the Institute of Education Science, Office of Special Education Programs, and the REGbioretescience Foundation.
(Surpprtingil Coyne is a Professor of Educational Psychology and the Coordinator of the Special students-
Education Program at the University of Connecticut. He is also Co-Director of the Center for Behavioral Entencastion and Research. He has expertise in beginning reading and early vocabulary instruction and
Educt interfikfgntion, school-based experimental research, multi-tiered or RTI systems of support, and effective R6aidiqeg for students with learning disabilities.

Dr. Frances Mary D'Andrea is an educational consultant and an instructor at the University of Pittsburgh, and other universities. She has over 10 years experience teaching students who were blind or visually impaired and has served as the director of the National Literacy Center for the American Foundation for the Blind. Her work focuses on literacy instruction for students who are blind or visually impaired. She is currently immediate past-chair of the Braille Authority of North America.

Dr. Christian Doabler is an Assistant Professor in the Department of Special Education at the University of Texas at Austin. Dr. Doabler specializes in curriculum design, classroom observation systems, and the prevention of learning difficulties. He is a former general education and special education teacher. Currently, Dr. Doabler serves as a Principal Investigator / Co-Principal Investigator on several efficacy trials and development projects funded through the Institute of Education Sciences and the National Science Foundation.

Dr. Ralph P. Ferretti is a Professor of Education and Psychological \& Brain Sciences, and the past Director of the University of Delaware's School of Education. His current scholarship focuses on interventions that promote students' self-regulatory skills in problem solving and written argumentation. He served as co-editor of The Journal of Special Education, on the editorial boards of Exceptional Children and The Journal of Special Education, and currently serves on the editorial boards of The Journal of Educational Psychology and The Journal of Teacher Education.

Dr. Charles Hughes Hughes is Professor of Special Education at The Pennsylvania State University where he teaches an undergraduate course on instructional design and delivery and a graduate course on effective instruction for students with learning disabilities. He developed, researched, and coauthored five of the instructional books included in the Strategic Intervention Model's (SIM) Learning Strategies Curriculum developed through the University of Kansas Center for Research on Learning and co-authored, with Dr. Anita Archer, a textbook on Explicit Instruction. He served as Co-editor of the Journal of Postsecondary Education and Disability and Editor of Learning Disabilities Research and Practice and serves as an editorial board member for a number of journals including Exceptional Children and the Journal of Learning Disabilities.

Dr. Joseph R. Jenkinsis an Emeritus Professor of Special Education at the University of Washington. His research focuses on assessment and instruction of students with learning and reading disabilities.

Dr. Asha K. Jitendrais a Professor of Special Education in the Graduate School of Education at the University of California, Riverside. She was a professor for 14 years in the College of Education at Lehigh University and faculty to the Center for Promoting Research to Practice. Dr. Jitendra's research interests focus on instructional design, particularly in mathematics and reading, textbook analysis, and dynamic assessment. Her work on mathematical problem solving includes her published curriculum teoviflityed, "Solving math word problems: Teaching students with learning disabilities using schemaRE80erkicessuction."
(/supporting
Br PRoristopher J. Lemons is an Associate Professor of Special Education at Peabody College of students-
Vanderbilt University and a member of the Vanderbilt Kennedy Center. His research focuses on
inheeaving academic outcomes for children and adolescents with intellectual, developmental, and Iedrfing disabilities. His recent research has focused on developing and evaluating reading
 for children and adolescents with learning and intellectual disabilities, data-based individualization, and intervention-related assessment and professional development. He has published studies in peerreviewed journals including Exceptional Children, Focus on Autism and Other Developmental Disabilities, Intellectual and Developmental Disabilities, Journal of Intellectual Disability Research, and Remedial and Special Education. Dr. Lemons has secured funding to support his research from the Institute of Education Sciences and the Office of Elementary and Secondary Education, both within the U.S. Department of Education and from the National Institutes of Health. He chairs the Executive Committee of the Pacific Coast Research Conference. Dr. Lemons is Co-Director of the National Center for Leadership in Intensive Intervention and a Senior Advisor for the National Center on Intensive Intervention, both funded by the Office of Special Education Programs.

Dr. Nonie K. Lesaux is Academic Dean and the Juliana W. and William Foss Thompson Professor of Education and Society. Her research focuses on promoting the language and literacy skills of today's children from diverse linguistic, cultural and economic backgrounds, and is conducted largely in urban and semi-urban cities and school districts. In 2009, Dr. Lesaux received a Presidential Early Career Award for Scientists and Engineers, the highest honor given by the United States government to young professionals beginning their independent research careers.

Dr. Endia Lindo is an Assistant Professor of Special Education at Texas Christian University and core faculty of the Alice Neeley Special Education Research and Service (ANSERS) Institute. Her research focus on improving the reading performance of struggling readers and students with disabilities in the elementary and middle grades. Of particular interest are approaches to teaching reading comprehension, and understanding the social and familial factors that predict students' responsiveness to generally effective instruction and evidence-based intervention.

Dr. Charles A. MacArthur is a Professor of School of Education at the University of Delaware. His major research interests include writing development and instruction for struggling writers, development of self-regulated strategies, adult literacy, and applications of technology to support reading and writing. His work has focused on development of a writing curriculum for students with learning disabilities,
writing strategy instruction in classroom settings, development of multimedia tools to support reading and writing in content areas, speech recognition as a writing accommodation, project-based learning in social studies in inclusive classrooms, and adult literacy.

Dr. Rollanda O'Connor is a Professor at the University of California, Riverside. Her research focuses on reading intervention and issues of early identification of reading disability, effects of multiple layers of support to children over the first few years of schooling, instructional issues for older students with reading difficulties, and transfer and generalization across multiple components of reading.

6PWIntane olinghouse is an Associate Professor in the Educational Psychology Department and a RESOURECES (/suppgrting-use's research interests include learning disabilities, writing instruction, and reliability and studentsvalidity in writing assessment.

DRee dagdia M. Pagliaro is a Professor in Professions in Deafness and Coordinator of the K-12 Deaf and Hd\#\#ing-Hearing Teacher Licensure Program at the University of North Carolina at Greensboro. Her pesid-19 \({ }^{\text {P }}\) ) focuses on mathematics instruction and learning with deaf and hard-of-hearing students, particularly in the areas of cognition, problem solving, and the influence of a visual language (American Sign Language) on mathematics understanding. Dr. Pagliaro is the co-creator of the Building Math Readiness in Young Deaf/Hard-of-Hearing Students: Parents as Partners intervention and the Early Mathematics Performance Diagnostic.

Dr. Shayne Piasta is an associate professor of Reading and Literature in Early and Middle Childhood in the Department of Teaching and Learning at the Ohio State University. She also is a faculty associate for the Crane Center for Early Childhood Research and Policy. Dr. Piasta's research focuses on early literacy development and how it is best supported during preschool and elementary years. Her work emphasizes the use of rigorous empirical methods to identify and validate educational programs and practices, such as experimental evaluation of specific curricula and professional development opportunities.

Dr. Sarah Powell is an Assistant Professor in the Department of Special Education at the University of Texas at Austin. Her research interests include developing, implementing, and evaluating mathematics interventions for students with disabilities. Dr. Powell is also interested in how students solve word problems, interpret mathematics symbols, and use mathematics language.

Dr. Claudia P. Rinaldi is an Associate Professor and Program Director of the Education Program at Lasell College. Her research interests are in the identification and intervention of evidenced-based practices for English language learners with mild/moderate disabilities. Her current research work addresses the implementation of RTI models in urban settings to respond to the needs of diverse learners and developing pathways for diversifying the teacher pipeline.

Dr. David Scanlon is an Associate Professor of Special Education in the Lynch School of Education at Boston College. He teaches and conducts research on content-area literacy and learning for adolescents with mild disabilities, and transition. He is formerly an assistant research scientist with the University of Kansas Center for Research on Learning. Dr. Scanlon is currently serving as editor of the International Journal for Research in Learning Disabilities.

Dr. Pamela M. Seethaler is a Research Associate with the Department of Special Education at Vanderbilt University. Previously, she taught special education students in the Metropolitan Nashville Davidson County public schools. She earned her Master's and Doctoral degrees under the advisement of Dr. Lynn S. Fuchs. Currently, she serves as co-Principal Investigator for a study assessing the efficacy of mathematics and reading comprehension tutoring for second-grade students at risk for developing mathematics and reading disability. Her interests include the early identification of and intervention for students with mathematics disability.

Eo円ąuㅎindelar is a Distinguished Professor of Special Education at the University of Florida and CoREṠ̇OUREEX the CEEDAR Center. His current research has focused on the special education teacher labor (/souppeattingly the impact of recession, declining SLD identification, and other factors have had on SET etadeafonent.
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Dryeldshael Solis is an assistant professor of special education at the University of California Riverside Grafingte School of Education. His line of research focuses on vocabulary and reading comprehension
 support. Currently, Dr. Solis serves as the Principal Investigator for an Institute of Education Sciences Goal Two grant to develop reading interventions for students with autism spectrum disorder. Prior to his work in higher education, he was a special educator, reading specialist, and literacy coach for 10 years.

Dr. Elizabeth Swanson is a Research Associate Professor at The University of Texas at Austin with a joint appointment between the Meadows Center for Preventing Educational Risk and the Department of Special Education. She is currently the Principal Investigator and Co-Principal Investigator of projects funded by the Institute of Education Sciences and the Office of Special Education Programming. Dr. Swanson's research includes developing and testing the efficacy of instructional methods for struggling readers, including students with learning disabilities.

Dr. Jade Wexler is an Associate Professor of Special Education at the University of Maryland. She is currently the Principal Investigator and co-Principal Investigator of projects funded by the Institute of Education Sciences and the Office of Special Education Programs. Her current research focuses on designing reading interventions to support at-risk adolescents with reading difficulties and disabilities in the content-area classroom and supplemental intensive intervention setting. She also focuses on designing effective professional development and school-wide service delivery models to support the implementation of evidence-based adolescent literacy practices.

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\section*{Behavior Screening TRC}

Selection criteria for the Behavior Screening TRC were: (a) member has a background in measurement and strong methodological skills and (b) member has strong expertise related to behavioral screening. Special attention was paid to including members with expertise on culturally and linguistically diverse populations. Members of the Behavior Screening TRC include:

Dr. Aarti Bellara is an Assistant Professor in the Department of Educational Psychology at the University of Connecticut.

Dr. Mack Burke is an Associate Professor in the Department of Educational Psychology at Texas A\&M University. His research interests are emotional and behavioral disorders, integrated academic and behavioral approaches, learning and behavior problems, positive behavior support, universal screening and response to intervention.

Dr. Sandra M. Chafouleas is a Board of Trustees Distinguished Professor in the Department of Educational Psychology within the Neag School of Education at the University of Connecticut. She also serves as Co-Director of the UConn Collaboratory on School and Child Health. She has authored over 150/puldjcations, and regularly serves as a national presenter and invited speaker. She is a fellow in REstU地EESmerican Psychological Association and Association for Psychological Science. She received (/stuppoofing'Conn Alumni Association award for excellence in graduate teaching, the 2016 APA Division \$tuderthend Mid-Career Scholar Award, and previously served as associate dean for The Graduate istapsive2012-2014) and then the associate dean for research in the Neag School (2014-2016). Prior to beebdsing a university trainer, she worked as a school psychologist and school administrator in a variety opurinftings for children with behavior disorders.
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Dr. Erin Dowdy is a Professor in the Department of Counseling, Clinical, and School Psychology at University of California, Santa Barbara. She is a licensed psychologist and a nationally certified school psychologist. Dr. Dowdy's research career and scholarly publications have focused on behavioral and social emotional assessment, particularly universal screening for social and emotional health and risk. She is the co-principal investigator on several screening measurement projects funded through the Institute of Education Sciences and she currently serves as associate editor for School Psychology Review.

Dr. Katie Eklund is an Assistant Professor in the School Psychology Program at the University of Missouri. Prior to entering academia, Dr. Eklund worked in public education for 10 years as a school administrator, school psychologist, and social worker. Dr. Eklund has authored a number of publications on school mental health, including early identification and intervention for childhood behavioral and emotional concerns, school climate, and school safety. Her current research projects include implementation of universal screening and Tier 2 social emotional interventions in K-12 schools, and investigating the impact of School Resource Officers on school climate and safety.

Dr. Austin H. Johnson is an Assistant Professor in the School Psychology program at the University of California, Riverside's Graduate School of Education. Dr. Johnson's research interests focus on the identification of evidence-based behavior support practices and the evaluation of observationally-based behavior assessment methodologies.

Dr. Stephen Kilgus is an Associate Professor in the School Psychology Program at the University of Missouri. His primary research interest is in the area of school mental health. Of particular interest is (a) the evaluation of interventions for students who are at risk for social-emotional and behavioral concerns, and (b) the development and validation of assessments for universal screening, progress monitoring, and problem analysis.

Dr. Kathleen Lynne Lane is a Professor in the Department of Special Education at the University of Kansas. Dr. Lane's research interests focus on designing, implementing, and evaluating comprehensive, integrated, three-tiered (Ci3T) models of prevention to (a) prevent the development of learning and behavior challenges and (b) respond to existing instances, with an emphasis on systematic screening. Dr. Lane serves as the primary investigator (PI) an Institute for Educational Sciences (IES) Researcher-

Practitioner Partnership grant. She also served as PI for other federally-funded projects including: Project WRITE, a Goal Area 2 Grant funded through the IES, focusing on impact of writing interventions for students at risk for EBD who are also poor writers; an OSEP directed project studying positive behavior support at the high school level; and an OSEP field-initiated project studying prevention of EBD at the elementary level. She is currently President of the Council for Children with Behavior Disorders (CCBD). She is the co-editor of Remedial and Special Education and Journal of Positive Behavior Interventions. Dr. Lane has co-authored 10 books and published over 168 refereed journal articles and 34 book chapters.
COVID 19
RDsdracieldMaggin is an Assistant Professor at the University of Illinois, Chicago. His research (/schppestieg-three areas related to the education of students with and at risk for developing emotional atudleatsavioral disorders including (a) the identification of evidence-based practices through the use of intabsisfesearch synthesis methods, (b) the training of school personnel to use a continuum of effeedsie assessment and intervention methods to identify and treat students with varying behavioral plufing- and (c) the development of school-based methods to ensure that effective interventions are covid-19)
implemented with integrity.
Dr. Faith Miller is an Assistant Professor of Educational Psychology within the School Psychology Program at the University of Minnesota. Dr. Miller's research interests relate to improving multi-tiered systems of support for students who experience social, emotional, and behavioral difficulties (SEBD). This includes the use of defensible assessments to inform data-based decision-making and problemsolving, as well as the development and delivery of a continuum of high-quality interventions to improve student outcomes.

Dr. Chris Riley-Tillman is a Professor and Chair of the Department of Educational School and Counseling Psychology at the University of Missouri. He is one of the co-developers of Direct Behavior Ratings as well as a recognized authority in evidence-based practice in schools and the application of experimental design and analysis in applied educational settings. His research interests include development and validation of assessment and intervention methodologies that are both empirically supported and feasible, applied single case design, consultation and school-wide problem-solving models.

Dr. Joni Williams Splett is an assistant professor of school psychology in the University of Florida's College of Education. One area of her research examines the use and outcomes of universal screening measures within a multi-tiered system of support for social, emotional, and behavioral concerns. She has worked with many schools and districts to support implementation of this system and screening practice via multiple funded research projects, consultation, and/or professional development workshops. In this area, she has used real-world datasets from partner schools to examine the factoral validity, consequential validity, and/or stability of four different screening measure, as well as the effects of between teacher differences on teacher ratings of student behavior. Dr. Splett also conducts research to identify cognitive-behavioral intervention strategies to reduce relational aggression and bullying in middle schools

Dr. Nathaniel von der Embse is an assistant professor of school psychology in the College of Education at the University of South Florida. His research has examined the influence of high-stakes testing on teacher and student wellbeing, the development of social-emotional screening tools, and the training of educators in population-based assessment methods to inform tiered and targeted intervention. He is an
associate editor at the Journal of School Psychology, and serves as principal/co-principal investigator on funded research from the Scattergood Foundation, Spencer Foundation, Institute for Education Sciences, and the National Institute of Justice.

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\section*{Behavior Progress Monitoring TRC}

SQVID. 19 criteria for the Behavioral Progress Monitoring TRC were: (a) member has a background in RESOURCES
Reasurement and strong methodological skills and (b) member has strong expertise related to (/supporting-
sthavioral progress monitoring. Special attention was paid to including members with expertise on frtethralle and linguistically diverse populations. Members of the Behavioral Progress Monitoring TRC ingeleds:
Diduring Briesch is an Associate Professor in the Bouvé College of Health Sciences at Northeastern Goviversity. Her research interests include the identification and examination of feasible and psychometrically-sound measures for the formative assessment of student social behavior; the use of self-management as an intervention strategy for reducing problem behaviors in the classroom; and the role of student involvement in intervention design and implementation.

Dr. Sandra M. Chafouleas is a Board of Trustees Distinguished Professor in the Department of Educational Psychology within the Neag School of Education at the University of Connecticut. She also serves as Co-Director of the UConn Collaboratory on School and Child Health. She has authored over 150 publications, and regularly serves as a national presenter and invited speaker. She is a fellow in both the American Psychological Association and Association for Psychological Science. She received the 2009 UConn Alumni Association award for excellence in graduate teaching, the 2016 APA Division 16 Oakland Mid-Career Scholar Award, and previously served as associate dean for The Graduate School (2012-2014) and then the associate dean for research in the Neag School (2014-2016). Prior to becoming a university trainer, she worked as a school psychologist and school administrator in a variety of settings for children with behavior disorders.

Dr. Tanya Eckert is an Associate Professor of Psychology and Director of Graduate Studies in the College of Arts and Sciences at Syracuse University. Dr. Eckert specializes in examining new procedures for assessing academic and behavior problems and developing classroom-based interventions to improve children's academic and behavioral functioning.

Dr. Kathleen Lane is a Professor in the Department of Special Education at the University of Kansas. Her research focuses on exploring the relation between academic achievement and behavior patterns of children and youth with social/behavioral concerns. She has designed and evaluated comprehensive, integrated, three-tiered (CI3T) models of prevention across the K-12 continuum to support all students, including those with emotional and behavioral disorders.

Dr. Daniel Maggin is an Assistant Professor at the University of Illinois, Chicago. His research addresses three areas related to the education of students with and at risk for developing emotional and behavioral disorders including (a) the identification of evidence-based practices through the use of various research synthesis methods, (b) the training of school personnel to use a continuum of
effective assessment and intervention methods to identify and treat students with varying behavioral profiles，and（c）the development of school－based methods to ensure that effective interventions are implemented with integrity．

Dr．David N．Miller is an Associate Professor of School Psychology at the University at Albany，State University of New York．His research interests focus primarily on suicidal behavior and related internalizing problems in children and adolescents，particularly issues in school－based suicide prevention．He is the immediate Past－President of the American Association of Suicidology（AAS），the
 REsioutecesd supporting those affected by it．
（／supporting－
Dr．Chris： Filey －Tillman is a Professor and Chair of the Department of Educational School and students－
Counseling Psychology at the University of Missouri．He is one of the co－developers of Direct Behavior Ratieqs－as well as a recognized authority in evidence－based practice in schools and the application of eđ⿴囗十irigental design and analysis in applied educational settings．His research interests include deviopment and validation of assessment and intervention methodologies that are both empirically supported and feasible，applied single case design，consultation and school－wide problem－solving models．

Dr．Howard P．Wills is an Associate Research Professor at Juniper Gardens Children＇s Project，The University of Kansas．He is currently interested in school－based academic and behavioral interventions for students with challenging behaviors．Dr．Wills is co－developer of the Class－Wide Function－Related Intervention Team（CW－FIT）program and directs CW－FIT efficacy research along with federally funded projects for professional development and interventions for high－school students with challenging behaviors or at risk for school failure．

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\section*{Behavior Intervention TRC}

Selection criteria for the Behavioral Intervention TRC were：（a）member has strong methodological skills and（b）member has a background and expertise in the evaluation of K－12 behavioral interventions． Special attention was paid to including members with expertise in single－subject design，as well as in evaluating the effectiveness of behavioral interventions with culturally and linguistically diverse populations．Members of the Behavioral Intervention TRC include：

Dr．Sandra M．Chafouleas is a Board of Trustees Distinguished Professor in the Department of Educational Psychology within the Neag School of Education at the University of Connecticut．She also serves as Co－Director of the UConn Collaboratory on School and Child Health．She has authored over 150 publications，and regularly serves as a national presenter and invited speaker．She is a fellow in both the American Psychological Association and Association for Psychological Science．She received the 2009 UConn Alumni Association award for excellence in graduate teaching，the 2016 APA Division 16 Oakland Mid－Career Scholar Award，and previously served as associate dean for The Graduate School（2012－2014）and then the associate dean for research in the Neag School（2014－2016）．Prior to becoming a university trainer，she worked as a school psychologist and school administrator in a variety of settings for children with behavior disorders．

Dr. David F. Cihak is a Professor of Special Education and the University of Tennessee's College of Education, Health and Human Sciences Interim Associate Dean and Director of the Bailey Graduate School of Education. His research interests include the use of effective instructional and behavioral strategies, specifically video, augmented, virtual, mobile, and context-aware technologies for improving educational, vocational, functional, and social/communicative outcomes for students with intellectual disability and autism in classroom and community settings.
Di. Tanya Eckert is an Associate Professor of Psychology and Director of Graduate Studies in the CoVfge 9 f Arts and Sciences at Syracuse University. Dr. Eckert specializes in examining new procedures RESORFEEsing academic and behavior problems and developing classroom-based interventions to (/suppportėnçfildren's academic and behavioral functioning.
students-
Dr Steven W. Evans is a Professor of Psychology at Ohio University and co-director of the Center for Intereyention Research in Schools. His research interests include school mental health treatment daúringment and evaluation research for adolescents with ADHD and related problems.
GP. Ridenee Hawkins is an Associate Professor and Coordinator of the School Psychology Program in the College of Education, Criminal Justice, and Human Services at the University of Cincinnati. Her research focuses on empirically-validating interventions designed to improve the behavior and academic performance of students.

Dr. Keith Herman is a Professor in the College of Education at the University of Missouri. His research interests include developmental psychopathology and school mental health; prevention and treatment of child depression; and parenting and family interventions.

Dr. Nicholas Ialongo is a Professor in the Bloomberg School of Public Health at Johns Hopkins University. His research interests include child and family psychology, adolescent substance abuse, and interventions research.

Dr. Kathryn Jaspers is an assistant professor of school psychology at Lewis \& Clark College. Her interests include academic interventions and consultation, development of early math skills, and intervention efficiency, generalization, and maintenance.

Dr. Debra Kamps is the former Director of the Kansas Center for Autism Research and Training and Associate Director and Senior Scientist at the Juniper Gardens Children's Project at the University of Kansas. She has served as Principal Investigator of 11 projects receiving federal research grants in the areas of autism and emotional and behavioral disorders/risk, and has been publishing her research since 1983. Dr. Kamps's work has focused in the areas of small group instruction and peer-mediated interventions for children with autism and emotional and behavioral disorders.

Dr. Krista Kutash is Professor Emeritus, Child and Family Studies at the University of South Florida. The focus of her work has been to conduct and disseminate findings from an integrated set of research and training activities focusing on the implementation of community-based mental health services for children with serious emotional disorders (SED) with a special emphasis on school-based mental health services and support services for parents of children with SED.

Dr. Kathleen Lane is a Professor in the Department of Special Education at the University of Kansas. Her research focuses on exploring the relation between academic achievement and behavior patterns of children and youth with social/behavioral concerns. She has designed and evaluated comprehensive,
integrated, three-tiered (CI3T) models of prevention across the K-12 continuum to support all students, including those with emotional and behavioral disorders.

Dr. Daniel Maggin is an Assistant Professor at the University of Illinois, Chicago. His research addresses three areas related to the education of students with and at risk for developing emotional and behavioral disorders including (a) the identification of evidence-based practices through the use of various research synthesis methods, (b) the training of school personnel to use a continuum of effective assessment and intervention methods to identify and treat students with varying behavioral EOWHIOSGHD (c) the development of school-based methods to ensure that effective interventions are RESPlercezsed with integrity.
(/supporting
Supprizabe th McCallum is an Associate Professor in the Department of Counseling, Psychology and students-
Special Education at Duquesne University. Her research interests include developing and empirically valideating academic interventions for students with and without special education eligibility; the tapedprobilitgs math intervention for building math fluency; academic and behavioral interventions that Łборарряgte technology to improve student performance; and academic accommodations for students with special needs.

Dr. Merilee McCurdy is an Associate Professor in the School Psychology program at the University of Tennessee. Her research interests include the development of interventions to improve student writing achievement in elementary and secondary school students, the evaluation of student writing assessment procedures, and the use of parent tutoring to increase student academic performance in all academic areas. In past research, she has developed a writing intervention that has been successful in increasing the writing performance of middle school children with learning disabilities.

Dr. Samuel Odom is the Director of the Frank Porter Graham Child Development Institute and professor in the School of Education at the University of North Carolina. His recent research has addressed the efficacy of a variety of focused intervention approaches for children with Autism Spectrum Disorders, such as peer-mediated interventions, sibling-mediated interventions, parent-child intervention to promote joint attention and an independent work systems approach to promote learning. In 2007, he received the Outstanding Research Award from the Council for Exceptional Children.

Dr. Brian Reichow is an Associate Professor in Special Education, School Psychology, and Early Childhood Studies and the Anita Zucker Center for Excellence in Early Childhood Studies in the College of Education at the University of Florida. Dr. Reichow's current research interests include the translation of clinical research into practical applications in schools and communities, the identification and evaluation of evidence-based practices, systematic review and meta-analytic methods and applications, and applied research in authentic educational settings.

Dr. Wendy M. Reinke is a Professor in the Educational, School, \& Counseling Psychology department at the University of Missouri with primary research interests in evidence-based social behavioral and emotional interventions, school mental health, prevention science, and school-based consultation. She is the PI or Co-PI on over \(\$ 20\) million in federal research grants. She is the developer of the Classroom Check-Up, a teacher coaching and consultation model. She is currently the lead investigator of a six school district-wide mental health project that has developed a web-based assessment and reporting system to identify students at risk and provide appropriate supports. Additionally, she is the co-author on several books and chapters related to prevention of social emotional and behavior problems in youth and over 85 peer-reviewed publications.

Dr. Chris Riley-Tillman is a Professor and Chair of the Department of Educational School and Counseling Psychology at the University of Missouri. He is one of the co-developers of Direct Behavior Ratings as well as a recognized authority in evidence-based practice in schools and the application of experimental design and analysis in applied educational settings. His research interests include development and validation of assessment and intervention methodologies that are both empirically supported and feasible, applied single case design, consultation and school-wide problem-solving models.

BoMbissa Stormont is a Professor in the College of Education at the University of Missouri. Her RESGORdESiterests include investigating characteristics associated with risk and success in school; (/suppronitiggeachers' knowledge and use of specific instructional practices for children at risk; and stuptenting children with ADHD in school. Prevention of emotional and behavior problems and the intatrssiten to kindergarten are primary areas of Dr. Stormont's research.
needs-
Ddutifigin Sutherland is a Professor in the School of Education at Virginia Commonwealth University. Dr.
Sbliferfond's primary areas of interest include teacher/student interactions in classrooms for students with emotional and behavioral disorders, the relationship between learning and behavior problems, and intervention research.

Dr. Leslie K. Taylor is a Project Manager at UT Physicians an affiliate of the medical school at the University Of Texas Health Science Center. Dr. Taylor works with physicians, behavioral health providers, and faculty to evaluate and coordinate community based integrated and trauma informed care efforts for children and adolescents. She is a member of the advisory board for BridgeUP at Menninger (which creates opportunities to support school based intervention and prevention programming) and is a licensed psychologist in the state of Texas. Her research interests include building and sustaining capacities for high quality mental health programming in schools and other community based settings, school based trauma and disaster focused intervention planning, and teacher identification of student mental health concerns.

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\section*{Related Resources}

\section*{TOOLS CHART}

Academic Progress Monitoring Tools Chart (https://charts.intensiveintervention.org/chart/progressmonitoring)

\section*{TOOLS CHART}

Behavioral Progress Monitoring Tools Chart (https://charts.intensiveintervention.org/chart/behavioral-progress-monitoring-tools)

\section*{TOOLS CHART}

Academic Intervention Tools Chart (https://charts.intensiveintervention.org/chart/instructional-intervention-tools)

\section*{TOOLS CHART}

Behavioral Intervention Tools Chart (https://charts.intensiveintervention.org/chart/behavioral-intervention-chart)

\section*{TOOLS CHART}

Academic Screening Tools Chart (https://charts.intensiveintervention.org/chart/academic-screening)

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covid-19)

\section*{POLICY PAPER}

Recommendations from the National Panel on the Future of Assessment Practices

\section*{The Future of Assessment Practices:}

\section*{COMPREHENSIVE AND BALANCED ASSESSMENT SYSTEMS}

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\section*{Introduction}

\section*{About LSI}

Learning Sciences International® (LSI) empowers schools and districts to transform core instruction and leadership practices, resulting in rapid gains in student learning.

At the center of this transformation is the company's Schools for Rigor partnerships, which are proven to raise student performance through strengthening core instruction and leadership practices and meet Every Student Succeeds Act (ESSA) requirements for evidence-based interventions.

LSI empowers each student and educator to meet the new challenges of a new economy (in which today's students and educators must prepare for a future in which new jobs, skills, functions, and disciplines are necessary) by transforming traditional core instruction and leadership practices with research-based, results-driven strategies, products, and services. By combining the most effective elements of traditional pedagogy, such as the strong social bonds forged by impassioned educators, with the advancements of new technology at a student's fingertips, LSI is at the forefront of this educational evolution and transformation for the better.

\section*{About The Panel}

The United States spends \({ }^{\$ 130,000}\) to educate each student from K through 12 - yet lags behind many other countries in academic achievement and is slipping further behind. Now is the time to fix our classrooms. Our students have waited long enough.

In 2018 the National Panel Charting the Future of Assessment Practices in the U.S. began as a movement where student success takes center stage. In that same year, at the 2nd annual Formative Assessment National Conference, leading educational experts on formative assessment-Susan Brookhart, Rick Stiggins, Jay McTighe, and Dylan Wiliam-participated in a fervent panel discussion. In the end, they all agreed a lack of a comprehensive and balanced assessment system is at the very heart of our challenges.

In that discussion Dr. Susan M. Brookhart exclaimed that we have seen an absence of implementation despite the many assessment systems which have been written and developed over the years.

While Dr. Dylan Wiliam lamented, "It is hard for me to imagine how it could be any worse." He went on to expound that teacher education needs to be treated as a process of habit change.

In 2019 at the 3rd annual Formative Assessment National Conference we tackle the elephant in the room - grading.

Susan M. Brookhart, Jay McTighe, Tom Guskey, and Dylan Wiliam will continue to discuss this important shift which can ripple into a farreaching effect on how students ultimately think and behave.

In fact, Dr. Wiliam maintains, "Grading is essential in American schools. We have to have measures of how much the students have learned. The trouble is the way it's done in many schools, grading gets in the way of learning."

Join us in our effort to give each and every one of our students a shot at a better life. Let's start by raising awareness with this thought-provoking policy paper, "Comprehensive and Balanced Assessment Systems."

\section*{Author Bio}


\section*{Susan Brookhart}

Dr. Susan M. Brookhart is Professor Emerita at Duquesne University and an expert consultant with an extensive background working with schools, districts, universities, and states. She studies the role of both formative and summative classroom assessment in student motivation and achievement, the connection between classroom assessment and large-scale assessment, and grading. She is author or coauthor of 18 books and more than 70 articles and book chapters and has served as editor for academic journals.


\section*{Jay McTighe}

Jay McTighe brings a wealth of assessment experience from leading classroom formative performance assessment efforts with the Maryland Assessment Consortium, from his work on large-scale performance assessments with the Maryland State Department of Education, and from his many other projects at state and district levels. He is co-author of 15 books, including the award-winning and bestselling Understanding by Design® series with Grant Wiggins, and has written more than 40 articles and book chapters.


Rick Stiggins
Dr. Rick Stiggins founded the Assessment Training Institute (ATI) to help teachers, school leaders, policy makers, and communities develop assessment literacy. He guides practitioners to assess accurately and use the classroom assessment process to support, not merely monitor, student learning. ATI's approach to assessment has been used productively by hundreds of thousands of teachers and school leaders for the past three decades. He is the author of dozens of articles, books, and training programs.


Dylan Wiliam
Dr. Dylan Wiliam has helped to successfully implement classroom formative assessment in thousands of schools all over the world. A BBC documentary tracking his work showed how his formative assessment strategies empower students, significantly increase engagement, and shift classroom responsibility from teachers to students. He has written over 300 books, chapters, and articles; his latest book breaks down the gaps between what research tells us works and what we actually do in schools.

\section*{Executive Summary}

Educational assessment is the process of eliciting, gathering, and interpreting evidence of student learning to describe student learning and/or inform educational decisions. School district assessment systems should serve to improve student learning and to document that learning for a variety of stakeholders. Comprehensive assessment systems assess all valued learning outcomes, not just those that are easy to test, and assess learning at all levels of the system: individual learners, classrooms, schools, and districts. Balanced assessment systems provide meaningful, relevant, and sufficient information for each stakeholder, with information quantity and quality commensurate with the uses to made from it: more detailed information for individual learners and their teachers in the classroom, where the learning takes place, and proportionally less (more general, and more aggregated) information available as the distance from the learning increases. Comprehensive and balanced assessment systems include a variety of types of assessments, producing evidence that can be used formatively, to improve learning, and evidence that can be used summatively, to certify, report on, or evaluate learning. Comprehensive and balanced assessment systems pay attention to the quality of assessment information; the process used to gather, interpret, and use assessment information; and the people who participate at all levels of the system, including students.

To be blunt, most district assessment systems are neither comprehensive nor balanced. This white paper describes the components of an ideal comprehensive, balanced assessment system that includes classroom formative assessment (within and between lessons), medium-cycle formative assessment (within and between instructional units), classroom summative assessment (grading), long-cycle formative assessment (several times during the school year), and district and state-level accountability assessment.

\section*{To be blunt, most district assessment systems are neither comprehensive nor balanced.}

It suggests ways these components should work together to provide the information needed at all levels to support teaching and learning and support a view of student learning consistent with current theories of student learning and motivation. The paper ends with some suggestions for districts interested in moving forward toward this vision, and advocates for doing so.

\section*{Comprehensive and Balanced Assessment Systems}

Educational assessment is the process of gathering evidence of student learning to inform educational decisions. Assessment systems should serve both to improve student learning and to document that learning for a variety of stakeholders. An assessment system is composed not only of assessment tools and processes, but also the people who use them. Many school districts use collections of assessment tools and processes that either do not serve to improve student learning, miss important learning outcomes, or under-serve one or more stakeholder groups. The purpose of this white paper is to describe ideal comprehensive and balanced assessment systems for school districts. We will address the system concept as a school district matter because this is the context in which the educational decisions are made that impact student learning. Districts may use this description to evaluate their own assessment system and set goals for improvement. The paper is organized into three sections: an overall vision for comprehensive and balanced assessment systems, the components of a comprehensive and balanced assessment system, and recommendations for enacting such a system.

\section*{A Vision for Comprehensive and Balanced Assessment Systems}

If an assessment system is to help improve student learning and document that learning for a variety of stakeholders, it must be both comprehensive and balanced. Comprehensive
assessment systems assess all valued learning outcomes, not just those that are easy to test, and assess learning at all levels of the system, with results and analyses describing learning for individual learners, classrooms, schools, and districts. Comprehensive and balanced assessment systems include a variety of types of assessments to serve a variety of purposes and uses, producing some evidence that can be used formatively, to improve learning, and some evidence that can be used summatively, to certify or report learning. Balanced assessment systems strike a balance in the assessment such that the available information is appropriate and useful for the information needs at the various levels of the system. Following this logic, a balanced assessment system does not provide an equal amount of assessment information available to each level of the system, but rather offers more detailed information to individual learners and their teachers in the classroom, where the learning takes place, and proportionally less (more general, and more aggregated) information available as the distance from the learning increases.

Learning outcomes are the foundation of a comprehensive, balanced assessment system and the reference against which assessment information should be interpreted. An important feature of a comprehensive and balanced assessment system is coherence among the learning outcomes, attendant assessment and instruction, and the views of learning they imply, at all levels of the system (Wilson, 2004). State standards are broad statements of
learning goals measured by district and state level assessments. Curricular and unit goals are smaller in scope, and typically a state standard will encompass more than one curricular or unit goal. Measurement of learning goals at this level is typically accomplished by both mediumcycle formative assessment and classroom summative assessment. Each unit learning goal typically encompasses several daily learning targets for individual lessons, and classroom formative assessment garners information keyed to lesson-sized learning targets. A critical aspect of a comprehensive assessment system is that these learning outcomes are coordinated; they work together to guide students' learning and teachers' instruction; they describe all the valued learning outcomes necessary for students to ultimately reach the standards; and they are framed by compatible understandings of learning, instruction, and assessment.

A balanced assessment system prompts educators to collect data in grain sizes that are appropriately actionable at each level of the system. Balanced assessment systems generate a great deal of classroom formative assessment information, varying in length from a few seconds to a week, because the resulting actions are more immediate and smaller in scope-typically actions taken by learners and their teachers during lessons. These small outcomes are often not recorded-although they can be-but rather are the basis for student and teacher action. As the assessment information increases in aggregation and distance from the classroom, or is collected periodically, the resulting actions are more distant and larger in scope-typically resource allocation or policy decisions made by administrators for district planning. Such
information should be less frequent and less detailed. A comprehensive and balanced assessment system should attend to both the assessment tools (tests, skill checks, performance assessments, classroom questions) and processes (the methods by which students and teachers participate in assessment activities, and the classroom climate in which they do so) that are currently presented in other descriptions of assessment systems, and also to the assessment literacy and information needs of the actors at each level of the system (Michigan Assessment Consortium, 2017; Stiggins, 2017).

The process of evaluating and improving local systems should be guided by a set of key questions:
- Are the learning goals to be assessed clear to all stakeholders, including students?
- Is the purpose of each assessment clear: What is the decision to be informed and who will make it (them)?
- Are the assessment tools capable of providing the needed information?
- Do the assessment processes deliver the needed information into the hands of the intended users in a timely and understandable form?
- Do assessment users at all levels of the system have the skills they need to gather, interpret, and use assessment information?

This last question focuses on the assessment literacy of the teachers and school leaders who manage assessment at all levels; that is, the level of their mastery of the basic principles of sound
assessment practice. Without this foundational professional competence in place, development of a quality local assessment system is highly unlikely.

> One of the current problems with assessment systems in many districts is that this balance is backward, with more resources spent on the less frequent and summative components of the system.

Figure 1 on the next page, identifies the components of a comprehensive and balanced assessment system. The locus of assessment
administration and use moves from closest to the learning on the left to closer to administrative and policy decision-making on the right. The frequency of assessment is greater and grain size of information is smaller on the left and increases toward the right. Arguably, then, the amount of time and other assessment resources invested should be largest on the left and decrease toward the right. One of the current problems with assessment systems in many districts is that this balance is backward, with more resources spent on the less frequent and summative components of the system. The result is more information to inform the periodic instructional decisions made by administrators and less information to inform those made continuously day to day in the classroom by learners and their teachers.

Figure 1. Components of a Comprehensive Assessment System
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|c|}{Comprehensive Assessment System Components} \\
\hline Short-Cycle Classroom Formative Assessment & \begin{tabular}{l}
Medium-Cycle \\
Formative Assessment
\end{tabular} & Classroom Summative Assessment (Grading) & Long-Cycle Formative Assessments & \begin{tabular}{l}
District-Level \\
Summative \\
Assessments and \\
Annual State \\
Accountability \\
Assessments
\end{tabular} \\
\hline Evidence of learning of lesson-sized learning target(s), generated and used by both students and teachers during the course of learning & Evidence of learning across related lessons or a unit (e.s., weekly diagnostics), for shortterm instructional and learning adjustment & Evidence of student achievement at a point in time, for reporting (e.g., unit tests, performance assessments) & Evidence of student learning, typically 2 to 3 times a year, for longer-term instructional planning & Evidence of student achievement of curricular learning outcomes and/or state standards, for reporting (e.g., end-of-course exams, state accountability assessments) \\
\hline \multicolumn{3}{|c|}{\multirow[b]{2}{*}{High Utility to Teachers and Parents}} & \multicolumn{2}{|l|}{High Utility to Central Office Administrators} \\
\hline & & & & High Utility to Policy Makers \\
\hline Have students learned the lesson content? What do they think the learning target is, where are they now, and what should they do next? & Have students retained th (learned curriculum)? & ir learning & Is the retained learning (learned curriculum) aligned with the accountability system? & Does the retained learning (learned curriculum) meet district and state expectations? \\
\hline \multicolumn{5}{|c|}{Appropriate to answer questions such as:} \\
\hline \begin{tabular}{l}
- How are students thinking about lesson-sized chunks of content (daily learning target concepts/skills)? \\
- What next steps do the students need to take in their understanding? \\
- Was the planning of my lesson effective? \\
- Did the students learn the lesson learning targets? Which students struggled (and why)? Which students need enrichment (and why)? \\
- How will I adjust my planning of tomorrow's lesson for those students
\end{tabular} & \begin{tabular}{l}
- How are students thinking about unit-sized chunks of content (unit goal concepts/skills)? \\
- What next steps do the students need to take in their understanding? \\
- Did the students retain what they learned in previous lessons? \\
- Which students are still struggling with the content, and which students need enrichment? \\
- How will I adjust my planning in the next few lessons in this unit?
\end{tabular} & \begin{tabular}{l}
- What are students' current status/ achievement levels on the learning goal(s) assessed? \\
- How should we report students' current achievement to parents/guardians and to the reporting/ record-keeping system?
\end{tabular} & \begin{tabular}{l}
- Are the standards being taught and learned? \\
- Does our curriculum have gaps between learning expectations and assessment? \\
- What structural or instructional changes might be helpful?
\end{tabular} & \begin{tabular}{l}
- Does the curriculum cover the standards in appropriate breadth and depth? \\
- How does each tested grade level, subject, and school perform in regard to the standards? \\
- Which curricular area(s) may need more resources?
\end{tabular} \\
\hline \multicolumn{5}{|c|}{NOT appropriate to answer questions such as:} \\
\hline - Which students "got it"/"didn't get it"? & - Which students "got it"/"didn't get it"? & \begin{tabular}{l}
- Which students are the best/smartest? \\
- Which teacher is more effective?
\end{tabular} & \begin{tabular}{l}
- Which teacher is more effective? \\
- Which school is more effective?
\end{tabular} & \begin{tabular}{l}
- Why did students perform the way they did? \\
- Why did schools perform the way they did?
\end{tabular} \\
\hline
\end{tabular}

\footnotetext{
\({ }^{\circ}\) Learning Sciences International - Michael Toth
}

\section*{The Components of Comprehensive and Balanced Assessment Systems}

In this section, we discuss the following assessment components in turn: daily classroom formative assessment (sometimes called short cycle formative assessment), formative assessment within and between instructional units (sometimes called medium-cycle formative assessment) and interim/benchmark assessment (sometimes called long-cycle formative assessment), assessment for classroom grading, and district- and state-level assessments. Each component is defined and its purposes are specified. Then a brief discussion explains how the component should function in the system, what research says about the component, and what questions its information can and, perhaps more importantly, cannot answer. Next, we describe the responsibilities of the various parties involved. In most cases, people from several role groups share joint responsibility in order to coordinate assessment practices and information throughout the system. Finally, for each component the current state of practice is compared with how the component should function in an ideal comprehensive and balanced assessment system.

Short-cycle Classroom Formative Assessment

Short-cycle formative assessment occurs in the classroom, is on-going, and serves only to support student learning. It takes place duringand as part of-instruction, which typically means during a lesson or practice. It helps student/
teacher teams make incremental decisions focused specifically on what they are trying to teach and learn, where they are in the process, and what they need to understand or do next to improve. Formative assessment helps teachers make incremental decisions about what they are trying to teach, how students currently are thinking about the concepts, and what immediate next instructional adjustments would help move students along. Wiliam (2010, p. 31) lists five key strategies that comprise short-cycle formative assessment:
1. Clarifying, sharing, and understanding learning intentions and criteria for success
2. Engineering effective classroom discussions, questions, and tasks that elicit evidence of learning
3. Providing feedback to teachers and students to inform instruction and improve learning
4. Activating students as instructional resources for one another
5. Activating students as the owners of their own learning

When formative assessment is intended, designed, and used to support students as they make the decisions that promote their learning, it helps them understand their learning target, participate in the collection of evidence of their own level of attainment, and collaborate with their teacher in deciding what comes next in their learning.

Research. There is evidence that formative assessment, when done well, improves student learning (Black \& Wiliam, 1998; Graham, Hebert, \& Harris, 2015). In a well-functioning system, short-cycle formative assessment includes both informal methods, like classroom questioning and observation, and more formal methods, like homework and practice work that, while not graded, helps inform students and teachers of learning progress during instruction while there is still time to address learning before reporting time (Ruiz-Primo \& Brookhart, 2018). Importantly for the concept of an assessment system, classroom formative assessment is the component that most involves the students and is most directly connected to their learning process as it is happening. When formative assessment is absent, weak, or poorly implemented in an assessment system, the system's major link to the focal stakeholdersthe learners-is weakened or broken. This disenfranchises learners from a system that should be designed to benefit them and, essentially, washes out the foundation of the system itself.

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Questions addressed. Information from shortcycle formative assessment helps students and teachers know how students are thinking about lesson-sized chunks of content from their daily learning targets and what next steps they need to take, for students to enhance their understanding and/or for teachers to adjust their instruction. Done well, it focuses on uncovering student thinking as opposed to evaluating or scoring student performance. A common but shallow understanding of formative assessment is that it helps teachers know which students "got it" or "didn't get it." This view of formative assessment is not only impoverished; it can lead to evaluative judgments of students by teachers and students themselves about their own learning. Such thinking robs students of the confidence they need to continue striving for success and works against student learning, especially for students who struggle (Stiggins, 2017).

In contrast, interpreting information from welldesigned formative assessment as evidence of student thinking and current place in learning progressions helps learners and teachers figure out next steps. So, for example, the more useful formative assessment information from an incorrect answer to a two-step mathematics problem is not that the student got the problem wrong, but what thinking was in evidence (e.g., was confused about when to divide and when to multiply). This kind of information is immediately actionable, both to focus the student's attention and intentions and to inform the teacher's immediate next instructional decisions. It is detailed at a fine grain size (e.g., not "mathematics" or even "numbers and operations," but "distinguishing multiplication and division").

Thus, classroom formative assessment information is the foundation from which a comprehensive, balanced assessment system is launched; it is foundational in the sense that if the overarching purpose of the assessment system is to support learning, that support begins and is based in this level of the system. It involves and informs the most vulnerable and the most important stakeholders, students. It supports a view of learning that understands students as the agents who regulate their own learning (Zimmerman \& Schunk, 2011). Although students are the primary stakeholders - school districts exist primarily for the purpose of educating students - they are often overlooked in assessment systems, which are typically designed to meet the needs and desires of the adult stakeholders. Formative assessment also empowers teachers, who should be key players in assessment systems but, in current practice, often feel like assessment is something done to them rather than for them. Comprehensive, balanced assessment systems include a solid foundation of high-quality formative assessment, in every lesson, by every student and teacher.

\section*{Responsibility and system coordination.}

Responsibility for this component of the system rests, in different ways, with students, teachers, and school leaders. While it may seem odd to give students responsibility for a part of the assessment system, research has shown that when students take responsibility for their own learning and assessment, assessment does support learning-the purpose of the assessment system-and when they don't, learning is less well supported, for students across the achievement range (Zimmerman \& Schunk, 2011). Similarly, teachers improve in their formative assessment
effectiveness when they begin to look at learning and assessment through students' eyes and approach their assessment practices from that perspective, which is a sea change for most educators (Brookhart, 2017). Finally, school leadership (building and district) and support is critical for formative assessment to function effectively and systematically within a school (Noyce \& Hickey, 2011; Schneider \& Randall, 2010). Building principals should take overall responsibility for instructional quality in their building.
Similarly, teachers improve in their formative assessment effectiveness when they begin to look at learning and assessment through students' eyes and approach their assessment practices from that perspective, which is a sea change for most educators (Brookhart, 2017).

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Current status vs. ideal functioning. Despite
} its position as the foundational component in a system whose major purpose is to support student learning, classroom formative assessment typically is the weakest component in most districts' assessment systems. This is due in part to the lack of assessment literacy training both for teachers and their supervisors in their pre-service preparation-training that should develop assessment knowledge and skills as well as the realization that assessment is part of their professional responsibility and the disposition to do it well. Accordingly, professional development in this arena is clearly needed and strongly recommended.

Another issue needing attention is the status of the student, the least powerful stakeholder in systems run by adults. Presently, the students function as examinees who respond to assessments rather than as proactive learners who are actively involved in the assessment process (Stiggins, 2014a). Modern learning theory holds that students actively construct learning (Shepard, 2001; Zimmerman \& Schunk, 2011), and one important aspect of coherence is that assessment of learning be underpinned by similar theories of learning (Pellegrino, Chudowsky, \& Glaser, 2001; Wilson, 2004). The mismatch between treating students as active constructors of knowledge for short-cycle classroom formative assessment and as passive examinees for district tests creates a lack of coherence in the system. Many teachers and even more administrators have yet to realize the sea change described above, looking at learning from the students' point of view. On the contrary, many educators and others still hold associationist theories of teaching and learning and a traditional view of assessment merely as something adults do to students, in which students are respondents (examinees) rather than active participants in the learning process (Brookhart, 2017; Shepard, 2001).

Research suggests that this change can be difficult, re-orienting classrooms and building cultures from primarily adult-centered to primarily student-centered, and is more a matter of habit change than knowledge acquisition.

To move toward a comprehensive and balanced assessment system, a district should begin with intensive development of knowledge, skills, and practice in formative assessment, for all teachers and administrators (Black \& Wiliam, 2004). Research suggests that this change can be difficult, re-orienting classroom and building cultures from primarily adultcentered to primarily student-centered, and is more a matter of habit change than knowledge acquisition. The authors are very aware that calls for the improvement of formative assessment are common, and often not successful. District policy makers who do not know which part of an accountability system most supports learning, and how that happens, mistakenly prioritize large-scale testing over classroom formative assessment. Often, good-faith efforts to improve formative assessment in classrooms, schools, and districts are misdirected or misunderstood (e.g., formative assessment presented as a list of "techniques" such as an Exit Ticket), underfunded, or under-prioritized (e.g., despite formative assessment initiatives, more attention still rests on large-scale accountability tests and teacher evaluation). Only when radical shifts in beliefs about learning and teaching and in classroom and school culture are made will comprehensive, balanced assessment systems be possible.

\section*{Medium-cycle Formative Assessment}

Typically accomplished with more formal formative assessment (Ruiz-Primo \& Brookhart, 2018), medium-cycle formative assessment occurs within and between instructional units,
typically in intervals of from one to four weeks (Wiliam, 2010) to inform students' decisions about studying and teachers' decisions about adjusting larger, longer-term lesson plans. For example, in Philadelphia, the year is divided into six-week blocks, with essential standards being taught in the first five weeks, on which students are tested, with the test performance used by teachers do determine whether week six is spent on extension or review (Goertz, Oláh, Nabors, \& Riggan, 2009).

Another example is the common assessments used by teams of teachers in the context of professional learning communities (DuFour, 2004). In this case, teams devise assessments reflective of the intended outcomes units of instruction offered by all team members across classrooms. Results are analyzed by the team to discern which team members achieved the best results so as to instruct others about how to improve their instruction.

Medium-cycle formative assessment typically involves assessment of student work on quizzes or performance tasks that encompass one or more instructional objectives, as opposed to the smaller grain-sized daily learning targets referenced in short-cycle formative assessment. Thus, the main actors in this component of the system are also students and teachers, but the purpose is somewhat broader. Medium-cycle formative assessment shows how students are synthesizing the bite-size chunks of content from their lessons into more general understandings often summarized as unit goals derived from state standards.

Research. Research on medium-cycle, formal
formative assessment has been mixed, largely because of problems in implementation (Furtak et al., 2008). However, there have been some exceptions. Saunders, Goldenberg, and Gallimore (2009) reported on a five-year study of work with grade-level teams in Title I schools. The first two years of work with principals only produced no changes in achievement, but the second phase, which included training for both principals and teacher leaders, increased both achievement and growth.

Questions addressed. Medium-cycle formative assessment answers questions about how students are thinking about unit-sized chunks of content, how they are able to apply what they are learning to build up larger understandings, and where they should go next. The focus of such periodic formative assessment should be on identifying what students are thinking, where they are in a learning progression, and what student or teacher instructional moves might be most likely to increase progress.

While short-cycle formative assessment informs adjustments the teacher or students make during live instruction, medium-cycle formative assessment provides more formal evidence on which teachers can base more general instructional planning, for example lesson planning, adjusting lesson pacing, grouping or regrouping students for remediation or enrichment, tutoring, providing additional practice, and so on. In the context of ongoing classroom formative assessment, the actionable information comes from insights about individual student thinking and performance that assessment results permit. But in the periodic assessment context, actions are suggested by
patterns of student performance detected over time and across classrooms and/or instructional approaches.

Responsibility and system coordination. In larger school districts, the responsibility for mediumcycle formative assessment may lie with district curriculum leaders. Teachers, working alone or in teams, and building principals should share in this work. Teachers and building principals are responsible for implementing the curriculum for students, that is, for mediating the written curriculum into the taught curriculum. As for classroom formative assessment, principals have supervisory responsibilities toward the teachers and coordinating responsibilities toward the rest of the system, as well.

> For all types of formative assessment, those who devise, conduct and use it must be assessment literate.

Current status vs. ideal functioning. For all types of formative assessment, those who devise, conduct and use it must be assessment literate. They must understand and be able to apply basic principles of sound assessment. Specifically, this means they must be masters of the learning goals to be assessed, able to select a proper method for the goal(s), able to build quality assessments and scoring schemes and able to anticipate and minimize any sources of bias that can distort results. These requirements apply regardless of the formative assessment context. We already
have established that many teachers and building principals would benefit from skill development in these two areas, including involving students in the formative learning cycle and reasoning from evidence of learning.

Programs that have embedded periodic formative assessment in curriculum materials without attention to these principles have not had much success (Yin et al., 2008). Once these principles are in place and teachers and administrators begin to develop skills in using them, mediumcycle formative assessment tools such as quizzes and short performance tasks can be incorporated into the process.

\section*{Classroom Summative Assessment (Grading)}

Classroom tests and performance assessments are the most common tools used to assess (evaluate) student achievement at a point in time, typically at the end of a series of related lessons and at the end of a unit. These are scored in different ways, most commonly as percent correct or by matching performance to levels on a rubric, sometimes translating the result into grading symbols (e.g., ABCDF) for communication. These individual components are aggregated for reporting at regular intervals, for example, for report cards issued at the end of a 9 -week quarter or other intervals specified by district policy. The purpose of grades is to judge the sufficiency of student learning given pre-set achievement expectations. We seek to inform students and parents of a student's current status on either a subject or standard,
depending on the type of reporting used, in effect creating "punctuation" points in a student's learning trajectory to take stock of learning in a formal way. A secondary purpose is to inform administrators and future teachers of a student's performance, for potential use in administrative or placement decisions. For older students, grades are entered into their permanent records. These are summative functions, although it is possible to use summative assessment results for formative purposes, as well, as for example when a teacher reviews test results to prompt further studying and assessment (Black et al., 2003). [Note that some states "grade" schools as part of the state's accountability system. This is not a district function. In this paper, we use the term "grades" to mean the grades students receive on classroom assessments or report cards, not ratings of schools by states.]

Research. Research on grading has identified several problematic issues (Brookhart, Guskey et al., 2016). Certain teacher grading practices, for example, counting surface features of an assignment that are unrelated to the standard it is designed to assess, or counting class participation in a grade intended to assess content learning, threaten the quality of information about learning that grades provide. Variability in grading practices and inconsistent application of criteria also threaten the reliability of grades. Nevertheless, grades can predict important educational outcomes like dropping out of school and being admitted to and successful in college. They also serve an administrative function in schools by summarizing student learning with a simple indicator that has utility especially in large schools and districts.

Questions addressed. Done well, grades should answer questions about students' current achievement status on important learning goals, to inform students, parents and guardians, and the school and district. For standards-based or standards-referenced grading, those important learning goals are expressed as reporting standards. Grades should not be used to compare students with one another (norm-referencing). The actionable information grades provide for students is less about learning specific concepts and skills-every 9 weeks is a bit late for thatand more about broader questions of whether students' learning needs are being met. They can serve as a way in to discussing learning and school more generally with students and parents. For standards-referenced grading, grades are intended to represent students' current status on learning standards and should not include attendance, motivation, or effort. However, these non-cognitive qualities can be brought in as part of the conversation as students, parents, and teachers interpret and discuss students' grades. Because grades are sometimes difficult to interpret, this component often represents a weak spot in district assessment systems. Grades stand at the transition point in a comprehensive assessment system, between assessment of learning for direct student and teacher consumption and use and assessment of learning for evaluative and administrative purposes.

Responsibility and system coordination. The state legislature empowers the local board of education to establish local policies for their operations, including grading (McElligott \& Brookhart, 2009). Therefore, the local school board and district administrators bear responsibility for grading and can be sued
in court for perceived abdications of this responsibility. Suits mostly focus on due process or equal protection concerns under the 14th Amendment of the U.S. Constitution (McElligott \& Brookhart, 2009). However, in practice, shared responsibility for grading rests with the teachers who assign the grades, building principals who oversee and, in many districts, have the authority to change grades if deemed appropriate, and district administrators.

These responsibilities must be coordinated. Classroom teachers' grading practices and classroom-level policies should be as consistent as possible with other teachers' practices and policies. At the classroom level, the policies are usually about details of what counts as evidence for various grades and how evidence may be collected (e.g., due dates and late policies). That means teachers are responsible for the match between their classroom assessments (e.g., tests and performance assessments), intended learning outcomes, and the approach to learning supported by the system. Teachers are also responsible for weighting and aggregating classroom assessment information into a report card grade that communicates about students' current status on those learning outcomes. At the building level, principals are responsible for seeing that teachers carry out meaningful grading practices, and also for reviewing due process and equal protection concerns. The district is responsible for seeing that students receive due process and equal protection in grading issues, and that grades are accurately recorded into the district database.

Current status vs. ideal functioning. Similar to formative assessment, grading is at present
a weak spot in most districts' assessment systems. To begin with, the dependability of any report card grade depends of the quality of the evidence on which it is based. It is impossible to combine low-quality test scores and get a meaningful representation of a student's level of achievement. We have already mentioned our concerns about the lack of assessment literacy in the classroom. This concern generalizes from classroom formative to medium-cycle formative to classroom summative assessment (report card grading). Professional development may be needed, depending on local circumstances.

Second, in many cases, grading relies on a banking model. Once students have demonstrated their proficiency on a specific standard (once it's "in the bank"), graded work pays no attention to whether what was assessed is retained. However, students often do forget. In some cases, forgetting occurs because learning was not deep enough to begin with, for example, topics were touched on but not completely understood, or skills were not practiced to fluency.

\section*{... many current grading policies hurt students rather than support learning.}

In addition, many current grading policies hurt students rather than support learning. For example, some classroom grading schemes result in students realizing halfway through a unit that they have no chance of passing, causing them to give up and sometimes see themselves as
stupid or worthless. Change may be required so that grades report current levels of student achievement of intended learning outcomes after students have had sufficient formative (learning and practice) opportunities and that the classroom assessment climate supports and motivates students to participate to the best of their ability in the formative learning cycle. Grades should convey to students where they are on learning outcomes they understand and what they are on track to do next. These changes require better description of student work across a continuum for each learning outcome, matched closely to standards and supportive of an active view of student learning.

Changes in grading policies and practices like these may run into some resistance. Some parents and others in our communities see grades as positional goods, whereby higher grades for some students convey status that relies on lower grades for other students. Such attitudes will need to change, although the assessment system we are proposing is possible even if we cannot stop some parents from regarding grades as positional goods. In addition, some new policies and practices will need to be worked out, to deal more appropriately with diversity in student abilities in a learning-referenced grading system, such that helpful and accurate reporting of learning can happen without hurting students. Such policies will be critical to ensuring that standards-based grading does not exacerbate the problems inherent in current and traditional grading systems.

\section*{Long-cycle Formative Assessments}

Many districts use interim or benchmark assessments, both of which are typically purchased from commercial vendors, although some larger districts develop their own. Interim assessments usually are parallel test forms for an external accountability test; they cover an entire year's worth of content and are administered two or three times during the school year to track student learning and achievement growth. Benchmark assessments usually are nonparallel test forms covering a portion of the year's content (e.g., the first report period) and are intended to be administered at a specified point in the school year and curriculum (Ferrara, Maxey-Moore, \& Brookhart, in press). However, some educators use the terms interchangeably. Both interim and benchmark assessments are intended to identify students who need more support to succeed and to inform curriculum planning and resource allocation. At present, some teachers see interim and benchmark tests as simply "test prep" practice for the state accountability tests; this is not the use for which these tests were designed.

Instructional and grouping decisions based on long-cycle assessments are not the fluid, in-class adjustments and groupings based on short- and medium-cycle formative classroom assessment, but rather grouping for pull-out interventions and other more structural purposes. At this point in the system, students become secondary stakeholders, involved only to the extent that decisions by teachers and administrators ultimately affect their experiences.

The primary stakeholders for interim and benchmark tests are administrators and teachers. Interim and benchmark tests primarily inform educators, not students, and the decisions made on the basis of their results often affect students other than those who took the assessment (for example, resulting in better curriculum alignment for next year's students). In fact, when benchmark assessments are used to monitor students' progress toward state accountability test performance, they are functioning summatively.

Research. To date there is very little research evidence that using interim/benchmark assessments helps improve student achievement. One study showed no effects of using interim/ benchmark data on student achievement in grades \(K\) to 2 and very small effects in grades 3 to 8 (Konstantopoulos et al., 2011). There is some evidence that when data teams in schools use interim/benchmark assessment data, they focus more on internal teaching issues than external forces not under their control (Gallimore et al., 2009), although it is worth reporting that this study reported a significant impact on student achievement. However, a study of teachers' use of mathematics interim/benchmark assessments found teachers mostly used results to group students or reteach procedural knowledge, rather than making sense of students' conceptual understanding (Oláh, Lawrence, \& Riggan, 2010). Reviewing these and other studies, Abrams and McMillan (2013) concluded that interim assessment data influenced topic selection as teachers decided to teach or reteach, but not cognitive considerations about how to reteach. Thus the value of devoting resources to interim
and benchmark assessments, as they are currently used, can be questioned.
> ... the value of devoting resources to interim and benchmark assessments, as they are currently used, can be questioned.

Questions addressed. Interim/benchmark data can answer general questions about student achievement in different areas in the curriculum, and sometimes the standards, depending on the test. However, large-scale assessments like this are much better for raising questions than answering them. Rather than collecting diagnostic information on every student, these monitoring assessments are best used to figure out which students need help; then, a separate assessment is needed to figure out what help to get them. For example an interim assessment might raise the question, "Why are my students not performing in mathematics at the level I expected?" Deep answers to these questions require looking at classroom-level assessment information. For example, a look at students' classroom work over time might find that they are better at computation than problem-solving using fractions and would also identify what kinds of mathematics work they had been asked to do (and perhaps, what they had not been asked to do but should have been). Effective action plans can be made based on these answers, and they cannot be made based on state test results alone.

\section*{Responsibility and system coordination.}

Interim and benchmark assessments are a relatively new addition to the components of a comprehensive and balanced assessment system. They arose in response to a perceived need for more instructional, predictive, and evaluative information, at more frequent intervals, than the once-a-year state accountability tests that preceded them (Perie, Marion, \& Gong, 2009). To date, responsibility for purchasing and administering interim and benchmark tests has rested with district administrators, and responsibility for interpreting results has been delegated to building principals and school data teams (Gallimore et al., 2009), with the not altogether satisfactory results reported above.

Current status vs. ideal functioning. As currently practiced, interim and benchmark assessment is the component of an assessment system with the least research support. It may be that, with enhanced short- and medium-cycle formative assessment and improved grading practices, this component can be eliminated or at least have its use radically transformed. When schools primarily use long-cycle interim or benchmark assessments to determine interventions instead of using quicker-acting systems (e.g., classroom formative assessment), they squander the power of formative assessment to prevent learning gaps in the first place. One of the goals of a balanced system weighted heavily on the side of classroom short-cycle and medium-cycle formative assessment is to strengthen core instruction and eliminate over-reliance on interventions.

If interim/benchmark assessments were to be reformed and not eliminated, this component of the assessment system should be conceived
and designed in connection with classroom formative assessment (privileging the curriculum as it is taught), and not large-scale accountability assessment as is the case currently, where it is common for interim/benchmark tests to be built from the same item banks that are used in state accountability tests. Ideally interim/benchmark assessments, if used at all, should be less about mimicking state tests and more about reflecting

> Ideally interim/benchmark assessments, if used at all, should be less about mimicking state tests and more about reflecting standards and learning goals within standards more closely than they do now.

standards and learning goals within standards more closely than they do now. Tracking systems for reconceived interim/benchmark assessments should track learning in concert with classroom formative assessment and should include students as partners. As one of the authors observed, "The state test is a snapshot, and what we need is a photo album."

Finally, if interim/benchmark tests are reinvented, the quality of the teacher learning communities or data teams that deal with the data must be improved. This will require teacher efforts and principal and teacher leadership.

District-level Summative Assessments and Annual State Summative Assessments.

District-level summative assessments are typically end-of-course exams for various subject areas in the curriculum, sometimes for final course assessment and sometimes for high school graduation. They should be keyed to the district course curriculum expectations.

Annual state summative assessments have been much in the news since the reauthorization of the Elementary and Secondary Education Act as the No Child Left Behind Act in 2002 and the current Every Student Succeeds Act in 2015. Annual state assessments are typically keyed to state standards, but at a very large-grain-size level, so that the results speak to aggregated standards (for example, Reading, Mathematics, Writing) rather than to different individual standards within subject areas.

Research. Because the information is so broad in scope, state summative assessment results are best suited for informing policy decisions, not instructional decisions. However, policies affect schools (Au, 2007) and indirectly affect instructional decisions by creating various pressures on teachers and other aspects of the school system. Supovitz (2009) reviewed research on the use of high-stakes, test-based accountability in the United States and concluded that testing does motivate teachers to change, but the changes are mostly (p. 211) "superficial adjustments in content coverage and test preparation activities rather than promoting deeper improvements in instructional practice." Current teacher evaluation practices that use
value-added models based on state summative assessment pressure teachers to change, but the effectiveness of these practices remains, on balance, unproven (Darling-Hammond, 2015). Value-added estimates for individual teachers are not very precise (Jacob \& Lefgren, 2005), vary from year to year (McCaffrey et al., 2009), and depend heavily on statistical assumptions made in the different models (Goldhaber, Goldschmidt, \& Tseng, 2013). For these reasons, the use of value-added modeling for making decisions about individual teachers' effectiveness is not recommended (American Statistical Association, 2014; Baker et al., 2010; Wiliam, 2016).

Questions addressed. End-of-course exams can answer questions about whether students are learning and retaining information they were supposed to learn in the course. This information can be aggregated to answer similar questions at the course, school, and district levels. End-of-course exams typically are not designed to be diagnostic or answer questions about why students performed the way they did.

State level accountability tests can answer questions about general performance in different subject areas. They can, if the tests are well-constructed, be used to describe the performance of different districts in teaching state standards. They cannot answer questions about the reasons for different performance from district to district.

For a variety of practical and technical reasons it is unacceptable to evaluate teacher performance based on change in annual standardized test scores analyzed using value-added models. For example, when tests sample broad domains of
achievement limitations in testing time require that many important learning outcomes go untested or are covered in a very superficial manner. Therefore, a fundamental mismatch could arise between what is tested and some teachers' assigned instructional responsibilities, rendering the test incapable of detecting the mismatched teacher's impact. Over and above the problems with the tests, there is the problem of the year-long time span between pre and post testing during which a wide variety of school and personal factors beyond the control of teachers have been shown to exert profound impacts on student learning success. Finally, there are the problems of the unstable estimates of teacher effects that have been revealed when using value-added analyses of scores. There is a role for the consideration of student growth in teacher evaluation but not using these scores or this kind of analysis. (Stiggins, 2014b).

\section*{Responsibility and system coordination.}

Responsibility for district-level summative assessments rests with district administrators, including curriculum coordinators, and is shared by building principals and teachers, especially the respective subject-area departments in which the assessments are used. This responsibility includes both quality control issues for the assessment tools (tests or performance assessments) as well as policy issues (e.g., whether and to what degree a student's results will count in a final grade).

The state, of course, is ultimately responsible for the quality, utility, and effectiveness of its state accountability testing program. District administrators are responsible for administration and reporting in accordance with the state's requirements. Because administering the
state accountability test reaches down into school and classroom schedules, both building administrators and teachers share responsibility for implementation (e.g., following prescribed administration guidelines when giving the test).

Current status vs. ideal functioning. Three issues must be addressed to move current state accountability tests to more ideal functioning.

First, state accountability tests need to move more in the direction of testing applications of knowledge and problem-solving and away from testing discrete facts, as called for by many nextgeneration learning standards. There is some evidence that this is happening slowly, but it has not gone far enough fast enough.

> Students must feel like the state accountability assessments are helpful, or in some way support their learning, in order to be motivated to do their best.

Second, there is the issue of student motivation. We learn little about students' achievement or understanding when they are not performing at their best, which can happen if students do not believe the assessments are important. Students must feel like the state accountability assessments are helpful, or in some way support their learning, in order to be motivated to do their best. At present this is not always the case. Most districts approach state accountability tests as something students must "do," and not only do once but prepare for weeks, in order
to make their school proud. Some school walls sport posters to that effect. Before student motivation about accountability tests really changes, the relevance of state test results for their own learning and for their school must be demonstrated to them. Current state accountability "school report cards" and other uses are not likely to advance this agenda, nor do they fit with a student-centered view of learning.

Third, assessment design for accountability needs to move from testing discrete knowledge of a large amount of content to testing for the application and transfer described in most contemporary learning standards. Then assessment reporting for accountability needs to be redesigned to encourage and support interpretation and use of assessment results for instructional and policy applications beyond emphasizing low-scoring subjects, to include more information about thinking, problem solving, and transfer. In fact, this is a consequence of the more general point that the assessment system should serve the curriculum, which in turn should be based on contemporary standards that include using knowledge, not just accumulating it.

\section*{Further Thoughts on Getting There}

Four major conclusions follow from comparing typical district accountability systems with the ideal comprehensive and balanced assessment system described here.
1. Almost every district in the country needs to increase time, money, and professional
development resources to raise both the quantity and quality of formative assessment in classrooms and to make appropriate use of this vital information. This may involve reducing the amount spent on other aspects of assessment: grading a smaller percentage of classroom assessments and increasing ungraded formative work with feedback, and transferring some of the resources now spent on large-scale assessment to classroom assessment.
2. Almost every district in the country needs to increase time, money, and professional development resources to improve teachers' grading practices and district grading policies that enable those practices. As above, this means a shift in the use of assessment resources.
3. Almost every district in the country needs to reduce the amount of time and energy spent on interim/benchmark tests and/or increase the amount of actionable information drawn from them.
4. At all levels of the system, from the classroom to the state, assessment tools and practices need to be broadened to include more assessments that call for students to apply what they know in more realistic (authentic) contexts (McTighe, 2018). At the classroom level, this calls for a change in classroom questioning and student discourse, an increase in the use (and quality) of performance assessment, and improvement in the interpretation and use of the results. At the large-scale level, this calls for assessment design changes so that evidence of student learning matches standards at a deeper level than at present.

Rebalancing districts' comprehensive assessment systems, with more focus and weight on shortand medium-cycle formative assessment, and with appropriate systems and professional development including on how to use the evidence with and for students, is a moral imperative. When teachers and administrators take actions, grounded in sound assessment, for the support of learning, and when students can understand and track their learning, the achievement of all students will rise, and the differences between different groups of students (e.g., minority status, EL status) will diminish. This will reduce the persistent reliance on intervention programs to make up learning deficits that should be a function of strong teaching in core instruction. Investments in short- and mediumcycle systems that strengthen core instruction will be offset with savings in the reduced need for interventions over time.

Evidence for the effectiveness of an ideal comprehensive and balanced assessment system should be collected and used. Such evidence should include evidence of student learning (did it improve? in what way(s)?) and evidence of the student self-efficacy for learning and selfregulation of learning that a student-centered view of learning entails. Additional academic evidence, such as students' understanding of their learning goals, and academic-related evidence, such as student conscientiousness, perseverance, and collaboration, should also be monitored. A comprehensive and balanced assessment system will be ideal to the extent that it supports student learning on outcomes that matter most, does not hurt students, comports with current understandings of how students learn, and contributes to a well-functioning
learning culture in classrooms, schools and districts.

Assessment literacy. Assessment literacy is a term with a quarter-century of history at this point (Stiggins, 1991). Originally referring to educators' understanding of how to produce and interpret high-quality student achievement data, the term has broadened to include the understanding of other stakeholders, including students, parents, and policy makers, needed to participate in a comprehensive assessment system. Assessment literacy is a well-studied academic phenomenon; Xu and Brown (2016), for example, reviewed 100 studies of teacher assessment literacy. Less obvious to the authors of this white paper is evidence of systematic pursuit of assessment literacy as a regular practice in districts across the country. One big step in "getting there" must be continued professional development for teachers and other educators, and continued education about assessment evidence and results for students, parents, and policy makers like school board members.

\section*{Allocation of responsibility for various parts} of the system. The authors of this white paper agree with Shepard and Penuel (2018, p. 54) that School districts are the most appropriate locus for the design and development of coherent curricular activity systems because control of curriculum most often rests with districts. School districts are also responsible for teacher professional development, grading policies, and interim testing mandates.

For these same reasons, the ideal comprehensive and balanced assessment system described in
this paper is intended as a district system, not a state system. States do not control curriculum and, while they do control state achievement standards, those standards describe end points or outcomes and not the learning needed to get there. State accountability tests are only one part in the system, over which districts have little or no control. Designing a comprehensive and balanced assessment system remains in the hands of the district.

Within the district's assessment system, allocation of responsibility has been described above and is summarized here. Notice that each component has several layers of responsibility (for implementing the assessment, for supporting and monitoring that the assessment is done well, for interpreting and using results, for communicating with other levels of the system). This multi-layer responsibility is reflected in the fact that each component implies responsibilities for more than one category of stakeholders.

Most responsible parties at each level include:
- Short-cycle classroom formative assessment - students, teachers, and building principals
- Medium-cycle formative assessment - teachers and building principals (and sometimes district administrators)
- Classroom summative assessment (grading) - teachers, building principals, and district administrators
- Long-cycle interim/benchmark assessments [if used] - district administrators, building principals, school teacher teams
- District assessments and state accountability assessments - district administrators (including curriculum coordinators), building principals, and teachers, especially the
respective subject-area departments

Improvements in assessment systems and increases in assessment literacy that must accompany them cannot be accomplished by the states. Although constitutional authority for education falls to the states, state education policies and Education Department staff tend to change frequently, making for an unstable state assessment landscape. Moreover, state education agencies are too far from the classroom to design and support systems whose main purpose is to support student learning. Neither can the solution be left solely to universities, as studies have documented the inadequacies of preservice teacher and administrator education in assessment literacy (Stiggins, 1991; Xu \& Brown, 2016). The last best hope for improving assessment systems and increasing the assessment literacy of the responsible parties resides at the district level. That is where the main responsibility for the parts of the system lie, and where the benefits and consequences-and thus, presumably, the motivation-accrue.

Alignment of the system. The previous section described issues of shared responsibility so that all stakeholders are responsible for important parts of one or more of the components of the assessment system. These actors will be the means by which the system is aligned. Thus, an important part of their work will be checking that all parts of the system are based on, and give information about, the appropriate standards at the appropriate grain size. The alignment should be deep and based on more than categorization of topics from assessment to assessment. Rather, conceptions of the learning standards and theories of student learning underlying
their instruction and assessment should be coordinated. Wilson (2004, p. 276) calls this "systemic coherence."

Interplay must exist among the components so they work as a system.

Conclusion. Most current district assessment systems are not comprehensive or balanced. At best, the results include less than optimal information for supporting student learning and less than optimal assessment climates in schools, and at worst, can harm students and their teachers. The most vulnerable, especially students who struggle, students of color, and students in poverty, are disproportionately harmed. It will take the concerted efforts of all stakeholders in the district, and a major shift in many educators' understanding of the role of the student in learning and assessment, to improve this situation. This white paper has laid out some issues, described components of an ideal comprehensive and balanced assessment system, and offered some thoughts about getting there. These thoughts are based in research, some of which was cited here, practical experience in teaching and assessing, and a great deal of care and concern about the systems now in place and their harmful effects. The treatment here was brief, as befits a white paper, and needs to be expanded and informed by the work of model and pilot districts willing to take on the challenges of improvement. The authors are convinced this can be done. It will not be easy, but it will be worthwhile.

\section*{References}

\section*{References}

Abrams, L. M., \& McMillan, J. H. (2013). The instructional influence of interim assessments: Voices from the field. In R. W. Lissitz (Ed.), Informing the practice of teaching using formative and interim assessment (pp. 105-133). Information Age Publishing.

American Statistical Association. (2014). ASA statement on using value-added models for educational assessment. Alexandria, VA: American Statistical Association.

Au, W. (2007). High-stakes testing and curricular control: A qualitative metasynthesis. Educational Researcher, (36)5, 258-267.

Baker, E. L., Barton, P. E., Darling-Hammond, L., Haertel, E. H., Ladd, H. F., Linn, R. L., . . .Shepard, L. A. (2010). Problems with the use of student test scores to evaluate teachers. Washington, DC: Economic Policy Institute.

Black, P., Harrison, C., Lee, C., Marshall, B., \& Wiliam, D. (2003). Assessment for learning: Putting it into practice. Maidenhead, Berkshire, England: Open University Press.

Black, P. \& Wiliam, D. (1998a). Assessment and classroom learning. Assessment in Education, 5, 7-74.

Black, P., \& Wiliam, D. (2004). The formative purpose: Assessment must first promote learning. In M. Wilson (Ed.), Towards coherence between classroom assessment and accountability (pp. 20-50): 103rd yearbook of the National Society for the Study of Education, Part II. Chicago, IL: University of Chicago Press.

Brookhart, S. M. (2017). Formative assessment in teacher education. In D. J. Clandinin \& J. Husu (Eds.) International handbook of research on teacher education (pp. 927-943). London: Sage.

Brookhart, S. M., Guskey, T. R., Bowers, A. J., McMillan, J. H., Smith, J. K., Smith, L F., Stevens, M. T., \& Welsh, M E. (2016). A century of grading research: Meaning and value in the most common educational measure. Review of Educational Research, 86, 803-848.

Darling-Hammond, L. (2015). Can value-added add value to teacher evaluation? Educational Researcher, 44, 132-137.

DuFour, R. (2004). What is a professional learning community? Educational Leadership, 61(8), 6-11.

Ferrara, S., Maxey-Moore, K., \& Brookhart, S. M. (in press). Guidance in the Standards for classroom assessment: Useful or Irrelevant? In S. M. Brookhart \& J. H. McMillan (Eds.), Classroom assessment and measurement. New York: Routledge.

Furtak, E. M., Ruiz-Primo, M. A., Shemwell, J. T., Ayala, C. C., Brandon, P. R., Shavelson, R. J., \& Yin, Y. (2008). On the fidelity of implementing embedded formative assessments and its relation to student learning: \(A\) collaboration between curriculum and assessment developers. Applied Measurement in Education, 21, 360-389.

Gallimore, R., Ermeling, B.A., Saunders, W.M., \& Goldenberg, C. (2009). Moving the learning of teaching closer to practice: Teacher Education Implications of School-based Inquiry Teams.

Elementary School Journal, 109(3), 537-553.
Goertz, M., Oláh, L., Nabors, \& Riggan, M. (2009). From testing to teaching: The use of interim assessments in classroom instruction (Vol. RR-65). Philadelphia, PA: Consortium for Policy Research in Education.

Goldhaber, D. D., Goldschmidt, P., \& Tseng, F. (2013). Teacher value-added at the high-school level: Different models, different answers? Educational Evaluation and Policy Analysis, 35(2), 220-236.

Graham, S., Hebert, M., \& Harris, K. R. (2015). Formative assessment and writing: A meta-analysis. The Elementary School Journal, 115, 523-547.

Jacob, B. A., \& Lefgren, L. (2005). Principals as agents: Subjective performance measurement in education. Cambridge, MA: National Bureau of Economic Research.

Konstantopoulos, S., Miller, S., van der Ploeg, A., Li, C.-H., \& Traynor, A. (2011, September). The impact of Indiana's system of diagnostic assessments on mathematics achievement. Paper presented at the Fall 2011 Conference of the Society for Research on Educational Effectiveness, Washington, DC.

McCaffrey, D. F., Sass, T. R., Lockwood, J. R., \& Mihaly, K. (2009). The intertemporal variability of teacher effect estimates. Education Finance and Policy, 4, 572-606.

McElligott, J., \& Brookhart, S. M. (2009). Legal issues of grading in the era of high stakes accountability. In T. Guskey, (Ed.), Practical solutions for serious problems in standards-based grading (pp. 57-74). Thousand Oaks, CA: Corwin Press.

McTighe, J. (2018). Three key questions on measuring learning. Educational Leadership, 75(5), 14-20.

Michigan Assessment Consortium. (2017). Assessment literacy standards. Retrieved 9/3/18 from http:// michiganassessmentconsortium.org/sites/default/ files/mac_AssessLitStds_2017_screen-9.19.17.pdf

Noyce, P. E., \& Hickey, D. T. (Eds.) New frontiers in formative assessment. Cambridge, MA: Harvard University Press.

Oláh, L. N., Lawrence, N. R., \& Riggan, M. (2010). Learning to learn from benchmark assessment data: How teachers analyze results. Peabody Journal of Education, 85, 226-245.

Pellegrino, J. W., Chudowsky, N., \& Glaser, R. (Eds.) (2001). Knowing what students know: The science and design of educational assessment. Washington, DC: National Academy Press.

Perie, M., Marion, S., \& Gong, B. (2009). Moving toward a comprehensive assessment system: A framework for considering interim assessments. Educational Measurement: Issues and Practice, 28(3), 5-13.

Ruiz-Primo, M. A., \& Brookhart, S. M. (2018). Using feedback to improve learning. New York: Routledge.

Saunders, W. M., Goldenberg, C. N., \& Gallimore, R. (2009). Increasing achievement by focusing grade level teams on improving classroom learning: A prospective, quasi-experimental study of title 1 schools. American Educational Research Journal, 46, 1006-1033.

Schneider, M. C., \& Randel, B. (2010). Research on characteristics of effective professional development programs for enhancing educators' skills in formative assessment. In H. L. Andrade \& G. J. Cizek (Eds.), Handbook of formative assessment (pp. 251-276). New York: Routledge.

Shepard, L. A. (2001). The role of classroom assessment in teaching and learning. In V. Richardson (Ed.), Handbook of research on teaching, 4th ed. (pp. 1066-1101). Washington, DC: American Educational Research Association.

Shepard, L. A., \& Penuel, W. R. (2018). Classroom assessment principles to support learning and avoid the harms of testing. Educational Measurement: Issues and Practice, 37(1), 52-57.

Stiggins, R. J. (1991). Assessment literacy. Phi Delta Kappan, 72(7), 534-539.

Stiggins, R. (2014a). Revolutionize assessment. Thousand Oaks, CA: Corwin.

Stiggins, R.J. (2014b) Defensible teacher evaluation: Student growth through classroom assessment. Thousand Oaks CA: Corwin.

Stiggins, R. (2017). The perfect assessment system. Alexandria, VA: ASCD.
Stiggins, R. J., \& Conklin, N. F. (1992). In teachers' hands: Investigating the practices of classroom assessment. Albany, NY: SUNY Press.

Supovitz, J. (2009). Can high stakes testing leverage educational improvement? Prospects from the last decade of testing and accountability reform. Journal of Educational Change, 10, 211-227.

Wiliam, D. (2010). An integrative summary of the research literature and implications for a new theory of formative assessment. In H. L. Andrade and G. J. Cizek (Eds.), Handbook of formative assessment (pp. 18-40). New York: Routledge.

Wiliam, D. (2016). Leadership for teacher learning. West Palm Beach, FL: Learning Sciences International.

Wilson, M. (2004). A perspective on current trends in assessment and accountability: Degrees of coherence. In M. Wilson (Ed.), Towards coherence between classroom assessment and accountability (pp. 272283): 103rd yearbook of the National Society for the Study of Education, Part II. Chicago, IL: University of Chicago Press.

Xu, Y., \& Brown, G. T. L. (2016). Teacher assessment literacy in practice: A reconceptualization. Teaching and Teacher Education, 58, 149-162.

Yin, Y., Shavelson, R. J., Ayala, C. C., Ruiz-Primo, M. A., Brandon, P. R., \& Furtak, E. M. (2008). On the impact of formative assessment on student motivation, achievement, and conceptual change. Applied Measurement in Education, 21, 335-359.

Zimmerman, B. J., \& Schunk, D. H. (2011). Selfregulated learning and performance. In B. J. Zimmerman \& D. H. Schunk (Eds.), Handbook of self-regulated learning and performance (pp. 1-12). New York: Routledge.

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\title{
Designing a Comprehensive Assessment System
}

DEBORAH SIGMAN • MARIE MANCUSO

States and districts face unprecedented challenges today in navigating an assessment landscape that is characterized by controversy, competing priorities, and increased demands for innovation as well as accountability (Hill \& Barber, 2014). Assessments are expected to be fair and technically sound measures of rigorous college- and career-readiness standards that call for students to demonstrate complex, analytical thinking skills and deep content knowledge. As a result, stakeholders are demanding new delivery platforms and item types for these assessments. New technologies have spurred innovations in next-generation assessments that have the potential to maximize accessibility for all students, promote test security, and accommodate the incorporation of performance-based activities on a large scale (Laitusis, 2016).

As part of the current assessment environment, many have questioned the emphasis placed on summative assessments in federal and state accountability systems. Local districts and schools have also developed or selected their own assessments in addition to those required by the state. With this abundance of assessments, educators are faced with balancing the need to collect information for accountability purposes and the need for student performance data that are more closely linked to classroom instruction. Many educators, parents, and students have raised concerns
that over-testing takes valuable time away from teaching and learning. As a consequence, "opt-out" movements have gained momentum in some communities. Meanwhile, policymakers at the state and federal levels are likely unaware of local assessment practices that may add to the assessment burden. These concerns are amplified when tests are used for purposes other than those for which they were designed or when one assessment is used for multiple purposes (Newton, 2007).

As these various pushes and pulls on state and local assessment systems have
increased, it is little wonder that frustration has emerged among policymakers, K-12 educators, parents, faculty in institutions of higher education, and workforce leaders. However, the need for equitable measures that inform and support student learning remains paramount. Therefore, it is time to revisit and reevaluate current assessment practices in light of these critical needs and competing priorities.

Assessments, as tools, are used to collect or elicit evidence, and through the assessment process, practitioners and policymakers reason from that evidence to make informed decisions. What is needed is an assessment system that provides decision-makers at all levels with sound information on which they can base their decisions in support of student learning. In a comprehensive system, there is a place for different types of assessment tools and processes, used for different purposes at different levels of the system: national, state, district, school, and classroom. But designing this kind of system is more difficult than it might appear.

The purpose of this paper is to conceptualize what a comprehensive system that is balanced and aligned might comprise, as well as identify what actions states, districts, and schools can take to create a comprehensive assessment system. Section I describes the federal response to recent testing concerns. Section II describes the purposes and characteristics of a comprehensive assessment system. Section III outlines concrete steps that policymakers and stakeholders might consider in developing a comprehensive assessment system. The final section provides examples from three state education agencies (SEAs)
engaged in creating a comprehensive assessment system.

\section*{SECTION I}

The Federal Response

\author{
The Testing Action Plan
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In October 2015, the U.S. Department of Education (ED) released the Testing Action Plan (TAP) fact sheet, a document to guide the development, selection, and use of "fewer and smarter assessments." Included in the TAP is a set of seven principles to ensure a thoughtful approach to testing by SEAs and local education agencies (LEAs). These seven principles, excerpted below, are intended to provide SEAs and LEAs with a clear statement of purpose and strategies for ensuring that all assessments administered in their jurisdictions are rigorous, fair, and yield unique (i.e., non-redundant) information about what students know and can do in relation to academic content standards. In short, assessments must be:
1. Worth taking
2. High quality
3. Time-limited
4. Fair - and supportive of fairness in equity in educational opportunity
5. Fully transparent to students and parents
6. Just one of multiple measures
7. Tied to improved learning

The TAP reaffirms the importance of assessment and it clearly articulates state and district responsibilities in selecting or developing assessment tools:

\begin{abstract}
One essential part of educating students successfully is assessing their progress in learning to high standards. Done well and thoughtfully, assessments are tools for learning and promoting equity. They provide necessary information for educators, families, the public, and students themselves to measure progress and improve outcomes for all learners. Done poorly, in excess, or without clear purpose, they take valuable time away from teaching and learning, draining creative approaches from our classrooms. In the vital effort to ensure that all students in America are achieving at high levels, it is essential to ensure that tests are fair, are of high quality, take up the minimum necessary time, and reflect the expectation that students will be prepared for success in college and careers. (2015, Fact Sheet, para. 1)
\end{abstract}

The TAP also outlines the actions the federal government planned to take to minimize testing redundancies. In addition, in early 2016, the department began releasing case studies that highlight exemplary practices from states and districts across the country as they started to review and revise their assessment systems (https://www2.ed.gov/ documents/press-releases/testing-action-plan-profiles.pdf).

\section*{Every Student Succeeds Act}

In December 2015, new federal policies related to assessment and accountability were enacted through the reauthorization of the Elementary and Secondary Education Act, termed the Every Student Succeeds Act (ESSA). ESSA shifted much of the authority
and responsibility for assessment and accountability systems to SEAs and LEAs, thereby allowing for increased flexibility in design of these systems. Both the TAP and ESSA set the stage for states and districts to examine their current assessments and make needed changes.

\section*{SECTION II}

\section*{A Comprehensive Assessment System}

Shifting more authority and flexibility to SEAs and LEAs will not necessarily ensure the effective selection and use of assessments. Much work must be done at the state and local levels to achieve these outcomes. That work begins with developing a shared understanding of the characteristics or elements of a comprehensive system.

A 2001 report from the National Research Council, Knowing What Students Know: The Science and Design of Educational Assessment, defines a comprehensive system as comprising a range of measurement approaches used to provide a variety of evidence to support education decision-making. In such a system, multiple measures enhance the validity of inferences drawn from assessment. These multiple measures may include four broad categories of assessment: formative, diagnostic, interim/benchmark, and summative (Center on Standards and Assessment Implementation, 2016). The information each type of assessment provides is summarized on page 4.

\section*{Type of} Assessment
\begin{tabular}{l} 
Formative \\
Assessment \\
\\
\\
\\
\hline
\end{tabular}

\section*{Diagnostic Assessments}

\section*{Interim/ \\ Benchmark \\ Assessments}

\section*{Description of Assessment}

Formative assessment is a process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes (Council of Chief State School Officers, 2008). The information collected is finely grained, providing a level of detail about the current status of student learning in relation to lesson goals. Its purpose is to inform real-time teaching and learning.

While many assessments may be considered diagnostic, traditionally and formally, diagnostic tests are generally used when students are demonstrating difficulties in learning, and results may assist in diagnosing strengths and needs. Because of the diagnostic nature of these assessments, they are often administered by specially trained education personnel.

Interim or benchmark assessments are generally administered by teachers at key points in time for one or both of two purposes: 1) to evaluate what students have learned in relation to mid-term goals; 2) to predict students' performance on particular standards assessed by the state's end-of-year summative assessment. Interim assessments may be administered under standardized or non-standardized conditions depending on purpose. Results may provide teachers with an early warning signal about those students who are falling behind in their learning and may benefit from targeted assistance to help them learn content prior to end-of-year testing. For leaders, results indicate whether students are on track in meeting learning goals and can inform decisions about curricular adjustments and professional learning needs, for example.

Summative assessments provide information about students' achievement of academic content standards following a longer period of instruction, such as a full semester or school year. Examples of summative assessment include final course exams developed by a teacher and an end-of-year or end-of-course assessment developed by a state or a multi-state consortium. State-developed summative assessments are administered in a standardized manner so that each student across the state can demonstrate his or her achievement under the same testing conditions. Results from summative measures can be used for grading and reporting purposes, policy and program decisions, and decisions about resource allocation and professional learning priorities.

\section*{An Assessment Continuum}

Figure 1, below, displays how these broad assessment categories can provide information along an assessment continuum. The grain size - the size and scope of the learning goals assessed becomes larger along the continuum. Assessments along the continuum may provide information at the instructional, program, or institutional (policy) level (Stiggins, 2008). Formative assessment provides real-time information at a fine grain size that the teacher and student
can act upon immediately or in the near term. Interim assessments measure a larger number of standards or portion of learning, while still providing opportunity for instructional adjustments before moving on. Summative assessments indicate what students have achieved by the end of the term or year across the scope of the standards, providing information at a coarser level. Diagnostic assessments may be needed at different points along the continuum depending on students' demonstrated needs.

Figure 1. The Assessment Continuum


Source: Adapted from English Language Arts/English Language Development Framework for California Public Schools: Kindergarten Through Grade Twelve, Chapter 8. Copyright 2014 by the California Department of Education. Adapted with permission.

\section*{Additional Assessment Aspects to Consider}

This section identifies three aspects of assessment to consider when developing a comprehensive system:
" assessment purpose;
» balance; and
» alignment.

\section*{Assessment Purpose}

Assessments are developed and designed to serve a particular purpose. A comprehensive assessment system includes different types of assessment, aligned to standards, to provide the information educators at different levels of the system and other stakeholders (e.g., parents, students, and policymakers) need to fulfill their responsibilities. For example, SEAs use assessment information to determine state priorities and policies, for accountability purposes, and to make decisions about needed supports to LEAs. LEAs use assessment data for decisionmaking about the effectiveness of certain policies, programs, or practices. Teachers use assessment data to make choices about instructional methods or approaches to teaching students with different academic strengths and needs. Finally, parents obtain information about their child's achievement status relative to academic standards; and students may use information from assessments to monitor their own progress and improvement.

It is important to note that along the assessment continuum, each assessment can contribute unique types of information to the collective understanding of what
students know and can do, such that no one assessment will be expected to yield evidence it was not designed to collect.

\section*{Balance}

Balancing varied assessments requires what Chattergoon and Marion (2016) refer to as assessment efficiency, meaning "getting the most out of assessment resources and eliminating redundant, unused, and untimely assessments... enabl[ing] each assessment to do what it is designed to do" (p. 8).

In some contemporary assessment systems, state summative assessments - and needs for accountability - are weighted so heavily that it has resulted in an imbalance with the other measures in the system. On the one hand, the underemphasis on instructionally sensitive measures and formative practices can vitiate efforts to promote a seamless instruction, curriculum, and assessment cycle. On the other hand, calling for the cessation of all summative assessment administrations and advocating for the sole use of formative practices could lead to an imbalance, leaving those stakeholder groups who need summative assessment data for decision-making at a disadvantage. Overemphasizing one test purpose or emphasizing the needs of one stakeholder group compared to another, can lead to system dysfunction as well as ineffective use of scarce resources. This perspective has been articulated by the National Association of State Boards of Education (NASBE):

Recognizing that no single test serves all purposes, states need to create a comprehensive, balanced assessment system that includes both assessment
of learning (reporting on what's been learned) as well as assessments for learning (providing ongoing feedback to teachers and students as learning progresses). (2009, p. 46)

Figure 2. Finding the Right Balance


Source: Authors.

Achieving and maintaining balance in an assessment system requires reconsideration of the purposes, uses, and targeted audience for all current or proposed measures. Finding the right balance in an assessment system also requires consensus-building among key stakeholder groups about the information that is needed and identification of those assessments that can best be utilized to collect such information.

Given the limited resources available in most education communities, making decisions about the "just right" set of assessments requires the identification of trade-offs, such as cost versus benefit and value versus burden, for each assessment considered for inclusion in the collection
of assessments (see figure 2). As leaders make decisions about their comprehensive systems, achieving this balance will include examination of the primary assessment purpose, the ease of administration, the time involved in the administration, and the type and format of the information needed. As assessment decisions are made, each will require choices about cost, time, and value. Recognizing and articulating the trade-offs will facilitate transparency of the system. Thoughtful consideration of the balance of value versus burden, and of benefit versus cost, can serve as a guardrail to prevent practitioners and policymakers from relying too heavily on any one assessment. In addition, considering balance in this fashion can highlight the many levels and types of information available for varied decisionmaking processes.

\section*{Alignment}

And finally, assessments along the continuum should be aligned - aligned with each other so that measures along the continuum assess learning at different grain sizes, from formative to interim/ benchmark to summative. Also necessary in a comprehensive system is alignment at different levels of the system: classroom, school, district, and state, so that what is taught and measured leads to college- and career-ready citizens.

Figure 3 reminds us of the continuous feedback loop between curriculum, instruction, and assessment. When a comprehensive assessment system is deliberately developed, the feedback loop of instruction, curriculum, and assessment is strengthened and the learning process is enhanced:

Curriculum, instruction, and assessment must work together as a continuous cycle of the learning process. Assessment viewed in isolation will not improve student achievement. (Wisconsin, 2009, p. 8)

\section*{Figure 3. The Curriculum, Instruction, and Assessment Cycle}


Source: Adapted from The Teacher Guide to the Smarter Balanced Summative Assessments: English Language Arts/Literacy, Grades Three, Four, and Five, p. 3. Copyright 2016 by the California Department of Education. Adapted with permission.

\section*{SECTION III}

\section*{Recommendations} for Creating a Comprehensive System

The reauthorization of the ESEA provides a critical and much-needed opportunity for states and districts to reevaluate the tests and measures currently in use and, in doing
so, to reconsider the information needs of all stakeholders.

As states and districts undertake this effort, they may want to consider the following recommendations:
» Develop a framework for a comprehensive system.
- Frameworks that include information regarding different types of assessments, definitions, purpose, format, frequency, and use can serve as a guide for states and districts in building common understanding and in examining and redesigning current systems. See the Center on Standards and Assessment Implementation's (CSAI) Overview of Major Assessment Types for an example.
- A framework can guide both SEAs and LEAs in building coherence across the system. See CCSSO's resource, Comprehensive Statewide Assessment Systems: A Framework for the Role of the State Education Agency in Improving Quality and Reducing Burden, which presents different approaches and key action steps a state can take to advance an efficient and effective system.
" Establish a set of principles to guide the redesign.
- Engage stakeholders in a process for reaching consensus on a set of principles that can guide decisionmaking. The guiding principles in the Testing Action Plan and in the Commitments on High-Quality Assessments, jointly published by CCSSO and the Council of the Great

City Schools (CGCS), can provide a place to start.
" Identify and weigh the information needs of a wide range of stakeholders.
- Students, teachers, administrators, parents, the community, advocacy groups, and policymakers need to be considered and consulted during this process.
- CSAI provides a number of communication resources that could support this work. These resources are available at http://www.csai-online. org/search?type=All\&type=All\& search_api_views_ fulltext=communication
» Keep policymakers and stakeholders informed about the process and system.
- Communicate the features of a proposed comprehensive assessment system.
- Communicate how the measures in the proposed system would work together to serve multiple purposes and audiences.
- Communicate how information from these assessments can and/or will be used to improve teaching and learning.
» Conduct an inventory of all measures in the current assessment system.
- Include state, district, school, and classroom assessments to the degree possible.
- Clarify the intended purpose(s) for each assessment.
- Evaluate the usefulness of the data collected from each assessment.
- Determine if purpose(s) and use(s) are meeting the needs of the target population of stakeholders.
- Weigh trade-offs such as burden and cost with benefit and value.
- Determine if the assessments work together in a coherent way to move the state or district forward in addressing valued student learning outcomes. What is missing and/or should be added?
- Is the same type of information being collected from multiple sources?
- Are one or more of these sources of information redundant or unnecessary?
- The Student Assessment Inventory for School Districts from Achieve allows districts and schools to inventory their assessments and assessment strategies from a student's perspective. The tool can be found at http://www.achieve.org/files/ AchieveStudentAssessment Inventory.pdf
- The CSAI-developed inventory tool uses the TAP's seven principles to guide the inventory process. The tool may be used by states and districts. The tool can be found at http:// www.csai-online.org/sites/default/ files/Assessment\%20Inventory\%20 Resource\%20and\%20TAP\%20 Handout.pdf
" Take advantage of local flexibility to consider that a balanced assessment system can be both state and locally driven.
- ESSA allows a great deal of flexibility in designing a state-level assessment system. A summary of the final assessment regulations can be found at https://www2. ed.gov/policy/elsec/leg/essa/ essaassessmentfactsheet1207.pdf
- Explore the use of innovative assessments as part of a comprehensive system.
- Determine how these assessments may impact practices and policies for stakeholders.
- Examine both intended and unintended consequences of these assessments.

\section*{SECTION IV Examples of State Approaches}

This concluding section provides examples of states that have begun the process of establishing a comprehensive assessment system.

\section*{Nevada Assessment Inventory}

The Nevada Department of Education (NDE) sought a process for systematically analyzing and evaluating its state and district assessment systems. It was interested in obtaining feedback on the efficacy of state assessments, cataloging district assessments, exploring how state and district assessments align, and estimating the overall cost versus benefit of each system component. In 2016, with the assistance of WestEd's Center on Standards and Assessment Implementation and the West Comprehensive Center, the NDE conducted an inventory of state and district assessments used, and administered a series of surveys and focus groups in three regions of the state. A report of findings from these activities highlighted current assessment practices and perceptions of these practices from a range of state stakeholders.

NDE leaders have reported that this effort was invaluable as the state considers changes to its system of assessments. The NDE has shared report findings with district administrators and state policymakers to support informed decision-making about a comprehensive system and to plan future actions. In addition, the Nevada State Board of Education used the results to inform a policy decision on K-2 assessments, and NDE has used the analysis in its ESSA planning. "It couldn't have happened at a better point in time; it has proven to be an invaluable resource for stakeholders at all levels" (Peter Zutz, NDE Director of Assessment, personal communication, August 19, 2016).

\section*{Colorado Assessment Literacy Initiative}

After WestEd assisted the Colorado Department of Education in collecting input from stakeholders on the value versus burden of state and local assessments, the department launched the Colorado Assessment Literacy Program (CALP) to (a) help fill assessment knowledge gaps among teachers, (b) describe the features of a high-quality assessment system and how it can support optimal student learning, and (c) promote systemslevel thinking during the processes of selecting and developing assessments. Teachers and administrators were provided with online resources (https://www.cde.state.co.us/ contentcollaboratives/phase3) and in-person workshops with department staff designed to deepen their assessment knowledge and skills. One resource is the Colorado Assessment Framework, which describes the features of a high-quality assessment system that is tailored to the specific needs of Colorado stakeholders.

The department is beginning to see early signs of the positive impact of the CALP. Participating district personnel report greater confidence during decision-making about assessment choice and data use and in evaluating what is working and what is not. The department has learned that it can play an important role in providing training and support to districts and that messaging is critical. As Angela Landrum, Principal Consultant for the department's Vision 2020, puts it, "We can't say at the state level that we believe in a comprehensive system, but only focus on the state assessment" (personal communication, October 25, 2016). Colorado's Assessment Literacy Program is helping districts and schools view the state assessment in the larger context of a comprehensive system driven at the local level.

\section*{Building a Next-Generation, Comprehensive Assessment System in California}

Prompted by a legislative requirement (California Education Code, 2014) to "... provide a system of assessments of pupils that has the primary purposes of assisting teachers, administrators, and pupils and their parents; improving teaching and learning; and promoting high-quality teaching and learning using a variety of assessment approaches and item types," the California Department of Education set out to reimagine what an effective, comprehensive assessment might look like. The department was seeking a system that had the potential to improve teaching and learning throughout the state, with roles for both the SEA and the LEAs in realizing this vision.

For this effort, the department and its partners, including WestEd, collected information from existing resources, solicited input from a range of stakeholders, and solidified a set of principles to guide the decision-making. The result was a report (http://www.cde.ca.gov/ \(\mathrm{ta} / \mathrm{tg} / \mathrm{ca}\) /documents/compassessexpand.pdf) that synthesized all collected information and articulated a vision for a comprehensive assessment system in California that would be used to guide policies governing California's assessment system by both the state board of education and the legislature.

\section*{References}

California Department of Education. (2014). English language arts/English language development framework for California public schools: Kindergarten through grade twelve (Chapter 8, Assessment). Sacramento, CA: Author. Retrieved from http://www.cde.ca.gov/ci/rl/cf/documents/ elaeldfwchapter8.pdf

California Department of Education. (2016). The teacher guide to the Smarter Balanced Summative Assessments: English language arts/literacy, grades three, four, and five. Sacramento, CA: Author. Retrieved from http://www.cde.ca.gov/ta/tg/ca/documents/sbteachgdeela35.pdf

California Education Code, Section 60602.5(a) (2014).

Center on Standards and Assessment Implementation. (2016). Overview of major assessment types in standards-based instruction. San Francisco, CA: WestEd. Retrieved from http://www.csai-online. org/sites/default/files/resources/6257/CSAI_AssessmentTypes.pdf

Chattergoon, R., \& Marion, S. (2016). Not as easy as it sounds: Designing a balanced assessment system. State Education Standard, 16(1), 6-9.

Council of Chief State School Officers. (2008). Attributes of effective formative assessment. Washington, D.C.: Author. Retrieved from http://www.ccsso.org/Documents/2008/Attributes of Effective 2008.pdf

Hill, P., \& Barber, M. (2014). Preparing for a renaissance in assessment. London: Pearson.
Laitusis, C. (2016). Coming together to raise achievement for students with disabilities and English learners. In The road ahead for state assessment (p. 13). Princeton, NJ: Educational Testing Service.

NASBE. (2009). Reform at a crossroads: A call for balanced systems of assessment and accountability [The Report of the NASBE Study Group on Assessment Systems for the 21st Century Learner]. Alexandria, VA: National Association of State Boards of Education.

National Research Council. (2001). Knowing what students know: The science and design of educational assessment. Committee on the Foundations of Assessment; J. Pelligrino, N. Chudowsky, \& R. Glaser, Eds.; Board on Testing and Assessment; Center for Education; Division of Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.

Newton, P. (2007). Clarifying the purposes of educational assessment. Assessment in Education, 14(2), 149-70.

Stiggins, R. (2008). Assessment manifesto: A call for the development of balanced assessment systems [Assessment Training Institute]. Princeton, NJ: Educational Testing Service. Retrieved from http://www.nyscoss.org/img/uploads/file/Assessment Manifesto Article_-Rick_Stiggins.pdf
U.S. Department of Education. (2015). Fact sheet: Testing action plan. Retrieved from
https://www.ed.gov/news/press-releases/fact-sheet-testing-action-plan
Wisconsin Department of Public Instruction. (2009). Crafting a balanced system of assessment in Wisconsin: Recommendations of the Next Generation Assessment Task Force. Madison, WI: Wisconsin Department of Public Instruction.

\section*{Additional Resources}

\section*{Assessment Policy Landscape}

Every Student Succeeds Act (ESSA) Assistance - Center on Standards and Assessment Implementation
Testing Action Plan Fact Sheet - U.S. Department of Education
Testing Action Plan Resources and Guidance - Center on Standards and Assessment Implementation
Testing Action Plan: State and District Profiles - U.S. Department of Education
Testing Overload in America's Schools - Melissa Lazarín, Center for American Progress
The Changing Nature of Educational Assessment - Randy Elliot Bennett, Review of Research in Education, 39(1), 370-407.

\section*{Building a Comprehensive, Balanced, and Aligned System}

Coherent Systems of Assessment: The Pathway to Student Success - Center on Standards and Assessment Implementation

Comprehensive Standards-Based Assessment Systems Supporting Learning - Center on Standards and Assessment Implementation and National Center for Research on Evaluation, Standards, and Student Testing

Comprehensive Statewide Assessment Systems: A Framework for the Role of the State Education Agency in Improving Quality and Reducing Burden - Council of Chief State School Officers

Criteria for High-Quality Assessment - Stanford Center for Opportunity Policy in Education, Center for Research on Student Standards and Testing, and Learning Science Research Institute

Developing a Coherent Assessment System Webinar - Center on Standards and Assessment Implementation

Guide to Evaluating Assessments Using the CCSSO Criteria for High Quality Assessments: Focus on Test Content — Brian Gong and Thanos Patelis, The National Center for the Improvement of Educational Assessment

How Much Testing is Taking Place in North Carolina Schools at Grades K-12? An Analysis of Federal, State, and Local Required Assessments - Micah Guindon, Hunter Huffman, Allison Rose Socol, and Sachi Takahashi-Rial, Public Schools of North Carolina, State Board of Education

Nevada State and District Assessment Survey - Expanded Summary - Center on Standards and Assessment Implementation, submitted to Nevada Department of Education

Not as Easy as It Sounds: Designing a Balanced Assessment System — Rajendra Chattergoon and Scott Marion, National Association of State Boards of Education

Ohio Testing Report and Recommendations_ Richard A. Ross, Ohio Department of Education
Re-Balancing Assessment: Placing Formative and Performance Assessment at the Heart of Learning and Accountability - Peter Hofman, Bryan Goodwin, and Stuart Kahl, McREL International and Measured Progress

Recommendations for Building a Next-Generation: Comprehensive Assessment System in California WestEd submitted to California Department of Education

Standards for educational and psychological testing. (2014). Prepared by the Joint Committee on Standards for Educational and Psychological Testing of the American Educational Research Association, American Psychological Association and National Council on Measurement in Education. Washington, DC: AERA.

The Colorado Standards and Assessments Task Force (HB14-1202): Report of Findings and Recommendations - HB14-12O2 Standards and Assessments Task Force

\section*{General Assessment Information}

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A Framework for Considering Interim Assessments - Marianne Perie, Scott Marion, and Brian Gong, National Center for the Improvement of Educational Assessment

Assessment Design Toolkit - Center on Standards and Assessment Implementation
Attributes of Effective Formative Assessment - Sarah McManus, Council of Chief State School Officers
Criteria for Procuring and Evaluating High-Quality Assessments - Council of Chief State School Officers
CSE Report 806-District Adoption and Implementation of Interim and Benchmark Assessments Kristen L. Davidson and Greta Frohbieter, National Center for Research on Evaluation, Standards, and Student Testing

Curriculum-Embedded Performance Assessments (CEPAs): Policy Considerations for Meaningful Accountability - Jane Best and Emily Winslow, McREL International

Distinguishing Formative Assessment from Other Educational Assessment Labels — Council of Chief State School Officers

Overview of Major Assessment Types - Center on Standards and Assessment Implementation
Quality Performance Assessment Framework - Center for Collaborative Education

\section*{Taking Stock of Your System}

Addressing Overtesting: The Student Assessment Inventory in Action - Achieve
Assessment Evaluation Tool (AET) - Student Achievement Partners
Assessment Inventory Resource - Center on Standards and Assessment Implementation
Assessment Review Tool - Rhode Island Department of Education and National Center for the Improvement of Educational Assessment

Colorado Assessment Review Tool - Colorado Professional Learning Network
Evaluating the Content and Quality of Next Generation Assessments - Nancy Doorey and Morgan Polikoff, Fordham Institute

Four Ways to Reduce Testing and Maintain Accountability - Mike Thomas, Excel in Ed and Foundation for Excellence in Education

Knowing the Score: The Who, What, and Why of Testing - Nancy Kober, Center on Education Policy
Resources for Evaluating Assessment Systems - Center on Standards and Assessment Implementation
Student Assessment Inventory for School Districts - Achieve

\author{
Student Assessment Inventory for School Districts - Illinois State Board of Education \\ Student Assessment Inventory for School Districts: Considerations for Assessing English Language Learner Students - Kenji Hakuta, Achieve \\ Student Assessment Inventory for School Districts: Considerations for Special Education Assessment Systems - Achieve and National Center on Educational Outcomes \\ Student Assessment Inventory for School Districts: Guidance for School Districts - Achieve \\ Student Testing in America's Great City Schools: An Inventory and Preliminary Analysis - Ray Hart, Michael Casserly, Renata Uzzell, Moses Palacios, Amanda Corcoran, and Liz Spurgeon, Council of the Great City Schools \\ Teaching is the Core: District Assessment Review - Cortland School District (New York)
}

\section*{Communicating about Assessment}

\author{
Communications 101: Getting Your Message Out - Collection of Communication Tools - Center on Standards and Assessment Implementation \\ Empowering Parents with Data: Ensuring Parents Have Data to Make Informed Choices - Data Quality Campaign \\ Parent Assessment Event Toolkit - National Parent Teacher Association \\ Sample Student Assessment Reports - Achieve \\ The Role of Strategic Communications in the Transition to New Academic Standards and Assessments: Case Studies of Tennessee and Kentucky - The Hunt Institute \\ Understanding the Results (PARCC Score Report) - Partnership for Assessment of Readiness for College and Careers \\ Why Education Data? - Data Quality Campaign
}

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\section*{WestEd}

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By Steve Underwood \\ (https://www.nwea.org/blog/author/sunderwood/) June 30, 2020 \\ Category | Formative Assessment \\ (https://www.nwea.org/blog/category/formative- \\ assessment/)
}

\section*{How to build a balanced assessment system}

(/blog/content/uploads/2020/06/TLG-IMG-06302020-e1593468889299.jpg)As my colleague Chase Nordengren said recently, teaching and learning have been transformed (/blog/2020/power-of-formative-assessment-when-only-constant-is-change/) by COVID-19 school closures-and they're unlikely to return to what we were used to anytime soon, if ever. They'll also have a big impact on what most children are ready for in the fall.

Student learning differences are not a new challenge for educators. However, the scope and learning variance that students will display this fall is likely to be fairly significant. This moment in time is an opportunity to revisit and rebalance your assessment practices. In this post, I offer up a mental model for how a balanced assessment system-built on formative assessment practices-can guide instruction to meet the needs of your students.

Make data easier to understand and use

There is a saying that schools can be data rich, but information poor. This means that you can have many sources of data on students but lack the coherent information you need to make effective decisions. It's helpful to consult many sources of formal and informal data to inform your instructional design, of course, but without an intentional, well-thought-out plan for how all the sources of data fit together, it will be hard to make decisions well. A coherent approach to assessment practices can streamline decision-making and improve learning.

One way to achieve this coherence is by developing a balanced assessment system. A balanced assessment system intentionally makes use of formative, interim, and summative assessment practices -with the most emphasis placed on formative assessment. This type of system is at the heart of a Multi-Tiered System of Support (MTSS), which uses a decision-tree approach to assist in streamlining decisions, as shown below.


\section*{(/blog/content/uploads/2020/06/MTSS-decision-tree.jpg)}

\section*{Strike a balance}

To create a balanced assessment system, there are two major domains that teachers need to consider:
1. The standards-based core instruction domain that aligns to grade-level or advanced content
2. The intervention domain for students who are not yet achieving standards and need additional support

Formative assessment plays a key role in both domains and should always be the starting point. It begins as a universal screening process for all students. Universal screening can take many forms, such as an early literacy probe, behavioral data, attendance patterns, grades, and even MAP \({ }^{\circledR}\) Growth \({ }^{\text {™ }}\) (/map-growth/) or MAP \({ }^{\otimes}\) Reading Fluency \({ }^{\text {™ }}\). (/map-reading-fluency/) The purpose, just like when
doctors take your blood pressure and weight during an annual checkup, is to look for signs that something might be off track. Following the administration of a universal screening process, educators face a decision point that affects which of the two domains come into focus for teaching and learning.

For students who are more or less on track with the universal screening measures, teachers should proceed with business as usual in the core instruction domain, using formative assessment practices to connect to and activate prior knowledge in ways that guide the relationship of teaching and learning, check for understanding along the way, and assess mastery against grade-level outcomes to determine if future adjustments need to be made.

This moment in time is an opportunity to revisit and rebalance your assessment practices. [...] [A] balanced assessment system-built on formative assessment practices -can guide instruction to meet the needs of your students.

If the universal screener indicates that the learning or social-emotional well-being of a student is at risk, then the best course of action for teachers is to employ formative assessment practices that diagnose and pinpoint what support is needed within the intervention domain, monitor progress on a learning progression, and assess mastery of prerequisite learning.

\section*{How to move forward with core instruction}

All students should experience teaching and learning that supports their success in the core instruction domain. This begins with teachers reviewing the scope and sequence of standards-aligned content, establishing clear learning targets, and using formative assessment data to develop responsive plans (/blog/2020/how-responsive-planning-can-strengthen-formative-assessment/) for lessons and units. The figure below illustrates three key assessment practices within core instruction: activate prior knowledge, check for understanding, and check for mastery and adjust instruction as needed.

(/blog/content/uploads/2020/06/Core-instruction-domain.jpg)

\section*{Before core instruction: Activate prior knowledge}

Lessons and units should start with formative assessment practices in the form of a pre-assessment or a process of activating prior knowledge. This serves the purpose of illustrating what students already know and assists teachers and students in understanding the learning path that students will need to take to reach the learning target.

Formative assessment at the beginning of a lesson or unit can take many forms, such as entrance tickets (https://www.brown.edu/sheridan/teaching-learning-resources/teaching-resources/course-design/classroom-assessment/entrance-and-exit), K-W-L chart activities
(http://www.readwritethink.org/classroom-resources/printouts/chart-a-30226.html), Venn diagrams (https://arbs.nzcer.org.nz/venn-diagrams), think-pair-share (/blog/2012/classroom-techniques-formative-assessment-idea-number-five/), and more. No matter the type, a formative assessment activity at the beginning of a lesson or unit will create the context for helping you know how to adapt core instruction by adding more scaffolding for students who may struggle; adapting content to adjust for key background knowledge that the whole class may need to be successful; or developing differentiated paths for advanced students who may wish to go deeper with their learning in the particular content area.

\section*{During core instruction: Check for understanding}

Formative assessment practices should take the form of checking for understanding. In a lesson, for example, this may occur when you monitor small group conversations, review students' quick writing assignments, or listen to how students report out on jigsaw activities (/blog/2013/classroom-techniques-formative-assessment-idea-number-eight/). Over the course of a unit, formative assessment should be occurring throughout, even incorporating more formal interim assessments (/map-growth/), quizzes, and longer-term assignments.

All students should experience teaching and learning that supports their success in the core instruction domain.

What makes these practices formative is using them to adjust instruction to keep learning progressing. If the activities are used for grading or there's no change to the long-term instructional trajectory, they no longer serve a formative purpose and swing over into the arena of summative assessment.

\section*{After core instruction: Check for mastery and adjust}

At the end of a lesson or unit, a balanced assessment system will make use of purposeful summative assessment. If the learning targets were clear from the beginning, a summative assessment will focus solely on the success criteria by which students demonstrate that they have learned what was expected. It is often common practice that end-of-unit summative assessments do not serve a formative purpose. However, if you intend to reteach the content or proceed to a new unit that builds
on the previous one, summative assessment can be utilized in a formative manner if there is an intentional effort made to adjust teaching and learning based on the degree to which students mastered the success criteria.

\section*{Tackling the intervention domain}

In the intervention domain, assessment practices often take on different terminology and more formal designs, but they represent similar ideas to the core instruction domain and are guided by the principles of formative assessment. When students are identified by a universal screener as being at risk, adopt the MTSS sequence illustrated below: diagnose learning needs; monitor progress; and check for mastery and adjust.


\section*{(/blog/content/uploads/2020/06/Intervention-domain.jpg)}

\section*{Before intervention: Diagnose learning needs}

In elementary schools, educators often make the mistake of making intervention about the content of the universal screener. For example, an early literacy screener might emphasize reading fluency, so some teachers will make intervention about fluency. Without diagnosis, the teacher may not uncover that the root cause of the student's poor fluency performance is an underlying issue with phonics.

By implementing a clear plan for diagnosis before intervening, you stay true to the idea of formative assessment by gaining the information you need to pinpoint the best starting point for teaching and learning. In early literacy, there are diagnostic assessments for phonemic awareness, phonics, comprehension, and more. In high school, a mathematics teacher may engage in diagnostic assessment by assessing students on a spectrum of math standards from lower grade levels. Regardless, the purpose of diagnostic assessment has the long-term learning trajectory in mind and can be matched with short-term success criteria that students can demonstrate to show their learning is on track. This creates the connection between diagnostic assessments and progress monitoring.

\section*{During intervention: Monitor progress}

Once you pinpoint the entry level for intervention, instruction and a progress-monitoring plan are needed. For example, an eighth-grade algebra teacher may diagnose that a student has strengths in many areas but is struggling because they have not yet learned to identify when two expressions are equivalent (a sixth-grade standard). This means that during intervention, instruction would begin at this level, and a learning path would slowly build toward eighth-grade standards. Formative assessment would occur in the form of progress monitoring that is broken out to measure the success criteria of each step needed to meet the related eighth-grade math standards.

Similarly, in early literacy, when students have mastered their basic phonics skills but still need support working on automaticity, accuracy, and prosody (i.e., fluency), a teacher might choose to use the progress monitoring for oral reading test within MAP Reading Fluency as a progress-monitoring tool.

By implementing a clear plan for diagnosis before intervening, you stay true to the idea of formative assessment by gaining the information you need to pinpoint the best starting point for teaching and learning.

Similarly, in early literacy, if a third-grade student is identified as struggling with variant vowels (a firstgrade skill), intervention would build from variant vowels and measure student progress toward mastery of this and successive phonics skills until the student demonstrates grade-appropriate success criteria with word reading.

\section*{After intervention: Check for mastery and adjust}

Following instruction, student learning should be verified through a summative assessment that measures whether or not a student has mastered the goals that have been set within their learning progression. A summative approach could even be the same diagnostic assessment tool that was used to identify the student's learning needs. If this is the case, the purpose changes from a formative, diagnostic use to a summative checkpoint that assesses mastery.

\section*{Tying it all together}

Here's a visual representation of the sequence and relationship between formative, interim, and summative assessment and the relevant assessment approaches that are most helpful in the core instruction domain and the intervention domain.


\section*{(/blog/content/uploads/2020/06/Balanced-assessment-system.jpg)}

Want to be sure you're engaging in formative assessment every step of the way? Here's how:
- Use the information you glean about students before instruction to plan core instruction and intervention
- Take what you learn during instruction to respond to students' needs and adjust what comes next in your lesson or unit plans
- Put summative assessment gathered after instruction to use guiding how you will reteach content or adjust your plans for the next unit

For more tips, visit our Formative Assessment archive (/blog/category/formative-assessment/) on Teach. Learn. Grow. And to explore this topic further-on your own or with your colleagues-try the following discussion questions:

\section*{Questions for teachers}
- What are ways to activate learning in your classroom?
- During core instruction, how are you checking for understanding during the lesson?
- How does instruction in the domain of intervention differ from the domain of core instruction?
- How can you ensure your classroom has a balanced assessment system in place? In what ways do all of your assessment practices inform each other?
- How have you determined the progression of learning that your students need?
- How are you diagnosing or pinpointing student intervention needs within a learning progression?

\section*{Questions for leaders}
- What processes do you have in place to monitor school-wide data and reflect on improvements that are needed for teaching, learning, and leading?
- How can you ensure there is a balanced assessment system in place system-wide? To what extent does your school have a systematic approach where different types of assessments inform each other?
- How can you support teachers in identifying effective learning progressions and developing responsive plans that move students forward along a progression?
- Does your school's schedule assure there is sufficient time for both core instruction and intervention?

This is the third in a series on formative assessment. Read the previous post. (/blog/2020/how-responsive-planning-can-strengthen-formative-assessment/) And read the entire series in our e-book (/resource-center/resource/making-it-work-how-formative-assessment-can-supercharge-yourpractice/).

\section*{Recommended for you}


The importance of student self-assessment
(https://www.nwea.org/blog/2021/the-importance-of-student-self-assessment/)


Formative assessment is not for grading
(https://www.nwea.org/blog/2021/formative-assessment-is-not-for-grading/)


19 formative assessment strategies for online teaching
(https://www.nwea.org/blog/2020/19-formative-assessment-strategies-for-online-teaching/)


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\section*{Understanding Balanced Assessment Systems}

Integrating assessment in a way that works for students and their families, the school, the district and the state.

\section*{Introduction}

Assessment is an established part of the educational landscape. It has a critical role to play in improving educational outcomes by measuring student learning. But this landscape is evolving as new legislative frameworks, such as the Every Student Succeeds Act (ESSA), introduce new accountability requirements, and wider developments such as rapidly advancing technologies emerge. These changes in turn have an impact on assessment systems. Educational stakeholders at all levels should consider whether their assessment systems continue to provide the right information in a timely manner and in the appropriate format to ensure their system is still fully fit for purpose.

Understanding the different types of available assessments and how these can be connected to enable best assessment practice is a key step
to assuring fit for purpose. Within K 12, there are three main assessment types: formative, interim and summative. Each has a critical role to play in delivering the right data to the right people to meet their particular needs, from student, parent, educator and principal to district- and state level stakeholders. Together, these assessments combine to create a balanced system that provides insights to accelerate educational progress.

This briefing looks at the characteristics of each form of assessment and how each could be used and applied to yield evidence that can inform various decisions, whether at a policy, district/school or classroom level to support the improvement of education. It also looks at the benefits of integrating assessment to create a balanced system whose whole is greater than the sum of its parts.


\section*{Fit for purpose}

The reason three different types of assessment are utilized in the K-12 arena is because each serves a different purpose. Understanding the goal of each assessment can help to ensure each is used to appropriately add value to improving overall learning outcomes. So, whether it's formative, interim or summative, it is important to be familiar with the function, and the limitations, of each form of assessment.

\section*{Formative assessment}

Fundamentally, the purpose of formative assessment is to inform both students and teachers about learning in the classroom. Formative assessment occurs within the classroom, planned and orchestrated by the teacher and provides information that helps them to make decisions about what are appropriate next learning steps for students to move learning forward, and to support students as they gain insights into their own learning. Formative assessment can take many different forms, from purposeful listening to student discussions as they collaborate together and providing feedback to help them deepen their understanding, to bringing important ideas forward to the whole class, or to extending work on a project with rounds of feedback from peers. Any information gained from formative assessment activities should be useful in the moment.

A good analogy for thinking about the role of formative assessment is Roger Bannister breaking the four-minute mile barrier. Finally running a sub four-minute mile was a summative performance with a specific target reached. The times for all Bannister's practice runs were not used to calculate his average for the year, but all the practices were essential in order for him to achieve his 'summative' performance. In the same way, formative assessment informs and guides ongoing learning during the year until a culminating summative assessment.

\section*{Interim assessment}

Interim assessment provides an opportunity to "check-in" on student learning at several points during the year and to get an estimate of likely performance
on the summative assessment. It is intended to provide a shared point of reference across teachers and classes within a grade level on student learning during the year. Interim assessment data can be used to examine group performance to address questions such as, "how does the performance of English Learners in our school compare to other students?" Data could be disaggregated by gender, race/ethnicity, disability status, or socio-economic status if there are sufficient numbers of students in a subgroup.

Data may be used to inform some adjustments in resources or curriculum strategies during the academic year, but may not necessarily influence classroom instruction in the way that a more targeted formative assessment would. Essentially, the information interim assessment delivers enables administrators and educators to understand where students are with respect to grade-level standards at given points in time during the year

\section*{Summative assessment}

The goal of state-wide summative assessment is to evaluate student learning usually near the end of the school year. It may also be referred to as the accountability assessment. State-wide summative assessment provides a broad view of student and school educational performance and allows districts and states to measure how well learning and teaching is meeting required state standards. As it measures specific outcomes at a single point in time, it is useful for examining individual student's overall mastery of state standards and also for comparing performances of groups of students across schools or districts. Given the survey nature of the assessment - covering a year's worth of standards in a relatively short period of time - it produces aggregated data that is useful for state education agencies and districts for accountability and resourcing purposes. For teachers, it can identify student strengths and weaknesses broadly but they will need additional more targeted information during the academic year to inform ongoing instruction.

Figure 1 below illustrates how formative, interim and state-wide summative assessments exist together, illustrating how the stakes vary, and the scope of each assessment varies in terms of the standards assessed.


Performance Tasks can be used for both Formative and Classroom Summative Assessment

Fig. 1. Representation of a balanced assessment system

Note that while not the focus on this paper we recognize that teachers often use classroom summative assessments as part of the process of determining student grades and also there is an increasing interest in the role of performance assessments which can be used in either a formative or summative capacity (Wylie \& Lyon, 2017).

\section*{Getting the most out of assessment data}

Each type of assessment produces a different type and grain size of evidence, from the very individualized information of formative assessment to the broader year-long view of summative. Formative, interim and summative assessment work together to create a multi-faceted view of learning at an individual, class, district and state level and the differing size of data generated by each is key to their appropriate deployment and successful application.

\section*{The relevance of real-time data}

Formative assessment provides very fine grain information, sometimes targeting only a single standard or aspect of a standard, which may be tailored to an individual student or a small group and of a particular moment. It is timely and informative, providing real-time feedback that teachers are then able to quickly apply to adjust their teaching plan to better reflect specific needs, or that students can apply to their own work to improve it. It is the immediacy and relevance of the insights gained that makes it highly effective. This allows teachers to incorporate the evidence of student learning into their planning and act on insights to augment their classroom-based instruction immediately, making a positive impact on deepening student learning. This process of timely adjustment to meet student learning needs as they are emerging has a positive impact on student learning \({ }^{1,2,3}\). There is no delay between the capture and application of data and this real-time characteristic is crucial to effective formative assessment.

Formative assessment can be wide-ranging, from more practice-based activities such as quick, verbal
checks-for-understanding, to more formal types of assessment such as extensive tasks that support deeper learning and that are designed to provide more scaffolded or supported learning opportunities. Evidence may take the form of notes that the teacher makes about questions to ask students about their writing drafts during conference time the next day, patterns across a set of exit tickets that students complete at the end of a class that will then inform groupings for an opening activity the next day, or student self-reflections or feedback to peers. In some cases, a teacher may share evidence with another teacher to see if she has observed similar patterns in student work in order to strategize an effective alternative representation to help students better understand an important concept. However, it is less likely that evidence will be reported or shared beyond a very immediate, local context. Most critically, if the evidence is truly formative then it will provide information to be acted on immediately, either confirming for the teacher that the direction she is going in is appropriate or suggesting a different next step, but in either instance the information will become quickly out-of-date. In short, the teacher and students obtain information about learning, both student and teacher can respond to that and then the learning has moved forward.

Research suggests that teachers need ongoing professional support to develop and deepen their formative assessment practices \({ }^{4,5}\). Collaborating with peers to plan and create shared tools and approaches to elicit evidence of student learning, to analyze student work together and to plan ways to deepen student learning based on evidence of current learning, are all important professional learning experiences for teachers. Teachers need time and opportunities to develop and practice these skills.
\({ }^{1}\) Black, P., \& Wiliam, D. (1998). Assessment and classroom learning. Assessment in Education: Principles Policy and Practice, 5, 7-73.
\({ }^{2}\) Heritage, M., \& Heritage, J. (2013). Teacher questioning: the epicenter of instruction and assessment. Applied Measurement in Education, 26, 176-190.
\({ }^{3}\) Andersson, C., \& Palm, T. (2017). The impact of formative assessment on student achievement: a study of the effects of changes to classroom practice after a comprehensive professional development programme. Learning and Instruction, 49, 92-102.
\({ }^{4}\) Gotwals, A.W. \& Birmingham, D. (2016). Eliciting, identifying, interpreting, and responding to students' ideas: Teacher candidates' growth in formative assessment practices. Research in Science Education, 46: 365. https://doi.org/10.1007/s11165-015-9461-2
\({ }^{5}\) Furtak, E.M., Kiemer, K., Circi, R.K. et al. (2016). Teachers' formative assessment abilities and their relationship to student learning: findings from a four-year intervention study. Instructional Science, 44: 267. https://doi.org/10.1007/s11251-016-9371-3

\section*{The benefits of interim assessment}

School and district leaders need to have a view of student performance as the school year unfolds so they can make informed, local decisions such as where to deploy coaches, or what type of professional development needs to plan for. Similarly, teachers want to be able to gauge student performance against summative expectations at the end of the year and adjust curriculum and learning strategies for both the student and cohort at regular points accordingly.

Interim assessments provide additional opportunities to monitor student progress using a set of content that is broader than formative, before reaching the summative end-of-year testing. Performance on the interim assessments will confirm a teacher's formative assessment judgments about student learning, or help teachers to identify students who may be performing more strongly or more poorly than the teacher had realized, and focus instruction in these areas. Students can sometimes have changes in learning that go undetected by the teacher and these interim check points can draw attention to these students. While interim data has greater longevity than its formative partner, it must still be provided in a timely way if it is to be acted on to drive educational improvement and to be effective.

\section*{Beyond accountability}

State, district and school leaders may want to understand student performance in aggregate, both in terms of absolute attainment and progress over time, but also by sub-groups to identify disparities and monitor the effectiveness of approaches being used to reduce achievement gaps. This is the role of summative assessment - to provide data that can support meaningful comparisons across groups of students, classes, schools, districts and so on. This macro data provides districts and schools with an overall pulse on how
students are progressing by grade, by school and by content area. It also measures student achievement against required state standards to deliver the type of information that may then be used to develop educational policies at a state and federal level.

However, summative assessment has applications beyond accountability. The data can help district or school leaders to identify areas for professional learning, and it can support teacher reflection on teaching strategies or curriculum at the end of the year and inform adjustments ahead of the next year's instructional planning. In addition, summative data might be used for planning at the start of the year, with the receiving teacher using it to get a snapshot of the new students entering their classroom and to think about the appropriate level to begin instruction.

With the introduction of the Every Student Succeeds Act (ESSA), state educational stakeholders now have the opportunity to revisit their assessment systems and to explore options that do not focus solely on a single end-of-year assessment. During this time of transition, some states are beginning to explore options around using multiple interim assessments for the purpose of accountability or greater use of performance assessments.


\section*{A balanced assessment}

A strategically balanced assessment system is one that incorporates summative, interim and formative components in order to provide meaningful and interpretable information for stakeholders at all levels in the educational system. By working together, these individual components provide greater insights into where students are and where they need to be throughout their K-12 journey, supporting learning opportunities for all students that are addressing their individual learning needs to help improve educational success for all.

\section*{The need for integration}

Formative, interim and summative - each type of assessment has a role to play in enhancing learning outcomes and driving forward standards in education. Understanding when to attend to each source of information is important. Usable, meaningful data is also timely data. Timely summative results allow teachers to use them to reflect on the year just ending and to use them as part of their planning for the following year. Interim results can be reviewed by grade level teams after each administration to identify any adjustments needed to instructional plans for the rest of the year. Formative assessment evidence - based on the same set of standards - will be ongoing throughout the year supporting teachers and students to identify current understandings from which to build next instructional or learning steps.

A coherent system built around common standards helps to create consistency across the different assessment components and means that the information generated can be interpreted more easily and productively. For example, if interim assessments are built to the same blueprint as the summative assessment, only shorter, as within a balanced system, then results can be linked directly to progress towards summative requirements. An effective assessment system is one that reconnects assessment to learning.

A balanced assessment system does this by allowing the various testing components within the system to interact with each other. Interim and summative assessments can use the same reporting scales and share item types, for example, making it easier to integrate and compare analyses. Formative assessment directly provides support for teachers to closely attend to student understanding to develop instruction that best meets their immediate learning needs, and supports students reflect on their own learning and that of their peers which also has a positive impact on their learning.

\section*{The role of assessment design}

With advances in technology, summative assessments are able to more strongly signal what is important for deeper student learning by greater use of assessment items that model good instructional practices, requiring students to demonstrate understanding through writing. In the past state-wide assessments tended to use primarily multiple choice questions due to the cost of human scoring and lack of technology support for more enhanced item types. With artificial intelligence (natural language processing) technologies, student open-ended responses can now be scored in a reliable way without the cost of human scoring. This allows the summative assessment to more fully assess the breadth of standards, which is likely to have a positive effect by encouraging broader curriculum teaching rather than focusing instruction only on parts of the standard that were known to be assessed.

For assessments that are closer to instruction, value is added by providing information to help teachers plan next instructional steps for a student or cohort. Where assessments are able to make use of learning progressions that target key ideas in the standards and describe how student understanding develops from naïve to expert levels, the reports can support teacher planning by signalling what is likely to be the next developmental milestone for students.

\section*{Making better sense of data}

A system that uses a common language where appropriate across all components, and where reporting focuses on meaningful, actionable next steps appropriate for that component enables stakeholders to more easily understand, communicate about, and take action in the light of students' learning. Connecting the various types of assessment can have a positive impact on analysis and reporting too.

A single dashboard that contains all the assessment data can be accessed and shared by all educational stakeholders at the appropriate grain size. For example, if an online reporting system contained both statewide summative results and interim assessment results it could facilitate the use by state, district and school administrators to examine levels of student progress and attainment of state milestones, making
the sharing of data more straightforward, increasing opportunities for gaining insights about student progress using multiple source of data, and creating a more efficient approach.

How data is presented can also improve the effectiveness of assessment and reduce time spent analyzing data to pinpoint the key trends. An intuitive system that allows stakeholders to easily identify relevant information without extensive training will increase the likelihood that the reports are accessed and analyzed, and the information used.

Furthermore, advances in technology and the increasing availability of curated online teaching resources support the development of score reports that can link to additional materials that might be useful for next teaching or learning steps.


\section*{In Summary}

K 12 assessment can seem complicated. Different types of assessment using different standards, reporting and delivery systems can produce a feeling that there is too much assessment producing too much data and not enough useful information.

Designed, developed and implemented effectively, assessment can play a valuable role in supporting learning outcomes and improving education. However, understanding the characteristics of formative, interim
and summative assessment is key to also understanding how together these assessment types can add value beyond the sum of their parts. A balanced approach to assessment connects all three components to create a more efficient pathway to improving educational outcomes for all students.


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\section*{2021-2022 Assessment Plan and Best Practices}

\section*{Running Records (grades 1 through 6) - All digital Running Record materials are found in the Staff Workspace (log-in required).}
- The Elementary Job-Alike task force team, which convened in July 2020, fully recommended assessing all students as early in the school year as is reasonable.
- Given that many students haven't been assessed since Fall or Winter of last school year, it is extremely important to assess all of your students this Fall. Even if students scored well above grade level in Fall or Winter of last year, assessing them this Fall will allow for the measurement of potential learning loss, or at least a measure of lack of expected growth, given the prolonged school building closures.
- It is recommended that the regular classroom teacher administers the running record assessment. Other staff, such as paraeducators, have not received the training that was provided last year to help ensure calibration of scoring.
- Running records should be administered as a one-to-one assessment using Zoom.
- Using the above guidance, the Zoom should be recorded and parent permission must be obtained.
- If parental permission is not obtained, the running record should be administered in a small group on Zoom or 1:1 with an additional adult present, such as a paraeducator.
- Assessing levels A through K should be done with the district-provided book series (BeBop) by using your document camera.
- The text for levels \(\mathbf{L}\) through \(\mathbf{Z}\) should also be provided via document camera.
- Even though there are PDF versions of levels L through Z text, they should not be emailed or provided to a student where they can copy and save it. The Teachers College running records are protected text and should not be available to students outside of the assessment process.
- Recording the administration of the assessment is not only a good idea because it's a recommendation from the Superintendent's Cabinet, but also because it will allow you to review the recording for scoring purposes, if necessary.
- Differentiated Professional Learning (asynchronous) will be available before \(9 / 18\) to support administering the Running Record and administering the Running Record online. Be on the lookout for an invitation from your building coach!

WaKIDS (kindergarten only) - OSPI has developed this Implementation Guide for administering WaKIDS in a remote environment.
Sight Words (kindergarten only) - All digital resources for the Sight Words assessment are found here in the Staff Workspace.
- The sight words assessment should be administered as a one to one assessment.

Acadience (all grades, but not all students) - Administered by TItle/LAP Teachers. Resource Teachers (Learning Support - special education) will test students on their caseload who have SDI in Reading.
iReady Math and Reading Diagnostic - Here are some general guidelines:
- The Fall math diagnostic should be administered in groups.
- Plans should be made to administer the diagnostic in two 30 to 45 minute chunks across two different days (total of 60 to 90 minutes). Students requiring more time to complete the diagnostic can do so as an asynchronous activity.
- It is incredibly helpful, when possible, to have a parent or adult family member provide support for the administration of the iReady diagnostic. Materials for families are in development and are being posted here as they become available.

\section*{Smarter Balanced Assessments and Washington Comprehensive Assessment of Science}
- Due to state assessments being cancelled in spring 2020 and spring 2021, the state assessments will be administered in Fall 2021 and again in Spring 2022. In Fall 2021, students will take the assessments they would have taken in Spring 2021. Thus, 3rd graders will not test in Fall, 4th graders will take the 3rd grade test, etc...
- The assessments are expected to be shortened to about \(2 / 3\) of their usual length.

\section*{WIDA is the new ELPA21:}
- Similar to ELPA21, WIDA annual assessment is administered in late winter of every school year.
- The WIDA screener is provided as-needed as students enroll and have evidence of the need for English language services.

The following pages contain a table of the current assessment and data collection schedule for 2021-2022. In addition to the assessments listed below, there are a variety of assessments available through the districts adopted curriculum and through the state assessment system, such as:
- On-Demand Writing Assessments
- Reading Units of Study Performance Tasks (Grades 3-6)
- Math Expressions Unit Tests
- Amplify End of Unit Assessments
- Smarter Balanced Interim Assessments

The tables include symbols appended to some of the assessment names. Here is the key to understanding the symbols:
- *Acadience or i-Ready Reading will be used to satisfy the state mandate for a Dyslexia Screener.
- \# iReady Math will be used for 7th grade math placement recommendations.
- ^WIDA Screener, for newly enrolled students who might qualify for English language services, is administered as-needed throughout the duration of the school year.
\begin{tabular}{|l|l|l|l|l|l|l|l|}
\hline \multicolumn{9}{|c|}{ DRAFT Data Collection Schedule \(-2021 / 2022\) School Year } \\
\hline Grade & Assessment & \begin{tabular}{l} 
Timing of \\
administration
\end{tabular} & Which Student's Test? & Who Administers? & Format? & \begin{tabular}{l} 
Estimated Testing Time \\
(average time spent actively \\
testing)
\end{tabular} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{8}{|c|}{DRAFT Data Collection Schedule - 2021/2022 School Year} \\
\hline Grade & Assessment & Timing of 1st administration & Which Student's Test? & Who Administers? & Format? & Estimated Time to Complete & Notes \\
\hline \multirow[t]{4}{*}{1st Fall} & Running Records & October & All & Class teacher & 1:1 & < 5 minutes per student & \\
\hline & iReady Reading* & 9/24 to 10/23 & All & Class teacher & Group & About 45 minutes. & Estimated testing time based on actual testing time data. \\
\hline & Acadience* & October & Students below grade leve on PSF based on Winter or any student who scored below on Fall running record. & Title/LAP Teacher(s) & 1:1 - PSF and NWF only Entered into Acadience Learning & < 5 minutes per student & \\
\hline & iReady Math* & 9/24 to 10/23 & All & Class teacher & Group & & \\
\hline \multirow[t]{5}{*}{1st Winter} & Running Records & January/February & All & Class teacher & 1:1 & < 5 minutes per student & \\
\hline & iReady Reading* & 01/01-2/14 & All & Class teacher & Group & About 45 minutes & Estimated testing time based on actual testing time data. \\
\hline & Acadience* & January & Students below on Winter PSF or any student who scored below on Fall running record. & Title/LAP Teacher(s) & 1:1 - PSF and NWF only Entered into Acadience Learning & < 5 minutes per student & \\
\hline & iReady Math & 01/01-2/14 & All & Class teacher & Group & & \\
\hline & WIDA^ & February & ELL & Varies & Group and 1:1 & ? & WIDA replaces ELPA21. \\
\hline \multirow[t]{4}{*}{1st Spring} & Running Records & Mid-April through May & All & Class teacher & 1:1 & < 5 minutes per student & \\
\hline & iReady Reading* & May & All & Class teacher & Group & About 45 minutes & Estimated testing time based on actual testing time data. \\
\hline & Acadience & April & Students below on Winter PSF or any student who scored below on Fall 2020 running record. & Title/LAP Teacher(s) & 1:1-PSF and NWF Entered into Acadience Learning & < 5 minutes per student & \\
\hline & iReady Math & May & All & Class teacher & Group & & \\
\hline \multicolumn{8}{|l|}{} \\
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\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{8}{|c|}{DRAFT Data Collection Schedule - 2021/2022 School Year} \\
\hline Grade & Assessment & Timing of 1st administration & Which Student's Test? & Who Administers? & Format? & Estimated Time to Complete & Notes \\
\hline \multirow[t]{5}{*}{2nd Fall} & Running Records & September & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student & \\
\hline & iReady Reading* & 9/24 to 10/23 & All & Class teacher & Group & About 40 minutes & Estimated testing time based on actual testing time data. \\
\hline & Acadience & October & Students below grade level on NWF based on Winter 19-20 and/or any student who scored below on Fall 2020 running record. & \begin{tabular}{l}
Title/LAP \\
Teacher(s)
\end{tabular} & 1:1 - NWF only Entered into Acadience Learning & < 5 minutes per student & \\
\hline & iReady Math* & 9/24 to 10/23 & All & Class teacher & Group & & \\
\hline & Naglieri - HiCap Screener & Nov/Dec & All & Class teacher & Group & 30 minutes & \\
\hline \multirow[t]{5}{*}{2nd Winter} & Running Records & January/February & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student & \\
\hline & iReady Reading* & 01/01-2/14 & All & Class teacher & Group & About 40 minutes & Estimated testing time based on actual testing time data. \\
\hline & Acadience* & January & Students below grade level on PSF based on Winter 19-20 and/or any student who scored below on Fall 2020 running record. & \begin{tabular}{l}
Title/LAP \\
Teacher(s)
\end{tabular} & 1:1 - PSF and NWF only Entered into Acadience Learning & < 5 minutes per student & \\
\hline & iReady Math & 01/01-2/14 & All & Class teacher & Group & & \\
\hline & WIDA^ & February & ELL & Varies & Group and 1:1 & ? & WIDA replaces ELPA21. \\
\hline \multirow[t]{4}{*}{2nd Spring} & Running Records & Mid-April through May & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student & \\
\hline & iReady Reading* & May & All & Class teacher & Group & About 40 minutes & Estimated testing time based on actual testing time data. \\
\hline & Acadience & April & Students below grade level on PSF based on Winter 19-20 and/or any student who scored below on Fall 2020 running record. & Title/LAP Teacher(s) & 1:1 - PSF and NWF only Entered into Acadience Learning & < 5 minutes per student & \\
\hline & iReady Math & May & All & Class teacher & Group & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{8}{|c|}{DRAFT Data Collection Schedule - 2021/2022 School Year} \\
\hline Grade & Assessment & Timing of 1st administration & Which Student's Test? & Who Administers? & Format? & Estimated Time to Complete & Notes \\
\hline \multirow[t]{5}{*}{3rd Fall} & Student Survey & 9/21-10/23 & All - Grades 3 through 6 & Class teacher & Group - asynchronous is okay & 10 to 30 minutes. & \\
\hline & Running Records & September & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student. & \\
\hline & iReady Reading & October & All & Class teacher & Group & About 60 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & October & All & Class teacher & Group & & \\
\hline & Naglieri HiCap Screener & Nov/Dec? & All & & Group & 30 minutes & \\
\hline \multirow[t]{5}{*}{3rd Winter} & Student Survey & February & All & Class teacher & Group - asynchronous is okay & 10 to 30 minutes & \\
\hline & Running Records & January & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student. & \\
\hline & iReady Reading & February & All & Class teacher & Group & About 60 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & February & All & Class teacher & Group & & \\
\hline & WIDA^ & February & ELL & Varies & Group and 1:1 & ? & WIDA replaces ELPA21. \\
\hline \multirow[t]{4}{*}{3rd Spring} & Student Survey & May & All & Class teacher & Group - asynchronous is okay & 10 to 30 minutes & \\
\hline & Running Records & April & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student. & \\
\hline & iReady Reading & May & All & Class teacher & Group & About 60 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & May & All & Class teacher & Group & & \\
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\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{8}{|c|}{DRAFT Data Collection Schedule - 2021/2022 School Year} \\
\hline Grade & Assessment & Timing of 1st administration & Which Student's Test? & Who Administers? & Format? & Estimated Time to Complete & Notes \\
\hline \multirow[t]{6}{*}{4th Fall} & Running Records & September & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student. & \\
\hline & SEL Screener & 9/21-10/23 & All & Class teacher & Group & 10 to 30 minutes. & \\
\hline & iReady Reading & 9/24 to 10/23 & All & Class teacher & Group & About 60 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & 9/24 to 10/23 & & & & & \\
\hline & SBA ELA & TBD November? & All & Class teacher & Group - in person only & & \\
\hline & SBA Math & TBD November? & All & Class teacher & Group - in person only & & \\
\hline \multirow[t]{5}{*}{4th Winter} & Running Records & January & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student & \\
\hline & SEL Screener & February & All & Class teacher & Group & 10 to 30 minutes per student. & \\
\hline & iReady Reading & February & All & Class teacher & Group & About 60 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & February & All & Class teacher & Group & & \\
\hline & WIDA^ & February & ELL & Varies & Group and 1:1 & ? & WIDA replaces ELPA21. \\
\hline \multirow[t]{6}{*}{4th Spring} & Running Records & April & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student & \\
\hline & SEL Screener & May & All & Class teacher & Group & 10 to 30 minutes per students & \\
\hline & iReady Reading & May & All & Class teacher & Group & About 60 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & May & & & & & \\
\hline & SBA ELA & April & All & Class teacher & Group - in person only & & \\
\hline & SBA Math & April & All & Class teacher & Group - in person only & & \\
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\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{8}{|c|}{DRAFT Data Collection Schedule - 2021/2022 School Year} \\
\hline Grade & Assessment & Timing of 1st administration & Which Student's Test? & Who Administers? & Format? & Estimated Time to Complete & Notes \\
\hline \multirow[t]{7}{*}{5th Fall} & Running Records & September & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student. & \\
\hline & SEL Screener & 9/21-10/23 & All & Class teacher & Group & 10 to 30 minutes per student. & \\
\hline & iReady Reading & 9/24 to 10/23 & All & Class teacher & Group & About 80 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & 9/24 to 10/23 & & & & & \\
\hline & SBA ELA & TBD November? & All & Class teacher & Group - in person only & & \\
\hline & SBA Math & TBD November? & All & Class teacher & Group - in person only & & \\
\hline & WCAS Science & TBD November? & All & Class teacher & Group - in person only & & \\
\hline \multirow[t]{5}{*}{5th Winter} & Running Records & January & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student. & \\
\hline & SEL Screener & February & All & Class teacher & Group & 10 to 30 minutes per student. & \\
\hline & iReady Reading & February & All & Class teacher & Group & About 80 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & February & All & Class teacher & Group & & \\
\hline & WIDA \(^{\wedge}\) & February & ELL & Varies & Group and 1:1 & ? & WIDA replaces ELPA21. \\
\hline \multirow[t]{6}{*}{5th Spring} & Running Records & April & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student. & \\
\hline & SEL Screener & May & All & Class teacher & Group & 10 to 30 minutes. & \\
\hline & iReady Reading & May & All & Class teacher & Group & About 80 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & May & & & & & \\
\hline & SBA ELA & April & All & Class teacher & Group - in person only & & \\
\hline & SBA Math & April & All & Class teacher & Group - in person only & & \\
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\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{8}{|c|}{DRAFT Data Collection Schedule - 2021/2022 School Year} \\
\hline Grade & Assessment & Timing of 1st administration & Which Student's Test? & Who Administers? & Format? & Estimated Time to Complete & Notes \\
\hline \multirow[t]{7}{*}{6th Fall} & Running Records & September & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student & \\
\hline & SEL Screener & 9/21-10/23 & All & Class teacher & Group & 10 to 30 minutes & \\
\hline & iReady Reading & 9/24 to 10/23 & All & Class teacher & Group & About 90 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & 9/24 to 10/23 & & & & & \\
\hline & SBA ELA & TBD November? & All & Class teacher & Group - in person only & & \\
\hline & SBA Math & TBD November? & All & Class teacher & Group - in person only & & \\
\hline & Healthy Youth Survey & October & 8th graders only & Class teacher & Group - in person only & Approximately 1 hour & \\
\hline \multirow[t]{5}{*}{6th Winter} & Running Records & January & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student & \\
\hline & SEL Screener & February & All & Class teacher & Group & 10 to 30 minutes & \\
\hline & iReady Reading & February & All & Class teacher & Group & About 90 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & February & All & Class teacher & Group & & \\
\hline & WIDA^ & February & ELL & Varies & Group and 1:1 & ? & WIDA replaces ELPA21. \\
\hline \multirow[t]{6}{*}{6th Spring} & Running Records & April & All & Class teacher & \begin{tabular}{l}
1:1 \\
Entered into Homeroom by \(10 / 23\)
\end{tabular} & < 5 minutes per student & \\
\hline & SEL Screener & May & All & Class teacher & Group & 10 to 30 minutes & \\
\hline & iReady Reading & May & All & Class teacher & Group & About 90 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math\# & May & & & & & Used for middle school math class ID. \\
\hline & SBA ELA & April & All & Class teacher & Group - in person only & & \\
\hline & SBA Math & April & All & Class teacher & Group - in person only & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{8}{|c|}{DRAFT Data Collection Schedule - 2021/2022 School Year} \\
\hline Grade & Assessment & Timing of 1st administration & Which Student's Test? & Who Administers? & Format? & Estimated Time to Complete & Notes \\
\hline \multirow[t]{6}{*}{7th and 8th Fall} & SEL Screener & 9/21-10/23 & All & Class teacher & Group & 10 to 30 minutes & \\
\hline & iReady Reading & 9/24 to 10/23 & All & Class teacher & Group & About 90 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & 9/24 to 10/23 & & & & & \\
\hline & SBA ELA & TBD November? & All & Class teacher & Group - in person only & & \\
\hline & SBA Math & TBD November? & All & Class teacher & Group - in person only & & \\
\hline & Healthy Youth Survey & October & 8th graders only & Class teacher & Group - in person only & Approximately 1 hour & 8th grade only \\
\hline \multirow[t]{4}{*}{7th and 8th Winter} & SEL Screener & February & All & Class teacher & Group & 10 to 30 minutes & \\
\hline & iReady Reading & February & All & Class teacher & Group & About 90 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & February & All & Class teacher & Group & & \\
\hline & WIDA^ & February & ELL & Varies & Group and 1:1 & ? & WIDA replaces ELPA21. \\
\hline \multirow[t]{5}{*}{7th and 8th Spring} & SEL Screener & May & All & Class teacher & Group & 10 to 30 minutes & \\
\hline & iReady Reading & May & All & Class teacher & Group & About 90 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math\# & May & & & & & Used for middle school math class ID. \\
\hline & SBA ELA & April & All & Class teacher & Group - in person only & & \\
\hline & SBA Math & April & All & Class teacher & Group - in person only & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{8}{|c|}{DRAFT Data Collection Schedule - 2021/2022 School Year} \\
\hline Grade & Assessment & Timing of 1st administration & Which Student's Test? & Who Administers? & Format? & Estimated Time to Complete & Notes \\
\hline \multirow[t]{8}{*}{High School Fall} & SEL Screener & 9/21-10/23 & All & Class teacher & Group & 10 to 30 minutes & \\
\hline & iReady Reading & 9/24 to 10/23 & All & Class teacher & Group & About 90 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & 9/24 to 10/23 & & & & & \\
\hline & SBA ELA & TBD November? & 9th and 11th & Class teacher & Group - in person only & About 3 hours & \\
\hline & SBA Math & TBD November? & 9th and 11th & Class teacher & Group - in person only & About 3 hours & \\
\hline & WCAS Science & TBD November? & 9th graders only & Class teacher & Group - in person only & About 2 hours & \\
\hline & Healthy Youth Survey & October & 10th and 12th only & Class teacher & Group - in person only & Approximately 1 hour & 8th grade only \\
\hline & PSAT & October 13 & & & Group[ & & Offered at each high school \\
\hline \multirow[t]{5}{*}{High School Winter} & SEL Screener & February & All & Class teacher & Group & 10 to 30 minutes & \\
\hline & iReady Reading & February & All & Class teacher & Group & About 90 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math & February & All & Class teacher & Group & About 90 minutes & Estimated testing time based on actual testing time data. \\
\hline & WIDA^ & February & ELL & Varies & Group and 1:1 & ? & WIDA replaces ELPA21. \\
\hline & World Language & March & Any who wish to test & & & variable & \\
\hline \multirow[t]{7}{*}{High School Spring} & SEL Screener & May & All & Class teacher & Group & 10 to 30 minutes & \\
\hline & iReady Reading & May & All & Class teacher & Group & About 90 minutes & Estimated testing time based on actual testing time data. \\
\hline & iReady Math\# & May & All & Class teacher & Group & About 90 minutes & Used for middle school math class ID. \\
\hline & SBA ELA & April & All & Class teacher & Group - in person only & & \\
\hline & SBA Math & April & All & Class teacher & Group - in person only & & \\
\hline & AP and IB Testing & May & Students enrolled in AP or IB classes & Class teacher & Group & Varies by test & \\
\hline & Pre-ACT & TBD & 10th grade & & Group & & \\
\hline
\end{tabular}

\section*{Regular Business Meeting}

Meeting Date: 06/08/2021
Submitted By: Erin Verschoor, Administrative Assistant

\section*{Information}

\section*{Subject}

Resolution 21-23, "Authorization \& Delegation of Limited General Obligation Bonds"

\section*{Recommendation}

It is recommended that the board approve Resolution 21-23.

\section*{Background}

This resolution authorizes the Superintendent or Executive Director of Business and Finance to enter into a limited general obligation bond purchase contract in an amount not to exceed \(\$ 20,000,000\), as long as the following conditions are met: The true interest cost does not exceed 4.0\%;
The final bond maturity is not later than 12/1/2027; and The first interest payment is not later than 12/1/2022.
The proceeds will be used to begin work on Spruce Phase II in advance of levy collections in 2022.
Notice of public hearing was published in the Everett Herald on May 25, 2021 and June 1, 2021.

\section*{Fiscal Impact}

\section*{Attachments}

\section*{Resolution 21-23}

\section*{Form Review}

\section*{Inbox}

Budget \& Finance Exec Dir (Originator)
Superintendent's Office
Form Started By: Erin Verschoor
Final Approval Date: 05/28/2021

\section*{Date}

05/28/2021 10:20 AM
05/28/2021 01:20 PM
Started On: 05/28/2021 09:28 AM

A RESOLUTION OF THE BOARD OF DIRECTORS OF EDMONDS SCHOOL DISTRICT NO. 15, SNOHOMISH COUNTY, WASHINGTON, AUTHORIZING THE SALE, ISSUANCE AND DELIVERY OF NOT TO EXCEED \$20,000,000 PRINCIPAL AMOUNT OF THE DISTRICT'S LIMITED GENERAL OBLIGATION BOND, SERIES 2021, TO PROVIDE MONEY FOR THE ACQUISITION, CONSTRUCTION AND INSTALLATION OF IMPROVEMENTS FOR INSTRUCTION, CLASSROOM AND SUPPORT SERVICES; AUTHORIZING THE HOLDING OF A HEARING IN CONNECTION WITH THE BOND; PROVIDING FOR THE DESIGNATION, DATE, TERMS, MATURITY, FORM, PAYMENT AND REDEMPTION PROVISIONS OF THE BOND; DESIGNATING A FISCAL AGENT; PROVIDING FOR REGISTRATION AND AUTHENTICATION OF THE BOND; PLEDGING THE DISTRICT'S FULL FAITH CREDIT AND RESOURCES TO THE PAYMENT OF THE BOND; CREATING AND ADOPTING CERTAIN FUNDS AND ACCOUNTS AND PROVIDING FOR DEPOSITS THEREIN AND PAYMENTS THEREFROM; AUTHORIZING THE SUPERINTENDENT OR THE EXECUTIVE DIRECTOR OF BUSINESS \& FINANCE TO EXECUTE A BOND PURCHASE CONTRACT FOR THE BOND; DELEGATING CERTAIN ACTIONS TO THE SUPERINTENDENT OR THE EXECUTIVE DIRECTOR OF BUSINESS \& FINANCE IN CONNECTION WITH THE BOND; COVENANTING TO COMPLY WITH CERTAIN FEDERAL TAX LAWS; AND PROVIDING FOR OTHER MATTERS PROPERLY RELATING THERETO

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\begin{abstract}
A RESOLUTION OF THE BOARD OF DIRECTORS OF EDMONDS SCHOOL DISTRICT NO. 15, SNOHOMISH COUNTY, WASHINGTON, AUTHORIZING THE SALE, ISSUANCE AND DELIVERY OF NOT TO EXCEED \$20,000,000 PRINCIPAL AMOUNT OF THE DISTRICT'S LIMITED GENERAL OBLIGATION BOND, SERIES 2021, TO PROVIDE MONEY FOR THE ACQUISITION, CONSTRUCTION AND INSTALLATION OF IMPROVEMENTS FOR INSTRUCTION, CLASSROOM AND SUPPORT SERVICES; AUTHORIZING THE HOLDING OF A HEARING IN CONNECTION WITH THE BOND; PROVIDING FOR THE DESIGNATION, DATE, TERMS, MATURITY, FORM, PAYMENT AND REDEMPTION PROVISIONS OF THE BOND; DESIGNATING A FISCAL AGENT; PROVIDING FOR REGISTRATION AND AUTHENTICATION OF THE BOND; PLEDGING THE DISTRICT'S FULL FAITH CREDIT AND RESOURCES TO THE PAYMENT OF THE BOND; CREATING AND ADOPTING CERTAIN FUNDS AND ACCOUNTS AND PROVIDING FOR DEPOSITS THEREIN AND PAYMENTS THEREFROM; AUTHORIZING THE SUPERINTENDENT OR THE EXECUTIVE DIRECTOR OF BUSINESS \& FINANCE TO EXECUTE A BOND PURCHASE CONTRACT FOR THE BOND; DELEGATING CERTAIN ACTIONS TO THE SUPERINTENDENT OR THE EXECUTIVE DIRECTOR OF BUSINESS \& FINANCE IN CONNECTION WITH THE BOND; COVENANTING TO COMPLY WITH CERTAIN FEDERAL TAX LAWS; AND PROVIDING FOR OTHER MATTERS PROPERLY RELATING THERETO
\end{abstract}

\author{
EDMONDS SCHOOL DISTRICT NO. 15 \\ Snohomish County, Washington \\ LIMITED GENERAL OBLIGATION BOND, SERIES 2021 \\ PRINCIPAL AMOUNT OF NOT TO EXCEED \$20,000,000
}

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF EDMONDS SCHOOL DISTRICT NO. 15, SNOHOMISH COUNTY, WASHINGTON, as follows:

WHEREAS, Edmonds School District No. 15, Snohomish County, Washington (the "District"), is a first-class school district duly organized and existing under and by virtue of the Constitution and the laws of the state of Washington (the "State") now in force;

WHEREAS, the District is authorized and empowered by chapters 28A.530, 39.36, 39.46 and 39.50 RCW to sell, issue and deliver its limited general obligation bonds to finance the Acquisition of capital improvements for the District's use;

WHEREAS, the District's Board of Directors (the "Board") has determined that it is in the best interest of the District to Acquire, construct and install improvements for instruction, classroom and support services, including completing Phase II of Spruce Elementary School;

WHEREAS, the Board deems it necessary and advisable that the District sell, issue and deliver at this time not to exceed \(\$ 20,000,000\) principal amount of its limited general obligation bonds (the "Bond") to pay all or a portion of: (1) the cost of instruction, classroom and support services improvements, including completing Phase II of Spruce Elementary School; and (2) the costs of issuing of the Bond;

WHEREAS, the Board acknowledges that the statutes providing for the issuance of limited general obligation bonds do not establish an independent source of revenue to repay such bond, and that debt service on such bonds must be paid from existing District resources;

WHEREAS, the Board has determined that the District will have sufficient revenue to pay principal of and interest on the Bond as such become due;

WHEREAS, pursuant to RCW 28A.530.080, after publishing a notice as required by RCW 28A.530.080, the District held a public hearing on the date hereof regarding the issuance of the Bond, at which public hearing, people who desired to comment on the issuance of the Bond submitted written comments to the Board;

WHEREAS, the principal amount of the Bond, when added to all other outstanding nonvoted general obligation debt hereto authorized and issued by the District \((\$ 20,000,000)\) does not exceed \(\$ 138,012,722\), which is the District's limitation of nonvoted general obligation indebtedness, nor, when added to all outstanding voted general obligation debt heretofore authorized and issued by the District ( \(\$ 207,470,000\) ) does not exceed \(\$ 1,632,699,622\), which is the District's limitation on all nonvoted and voted general obligation indebtedness prescribed by RCW 39.36.020(2);

WHEREAS, pursuant to the provisions of RCW 43.80.120, the State Finance Committee from time to time designates certain financial institutions to act as the fiscal agent for the State and any political subdivisions thereof who so designates, and the District wishes to establish the procedures pursuant to which such fiscal agent will carry out its duties with respect to the Bond;

WHEREAS, pursuant to the provisions of RCW 39.44.130, the Treasurer of Snohomish County has designated the Washington State Fiscal Agent as the District's legally designated fiscal agent; and

WHEREAS, the Board has determined it to be in the best interest of the District to authorize the Superintendent and/or the Executive Director of Business \& Finance to accept and execute the Bond Purchase Contract pursuant to chapter 39.46 RCW;

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED AND ORDERED as follows:

\section*{Section 1: Definitions}

As used in this Resolution and not otherwise defined herein, the following terms have the meanings provided in this Section 1.

Acquisition, Acquiring or Acquire means purchase, securing, lease, receipt by gift or grant, condemnation, transfer or other acquirement or any combination thereof.

Board means the District's Board of Directors, as duly and regularly constituted from time to time.

Bond Counsel means Kutak Rock LLP or such other nationally recognized bond counsel firm as designated by the Superintendent and/or the Executive Director of Business \& Finance.

Bond Purchase Contract means the bond purchase contract or Offer Letter between the District and the financial institution containing the terms set forth in Section 4 of this Resolution.

Bond Register means the registration records maintained by the Registrar on which shall appear the names and addresses of the Registered Owner of the Bond.

Bond means the herein-authorized bond designated as "Edmonds School District No. 15 Limited General Obligation Bond, Series 2021."

Capital Projects Fund means the District's Capital Projects Fund heretofore created pursuant to RCW 28A.320.330, and referred to in Section 10 of this Resolution.

Code means the Internal Revenue Code of 1986, as amended, and any proposed, temporary or final Treasury Regulations promulgated thereunder.

Costs of the Project means all or any part designated by the Board as costs of the Project or interest therein; which costs, at the option of the Board, may include all or any part of the incidental costs pertaining to the Project, including, without limitation: (1) the cost of instruction, classroom and support services improvements, including completing Phase II of Spruce Elementary School; and (2) the costs of issuing of the Bond.

Debt Service Fund means the District's "Debt Service Fund" heretofore created pursuant to RCW 28A.320.330, and referred to in Section 8 of this Resolution.

District means Edmonds School District No. 15, Snohomish County, Washington.
Executive Director of Business \& Finance means the Executive Director of Business \& Finance of the District, as duly appointed from time to time, or her successor in function.

General Fund means the District's General Fund heretofore created pursuant to RCW 28A.320.330, and referred to in Section 9 of this Resolution.

Government Obligations means cash or any government obligation as now or hereafter defined in RCW 39.53.010 pledged solely for the redemption of the Bond.

LGO Account means the District's "Limited General Obligation Debt Service Account" heretofore created in the Debt Service Fund to account for money to pay the principal of and interest on the District's limited general obligations and referred to in Section 8 of this Resolution.

Outstanding means, when used with reference to the Bond, as of any particular date, all that portion of the Bond that has been issued, executed, authenticated and delivered except: (1) any portion of the Bond canceled because of payment or redemption prior to its stated date of maturity;
and (2) any Bond (or portion thereof) deemed to have been paid pursuant to Section 15 of this Resolution.

President means the President of the Board or any presiding officer or titular head of the Board or his or her successor in function, if any.

Project means the Acquisition, construction and installation of capital improvements for safety, security, renewal and upgrade projects, capacity and educational programs.

Purchaser shall mean the financial institution for the Bond.
Registered Owner means the person in whose name the Bond shall be registered in the Bond Register in accordance with the terms of this Resolution.

Registrar means the Washington State Fiscal Agent, acting in the capacity as registrar, authenticating agent, paying agent and transfer agent of the Bond, or its successors in functions, as now or hereafter designated.

Resolution means this Resolution adopted by the Board on June 8, 2021, authorizing the sale, issuance and delivery of the Bond.

Superintendent means the Secretary to the Board and Superintendent of the District, as duly appointed by the Board, or his successor in function.

Treasurer means the Treasurer of Snohomish County, as ex officio treasurer of the District, and any successor to the office of the Treasurer in accordance with applicable law.

\section*{Section 2: Interpretation}

For all purposes of this Resolution, except as otherwise expressly provided or unless the context otherwise requires:
A. Internal References. All references in this Resolution to designated "Sections" and other subdivisions are to the designated sections and other subdivisions of this Resolution. The words "herein," "hereof," "hereto," "hereby," "hereunder" and other words of similar import refer to this Resolution as a whole and not to any particular section or other subdivision.
B. Headings. Any headings preceding the texts of the several sections of this Resolution and the table of contents shall be solely for convenience of reference and shall not constitute a part of this Resolution nor shall they affect its meaning, construction or effect.
C. Accounting Terms. All accounting terms not otherwise defined herein have the meanings assigned to them in accordance with generally accepted accounting principles as in effect from time to time.
D. Writing Requirement. Every "notice," "certificate," "consent" or similar action hereunder by the District shall, unless the form thereof is specifically provided, be in writing signed by an authorized representative of the District.
E. Time. In the computation of a period of time from a specified date to a later specified date, the word "from" means "from and including" and each of the words "to" and "until" means "to but excluding."
F. Redemption. Words importing the prepayment, redemption or redeeming of the Bond or the calling of the Bond for redemption or providing notice of prepayment do not include or connote the payment of the Bond at their stated maturity or the purchase of the Bond.
G. Payment Terms. References to the payment of the Bond shall be deemed to include references to the payment of interest thereon.
H. Gender. Words importing persons shall include firms, associations, partnerships (including limited partnerships), trusts, corporations and other legal entities, including public boards, as well as natural persons. Words of the masculine gender shall be deemed and construed to include correlative words of the feminine and neutral genders. Words imparting the singular number shall include the plural numbers and vice versa, unless the context shall otherwise dictate.

\section*{Section 3: The Project}
A. The Project. The Bond is being issued to pay the Costs of the Project.
B. Reallocation of Bond Proceeds. If in the opinion of the Board, the needs of the District change in a manner which results in a circumstance wherein the Acquisition of the Project is not required or in the best interest of the District, the Board retains the right not to Acquire the Project and to deposit such money in the LGO Account.
C. Modifications. The District may make alterations or modifications to the Project so long as such alterations or modifications do not significantly alter the Project.
D. Costs of the Project. The total Costs of the Project are estimated to be \(\$ 45,800,000\) which amount of \(\$ 20,000,000\) shall be paid from the proceeds of the Bond.
E. Excess Bond Proceeds. In the event there are Bond proceeds remaining after the Costs of the Project are duly provided for, the Board shall deposit such money into the LGO Account to: (1) make scheduled payments of principal and interest on the Bond; and/or (2) prepay a portion of the Bond prior to maturity.
F. Insufficient Money. In the event the proceeds from the sale of the Bond, plus any other legally available money, are insufficient to pay the Costs of the Project, the District shall use the available money to pay the Costs of the Project for which the Bond were approved and deemed most necessary and to be in the best interest of the District by the Board.

\section*{Section 4: Authorization of the Bond}
A. The Bond. A limited general obligation bond designated "Edmonds School District No. 15 Limited General Obligation Bond, Series 2021," is hereby authorized to be sold, issued and delivered to the Purchaser by the District pursuant to chapters 28A.530, 39.36, 39.46 and 39.50 RCW . The Bond shall be issued in an aggregate principal amount not to exceed \(\$ 20,000,000\); shall be issued in fully registered form; shall be issued as a single Bond in the denomination of not to exceed
\(\$ 20,000,000\); and shall be numbered One and with any additional designation as the Registrar deems necessary for purposes of identification. The Bond shall not bear a CUSIP indentification number. The Bond shall be substantially in the form of Exhibit "A" attached hereto.
B. Private Placement. The Superintendent and/or the Executive Director of Business \& Finance is hereby authorized and directed to execute the Bond Purchase Contract and cause the Bond to be delivered, in one or more series, to the Purchaser at such time as the following conditions are satisfied:
(1) the True Interest Cost of the Bond does not exceed 4.00 percent;
(2) the final maturity of the Bond, shall not be later than December 1, 2027; and
(3) the date on which interest shall first be payable for the Bond shall be no later than December 1, 2022.

Prior to executing the Bond Purchase Contract, the Superintendent or the Executive Director of Business \& Finance, shall cause the following information to be included in the Bond Purchase Contract:
(1) the date of the Bond Purchase Contract;
(2) the purchase price for the Bond and its components;
the terms to be established in the Bond Purchase Contract pursuant to this Section 4;
(4) no Bond shall bear interest at a rate greater than 5.00 percent per annum; and
(5) the date of the Bond is to be delivered to the Purchaser, which shall be no later than December 31, 2021.

The Superintendent and/or the Executive Director of Business \& Finance, is hereby authorized to approve additions, deletions or alterations to the Bond Purchase Contract or any other document or certificate related hereto so long as such additions, deletions or alterations do not substantially alter the intent and substance of this Resolution.

The Board hereby finds that the determinations made in this Resolution are the determinations set forth in RCW 39.46.040; and as such, the Board has fully and properly authorized the sale, issuance and delivery of the Bond.
C. Negotiable Instrument. The Bond shall be a negotiable instrument to the extent provided by chapter 62A. 3 RCW .

\section*{Section 5: Redemption Provisions}

The Bond will be subject to redemption as provided in the Bond Purchase Contract as approved by the Superintendent or the Executive Director of Business \& Finance.

\section*{Section 6: Place, Manner and Medium of Payment}

Both the principal of and interest on the Bond are payable in lawful money of the United States of America to the Registered Owner thereof.

Payment of each installment of principal of and interest on the Bond, as appropriate, shall be made to the Registered Owner whose name appears on the Bond Register at the close of business on the fifteenth day of the calendar month preceding each principal and interest payment date. Each installment of principal and interest, except the final installment thereof, shall be paid by check, wire or draft of the Registrar sent to such Registered Owner on the due date at the address appearing on the Bond Register or at such other address as may be furnished in writing by such Registered Owner to the Registrar. Upon payment of the final installment of principal and interest on the Bond, the Registered Owner shall present and surrender the Bond at the office of the Registrar for cancellation in accordance with law.

The District and the Registrar may deem and treat the Registered Owner of the Bond as the absolute owner of the Bond for the purpose of receiving payments of principal and interest due on the Bond and for all other purposes; and neither the District nor the Registrar shall be affected by any notice to the contrary.

Pursuant to RCW 43.80.160 (as it now reads or is hereafter amended or recodified), the Treasurer shall submit a written request to the Registrar that the Registrar return to the Treasurer all money previously remitted to the Registrar for the payment of the Bond that has not been distributed by the Registrar as of one year after the final maturity of all of the Bond. The Treasurer shall deposit such money into a separate account to be held solely for the benefit of the Registered Owner of the Bond which have not been presented for payment, and which shall be used solely for paying the principal of the Bond and the interest which had accrued thereon to the date of maturity. Interest earnings on the money in such account may be deposited into the LGO Account to pay the principal of and interest on any portion of the Bond that is Outstanding.

\section*{Section 7: Pledge of Full Faith, Credit and Resources of the District}

The Bond is a limited general obligation of the District and, as such, the full faith, credit and resources of the District are hereby pledged for its payment within the appropriate constitutional and statutory limitations pertaining to nonvoted general obligations. The District hereby pledges that any legally available money, including but not limited to money in the District's General Fund and Capital Projects Fund, shall be transferred to the LGO Account to pay the maturing principal of the Bond and the interest accruing thereon as it becomes due.

\section*{Section 8: The Debt Service Fund}
A. Debt Service Fund. There heretofore has been created pursuant to RCW 28A.320.330, and shall continue to be maintained in the office of the Treasurer, a fund separate and distinct from all other funds of the District, designated the "Edmonds School District No. 15 Debt Service Fund," for the purpose of paying the principal of, premium, if any, and interest on the Bond and on all other outstanding general obligation bonds of the District when due. The District has heretofore created a separate account within the Debt Service Fund, designated the "LGO Account," which shall be used to account for money to pay the principal of and interest on limited general obligations of the District as such payments become due.
B. Deposits to the LGO Account. The Treasurer is hereby authorized and directed to: (1) transfer, prior to the due date of the principal and interest payment on the Bond, legally available money from the District's General Fund and Capital Projects Fund to the LGO Account in amounts sufficient to pay the principal of and interest on the Bond as such payments become due; and (2) pay to the Registrar, in its capacity as the District's paying agent, all payments of principal and interest due on the Bond in sufficient time for such payments to be made.
C. Investment of Money in the LGO Account. Money in the LGO Account may be invested as permitted by law, which investments shall mature prior to the date on which such money shall be needed for the required interest or principal payment of the Bond. All interest earned and income derived by virtue of such investments shall remain in the LGO Account and be used to meet the required deposits therein or may be used as otherwise permitted by law.

\section*{Section 9: The General Fund}
A. General Fund. There heretofore has been created pursuant to RCW 28A.320.330, and shall continue to be maintained in the office of the Treasurer, a fund separate and distinct from all other funds of the District, designated the "Edmonds School District No. 15 General Fund."
B. Deposits into the General Fund. The District shall not deposit any of the proceeds from the sale of the Bond into the General Fund.
C. Use of the General Fund. Money in the General Fund may be used from time to time to pay the Costs of the Project or, if necessary, to pay debt service on the Bond.

\section*{Section 10: Capital Projects Fund}
A. Capital Projects Fund. There has heretofore been created pursuant to RCW 28A.320.330, and shall continue to be maintained in the office of the Treasurer, a fund separate and distinct from all other funds of the District, designated the "Edmonds School District No. 15 Capital Projects Fund."
B. Deposits into the Capital Projects Fund. The District shall deposit all of the proceeds of the sale of the Bond into the Capital Projects Fund, except such amounts paid to the Purchaser as the Purchaser's discount, if any, which amount shall be retained by the Purchaser. Money in the Capital Projects Fund may be invested as permitted by law and shall be used as permitted by law. The District's share of any liquidated damages or other money paid by defaulting contractors or their
sureties will be deposited into the Capital Projects Fund to ensure the Acquisition of the Costs of the Project.
C. Use of the Capital Projects Fund. Money in the Capital Projects Fund shall be used from time to time to pay the Costs of the Project. When the Project has been completed and all Costs of the Project have been paid in full or duly provided for, any balance remaining in the Capital Projects Fund shall be used to pay debt service on the Bond as provided in Section 3 of this Resolution.

\section*{Section 11: Execution and Authentication of the Bond}
A. Execution of the Bond. Without unreasonable delay, the District shall cause the definitive Bond to be prepared, executed, and delivered, which Bond shall be lithographed or printed with steel engraved or lithographed borders. The Bond shall be executed on behalf of the District by the manual or facsimile signature of the President, shall be attested by the manual or facsimile signature of the Superintendent and shall have the seal of the District impressed or imprinted thereon.
B. Authentication of the Bond. The executed Bond shall be delivered to the Registrar for authentication. The Bond shall be numbered separately in the manner and with any additional designation as the Registrar deems necessary for purposes of identification. Only the Bond that bears a Certificate of Authentication substantially in the form set forth in Exhibit "A" attached hereto and manually executed by an authorized representative of the Registrar shall be valid or obligatory for any purpose or entitled to the benefits of this Resolution. Such Certificate of Authentication shall be conclusive evidence that the Bond so authenticated has been duly executed, authenticated and delivered hereunder and are entitled to the benefits of this Resolution.
C. Temporary Bond. Until the definitive Bond is prepared, the District may, if deemed necessary by the Superintendent or the Executive Director of Business \& Finance, utilize a temporary Bond which shall be typewritten, and which shall be delivered to the Purchaser in lieu of the definitive Bond, but subject to the same provisions, limitations and conditions as the definitive Bond. Such temporary Bond shall be dated as of the date of the Bond, shall be in the denomination of not to exceed \(\$ 20,000,000\), shall be numbered \(T-1\), shall be substantially of the tenor of such definitive Bond, but with such omissions, insertions and variations as may be appropriate to a temporary Bond, and shall be manually signed by the President and the Superintendent and shall have the seal of the District impressed thereon. The Treasurer shall be the Registrar in the event and for so long as a temporary Bond is utilized.
D. Validity of Signatures. In case any of the officers who shall have signed or attested any of the Bond shall cease to be such officer or officers of the District before the Bond so signed or attested shall have been authenticated or delivered by the Registrar, or issued by the District, such Bond may nevertheless be authenticated, delivered and issued, and, upon such authentication, delivery and issue, shall be as binding upon the District as though those who signed and attested the same had continued to be such officers of the District. The Bond may also be signed and attested on behalf of the District by such persons as at the actual date of execution of such Bond shall be the proper officers of the District although at the original date of such Bond any such person shall not have been such officer of the District.

\section*{Section 12: The Registrar}
A. Registrar Appointed. The Treasurer has designated the Washington State Fiscal Agent as the District's legally designated fiscal agent with respect to the Bond pursuant to RCW 39.44.130. The Board hereby confirms such designation with respect to the Bond and appoints the Washington State Fiscal Agent as Registrar, authenticating agent, paying agent and transfer agent with respect to the Bond, subject to the terms and conditions of this Section 12.
B. Delegated Duties. The Registrar is hereby authorized and directed, on behalf of the District, to authenticate and deliver the Bond initially issued or transferred or exchanged in accordance with the provisions of the Bond and this Resolution and to carry out all of the Registrar's powers and duties under this Resolution and the Washington State Fiscal Agency Agreement between the Washington State Finance Committee and the Registrar (as the same may be amended or readopted from time to time).
C. Bond Register. The Bond shall be issued only in registered form as to both principal and interest. The Registrar shall keep, or cause to be kept, at its designated corporate trust office the Bond Register which shall at all times be open to inspection by the District. The District hereby specifies and adopts the system of registration for the Bond approved by the Washington State Finance Committee.
D. Fees and Costs. Subject to the terms of the Washington State Fiscal Agency Agreement referred to above, the District shall pay to the Registrar from time to time reasonable compensation for all services rendered under this Resolution, together with reasonable expenses, charges, fees of counsel, accountants and consultants and other disbursements, including those of its attorneys, agents and employees, incurred in good faith in and about the performance of their powers and duties under this Resolution. The administrative fees provided for in this subsection D may be paid from the LGO Account.
E. Representations. The Registrar shall be responsible for its representations contained in the Registrar's Certificate of Authentication on the Bond.
F. Ownership Rights. The Registrar may become the Registered Owner of Bond with the same rights it would have if it were not the Registrar, and, to the extent permitted by law, may act as depository for and permit any of its officers or directors to act as a member of, or in any other capacity with respect to, any committee formed to protect the rights of Registered Owner of the Bond.
G. Cancellation of Surrendered Bond. The Bond surrendered to the Registrar for payment, redemption, transfer or exchange, as well as the Bond surrendered by the District for cancellation, shall be canceled immediately by the Registrar and returned to the District.

\section*{Section 13: Transfer and Exchange of the Bond}

Except as provided for a mutilated, lost, stolen or destroyed Bond, the Bond shall not be exchangeable for another Bond. At the request of the Purchaser, the Bond shall not be transferable unless:
A. the corporate name of the Purchaser is changed and the transfer is necessary to reflect such change;
B. the transferee is a successor in interest of the Purchaser by means of a corporate merger, an exchange of stock, or a sale of assets;
C. the Purchaser is dissolved and its assets are liquidated; or
D. in whole to a qualified institutional investor.

Any transfer of the Bond by the Purchaser to a successor in interest shall be accomplished by the Purchaser in person, or by its attorney duly authorized in writing, surrendering the Bond at the designated corporate trust office of the Registrar for cancellation and issuance of a new Bond registered in the name of the transferee in exchange therefor. Whenever the Bond shall be surrendered for transfer as provided in this Section 13, the Registrar shall authenticate and deliver to the transferee, in exchange therefor, a new fully registered Bond with the same maturity and interest rate and for the aggregate principal amount of the Bond being surrendered. The Registrar shall not be obligated to transfer the Bond during the 15 days preceding any principal payment date or redemption date. The Registrar shall require the payment by the Purchaser requesting such transfer of any tax, fee or governmental charge required to be paid with respect to such transfer. The Purchaser shall pay all costs incurred by the District to effectuate such transfer.

\section*{Section 14: A Mutilated, Lost, Stolen or Destroyed Bond}
A. Issuance of a Substitute Bond. If the Bond shall become mutilated, lost, stolen or destroyed, the affected Registered Owner shall be entitled to the issuance of a substitute Bond only as follows:
(1) in the case of a lost, stolen or destroyed Bond, the Registered Owner shall: (a) provide notice of the loss, theft or destruction to the District and the Registrar within a reasonable time after the Registered Owner receives notice of the loss, theft or destruction; (b) request the issuance of a substitute Bond; (c) provide evidence, satisfactory to the District and the Registrar, of the ownership and the loss, theft or destruction of the Bond; and (d) file in the offices of the District and the Registrar a written affidavit specifically alleging on oath that such Registered Owner is the proper owner, payee or legal representative of such owner or payee of the Bond that has been lost, stolen or destroyed, giving the date the Bond was issued and the number, principal amount and series of such Bond, and stating that the Bond has been lost, stolen or destroyed, and has not been paid and has not been received by such Registered Owner;
(2) in the case of a mutilated Bond, the Registered Owner shall surrender the Bond to the Registrar for cancellation; and
(3) in all cases, the Registered Owner shall provide indemnity against any and all claims arising out of or otherwise related to the issuance of a substitute Bond pursuant to this Section 14 satisfactory to the District and the Registrar.

Upon compliance with the foregoing, a new Bond of like tenor and denomination, bearing the same number as the mutilated, lost, stolen or destroyed Bond, and with the word "DUPLICATE" stamped or printed plainly on its face, shall be executed by the District, authenticated by the Registrar and delivered to the Registered Owner, all at the expense of the Registered Owner to whom the
substitute Bond is delivered. Notwithstanding the foregoing, the Registrar shall not be required to authenticate and deliver any substitute Bond for a Bond that has matured or is about to mature or that has been called for redemption and, in any such case, the principal or redemption price and interest then due or becoming due shall be paid by the Registrar in accordance with the terms of the mutilated, destroyed, lost or stolen Bond without substitution therefor.
B. Notation on the Bond Register. Upon the issuance and authentication of any substitute Bond under the provisions of this Section 14, the Registrar shall enter upon the Bond Register a notation that the original Bond was canceled and a substitute Bond was issued.
C. Rights of the Registered Owner of a Substitute Bond. Every substitute Bond issued pursuant to this Section 14 shall constitute an additional contractual obligation of the District and shall be entitled to all the benefits of this Resolution unless the Bond alleged to have been destroyed, lost or stolen shall be at any time enforceable by a bona fide purchaser for value without notice. In the event the Bond alleged to have been destroyed, lost or stolen shall be enforceable by anyone, the District may recover the substitute Bond from the Registered Owner to whom it was issued or from anyone taking under the Registered Owner except a bona fide purchaser for value without notice.
D. Exclusive Rights. The Bond shall be held and owned upon the express condition that the foregoing provisions are exclusive with respect to the replacement or payment of a mutilated, destroyed, lost or stolen Bond, and shall preclude any and all other rights or remedies, notwithstanding any law or statute existing or hereafter enacted to the contrary with respect to the replacement or payment of negotiable instruments or of investment or other securities without their surrender.

\section*{Section 15: Tax Covenants}
A. Compliance with the Code. The District covenants to comply with each requirement of the Code necessary to maintain the exclusion of interest on the Bond from gross income for federal income tax purposes. In furtherance of the covenant contained in the preceding sentence, the District covenants to comply with the provisions of the Tax Compliance Certificate, executed by the District on the date of initial issuance and delivery of the Bond, as such Tax Compliance Certificate may be amended from time to time.
B. Necessary Payments. The District covenants to make any and all payments required to be made to the United States Department of the Treasury in connection with the Bond pursuant to Section 148(f) of the Code.
C. Survival of Tax Covenants. Notwithstanding any other provision of this Resolution to the contrary, so long as necessary in order to maintain the exclusion from gross income of interest on the Bond for federal income tax purposes, the covenants contained in this Section 15 shall survive the payment of the Bond and the interest thereon, including any payment or defeasance thereof pursuant to Section 16 of this Resolution.
D. Remedies. Notwithstanding any other provision of this Resolution to the contrary: (1) upon the District's failure to observe or refusal to comply with the above covenants, the Registered Owner, or any trustee acting on their behalf, shall be entitled to the rights and remedies provided to the Registered Owner under this Resolution, and (2) neither the holders or registered owners of bonds of any series other than the Bond, nor a trustee acting on their behalf, shall be entitled to exercise any
right or remedy provided to Registered Owner under this Resolution based upon the District's failure to observe, or refusal to comply with, the above covenants.

\section*{Section 16: Defeasance of the Bond}

In the event that money and/or "government obligations" (as defined from time to time in RCW 39.53.010, and maturing or having guaranteed redemption prices at the option of the owner at such time or times and bearing interest to be earned thereon) in such amounts as are sufficient, together with any resulting cash balances, to redeem and retire part or all of the Bond in accordance with its terms, are hereafter irrevocably set aside in a special account and pledged to effect such redemption and retirement, then no further payments need be made into the LGO Account for the payment of the principal of and interest on the certain Bond so provided for, and such Bond and interest accrued thereon shall no longer be deemed to be Outstanding hereunder.

If the principal or redemption price of the Bond becoming due, either at maturity or by redemption or otherwise, together with all interest accruing thereon to the due date, has been paid or provision therefor made in accordance with this Section 16, all interest on such Bond shall cease to accrue on the due date and all liability of the District with respect to such Bond shall cease as of the date the principal, redemption price, if any, and interest is so provided for, except as hereinafter provided. Thereafter, the Registered Owner of the Bond shall be restricted exclusively to the money so deposited for any claim of whatsoever nature with respect to the Bond, and the Registrar shall hold such money in trust for the Registered Owner uninvested and without interest.

\section*{Section 17: Amendments to the Resolution}
A. Amendments Not Requiring Registered Owner's Consent. The Board from time to time, and at any time, may adopt a resolution or resolutions supplemental hereto, which thereafter shall become a part of this Resolution, for any one or more of all the following purposes: (1) to add to or delete from the covenants and agreements of the District in this Resolution or to surrender any right or power reserved to the District herein; provided, such additions or deletions shall not adversely affect, in any material respect, the interests of the Registered Owner of the Bond; and (2) to cure, correct or supplement any ambiguous or defective provision contained in this Resolution; provided, such supplemental resolution shall not adversely affect, in any material respect, the interests of the Registered Owner of the Bond. Any such supplemental resolution may be adopted without the consent of the Registered Owner of the Bond or portion thereof at any time Outstanding, notwithstanding any of the provisions of subsection B of this Section 17.
B. Amendments Requiring Registered Owner Consent. With the consent of the Registered Owner of the Bond at any time Outstanding, the Board may adopt a resolution or resolutions supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Resolution or of any supplemental resolution. It shall not be necessary for the consent of the Registered Owner under this subsection B to approve the particular form of any proposed supplemental resolution, but it shall be sufficient if such consent shall approve the substance thereof.
C. Effect of Supplemental Resolutions. Upon the adoption of any supplemental resolution pursuant to the provisions of this Section 17, this Resolution shall be deemed to be modified and amended in accordance therewith; and the respective rights, duties and obligations of the District under this Resolution and the Registered Owner of the Bond Outstanding hereunder shall thereafter
be determined, exercised and enforced thereunder, subject in all respects to such modification and amendments. All terms and conditions of any such supplemental resolution shall be deemed to be part of the terms and conditions of this Resolution for any and all purposes.
D. Notations; Replacement Bond. Any Bond executed and delivered after the execution of any supplemental resolution adopted pursuant to the provisions of this Section 17 may have a notation as to any matter provided for in such supplemental resolution; and if such supplemental resolution shall so provide, a new Bond so modified as to conform in the opinion of the Board to any modification of this Resolution contained in any such supplemental resolution may be prepared and delivered without cost to the Registered Owner of the Bond upon surrender for cancellation of the Bond.

\section*{Section 18: Sale and Delivery of the Bond Authorized}

The Board hereby authorizes and directs each of the President, the Superintendent, the Executive Director of Business \& Finance, the Treasurer and Bond Counsel to execute and deliver the Bond to the Purchaser, to execute all other documents and to take all such further action for the proper application and use of the proceeds of the sale thereof, including executing such certificates and receipts as may be necessary to properly document the issuance of the Bond.

In addition, the President, the Superintendent, the Executive Director of Business \& Finance, the Treasurer and Bond Counsel are hereby authorized by the Board to execute and deliver such other certificates, agreements and documents, and to take such other actions on behalf of the District as may be reasonable and necessary:
A. to facilitate the issuance and sale of the Bond;
B. to meet all provisions of the Code in order to maintain tax-exempt status of the Bond; and
C. in connection with any matters related thereto, until the final maturity date of the Bond.

\section*{Section 19: Public Hearing}

Pursuant to RCW 28A.530.080(2) the District held a public hearing at 6:30 p.m., on the date hereof, at the District's Administrative Office, located at \(2042068^{\text {th }}\) Ave. W., Lynnwood, Washington, regarding the issuance of the Bond. People who desired to comment on the issuance of the Bond provided written comments to the Board.

\section*{Section 20: Contract and Severability of Provisions}

The covenants contained in this Resolution and in the Bond shall constitute a contract between the District and the Registered Owner of the Bond. Any action by the Registered Owner of the Bond shall bind all future Registered Owner of the Bond in respect of anything done or suffered by the District or the Registrar in pursuance thereof. All the covenants, promises and agreements in this Resolution contained by or on behalf of the District or by or on behalf of the Registrar shall bind and inure to the benefit of their respective successors and assigns, whether so expressed or not.

If any one or more of the covenants or agreements provided in this Resolution to be performed on the part of the District shall be declared by any court of competent jurisdiction on final appeal (if any appeal be taken) to be contrary to law, then such covenant or agreement shall be null and void and shall be deemed separable from the remaining covenants and agreements in this Resolution and shall in no way affect the validity of the other provisions of this Resolution or of the Bond.

\section*{Section 21: Exemption from Continuing Disclosure Requirements}

The Purchaser has advised the District that it is exempt from the continuing disclosure requirements by virtue of Rule 15c2-12(d)(1)(i) of the Securities and Exchange Commission, as amended.

\section*{Section 22: No Personal Recourse}

No recourse shall be had for any claim based on this Resolution or the Bond against any past, present or future Board member, officer or employee of the District or of any successor body, either directly or through the District or any such successor body, under any constitutional provision, statute or rule of law or by the enforcement of any assessment or penalty or otherwise.

\section*{Section 23: Ratification}

All actions not inconsistent with the provisions of this Resolution heretofore taken by the Board and the District's employees in connection with the Project and the marketing, sale, issuance and delivery of the Bond are hereby and in all respects ratified, approved and confirmed.

\section*{Section 24: Repealer}

All resolutions or parts thereof in conflict herewith are, to the extent of such conflict, hereby repealed and shall have no further force or effect.

\section*{Section 25: Effective Date}

This Resolution shall be in full force and effect from and after its adoption.

ADOPTED AND APPROVED by the Board of Directors of Edmonds School District No. 15, Snohomish County, Washington, at a regular meeting thereof, held on the \(8^{\text {th }}\) day of June, 2021.

EDMONDS SCHOOL DISTRICT NO. 15
Snohomish County, Washington

Deborah Kilgore, President

Nancy Katims, Vice President

Carin Chase, Director

Ann McMurray, Director

Gary Noble, Director

\section*{ATTEST:}

Dr. Gustavo Balderas
Secretary to the Board of Directors
(S E A L)

\section*{CERTIFICATE}

I, Dr. Gustavo Balderas, Secretary to the Board of Directors of Edmonds School District No. 15, Snohomish County, Washington, hereby certify as follows:
1. the foregoing resolution is a full, true and correct copy of a resolution duly passed and adopted at a regular meeting of the Board of Directors of the District (the "Board");
2. That such meeting was duly convened and held in all respects in accordance with the law; that a quorum was present throughout the meeting through telephonic, electronic, internet or other means of remote access, and a majority of the Board so present voted in the proper manner for the adoption of such resolution;
3. That in accordance with Proclamation 20-28 by the Governor of the state of Washington, dated March 24, 2020: (a) such meeting was not conducted in person, (b) one or more options provided for the public to attend the meeting remotely, including by telephone access, which mean(s) of access provided the ability for all persons attending the meeting remotely to hear each other at the same time and (c) adoption of such resolution is necessary and routine action of the Board; and
4. Such resolution was adopted by the following vote:

AYES, and in favor thereof:
NAYS:
ABSENT:

\section*{ABSTAIN:}

I further certify that I have carefully compared the same with the original resolution on file and of record in my office; that such resolution is a full, true and correct copy of the original resolution adopted at such meeting; and that such resolution has not been amended, modified or rescinded since the date of its adoption, and is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of the District on the \(8^{\text {th }}\) day of June, 2021, and impressed the seal of the District hereon.

\author{
EDMONDS SCHOOL DISTRICT NO. 15 \\ Snohomish County, Washington
}

Dr. Gustavo Balderas
Secretary to the Board of Directors
(S E A L)

\title{
Exhibit "A" \\ FORM OF BOND
}
[Face of Bond]
\begin{tabular}{lc}
\(\substack{\text { Number: } \\
* * 1^{* *}}\) & \\
& \\
& UNITED STATES OF AMERICA \\
& STATE OF WASHINGTON \\
& COUNTY OF SNOHOMISH
\end{tabular}

Dollars:
\$

\section*{UNITED STATES OF AMERICA COUNTY OF SNOHOMISH}

\section*{EDMONDS SCHOOL DISTRICT NO. 15 \\ LIMITED GENERAL OBLIGATION BOND, SERIES 2021}

Interest Rate:
Maturity Date:
December 1, 20
See Page 2 for
Additional Provisions
EDMONDS SCHOOL DISTRICT NO. 15, SNOHOMISH COUNTY, WASHINGTON (the "District"), a first-class school district duly organized and existing under and by virtue of the Constitution and the laws of the state of Washington (the "State"), acknowledges itself to owe and, for value received, promises to pay from the District's "Limited General Obligation Bond Account" (the "LGO Account") within the District's "Debt Service Fund" (the "Debt Service Fund"), as described in Resolution No. 21-23, adopted by the District's Board of Directors (the "Board") on June 8, 2021 (the "Resolution"), to
or registered assigns, the principal sum of

\section*{AND NO/100 DOLLARS}
and to pay interest thereon from the LGO Account from \(\qquad\) , 2021, or from the most recent date to which interest has been paid or duly provided for, whichever is later, at the interest rates designated in the schedule attached as Exhibit "A" to this Bond.

Interest shall be computed on the basis of a 360-day year consisting of twelve 30-day months. Principal and interest payments for this Bond shall be payable in equal annual installments commencing on June 1, 2022, and thereafter on each December 1 up to and including December 1, 2026, or the date of redemption, whichever occurs first. The final installment may be in such greater or lesser amount as is necessary to fully pay the Bond. If the Bond shall have been duly presented for payment and not paid on such date, then interest shall continue to accrue thereafter at the rate stated on the Bond until it is paid or duly provided for.

\footnotetext{
Exhibit "A"
Page 1
4828-6466-3782.3
}

The principal of and interest on this Bond are payable in lawful money of the United States of America to the Registered Owner hereof, whose name and address shall appear on the registration books of the District (the "Bond Register") maintained by the Washington State Fiscal Agent (the "Registrar"). Payment of each installment of principal of and interest on this Bond, except the final installment, shall be paid to the Registered Owner whose name appears on the Bond Register at the close of business on the fifteenth day of the calendar month preceding the principal or interest payment date; and shall be paid by check, wire or draft of the Registrar sent to such Registered Owner on the due date at the address appearing on the Bond Register, or at such other address as may be furnished in writing by such Registered Owner to the Registrar. Upon payment of the final installment of principal and interest on this Bond, the Registered Owner shall present and surrender this Bond at the office of the Registrar for cancellation in accordance with law.

The District and the Registrar may deem and treat the Registered Owner of this Bond as the absolute owner for the purpose of receiving payments of principal or interest due on this Bond and for all other purposes; and neither the District nor the Registrar shall be affected by any notice to the contrary.

Reference is hereby made to the Additional Provisions of this Bond set forth on page 2 hereof, and such Additional Provisions shall for all purposes have the same effect as if set forth in this space.

This Bond shall not be valid or become obligatory for any purpose or be entitled to any security or benefit under the Resolution until the Certificate of Authentication hereon is signed manually or by facsimile by the District.

IT IS HEREBY CERTIFIED, RECITED AND DECLARED that this Bond is issued pursuant to and in strict compliance with the Constitution and the laws of the State now in force, and the ordinances and resolutions of the District, specifically the Resolution; and that all acts, conditions and things required to be done precedent to and in the issuance of this Bond have happened, been done and been performed.

IN WITNESS WHEREOF, Edmonds School District No. 15, Snohomish County, Washington, has caused this Bond to be executed by the manual signature of its President of the Board, attested by the manual signature of its Secretary and impressed with its seal on this \(\qquad\) day of \(\qquad\) , 2021.

\title{
EDMONDS SCHOOL DISTRICT NO. 15
}

Snohomish County, Washington
[Manual or Facsimile Signature]
President of the Board of Directors

ATTEST:
[Manual or Facsimile Signature]
Secretary to the Board of Directors
[S E A L]

Exhibit "A"
Page 2
4828-6466-3782.3

\section*{CERTIFICATE OF AUTHENTICATION}

Date of Authentication: \(\qquad\) 2021.

This Bond is the Edmonds School District No. 15 Limited General Obligation Bond, Series 2021, dated \(\qquad\) , 2021, and described in the within-mentioned Resolution.

WASHINGTON STATE FISCAL AGENCY,
as Registrar as Registrar

By
Authorized Signatory

\section*{ADDITIONAL PROVISIONS}

The Bond is issued as a single, fully-registered bond in the principal amount of \$ with a maturity date and interest rate as set forth above. Capitalized terms used herein shall have the meanings given to them in the Resolution.

This Bond is issued by the District pursuant to and in full compliance with the Constitution and the laws of the State now in force, particularly chapters 28A.530, 39.36, 39.46 and 39.50 RCW, and proceedings duly adopted and authorized by the Board, more particularly the Resolution. The proceeds of this Bond will be used by the District to Acquire, construct and install improvements for the cost of instruction, classroom and support services improvements, including completing Phase II of Spruce Elementary School and to pay the issuance costs of this Bond, all as specified and more particularly described in the Resolution.

This Bond is a limited general obligation of the District and as such, the full faith, credit and resources of the District are pledged for the punctual and full payment of the principal hereof and interest hereon within the appropriate constitutional and statutory limitations pertaining to nonvoted general obligations. The District has pledged that any legally available money including, but not limited to, money in the District's General Fund and Capital Projects Fund shall be transferred to the LGO Account to pay the maturing principal of this Bond and the interest accruing hereon.

\section*{[Redemption Provisions to be Inserted]}

This Bond is transferable or exchangeable pursuant to the terms of the Resolution by the Registered Owner hereof in person, or by its attorney duly authorized in writing, upon due completion of the Assignment appearing hereon and upon presentation and surrender of this Bond at the office of the Registrar. Upon such transfer or exchange, a new Bond of any authorized denomination of the same maturity and interest rate and for the same aggregate principal amount of the Bond being surrendered, will be issued to the transferee or exchangee in exchange therefor. The Registrar is not required to transfer or exchange any Bond during the 15 days preceding any principal payment date or redemption date.

Reference is hereby made to the Resolution for the covenants and declarations of the District and other terms and conditions under which this Bond has been issued. The covenants contained Exhibit "A"
herein and in the Resolution, as they may apply to this Bond, may be discharged by making provision, at any time, for the payment of the principal of and interest on this Bond in the manner provided in the Resolution.

\section*{BOND COUNSEL OPINION}

It is hereby certified that the following is a true and complete copy of the bond counsel opinion of Kutak Rock LLP, Spokane, Washington, on file in my office; which opinion is dated the date of delivery of and payment for the Bond described therein, an original of which was delivered to me on such date, and is a part of the permanent records of the District.

EDMONDS SCHOOL DISTRICT NO. 15
Snohomish County, Washington
[Manual or Facsimile Signature]
Secretary to the Board of Directors
[Insert Bond Counsel Opinion of Kutak Rock LLP]

The following abbreviations, when used in the inscription on the face of this Bond, shall be construed as though they were written out in full according to applicable laws or regulations:


TEN ENT -- as tenants by the entireties under Uniform Transfer to Minors Act . . . . . . . . . . . . . .
(State)
JT TEN -- as joint tenants with right of survivorship and not as tenants in common

Additional abbreviations may also be used although not in the above list.

\begin{abstract}
ASSIGNMENT
FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto Name of Transferee: \(\qquad\) Address: \(\qquad\)
Tax Identification No.:
the within Bond and hereby irrevocably constitutes and appoints
to transfer the Bond on the books kept for registration thereof with full power of substitution in the premises.
\end{abstract}

\section*{Registered Owner}

NOTE: The signature on this Assignment must correspond with the name of the Registered Owner as it appears upon the face of the within Bond in every particular, without alteration or enlargement or any change whatsoever.
Dated:
SIGNATURE GUARANTEED:

\author{
Bank, Trust Company or Member \\ Firm of the New York Stock Exchange
}

\section*{Authorized Officer}

\section*{EXHIBIT "A" TO BOND}

Payment Date Principal Interest Rate Interest Balance

Regular Business Meeting
Meeting Date: 06/08/2021
Submitted By: Sharon James
Submitted For: Edward J Peters

\section*{Information}

\section*{Subject}

Approval of OSPI Study and Survey for School Construction Assistance Program (SCAP).

\section*{Recommendation}

It is recommended that the Board of Directors approve this new Study and Survey which was prepared for OSPI to qualify for State funding for school construction projects, by adopting Resolution \#21-22.

\section*{Background}

The Office of Superintendent of Public Instruction, under WAC 392-341-020, requires a Study and Survey of existing and proposed school facilities within the District, prior to the State Board of Education's consideration of state assistance for new construction or modernization of existing facilities.

A study and survey must be no more than 6 years old prior to OSPI issuance of the Form D-4 Project Approval for a specific project. Approval of this Study and Survey will permit the District to proceed with applying for the State's School Construction Assistance Program for the new Spruce Elementary Phase 2, Oak Heights Elementary and subsequent projects.

The District's last complete Study and Survey was submitted and updated in 2014. The District received a grant from OSPI to prepare a new Study and Survey, with the assistance of Brian Poppe of HKP Architects. This new format is entirely on-line.

Attached is a printed Executive Summary of the completed 2020 Study and Survey, together with the Study and Survey Workbook, a Table of Contents and a sample of the facilities description and building evaluation forms prepared for every school building in the District. (The sample is for Oak Heights Elementary.) Also the entire document is available on a flash-drive from the ESD Capital Projects Office.

\section*{Attachments:}

Resolution \#21-22
Executive Summary, Study and Survey Workbook, Table of Contents and
Sample forms from 2020 Study and Survey

\section*{Fiscal Impact}

\section*{Attachments}

Res 21-22 S\&S Board Approval
Executive Summary-Final
2-S\&S Workbook
3-Table of Contents
4-2020 S\&S Sample Forms OHE

\section*{Form Review}

\section*{Inbox}

Capital Projects Director
Superintendent's Office
Form Started By: Sharon James
Final Approval Date: 05/25/2021

\section*{Date}

05/24/2021 03:12 PM
05/25/2021 09:50 AM
Started On: 05/24/2021 11:46 AM

\section*{APPROVAL OF 2020 STUDY AND SURVEY}

WHEREAS, The Edmonds School District No. 15, has undertaken projects to replace Spruce Elementary and Oak Heights Elementary, and contemplates future projects; and

WHEREAS, both local and state funds will be used for these projects; and
WHEREAS, there are laws and rules regarding District eligibility for State assistance; and
WHEREAS, a Study and Survey of existing and proposed school facilities within the District is required by the Superintendent of Public Instruction, under WAC 392-341-020, prior to the State Board of Education's consideration of State assistance for new construction or modernization of existing facilities; and

WHEREAS, This Study and Survey must be current with each D-3 submission and current is defined as updated within the last six years;

NOW THEREFORE BE IT RESOLVED that the Edmonds School District Board of Directors hereby accepts and approves the 2020 Edmonds School District \#15 Study and Survey as final and the Board authorizes the submission of the Study and Survey to OSPI in compliance with WAC 392-341-025.

ADOPTED by the Board of Directors of Edmonds School District \#15, Snohomish County, Washington, at a regular meeting thereof this \(8^{\text {th }}\) day of June, 2021

EDMONDS SCHOOL DISTRICT NO. 15 SNOHOMISH COUNTY, WASHINGTON

Deborah Kilgore, President

Nancy Katims, Vice President

Carin Chase, Legislative Representative

Ann McMurray, Board Member

Gary Noble, Board Member

\section*{ATTEST:}

Dr. Gustavo Balderas
Secretary to the Board of Directors

Serving the communities and students of Brier, Edmonds, Lynnwood, Mountlake Terrace, Woodway, and portions of Snohomish County

\section*{EXECUTIVE SUMM ARY}

This completely new Study and Survey submitted to the Office of Superintendent of PublicInstruction (OSPI) supersedesthe 2011 and 2014 updates. This document incorporates the new Inventory of Condition of Schools (ICOS) format and lean process for the Study and Survey established by OSPI in November, 2020. New information incorporated in this document includes the following:
- Changes in Edmonds School District's facilities that occurred since the year2014.
- Capital improvements as part of the 2014 Bond Measure
- Enrollment Projections and Capacity analysis
- Cost-Benefit analysis

\section*{1. Changes in District's facilitiessince 2014 include:}
- Demolition of District M aintenance and Transportation Center; Lynndale, Lynnwood, and M ountlake Terrace Elementary Schools, and, Madrona K-8School
- Replacement of District M aintenance and Transportation, Alderwood Middle School, Lynndale, Lynnwood, Mountlake Terrace Elementary Schools, and Madrona K-8School and construction of Phase 1 Spruce Elementary School Replacement.

\section*{2. 2021 Levy Measure and Other Projects}

On February 11, 2020 56\% of the voters of the District approved a capital bond that would have funded multiple capital improvements, two additional schools for capacity and four replacement projects as identified in the Capital Facilities Plan. Unfortunately, this was not sufficient for the measure to pass. In April 2021 the 56 + \% of the voters approved a levy to complete the following reduced list of projects:

\section*{ProjectsProposed for SCAP Assistance}
1. Spruce Phase 2 Addition-New in Lieu
2. Oak Heights Elementary - New in Lieu

Projects Not Proposed for SCAP Assistance
3. Interim Capacity Mitigation across the District
4. Capital Improvements at various sites
\begin{tabular}{|c|c|}
\hline Estimated Cost & Expected Completion \\
\hline \$45,500,000 & July 2022 \\
\hline \$70,000,000 & TBD \\
\hline
\end{tabular}
Estimated Cost Expected Completion
\$5,800,000 August 2023
\$58,700,000 (Projects to be completed over the next 6 years)

\section*{3．Current Inventory of Permanent Facilities}

The following is a comparison of the total gross area in permanent school facilities．This compares the 2014 OSPI inventory of school facilities with the current inventory conducted by HKP．The difference between OSPI＇s 2014 gross square feet inventory of 2，613，177 and HKP’s 2020 gross square feet inventory of \(2,828,726\) is 215,549 square feet．OSPI＇sinventory as recorded in ICOS has been updated to reflect these changes．The change isthe result of the increased square footageto meet District standards of replacement schools funded by the 2014 Bond．
\begin{tabular}{lrr} 
& \multicolumn{1}{c}{ Total Gross Square Feet } & \\
\cline { 2 - 3 } & \(\underline{\mathbf{2 0 2 0} \mathbf{I C O S}}\) & \(\underline{\mathbf{2 0 1 4} \mathbf{~ I C O S}}\) \\
Elementary Schools & \(\mathbf{1 , 3 5 6 , 2 1 7}\) & \(\mathbf{1 , 2 6 0 , 3 6 8}\) \\
Middle Schools & 387,712 & 368,378 \\
High Schools & \(\mathbf{9 9 1 , 1 0 9}\) & \(\mathbf{9 8 4 , 4 3 1}\) \\
Grand Total： & \(\mathbf{2 , 8 2 8 , 7 2 6}\) & \(\mathbf{2 , 6 1 3 , 1 7 7}\)
\end{tabular}

\section*{4．Summary of ICOS Scores}

The following tables summarizethe Inventory and Condition Of Schools（ICOS）．They show how a facility score changed in relation to their peersfrom 2014 to 2020．In general，the school facilities are well maintained．However，several of the facilities and／or their components have reached their useful life span and need modernization or replacement．Most of the District＇s olderfacilities do not support current educational practices．Educational suitability is not reflected in these scores．Six of these facilitieswere replaced by the voter approved 2014 Bond．The completion of Spruce and replacement of Oak Heights will be funded by the 2021 Levy．

\section*{Elementary School Scores}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & \[
\begin{aligned}
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& \text { 을 } \\
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\frac{\underline{\underline{\overline{1}}}}{}
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\] & \(*\)
\(\frac{N}{10}\)
\(\frac{2}{5}\)
\(\vdots\) & \begin{tabular}{l}
\(*\) \\
\(\stackrel{*}{\circ}\) \\
\(\stackrel{8}{5}\) \\
\multirow{2}{3}{}
\end{tabular} &  &  & \[
\begin{aligned}
& \frac{\otimes}{\omega} \\
& \frac{0}{0} \\
& \frac{0}{E} \\
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& \frac{1}{2}
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& \text { 루 }
\end{aligned}
\] &  &  & 令 \\
\hline 2014 ICOS Score & & 86 & 80 & 88 & 76 & 88 & 77 & 77 & 83 & 84 & 70 & 79 & 71 & 89 & 84 & 89 & 72 & 82 & 84 & 85 & 82 & 86 & 85 & 67 \\
\hline 2020 ICOS Score & 74 & 78 & 75 & 80 & 75 & 78 & 74 & 75 & 84 & 73 & 99 & 98 & 99 & 82 & 81 & 85 & 98 & 77 & 79 & 75 & 85 & 82 & 84 & 66 \\
\hline
\end{tabular}

Middle School Scores


Hiah School Scores


\footnotetext{
＊Replacement（new）building
＊＊Spruce Phase 1
＊＊＊Scriber Lake housed at Woodway Campus
}

\section*{5. Enrollment Projections and Capacity Analysis}

The following enrollments foryear 2013 and 2019 reflect actual October 1 data for the Edmonds School District from Office of Superintendent of PublicInstruction (OSPI). The Projected enrollment for year2025 is from Flo Analytics' 2019 Forecast Report included in the Capital Facilities Plan. Flo Analytics expects growth across the District, primarily due to the extension of regional lightrail to M ountlake Terrace and Lynnwood in 2024, and new multifamily construction. UsingOSPI's standards for allowable Square Footage per Student thereare currently no unhoused students in the District for the years 2019 through 2025. However, due to the State of Washington's commitment to fund Full Day Kindergarten and reduced class sizes in the primary grades (1-3) by 2018, the District still needed to expand K-3capacity. The District has added 45+ relocatable classrooms, serving approximately 1,100 students, since 2014 to mitigate severe overcrowding at many sites. District enrollment was relatively unchanged during this period. OSPI considersstudents in portable classrooms to be unhoused.

Interim Capacity Mitigation will provide some modest relief for these needs for K-3Classroom Expansions across the District. The District is also experiencing growth and overcrowding. Elementary enrollment is currently at \(107 \%\) of capacity. The District has developed a long-term recommendation for addressingits severe overcrowding, which is described under the Cost-Benefit section below. Unfortunately, under the current School Construction Assistance Program (SCAP) fundingformula, none of the projects needed to address current or future overcrowding are eligible for State assistance.
\begin{tabular}{lrrrr} 
Headcount Enrollment & & Year 2013 & Year 2019 & Projected Year 2025 \\
\cline { 1 - 4 } Total K-6 & \(\mathbf{1 0 , 5 4 8}\) & \(\mathbf{1 1 , 1 7 5}\) & \(\mathbf{1 1 , 6 9 7}\) \\
Total 7-8 & 2,959 & 3,124 & 3,222 \\
Total 9-12 & \(\underline{6,639}\) & \(\underline{\mathbf{6}, 477}\) & \(\underline{\mathbf{6 , 6 4 3}}\) \\
& Total & \(\mathbf{2 0 , 1 4 6}\) & \(\mathbf{2 0 , 7 7 6}\) & \(\mathbf{2 1 , 5 6 2}\)
\end{tabular}

A summary of the enrollment data by grade span for the period from 2013 through 2019 is as follows:
1) The elementary school population (gradesK-6) trend has increased on average of approximately 105 students per yearfrom years 2013-2019 and this trend will continue to increase an average of approximately 87 students per year from years 2020-2025 with a 4.7\% gain.
2) The middle school population (grades 7-8) trend has increased on average of approximately 28 students per year from years 2013-2019. Thistrend is projected to continue increasingon average by approximately 16 students per yearfrom years \(2020-2025\), or a \(3.1 \%\) gain.
3) The high school population (grades \(9-12\) ) trend has decreased on average approximately 27 students per year from years 2013-2019. The population trend will change increasingon average of approximately 28 studentsper yearfrom years 2019-2025 or a \(2.6 \%\) gain.

\section*{6. Cost-Benefit Analysis: Support of Learning Activities and District-wide Facilities Needs}

In addition to providing adequatequantities of code-compliant space, the Edmonds School District's cost-benefit analysisfor facilities decisions uses the followingfactors:
- Support of LearningActivities - do the physical facilities and environment support best educational practices?
- District-wide Facilities' Needs-How doesa particular project support the District's strategic plan?

These two factors were critical for the planning process and project decisions described below.
For the 2020 Bond, the EdmondsSchool District charged the Facilities \& Bond Committee (FBC) with examining available data rangingfrom bond financingand tax rates, construction costs and escalation, enrollment trends, middle school reconfiguration, early childhood education, and physical facility conditions. The work built on the recommendations of the previous Enrollment Committee. The FBCtoured every older school in the district and reviewed them with the following priorities: 1) space at the elementary and middle school level to meet capacity, 2) Educational suitability and physical condition, 3) Program needs 4) Investments in existing facilitiesfor asset preservation. The FBCalso toured a sample of recent new replacement schools. With these priorities, the FBC used the data available as guidance in determiningtheir recommendationsto the School Board. The links below lead to the report of the Facilities Bond Committee and the Enrollment Committee:

\section*{Facilities \& Bond Committee Recommendation}

\section*{Enrollment Committee Report April 12, 2018}

Their conclusions and recommendations were as follows:
- Current Needs-The District's currentfacilities needs total \$1.7Billion, but there is no feasible mechanism for funding all of these priorities at once. A majority of the District's Schools are more than 50 years old and are obsolete both physically and educationally. Elementary School enrollment is \(107 \%\) of capacity. The Committee focused on prioritizing projectsthat could be completed while maintain a level tax rate.
- Replacement of Obsolete Facilities- Based on data presented and tours of old and new facilities, the Committee concluded that it was both cheaper and more cost-effective to replace facilities than try to bring them up to current physical and educational standards. The Spruce Elementary Phase 2Addition and Replacement would complete the school already started with the previous bond. The replacement of Oak Heights Elementary rose to the top of the list because it is over capacity, in an aged facility that doesn't meet current educational needs, followed by Beverly ES and Westgate ES. The Committee suggested replacing these schools with a two or three story design to add capacity with the desired security, and provide new building systems. On further review, Westgate was placed in the next funding phase to keep a level tax rate. The committee also recommended replacing College PlaceMS.
- Improve Capacity via Middle/Elementary School Grade Reconfiguration - Based on the work of the previous Enrollment Committee and additional investigations, the Bond Committee concluded that the best solution to current and projected overcrowdingwasto reconfigure
grade levels to a K-5 and 6-8 model. This change could be justified purely on educational grounds. They recommended constructing a new middle school on the FormerAlderwood MS Site. Th four existing Middle School would be to be expanded for capacity as well. This approach also requires constructing a new Elementary School on District-owned vacant land. This project would add capacity at the elementary level, which would be needed even with the reconfiguration strategy. Reconfiguration also requires expanding the three existing middle schools. Underthe current SCAP fundingformula, none of the projects needed to address current overcrowding are eligible for State assistance.
- Innovative Learning Center- The committee prioritized providing a permanent facility for the Scriber Lake HS alternative program temporarily located at the Woodway Campusfor more than a decade. This project might include space for other programs. It does not meet the requirements of state funding assistance.
- District-wide Facilities Renewal, Upgrades and Program Improvement - The Committee recognized the need for asset preservation and renewal projects across the District. These projects do not meet State School Construction Assistance Program requirements.

The above recommendations led to a \(\$ 600 \mathrm{M}\). Bond measure that was presented to the voters in February 2020 and received 56\% approval, insufficient to pass.
7. Housed and Un-housed Students-According to OSPI standards the District is adequately housed, although, actually, it is experiencing severe overcrow ding at many sites. The District has not lost any facilities as a result of a natural disaster.
8. Racial Balance - The upcomingreplacement or modernization of facilities will not impact the racial balance in any way.
9. Attendance Boundaries - Presently, the District has no plans to adjust attendance areas. The District made numerous boundary adjustment is previous years to use all available capacity. Both the schools that are being replaced will remain on their present sites and attendance boundaries will remain the same.


Rev 11/18/2020


\section*{Study and Survey Workbook - Chapter 2 - Tab 2 - Financial Status}

This table provides an overview of the District's ability to obtain capital funds to provide the local share required for state funding assistance. Listed below is the assessed valuation of the District, outstanding bonded indebtedness, current bonding capacity, information on current bond status, and information on capital levies and other non-debt sources of funds for proposed capital projects.
\begin{tabular}{|c|c|}
\hline District: Edmonds School District & Date: 5/15/2021 \\
\hline \multicolumn{2}{|l|}{Financial Summary} \\
\hline Bond Assessed Value (2021 Collection Year) & \$36,803,392,447 \\
\hline \multicolumn{2}{|l|}{} \\
\hline Total General Obligation Debt Capacity (5\%) of Assessed Valuation & \$1,840,169,622 \\
\hline Less: Outstanding Unlimited Tax General Obligation Bonds & (\$207,470,000) \\
\hline Less: Anticipated 2021 Bonds & \$0 \\
\hline Less: Other & \$0 \\
\hline Less: Other & \$0 \\
\hline Plus: Cash and Investments in Debt Service Fund (As of 1/1/2021) & \$5,633,458 \\
\hline Plus: Other & \$0 \\
\hline Plus: Other & \$0 \\
\hline Remaining Total Debt Capacity & \$1,638,333,080 \\
\hline \multicolumn{2}{|l|}{} \\
\hline Non-Voted General Obligation Debt Capacity (.375\% of assessed valuation) & \$138,012,722 \\
\hline Less: Outstanding Non-voter approved debt & \$0 \\
\hline Less: Other Anticipated Limited General Obligation Bonds & (\$19,000,000) \\
\hline Plus: Other & \$0 \\
\hline Remaining Non-Voted Debt Capacity & \$119,012,722 \\
\hline & \\
\hline \multicolumn{2}{|l|}{Notes: (e.g.: Basis of Bond Assessed Value, anticipated bond sales, exemptions)} \\
\hline \multicolumn{2}{|l|}{1} \\
\hline \multicolumn{2}{|l|}{2} \\
\hline \multicolumn{2}{|l|}{3} \\
\hline \multicolumn{2}{|l|}{4} \\
\hline \multicolumn{2}{|l|}{5} \\
\hline \multicolumn{2}{|l|}{Bond Status Narrative} \\
\hline Brief Narrative: For bonds referred to in statement above, provide information of projects to be funded. If District is currently in bond planning status, provid bond if known. (Expand row height as needed.) & on anticipated bond sales and total estimated cost cipated election date and estimated amount of \\
\hline
\end{tabular}

\section*{Study and Survey Workbook - Chapter 2 - Tab 3 - Proposed Major Capital Projects}

OSPI

 rows to table if needed.
 assistance, then enter TBD (for to be determined).
\begin{tabular}{|c|c|c|c|c|}
\hline District: & Edmonds School District & & Date: & 5/15/2021 \\
\hline & List of Major Capital Projects & Construction Period 20XX - 20YY & Estimated Total Project Cost & \begin{tabular}{l}
Optional: \\
Potential SCAP Eligibility
\end{tabular} \\
\hline & Spruce Elementary School Replacement, Phase 2, New-In-Lieu & 2021-2022 & \$45,500,000 & \$4,692,109 \\
\hline & Oak Heights Elemetnary School Replacement, New-In-Lieu & 2023-2024 & \$65,000,000 & \$5,400,000 \\
\hline & Beverly Elementary School Replacement, New-In-Lieu & 2025-2026 & TBD & TBD \\
\hline & College Place Middle School Replacement, New-In-Lieu & 2026-2027 & TBD & TBD \\
\hline & New Elemenary School & 2024-2025 & TBD & \$0 \\
\hline & New Middle School & 2026-2027 & TBD & \$0 \\
\hline & New Innovative Learning Center & 2025-2026 & TBD & \$0 \\
\hline & & & \$0 & \$0 \\
\hline & & & \$0 & \$0 \\
\hline & & & \$0 & \$0 \\
\hline & & & \$110,500,000 & \$10,092,109 \\
\hline
\end{tabular}

\section*{Confirmation of coordination with OSPI regarding SCAP eligibility}

If the table above indicates potential SCAP eligibility, provide a statement in the space below that the District has coordinated with its Regional Coordinator and describe extent of coordination. (Expand row height as needed.)
 to significant change.
 process, and funding has been secured.

\section*{Study and Survey Workbook - Chapter 2-Tab 4-School Housing Emergency}

OSPI
A school housing emergency is defined in RCW 28A. 525.166 (5)(a) as an emergency resulting from the destruction of a school building by fire or other natural disaster, the condemnation of a school building by properly constituted authorities, a sudden excessive projected increase in school population, or other conditions similarly emergent in nature.
\begin{tabular}{|c|l|l|}
\hline District: Edmonds School District & Date: & \\
\hline Does your district have a school housing emergency? & NO & <= Use Pull Down Menu \\
\hline
\end{tabular}

If the answer is yes, then in the space below please describe the emergency. Provide financial information to demonstrate that the district is unable to address the situation without significant assistance, referring as appropriate to the financial information in Tab 2. Upload into ICOS supporting documentation providing evidence of the emergency (photographs, newspapers articles, reports, etc.). (Expand row height as needed.)

\section*{STUDY AND SURVEY}

\section*{EDMONDS SCHOOL DISTRICT NO. 15}

\author{
SUPERINTENDENT OF SCHOOLS \\ Dr. Gustavo Balderas \\ BOARD OF EDUCATION \\ Deborah Kilgore, President \\ Nancy Katims, Vice President \\ Carin Chase \\ Ann McMurray \\ Gary Noble \\ CAPITAL PROJECTS \\ Edward J. Peters, ALEP, Director of Capital Projects
}

June 2021

HKP Architects
1402 Third Avenue, Suite 212
Seattle, WA 98101

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- School Board Resolution Adopting Study and Survey
- Executive Summary
- Study and Survey Workbook

Chapter 1. Facility Inventory and Condition
Chapter 2. Capital Facilities Plan
Chapter 2 OSPI-1 Report 1049 Demographic Data Supplement.

OSPI-2 Diversity Report
Tab 2 Financial and Bond/Levy Status
Tab 3 Proposed New Facilities and Additions and modernizations and estimated costs

Tab 4 School housing emergency - N/A
Appendix Compiled ICOS Building Condition Rating Summaries


\section*{OAK HEIGHTS ELEMENTARY SITE PLAN}


\section*{OAK HEIGHTS ELEMENTARY AREA ANALYSIS DIAGRAM}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{13}{|l|}{Area Analysis - Oak Heights Elementary} \\
\hline \multirow[b]{2}{*}{Building Name} & & \multirow[b]{2}{*}{\[
\underset{\text { Description }}{\text { Area }}
\]} & \multirow[b]{2}{*}{\[
\begin{gathered}
\text { Area } \\
\text { IIfentifier } \\
\text { (If Applicable) }
\end{gathered}
\]} & \multicolumn{3}{|l|}{New Construction - SCAP-Funded or Not} & \multicolumn{2}{|l|}{SCAP-Funded Modernization} & \multirow[b]{2}{*}{\[
\begin{gathered}
\text { Gross } \\
\text { GF }
\end{gathered}
\]} & \multirow[b]{2}{*}{\[
\begin{array}{|c|}
\hline \text { Gross } \\
\text { Instructional } \\
\text { SF }
\end{array}
\]} & \multirow[b]{2}{*}{\[
\begin{gathered}
\text { SCAP- } \\
\text { Recognized } \\
\text { SF }
\end{gathered}
\]} & \multirow[b]{2}{*}{\begin{tabular}{l}
Comments \\
Expand cell veritically as needed for comment. (Can include date of non-SCAP-funded modernization.)
\end{tabular}} \\
\hline & \[
\begin{gathered}
\frac{\text { Building }}{\text { Identifier }} \\
\text { (fif } \\
\text { Applicable) }
\end{gathered}
\] & & & Occupancy Date (See Note 1) & Date of Board Acceptance of Construction (See Note 1) & sCAP-Funded Construction? (Y/N/DKSee Note 2) & Occupancy Date of
Most Recent SCAP.
Funded Modernization
(See Note 1) & \[
\begin{array}{|c}
\hline \hline \text { Date of Board-accept of } \\
\text { Most Recent } \\
\text { SCAP-Funded } \\
\text { Modernization } \\
\text { (See Note 1) } \\
\hline \hline
\end{array}
\] & & & & \\
\hline Unit A - Classrooms & A & N/A & N/A & 1967 & & & 1992 & 7/11/1995 & 8,409 & 8,409 & 8,409 & \\
\hline Unit B - Classrooms & B & N/A & N/A & 1967 & & & 1992 & 7/11/1995 & 8,409 & 8,409 & 8,409 & \\
\hline Unit C - Classrooms & C & N/A & N/A & 1967 & & & 1992 & 7/11/1995 & 8,409 & 8,409 & 8,409 & \\
\hline Unit D - Admin & D & N/A & N/A & 1967 & & & 1992 & 7/11/1995 & 7,059 & 7,059 & 7,059 & \\
\hline Unit E - Multipurpose & E & N/A & N/A & 1967 & & & 1992 & 7/11/1995 & 7,640 & 7,640 & 7,640 & \\
\hline Unit F - Music Bldg. Addition & F & N/A & N/A & 1992 & 7/11/1995 & Y & & & 1,076 & 1,076 & 1,076 & \\
\hline Unit G - Classroom Addition & G & N/A & N/A & 1992 & 7/11/1995 & Y & & & 7,365 & 7,365 & 7,365 & \\
\hline Unit H-Covered Play Addition & H & N/A & N/A & 1987 & & & & & 3,200 & 3,200 & 1,600 & \\
\hline & & & & & & & & & 51,567 & 51,567 & 49,967 & \\
\hline
\end{tabular}

Notes
1- Board-acceptance date is required for all SCAP-funded buildings or additions constructed after January 1, 1993
For locally-funded new construction and additions, provide board-acceptance date or, if board did not officially accept project, then provide occupancy date Board-acceptance date is required for all most recent SCAP-funded modernizations constructed after January 1, 1993.
Fon't Know (DK) ion and additions and modernizations prior to 1993, it is acceptable to provide occupancy date, or if not precisely known, year occupancy began.
. Don Squow (DK) is not accepted for all buildings or builiding areas constructed after January 1, 1993
3- All Square Footage take off calculations are to be measured to the outside face of exterior
- Area calculations are to be in accordance AIA Document D-101 and WAC 392-343-019,
- All covered play areas and covered outdoor learning areas are calculated to the eave line, and counted at \(1 / 2\) the SF.
- All building and area names are exactly equal to those shown on area analysis plans and those entered in ICOS

8 - Preparer of this Area Analysis has identified the precise location and SF of all SCAP and Non-SCAP-funded additions and all SCAP-Funded modernizations at this facility.

\section*{Oak Heights Elementary School - Unit A - Classrooms}
\begin{tabular}{ll} 
Building Details & \\
\hline PROFILE TYPE & Classroom Building - Slabs On Grade \\
NUMBER OF FLOORS & 1 \\
CHARACTERISTICS & Occupied
\end{tabular}

Building Inventory
\begin{tabular}{cccccc}
\begin{tabular}{c} 
AREA YEAR \\
BUILT
\end{tabular} & \begin{tabular}{c} 
DISTRICT ASSIGNED \\
AREA
\end{tabular} & \begin{tabular}{c} 
GROSS BUILDING \\
SQ FT
\end{tabular} & GROSS INSTRUCTIONAL SQ FT & \begin{tabular}{c} 
SCAP RECOGNIZED \\
SQ FT
\end{tabular} & \begin{tabular}{c} 
ORIGINAL OCCUPANCY \\
DATE
\end{tabular} \\
\hline 1967 & Area 1 & 8,409 & 8,409 & 8,409 \\
\hline & Building Totals & 8,409 & 8,409 & \(\mathbf{8 , 4 0 9}\) \\
& & &
\end{tabular}

Building Components
\begin{tabular}{|c|c|c|c|c|}
\hline SUB-ASSEMBLY & COMPONENT & COMPONENT CODE & MAINTENANCE PRIORITY & CONDITION RATING \\
\hline Foundations & Standard Foundation & A1010 & & 90.00\% Good \\
\hline Slabs on Grade & Standard Slabs on Grade & A4010 & & 90.00\% Good \\
\hline Water and Gas Mitigation & Building Subdrainage & A6010 & & 90.00\% Good \\
\hline Superstructure & Roof Construction & B1020 & & 90.00\% Good \\
\hline Exterior Vertical Enclosures & Exterior Walls & B2010 & & 62.00\% Fair \\
\hline & Deficiencies: & Excessive Heat Loss & & \\
\hline & Causes: & Inadequate Insulation & & \\
\hline & Exterior Windows & B2020 & & 30.00\% Poor \\
\hline & Deficiencies: & Excessive Heat Loss & & \\
\hline & Causes: & U-Value & & \\
\hline & Exterior Doors and Grilles & B2050 & & 30.00\% Poor \\
\hline & Deficiencies: & Not ADA Compliant & & \\
\hline
\end{tabular}

\section*{Building Components}
\begin{tabular}{|c|c|c|c|}
\hline SUB-ASSEMBLY & COMPONENT & \(\begin{array}{cc}\text { COMPONENT } & \text { MAINTENANCE } \\ \text { CODE } & \text { PRIORITY }\end{array}\) & CONDITION RATING \\
\hline \multirow[t]{6}{*}{Exterior Vertical Enclosures} & Causes: & \multicolumn{2}{|l|}{Other} \\
\hline & Comments: & \multicolumn{2}{|l|}{old} \\
\hline & Exterior Louvers and Vents & B2070 & 62.00\% Fair \\
\hline & Deficiencies: & \multicolumn{2}{|l|}{Other} \\
\hline & Causes: & \multicolumn{2}{|l|}{Material Condition} \\
\hline & Comments: & \multicolumn{2}{|l|}{worn} \\
\hline \multirow[t]{7}{*}{Exterior Horizontal Enclosures} & Roofing & B3010 & 100.00\% Excellent \\
\hline & Deficiencies: & \multicolumn{2}{|l|}{Faulty Material, Leaking} \\
\hline & Causes: & \multicolumn{2}{|l|}{Cracks, Tears, Holes, and Breaks, Protective Coating, Standing Water, Surface Weathering} \\
\hline & Comments: & \multicolumn{2}{|l|}{Deficiency: Peeling paint at Fascias, Roof Leaks, Several Blocked Roof Drains} \\
\hline & Roof Appurtenances & B3020 & 100.00\% Excellent \\
\hline & Horizontal Openings & B3060 & 100.00\% Excellent \\
\hline & Overhead Exterior Enclosures & B3080 & 90.00\% Good \\
\hline \multirow[t]{7}{*}{Interior Construction} & Interior Partitions & C1010 & 90.00\% Good \\
\hline & Interior Windows & C1020 & 90.00\% Good \\
\hline & Interior Doors & C1030 & 30.00\% Poor \\
\hline & Deficiencies: & \multicolumn{2}{|l|}{Not ADA Compliant} \\
\hline & Causes: & \multicolumn{2}{|l|}{Other} \\
\hline & Comments: & \multicolumn{2}{|l|}{old} \\
\hline & Suspended Ceiling Construction & C1070 & 90.00\% Good \\
\hline \multirow[t]{10}{*}{Interior Finishes} & Wall Finishes & C2010 & 90.00\% Good \\
\hline & Interior Fabrications & C2020 & 90.00\% Good \\
\hline & Flooring & C2030 & 62.00\% Fair \\
\hline & Deficiencies: & \multicolumn{2}{|l|}{Stains, Discoloration} \\
\hline & Causes: & \multicolumn{2}{|l|}{Deterioration} \\
\hline & Comments: & \multicolumn{2}{|l|}{old} \\
\hline & Ceiling Finishes & C2050 & 62.00\% Fair \\
\hline & Deficiencies: & \multicolumn{2}{|l|}{Efflorescence and Staining} \\
\hline & Causes: & \multicolumn{2}{|l|}{Moisture} \\
\hline & Comments: & \multicolumn{2}{|l|}{Deficiency: Stains at roof leaks} \\
\hline Plumbing & Domestic Water Distribution & D2010 & 90.00\% Good \\
\hline
\end{tabular}

\section*{Building Components}
\begin{tabular}{|c|c|c|c|}
\hline SUB-ASSEMBLY & COMPONENT & \begin{tabular}{cc} 
COMPONENT & MAINTENANCE \\
CODE & PRIORITY
\end{tabular} & CONDITION RATING \\
\hline \multirow[t]{3}{*}{Plumbing} & Comments: & recently repiped & \\
\hline & Sanitary Drainage & D2020 & 90.00\% Good \\
\hline & Building Support Plumbing Systems & D2030 & 90.00\% Good \\
\hline \multirow[t]{9}{*}{HVAC} & Facility Fuel Systems & D3010 & 90.00\% Good \\
\hline & Heating Systems & D3020 & 90.00\% Good \\
\hline & Facility HVAC Distribution Systems & D3050 & 62.00\% Fair \\
\hline & Deficiencies: & Uneven Zone Coverage & \\
\hline & Causes: & Misadjusted Air Balancing & \\
\hline & Comments: & New exhaust fans overwhelming hvac system, rooms are noted as very cold. & \\
\hline & Ventilation & D3060 & 62.00\% Fair \\
\hline & Deficiencies: & Excessive Noise, Stuffy Areas & \\
\hline & Causes: & Blocked Vent Grills & \\
\hline \multirow[t]{5}{*}{Fire Protection} & Fire Suppression & D4010 & 90.00\% Good \\
\hline & Deficiencies: & Other & \\
\hline & Causes: & Building Alterations & \\
\hline & Comments: & Deficiency: Partial Fire Sprinkler coverage & \\
\hline & Fire Protection Specialties & D4030 & 90.00\% Good \\
\hline \multirow[t]{3}{*}{Electrical} & Electrical Services and Distribution & D5020 & 90.00\% Good \\
\hline & General Purpose Electrical Power & D5030 & 90.00\% Good \\
\hline & Lighting & D5040 & 90.00\% Good \\
\hline \multirow[t]{4}{*}{Communications} & Data Communications & D6010 & 90.00\% Good \\
\hline & Voice Communications & D6020 & 90.00\% Good \\
\hline & Audio-Video Communications & D6030 & 90.00\% Good \\
\hline & Distributed Communications and Monitoring & D6060 & 90.00\% Good \\
\hline \multirow[t]{4}{*}{Electronic Safety and Security} & Detection and Alarm & D7050 & 30.00\% Poor \\
\hline & Deficiencies: & Devices Not Working & \\
\hline & Causes: & Equipment Obsolescence & \\
\hline & Comments: & Fire Alarm Panel is \#2 priority by District for replacement & \\
\hline
\end{tabular}

\section*{Building Components}
\begin{tabular}{|c|c|c|c|}
\hline SUB-ASSEMBLY & COMPONENT & \(\begin{array}{cc}\text { COMPONENT } & \text { MAINTENANCE } \\ \text { CODE } & \text { PRIORITY }\end{array}\) & CONDITION RATING \\
\hline Integrated Automation & Integrated Automation Facility Controls & D8010 & 100.00\% Excellent \\
\hline Furnishings & Fixed Furnishings & E2010 & 62.00\% Fair \\
\hline & Deficiencies: & Surface Deterioration & \\
\hline & Causes: & Deterioration, Physical Damage & \\
\hline & Comments: & casework wearing out & \\
\hline & Movable Furnishings & E2050 & 62.00\% Fair \\
\hline & Deficiencies: & Surface Deterioration & \\
\hline & Causes: & Deterioration & \\
\hline & Comments: & Deficiency: Worn out classroom desks and chairs & \\
\hline & & Corrective Actions: Replace classroom desks and chairs & \\
\hline
\end{tabular}

\section*{Regular Business Meeting}

Meeting Date: 06/08/2021
Submitted By: Sharon James
Submitted For: Edward J Peters

\section*{Information}

\section*{Subject}

Project Award for Spruce Elementary Phase 2 Relocatable Classrooms Project.

\section*{Recommendation}

It is recommended that the Board of Directors authorize the award of a Contract to Pacific Mobile Structures, Inc. (KCDA \#19-255) to relocate five (5) existing relocatable classrooms from Spruce Elementary School, in the amount of \$268,162.96.

\section*{Background}

On April 27, 2021 voters approved the 2021 Levy allowing the second phase of the Spruce Elementary School Replacement project. Before construction can begin, five relocatable classrooms must be moved as soon as possible to meet demolition and construction timelines. At it's February 26, 2019 meeting, the School Board approved the project and preliminary budget for Spruce Elementary School Replacement Phase 2, which includes this move of relocatable classrooms as part of the overall scope. At the June 8, 2021 meeting, the Capital Projects Office is requesting approval of the total project budget for Spruce Phase 2 , which includes the cost of relocating these five portable classrooms.
The scope of work covered by the contract with Pacific Mobile Structures, Inc. is to dismantle, transport and reinstall two (2) existing portable classrooms from Spruce Elementary to Martha Lake Elementary School; and dismantle, transport and reinstall three (3) existing portable classrooms from Spruce Elementary to Woodway Elementary School. If the Board of Directors approves this item, the Capital Projects Office would give notice to proceed on June 28, 2021. This work is expected to be complete by August 16, 2021.
The Capital Projects Office recommends that the referenced contract be awarded to Pacific Mobile Structures, Inc. through KCDA contract \#19-255.

Fiscal Year: 2020-2021
Amount Requested:
Source of Funds: 2021 Levy
Account Code: 1054

\section*{Fiscal Impact:}

Included in Spruce Phase 2 Budget

\section*{Attachments}

\section*{No file(s) attached.}

\section*{Form Review}

Inbox
Capital Projects Director
Superintendent's Office
Form Started By: Sharon James
Final Approval Date: 05/25/2021

Reviewed By Date
Edward Peters 05/24/2021 12:28 PM
Allison Kaufmann 05/25/2021 09:50 AM
Started On: 05/24/2021 11:39 AM

\title{
Regular Business Meeting
}

Meeting Date: 06/08/2021
Submitted By: Sharon James
Submitted For: Edward J Peters

\section*{Information}

\section*{Subject}

Approval of Guaranteed Maximum Price Amendment - Spruce Elementary Phase 2 Addition and Replacement Project, and increase in Total Project Budget

\section*{Recommendation}

It is recommended that the Board of Directors approve the Guaranteed Maximum Price Amendment -Spruce Elementary School Phase 2 Addition and Replacement Project with BNBuilders, Inc, by adopting Resolution 21-20, and increase the Total Project Budget.

\section*{Background}

At its September 13, 2016 regular business meeting, the Board of Directors approved the project and preliminary budget authorization for the replacement of Spruce Elementary School. Originally, the 2014 Bond measure identified the Spruce project as a modernization and addition to increase capacity. Subsequent analysis revealed that modernization was not cost-effective and that current funding might not be adequate to complete the project in one phase. At its January 24, 2017 regular business meeting, the Board of Directors approved Resolution No. 17-01, altering the use of 2014 Bond proceeds to replace Spruce, Lynnwood, and Mountlake Terrace elementary schools. At its June 13, 2017 regular business meeting, the Board of Directors approved the Project and Preliminary Budget Authorization for Phase 1 of the Replacement of Spruce Elementary School.

The District's design and construction team developed a full replacement design and moved ahead with full contract documents for Phase 1 and subsequently Phase 2. Phase 1 constructed a new Commons/Gym/Administration wing on the rear of the existing site. Upon completion Phase 1 gave the school a commons, additional gym and assembly space, a music room, and space for intervention programs, all of which was needed. Phase 2 will construct a new two-story classroom wing addition, outdoor classroom courtyard, and nature play. Once the existing facilities are demolished the west end of the site will provide new site
access, enlarged traffic circulation and parking, playfields, and stormwater detention. The school will move to Former Alderwood Middle School (FAMS) for the duration of Phase 2 construction and move back to the new school upon project completion.

At its November 29, 2016 regular business meeting, the Board of Directors authorized the award of a contract to BNBuilders for General Contractor/Construction Manager services for the replacement of Spruce Elementary School. That contract agreement was structured to allow BNBuilders to proceed with pre-construction consulting services, including design review, cost estimating, value engineering and constructability review, and construction.

At its March 27, 2018 regular business meeting the Board of Directors approved the Guaranteed Maximum Price Amendment 1 to construct Phase 1. Phase 1 Project Acceptance by the Board occurred at its February 23, 2021 regular business meeting.

At its May 25, 2021 regular business meeting the Board of Directors accepted the results of the 2021 Levy. Capital Projects has savings from past projects to start the project. Limited General Obligation Bond to provide further front funding for the Phase 2 addition in accordance with RCW 36.73.070 of the Washington State Revised Code of Washington is in progress.

Proceeding with construction requires the parties to execute Amendment 2 specifying a Guaranteed Maximum Price (GMP), scope of work and schedule. District Capital Projects Office staff recommends approval of the Guaranteed Maximum Price Amendment 2. The Capital Projects Office staff and BNBuilders have negotiated a GMP of \(\$ 28,431,077\) for construction of Phase 2 based on bid documents Bassetti Architects has completed, and the actual bids for the work. The GMP Amendment 2 provides substantial completion of the entire Work not later than July 29, 2022. The cost, scope and schedule features of the GMP proposal are contained in the attached amendment.

The proposed costs are consistent with the total project budget and reflect actual bids BNBuilders received. To verify these costs, the Design Team's estimator prepared independent estimates as the design progressed and the District's construction management advisor reviewed both sets of estimates and their reconciliation. In compliance with OSPI procedures for State Construction Assistance, staff requests that the Board adopt attached Resolution \#21-20, which accepts and approves the GMP Amendment 2. Although Phase 1 was not eligible for State Construction Assistance, Phase 2 is.
Absent unforeseen conditions or District requested scope changes, the GMP Amendment 2 sets a ceiling for the construction cost. If the actual Cost of the

Work plus Fee totals less than the amount covered by the GMP, the agreement provides that savings be returned to the School District.

The District's Capital Projects Office requests increasing the budget authorization for this project to a total of \(\$ 45,500,000\), which is total project budget target set for this project. This total authorization is intended to cover all costs of construction, sales tax, furniture and equipment, ancillary work such as moving relocatable classrooms, complete design and architect's construction administration activities, permits, special inspections and testing, School District project management and all other costs related to this project. This project is funded by the 2021 Levy, Limited General Obligation Bond, State Construction Assistance, and Property Revenue.

Attachment:
GMP Amendment 2 - AIA Document A133 Exhibit A
BNB GMP Proposal, Abbreviated
Resolution 21-20

\section*{Fiscal Impact}
Fiscal Year: 2020-2021

Amount Requested: 45,500,000
Source of Funds: 2021 Levy
Account Code: 1054-2210

\section*{Fiscal Impact:}

\section*{Attachments}

SPE Phase 2 A133-2009
SPE Phase 2 - GMP Proposal
Resolution 21-20 SPE GMP Approval

\section*{Form Review}

Inbox
Capital Projects Director
Superintendent's Office
Form Started By: Sharon James
Final Approval Date: 05/26/2021

\section*{Reviewed By \\ Date}

Edward Peters
Allison Kaufmann

05/25/2021 04:18 PM
05/26/2021 11:01 AM
Started On: 05/25/2021 02:16 PM

\title{
BNB \\ BNBuIlders
}

\section*{2601 4th Ave, Suite 350}

Seattle, WA 98121
P: 206.382.3443
F: 206.382.3440
www.bnbuilders.com


Spruce Elementary Phase 2 Edmonds School District No. 15 Bassetti Architects

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\author{
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Document List 3
Schedule 4
Site Logistics 5
NSS Detailed Estimate 6
GCCM GC's Detailed Estimate 7


\section*{B N B \\ BNBuilders}
\(\begin{array}{ll}\text { PROJECT: } & \text { Spruce Elementary School - Phase } 2 \\ \text { OWNER: } & \text { Edmonds School District }\end{array}\)
ARCHITECT: Bassetti Architects
ISSUE DATE: 5/20/2021

ESTIMATE TYPE: GMP
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline BID PACKAGE NUMBER & BID PACKAGE TITLE & Subcontractor & & BID PACKAGE BUDGET & & D PACKAGE MOUNTS & & T BID ATES EPTED & & L GMP & & \begin{tabular}{l}
ET VS. GMP \\
RIANCE
\end{tabular} \\
\hline BP02.40 & Demolition and Abatement & Dickson & \$ & 873,406 & \$ & 540,916 & \$ & & \$ & 540,916 & \$ & \((332,490)\) \\
\hline BP03.00 & Structures & BNB & \$ & 3,624,458 & \$ & 3,718,535 & \$ & 16,000 & \$ & 3,734,535 & \$ & 110,077 \\
\hline BP07.40 & Siding & Northshore Exteriors Inc. & \$ & 1,421,393 & \$ & 1,126,900 & \$ & 2,000 & \$ & 1,128,900 & \$ & (292,493) \\
\hline BP07.50 & Roofing & Wright Roofing & \$ & 517,698 & \$ & 485,850 & \$ & 3,825 & \$ & 489,675 & \$ & \((28,023)\) \\
\hline BP08.10 & Doors, Frames and Hardware & BNB & \$ & 562,591 & \$ & 560,000 & \$ & - & \$ & 560,000 & \$ & \((2,591)\) \\
\hline BP08.40 & Windows, Glass and Glazing & Pacific Window Systems & \$ & 642,889 & \$ & 712,000 & \$ & 244,000 & \$ & 956,000 & \$ & 313,111 \\
\hline BP14.20 & Elevator & BNB & \$ & 128,717 & \$ & 128,000 & \$ & - & \$ & 128,000 & \$ & (717) \\
\hline BP21.00 & Fire Protection & Fireshield & \$ & 344,911 & \$ & 175,592 & \$ & - & \$ & 175,592 & \$ & \((169,319)\) \\
\hline BP22.00 & Mechanical & Ramsett & \$ & 3,760,298 & \$ & 2,676,000 & \$ & 215,000 & \$ & 2,891,000 & \$ & \((869,298)\) \\
\hline BP26.00 & Electrical & Ewing & \$ & 3,739,104 & \$ & 2,112,000 & \$ & 217,356 & \$ & 2,329,356 & \$ & (1,409,748) \\
\hline BP31.00 & Earthwork and Utilities & Interwest & \$ & 4,082,785 & \$ & 3,675,000 & \$ & - & \$ & 3,675,000 & \$ & \((407,785)\) \\
\hline BP03.10 & Site Concrete \& Specialties & BNB & \$ & 1,295,349 & \$ & 1,328,343 & \$ & - & \$ & 1,328,343 & \$ & 32,994 \\
\hline BP06.40 & Architectural Casework & Frontier & \$ & 904,775 & \$ & 857,385 & \$ & - & \$ & 857,385 & \$ & \((47,390)\) \\
\hline BP09.20 & GWB Assemblies & Northwest Partitions & \$ & 2,618,313 & \$ & 2,225,000 & \$ & 15,500 & \$ & 2,240,500 & \$ & (377,813) \\
\hline BP09.50 & Acoustical Assemblies & Acoustics West LLC & \$ & 424,181 & \$ & 286,000 & \$ & 650 & \$ & 286,650 & \$ & \((137,531)\) \\
\hline BP09.60 & Floor Coverings & Spectra Contract Flooring & \$ & 453,099 & \$ & 356,000 & \$ & - & \$ & 356,000 & \$ & \((97,099)\) \\
\hline BP09.90 & Painting and Coatings & Halili DBA NW Complete Contracting & \$ & 218,794 & \$ & 171,743 & \$ & 3,715 & \$ & 175,458 & \$ & \((43,336)\) \\
\hline BP10.00 & Specialties & BNB & \$ & 404,899 & \$ & 492,767 & \$ & - & \$ & 492,767 & \$ & 87,868 \\
\hline BP32.90 & Irrigation and Landscaping & A-1 Landscaping & \$ & 982,321 & \$ & 949,000 & \$ & - & \$ & 949,000 & \$ & \((33,321)\) \\
\hline & & DIRECT CONSTRUCTION COSTS (DCC) & \$ & 26,999,981 & \$ & 22,577,031 & \$ & 8,046.00 & \$ & 23,295,077 & \$ & \((3,704,904)\) \\
\hline & GLI (Calculated as a \% of the GMP) & 0.90\% & \$ & 291,477 & \$ & 248,411 & \$ & 7,469 & \$ & 255,880 & \$ & \((35,597)\) \\
\hline & Negotiated Support Services & (est detail) & \$ & 1,314,142 & \$ & 1,411,525 & \$ & 33,910 & \$ & 1,445,435 & \$ & 131,293 \\
\hline & Specified General Conditions & (est detail) & \$ & 1,315,838 & \$ & 1,270,613 & \$ & 6,000 & \$ & 1,276,613 & \$ & \((39,225)\) \\
\hline \multicolumn{3}{|r|}{MAXIMUM ALLOWABLE CONTRACT COSTS (MACC)} & \$ & 29,921,438 & \$ & 25,507,579 & \$ & 765,425 & \$ & 26,273,004 & \$ & \((3,648,434)\) \\
\hline \multicolumn{3}{|r|}{MACC CONSTRUCTION CONTINGENCY} & \$ & 1,430,280 & \$ & 1,211,848 & \$ & 37,971 & \$ & 1,249,820 & \$ & \((180,460)\) \\
\hline \multicolumn{3}{|r|}{CONTRACTORS FEE} & \$ & 1,034,607 & \$ & 881,741 & \$ & 26,512 & \$ & 908,253 & \$ & \((126,354)\) \\
\hline \multicolumn{3}{|r|}{GUARANTEEED MAXIMUM PRICE (GMP)} & \$ & 32,386,325 & \$ & 27,601,168 & \$ & 829,909 & \$ & 28,431,077 & \$ & \((3,955,248)\) \\
\hline \multicolumn{3}{|r|}{SALES TAX \(10.50 \%\)} & \$ & 3,400,564 & \$ & 2,898,123 & \$ & 87,140 & \$ & 2,985,263 & \$ & \((415,301)\) \\
\hline \multicolumn{3}{|r|}{TOTAL CONSTRUCTION COST (TCC)} & \$ & 35,786,889 & \$ & 30,499,291 & \$ & 917,049 & \$ & 31,416,340 & \$ & \((4,370,549)\) \\
\hline
\end{tabular}

\section*{PROJECT: Spruce Elementary School - Phase 2 \\ OWNER: Edmonds School Distric \\ ARCHITECT: Bassetti Architects}


\title{
B N B \\ BNBuilders
}

PROJECT: Spruce Elementary Phase 2
OWNER: Edmonds School District No. 15
ESTIMATE TYPE: GMP
ARCHITECT: Bassetti Architects
The GMP is hereby established based upon the \(100 \%\) CD drawings prepared by Bassetti Architects, Addendum \(1-4\), and the following specific clarifications and exclusions found below.

\section*{PROJECT DOCUMENTS}
1. See GMP Section 03 - Document List.

\section*{ALLOWANCES}
2. This GMP includes the following allowance(s) which are included in the Direct Costs of the GMP. Allowances shall be reconciled (increase or decrease) via Owner Change Order.
A. No allowances are included in the GMP.

\section*{ALTERNATES}
3. Alternate pricing is enclosed. See GMP Section 01. Alternate pricing is valid until \(5 / 14 / 21\). We encourage the District to make alternate selections by this date to ensure accepted alternates can be incorporated into the project. Delayed approval may result in additional cost/impacts that are not known and unforeseen at this time.
4. The following Alternates have been accepted and incorporated into the GMP:
A. Alternate \#1 - Fiberglass Windows - \$167,325
B. Alternate \#2 - Classroom Audio - \$85,864
C. Alternate \#4 - Heat Pump - \$239,917
D. Alternate \#5 - Lighting Control - \(\$ 148,060\)
E. Alternate \#6 - Classroom Skylights - \$149,273
5. The following Alternates have been declined and are hereby voided:
A. Alternate \#3 - Not Used
B. Alternate \#7 - BP 22.00 Led MEP Coordination

\section*{UNIT RATES}
6. All Unit Price Rates listed below are direct costs and do not include GC/CM markups. Actual quantities related to unit pricing to be reconciled via change order once the work is fully defined/completed with applicable GC/CM markups.
A. Bid Package 09.60 - Floor Coverings
- Unit Price \#2: Specification Section 090562 remedial floor coating for control of concrete floor moisture in excess of that accepted by flooring manufacturer. Unit of measure: Cost per square foot, assuming minimum of 5,000 square feet.
\$6.70/SF
B. Bid Package 31.00 - Earthwork
- Unit Price \#1: Over-Excavation/Haul/Dispose of unsuitable soils, measured in Bank CY as determined by Geotech Engineer. Express unit rate in \$/BCY.
- Unit Price \#2: Place/compact native fill from site to replace UP \#1
- Unit Price \#3: Import/place structural fill to replace UP \#1 above. Express unit rate in \$/Ton.

\author{
\$30.00/Ton
}

\section*{DIVISION 01 - GENERAL PROJECT REQUIREMENTS/CLARIFICATIONS}
7. This GMP pricing and schedule is based on verbal approval and release of the GMP by \(5 / 14 / 21\) and a full GMP execution by \(6 / 8 / 21\). We require a written Notice to Proceed on or before \(7 / 1 / 21\). Upon verbal acceptance of GMP, BNB will proceed in good faith in anticipation of a Notice to Proceed on \(7 / 1 / 21\). If the project is delayed or cancelled, BNB will request reimbursement for all cost incurred. This includes (but is not limited to) direct costs, Subcontractor costs, mark ups, etc. A delayed Notice to Proceed may result in cost and schedule impacts.
8. This GMP includes a schedule, data date 01/08/21. Work shall commence on or before 07/06/21. The date of Substantial Completion (assuming a \(7 / 6 / 21\) Start) is \(7 / 29 / 2022\). Any delays to the start date will impact the date of Substantial Completion, could result in cost impacts, and will need to be evaluated on a case-by-case basis.
9. Schedule is based on all portables being removed by Owner no later than \(7 / 22 / 21\).
10. Upon the date of Substantial Completion, warranties will commence, Builder's Risk insurance will expire, building operations insurance will be required to be provided by the Owner, and the Owner will assume responsibility for the security of the building/site.
11. Preconstruction costs are included under a separate agreement and are not included within this GMP.
12. We assume that punchlists will be created in an efficient manner with one walk per area/component. Multiple punch lists generated by multiple parties at various times after completion will result in additional costs to the project.
13. We have included the cost of taking progress photos throughout the project (by BNB staff using digital cameras) and will provide digital progress photos at various times during construction as specified. Specialty 'Completion' photos or professional photography is not included.
14. All specified mockups are assumed to be in place.
15. We will maintain a Bluebeam Studio Session or Plangrid (or similar) for "As-Built" conditions relating to Civil, Structural and Architectural elements of the project. These As-Built documents will be submitted at the end of the project along with the As-Built Mechanical, Electrical, Plumbing and Fire Protection (MEPFP) documents. We have excluded a "clean" set of as-built drawings created in CAD at the completion of the project.
16. Bid Addenda 1-4 are included in this GMP.
17. Pricing is based on award of full GMP for all bid packages. Should Owner request any scope breakouts or wish to award any scopes separately, we reserve the right to revise our pricing.
18. We exclude all testing and inspections including special inspections, independent quality assurance inspections, waterproofing inspection, waterproofing warranty inspections, paint/coating inspectors, and all other 3rd party testing and inspections.
19. As requested by the Owner during GMP Negotiation, BNB has included estimated costs associated with whole building air infiltration testing and in place water testing at windows, storefront, and curtainwall assemblies. We have assumed a total of (9) spray testing locations with test procedures described in the Specifications. We have included \(\$ 20,000\) for whole building air infiltration testing and \(\$ 20,000\) for spray testing within the NSS Budget. A total of \(\$ 40,000\) has been added to the NSS budget in the "post bid updates accepted" column within Section 01a - Executive Summary.
20. We have not included cost or manpower loading of the schedule.
21. The cost for utilities, gas, power, and water consumption as well as water discharge for construction are excluded. We assume construction dewatering/storm water will be managed onsite in temporary settling ponds as indicated in SWPPP and SPCC submitted to City of Lynnwood on 4/26/21.
22. The Allowable mark-ups on the project are listed below. The intent is to define how each markup is calculated, what the allowable usage is, and how the final project cost will be substantiated.
A. General Liability Insurance - \(0.9 \%\) - Calculated on total GMP value. This markup is a negotiated rate and is not subject to audit or substantiation.
B. Contractor's Fee - 3.3\% - Calculated on sum of the MACC and the Construction Contingency. This markup is a negotiated rate and is not subject to audit or substantiation. Fee will not be included on Contingency request pricing requests, as the GC/CM Fee is calculated on the total Contingency value in this GMP.
C. Construction Contingency - 5.0\% Calculated on the MACC less SGS's. Total value of Construction Contingency within the GMP is \(\$ 1,275,734\). The Course of Construction Contingency is for the Contractor's exclusive use to cover costs which are properly reimbursable as Costs of the Work, but not for Owner Change Orders, as defined in the Prime Agreement.
D. Builder's Risk Insurance (BRI) - Included within NSS Budget based on estimated value and will be substantiated. All Change Order Proposals will include BRI mark-up at actual percentage calculated on Direct Costs.
E. Washington State Sales Tax - EXCLUDED from GMP. Shown on Executive Summary for Owner budgetary purposes only. WSST will be included with Contractor billings at current rate and paid by the Owner as a pass-through at actual cost.

\section*{BP 02.40 - DEMOLITION \& ABATEMENT}
23. Addenda 1-2 included.
24. Assessments:
A. Environmental assessments are by Owner.
B. Hazardous materials assessments are by Owner.
25. Contaminated site material removal - We specifically exclude all costs associated with abatement, handling, removal, or disposal of additional Hazardous Material (e.g. Lead, Asbestos, PCB's, etc.), in excess of the quantities listed in the Contract Documents. Additional hazardous materials are an unforeseen condition and will result in additional cost and potentially schedule impacts, which shall be reimbursable via an Owner Change Order per the terms of the Prime Agreement.
26. Water remediation - We specifically exclude all costs associated with Handling, Removal, or Disposal of Contaminated water.
27. Any items left in the original existing Spruce Elementary will become the property of the Demolition subcontractor and will be disposed of legally. The new Spruce Elementary Phase 1 is not included in this statement.
28. Pre-Demolition Rodent Control is excluded.

\section*{BP 03.00 - STRUCTURES}
29. Addenda 1-2 included.
30. Fall Protection Anchors - We have included (16) locations as shown on the Contract Documents. We have included supplemental steel as specified by 30/S5.16. If actual number of fall arrest anchors required changes due to code/final design, or Owner/Architect requests the additional costs are to be reconciled via change order, including the costs of any additional support steel.
31. We exclude any injection grouting for concrete crack repair. No allowance has been made for concrete crack repair. All costs associated with concrete crack repair are specifically excluded.
32. No allowance has been made for rain-out slab repair. All costs associated with repair of rain-out slabs are specifically excluded. BNB will notify Owner/Architect of potential inclement weather prior to commencing with a pour and allow BNB/Owner/Architect to determine the best course of action based on the information available. Should weather/rainout delay the slab pours, any cost and schedule impacts will need to be reimbursed via change order.
33. We have excluded any work associated with overlaying floors for flooring that is not compatible with the specified FF \& FL requirements. We have assumed the following values for FF \& FL:
A. Slab on Grade: As indicated in Specification 0330 00-3.9A
B. Slab on Metal Deck: All FF \& FL criteria for slabs on metal deck are excluded.
34. We have included FF/FL Testing at slab on grade only.
35. We have assumed that the Owner will provide for timely special inspections and test results to maintain the construction schedule.
36. We have not included the cost for any architectural or specialty exposed concrete finishes, unless specified in the Contract Documents. A Class B finish has been assumed for all exposed formed surfaces. This level of finish includes the following: patch voids larger than \(3 / 4\) " wide or \(1 / 2\) " deep, remove projections larger than \(1 / 4\) ", and patch tie holes.
37. We have included hard troweled or broomed finishes at slab on grade and slab on metal deck as required by subsequent finishes.
38. We have not included pointing or de-finning of concealed concrete surfaces.
39. We specifically exclude all AESS requirements as directed via Addendum \#1.
40. We have assumed that the metal deck, as specified in the documents, does not need to be shored to support the wet weight of the concrete.
41. We have included NMBS Open web steel joists per Addendum \#3 Substitution Request. Open web steel joists have an extended lead time and are schedule critical. Owner and Architect shall expedite Submittal approval and must return an approved submittal no later than \(6 / 4 / 21\). Delayed approvals will result in impact to the Project Schedule and additional cost.
42. Structural steel at elevator hoist way is included per Contract Documents. We assume this has been coordinated with BP 14.20 - Elevator. Any additional support elements required by Elevator manufacturer will result in additional cost and require an Owner Change Order.

\section*{BP 03.10 - SITE CONCRETE \& SPECIALTIES}
43. Addenda 1-4 included.

\section*{BP 06.40 - ARCHITECTURAL CASEWORK}
44. Addenda 1-4 included.

\section*{BP 07.40 - METAL WALL PANELS}
45. Addenda 1-2 included.

BP 07.50 - ROOFING
46. Addenda 1-2 included.

BP 08.10 - DOORS, FRAMES, \& HARDWARE
\(47 . \quad\) Addenda 1-2 included.

\section*{BP 08.40 - WINDOWS, GLASS \& GLAZING}
48. Addenda 1-2 included.

BP 09.20 - GWB ASSEMBLIES
49. Addenda 1-4 Included.

\section*{BP 09.50 - ACOUSTICAL ASSEMBLIES}
50. Addenda 1-2 Included.

\section*{BP 09.60 - FLOOR COVERNINGS}
51. Addenda 1-4 Included.
52. Specification Section 090562 - Remedial Floor Coating for control of concrete floor moisture in excess of that accepted by flooring manufacturer. If required, we will cover up to \(\$ 15,000\) from Construction Contingency. Any cost in excess of \(\$ 15,000\) will be reimbursable via Owner Change Order at Unit Rate established per Bid Package 09.60 - Floor Covering Unit Rate \#2.

\section*{BP 09.90 - PAINTING \& COATINGS}
53. Addenda 1-4 Included.

\section*{BP 10.00 - SPECIALTIES}
54. Addenda 1-4 included.

\section*{BP 14.20 - ELEVATOR}
55. Addenda 1-2 included.
56. We have included (1) Otis, HydroFit Hydraulic Passenger Elevator, per project Specifications and revisions noted herein:
A. Otis requires a \(5^{\prime} 0\) " deep pit in lieu of 4 ' 0 " shown in the Contract Documents in order to accommodate the requirements of BP 14.20 - Elevator. We have included the additional pit depth in the GMP and this change will be documented via RFI.
B. Cab height shall be 7'-9".
C. We have included OTIS ERU Battery rescue unit. Note this is for emergency lowering to release trapped passenger only and is NOT emergency power.
D. Standard 4-LED Canopy ceiling is included.
E. Billing requirements - Elevator manufacturer requires \(35 \%\) of the Contract value being invoiced at notice to proceed and due before order of equipment from factory. We will include this amount in our first pay application.

\section*{BP 21.00 - FIRE PROTECTION}
57. Addenda 1-2 included.

\section*{BP 22.00 - MECHANICAL. \& PLUMBING}
58. Addenda 1-2 included.
59. Commissioning Assistance has been included. The Commissioning Agent/Authority is excluded and shall be provided by the Owner.

\section*{BP 26.00 - ELECTRICAL}
60. Addenda 1-2 included.
61. Commissioning Assistance has been included. The Commissioning Agent/Authority is excluded and shall be provided by the Owner.
62. Any changes or additions to the designed Fire Alarm, Exit and Egress Lighting by the AHJ are to be reconciled via Change Order and are not included in the GMP.

\section*{BP 31.00 - EARTHWORK AND UTILITIES}
63. Addenda 1-2 included.
64. We specifically exclude all work associated with wetland mitigation and/or modifications.
65. We have excluded all costs associated with over-excavation and/or import of material to replace unsuitable soils encountered on this site. If required, cost will be reconciled via Owner Change Order at Unit Rate established per Bid Package 31.00 - Earthwork and Utilities - Unit Prices 1, 2, and 3.
66. We specifically exclude any costs associated with contaminated soils and/or Underground storage tanks that are not identified on the Contract Documents. If contaminated soils are encountered, we will need to evaluate the soil classification before providing a price for removal. Unit Rate \#1 is not intended to be used for Contaminated Soils.
67. We exclude any import/export required to achieve final/sub grades that exceeds the requirements of the Contract Documents.
68. Relocation of existing utilities or reconfiguring new utilities around existing utilities is excluded unless specifically shown on the Contract Documents.
69. Any and all cost associated with the repair of existing utilities, structures, detention facilities, etc. that are indicated to remain are excluded.
70. We exclude design responsibility for finish grades (i.e. ADA, surface water management, etc.).
71. We exclude all additional cost and/or schedule impacts associated with underground obstructions or other unforeseen conditions.
72. We exclude off-gassing mitigation (e.g. radon, methane, etc.).

\section*{BP 32.90 - LANDSCAPING \& IRRIGATION}
73. Addenda 1-4 included.

\section*{NEGOTIATED SUPPORT SERVICES}
74. See GMP Section 06 for detailed NSS estimate.
75. We have included temporary heat for GWB taping and finishes only. Temp heat prior to, and for any other purpose, is not included.
76. Builders Risk Insurance will be included as a component of the NSS. We will solicit a BRI policy upon acceptance of the final GMP.
77. The Negotiated Support Services is for items BNBuilders will manage or perform on the project including, but not limited to, surveying, hoisting, safety, temp facilities, \& clean-up. These costs are to be reimbursed by the Owner on a direct cost basis and any overages/savings will be reconciled via Owner Change Order. BNBuilders reserves the right to re-allocate budgets between line items in NSS .
78. NSS Labor will be charged and paid at the mutually agreed rates as established below. These rates were audited prior to execution of the GMP. The base hourly rates and fringe benefits are subject to adjustment (increase or decrease) pending the results of any subsequent collective bargaining agreements. Most Union agreements expire 5/31/21. All other components (besides base hourly rate and fringe benefits) were audited during GMP negotiation and are fixed and not subject to further adjustment throughout the duration of the Project.
79. All equipment/material cost associated with NSS personnel (vehicle, cell phone, computer, and gas/maintenance for vehicles) will be charged to designated cost codes within NSS and this cost is NOT included in the labor rates below.
\begin{tabular}{|l|c|c|c|}
\hline \multicolumn{1}{|c|}{ Classification } & \begin{tabular}{c} 
Straight Time \\
\((\$ / \mathrm{HR})\)
\end{tabular} & \begin{tabular}{c} 
Overtime \\
\((\$ / \mathrm{HR})\)
\end{tabular} & \begin{tabular}{c} 
Double Time \\
\((\$ / \mathrm{HR})\)
\end{tabular} \\
\hline Carpenter - Sr. Foreman & \(\$ 85.32\) & \(\$ 116.26\) & \(\$ 147.21\) \\
\hline Carpenter - Foreman & \(\$ 80.87\) & \(\$ 109.60\) & \(\$ 138.32\) \\
\hline Carpenter - Journeyman - Lead & \(\$ 76.59\) & \(\$ 103.77\) & \(\$ 130.95\) \\
\hline Carpenter - Journeyman & \(\$ 74.37\) & \(\$ 100.44\) & \(\$ 126.51\) \\
\hline Laborer - Sr. Foreman & \(\$ 77.66\) & \(\$ 107.49\) & \(\$ 137.33\) \\
\hline Laborer - Foreman & \(\$ 66.72\) & \(\$ 91.09\) & \(\$ 115.46\) \\
\hline Laborer - Journeyman - Lead & \(\$ 64.31\) & \(\$ 88.08\) & \(\$ 111.84\) \\
\hline Laborer - Journeyman & \(\$ 62.09\) & \(\$ 84.74\) & \(\$ 107.40\) \\
\hline Surveyor - Chief (incl. equip) & \(\$ 210.15\) & \(\mathrm{~N} / \mathrm{A}\) & \(\mathrm{N} / \mathrm{A}\) \\
\hline Surveyor (incl. equip) & \(\$ 166.05\) & \(\mathrm{~N} / \mathrm{A}\) & \(\mathrm{N} / \mathrm{A}\) \\
\hline
\end{tabular}
80. The following NSS budget adjustments have been mutually agreed during the GMP Negotiation (see executive summary - NSS Post Bid Updates Accepted Column):
A. Add - \(\$ 6.445\) - FAM Cased Openings
B. Add - \(\$ 3,590\) - Builder's Risk Associated with Accepted Alternates
C. Add - \(\$ 20,000\) - Whole Building Air Infiltration Testing
D. Add - \$20,000 - Spray testing (9 locations)
E. Deduct \$6,000 - Labor Rate negotiation. Add corresponding amount to SGC's
F. Deduct \$10,125 - Safety Awards/Lunches/Recognition.

\section*{Former Alderwood Middle Work}
81. The GMP includes Owner requested work at Former Alderwood Middle School as follows. Detailed pricing is included in GMP Section 09 - Post Bid Pricing.
A. (4) Cased Opening Infills - Framing, insulation, GWB, paint and rubber base. Budget is carried in NSS Category.

\section*{PROJECT EXCLUSIONS}

The following is a listing of items that should be considered by the end user but have been excluded from our GMP for this project.
82. We exclude Preconstruction, bidding and GMP preparation costs in this GMP (under separate Agreement).
83. Any and all costs associated with design fees. Including, but not limited to, Civil, Architectural, Structural, Mechanical, Fire Protection, Fire Alarm or associated sub-consultants. However, we do include costs associated with delegated design scope of work as specified in the Contract Documents.
84. Deferred Submittals/Delegated Design other than items identified in the Contract Documents.
85. Building envelope consultant fees and/or costs associated with project document or detail revisions resulting from exterior enclosure consultant review comments.
86. Commissioning Agent fees.
87. All permits and associated fees/bonds. This specifically includes, but is not limited to, building, demolition, mechanical, electrical, plumbing, grading, etc. BNBuilders will coordinate the required inspections with authorities having jurisdiction. We have only included the cost of Permits associated with Delegated Design Scope/Deferred Submittals and permits related to Construction Means and Methods.
88. Utility Company or jurisdictional authority charges and fees including, but not limited to, water/sewer access charges; setting of water meter and the cost of the water meter itself; storm-water discharge fees; natural gas service design; natural gas service to the site from point of origin and costs associated with purchase and setting of the gas meter, temporary or permanent; electrical primary service design; electrical service to site from point of origin, communications provider (Centurylink or other) design, agreement fees or cabling/terminations/testing installation costs.
89. Utility consumption charges (e.g. water, natural gas, electricity, sewer, etc.). All utility consumption costs shall be paid for by the Owner.
90. Special Testing and Inspection services (e.g. geotechnical, concrete, steel, paint/coating, etc).
91. Building commissioning beyond standard Test and Balance based on designed limits and/or costs associated with project document or detail revisions resulting from commissioning consultant review comments.
92. Unreferenced details, or blanket document notes without indicated quantities (i.e. as required, as necessary, etc).
93. Procurement, handling, distribution, or installation of Owner Furnished and Installed (OFOI) Fixtures Furnishings \& Equipment.
94. We exclude all classroom/office accessories, furnishings, institutional/systems furniture, and other furnishings. These are anticipated to be provided as part of the Owner FF\&E package.
95. We exclude the pursuit or cost associated with obtaining supplemental WSSP points beyond what is indicated on the WSSP Scorecard.
96. We exclude all costs for a project Arborist and assume these are borne by the Owner or the Architect.
97. We exclude all domestic/Buy-American clauses or requirements. If required, these will be an added cost.
98. We exclude noise mitigation, or any schedule restrictions related to the school schedule.
99. We specifically exclude rodent, termite, and or vegetation control treatments.
100. We exclude Washington State and local Sales Tax.

\section*{END OF GMP NARRATIVE}

\title{
B N B \\ BNBuilders
}

DRAWINGS
SHEET NUMBER
SHEET NAME

DATE
GENERAL
\begin{tabular}{llr} 
G0. 00 & COVER SHEET & \(1 / 15 / 2021\) \\
G0. 02 & DRAWING INDEX & \(1 / 15 / 2021\) \\
1 & TOPOGRAPHICAL SURVEY & \(11 / 19 / 2019\) \\
2 & TOPOGRAPHICAL SURVEY & \(6 / 16 / 2017\) \\
3 & TOPOGRAPHICAL SURVEY & \(6 / 16 / 2017\) \\
4 & TOPOGRAPHICAL SURVEY & \(6 / 16 / 2017\) \\
5 & TOPOGRAPHICAL SURVEY & \(6 / 16 / 2017\) \\
6 & TOPOGRAPHICAL SURVEY & \(6 / 16 / 2017\) \\
HM1.0 & REGULATED BUILDING MATERIALS & \(2 / 7 / 2020\) \\
HM1.1 & LOCATION OF MATERIALS - A BUILDING & \(2 / 7 / 2020\) \\
HM1.2 & LOCATION OF MATERIALS - B BUILDING & \(2 / 7 / 2020\) \\
HM1.3 & LOCATION OF MATERIALS - C BUILDING & \(2 / 7 / 2020\) \\
HM1.4 & LOCATION OF MATERIALS - D BUILDING & \(2 / 7 / 2020\) \\
HM1.5 & LOCATION OF MATERIALS - PIPING AND UNDERGROUND STORAGE TANKS \\
HM1.6 & CEILING CONTAMINATION & \(2 / 7 / 2020\) \\
& & \(2 / 7 / 2020\)
\end{tabular}

CODE
G1. 10 CODE ANALYSIS \(1 / 15 / 2021\)
G1. 12 ENVELOPE CALCULATIONS \(1 / 15 / 2021\)
G2. 10 CODE PLAN - FIRST FLOOR \(1 / 15 / 2021\)
G2. 20 CODE PLAN - SECOND FLOOR \(1 / 15 / 2021\)
CIVIL
C1.00
C2.00
C2.01
C2.02
C2.03
C3.00
C3.01
C3.02
C3.03
C3.04
C3.05
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C7.06
C7.07
C7.08
C8.00
C8.01
\begin{tabular}{ll} 
COVER SHEET & \(1 / 15 / 2021\) \\
DEMOLITION PLAN & \(1 / 15 / 2021\) \\
DEMOLITION PLAN & \(1 / 15 / 2021\) \\
DEMOLITION PLAN & \(1 / 15 / 2021\) \\
DEMOLITION PLAN & \(1 / 15 / 2021\) \\
TESC PLAN & \(1 / 15 / 2021\) \\
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TESC PLAN & \(1 / 15 / 2021\) \\
TESC DETAILS & \(1 / 15 / 2021\) \\
TESC DETAILS & \(1 / 15 / 2021\) \\
GRADING PLAN & \(1 / 15 / 2021\) \\
GRADING PLAN & \(1 / 15 / 2021\) \\
GRADING PLAN & \(1 / 15 / 2021\) \\
GRADING PLAN & \(1 / 15 / 2021\) \\
GRADING PROFILES & \(1 / 15 / 2021\) \\
GRADING ENLARGEMENT & \(1 / 15 / 2021\) \\
DRAINAGE PLAN & \(1 / 15 / 2021\) \\
DRAINAGE PLAN & \(1 / 15 / 2021\) \\
DRAINAGE PLAN & \(1 / 15 / 2021\) \\
DRAINAGE PLAN & \(1 / 15 / 2021\) \\
DRAINAGE DETAILS & \(1 / 15 / 2021\) \\
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DRAINAGE DETAILS & \(1 / 15 / 2021\) \\
DRAINAGE DETAILS & \(1 / 15 / 2021\) \\
UTILITY PLAN & \(1 / 15 / 2021\) \\
UTILITY PLAN & \(1 / 15 / 2021\) \\
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UTILITY PLAN & \(1 / 15 / 2021\) \\
UTILITY DETAILS & \(7 / 25 / 2019\) \\
UTILITY DETAILS & \(7 / 25 / 2019\) \\
UTILITY CROSSING PLAN & \(1 / 15 / 2021\) \\
HORIZONTAL CONTROL AND PAVING PLAN & \(1 / 15 / 2021\) \\
HORIZONTAL CONTROL AND PAVING PLAN & \(1 / 15 / 2021\) \\
HORIZONTAL CONTROL AND PAVING PLAN & \(1 / 15 / 2021\) \\
HORIZONTAL CONTROL AND PAVING PLAN & \(1 / 15 / 2021\) \\
PAVING DETAILS & \(7 / 25 / 2019\) \\
PAVING DETALS & \(7 / 25 / 2019\) \\
PAVING DETAILS & \(7 / 25 / 2019\) \\
SEAL COAT LIMITS & \(1 / 15 / 2021\) \\
SEAL COAT LIMITS & \(1 / 15 / 2021\) \\
FRONTAGE IMPROVEMENTS (SOUTH) & \(1 / 15 / 2021\) \\
FRONTAGE IMPROVEMENTS (NORTH) AND DETAILS & \(1 / 15 / 2021\) \\
& \\
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\end{tabular}

FRONTAGE IMPROVEMENTS (NORTH) AND DETAILS

\section*{LANDSCAPE}

L1.00
L1.11
L1.12
L1.13
L1.14
L1.21
L1.22
L1.23
L1.24
L1.30
L1.40
L3.10
L3.20
L3.21
L3.22
L3.23
L4.00
L4. 10
L4.20
L5.00
L5.01
L5.11
L5.12
L5.13
L5.14
L5.20
L5.21

\section*{L5.30}

\section*{DEMOLITION}

AD2. 02

\section*{ARCHITECTURAL}

AO. 10
A1. 10
A1.20
A1.30
A2.11
A2.11D
A2.11S
A2.21
A2.21D
A2.21S
A2.31
A2.32
A2.50
A3. 02
A3. 03
A3. 12
A3. 13
A4. 04
A4. 05
A4. 06
A4. 07
A5. 11
A5. 12
A5.24
A5. 25
A5.26
A5.27
A5. 28
A5.52
A5.53
A5.54
A5.55
A5.61
A5.62
A6.11
A6. 21
A6.22
\begin{tabular}{lr} 
LANDSCAPE SITE PLAN & \(2 / 7 / 2020\) \\
LANDSCAPE MATERIALS PLAN - NW & \(2 / 7 / 2020\) \\
LANDSCAPE MATERIALS PLAN - NE & \(2 / 7 / 2020\) \\
LANDSCAPE MATERIALS PLAN - SW & \(2 / 7 / 2020\) \\
LANDSCAPE MATERIALS PLAN - SE & \(2 / 7 / 2020\) \\
LANDSCAPE LAYOUT PLAN - NW & \(2 / 7 / 2020\) \\
LANDSCAPE LAYOUT PLAN - NE & \(2 / 7 / 2020\) \\
LANDSCAPE LAYOUT PLAN - SW & \(2 / 7 / 2020\) \\
LANDSCAPE LAYOUT PLAN - SE & \(2 / 7 / 2020\) \\
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LAYOUT ENLARGEMENT PLAN & \(2 / 7 / 2020\) \\
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DETAILS & \(2 / 7 / 2020\) \\
DETAILS & \(2 / 7 / 2020\) \\
DETAILS & \(2 / 7 / 2020\) \\
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IRRIGATION PLAN & \(2 / 7 / 2020\) \\
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PLANTING SCHEDULE & \(2 / 7 / 2020\) \\
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PLANTING PLAN - SW & \(2 / 7 / 2020\) \\
PLANTING PLAN - SE & \(2 / 7 / 2020\) \\
PLANTING DETAILS & \(2 / 7 / 2020\) \\
PLANTING DETAILS & \(2 / 7 / 2020\) \\
SOIL AMENDMENT PLAN & \(2 / 7 / 2020\)
\end{tabular}

DEMO PLANS 1/15/2021
\begin{tabular}{ll} 
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OVERALL FIRST FLOOR PLAN & \(1 / 15 / 2021\) \\
OVERALL SECOND FLOOR PLAN & \(1 / 15 / 2021\) \\
OVERALL ROOF PLAN & \(1 / 15 / 2021\) \\
FIRST FLOOR PLAN & \(1 / 15 / 2021\) \\
DIMENSION - FIRST FLOOR PLAN & \(1 / 15 / 2021\) \\
FIRST FLOOR SLAB PLAN & \(1 / 15 / 2021\) \\
SECOND FLOOR PLAN & \(1 / 15 / 2021\) \\
DIMENSION - SECOND FLOOR PLAN & \(1 / 15 / 2021\) \\
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ELEVATIONS & \(1 / 15 / 2021\) \\
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BUILDING SECTIONS & \(1 / 15 / 2021\) \\
WALL SECTIONS & \(1 / 15 / 2021\) \\
WALL SECTIONS & \(1 / 15 / 2021\) \\
WALL SECTIONS & \(1 / 15 / 2021\) \\
WALL SECTIONS & \(1 / 15 / 2021\) \\
WINDOW / LOUVER TYPES & \(1 / 15 / 2021\) \\
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EXTERIOR DETAILS & \(1 / 15 / 2021\) \\
EXTERIOR DETAILS & \(1 / 15 / 2021\) \\
EXTERIOR PLAN DETAILS & \(1 / 15 / 2021\) \\
EXTERIOR PLAN DETAILS & \(1 / 15 / 2021\) \\
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ROOF DETAILS & \(1 / 15 / 2021\) \\
ROOF DETAILS & \(1 / 15 / 2021\) \\
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SEISMIC JOINT COVER DETAILS & \(1 / 15 / 2021\) \\
ENLARGED TOILET PLANS AND ELEVATIONS & \(1 / 15 / 2021\) \\
ENLARGED STAIR PLANS & \(1 / 15 / 2021\) \\
ENLARGED STAIR PLANS & \(1 / 15 / 2021\) \\
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\end{tabular}
\begin{tabular}{|c|c|c|}
\hline A6.23 & ENLARGED STAIR \& SHIP LADDER PLANS & 1/15/2021 \\
\hline A6.24 & ENLARGED ELEVATOR PLANS & 1/15/2021 \\
\hline A6.26 & STAIR \& RAILING DETAILS & 1/15/2021 \\
\hline A6.28 & STAIR \& RAILING DETAILS & 1/15/2021 \\
\hline A7.08 & INTERIOR ELEVATIONS - FIRST FLOOR CORRIDOR & 1/15/2021 \\
\hline A7.09 & INTERIOR ELEVATIONS - FIRST FLOOR CORRIDOR & 1/15/2021 \\
\hline A7.10 & INTERIOR ELEVATIONS - ADMIN & 1/15/2021 \\
\hline A7.11 & INTERIOR ELEVATIONS - CLASSROOMS & 1/15/2021 \\
\hline A7.12 & INTERIOR ELEVATIONS - CLASSROOMS & 1/15/2021 \\
\hline A7.13 & INTERIOR ELEVATIONS - CLASSROOMS & 1/15/2021 \\
\hline A7.14 & INTERIOR ELEVATIONS - CLASSROOMS & 1/15/2021 \\
\hline A7.15 & INTERIOR ELEVATIONS - LEARNING SUPPORT & 1/15/2021 \\
\hline A7.16 & INTERIOR ELEVATIONS - FLEX / SMALL GROUP & 1/15/2021 \\
\hline A7.17 & INTERIOR ELEVATIONS - FLEX / SMALL GROUP & 1/15/2021 \\
\hline A7.18 & INTERIOR ELEVATIONS - LIBRARY & 1/15/2021 \\
\hline A7.19 & INTERIOR ELEVATIONS - SECOND FLOOR CORRIDOR & 1/15/2021 \\
\hline A8.11 & REFLECTED CEILING PLAN - FIRST FLOOR & 1/15/2021 \\
\hline A8.21 & REFLECTED CEILING PLAN - SECOND FLOOR & 1/15/2021 \\
\hline A8.50 & REFLECTED CEILING PLAN - RENOVATION & 1/15/2021 \\
\hline A9.11 & ASSEMBLY DTLS/INTERIOR PARTITION SCHEDULE & 1/15/2021 \\
\hline A9.21 & FLOOR / ROOF \& EXTERIOR PARTITION SCHEDULES & 1/15/2021 \\
\hline A9.31 & DOOR AND RELITE TYPE SCHEDULE & 1/15/2021 \\
\hline A9.42 & INTERIOR OPENING DETAILS & 1/15/2021 \\
\hline A9.43 & INTERIOR OPENING DETAILS & 1/15/2021 \\
\hline A9.51 & INTERIOR DETAILS & 1/15/2021 \\
\hline A9.52 & INTERIOR DETAILS & 1/15/2021 \\
\hline A9.71 & CEILING DETAILS & 1/15/2021 \\
\hline A9.81 & CASEWORK TYPES \& DETAILS & 1/15/2021 \\
\hline A9.82 & CASEWORK DETAILS & 1/15/2021 \\
\hline A10.01 & SIGNAGE TYPES & 1/15/2021 \\
\hline A10.02 & SIGNAGE SCHEDULE & 1/15/2021 \\
\hline A10.11 & FIRST FLOOR FINISH \& SIGNAGE PLAN & 1/15/2021 \\
\hline A10.21 & SECOND FLOOR FINISH \& SIGNAGE PLAN & 1/15/2021 \\
\hline \multicolumn{3}{|l|}{STRUCTURAL} \\
\hline S1.04 & GENERAL STRUCTURAL NOTES & 1/15/2021 \\
\hline S1.05 & GENERAL STRUCTURAL NOTES & 1/15/2021 \\
\hline S2.11 & FOUNDATION PLAN & 1/15/2021 \\
\hline S2.21 & SECOND FLOOR FRAMING PLAN & 1/15/2021 \\
\hline S2.31 & ROOF FRAMING PLAN & 1/15/2021 \\
\hline S2.41 & MECHANICAL PLATFORM ROOF FRAMING PLAN & 1/15/2021 \\
\hline S3.04 & TYPICAL CONCRETE DETAILS & 1/15/2021 \\
\hline S3.05 & FOUNDATION DETAILS & 1/15/2021 \\
\hline S3.06 & BRACED FRAME FOUNDATION DETAILS & 1/15/2021 \\
\hline S5.11 & TYPICAL METAL DECK DETAILS & 1/15/2021 \\
\hline S5.12 & TYPICAL STEEL DETAILS & 1/15/2021 \\
\hline S5.13 & FLOOR FRAMING DETAILS & 1/15/2021 \\
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\hline S5.15 & ROOF FRAMING DETAILS & 1/15/2021 \\
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\hline S5.17 & STAIR PLANS AND DETAILS & 1/15/2021 \\
\hline S6.04 & BRACED FRAME ELEVATIONS & 1/15/2021 \\
\hline S6.05 & BRACED FRAME DETAILS & 1/15/2021 \\
\hline S6.06 & BRACED FRAME DETAILS & 1/15/2021 \\
\hline S6.07 & BRACED FRAME DETAILS & 1/15/2021 \\
\hline S7.02 & TYPICAL METAL STUD DETAILS & 1/15/2021 \\
\hline S7.03 & TYPICAL METAL STUD DETAILS & 1/15/2021 \\
\hline \multicolumn{3}{|l|}{MECHANICAL} \\
\hline M0. 01 & MECHANICAL LEGEND & 1/15/2021 \\
\hline M0.02 & MECHANICAL ABBREVIATIONS AND GENERAL NOTES & 1/15/2021 \\
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WATER DISTRIBUTION
1/15/2021
SANITARY SEWERAGE
1/15/2021
STORM UTILITY DRAINAGE 1/15/2021
SUBDRAINAGE 1/15/2021

Addendum \#2 - Complete 3/25/2021
Addendum \#3-Complete
4/19/2021
Addendum \#4 - Complete
4/28/2021

\title{
B N B \\ BNBuilders
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\title{
Spruce Elementary School Phase 2 Current
}


Collaborative People, Progressive Builders Page 2 of 14
Actual Work Review / Approve Fire Sprinkler Subbmitta

\title{
Spruce Elementary School Phase 2 Current
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\title{
Spruce Elementary School Phase 2 Current
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\title{
Spruce Elementary School Phase 2 Current
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2601 FOURTH AVENUE, SUITE 350

BNBuilders


\title{
Spruce Elementary School Phase 2 Current
}

BNBuilders


Spruce Elementary School Phase 2 Current


\section*{BNB}

BNBuilders


Spruce Elementary School Phase 2 Current
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Activity ID} & \multirow[t]{2}{*}{Activity Name} & \multirow[t]{2}{*}{Original
Duration} & \multirow[t]{2}{*}{Start} & \multirow[t]{2}{*}{Finish} & & \multicolumn{12}{|c|}{2021} & \multicolumn{8}{|c|}{2022} \\
\hline & & & & & Dec & Jan & Feb & Mar & Apr & May & Jun & Jul & Aug & Sep & Oct & Nov & Dec & Jan & Feb & Mar & Apr & May & Jun & Jul & Aug \\
\hline A3070 & OH Sprink Rough-ln - L1 & 10 & 12/14/21 & 12/27/21 & & & & & & & & & & & & & \(\square\) & OH Sprin & Roug & n-L1 & & & & & \\
\hline A3090 & Wall Framing-L1 & 15 & 12/14/21 & 01/03/22 & & & & & & & & & & & & & & Wa & m & & & & & & \\
\hline A2760 & OH Duct Rough-In-L1 & 10 & 12/21/21 & 01/03/22 & & & & & & & & & & & & & & \[
\mathrm{OH}
\] &  & In - L1 & & & & & \\
\hline A5080 & OH Chilled Water - L1 & 5 & 12/23/21 & 12/29/21 & & & & & & & & & & & & & & OH Chill & Wate & & & & & & \\
\hline A6290 & Sprink Hydro Test-L1 & 2 & 12/28/21 & 12/29/21 & & & & & & & & & & & & & & Sprink & dro Te & L1 & & & & & \\
\hline A6280 & Hydronic Pipe Testing - L1 & 2 & 12/30/21 & 12/31/21 & & & & & & & & & & & & & & Hydron & Pipe \(T\) & ting - L1 & & & & & \\
\hline A5090 & In-Wall Electrical Rough-In - L1 & 10 & 01/04/22 & 01/17/22 & & & & & & & & & & & & & & \(\square\) & all & rical Ro & -n & & & & \\
\hline A6250 & Duct Pressure Test-L1 & 2 & 01/04/22 & 01/05/22 & & & & & & & & & & & & & & \[
\square \mathrm{Du}
\] & & tt - L1 & & & & & \\
\hline A6310 & Install Backing - L1 & 10 & 01/04/22 & 01/17/22 & & & & & & & & & & & & & & \(\square \mathrm{I}\) & all Ba & ng - L1 & & & & & \\
\hline A5130 & OH Duct / Pipe Insulation - L1 & 10 & 01/06/22 & 01/19/22 & & & & & & & & & & & & & & \(\square\) & Duct & ipe Insula & -L & & & & \\
\hline A3080 & OH Electrical Rough-In - L1 & 15 & 01/13/22 & 02/02/22 & & & & & & & & & & & & & & \(\square\) & OH & ctrical R & ugh- & & & & \\
\hline A5110 & In-Wall MEP Inspections-L1E & 1 & 01/18/22 & 01/18/22 & & & & & & & & & & & & & & 11 & Wa & Inspe & ns - L & & & & \\
\hline A5120 & Matterport and Insulate Walls - L1E & 5 & 01/19/22 & 01/25/22 & & & & & & & & & & & & & & & & tand & late W & -L1E & & & \\
\hline A5140 & Soffit Framing -L1 & 10 & 01/20/22 & 02/02/22 & & & & & & & & & & & & & & & Soff & raming & & & & & \\
\hline A3240 & OH Low Volt Rough-In - L1 & 10 & 01/27/22 & 02/09/22 & & & & & & & & & & & & & & & OH & Ow Volt & ough-In &  & & & \\
\hline A3100 & In-Wall Plumbing Rough-In - L1 & 10 & 02/10/22 & 02/23/22 & & & & & & & & & & & & & & & \(\square\) & n-Wall P & mbing & ough-In & & & \\
\hline A5100 & In-Wall MEP Inspections - L1W & 1 & 02/24/22 & 02/24/22 & & & & & & & & & & & & & & & & n-Wall & PIn & tions - Li & & & \\
\hline A3230 & Matterport and Insulate Walls - Liw & 5 & 02/25/22 & 03/03/22 & & & & & & & & & & & & & & & & Mat & & sulate & alls - Liw & & \\
\hline A4800 & VAV Install - L1 & 1 & 03/02/22 & 03/02/22 & & & & & & & & & & & & & & & & VAV Ins & all - L1 & & & & \\
\hline Finishes & & 95 & 03/02/22 & 07/12/22 & & & & & & & & & & & & & & & & & & & & & \\
\hline A2780 & GWB Hang Tape \& Finish - Liw & 12 & 03/02/22 & 03/17/22 & & & & & & & & & & & & & & & & GW & \(B\) Hang & ape \& Fin & sh-L1W & & \\
\hline A3060 & Prime and First Coat-L1W & 5 & 03/18/22 & 03/24/22 & & & & & & & & & & & & & & & & \(\square\) & ime & First C & -L1W & & \\
\hline A3150 & Polished Slab-L1W (nights) & 5 & 03/18/22 & 03/24/22 & & & & & & & & & & & & & & & & \(\square\) & olish & lab L1 & (nights) & & \\
\hline A3130 & Ceiling Grids - L1W & 5 & 03/25/22 & 03/31/22 & & & & & & & & & & & & & & & & & Ceiling & Grids - Liw & & & \\
\hline A4980 & MEP Drops into Grid - L1W & 5 & 04/01/22 & 04/07/22 & & & & & & & & & & & & & & & & & MEP & brops into & Grid-Liw & & \\
\hline A4990 & Ceiling Cover Inspection - L1W & 1 & 04/08/22 & 04/08/22 & & & & & & & & & & & & & & & & & I Ceill & Cover in & spection & 1w & \\
\hline A3140 & ACT Install - L1W & 5 & 04/11/22 & 04/15/22 & & & & & & & & & & & & & & & & & \(\square\) & Install -L & 1w & & \\
\hline A3170 & Casework-L1W & 8 & 04/18/22 & 04/27/22 & & & & & & & & & & & & & & & & & & Casework & L1w & & \\
\hline A5000 & Ceiling Fan Install - L1W & 2 & 04/18/22 & 04/19/22 & & & & & & & & & & & & & & & & & 0 & iling Fan & nstall - L1 & & \\
\hline A5020 & Lighting - L1w & 5 & 04/28/22 & 05/04/22 & & & & & & & & & & & & & & & & & & Lighting & -L1W & & \\
\hline A3630 & Wall Coverings-L1W & 5 & 04/28/22 & 05/04/22 & & & & & & & & & & & & & & & & & & Wall C'O & verings - & 11 & \\
\hline A5010 & Carpet / Lino Install - L1W & 5 & 05/18/22 & 05/24/22 & & & & & & & & & & & & & & & & & & \(\square\) & Carpet / Lin & o Instal & - -1w \\
\hline A3160 & Doors \& Hardware - L1W & 5 & 05/25/22 & 05/31/22 & & & & & & & & & & & & & & & & & & 밈 & Doors \& & Hardwar & - L1W \\
\hline A5030 & MEP Trim - L1w & 5 & 05/25/22 & 05/31/22 & & & & & & & & & & & & & & & & & & \(\square\) & MEP Trim & -L1w & \\
\hline A5040 & Corner Guards and Accessories - L1 & 5 & 06/08/22 & 06/14/22 & & & & & & & & & & & & & & & & & & & - Corn & er Guar & s and 4 \\
\hline A5070 & Final Paint-L1 & 5 & 06/08/22 & 06/14/22 & & & & & & & & & & & & & & & & & & & \(\square\) Final & Paint - & \\
\hline A5050 & Final Clean - L1 & 5 & 06/15/22 & 06/21/22 & & & & & & & & & & & & & & & & & & & \(\square\) - & al Clean & - L1 \\
\hline A5520 & Generate Punchlist-L1 & 5 & 06/22/22 & 06/28/22 & & & & & & & & & & & & & & & & & & & \(\square\) & Generat & Punch \\
\hline A5060 & Punchlist-L1 & 10 & 06/29/22 & 06/28/22 & & & & & & & & & & & & & & & & & & & & P & hlist-1 \\
\hline \multicolumn{2}{|l|}{Finishes - L1 East} & 58 & 03/18/22 & 06/07/22 & & & & & & & & & & & & & & & & & & & & & \\
\hline A2800 & GWB Hang Tape \& Finish - L1E & 12 & 03/18/22 & 04/04/22 & & & & & & & & & & & & & & & & & GWB & tang Tape & \& Finish' - & & \\
\hline A4940 & Polished Slab-L1E (nights) & 5 & 03/25/22 & 03/31/22 & & & & & & & & & & & & & & & & & Polis & Slab - Li & (nights) & & \\
\hline A3180 & Prime and First Coat - L1E & 6 & 04/05/22 & & & & & & & & & & & & & & & & & & \(\square \mathrm{Pr}\) & e and F & Coat-L1 & & \\
\hline A3280 & Ceiling Grids - L1E & 5 & 04/13/22 & 04/12/22 & & & & & & & & & & & & & & & & & & iling Grids & -L1E & & \\
\hline A4930 & MEP Drops into Grid - L1E & 5 & 04/20/22 & 04/19/22 & & & & & & & & & & & & & & & & & & MEP D Drop & into Gria & -LiE & \\
\hline A3300 & Ceiling Cover Inspection - L1E & 1 & 04/27/22 & 04/27/22 & & & & & & & & & & & & & & & & & & 仡 & ver Inspe & ction & \\
\hline A4950 & ACT Install - L1E & 5 & 04/28/22 & 05/04/22 & & & & & & & & & & & & & & & & & & ACT & all - LiE & & \\
\hline A3200 & Lighting - L1E & 10 & 05/05/22 & & & & & & & & & & & & & & & & & & & \(\square\) Lig & ting - LiE & & \\
\hline A4960 & Casework-L1E & 8 & 05/05/22 & 05/18/22 & & & & & & & & & & & & & & & & & & \(\square\) Cas & work - L1 & & \\
\hline A4970 & Ceiling Fan Install - L1E & 2 & 05/05/22 & 05/06/22 & & & & & & & & & & & & & & & & & & 0 Ceiling & Fan İsita & -LiE & \\
\hline \multicolumn{2}{|l|}{Collaborative People, Progressive Builders} & \multicolumn{2}{|c|}{Page 9 of 14} & & \multicolumn{3}{|r|}{Remaining Level of Eff Actual Level of Effort} & rt & \multicolumn{3}{|r|}{Actual Work Remaining Work} & \multicolumn{4}{|l|}{\begin{tabular}{l}
Critical Remaining Work \\
Milestone
\end{tabular}} & & & \multicolumn{8}{|r|}{PRINTED: 02/23/21 DATA DATE: 01/08/21} \\
\hline
\end{tabular}

Spruce Elementary School Phase 2 Current


BNBuilders


Spruce Elementary School Phase 2 Current


Spruce Elementary School Phase 2 Current


BNBuilders


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TRUCK ROUTE
17405 Spruce Way Lynnwood WA
From l-5 N bound:
Exit 181 (196th St SW)
Turn Right on 44th Ave W Turn Right on Maple Rd Turn Left on Spruce
. 3 Miles on the Right

From I-5 S bound: Exit 164th St SW
Turn Left Spruce Way
Miles on the Left

\section*{LEGEND}

Truck Route
Emergency Route
Crew / Visitor Route
Pedestrian Path
Site Fencing
Access Gate - Construction Only
Parking
Temp Power Pole
Muster Area
Sani-Can
Fire Hydrant
Security Camera
Salvage Materials Site Fencing

\title{
B N B \\ BNBuilders
}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Bid Pak & Location & Phase & Phase & Description & Takeoff Quantity & & Total Cost/Unit & Total Amount \\
\hline & & 1520.160 & & Project Safety & & & & \\
\hline & & & 1520.160 & Jobsite Safety Awareness \& Recognition Events & 13.50 mo & - & 750.00 /mo & 10,125 \\
\hline & & & & Project Safety & & & /sf & 103,875 \\
\hline & & 1520.190 & & Sanitary Facilities & & & & \\
\hline & & & 1520.190 & Sanitation Units (STD - Trades, 3x Week Service) (5 Units) - Demo & 3.50 mo & & 1,388.40 /mo & 4,859 \\
\hline & & & 1520.190 & Sanitation Units (ADA - Trades, 3x Week Service) - Demo & 3.50 mo & & \(410.00 / \mathrm{mo}\) & 1,435 \\
\hline & & & 1520.190 & Sanitation Units (STD - Trades, 3x Week Service) (5 Units) - Site & 10.00 mo & & 1,388.40 /mo & 13,884 \\
\hline & & & 1520.190 & Sanitation Units (ADA - Trades, \(3 \times\) Week Service) - Site & 10.00 mo & & \(410.00 / \mathrm{mo}\) & 4,100 \\
\hline & & & 1520.190 & Sanitation Units (STD - Trades, \(3 \times\) Week Service) ( 5 Units) - BLDG & 6.00 mo & & 1,388.40 /mo & 8,330 \\
\hline & & & 1520.190 & Sanitation Units (ADA - Trades, \(3 \times\) Week Service) - BLDG & 6.00 mo & & 410.00 /mo & 2,460 \\
\hline & & & 1520.190 & Handwash Station (Trades, \(1 \times\) Week Service) (2 Units) - Demo & 3.50 mo & & 422.54 /mo & 1,479 \\
\hline & & & 1520.190 & Handwash Station (Trades, \(1 \times\) Week Service) (2 Units) - Site & 10.00 mo & & 422.54 /mo & 4,225 \\
\hline & & & 1520.190 & Handwash Station (Trades, \(1 \times\) Week Service) (2 Units) - BLDG & 6.00 mo & - & 422.54 /mo & 2,535 \\
\hline & & & & Sanitary Facilities & & & /mo & 43,308 \\
\hline & & 1530.010 & & Temp Construction & & & & \\
\hline & & & 1530.010 & Temporary Stair Tower - Rent (2 Units) & 4.00 mo & & 4,500.00 /mo & 18,000 \\
\hline & & & 1530.010 & Temporary Stair Tower - Erect & 2.00 ea & & 4,654.00 /ea & 9,308 \\
\hline & & & 1530.010 & Temporary Stair Tower - Disml & 2.00 ea & - & 2,327.00 /ea & 4,654 \\
\hline & & & & Temp Construction & & & /mo & 31,962 \\
\hline & & 1540.010 & & Construction Equipment & & & & \\
\hline & & & 1540.010 & Trucking / Equipment Deliveries (Not Anticipated, Excluded) & - wk & & 0.00 /wk & 0 \\
\hline & & & 1540.010 & Trucking - Haul Salvaged Boilers to In-District Specified Location (Not Anticipated, Excluded) & - trip & & 0.00 /trip & 0 \\
\hline & & 1540.162 & & Forklifts & & & & \\
\hline & & & 1540.162 & Warehouse Forklift - (Not Required, Excluded) & - fyi & & 0.00 /fyi & 0 \\
\hline & & & 1540.162 & All-Terrain Forklift - Rental ( \(10,000 \#\) ) & 13.50 mo & & 4,815.94 /mo & 65,015 \\
\hline & & & 1540.162 & All-Terrain Forklift - Operator (0.5 FTE after Earthwork) & 13.50 mo & & 9,060.10 /mo & 122,311 \\
\hline & & & 1540.162 & All-Terrain Forklift - Maint/Fuel & 13.50 mo & & \(325.00 / \mathrm{mo}\) & 4,388 \\
\hline & & & 1540.162 & Warehouse Forklift - Maint/Fuel (Not Required, Excluded) & - fyi & & 0.00 /fyi & 0 \\
\hline & & & & Forklifts & & & /mo & 191,714 \\
\hline & & 1540.230 & & Scaffolding & & & & \\
\hline & & & 1540.230 & Enclosure Scaffolding (w/ Cost of Work) & fyi & & /fyi & \\
\hline & & 1550.260 & & Traffic Control & & & & \\
\hline & & & 1550.260 & Traffic Control Barricades - ROW Work & 2.00 mo & & 1,200.00 /mo & 2,400 \\
\hline & & & 1550.260 & Traffic Control / Flagger - ROW Work (2 FTE) & 4.00 wk & - & 7,490.40 /wk & 29,962 \\
\hline & & & & Traffic Control & & & /mo & 32,362 \\
\hline & & 1560.000 & & Temporary Barriers/Enclosures & & & & \\
\hline & & & 1560.000 & Temporary Air Barriers - Build & 3,500.00 sf & & 6.37 /sf & 22,304 \\
\hline & & & 1560.000 & Temporary Air Barriers - Maintain & 16.00 wks & & 92.00 /wks & 1,472 \\
\hline & & & 1560.000 & Temporary Air Barriers - Remove & 3,500.00 sf & & 0.94 /sf & 3,277 \\
\hline & & & 1560.000 & Temporary Doors & 5.00 ea & & 272.26 /ea & 1,361 \\
\hline & & & 1560.000 & Wood Opening Rails - Build (Misc Openings) & 600.00 If & & 9.51 If & 5,704 \\
\hline & & & 1560.000 & Wood Toe Boards - Build (Add to Cable Rail) & 950.00 If & & 9.09 If & 8,639 \\
\hline & & & 1560.000 & Perimeter/Opening Rails - Maintain & 16.00 wk & & 581.75 /wk & 9,308 \\
\hline & & & 1560.000 & Perimeter/Opening Rails - Remove & 950.00 If & & 4.65 Iff & 4,421 \\
\hline & & & 1560.000 & Floor Covers & 20.00 ea & - & 257.70 /ea & 5,154 \\
\hline & & & & Temporary Barriers/Enclosures & & & /sf & 61,640 \\
\hline & & 1560.260 & & Temporary Fencing & & & & \\
\hline & & & 1560.260 & Temp Site Fence - 6' high Driven Post (Front of School) & 305.00 If & & 3.80 If & 1,159 \\
\hline & & & 1560.260 & Misc Repair of Existing Fence to Secure Site & 1.00 is & & 1,180.80 /ls & 1,181 \\
\hline & & & 1560.260 & Temp Site Fence - Double Swing Gates & 2.00 ea & & 750.00 /ea & 1,500 \\
\hline & & & 1560.260 & Temp Site Fence - Move/Maintain (Construction Schedule, less 1 mo) & 58.00 wk & & \(93.63 / \mathrm{wk}\) & 5,431 \\
\hline & & & 1560.260 & Temp Site Fence - Remove & 160.00 If & & 1.25 If & 200 \\
\hline & & & 1560.260 & Temp Site Fence - Graphics Barrier / Screen & 200.00 sf & - & 4.87 /sf & 974 \\
\hline & & & & Temporary Fencing & & & /sf & 10,444 \\
\hline & & 1560.390 & & Temporary Tree \& Plant Protection & & & & \\
\hline & & & 1560.390 & Temporary Tree Protection - Build (w/Civil) & - If & & 0.00 /If & 0 \\
\hline & & & 1560.390 & Temporary Tree Protection - Maintain & 58.00 wk & & 186.00 /wk & 10,788 \\
\hline & & & 1560.390 & Temporary Tree Protection - Remove & 1,334.00 If & - & 1.87 If & 2,498 \\
\hline & & & & Temporary Tree \& Plant Protection & & & /sf & 13,286 \\
\hline & & 1570.190 & & Temporary Environmental Controls & & & & \\
\hline & & & 1570.190 & Rainwater Management / Snow Removal (0.2 FTE) & 58.00 wk & - & 749.04 /wk & 43,444 \\
\hline & & & & Temporary Environmental Controls & & & /sf & 43,444 \\
\hline & & 1570.230 & & Temporary Stormwater Pollution Control & & & & \\
\hline & & & 1570.230 & NPDES Permit (BY OWNER) & fyi & & /fyi & \\
\hline
\end{tabular}
OWNER: Edmonds School District \#15 ESTIMATE TYPE: \(100 \%\) CD GMP Estimate
Sid Pak Location Pase Phat Costunit Total Amount


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\begin{tabular}{|l|l|l|l|l|l|}
\hline Location & Phase & Description & Takeoff Quantity & Total Cost/Unit & Total Amount \\
\hline
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\section*{Base}

\section*{Estimate}


\section*{SPRUCE ELEMENTARY SCHOOL PHASE 2 ADDITION AND REPLACEMENT PROJECT ACCEPT AND APPROVE THE GUARANTEED MAXIMUM PRICE AMENDMENT 2}

A resolution of the Board of Directors (the "Board") of the Edmonds School District No. 15 (the "District") to accept the final Guaranteed Price Amendment 2 for the Spruce Elementary School Phase 2 Addition and Replacement (Phase 2) project (the "Project").

WHEREAS, the Board has determined a need to construct a new replacement elementary school and certain related improvements on the site of the existing Spruce Elementary School, and;

WHEREAS, the Board has determined a need to construct the Spruce Elementary School Phase 2 Addition and Replacement Project using the General Contractor/Construction Manager (GC/CM) Alternative Public Works Process as defined in Chapter 39.10 RCW, and;

WHEREAS, the District contracted with BNBuilders Inc., to be the General Contractor/Construction Manager for the Project, and;

WHEREAS, the District has developed, in collaboration with its Design Team and the GC/CM, a construction plan for the project, and;

WHEREAS, the Amendment of the construction plan for the project involves constructing the structure and other elements: phase 2 classroom wing building, landscaping, sitework and other improvements, and;

WHEREAS, BNBuilders Inc. and District Capital Projects Staff have negotiated a Guaranteed Maximum Price Amendment 2 to the agreement following the specified format, and;

WHEREAS, the District intends to seek State Construction Assistance funds from the Office of the Superintendent of Public Instruction for the completion of phase 2 of the Project, and;

WHEREAS, OSPI requires the School District Board to approve the Guaranteed Maximum Price as a condition for State Construction Assistance, and;

WHEREAS, District Capital Projects Office staff and the project Design Team have reviewed and recommend the Guaranteed Price Amendment 2 in the amount of \$28,431,077, and;

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors of Edmonds School District No. 15, accepts the Guaranteed Price Amendment 2 in the amount of \(\$ 28,431,077\) for Phase 2 of the Spruce Elementary School Addition and Replacement project.

DATED this \(8^{\text {th }}\) day of June, 2021, at a regular meeting of the Board of Directors, Edmonds School District No. 15.

EDMONDS SCHOOL DISTRICT NO. 15
BOARD OF DIRECTORS

Deborah Kilgore, President

Nancy Katims, Vice President

Carin Chase, Legislative Representative

Ann McMurray, Board Member

Gary Noble, Board Member
Attest:
Dr. Gustavo Balderas, Superintendent
Adoption Date:

Regular Business Meeting
Meeting Date: 06/08/2021
Submitted By: Sari White
Submitted For: Kim Hunter

\section*{Information}

\section*{Subject}

High School General Chemistry and Science Materials Adoption
Recommendations

\section*{Recommendation}

Recommendation -
Recommendation I: Following the Edmonds School District's Science Adoption process implemented from January 2019- June 2021, the Instructional Materials Committee, Materials Review Committee, Pilot Committee, Student Learning Team, with the support of parents, families, community members, and students of Edmonds School District formally recommend adopting the Living By Chemistry textbook and instructional materials for high school Chemistry. Implementation of this program will require the purchase of both digital licenses and physical textbook materials and supporting teachers with ongoing job-embedded professional development.

Recommendation II: In order to provide equitable access to the Next Generation Science Standards Science and Engineering Practices, the Instructional Materials Committee, Materials Review Committee, Pilot Committee, Student Learning Team, with the support of parents, families, community members, and students of Edmonds School District formally recommend the purchase of up to date science materials. Teachers will be supported with job-embedded professional development.

\section*{Background}

Background - We currently implement curriculum aligned to outdated standards in science for grades 9-12 in the Edmonds School District. The Edmonds School district last adopted the High School Science curriculum in 2005. The previously adopted materials do not align with the developed curriculum frameworks currently in use or the Next Generation Science Standards (NGSS), now known as the Washington State 2013 K-12 Science Learning Standards. This has created systems of inequity and institutional barriers for students across the district, especially those who are furthest from educational justice. Although originally slated as a 9-11 Core Science course adoption, we are prioritizing our need for
updated science materials and curriculum for chemistry, as the other core courses are engaged in an Open Educational Resource curriculum development process and have an alternative timeline slated for completion in the 20221-2022 school year.

\section*{Fiscal Impact}

\section*{Attachments}

High School Chemistry and Science Materials Board Report FINAL
High School General Chemistry and Science Materials Adoption Board Presentation slides
Inbox
Exec. Dir. Baumgartner
Superintendent's Office
Form Started By: Sari White
Final Approval Date: 05/28/2021

\section*{Form Review}

Reviewed By
Robert Baumgartner
Allison Kaufmann

\section*{Date}

05/27/2021 11:59 AM
05/28/2021 06:41 AM
Started On: 05/27/2021 10:58 AM

SCHOOL DISTRICT

\section*{High School Science Adoption}

GENERAL CHEMISTRY AND SCIENCE MATERIALS

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\section*{RECOMMENDATIONS}

\section*{RECOMMENDATION I}

Following the Edmonds School District's Science Adoption process implemented from January 2019June 2021, the Instructional Materials Committee, Materials Review Committee, Pilot Committee, Student Learning Team, with the support of parents, families, community members, and students of Edmonds School District formally recommend adopting the Living By Chemistry textbook and instructional materials for high school Chemistry. Implementation of this program will require the purchase of both digital licenses and physical textbook materials and supporting teachers with ongoing job-embedded professional development.


\section*{6 Sapling Plus}

bedford, freeman \& worth high school publishers

\section*{RECOMMENDATION II}

In order to provide equitable access to the Next Generation Science Standards Science and Engineering Practices, the Instructional Materials Committee, Materials Review Committee, Pilot Committee, Student Learning Team, with the support of parents, families, community members, and students of Edmonds School District formally recommend the purchase of up to date science materials. Teachers will be supported with job-embedded professional development.


\section*{RATIONALE FOR CHANGE AND SCIENCE VISION}

\section*{Where we have been, where we are, where we need to be}

In order to improve student outcomes in science we must first shift teacher practice. This process begins by understanding our current constraints in science instruction. Presented in this document is a detailed account of the Chemistry Curriculum adoption process and the rationale for equitable distribution of science equipment within our district. Although originally slated as a 9-11 Core Science course adoption, we are prioritizing our need for updated science materials and curriculum for chemistry, as the other core courses are engaged in an Open Educational Resource curriculum development process and have an alternative timeline.

\section*{WHERE WE HAVE BEEN}

The Edmonds School district last adopted High School Science curriculum in 2005, eight years after the release of the initial Washington State Science Learning Standards. Before the roll out of the modified 2009 Washington State K-12 Science Standards, extensive efforts went under way to align course materials to the standards. The Biology End of Course Exam was utilized as both a federal accountability and graduation required assessment, so naturally this course was supported with additional professional development to improve student success. However, with the state adoption of the Next Generation Science Standards (NGSS), now called the Washington State 2013 K-12 Science Learning Standards, expectations of learning moved from a siloed content area (Biology) to a breadth of science content areas: Life Science (Biology), Earth and Space Sciences, Engineering, and Physical Sciences (Physics and Chemistry). In order to ensure alignment to standards a detailed data driven review was conducted in the 2016-2017 school year. Although teachers worked diligently on the adjustment of course materials to align to NGSS, it is evident form the 2015-2016 Science Course Pathways that there was extreme variability in the science requirements and opportunities for students in the Edmonds School District.


Prior to 2016-2017 school year, there was also no common course description language. Common Course descriptions have been written for use in the 2017-2018 school year and course catalogs. For the 2017-2018 school year, each high school offered the following courses to cover the breadth of NGSS domains: Earth Space Science, Biology, and Physical Science.
- Curriculum Framework Development Process
- NGSS Course Alignment Final Steps
- Example Curriculum Framework

High school science staff developed draft curriculum frameworks in June 2016 that align to the 2013 Next Generation Science Standards for two science courses: Physical Science and Earth Space Science. These courses will replace Integrated Physical Science and Global Science/Issues and will be common courses offered at each school in the district. The frameworks were piloted in 2 buildings for data collection and were revised in spring 2017 with release of the full framework for the 2017-2018 school year. For each unit, resources and activities were identified that support student learning around the specific standards. At least 1 STEM or Engineering Design activity was identified for each unit of study to align to both the NGSS Engineering and Technology standards and the STEM for ALL Initiative. Biology, Physics, and Chemistry draft frameworks were completed spring 2017. After the adoption of Amplify Science K-8 in 2018 and 2019 it was determined that in order to have full vertical alignment to the Washington State Science 2013 Learning Standards (NGSS), that our core high school science courses would need to modernize both science equipment and curriculum resources.
\begin{tabular}{|l|l|l|l|l|l|}
\hline Course & Textbook & Publisher & Pub. Year & Adopted & Grade Levels/ Sites \\
\hline Biology & Biology (Miller-Levine) & Prentice Hall & 2004 & 2004 & \(9 \& 10\) \\
\hline Global Science & \begin{tabular}{l} 
Concepts in Action with Earth \\
and Space Science
\end{tabular} & Prentice Hall & 2004 & 2004 & \(9 \& 10\) \\
\hline \begin{tabular}{l} 
Integrated Physical \\
Science
\end{tabular} & Conceptual Physics (Hewitt) & Prentice Hall & 2006 & 2005 & EW, MT, SL \\
\hline \begin{tabular}{l} 
Integrated Physical \\
Science
\end{tabular} & \begin{tabular}{l} 
Hewitt Conceptual Physical Science \\
(supplement)
\end{tabular} & Prentice Hall & 2002 & 2004 & 9-10 (supplement) \\
\hline Chemistry & \begin{tabular}{l} 
Introductory Chemistry (Zumdahl) \\
\(3^{\text {rd }}\) Edition
\end{tabular} & Houghton Mifflin & 2004 & 2005 & LH,EW,MD,MT,SL \\
\hline Physics & Physics, AP (Walker) 2nd Edition & Prentice Hall & 2004 & 2005 & EW, MT, MD, LH \\
\hline
\end{tabular}

Table 1: Current Edmonds School District High School Science Materials by Publication and Adoption Year

\section*{WHERE WE ARE}

We currently implement curriculum aligned to outdated standards for grades 9-12 in the Edmonds School District. Washington State adopted the Next Generation Science Standards (NGSS) in 2013, now known as the Washington State 2013 K-12 Science Learning Standards. Washington State released a science assessment that is aligned to the NGSS in the 2017-2018 school year known as the Washington Comprehensive Assessment of Science (WCAS). The WCAS assessment is currently taken in Edmonds School District in the 5th, 8th, and 11th grade levels and covers all core
science content areas. Although, many steps were taken to ensure student access to the standards through the Curriculum Framework Development process, adopted resources are not aligned to either set of standards (2009 or 2013), current event topics are aged, and instructional strategies have evolved since publication. Due to the lack of alignment and relevance, each building has designed units of study that utilize key laboratories, activities, and physical materials that supplement their designed units. The physical texts are rarely used in classrooms. The previously adopted materials do not align with the developed curriculum frameworks currently in use. This has created inequity and institutional barriers for students across the district for many years depending on how much time and resources were allocated by buildings for this purpose.

In addition, buildings do not have the resources or physical materials needed to engage in the Engineering and Technology Standards for NGSS or to prepare students for post-secondary success in STEM fields or college courses. Scientific instruments, such as probe ware, and data collection software should be part of the core student experience. Unfortunately, teachers use department or even personal funds to provide students with engineering experiences in the classroom, therefore each building and classroom has varying levels of engagement in STEM, Engineering Design and Technology. Staff need specific training in the implementation of Engineering Design as well as access to materials and resources. Professional development around the instructional shifts in NGSS and new units of study in the curriculum frameworks is ongoing for Learning and Leading team members, but all staff need time and opportunity to engage in this work across the district for consistency in implementation. Although there have been a multitude of differentiated learning experiences and professional development opportunities across the district for the past 6 years, high school science teachers need additional job embedded professional leaning on pedagogical shifts in NGSS, access to aligned curriculum and assessments, and modern future-ready technology and engineering instruments and tools in order to prepare our Edmonds students for real world success.
Snohomish STEM, our Washington STEM support network, has conducted detailed research on the impact of K-12 STEM learning on post-secondary success and career access. "The Snohomish Region is home to historically robust STEM industries, spanning from advanced manufacturing to information technology, served by the Snohomish STEM Network and its cross-sector partners. By 2030, 79\% of high-demand, family-sustaining wage jobs available in our region will require a postsecondary degree or credential; \(50 \%\) of those jobs will be STEM or STEM literacy-based occupations. However, students in the Snohomish Region are not equitably or adequately prepared to take advantage of these opportunities, with only \(42 \%\) of the high school cohort of 2019 projected to be on track to attain postsecondary credentials." (Washington STEM Report, 2020). Providing students with STEM experiences, activities, and laboratories with real world equipment and technologies is one of the first steps in narrowing the achievement gap in science.

\section*{WHERE WE NEED TO BE}


Figure 2: Students Utilizing Chemistry sensors for titration laboratory while analyzing data output on computer
"The NGSS offer a vision of science teaching and learning that presents both learning opportunities and demands for all students, particularly student groups that have traditionally been underrepresented in the science classroom. Furthermore, the NGSS are connected to the Common Core State Standards for English language arts and mathematics. Changes in the new standards occur as student demographics in the nation become increasingly diverse while science achievement gaps persist among demographic subgroups. The academic rigor and expectations of the NGSS are less familiar to many science teachers than conventional or traditional teaching practices and require shifts for science teaching, which are consistent with shifts for teaching the CCSS for English
language arts and mathematics. Science teachers need to acquire effective strategies to include all students regardless of racial, ethnic, cultural, linguistic, socioeconomic, and gender backgrounds. While effective classroom strategies that enable students to engage in the NGSS will draw from the existing research literature, the NGSS will also stimulate new research agenda. For example, future research may identify ways to make connections between school science and home/community for non-dominant student groups as they engage in the NGSS. Future research may also explore how to utilize and allocate school resources to support student learning in terms of material resources, human capital, and social capital in relation to the NGSS. Effective implementation of the NGSS for all students, including non-dominant student groups, will require shifts in the education support system. Key components of the support system include teacher preparation and professional development, principal support and leadership, public-private-community partnerships, formal and informal classroom experiences that require considerable coordination among community stakeholders, technological capabilities, network infrastructure, cyber-learning opportunities, and access to digital resources, online learning communities, and virtual laboratories. As the NGSS implementation takes root over time, these components of the education system will also evolve and change accordingly."

Figure 3: OSPI's NGSS infographic for the 2013 Washington State Science Learning Standards


NEXT GENERATION SCIENCE STANDARDS

FOR REFERENCE:
WWW.K12.WA.US/SCIENCE/STANDARDS.ASPX


Figure 4: Overview of Adoption Process Stages

\section*{HIGH SCHOOL SCIENCE}

The Materials Review Committee, all science staff, and a focus group of students determined the following elements to be critical for an engaging and relevent science curriclulum

\section*{1 NGSS ALIGNMENT}

\section*{2 COHERENT STORYLINE}

3 ENGAGING PHENOMENA

\section*{4 COGNITIVE COMPLEXITY}

5 DIFFERENTIATED READINGS

\section*{6 TRANSLATED MATERIALS}

\section*{1 CULTURALLY RESPONSIVE}

8 E-BOOK + DIGITAL MATERIALS


\section*{INITIAL NEEDS ASSESSMENT AND COMMITTEE FORMATION}

\section*{NEEDS ASSESSMENT}

The intent to review curriculum materials was communicated to all high school science teacher and administrators in January 2019. From February 25-March \(15^{\text {th }}\) 2019, the science needs assessment was conducted. Jennifer Hageman visited each school site (see Timeline of Adoption events starting on page 12, for details) and facilitated a needs assessment and criteria ranking process via dotstorm, a software that allows members to prioritize criteria. A small focus group of 5 students from various high school sites were asked to develop their own list of criteria through the same process. After all sites and the student focus group developed a prioritized needs assessment list, the criteria shared and voted on. Eight core priorities were identified by students and teachers, as shown in infographic the left.

\section*{COMMITTEE FORMATION}

\section*{MATERIAL REVIEW COMMITTEE}

All buildings were asked to have a least two science teachers on the Materials Review Committee (MRC). All content areas and building sites were represented and proportional demographic representation to all high school science teachers in the district. These 11 teachers have spent countless hours committed to this process and securing resources for our students, truly acting as exemplary teacher leaders. After the initial screening and review of materials it was determined that content based sub committees would review and pilot curriculum materials, as they are experts on the given subject areas. In this way, Special Education and English Language teachers and staff could also review materials through the specifics of each individual course.

\section*{CONTENT AREA COMMITTEES}

The Content Area Committee's primary role in this process was to review individual course materials in a given subject area, in this
case Chemistry, providing insight and feedback on depth of coverage, consistency of storylines, and relevancy of phenomena. Both the MRC and Content Committees completed the detailed rubric evaluations for analysis in the adoption process.

\section*{PILOT COMMITTEE}

All chemistry teacher were provided the opportunity to pilot curriculum. A total of 5 teachers at 2 school sites expressed interested in piloting the curriculum. It is important to note that high school science teachers often teach in multiple content areas. Due to this fact that a majority of our MRC and content area teachers were also in the midst of reviewing and piloting curricula in other content areas (namely, Earth Space and Physical Sciences), so participation in the was Chemistry pilot was limited in scope. In hindsight, focusing on one content area at a time would be beneficial to allow all teachers the option of participating in the pilot process, which will be implemented with subsequent adoption processes. The pilot process will be address in detail in subsequent sections of this report.

DEVELOPING THE VISION
To develop the vision, the MRC immersed themselves in the Next Generation Science Standards Appendix D: "All Standards, All Students" which describes the role of institutionalized privilege in gatekeeping content and to demand increased cognitive expectations for all students in science and engineering. The group reviewed: longitudinal district data and the static nature of student achievement over time (also known as the achievement gap), the Edmonds School District Equity Policy, data on the diverse populations of students and their movements through science course pathways, the seven case studies who's findings were detailed in Appendix \(D\), as well as the K-5 and 6-8 Science Vision Statements.

\section*{K-12 EDMONDS SCHOOL DISTRICT SCIENCE VISION STATEMENT}

We believe that everyone should have access to a science education which challenges them to create solutions to authentic and complex problems. We can do this by:
- Eliminating systemic barriers based on race, gender, language, socioeconomic status, and/or (dis)abilities.
- Fostering each student's development into a global citizen, rather than an elite opportunity for some.
- Identifying and eliminating any practices that interfere with academic achievement for any students' racial or ethnic group compared to their peers. (Board policy 0600)
- Intentionally seeking and including students' multiple racial and ethnic perspectives when engaging in science. (Board policy 0600)
- Ensuring a positive and academically rigorous science learning environment that engages each and every student. (Board policy 0600)
- Inviting and including community members and corporate partners to bring multiple perspectives that reflect student backgrounds.

Teachers facilitate science learning through:
- The Next Generation Science Standards that are based on authentic, locally sourced phenomena
- Making student learning relevant through identifying STEM careers that relate to student interests
- Shifting the teacher's role from science expert to facilitator
- Facilitating student discourse that builds conceptual understanding
- Leveraging technology to enhance student learning and products
- Making explicit connections between content learning and real world application
- Anchoring phenomena to an essential question that leads into a coherent storyline
- Integrate often siloed subject areas to deepen students learning experiences

Students experience science learning through:
- Phenomena that allows them to build upon their current understanding of the world around them
- Utilizing 21st century skills such as critical thinking, creative problem solving, communication, and collaboration.
- Engage in hands-on labs and engineering design to unpack the phenomena and provide evidence and reasoning for their thinking
- Investigate the world around them in order to explain phenomena and use their scientific understanding to design solutions to problems.
- Seeing themselves reflected in their science learning while recognizing the institutional biases toward race, gender, language, socioeconomic status
- Increased ownership of learning (student voice and choice)
- Students do authentic work of scientists and engineers, explicitly seeing themselves in those roles and understanding what that entails.

High School Science Adoption Timelines
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{School Year} & \multicolumn{6}{|c|}{2018-2019} \\
\hline & January 2019 & February 2019 & March 2019 & April 2019 & May 2019 & June 2019 \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
Administration \\
And Staff \\
Communications and Events
\end{tabular}} & \multirow[t]{2}{*}{\begin{tabular}{l}
January, \\
Administration and Staff Communication of Adoption Intent
\end{tabular}} & February 1, Staff and Administrators, Communication of adoption calendar, timelines, and committee opportunities & March 7, Review committee team members selected & & May 30 Staff: Update on Potentials Materials Pending Review & \\
\hline & & \multicolumn{2}{|l|}{February 25- March 15, Science Teachers and Staff, Needs Assessment Conducted} & & & \\
\hline Materials Review Committee/Content Area Meetings & & & \begin{tabular}{l}
March 14, Review Committee: Equity in Science, Development of K-12 Science Vision \\
March 20, Review Committee: \\
Develops scoring rubrics \\
March 21, Review Committee: \\
Calibrates Scoring of Rubric \\
March - June Content Teachers and
\end{tabular} & view Committee: Cu & May 30, Review Committee: Update on Materials & \begin{tabular}{l}
June 7 and 10, Content \\
Teachers and Review \\
Committee: Evaluates curriculum using scoring rubrics \\
June 24 Review Committee: Reviews rubric data and selects final materials to pilot
\end{tabular} \\
\hline Community and Staff Input Events & & & \begin{tabular}{l}
Site Based Needs Assessment and Criteria Drafting \\
March 6: MTH \\
March 7: MDH \\
March 11: EWH \\
March 12: SLH \\
March 15:LHS
\end{tabular} & & & \\
\hline PEC, IMC, and School Board Updates & IMC January 22 & & & \begin{tabular}{l}
PEC April 23 \\
IMC April 30
\end{tabular} & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{8}{|c|}{High School Science Adoption Timelines} \\
\hline \multirow[t]{2}{*}{School Year} & \multicolumn{7}{|c|}{2019-2020} \\
\hline & September 2019 & October 2019 & November 2019 & December 2019 & January 2020 & February 2020 & March- June 2020 \\
\hline \begin{tabular}{l}
Administration \\
And Staff \\
Communications and Events
\end{tabular} & September, Staff and Administrators, Communication of adoption calendar, Science Job Alike, timelines, and committee events & & & & September, Staff and Administrators, Communication of adoption calendar, Science Job Alike, timelines, and committee events & & \\
\hline Materials Review Committee/Content Area Meetings & September 18 and 20, Pilot Committee, Training on McGraw Hill, Inspire Science & \begin{tabular}{l}
October 19 ALL \\
Science Job-Alike, Update on Materials in Review and Probeware/Hardware Needs Assessment
\end{tabular} & ber - November for In & December 10,Pilot Committee: Training on BFW Living By Chemistry and Curriculum Mapping & Piloting Widow 2: January- Mar & \begin{tabular}{l}
February 27, Pilot Committee, Training on Sapling Plus Accounts BFW Living By Chemistry \\
for Living by Chemistry
\end{tabular} & Hold on All Adoption Events to Support Students and Teachers with Remote Learning \\
\hline \multirow[t]{2}{*}{Community and Staff Input Events} & & \multicolumn{4}{|l|}{Science Laboratory Inventory, Science Materials Needs Assessment and Initial Probeware List Development (all Science Staff)} & & \\
\hline & & \begin{tabular}{l}
October 23 \\
Community Bias Screener Input and Science Focus Group
\end{tabular} & & & & & \\
\hline PEC, IMC, and School Board Updates & & IMC October 8 PEC October 17 & IMC November 5 & & IMC January 14 PEC January 22 & IMC February 11 & IMC March 10 \\
\hline
\end{tabular}

High School Science Adoption Timelines
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline School Year & \multicolumn{10}{|c|}{2020-2021} \\
\hline Month & September
\[
2020
\] & \[
\begin{aligned}
& \text { October } \\
& 2020
\end{aligned}
\] & \[
\begin{aligned}
& \text { November } \\
& 2020
\end{aligned}
\] & \[
\begin{gathered}
\text { December } \\
2020
\end{gathered}
\] & \[
\begin{gathered}
\text { January } \\
2021
\end{gathered}
\] & February 2021 & March
\[
2021
\] & \[
\begin{aligned}
& \text { April } \\
& 2021
\end{aligned}
\] & \[
\begin{aligned}
& \text { May } \\
& 2021
\end{aligned}
\] & \[
\begin{aligned}
& \text { June } \\
& 2021
\end{aligned}
\] \\
\hline \begin{tabular}{l}
Administration \\
And Staff \\
Communications and Events
\end{tabular} & September, Staff and Administrators, Communication Adoption Hold and Science Job Alike & \multicolumn{4}{|l|}{\multirow{4}{*}{Hold on All Adoption Events to Support Students and Teachers with Remote Learning and Transition to Simultaneous Instruction}} & \begin{tabular}{l}
Feb 17 \\
Chemistry \\
Staff Update
\end{tabular} & March Staff Communication of adoption calendar, timelines, and committee events for Science Probeware/Hardware & April Staff Communication of adoption calendar, timelines, and committee events for 2021-2022 and Chemistry & & \\
\hline & & & & & & & & & & \\
\hline Materials Review Committee/Content Area Meetings & \multirow[t]{2}{*}{September 2, All Science Staff Job-Alike} & & & & & \begin{tabular}{l}
Feb 17 \\
Chemistry Staff Update on Adoption Process
\end{tabular} & \begin{tabular}{l}
March 8, Department \\
Chairs \\
Hardware/Probe ware Needs Finalized
\end{tabular} & & May 5 Chemistry Committee Update May 12 Chemistry Teacher Feedback May 25 Chemistry Final Feedback & \\
\hline Community and Staff Input Events & & & & & & \multicolumn{5}{|c|}{Public Online Chemistry Community Review/Feedback Window 1 May 15-25, Window 2} \\
\hline PEC, IMC, and School Board Updates & & & & PEC December 1 & IMC Jan 12 & PEC Feb 18 & IMC March 9 & PEC April 21 IMC April 27 & \begin{tabular}{l}
IMC May 11 \\
PEC May 20
\end{tabular} & \begin{tabular}{l}
IMC June 8 \\
School Board \\
Reading 1 \\
June 8 \\
School Board \\
Reading 2 \\
June 22
\end{tabular} \\
\hline
\end{tabular}

\section*{DEVELOPING THE SCIENCE EVALUATION RUBRIC}

The Materials Review Committee used two guiding documents to develop the science evaluation rubric. Both documents are recommended by Achieve to evaluate NGSS 3-Dimensional alignment and are the keystone tools that states and districts have used to evaluate instructional materials.

The first guiding document was designed for intense unit level evaluation, called the Educators Evaluating the Quality of Instructional Products (EQuIP) Rubric. The EQuIP Rubric provides criteria by which to measure the alignment and overall quality of lessons and units with respect to the Next Generation Science Standards (NGSS). The purpose of the Rubric is to (1) review existing lessons and units to determine what revisions are needed; (2) provide constructive criterion-based feedback and suggestions for improvement to developers; (3) identify examples/models for teachers' use within and across states; and (4) to inform the development of new lessons, units, and other instructional materials. The second guiding document was the Primary Evaluation of Essential Criteria for NGSS Instructional Materials Design Rubric (PEEC Rubric). This resource is a curricular program level tool that seeks to focus educators and curriculum developers on the critical innovations within the NGSS and dig deeply into materials


Figure 6: Levels of Instructional Resource Evaluation tools utilized in the Materials review rubric development process, Image from iowacore.gov to (1) evaluate the presence of those innovations and (2) answer the question "How thoroughly are these science instructional materials designed for the NGSS?

In addition to these main guiding documents, the science leads also provided the committee with modified EQUIP and PEEC rubrics developed by the following NGSS early adopter states: Ohio, Georgia, Wisconsin, and Oregon. These states also utilize statewide Science adoption criteria to assist districts in evaluating instructional programs for science. Materials Review Committee members selected key elements from the each of the rubrics in order to develop the Edmonds School District Science Curriculum Evaluation Rubric (Appendix II)

A seven category rubric was developed with a total of 52 criteria. The categories to evaluate the curricular options include: Category A: NGSS 3-Dimensional Design, Category B: Student Engagement, Category C: Monitoring Student Progress, Category D: Instructional Supports, Category E: Technology and Materials, Category F: Differentiated Instruction, and Category G: Bias.

We utilized a coefficient of 2 to weigh the importance of Category A: NGSS 3-Dimenional Design, in comparison to categories B-F. Category A was heavily modeled after the EQUIP and PEEC rubrics, assessing the strength of NGSS alignment and intentionality of NGSS design. Category A was also considered the highest validation point in the process, as committee members would not proceed to Categories B-G if the Category A Total did not meet the threshold requirement (scoring above 12 and each criteria is 3 or above). If materials scored a 2 or below in one criteria only, specific evidence must be cited and will be collectively evaluated by the committee. It is a requirement
of that materials be designed or strongly aligned to NGSS, so materials would not be considered if the validation point was not reached. For consistency in scoring and inter-rater reliability, criteria descriptors for each criteria score were composed. Rubric validation and scoring training was conducted with the Materials Review Committee early on in our process (see timeline for specific dates).

For scoring in Categories B-F, committee members used a 4 point scale evaluating each criteria. A score of 4 indicates a high degree of NGSS alignment and a score of 1 indicates traditional, non-NGSS aligned materials.
\begin{tabular}{|c|l|}
\hline (4) & \begin{tabular}{l} 
NGSS designed. May require very little modification. The element is presented in full and is of good quality. It \\
would be supportive of student learning.
\end{tabular} \\
\hline (3) & \begin{tabular}{l} 
Mostly NGSS aligned. May require some modification or accommodations for students. The element is \\
present. May need a little supplementation, but could be used adequately to support student learning.
\end{tabular} \\
\hline (2) & \begin{tabular}{l} 
Mostly Traditional. Would require a moderate amount of modification for NGSS alignment. The element is not \\
present, partially present, or of very poor quality. Major supplementation is needed to adequately support \\
student learning.
\end{tabular} \\
\hline (1) & Traditional. Would require major modifications for NGSS alignment. The element is not present at all. \\
\hline
\end{tabular}

Table 2: Scoring Criteria for Rubric
After initial drafting of the rubric, Material Review Committee (MRC) members determined that an abbreviated system and scoring procedure needed to be implemented in order to simplify the process of scoring and evaluating curricula and to elevate the importance of guaranteed and viable access to curriculum, equity of opportunity, and most importantly; culturally responsive teaching. Each Category has culturally responsive teaching practices embedded in at least one criteria. Criteria were limited to 5 in each category of high importance, as defined by the needs assessment and vision: Differentiated Instruction (Category F) and Instructional Supports for Students (Category D). Categories B, C, and E (Student Engagement, Progress Monitoring/Assessment, and Technology Access) were limited to 4 or fewer. Each category was coded for ease of reference during the recommendation process.

In order to prepare teachers for the evaluation of NGSS Alignment, the MRC calibrated the rubric using exemplary NGSS Designed Curriculum, inquiryHub Biology, an Open Educational Resource course developed by the University of Colorado and Denver Public Schools. InquiryHub Biology received an NGSS Design Badge in 2019. According to the nextgenscience.org website, to earn this digital badge, "instructional materials must be reviewed either by NextGenScience (for proprietary materials or materials in development) or its Science Peer Review Panel (for free and publicly available materials) and earn the highest rating on the EQuIP Rubric for Science. The EQulP Rubric for Science provides criteria for measuring the degree to which lessons and units are designed for the NGSS. The highest rating, "E: Example of high-quality NGSS design," indicates a high-quality design for the NGSS across all three categories of the EQuIP Rubric: I) NGSS 3D Design, II) NGSS Instructional Supports, and III) Monitoring NGSS Student Progress. Achieve coordinated the development of the EQuIP Rubric for Science after facilitating the development of the NGSS, and the rubric has widespread adoption in the field." After calibrating the MRC developed rubric to the EQuIP rubric and subsequent review of the materials, the MRC was able to score the inquiryHub Biology curriculum at 160/160 due to alignment, embedded culturally responsive teaching practices, and explicit supports for student learning in a rigorous discourse based inquiry curriculum. The committee determined that 140/160 would be the minimum threshold for moving curriculum to the pilot stage of the review process, sharing the threshold previously established at 3 or higher per criteria.

The following curricula were eliminated due to Category A scores below threshold: Mastering Chemistry by Pearson, and Active Chemistry by Activate Learning.

Mastering Chemistry by Pearson Rationale: Materials are not aligned or weakly aligned to the 3-Dimensions of NGSS. This is a non-negotiable criteria. In addition, teachers have provided feedback that the Pearson platform is challenging to navigate and that there is a lack of varied professional development opportunities (based on currently adopted materials within the district). Pearson was recently acquired by Savvas, and updated materials have not been finalized for release at this time.

Active Chemistry by Activate Learning Rationale: Materials are not aligned or weakly aligned to the 3-Dimensions of NGSS. This is a non-negotiable criteria. Aged content and relevancy of topic arrangement and phenomena is largest concern.
\begin{tabular}{|l|l|c|}
\hline Publisher & Title & \begin{tabular}{l} 
Selected for \\
Full Review
\end{tabular} \\
\hline McGraw Hill & \begin{tabular}{l} 
Inspire \\
Chemistry
\end{tabular} & \(\mathbf{X}\) \\
\hline \begin{tabular}{l} 
Activate \\
Learning
\end{tabular} & \begin{tabular}{l} 
Active \\
Chemistry
\end{tabular} & \(\mathbf{X}\) \\
\hline \begin{tabular}{l} 
HMH \\
Science \\
Dimensions
\end{tabular} & \begin{tabular}{l} 
HMH Science \\
Dimensions \\
Chemistry
\end{tabular} & \(\mathbf{X}\) \\
\hline \begin{tabular}{l} 
Accelerate \\
Learning
\end{tabular} & STEMscopes & \(\mathbf{X}\) \\
\hline \begin{tabular}{l} 
Bedford \\
Freeman \\
Worth
\end{tabular} & \begin{tabular}{l} 
Living By \\
Chemistry
\end{tabular} & \(\mathbf{X}\) \\
\hline Pearson & \begin{tabular}{l} 
Mastering \\
Chemistry
\end{tabular} & \begin{tabular}{l} 
Chemistry \\
(Zumdahl 2018)
\end{tabular} \\
\hline Cengage
\end{tabular}

Table 3: Curriculum Materials Selected for Full Review

\section*{MATERIALS EVALUATION USING FULL RUBRIC}

The following materials were selected for a full scale review using the developed rubric, despite some questions regarding actual alignment to NGSS: HMH Science Dimensions Chemistry, STEMScopes, and Introduction to Chemistry by Cengage, Living by Chemistry, and Inspire Science. Both MRC and content teachers reviewed

Material Review Committee Rubric Evaluation Scores

materials with the full rubric. The box and whisker plot of composite rubric scores is shown above (full view) and below (zoom).

Table 4: Distribution of Composite Rubric Scores for Reviewed Materials

\section*{RATIONALE FOR ELIMINATION}
\begin{tabular}{|l|l|l|l|}
\hline Material & Min & Median & Max \\
\hline Stem Scopes & 117 & 132 & 141 \\
\hline Pearson & 92 & 106 & 120 \\
\hline McGraw Hill & 131.5 & 143 & 145 \\
\hline Cengage & 117 & 118.5 & 120 \\
\hline HMH Science & 115 & 117 & 127 \\
\hline Living By Chemistry & 145 & 150 & 155 \\
\hline
\end{tabular}

The following curricula did not meet the threshold composite score of 140/160 on the evaluation rubric and had median composite scores of 106 (Pearson), 117 (HMH Science Dimensions), 118.5 (Cengage, Zumdahl), and 132 (STEMscopes). McGraw Hill Inspire Science series had a low composite score of 132.5 and high of 145 with a median of 143 . Living by Chemistry's composite score range fell between 145 and 155 with a median score of 150 . Living by Chemistry had overall higher inter-rater reliability in rubric scores as evidenced on the box and whisker data plat.

Based on rubric scoring, teachers summarized their findings into the following rationale for elimination.
Material Review Committee Rubric Evaluation Scores

\begin{tabular}{ll} 
Curriculum Title \\
\(\square\) & Pearson \\
\(\square\) & HMH Science Dimensions \\
\(\square\) & Cengage Zumdahl \\
\(\square\) & StemScopes \\
\(\square\) & Inspire McGraw Hill \\
\(\square\) & Living By Chemistry BFW
\end{tabular}

Figure 8: Box and Whisker Plot of Composite Rubric Scores for Evaluated Curricula, Zoomed View

STEMScopes Rationale: StemScopes was eliminated early in the process for Chemistry for lack of rigor and coverage of the breadth of physical science/ chemistry DCI's, even for general chemistry and Physical science course. The committee felt the phenomena were relevant to most students, but over utilized hooks versus true phenomena and contained fractured learning as opposed to a coherent storyline. Teachers and review committee felt there would need to be too much supplementation to make this a meaningful core curriculum for students, and near impossible to supplement for Honors.

HMH Science Dimensions Rationale: No districts within our region have adopted HMH Science Dimensions or have indicated that this publisher is a finalist for piloting purposes. However it was developed using the Equip rubric and contained promising phenomena. The challenge with this curriculum was the platform, and the fact we receive California standard edition materials to review. The National edition had not been released at time of review and was not finalized. This is a slightly integrated curriculum and would fit in well with a district utilizing the entire suite of HMH materials for their integrated course sequencing in high school, but the inability to review all course materials for the purchasing edition prevented the committee from recommending it for piloting.

Introduction to Chemistry (Zumdahl) by Cengage Rationale: The newest and reviewed edition (2018) was identical to our current core curriculum, adopted in 2005. NGSS alignment was not present. Teachers and MRC remarked that the website, digital materials, customer service, teacher support and professional development provided by Cengage were lackluster and in need of improvement.

\section*{PILOT PROCESS}

The Materials Review and Student Learning Team recommended that Inspire Science be piloted in classrooms followed by Living By Chemistry and that detailed feedback and reviews be conducted on NGSS alignment. The Inspire Science series was the first curriculum to pilot due to the intentionality of the scope and sequences across integrated science domains (content areas) and shared pedagogical methods that would allow for integration. The pilot window for this curriculum would occur from late September to early November with a staggered approach to implementation for multiple content areas.


The pilot window for Living by Chemistry would extend from February to March, allowing teachers to transition students between semesters and ensure that piloting curriculum would not impact student achievement or teacher workload during intensive grading periods.


Figure 9: Textbook Covers of Piloted Curricula

Our goal is that the pilot committee should consist of a variety of teachers to represent the breadth of educators in the Edmonds School District: from those in their beginning years of teaching to more than 20 years of experience, experience teaching in Edmonds or surrounding districts and states, and multiple demographics. However, the teachers in these courses are all definitive teacher leaders with similar years of experience teaching science and demographics, as our high school science teacher pool is not racially diverse. Teacher's student groups were varied to include sections/classes with high percentages of English Language Learners or students with special needs including IEPs and/or 504 plans as well as general education students at various school sites.

During the 6-8 science adoption, teachers implemented a minimum of 5-7 lessons (from 3-7 days) within a 2 week time period. It was determined after that process that a) the number of lessons was too few to determine storyline coherence and b) that specific routines (unit phenomena launch, how students develop causal understanding over time, argumentation practices) and assessments need to be piloted. Therefore for the High School adoption, the minimum number of lessons was dropped and the pilot window extended to \(4-6\) weeks. At the close of each unit, teachers evaluated the materials based on their experience utilizing the curriculum in the classroom and indicated feedback and evidence on the Evaluation Rubrics.

\section*{INSPIRE SCIENCE PILOT}

A total of 11 teachers elected to pilot the Inspire Science curricula materials and received training on the platform and material usage on September \(18^{\text {th }}\) and \(20^{\text {th }}, 2019\). Pilot teachers were able to choose from the following implementation methods: 1) individual choice of unit, 2) units that target specific standards that fit into the scope of current curriculum. Majority of teachers chose option two and were provided with one full release day to plan instruction collaboratively and map out scope and sequence changes and adjustments for students. The pilot window was open from end of September through November with feedback deadlines by November \(15^{\text {th }}\) for MRC review in December. Teachers made the determination to stagger start dates for content areas to allow for co planning and to prevent teachers with multiple preps from having to learn and pilot 2 new curricula. Biology and Earth Space Science teachers elected to go at the start of the window (October) followed by Chemistry teachers (November).

\section*{INSPIRE SCIENCE PILOT TEACHER FEEDBACK}

Although there are many qualitative data points that could be presented, the descriptive feedback from the pilot teachers is most impactful in regards to understanding the shortcomings of the piloted curricula. Teachers indicated that the units were not aligned with the content standards. Only lesson 1 of 4 addressed content standards and the phenomena topic was not carried over via storylines and that the storylines lacked relevancy and were not place based (Pacific Northwest Region). The packaging of the storylines, which should be the strength of the curriculum was determined to be the weakest point.
"It tried to weave story lines with a textbook format-- unsuccessfully. A textbook is typically linear. It groups related topics into units and chapters. A curriculum based on a story line uses the essential question to anchor student learning. What a student needs to know to answer the essential question may bounce between units and chapters within a textbook. It attempted to use storylines, but overlaid them into a traditional textbook. The result was weak (connections weren't made, no looping back, focus questions unanswered and week engagement in essential question)."
"This is a medium to strong digital textbook with lab ideas. It is not a curriculum. If you taught it directly it would not meet the needs of all students."

Teachers were also frustrated with the online platform which appeared as if not beta tested yet, as there were many dead-end links, mislabels and redirects on the site. Grading was considered "clunky" as teachers had to export .cvs files for upload into Canvas or hand enter grades into Skyward. Our high school science teachers were early adopters of the Canvas LMS, and were hoping to have streamlined grading features.

Pilot Teacher Feedback: Inspire Science


Figure 10: Pilot Teacher Feedback on Instructional Supports for the Inspire Science Curriculum

The fact that the digital materials (ebook, English/Spanish translations, simulations, videos, etc.) were all housed in a closed system interface, external plugins and applications such as Google Translate and Google Read+Write were not able to be used to support student learning. While the internally available materials were able to support those students proficient in Spanish, no other language resources were available. For this reason \(40 \%\) of teachers disagreed or strongly disagreed that the curriculum materials met students reading and language levels.

Due to the inaccessibility of materials for diverse learners and a weak through line for student understanding over time, teachers were not able to recommend this curriculum for use in the classroom at a majority vote of \(60 \%\). Based on this feedback and the unpolished quality of the digital platform, Chemistry teachers began their planning and mapping process to pilot the Inspire Chemistry curriculum, but found the materials to appear "retro fitted" to NGSS versus designed with intentionality around the standards. In that, the content of the lessons and chapters was not much different from what was available in the textbook currently in use, but layered on the pedagogical routines and science practices of NGSS in ways that seemed extraneous and did not support student understanding. The overarching questions and

Based on what you have evaluated and piloted, would you recommend the Inspire Science curriculum for the Edmonds School District?
 phenomena were not puzzling "What do plants and buildings have in common?" followed with the Lesson question "How can chemistry help you understand the world?" Chemistry teachers determined not to invest time into a full pilot of the curriculum and invest time into reviewing the subsequent materials and piloting the curriculum in full, voting as part of the \(40 \%\) unsure in the graph below.

Figure 11: Final Pilot Teacher Feedback on Inspire Science Curriculum

675 students at 3 schools and in three content areas participated in the Inspire Science pilot. 554 students submitted responses and feedback at the end of the pilot process. Students provided detailed feedback but struggled to describe how the curriculum storylines and phenomena were ambiguous. Students often described it as "learning objective unclear" or the topic/phenomena was not engaging. Students felt as though the experiments and design challenges were scripted and the laboratories were over structured and infrequent.
'More hands on work. There needs to be work where kids actually have freedom to say and test their ideas. The class and textbook didn't do that. The textbook was very mechanical and boring. It made the subject seem like the least interesting thing I could learn about."

Although students piloted a variety of the features provided, the students did not find the materials specific to Inspire Science to support their learning. 53\% found the videos to aid in their understanding and \(44 \%\) of students highlighted the online dictionary and e-book as strong features. The key features that were promoted as accessible and universally accommodating: LearnSmart, SpongeLabs, and pre-translated Spanish texts were frequently used by less than 20\% of students.
What supports, features, or tools did you utilize to help you understand the science you were learning?

554 responses


Based on what you have seen and participated in, would you like to see
When asked if students would like to see other teachers in the Edmonds school district use this science curriculum, the majority were undecided at \(53 \%\). Based on the feedback from Pilot Teachers and students, the Materials Review Committee did not propose to recommend the Inspire Science curriculum for Earth Space Science, Biology, or Chemistry.
other teachers in the Edmonds School district use this science curriculum?


Figure 13: Final Student Feedback on Inspire Science Curriculum

All chemistry teachers were given the opportunity to participate in the district pilot process for Living by Chemistry. A total of 4 teachers from 5 schools expressed interest in piloting and were invited to participate in the Pilot Committee. Teachers participated in Training on BFW Living By Chemistry curriculum on December 10 \({ }^{\text {th }}, 2019\) and completed curriculum mapping and planning. Teachers divided the pilot into two parts: first utilizing the physical text resources and second to evaluate the online components. Teachers began using the materials in January and then received Training on Sapling Plus Accounts, BFW Living By Chemistry on February 27, 2020. Teachers began to use digital resources in March. The 175 students who participated in the pilot process completed 3 units: Weather (an integrated Physical Science unit), Toxicology, and Alchemy. The student feedback deadline was March 15, 2020. However, the piloting feedback and data collecting process was cut short due to our emergency COVID closure. One chemistry teacher was able to engage in a long term pilot of the curriculum materials from September 2020 to June 2021 with 65 students. The student feedback may be limited in number, but not scope and the Material Review Committee found it satisfactory in making a determination on recommending this curriculum.

STUDENT FEEDBACK FROM THE PILOT CLASSROOMS: LIVING BY CHEMISTRY

Number of students who participated in the pilot of the curriculum compared to how many summitted feedback


Figure 14: Student Participation in Pilot and Feedback Responses Given for Living By Chemistry

What are the resources in the curriculum that best supported your learning?


At the close of each pilot period, students were asked to provide feedback on their experiences and perception of the curriculum materials via a Google Form. 175 students participated in the Living by Chemistry pilot at 2 sites. However due to the close of schools during the pandemic, only 50 out of 175 were able to submit feedback on the curriculum. These 50 students were enrolled in general chemistry. For scaling purposes, the total n is 50 students.

A majority of students identified laboratories, videos, and the digital textbook to be the elements of the curriculum that best supported their learning. Less than \(50 \%\) of students indicated that the physical textbook was a tool that best supports their needs, which is in contrast to the perception provided by parents in the parent and community feedback survey. This mirrors the feedback received from students in the Inspire Science pilot. One difference is that

Figure 15: Student Indication for which materials best supported learning in Inspire Science
students felt this curriculum contained more laboratories and hands on experience than indicated in the Inspire Science pilot.

All students who submitted feedback indicated that the curriculum covered content that they found important and \(76 \%\) found that the materials addressed their learning needs. Overall, \(92 \%\) of students ( 46 out of 50 ) indicated that they would like to see this curriculum being used in the Edmonds School District chemistry classroom. 4 indicated that they were unsure, with no rationale and there were not any no responses (see Figure 17).

Student Feedback on Piloted Curriculum


Figure 16: Student Perspective on Relevancy and content coverage in Living by Chemistry curriculum

Based on what you have seen and participated in, would you like other teachers in the Edmonds school district to use this science curriculum?


Figure 17: Final Student Feedback on Living by Chemistry Curriculum

\section*{DATA REVIEW AND DEVELOPING THE RECOMMENDATION}

After the pilot, all of the committees (Materials Review, Pilot, and Content Teachers) reconvened to review the suite of data in spring 2021. During this meeting, it was determined that one final and exhaustive push for feedback was necessary to allow for community and parent perspective on the curriculum. Details on this are outlined in the

Parent and Community Feedback Section. The curriculum highlights that elevated the Living by Chemistry curriculum were in regards to the content topics within the units and the phenomena approach which had clear storylines. Teachers then discussed the features that supported students in simultaneous learning. The list of includes:
- Full Canvas Deep Integration
- E-book App embedded into left bar menu of Canvas Navigation
- Grading and Assessment directly sync to Skyward
- Available Sandbox and templates to build into current course/modules
- Sapling Learning Systems
- E-book and digital learning support embed into Canvas
- Allow for translation app and Google Read+Write
- Computerized Adaptive Testing and Assessment Item Banks
- Exam View Item Banks with levels pre-chem to college chem
- Assessment Analytics and Item Filters
- Engineering Design Challenges

Teacher feedback indicated that the Living by Chemistry materials are an appropriate baseline knowledge for ALL students in chemistry and that it is best suited for students in the general education chemistry setting, while providing access to students who may find chemistry a challenging subject area to master. And had the following to say:
"We can use this material to teach chemistry. That it is not able to check all the boxes that individual teachers may have does not mean it is not the best curriculum at this time."
"It is the only NGSS chemistry textbook available that meets a majority of our needs as defined by the needs assessment>"
"I have used the LBC materials for almost all of remote/hybrid learning this year. Though limited in what I was able to teach, I found the material/text accessible for gen chem students to use. It is at an appropriate level for gen chem I physical science students."


Figure 18: Edmonds School District Chemistry and Honors Chemistry Enrollment by school site

The figure on the left shows the Edmonds School District 2020-2021 Chemistry enrollment for Honors and General Chemistry. One important comment that was made is that Scriber Lake High School does not usually offer chemistry to students as it has been challenging course for students furthest from educational justice. Our department chair at SLH indicated that with accessible materials and the simplified reading level found in the text, plus the integrated and engaging units, that the general chemistry course would likely be able to be offered to students. As shown in figure 18, our general chemistry courses are more diverse than our Honors Chemistry courses based on student demographics. When asked to vote, 11 teachers (Material Review Committee and Content Teachers) participated
and 2 abstained. 9 teachers ( \(90 \%\) ) agreed that the curriculum would best suit the needs of our general chemistry students, 2 abstained but agreed to commit to the implementation process but did not vote or participate in the process, and one teacher (10\%) disagreed. The teacher who disagreed did not feel as though the curriculum would best suit the needs of the Honors Chemistry students to prepare them for AP Chemistry and college level STEM courses. The teacher did agree that this would best fit general chemistry student's needs, but not as a curriculum intended for district wide use in all courses as there would need to be heavy supplementation for Honors students. This sentiment was echoed by a few parents in the Parent and Community Feedback (see section). This feedback is addressed at more length in the Rigor section of Expected Challenges.


Figure 19: Student Demographics of General and Honors Chemistry courses

Based on the information that you have reviewed, do you recommend the Living by Chemistry curriculum for the general education chemistry students in our district?


Figure 20: Final Material Review Committee and Content Area Teacher Feedback Vote
90.0\%

Based on our evaluation of the challenges expected and feedback provided, the Material Review Committee and content teachers recommend, by majority, adopting the Living By Science instructional materials for general chemistry.

\section*{BIAS AND ACCESSIBILITY SCREEENING}

Living by Chemistry is approved by the National Instructional Materials Access Center (NIMAC) for alignment to the National Instructional Materials Accessibility Standards for the textbook that we recommend for adoption. The goal of NIMAS is to have high-quality consistent source materials in specialized formats for students with print disabilities to be able to access the curriculum. Our planned professional development will include identifying strategies on how to utilize resources to meet the needs of diverse learners. Category G, the Bias Screening Tool was carried over from past adoptions, pursuant to ESD Board Policy 2020P: Instructional materials shall be free of bias pertaining to sex, race, creed, religion, color, national origin, honorably discharged veteran or military status, sexual orientation including gender expression or identity, the presence of any sensory, mental, or physical disability, or the use of a trained dog guide or service animal.

This bias screening, however, focuses on identifying stereotypes (in images and in text) and does not address the curriculum's cultural relevancy or presence of culturally responsive pedagogy. The MRC utilized OSPI's Model Resource: Screening for Biased Content in Instructional materials to review the content contained in this recommended text. It is recommended that a detailed procedure be developed with the Department of Equity and Outreach to identify areas in need of improvement in the adopted curriculum and that all stakeholders are invited to participate in the development of the screening tool. Part of our rubric development process was to ensure that high impact culturally responsible practices were embedded into our scoring criteria in each category to ensure that these elements were present in all categories in order to promote the identification of materials that provide equitable access to high quality science education and achievement outcomes for ALL students.

\section*{PARENT, FAMILY, AND COMMUNITY FEEDBACK}

In this science adoption process, our goal was to include student, parent, family, and community voice in each part of our process, as we have underutilized these groups historically. In the past one or two Curriculum Review nights have been held at the ESC. For the K-5 and 6-8 Science adoption processes, it was found that the most effective option for previewing curriculum and providing feedback was the online review process. In order to ensure that the curriculum was both relevant and culturally responsive, a community focus group meeting was held on October \(23^{\text {rd }}, 2019\). The purpose was to develop community input regarding our current Bias Screener and to begin a Science Focus Group. The Science Community Focus Group had 5 community/parent attendees and we hope to grow this committee to evaluate our curricula over time. Part of this group's work was the development of the integrated feedback tool that will be utilized in our Biology, Physical Science, and Earth Space Science Curriculum Development process. The first draft is below and includes evaluation of the Living by Chemistry materials.

\section*{High School Science Curriculum Evidence Based Feedback Form}

Washington State adopted the Next Generation Science Standards in October 2013, also known as the Washington State Science Learning Standards (WSSLS 2013). "The NGSS Innovations are the five most significant ways the NGSS advance science teaching and learning, when compared to previous standards and typical instructional and curricular practice in American schools." (source: Primary Evaluation of Essential Criteria (PEEC) for Next Generation Science Standards Instructional Materials Design)
NGSS Innovations:
1. Making Sense of Phenomena and Designing Solutions to Problems
2. Three Dimensional Learning and Assessment
3. Building K-12 Progressions
4. Alignment with English Language Arts and Mathematics
5. All Standards, All Students

\section*{Innovation 1: Making Sense of Phenomena and Designing Solutions to Problems}
"By organizing instruction around phenomena, students are provided with a reason to learn (beyond acquiring information they are told they will later need) and shifts student focus from learning about a topic to figuring out why or how something happens. Additionally, the focus on relevant, engaging phenomena and design problems that students can access addresses diversity and equity considerations by providing opportunities for students to make connections with the content based on their own experiences and questions." (source: NGSS Innovations and Instructional Materials, 2017)

Phenomenon is relevant and meaningful to students.
\begin{tabular}{|l|l|}
\hline 4 & Superior Evidence \\
\hline 3 & Strong Evidence \\
\hline 2 & Moderate Evidence \\
\hline 1 & Minimal Evidence \\
\hline 0 & No Evidence \\
\hline
\end{tabular}

Phenomenon offer an opportunity to explore historical racism (ex: Flint, Michigan Water issues, eugenics, etc.) and the role of power, privilege and intuitional racism in the science fields.
\begin{tabular}{|l|l|}
\hline 4 & Superior Evidence \\
\hline 3 & Strong Evidence \\
\hline 2 & Moderate Evidence \\
\hline 1 & Minimal Evidence \\
\hline 0 & No Evidence \\
\hline
\end{tabular}

Feedback: No evidence that these topics were addressed in the chemistry curriculum. Supplementation could occur in the polarity unit engineering task when students are designing a water filtration system, especially in regards to Indigenous Water Rights, Flint Michigan water issues, or clean water and environmental justice topics.
\begin{tabular}{|l|l|}
\hline 4 & Superior Evidence \\
\hline 3 & Strong Evidence \\
\hline 2 & Moderate Evidence \\
\hline 1 & Minimal Evidence \\
\hline 0 & No Evidence \\
\hline
\end{tabular}

Units are organized as a storyline, anchored by phenomenon or engineering problems that allow for students to build knowledge to explain the phenomenon or solve the engineering problem.

Instructional materials provide students with opportunities to consider the ethical implications of science (ex: gene modification)
\begin{tabular}{|l|l|}
\hline 4 & Superior Evidence \\
\hline 3 & Strong Evidence \\
\hline 2 & Moderate Evidence \\
\hline 1 & Minimal Evidence \\
\hline 0 & No Evidence \\
\hline
\end{tabular}

Innovation 2: Three Dimensional Learning and Assessments
"Effective assessment of three dimensional science learning requires more than just a one to one mapping between the NGSS performance expectations and assessment tasks. It is important to note that more than one assessment task may be required to adequately assess students' mastery of some three dimensional targets, and any given assessment task may assess aspects of more than one performance expectation." (source: NGSS Innovations and Instructional Materials, 2017)

Students do the authentic work of scientists and engineers, explicitly seeing themselves in those roles and understanding what that entails.
\begin{tabular}{|l|l|}
\hline 4 & Superior Evidence \\
\hline 3 & Strong Evidence \\
\hline 2 & Moderate Evidence \\
\hline 1 & Minimal Evidence \\
\hline 0 & No Evidence \\
\hline
\end{tabular}
\begin{tabular}{|l|l|}
\hline 4 & Superior Evidence \\
\hline 3 & Strong Evidence \\
\hline 2 & Moderate Evidence \\
\hline 1 & Minimal Evidence \\
\hline 0 & No Evidence \\
\hline
\end{tabular}

\section*{The assessment system gives teachers clear artifacts of student learning progressions and understandings of the three dimensions through a variety of formal and informal formative and summative assessment items including performance tasks.}

\section*{Innovation 5: All Standards, All Students}

Instructional materials designed for the NGS provide opportunities for All learners and guidance to teachers for supporting diverse student groups, including students from economically disadvantaged backgrounds, students with special needs, English Learners, students from diverse racial and ethnic backgrounds, students with alternative education needs and accommodations, and gifted and talented students. They do so using a variety of approaches, but also ensure that features of NGSS design are intentionally leveraged to support diverse learners as they develop proficiency, agency, and identity in science. (source: NGSS Innovations and Instructional Materials, 2017)

Modifications and extensions for all students, including those performing above their grade level, to develop deeper understanding of the practices, disciplinary core ideas, and crosscutting concepts.
\begin{tabular}{|l|l|}
\hline 4 & Superior Evidence \\
\hline 3 & Strong Evidence \\
\hline 2 & Moderate Evidence \\
\hline 1 & Minimal Evidence \\
\hline 0 & No Evidence \\
\hline
\end{tabular}

\section*{Instructional Planning and Support}
"Educators must possess a repertoire of evidence-based instructional strategies in delivering the curriculum to develop talent, enhance learning, and provide students with the knowledge and skills to become independent, self-aware learners and to give students the tools to contribute to a multicultural and diverse society. The curriculum, instructional strategies, and materials and resources must engage a variety of learners using culturally responsive practices" (source: National Association for Gifted Children)

Uses diverse and inclusive instructional strategies in a logical progression of instruction that provide clear purposes for learning experiences (e.g., elicit preconceptions, teach new knowledge, build skills and abilities, connect to prior knowledge)
\begin{tabular}{|l|l|}
\hline 4 & Superior Evidence \\
\hline 3 & Strong Evidence \\
\hline 2 & Moderate Evidence \\
\hline 1 & Minimal Evidence \\
\hline 0 & No Evidence \\
\hline
\end{tabular}

For this adoption, events were planned in March, April, and May of 2020 on designated Middle and High School Nights. Each middle and high school site was to be prepared with in person translators and childcare and open stations, a model that worked well for both the K-5 and 678 Science Adoption processes. The digital website was prepared as a supplement to these events in addition to the feedback form. As 2020 offered the challenge of the pandemic, a website was created showcasing informational videos, a tour of the online platforms, and a link to submit feedback via Google Forms. With the closure of school, momentum and communication about the process was lost to much more urgent and pressing needs. The curriculum review website was launched again in March 2021, just prior to teachers and students pivoting into the classroom for hybrid simultaneous instruction. Despite the length of time the site and feedback form was publicized and available for review, minimal feedback was obtained, as only one parent provided feedback. During the May 12th MRC and chemistry teacher meeting, it was determined that one final and exhaustive push for feedback was necessary to allow for community and parent perspective on the curriculum. The following methods were used to one final attempt for feedback:
- Peachjar flyer in English and Spanish to flyerboard
- Email announcement in English and Spanish to almost 13,000 Edmonds accounts with attached links and flyers

Figure 21: Parent and Community Member Demographics from Feedback Responses
- Facebook, Twitter, and Instagram posts
- eNews article on the day the feedback forms closed

Although 12,955 accounts were pinged with flyers, announcements and posted to the external site only 9 individuals submitted a feedback form. The overall rate of return was \(0.007 \%\). The feedback from parents and students was minimal and we cannot draw concrete conclusions from such a small sample size. That being said, a brief analysis is provided.

\(71.4 \%\) of parents identified themselves as white and \(28.6 \%\) identified themselves as being of Asian descent, specifically Korean as indicated on the question in regards to racial identity. These are the highest proportionally represented groups in our chemistry courses, but this feedback does not represent the diversity of students who take chemistry nor the diversity of students in the Edmonds School District. 100\% of parents agreed or strongly agreed that the science

Language Support Feedback


Figure 22: Parent Feedback on available Language Supports in curriculum
materials presented would be accessible to their student's reading and English language proficiency level, with two indicating that their students receive or have received services for English Language instruction. The same percentage also indicated that the materials were translatable and accessible in the language spoken at home.

The feedback on content and relevancy shows 8 of 9 parents agreed or strongly agreed that the content was relevant and important for their student and that their student would be engaged in age appropriate ways. A few parents indicated that their child also received accommodations with an IEP/504 plan.

Parents and community members determined the strength of the curriculum to be in three key areas:
1. Materials are an appropriate baseline knowledge for ALL students in chemistry
2. Curriculum is relevant to students lives
3. The organization of materials support student success


Figure 23: Parent Feedback on Content and Relevancy of Living by Chemistry Curriculum

\footnotetext{
"This curriculum provides a good baseline for my student to learn. I would like to see more in-depth materials in case that my student would like to drill down further in certain topics."
"Hands on experience and teach them how to take notes since they don't work with printed material. It is harder to locate information if one needs to go back if there are too many links or resources to check. The curriculum seems organized well and relevant, but it depends on the teacher how they choose to implement it and make it "fun" for the kids."
"My student loves anything that is hands-on. This would be a phenomenal curriculum for my student!."
}
"I don't think I have ever seen a better science curriculum. Since my children have been mainly homeschooled, I have reviewed a wide variety of curricula, and this one appears to be outstanding. If it is the one selected, I expect my son to take chemistry at.... in the 22/23 school year."

Critical Feedback on the curriculum fell within two categories. First was that physical materials and laboratories were not able to be reviewed by Parents or community member in the virtual setting, so it was not apparent to some that these would also be embedded or used in the classroom. Usually, we are able to set up a laboratory experiment or demonstration and showcase the physical and digital materials at our curriculum night events. This was not possible with our site limitations and COVID restrictions. It is the intent to provide physical textbooks and provide a variety of laboratory and hands on learning experiences for students. There is also a high frustration level with Digital Learning Components after varied remote learning experiences, and parents felt strongly that excellent teachers and hands on materials were of the utmost imperative. While the materials have an online component available, which syncs seamless with our Canvas LMS, it is not the only source available for teachers and students. The benefit of the digital text is that it is translatable, can be used with Google Read+Write and our accessibility tools, and can provide seamless accommodations for students in their personal learning environment. We acknowledge that this does not replace excellent instruction from teachers and the learning opportunities they cultivate.
"Online only doesn't work for my kids. They need hands on experiences when it comes to science, but having access to materials online helps with setting own pace."

The second category was in regards to curriculum content and the target audience for the curriculum. There were some comments made in regards to the content and that it seemed watered down and would not prepare students for AP chemistry or college chemistry courses. Rigor is addressed in the "Expected Challenges" section of this report. It is important to note that this curriculum is designed to support all students in the understanding of chemistry and the NGSS physical science standards. The chemistry content and standards covered in the semester of chemistry found in the Physical Sciences course is similar to the general Chemistry course, the content expectations and standards address are different in Honors Chemistry. Honors Chemistry needs different supplementation to meet the entrance requirements of college and universities.

70\% (7 parents) would recommend that this curriculum be taught in the general education chemistry classroom and 30\% (3 parents) disagreed. The 30\% who disagreed stated that the lack of rigor and expected content covered would not be sufficient for Honors Chemistry and to prepare students for AP Chemistry. The 70\% of parents who agreed indicated that the materials were an excellent foundation for all students to demonstrate their knowledge of the physical sciences and chemistry.

Based on the information that you have reviewed, do you recommend the Living by Chemistry curriculum for the general education chemistry students in our district?


While feedback was minimal, a majority of parents at 70\% are in support of this recommendation and critical feedback is acknowledged and will be addressed.

Based on our evaluation of the challenges expected and feedback provided, we recommend adopting the Living By Science instructional materials for Chemistry.
\begin{tabular}{|c|c|c|c|c|}
\hline Timeline & Summer 2021 & 2021-2022 School Year & 2022-2023 School Year & 2023-2024 School Year \\
\hline Curriculum Implementation & & All units of instruction & All units of instruction & All units of instruction \\
\hline \multirow[t]{2}{*}{Professional Development Options (Required)} & \begin{tabular}{l}
Option A) \\
August Summer Institute (2 full days or 4 half day sessions)
\end{tabular} & Option B) September Release or After School & Option A) New Teachers (2 full days or 4 half day sessions) with same offerings as summer 2021 & Option A) New Teachers (2 full days or 4 half day sessions) with same offerings as summer 2021 \\
\hline & \begin{tabular}{l}
Day 1 NGSS and Chemistry Session A) Historical Alchemy, Bonds and Matter (curriculum mapping and scope and sequence) \\
Session B) Working through digital and physical tools/resources (Canvas and Sapling Learning) \\
Day 2 NGSS and Chemistry Session C) Assessing Student Learning, Discourse, and Planning for Instructional Routines Session D) Collaborative and Individual Planning with support
\end{tabular} & Same Sessions offered over 2 full days or 4 after school sessions & \begin{tabular}{l}
Option B) Continuing Teachers 1 full day or 2 half day offerings \\
Advancing Instructional Practices and Storyline Coherence
\end{tabular} & \begin{tabular}{l}
Option B) Continuing Teachers 1 full day or 2 half day offerings \\
Advancing Instructional Practices and Storyline Coherence with Student Data
\end{tabular} \\
\hline Professional Development Options (Optional) & & \begin{tabular}{l}
Monthly After School Support Sessions \\
Quarterly Curriculum Mapping and Scope and Sequence Revisions (Paid)
\end{tabular} & \begin{tabular}{l}
Monthly After School Support Sessions \\
Quarterly Curriculum Mapping and Scope and Sequence Revisions (Paid)
\end{tabular} & Continuation of Scope and Sequence Revisions and needs depending on Turnover and New Teachers \\
\hline Materials Processes and Distribution & \begin{tabular}{l}
Physical Textbook barcoding and distribution to sites \\
Digital Materials Uploaded via Deep Integration in Canvas
\end{tabular} & & Revised Digital Materials uploaded over Summer for September use & Revised Digital Materials uploaded over Summer for September use \\
\hline Budget Estimates & First year implementation Professional teachers based on current enrollment: & velopment Cost for 13 chemistry
\[
4,900
\] & Implementation with \(10 \%\) turnover estimate: \(\mathbf{\$ 6 , 0 0 0}\) & New Teacher Professional Development with \(10 \%\) turnover estimate: less than \(\mathbf{\$ 5 0 0}\) \\
\hline \multicolumn{2}{|l|}{Total 3 year Professional Development Allocation Estimate} & \$21,400 & & \\
\hline
\end{tabular}

\section*{Licensing:}

BFW is offering an eight year digital license. In the past, science digital licenses were in much shorter duration (4-6 years) which created a continuous cycle of changing expectations due to the variable resources. In order to create guaranteed and viable curriculum and build teacher capacity for implementation of NGSS instruction, materials with extended licenses are preferable. There will be renewal options and updates to the Sapling Learning platform and Canvas Modules as materials are updated.

\section*{Author Background:}

\section*{Dr. Angelica Stacy}
- Committee member and designer of NGSS Physical science standards (physics and chemistry)
- Served on College Board Chemistry Development Committee to redesign AP Chemistry course and exam
- Designed Living By Chemistry as a precursor to AP and college chemistry courses

\section*{Canvas Deep Integration:}

This curriculum is the only high school material reviewed to date that is fully compatible and integrated with the Canvas LMS. Sandbox courses and modules are available for teachers use, and all course materials, including digital book are applied to menu bar.

\section*{Additional Features to Note:}
- English/Spanish visual glossary
- Translation can occur within browser
- Can use Google Read+Write Features
- Accessible for Screen Reading Technology
- Accessible for Speech to Text Technology
- Visually adaptable

\section*{Previous Adopted Materials:}

Our previously adopted instructional materials (Introductory Chemistry by Zumdahl) can be maintained to be utilized for supplementing the Honors Chemistry Course. When we evaluate the current Living by Chemistry sequence, it may be decided to embellish the curriculum with additional laboratories or content topics by utilizing the existing physical materials and instructional materials. This is due to the difference in standards addressed in General Chemistry and Honors Chemistry (see expected Challenges below for details).

\section*{EXPECTED CHALLENGES}

Rigor: Our general chemistry course is designed to meet the needs of all students and address specific NGSS physical science (chemistry) standards. Our Honors Chemistry course is a college preparatory course that covers NGSS standards plus additional material. Many students who take Honors Chemistry also take AP/IB courses, such as AP or IB Chemistry. The Honors Course also prepares students for the rigorous and mathematical skills needed to be successful at these advanced level courses. Materials Review Committee Member and a few chemistry teachers stated that some areas of Chemistry lacked rigor and some specific content that is traditionally taught in the Honors Chemistry classroom. However, there is a difference in scope between colleges and university expectations in student post-secondary preparation and what is outlined in the NGSS DCIs. Specifically, gas laws, acid/base reactions, nomenclature, and solutions. These topics are usually considered pre-requisite knowledge for STEM field science courses at the college level, but are not part of our Washington State Science Learning Standards or NGSS. The difference in expected standards will allow us to make a clear distinction between chemistry and honors chemistry and develop more detailed course frameworks that define how and what is taught and the
purpose/rationale for a college preparatory or honors chemistry. In order to address this concern, we will collaborate in cross district PLCs and job alike work groups to add in specific questions for students and to determine at which stages of instruction rigor will need to be elevated. Teachers have developed excellent supplement resources to address these aforementioned topics, which can be shared and outlined in the course frameworks process.

Parent and Community Feedback: Historically, feedback from high school science curriculum reviews has been extremely challenging to encourage for a multitude of reasons. The content and topics are often alienating for those who do not have backgrounds in science. Although we have attempted to challenge this perceptions and make our curriculum preview nights as welcoming and invitational as possible, with the focus not on the content, but rather the pedagogy, relevancy and student accessibility, it has been a barrier we have struggled to overcome. We plan on reviewing challenges with the Department of Equity and Outreach and seek their advice on improving trust and communication through lines with our communities.
In addition, attempting to collect feedback from parents and community members in the midst of a global pandemic was extremely challenging. Usually, many events are structured for question and answer sessions, viewing physical materials, and collecting feedback. For this adoption, events were planned in March, April, and May of 2020 on designated Middle and High School Nights. Each middle and high school site was to be prepared with in person translators and childcare and open stations, a model that worked well for both the K-5 and 678 Science Adoption processes. The digital website was prepared as a supplement to these events in addition to the feedback form. With the closure of school, momentum and communication about the process was lost to much more urgent and pressing needs. The curriculum review website was launched again in March 2021, just prior to teachers and students pivoting into the classroom for hybrid simultaneous instruction. Despite the length of time the site and feedback form was publicized and available for review, minimal feedback was obtained. During the May12th MRC and chemistry teacher meeting, it was determined that one final and exhaustive push for feedback was necessary to allow for community and parent perspective on the curriculum. The following methods were used to one final attempt for feedback:
- Peachjar flyer in English and Spanish to flyerboard
- Email announcement in English and Spanish to almost 13,000 Edmonds accounts with attached links and flyers
- Facebook, Twitter, and Instagram posts
- eNews article on the day the feedback forms closed

Although 12,955 accounts were pinged with flyers, announcements and posted to the external site only 9 individuals submitted a feedback form. The overall rate of return was \(0.007 \%\). Details of performance metrics are shown in figures:


\section*{SCIENCE MATERIALS: PROBEWARE SENSORS, SOFTWARE, AND INTERFACES}

As previously mentioned, our high school sites need access to engaging and field tested physical materials to engage students in the Engineering and Technology Standards for NGSS and to prepare students for postsecondary success in STEM fields or college courses. Scientific instruments, such as probe ware sensors, and data collection software should be part of the core student experience.

\section*{NEEDS ASSESSMENT}

On October 2019, all district science teachers attended the job-alike at Meadowdale Middle School. Teachers received updates on the materials being reviewed as part of the curriculum adoption process, were able to review materials and provide feedback or evaluate using the established rubric, and inventoried current laboratory materials. This was the first time that science teachers were able to discuss and visualize the inequitable distribution of materials across sites, after documenting their current materials. One of the most eye-opening data points for staff to consider was that Scriber Lake High School did not have any advanced scientific tools available for use in the classroom, and that materials (save for consumables) have not been replenished for an excess of 25 years. For ease of viewing, please review the current inventories lists on this google sheet, each school site has an indicated tab: District Compiled Science Inventory

Staff then studied their current course frameworks and identified key laboratories and activities that would be much improved by adding data collection sensors and graph visualizations. At minimum, 5 multi-day laboratories were identified as well as a multitude of shorter labs and station activities. After identifying these key student inquiry experiences, an initial draft of science materials was developed.

\section*{REVIEW AND PILOTING}

\section*{REVIEW}

Department chairs and staff were tasked with refining the science materials list from January 2020-March 2021. After deep cleaning and review of science preparatory and storage spaces following our long closure for COVID, Department Chairs submitted final lists that included basic items in need of replacement. For example, for Scriber Lake and Mountlake Terrace High School determined that many student hot plates would need to be upgraded, while our other sites have been able to replace these items periodically over time with other funds. After discussing this with department chairs, it was determined that there would be a) an equal distribution of new tools at each site and b) equitable supplementation at sites with fewer materials to create symmetry in available materials in teacher's repertoires.

The science materials reviewed and proposed in this recommendation include the following:
- Sensors and Probes (Probeware)
- Hardwired with USB
- Bluetooth for mobile use (field studies outdoors)
- A variety of materials for each content area
- Data Analysis and Visualization Software


- Allows students to collect numerical data at discreet intervals
- Supports students in manipulating and interpreting data sets and graphs
- Accessible to all students
- Allows students to conduct experiments in a remote setting with in person peers or vice versa
- Interfaces
- The interface is the "computer" for the sensors and probes, that allow the probes and graphical analysis software to communicate and create visual data
- The preferred interface is the smaller, more mobile product that allows students to take measurements outdoors


Figure 27: Graphics of Science Material Sensors for simultaneous learning
- Supplemental Laboratory Supplies
- Examples include: hot plates, microscope upgrades such as cameras, spectrophotometers

\section*{PILOTING}

The pilot was conducted on a minimal basis, as these materials are currently used in our district. One aspect that was addressed was Chromebook and Chrome OS compatibility in terms of the data collections software as the original software used to analyze data, Logger Pro, was not compatible with the Chrome OS. However, a new software was developed during 2020-2021 called Graphical Analysis Pro which is compatible with the Chrome OS. This software was piloted internally by Student Learning with support of LIT and Technology and it was determined that this option would best suit students as it is a subscription based product and can be renewed or discontinued as needed. No additional piloting or technology review was suggested as this product fits the needs of students, teachers, and the recommended materials.

FINAL RECOMMENDATION AND ALLOCATIONS
It is recommended that all sites have access to the following science materials and the annual digital site license for the Edmonds School District. Complete allocation by site can be viewed on this google spreadsheet: Recommendation for Science Materials Allocation by Site 2021.
\begin{tabular}{|l|l|r|}
\hline Category & Item Type & \begin{tabular}{r} 
Quantity \\
per Site
\end{tabular} \\
\hline Sensor/ Probe & Motion Encoder Carts and Tracks & \(\mathbf{8}\) \\
\hline Sensor/ Probe & Pressure Sensor & \(\mathbf{1 8}\) \\
\hline Sensor/ Probe & Photogate & \(\mathbf{1 8}\) \\
\hline Sensor/ Probe & Motion Sensors & \(\mathbf{9}\) \\
\hline Sensor/ Probe & Force & \(\mathbf{1 8}\) \\
\hline Sensor/ Probe & Light & \(\mathbf{1 8}\) \\
\hline Sensor/ Probe & Turbidity Sensor & \(\mathbf{3}\) \\
\hline Sensor/ Probe & Temperature Sensors (USB- pack of 8) & \(\mathbf{2}\) \\
\hline
\end{tabular}
\begin{tabular}{|l|l|r|}
\hline Sensor/ Probe & Temperature Sensors (Wireless- pack of 8) & \(\mathbf{2}\) \\
\hline Sensor/ Probe & Spectrophotometer & \(\mathbf{4}\) \\
\hline Sensor/ Probe & Ph (teacher pack of 8) & \(\mathbf{2}\) \\
\hline Sensor/ Probe & Oxygen gas & \(\mathbf{1 8}\) \\
\hline Sensor/ Probe & Carbon Dioxide gas & \(\mathbf{1 8}\) \\
\hline Sensor/ Probe & Dissolved Oxygen & \(\mathbf{1 0}\) \\
\hline Interface & LabQuest Mini & \(\mathbf{2 4}\) \\
\hline Data Analysis and Visualization Software & Graphical Analysis Pro Site License & \(\mathbf{1}\) \\
\hline
\end{tabular}

Table 5: Science Materials by category
SCIENCE MATERIALS IMPLEMENTATION PLAN
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|c|}{Science Materials Implementation Plan} \\
\hline Timeline & Summer 2021 & 2021-2022 School Year & 2022-2023 School Year and Beyond \\
\hline Materials Implementation & & All materials available to be used & All materials available to be used \\
\hline Professional Development Options (Required) & \begin{tabular}{l}
Option A) \\
August Summer Institute \\
1.5 hour Training \\
- Materials set up \\
- Laboratory Integration \\
- Data Analysis \\
- Student Accommodations
\end{tabular} & \begin{tabular}{l}
Option B) \\
September Release or After School \\
1.5 hour Training \\
- Materials set up \\
- Laboratory Integration \\
- Data Analysis \\
- Student Accommodations
\end{tabular} & \begin{tabular}{l}
Options A and B) \\
Summer/September Release/ After School \\
1.5 hour Training \\
- Materials set up \\
- Laboratory Integration \\
- Data Analysis \\
- Student Accommodations
\end{tabular} \\
\hline Professional Development Options (Optional) & & Monthly After School Support Sessions & Monthly After School Support Sessions \\
\hline Materials Processes and Distribution & \begin{tabular}{l}
Materials barcoding and distribution to sites \\
Software Purchased and uploaded
\end{tabular} & & \\
\hline Budget Estimates & \begin{tabular}{l}
Professional Development for 36 \\
District License for Graphical Ana
\end{tabular} & \begin{tabular}{l}
School Teachers \(=\$ 1425\) \\
s Pro = \$199 annually
\end{tabular} & New Teacher Professional Development with 10\% turnover estimate: \$150-750 annually \\
\hline
\end{tabular}

Total 3 year Professional Development Allocation Estimate= \(\mathbf{\$ 2 , 1 7 5}\)

APPENDICES I-IX

\section*{WHY DID WE NEED NEW SCIENCE STANDARDS?}

Science, engineering, and technology Permeate every aspect of modern life. Some knowledge of science and engineering is required to understand and participate in many major public policy issues of today, as well as to make information every day decisions, such as selecting among alternative medical treatments or determining whether to buy an energy efficient furnace. By the end of the 12th grade, students should have sufficient knowledge of science and engineering to engage in public discussions on science-related issues, to be critical consumers of scientific information related to their everyday lives, and to be able to continue to learn about the science throughout their lives.

Today, science education in the United States is not guided by a common vision of what students finishing high school should know and be able to do in science. Too often, standards are long list of detailed and disconnected facts, reinforcing the criticism that our schools science curriculum tend to be "a mile wide and an inch deep. " Not only does this approach alienate young people, it also leaves them with fragments of knowledge and little sense of the inherent logic and consistency of science and of its universality. Moreover, the current fragmented approach neglects the need for students to engage in doing science and engineering, which is a key part of understanding science.-National Academy of Sciences, Report Brief, 2011

WHERE DID THE NEXT GENERATION SCIENCE STANDARDS COME FROM?

The Next Generation Science Standards (NGSS) were built from A Framework for K-12 Science Education.
The National Research Council (NRC) of the National Academy of Sciences was asked to develop a framework that would provide unifying guidance for the nation's schools to improve all students' understanding of science. The expert committee that developed the framework used research-based evidence on how students learn, input from a wide array of scientific experts and educators, and post national reform efforts, as well as its members' individual expertise and collective judgement. -National Academy of Sciences, Report Brief, 2011

A consortium of states used the framework developed by the experts to create the standards known as Next Generation Science Standards. Washington State participated in both the writing and review of the Next Generation Science Standards (NGSS) and adopted the NGSS now known as the Washington State 2013 K-12 Science Learning Standards.

After a five year implementation plan (2013-2017) that guided districts in aligning their curriculum and practice to the Washington State 2013 K-12 Science Learning Standards, Washington State released a science assessment in the 2017-2018 school year known as the Washington Comprehensive Assessment of Science (WCAS). The WCAS assessment is currently taken in Edmonds School District in the 5th, 8th, and 11th grade levels.

\section*{WHAT ARE THE INSTRUCTIONAL SHIFTS?}

Science educators in the United States are adapting to a new vision of how students learn science. Children are natural explorers, and their observations and intuitions about the world around them are the foundation for science learning. Unfortunately, the way science has been taught in the United States has not always taken advantage of those attributes. Some students who successfully complete their K-12 science classes have not really had the chance to "do" science for themselves in ways that harness their natural curiosity and understanding of the world around them. National Academy of Sciences, 2017

A New Vision for Science Education

Implications of the Vision of the Framework for K-12
Science Education and Next Generation Science Standards

\section*{Science Education Will involve Less: \\ Science Education Will involve More}

Rote memorization of facts and terminology

Learning of ideas disconnected from questions about phenomena

Teachers providing information to the whole class

Teachers posing questions with only one right answer

Facts and terminology as needed while developing explanations and designing solutions supported by evidence-based arguments and reasoning

Systems thinking and modeling to explain phenomena and to give a context for the ideas to be learned

Students conducting investigations, solving problems, and engaging in discussions with teachers' guidance

Students discussing open-ended questions that focus on the strength of the evidence used to generate claims

Students reading textbooks and answering questions at the end of the chapter

Students reading multiple sources; including science-related magazine and journal articles and web-based resources; students developing summaries of information.

Pre-planned outcome for "cookbook" laboratories or hands-on activities

Worksheets
Student writing of journals, reports, posters, and media presentations that explain and argue

Oversimplification of activities for students who are perceived to be less able to do science and engineering

Multiple investigations driven by students' questions with a range of possible outcomes that collectively lead to a deep understanding of established core scientific ideas

Provision of supports so that all students can engage in sophisticated science and engineering practices

\section*{THE NGSS OFFER FIVE INNOVATIONS FOR TEACHING}


Three Dimensional Learning: There are three equally important, distinct dimensions to learning science included in the NGSS: Scientific and Engineering Practices, Crosscutting Concepts, and Disciplinary Core Ideas. The NGSS connect all three dimensions. To prepare students for success in college and 21st century careers, the NGSS also connect scientific principles to real-world situations, allowing for more engaging and relevant instruction to explore complicated topics.

All three dimensions build coherent learning progressions: The NGSS provide students with continued opportunities to engage in and develop a deeper understanding of each of the three dimensions of science. Building on the knowledge and skills gained from each grade-from elementary through high school-students have multiple opportunities to revisit and expand their understanding of all three dimensions by the end of high school.

Students engage with phenomena and design solutions: In instructional systems aligned to the NGSS,
the goal of instruction is for students to be able to explain real-world phenomena and to design solutions using their understanding of the Disciplinary Core Ideas. Students can achieve this goal by engaging in the Science and Engineering Practices and applying the Crosscutting Concepts.

Engineering and the Nature of Science is integrated into science: Some unique aspects of engineering (e.g., identifying problems) are incorporated throughout the NGSS. In addition, unique aspects of the nature of science (e.g., how theories are developed) are also included throughout the NGSS as practices and crosscutting concepts.

Science is connected to math and literacy: The NGSS not only provide for coherence in science instruction and learning but the standards also connect science with mathematics and English Language Arts. This meaningful and substantive overlapping of skills and knowledge affords all students equitable access to the learning standards.

Achieve, Inc. 2016. NGSS Factsheet.

\section*{NGSS THREE-DIMENSIONAL LEARNING}

The NGSS shift the focus away from students learning about science to students doing science. K-12 students parallels the way scientific knowledge is developed in the real world by intertwining the three dimensions of the NGSS: The
Science and Engineering practices (what scientists and engineers do), Disciplinary Core ideas (big ideas that make up foundational knowledge used by scientists and
engineers), and Crosscutting Concepts (common themes that apply across science domains).

\section*{HOW DO I READ THE STANDARDS?}

See appendix __ for the complete 6-8 performance expectations.
The NGSS architecture was designed to provide information to teachers and curriculum and assessment developers beyond the traditional one-line standard. The Performance Expectations are the policy equivalent of what most states have used as their standards.

In order to show alignment and coherence to the Framework, the NGSS include the appropriate learning goals in "foundation boxes" in the order in which they appeared in the Framework. They were included to ensure curriculum and assessment developers should not be required to guess the intent of the Performance Expectations. -NSTA.com, 2014

To review the specific science standards visit:
HTTP://WWW.NEXTGENSCIENCE.ORG/EVIDENCE-STATEMENTS

\section*{APPENDIX II: SCIENCE EVALUATION RUBRIC}

\author{
Edmonds School District
}

\section*{Science Curriculum Evaluation Rubric}

HS NGSS Science Adoption 2019


This rubric was designed through committee work of the Edmonds School District Science Materials Review Committee. The purpose of this rubric is to assist educators in evaluating core curriculum, including lessons, activities or investigations, units, and sequences of multiple units to determine its alignment with the conceptual shifts of the NGSS. Because the criteria is aligned to the Next Generation Science Standards and the NRC Framework for K-12 Science Education, a comprehensive understanding of these documents should be in place. The NRC Framework clearly emphasizes the shifts in science education that should be present in instructional materials:
1) Three-dimensional learning - students engage in science and engineering practices to learn content, while relating and understanding that content through the lens of crosscutting concepts.
2) Explaining phenomena and designing solutions- students investigate the world around them in order to explain phenomena and use their scientific understanding to design solutions to problems.
3) Engineering design and the nature of science- students do authentic work of scientists and engineers, explicitly seeing themselves in those roles and understanding what that entails.
4) Coherent learning progressions- within a grade and from K-12, three-dimensional learning builds on past experience, avoiding redundancy and building connections across disciplines.
5) Connections to English/language arts and mathematics- students' learning reflects real-world contexts as it explicitly uses practices and understandings from mathematics and English/language arts.

For scoring, committee members will use a 4 point scale evaluating each criteria. A score of 4 indicates a high degree of NGSS alignment and a score of 1 indicates traditional, non-NGSS aligned materials. A coefficient score is applied to categories that are weighted due to importance.
\begin{tabular}{|c|l|}
\hline (4) & NGSS designed. May require very little modification. The element is presented in full and is of good quality. It would be supportive of student learning. \\
\hline (3) & \begin{tabular}{l} 
Mostly NGSS aligned. May require some modification or accommodations for students. The element is present. May need a little supplementation, but could be used adequately \\
to support student learning.
\end{tabular} \\
\hline (2) & \begin{tabular}{l} 
Mostly Traditional. Would require a moderate amount of modification for NGSS alignment. The element is not present, partially present, or of very poor quality. Major \\
supplementation is needed to adequately support student learning.
\end{tabular} \\
\hline (1) & Traditional. Would require major modifications for NGSS alignment. The element is not present at all. \\
\hline
\end{tabular}

This rubric was not intended to replace an in-depth review of a unit through the use of the EquIP or PEEC rubrics, but is designed to allow educators a faster preliminary review of a potential lesson, activity, or resource to determine its appropriateness and alignment to NGSS. This evaluation tool draws heavily from the EQuIP rubric and PEEC alignment tools, developed by Achieve. NGSS Early Adopter State Rubrics from Wisconsin, Oregon, Georgia, and lowa were also utilized in this process. Cross referenced citations are located here.

\section*{Category A: NGSS 3-Dimensional Design}

\section*{Criteria}

A1 : Phenomena Based
Making sense of a phenomena and or designing solutions to a problem drive student learning.

\section*{A2: Disciplinary Core Ideas (DCIs)}

DCls are the fundamental ideas that are necessary for understanding a given science discipline. The core ideas all have broad importance within or across science or engineering disciplines, provide a key tool for understanding or investigating complex ideas and solving problems, relate to societal or personal concerns, and can be taught over multiple grade levels at progressive levels of depth and complexity

\section*{A3: Cross Cutting Concepts (CCCs)}

These are concepts that hold true across the natural and engineered world. Students can use them to make connections across seemingly disparate disciplines or situations, connect new learning to prior experiences, and more deeply engage with material across the other dimensions. The NGSS requires that students explicitly use their understanding of the CCCs to make sense of phenomena or solve problems

\section*{A4: Science and Engineering Practices (SEPs)}

Students do the authentic work of scientists and engineers, explicitly seeing themselves in those roles and what that entails. Engineering is embedded in the learning sequence to support solutions.

\section*{A5: 3 Dimensions are Integrated}

Builds understanding of multiple age appropriate elements of the SEPs, DCIs, and CCCs that are deliberately selected to aid in student sense making of the phenomena and/or designing of solutions. Student sense making of the phenomena and or designing of solutions requires students to use the SEPs and CCCs in authentic ways
4

Learning is organized around essential questions and investigating meaningful phenomena through student initiated explorations and with opportunities to design their own procedures and build evidence.

Content is examined and experienced in a meaningful and authentic manner and builds coherently towards answering the essential question while remaining ageappropriate* and connecting more than one science discipline.
* NSTA DCI Matrix Learning is framed by big ideas of science/ themes (cross-cutting concepts) in a gradeappropriate manner* that would allow students to see and/or describe the connections to phenomena within or across disciplines.
* NSTA CCC Matrix Students engage in grade-appropriate scientific and engineering practices* to learn about the world around them and solve problems with little prompting and teacher guidance.
*NSTA SEP Matrix

\section*{A blend in practices,} content, and crosscutting concepts is evident in how material is presented, not just what
Phenomena is present with the goal of making sense of the world (not just covering content), but appears loosely connected and student explorations are investigations provided to them.

Content is connected to meaningful phenomena but the connection is loose or requires teacher prompting for student to see connection.

Learning is framed by big ideas of science/ themes (cross-cutting concepts) but likely would not be explicitly seen by students without teacher prompting or guidance.

\section*{Students engage in} science and engineering practices but their engagement is teacherdirected.

Lesson utilizes the three dimensions, but they are incorporated as 3 separate entities

Learning has limited explicit connection to students' day-to-day lives and questions and while learning may be difficult, but is not conceptually rigorous student work confirms equations and/or generally follows a set procedure
tudents interact with content in somewhat meaningful ways but with little need to apply he content to real-world situations or phenomena

\section*{earning may be framed} by big ideas of science/ themes (cross-cutting concepts) but connections are implicit or very loosely onnected

Students are asked to follow a scientific method instead o dentifying science and engineering practices.
esson or activity utilizes wo of the three dimensions (content, or science/engineering practices, or crosscutting concept)

Organized by big content
ideas, each section/chapter having lab idea(s) that largely confirm learning about that content with no meaningful phenomena present.

Content is presented through worksheets or activities that focus on simple memorization of facts.

Learning is not framed by big ideas of science/ themes. (cross-cutting concepts) and concepts are disconnected from unit to unit

Students are not utilizing any science or engineering practices.

Lesson or activity appears to only utilize one of the three dimensions with student learning centered on

*DO NOT proceed to Categories B-G if Total is below 12, or each criteria is 2 or below. It is a requirement of the Edmonds School District that materials be designed or strongly aligned to NGSS. If materials score a 2 or below in one criteria, specific evidence must be cited and will be collectively evaluated by the committee.
\begin{tabular}{|c|l|}
\hline (4) & NGSS designed. May require very little modification. The element is presented in full and is of good quality. It would be supportive of student learning. \\
\hline (3) & \begin{tabular}{l} 
Mostly NGSS aligned. May require some modification or accommodations for students. The element is present. May need a little supplementation, but could be used adequately \\
to support student learning.
\end{tabular} \\
\hline (2) & \begin{tabular}{l} 
Mostly Traditional. Would require a moderate amount of modification for NGSS alignment. The element is not present, partially present, or of very poor quality. Major \\
supplementation is needed to adequately support student learning.
\end{tabular} \\
\hline (1) & Traditional. Would require major modifications for NGSS alignment. The element is not present at all. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{7}{|l|}{Category B: Student Engagement} & \multirow[t]{2}{*}{Notes} \\
\hline \multicolumn{3}{|l|}{Criteria} & 4 & 3 & 2 & 1 & \\
\hline B1 & \multicolumn{2}{|l|}{The context of learning experiences, including relevant phenomenon, questions or problems engages students in 3-d learning through inquiry and engineering design.} & & & & & \\
\hline B2 & \multicolumn{2}{|l|}{Provides relevant hands on experiences as "activities" and "labs" that allow students to explore and make sense of the physical and natural world} & & & & & \\
\hline B3 & \multicolumn{2}{|l|}{Provides opportunities to connect their explanation of a phenomenon and/or design solution to their own experience at home, life, school or careers, taking into account student choice, agency, and voice} & & & & & \\
\hline B4 & \multicolumn{2}{|l|}{Opportunities to practice scientific discourse in oral, visual and/or written form and to respond to peers and teacher feedback as scientifically literate citizens.} & & & & & \\
\hline \multicolumn{3}{|r|}{Subtotal} & & & & & \\
\hline & & Category B Total & \multicolumn{4}{|r|}{/16} & \\
\hline
\end{tabular}
\begin{tabular}{|c|l|}
\hline (4) & NGSS designed. May require very little modification. The element is presented in full and is of good quality. It would be supportive of student learning. \\
\hline (3) & \begin{tabular}{l} 
Mostly NGSS aligned. May require some modification or accommodations for students. The element is present. May need a little supplementation, but could be used adequately \\
to support student learning.
\end{tabular} \\
\hline (2) & \begin{tabular}{l} 
Mostly Traditional. Would require a moderate amount of modification for NGSS alignment. The element is not present, partially present, or of very poor quality. Major \\
supplementation is needed to adequately support student learning.
\end{tabular} \\
\hline (1) & Traditional. Would require major modifications for NGSS alignment. The element is not present at all. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{7}{|l|}{Category C: Monitoring Student Progress} & \multirow[t]{2}{*}{Notes} \\
\hline \multicolumn{3}{|l|}{Criteria} & 4 & 3 & 2 & 1 & \\
\hline C1 & \multicolumn{2}{|l|}{Elicits direct, observable evidence of 3-D learning using practices with core ideas and CCCs to make sense of phenomena and or to design solutions that have been covered adequately in the instructional materials. Teachers should be able to collect artifacts showing a student's growth in these areas.} & & & & & \\
\hline C2 & \multicolumn{2}{|l|}{Platform is easy to navigate, with downloadable, editable, and device independent materials} & & & & & \\
\hline C3 & \multicolumn{2}{|l|}{Elicits direct observable evidence of 3-D learning using practices with DCI and CCCS to make sense of phenomena through ongoing formative assessments.} & & & & & \\
\hline C4 & \multicolumn{2}{|l|}{Provides quality test banks that include questions with a full spectrum of rigor from recall to application. Rubrics that assess students in 3 dimensions, complete with opportunities for demonstration of learning in multiple domains.} & & & & & \\
\hline \multicolumn{3}{|r|}{Subtotal} & & & & & \\
\hline & & Category C Total & \multicolumn{4}{|r|}{/16} & \\
\hline
\end{tabular}
\begin{tabular}{|c|l|}
\hline (4) & NGSS designed. May require very little modification. The element is presented in full and is of good quality. It would be supportive of student learning. \\
\hline (3) & \begin{tabular}{l} 
Mostly NGSS aligned. May require some modification or accommodations for students. The element is present. May need a little supplementation, but could be used adequately \\
to support student learning.
\end{tabular} \\
\hline (2) & \begin{tabular}{l} 
Mostly Traditional. Would require a moderate amount of modification for NGSS alignment. The element is not present, partially present, or of very poor quality. Major \\
supplementation is needed to adequately support student learning.
\end{tabular} \\
\hline (1) & Traditional. Would require major modifications for NGSS alignment. The element is not present at all. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{7}{|l|}{Category D: Instructional Supports} & \multirow[t]{3}{*}{Notes} \\
\hline \multicolumn{3}{|l|}{Criteria} & 4 & 3 & 2 & 1 & \\
\hline D1 & \multicolumn{2}{|l|}{Provides strategies for linking student learning across lessons and between units.} & & & & & \\
\hline D2 & \multicolumn{2}{|l|}{Instructional sequence consistently provides multiple opportunities and adequate time for student learning (by lesson and unit).} & & & & & \\
\hline D3 & \multicolumn{2}{|l|}{Uses diverse instructional strategies in a logical progression of instruction that provide clear purposes for learning experiences (e.g., elicit preconceptions, teach new knowledge, build skills and abilities, connect to prior knowledge)} & & & & & \\
\hline D4 & \multicolumn{2}{|l|}{Engineering is embedded. Clear instructions and pedagogy are outlined for students and teachers.} & & & & & \\
\hline D5 & \multicolumn{2}{|l|}{Background information, Instructions for academic discourse and roles are included to support facilitation in the classroom, corresponding research, model videos are included to support the needs of teachers with a variety of experience teaching science.} & & & & & \\
\hline \multicolumn{3}{|r|}{Subtotal} & & & & & \\
\hline & & Category D Total & & & & 120 & \\
\hline
\end{tabular}
\begin{tabular}{|c|l|}
\hline (4) & NGSS designed. May require very little modification. The element is presented in full and is of good quality. It would be supportive of student learning. \\
\hline (3) & \begin{tabular}{l} 
Mostly NGSS aligned. May require some modification or accommodations for students. The element is present. May need a little supplementation, but could be used adequately \\
to support student learning.
\end{tabular} \\
\hline (2) & \begin{tabular}{l} 
Mostly Traditional. Would require a moderate amount of modification for NGSS alignment. The element is not present, partially present, or of very poor quality. Major \\
supplementation is needed to adequately support student learning.
\end{tabular} \\
\hline (1) & Traditional. Would require major modifications for NGSS alignment. The element is not present at all. \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|l|l|}
\hline \multicolumn{7}{|l|}{ Category E: Technology } \\
\hline Eriteria & Notes \\
\hline E1 & \begin{tabular}{l} 
Provide virtual lab simulations that support, extend, and enhance \\
learning experiences but do not replace hands-on activities that also \\
include a component of student choice.
\end{tabular} & \(\mathbf{4}\) & \(\mathbf{3}\) & \(\mathbf{2}\) & \(\mathbf{1}\) & \\
\hline E2 & \begin{tabular}{l} 
Supplies and equipment are high quality (durable, dependable) and \\
organized, with thorough lists of consumable and non-consumable \\
materials aligned for both instruction and assessment
\end{tabular} & & & & \\
\hline & \begin{tabular}{l} 
Content contains grade-appropriate scientific information, vocabulary, \\
phenomena, models and representations to support student's three- \\
dimensional learning, in an easy to navigate platform that allows \\
students easily transition between hands on activities and device \\
dependent learning.
\end{tabular} & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|l|}
\hline (4) & NGSS designed. May require very little modification. The element is presented in full and is of good quality. It would be supportive of student learning. \\
\hline (3) & \begin{tabular}{l} 
Mostly NGSS aligned. May require some modification or accommodations for students. The element is present. May need a little supplementation, but could be used adequately \\
to support student learning.
\end{tabular} \\
\hline (2) & \begin{tabular}{l} 
Mostly Traditional. Would require a moderate amount of modification for NGSS alignment. The element is not present, partially present, or of very poor quality. Major \\
supplementation is needed to adequately support student learning.
\end{tabular} \\
\hline (1) & Traditional. Would require major modifications for NGSS alignment. The element is not present at all. \\
\hline
\end{tabular}

\begin{tabular}{|c|l|}
\hline (4) & NGSS designed. May require very little modification. The element is presented in full and is of good quality. It would be supportive of student learning. \\
\hline (3) & \begin{tabular}{l} 
Mostly NGSS aligned. May require some modification or accommodations for students. The element is present. May need a little supplementation, but could be used adequately \\
to support student learning.
\end{tabular} \\
\hline (2) & \begin{tabular}{l} 
Mostly Traditional. Would require a moderate amount of modification for NGSS alignment. The element is not present, partially present, or of very poor quality. Major \\
supplementation is needed to adequately support student learning.
\end{tabular} \\
\hline (1) & Traditional. Would require major modifications for NGSS alignment. The element is not present at all. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{7}{|l|}{Category G: Bias} & \multirow[t]{2}{*}{Notes} \\
\hline \multicolumn{3}{|l|}{Criteria} & 4 & 3 & 2 & 1 & \\
\hline G1 & \multicolumn{2}{|l|}{The program reflects the depth and breadth of diversity found in the real world.} & & & & & \\
\hline G2 & \multicolumn{2}{|l|}{Males and females are equally represented in text and graphics.} & & & & & \\
\hline G3 & \multicolumn{2}{|l|}{Materials contain racial/ethnic balance in text and graphics.} & & & & & \\
\hline G4 & \multicolumn{2}{|l|}{Persons with and without disabilities are represented in text and graphics.} & & & & & \\
\hline G5 & \multicolumn{2}{|l|}{Characters are described by their behaviors, beliefs, and values, rather than unnecessary socio-economic descriptors.} & & & & & \\
\hline G6 & \multicolumn{2}{|l|}{In addition to the traditional nuclear family model, family groups are depicted in which there are single parents, adopted and foster children, step-parents, same-sex parents, and/or relatives living with the family.} & & & & & \\
\hline G7 & \multicolumn{2}{|l|}{Program avoids use of stereotypical language and images.} & & & & & \\
\hline \multicolumn{3}{|r|}{Subtotal} & & & & & \\
\hline & & Category F Total & \multicolumn{4}{|r|}{128} & \\
\hline
\end{tabular}

\footnotetext{
+ Pursuant to ESD Board Policy 2020: "Instructional materials shall be free of bias pertaining to sex, race, creed, religion, color, national origin, honorably discharged veteran or military status, sexual orientation including gender expression or identity, the presence of any sensory, mental, or physical disability, or the use of a trained dog guide or service animal."
"See separate "Washington Models for the Evaluation of Bias" document for best practices in conducting this section of the review.
}
bedford, freeman, \& worth High School Publishers

\section*{Living By Chemistry: Correlations Compatible with Next Generation Science Standards}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & A & B & c & D & E & F & G & H & 1 & J & K & L & M & N & 0 & P & Q & R & S & T & U & v & W & x & Y \\
\hline 1 & &  &  &  &  &  & U2 C6: Speaking of Molecules &  &  & U2 C9: Molecules in the Body & U3 C10: Physically Changing Matte &  & U3 C12: Concentrating Matter & U4 C13: Toxic Changes & U4 C14: Measuring Toxins &  &  &  &  &  &  &  &  &  &  \\
\hline 2 & HS-PS1-1 & & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & \(\checkmark\) & & & & & \(\checkmark\) & & & & \(\checkmark\) & & & \(\checkmark\) & \(\checkmark\) & & & \\
\hline 3 & HS-PS1-2 & & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & & & & & & \(\checkmark\) & & & \(\checkmark\) & \(\checkmark\) & & \(\checkmark\) & & \(\checkmark\) & & \(\checkmark\) & \\
\hline 4 & HS-PS1-3 & & & & & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) & & & & \(\checkmark\) & \(\checkmark\) & & & \(\checkmark\) & \(\checkmark\) & & & & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) \\
\hline 5 & HS-PS1-4 & & & & & & \(\checkmark\) & & & & & & & & & & & & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & & \\
\hline 6 & HS-PS1-5 & & & & & & & & & & & & & & & & & & & & \(\checkmark\) & & & & \\
\hline 7 & HS-PS1-6 & & & & & & & & & & & & & & & & & & & & & & & & \(\checkmark\) \\
\hline 8 & HS-PS1-7 & & \(\checkmark\) & & & & \(\checkmark\) & & & & & & & \(\checkmark\) & & & \(\checkmark\) & \(\checkmark\) & & & & & & & \\
\hline 9 & HS-PS1-8 & & & \(\checkmark\) & & & & & & & & & & & & & & & & & & & & & \\
\hline 10 & HS-PS2-1 & & & & & & & & & & & & & & & & & & & & & & & & \\
\hline 11 & HS-PS2-2 & & & & & & & & & & & \(\checkmark\) & & & & & & & & & & & & & \\
\hline 12 & HS-PS2-3 & & & & & & & & & & & & & & & & & & & & & & & & \\
\hline 13 & HS-PS2-4 & & & & \(\checkmark\) & & & & & & & & & & & & & \(\checkmark\) & & & & \(\checkmark\) & & & \\
\hline 14 & HS-PS2-5 & & & & & & & & & & & & & & & & & & & & & & & & \\
\hline 15 & HS-PS2-6 & & & & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & & & & & & & & & & \(\checkmark\) & & \(\checkmark\) & & & \\
\hline 16 & HS-PS3-1 & & & & & & & & & & & & & & & & & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & \\
\hline 17 & HS-PS3-2 & & & & & & & & & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & & & & & & & & & & & \\
\hline 18 & HS-PS3-3 & & & & & & & & & & & & & & & & & & & & \(\checkmark\) & \(\checkmark\) & & & \\
\hline 19 & HS-PS3-4 & & & & & & & & & & & & & & & & & & \(\checkmark\) & \(\checkmark\) & & & & & \\
\hline 20 & HS-PS3-5 & & & & & & & & \(\checkmark\) & & & & & & & & & & & & & & & & \\
\hline 21 & HS-PS4-1 & & & & & & & & & & & & & & & & & & & & & \(\checkmark\) & & & \\
\hline 22 & HS-PS4-2 & & & & & & & & & & & & & & & & & & & & & & & & \\
\hline 23 & HS-PS4-3 & & & & & & & & & & & & & & & & & & & & & & & & \\
\hline 24 & HS-PS4-4 & & & & & & & & & & & & & & & & & & & & & \(\checkmark\) & & & \\
\hline 25 & HS-PS4-5 & & & & & & & & & & & & & & & & & & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & A & B & c & D & E & F & G & H & 1 & J & K & L & M & N & 0 & P & Q & R & S & T & \(u\) & V & w & X & Y \\
\hline 1 & & U1 C1: Defining matter & U1 C2: Basic Building Materials &  &  & U1 C5: Building with Matter &  & U2 C7: Building Molecules &  &  & U3 C10: Physically Changing Matte & U3 C11: Pressing Matter &  & U4 C13: Toxic Changes & U4 C14: Measuring Toxins &  & U4 C16: Acidic Toxins &  &  &  &  &  &  &  &  \\
\hline 2 & SEP-1 & & & & & & & & \(\checkmark\) & & & & & & & & & & & & & \(\checkmark\) & & & \\
\hline 3 & SEP-2 & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) \\
\hline 4 & SEP-3 & & & & & & & & & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & & \(\checkmark\) & & & & \(\checkmark\) & & & & & \\
\hline 5 & SEP-4 & \(\checkmark\) & & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) & & & & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & & & & \\
\hline 6 & SEP-5 & \(\checkmark\) & & & & & & & & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) \\
\hline 7 & SEP-6 & \(\checkmark\) & \(\checkmark\) & & & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & & & \(\checkmark\) & & & \(\checkmark\) & & & & & \\
\hline 8 & SEP-7 & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & & & \(\checkmark\) & \(\checkmark\) & & \(\checkmark\) & & \\
\hline 9 & SEP-8 & & & \(\checkmark\) & & & & & & & \(\checkmark\) & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) & & & \(\checkmark\) & & & \(\checkmark\) & & & \(\checkmark\) & \\
\hline
\end{tabular}
bedford, freeman, \& worth High School Publishers


\section*{APPENDIX IV: TECHNOLOGY SURVEY AND REVIEW}

The digital companion materials and integration has been approved and is compatible with current district technologies, including Skyward and Canvas. To view the full compatibility and screening survey for this vendor, go to the following google sheet: https://docs.google.com/spreadsheets/d/12HBPvoRgVYV39BwqTCd2p8omjFfHb-I-lfSbl22wFjs/edit?usp=sharing

\section*{APPENDIX V: PARENT AND COMMUNITY FEEDBACK AND REVIEW RESOURCE LINKS}

To view the Chemistry Curriculum Review website, go to the following linked site:
https://sites.google.com/edmonds.wednet.edu/esd15highschoolscienceadoption/home
Edmonds Peachjar Flyerboard
Spanish Peachjar Flyer
English Peachjar Flyer
\begin{tabular}{|l|l|}
\hline \multicolumn{2}{|c|}{ Living By Chemistry Adoption Purchase Estimate } \\
\hline Item & Total Category Expense \\
\hline Student Textbooks with 8 year digital license & \(\$ 132,320\) \\
\hline Teacher Materials & In gratis \\
\hline Total 3 year Professional Development Allocation Estimate & \(\$ 21,400\) \\
\hline Total Cost Estimate for General Chemistry & \(\$ 153,720\) \\
\hline Total Cost Estimate for Honors and General Chemistry & \(\mathbf{\$ 2 3 1 , 2 9 0}\) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Science Materials Purchase Overview} \\
\hline & Item & Model: & Price/individual item & Number per school & Total Category pricing \\
\hline Sensor/ Probe & Motion Encoder Carts and Tracks & DTS-EC & \$445.00 & 8 & \$3,560.00 \\
\hline Sensor/ Probe & Pressure Sensor & GPS-BTA & \$89.00 & 18 & \$1,602.00 \\
\hline Sensor/ Probe & Photogate & VPG-BTD & \$49.00 & 18 & \$882.00 \\
\hline Sensor/ Probe & Motion Sensors & MD-BTD & \$89.00 & 9 & \$801.00 \\
\hline Sensor/ Probe & Force & DFS-BTA & \$109.00 & 18 & \$1,962.00 \\
\hline Sensor/ Probe & Light & LS-BTA & \$59.00 & 18 & \$1,062.00 \\
\hline Sensor/ Probe & Turbidity Sensor & TRB-BTA & \$112.00 & 3 & \$336.00 \\
\hline Sensor/ Probe & Temperature Sensors (wired pack of 8) & GT-TP & \$299.00 & 2 & \$598.00 \\
\hline Sensor/ Probe & Temperature Sensors (Wirelesspack of 8 ) & GO-TEMP & \$599.00 & 2 & \$1,198.00 \\
\hline Sensor/ Probe & Spectrophotometer & GDX-VDISPL & \$399.00 & 4 & \$1,596.00 \\
\hline Sensor/ Probe & Ph (teacher pack of 8) & GDX-PH-TP & \$758.00 & 2 & \$1,516.00 \\
\hline Sensor/ Probe & Oxygen gas & GDX-O2 & \$189.00 & 18 & \$3,402.00 \\
\hline Sensor/ Probe & Carbon Dioxide gas & GDX-CO2 & \$199.00 & 18 & \$3,582.00 \\
\hline Sensor/ Probe & Dissolved Oxygen & GDX-ODO & \$298.00 & 10 & \$2,980.00 \\
\hline Interface & LabQuest Mini & LQ-MINI & \$169.00 & 24 & \$4,056.00 \\
\hline \multicolumn{5}{|l|}{Total Probeware Cost Per Site} & \$29,133.00 \\
\hline \multicolumn{5}{|l|}{District Graphical Analysis Pro Site License (for all K-12 schools) annual purchase} & \$199.00 \\
\hline \multicolumn{5}{|l|}{Total Probeware and License Cost for District} & \$145,864.00 \\
\hline \multicolumn{5}{|l|}{Estimated Professional Development for 3 years} & \$2,175.00 \\
\hline \multicolumn{5}{|l|}{TOTAL} & \$148,039.00 \\
\hline
\end{tabular}

\section*{APPENDIX VIII: ACKNOWLEDGEMENTS}

\section*{Acknowledgements}

A special thanks to the families, community members, and students of the Edmonds School District that participated in reviewing and providing feedback on curricula throughout the adoption process.

\section*{Material Review Committee}

Pete Bonifaci, Lynnwood High School
Richard Croxon, Scriber Lake High School
Corrine Daycross, Meadowdale High School
Kelly Hayes, Edmonds Woodway High School
Allen Paves, Meadowdale High School
Corey Thomas, Meadowdale High School

Dianne Thompson, Meadowdale High School
Jonathan Tong, Mountlake Terrace High School
Brenda Torres, Lynnwood High School
John Traxler, Mountlake Terrace High School
Susan Russell, Lynnwood High School

\section*{Student Learning Science Adoption Team}

Jennifer Hageman
7-12 Science Lead

Kim Hunter
Manager of Secondary Education

\section*{Valued Consultants}

\section*{Professional Education Committee (PEC)}

Instruction Material Committee (IMC)

\author{
Christa Polzin \\ Instructional Technology Coordinator \\ Jen Madson \\ Information Systems Supervisor \\ Chris Hagen \\ Information Systems Data Analyst
}

\section*{APPENDIX IX: RESEARCH AND REFERENCES}

Achieve. "Next Generation Science Standards: Read the Standards." Next Generation Science Standards, 2013, www.nextgenscience.org/search-standards.

Achieve. "PEEC Professional Learning Facilitator's Guide." Next Generation Science Standards, 2018, nextgenscience.org/peecpl.
"EQuIP Professional Learning Facilitator's Guide." Edited by Tricia Shelton, Next Generation Science Standards, 2017, www.nextgenscience.org/resources/equip-professional-learning-facilitator\%E2\%80\%99s-guide-0.

National Academies of Sciences. "Seeing Students Learn Science: Integrating Assessment and Instruction in the Classroom." National Academies Press: OpenBook, 27 Mar. 2017, www.nap.edu/catalog/23548/seeing-students-learn-science-integrating-assessment-and-instruction-in-the.

National Research Council, and Committee. "Guide to Implementing the Next Generation Science Standards." National Academies Press: OpenBook, 8 Jan. 2015, www.nap.edu/catalog/18802/guide-to-implementing-the-next-generation-science-standards.

NSTA. "Introduction." NGSS@NSTA, 2014, ngss.nsta.org/front-matter.aspx.

Rhodes, Holly. Design, Selection, and Implementation of Instructional Materials for the next Generation Science Standards: Proceedings of a Workshop. The National Academies Press, 2018.

The National Academy of Science. "Board Brief: A Framework For K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas." The National Academies of Science, Engineering, and Medicine, The National Academy Press , July 2011, www.nap.edu/resource/13165/dbasse_071099.pdf.

\section*{High School General Chemistry and Science Materials Adoption Recommendation}

Edmonds School District • Student Learning Department

HIGH SCHOOL SCIENCE
rials Review Committee. all science staff, and a focus group of students
determined the following elements determined the following elements to be
critical for an engaging and relevent scienc curriclulum
1 NGSS ALIGNMENT

2 coherent storyine

3 engaging phenomena

4 COGNItive complexity

5 DIFFERENTIATEDREADINGS

6 translated materials

1 culturally responsive

8 E-BOOK + DIGITAL MATERIALS

Needs Assessment
\begin{tabular}{|l|l|l|l|l|l|}
\hline Course & Textbook & Publisher & \begin{tabular}{l} 
Pub. \\
Year
\end{tabular} & \begin{tabular}{l} 
Adopt \\
ed
\end{tabular} & \begin{tabular}{l} 
Grade Levels/ \\
Sites
\end{tabular} \\
\hline Biology & Biology (Miller-Levine) & \begin{tabular}{l} 
Prentice \\
Hall
\end{tabular} & 2004 & 2004 & 9 \& 10 \\
\hline Global Science & \begin{tabular}{l} 
Concepts in Action with Earth \\
and Space Science
\end{tabular} & \begin{tabular}{l} 
Prentice \\
Hall
\end{tabular} & 2004 & 2004 & 9 \& 10 \\
\hline \begin{tabular}{l} 
Integrated \\
Physical Science
\end{tabular} & Conceptual Physics (Hewitt) & \begin{tabular}{l} 
Prentice \\
Hall
\end{tabular} & 2006 & 2005 & EW, MT, SL \\
\hline \begin{tabular}{l} 
Integrated \\
Physical Science
\end{tabular} & \begin{tabular}{l} 
Hewitt Conceptual Physical \\
Science (supplement)
\end{tabular} & \begin{tabular}{l} 
Prentice \\
Hall
\end{tabular} & 2002 & 2004 & \begin{tabular}{l} 
9-10 \\
(supplement)
\end{tabular} \\
\hline Chemistry & \begin{tabular}{l} 
Introductory Chemistry \\
(Zumdahl) 3rd Edition
\end{tabular} & \begin{tabular}{l} 
Houghton \\
Mifflin
\end{tabular} & 2004 & 2005 & \begin{tabular}{l} 
LH,EW,MD,M \\
T,SL
\end{tabular} \\
\hline Physics & \begin{tabular}{l} 
Physics, AP (Walker) 2 2 \\
Edition
\end{tabular} & \begin{tabular}{l} 
Prentice \\
Hall
\end{tabular} & 2004 & 2005 & \begin{tabular}{l} 
EW, MT, MD, \\
LH
\end{tabular} \\
\hline
\end{tabular}
istrict • Student Learning Department
\begin{tabular}{|l|l|c|}
\hline Publisher & Title & \begin{tabular}{l} 
Selected for Full \\
Review
\end{tabular} \\
\hline McGraw Hill & Inspire Chemistry & X \\
\hline Activate Learning & Active Chemistry & \\
\hline \begin{tabular}{l} 
HMH Science \\
Dimensions
\end{tabular} & \begin{tabular}{l} 
HMH Science Dimensions \\
Chemistry
\end{tabular} & X \\
\hline \begin{tabular}{l} 
Accelerate \\
Learning
\end{tabular} & STEMscopes & X \\
\hline \begin{tabular}{l} 
Bedford Freeman \\
Worth
\end{tabular} & Living By Chemistry & X \\
\hline Pearson & Mastering Chemistry & X \\
\hline Cengage & Chemistry (Zumdahl 2018) & \\
\hline
\end{tabular}

\section*{Course Materials Selected for Full Rubric Evaluation}

Edmonds School District • Student Learning Department

\section*{Rubric Evaluation and Alignment}

\begin{tabular}{|r|r|r|r|}
\hline Material & Min & Median & Max \\
\hline STEMscopes & 117 & 132 & 141 \\
\hline Pearson & 92 & 106 & 120 \\
\hline Cengage & 117 & 118.5 & 120 \\
\hline HMH Science & 115 & 117 & 127 \\
\hline Livaw Hill & 131.5 & 143 & 145 \\
\hline
\end{tabular}

Edmonds School District • Student Learning Department

\section*{Piloting Overview}

Materials that Best support Student Learning


\section*{Initial Pilot:}

175 students for 3 Units
50 submitted responses
- Weather
- Toxicology
- Alchemy

\section*{Extended Pilot:}

65 students for 2020-2021
school year

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\section*{Pilot Student Feedback}

Based on what you have seen and participated in, would you like other teachers in the Edmonds school district to use this science curriculum?


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\section*{Parent and Community Feedback}

Based on the information that you have reviewed, do you recommend the Living by Chemistry curriculum for the general education chemistry students in our district?



Content and Relevancy Feedback


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\section*{Chemistry Teacher Feedback}

Based on the information that you have reviewed, do you recommend the Living by Chemistry curriculum for the general education chemistry students in our district?
No (1)
10.0\%

Teacher feedback indicated that the Living by Chemistry materials are an appropriate baseline knowledge for ALL students in chemistry and that it is best suited for students in the general education chemistry setting, while providing access to students who may find chemistry a challenging subject area to master.
However, specific curriculum supplementation is necessary to meet the expectations of the Honors Chemistry Courses.

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\section*{Living By Chemistry Highlights}
- Full Canvas Integration
- E-book app
- Grading and Assessment with Skyward sync
- Available Sandbox and templates to build into current courses/modules
- Sapling Learning System
- Embedded into Canvas
- Computerized Adaptive Testing and Assessment Item Banks
- Exam View Item Banks with levels pre-chem to college chem
- Assessment Analytics and Item Filters
- Engineering Design

\section*{Concerns and Challenges}
- Parent and Community Feedback
- Rigor
- General chemistry vs. Honors Chemistry
- General Chemistry and Physical science courses: designed to support all students in the understanding of chemistry and the NGSS physical science standards.
- Honors Chemistry standards are slightly different, designed to meet the STEM entrance requirements of college and universities and/or to prepare students for advanced AP/IB Science courses.

Peachjar and e-mail Performance Metrics
15,000


\section*{Chemistry Implementation Plan}
- Physical Text Distribution: end of June and July
- Digital Materials Uploaded into Modules July-August (Jennifer and Tech)
- Teacher Access to Digital Tools and ebook begins in June

\section*{Formal Training}
- August Summer Option and September Options: 2 days or 4 half days
- Day 1: NGSS and Chemistry : Historical Alchemy, Bonds and Matter
- Curriculum mapping and scope and sequence revisions
- Working through digital and physical tools/resources (Canvas and Sapling Learning)
- Day 2: NGSS and Chemistry : Assessing Student Learning, Discourse, and Planning for Instructional Routines
- Collaborative and Individual Planning with support

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\section*{Recommendation I}

Following the Edmonds School District's Science Adoption process implemented from January 2019June 2021, the Instructional Materials Committee, Materials Review Committee, Pilot Committee, Student Learning Team, with the support of parents, families, community members, and students of Edmonds School District formally recommend adopting the Living By Chemistry textbook and instructional materials for high school Chemistry. Implementation of this program will require the purchase of both digital licenses and physical textbook materials and supporting teachers with ongoing job-embedded professional development.


Angelica M. Stacy
Edmonds School District • Student Learning Department

\section*{Science Materials}
- Sensors and Probes (Probeware)

■ Hardwired with USB
- Bluetooth for mobile use (field studies outdoors)
- A variety of materials for each content area


Sensors


Software
- Data Analysis and Visualization Software
- Allows students to collect numerical data at discrete intervals
- Supports students in manipulating and interpreting data sets and graphs
- Accessible to all students
- Allows students to conduct experiments in a remote setting with in person peers or vice versa
- Interfaces

■ The interface is the "computer" for the sensors and probes, that allow the probes and graphical analysis software to communicate and create visual data
- The preferred interface is the smaller, more mobile product that allows students to take measurements outdoors
- Supplemental Laboratory Supplies

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\section*{Recommendation II}

In order to provide equitable access to the Next Generation Science Standards Science and Engineering Practices, the Instructional Materials Committee, Materials Review Committee, Pilot Committee, Student Learning Team, with the support of parents, families, community members, and students of Edmonds School District formally recommend the purchase of up to date science materials. Teachers will be supported with job-embedded professional development.


Edmonds School District • Student Learning Department

\section*{Regular Business Meeting}

Meeting Date: 06/08/2021
Submitted By: Erin Verschoor, Administrative Assistant

\section*{Information}

\section*{Subject}

Revisions to Policy 5202- Federal Motor Carrier Safety Administration Mandated Drug and Alcohol Testing Program

\section*{Recommendation}

It is recommended that the board approve the updates to Policy 5202.

\section*{Background}

The revisions to policy 5202:
1.) Clarify that the licensed medical practitioner is familiar with the driver's job duties
2.) Adds "Safety- Sensitive Functions" in addition to "Operating a Motor Vehicle"
3.) Requires reporting to Human Resources rather than to "the district"
4.) Eliminates reference to the collective bargaining agreement as this is not standard practice for WSSDA's policies

\section*{Fiscal Impact}

\section*{Attachments}

Markup Policy 5202
Clean Policy 5202
WSSDA Policy 5202

\section*{Form Review}

\section*{Inbox}

Budget \& Finance Exec Dir (Originator)
Superintendent's Office
Form Started By: Erin Verschoor
Final Approval Date: 05/26/2021

\section*{Date}

Lydia Sellie 05/25/2021 11:51 AM
Allison Kaufmann 05/26/2021 11:01 AM
Started On: 05/21/2021 01:42 PM

\section*{Federal Motor Carrier Safety Administration Mandated Drug and Alcohol Testing Program}

The superintendent/designee will establish programs and procedures as mandated by the Federal Motor Carrier Safety Administration (FMCSA) controlled substances, including marijuana (cannabis), and alcohol testing rules.

\section*{Prohibited Alcohol and Controlled Substance-Related Conduct}

The following alcohol and controlled substance-related activities are prohibited by the district for drivers to possess a commercial driver's license (CDL) as part of their job responsibilities:
A. Reporting for duty or remaining on duty to perform safety-sensitive functionswhile having an alcohol concentration in excess of the standard set by the FMCSA.
B. Being on duty or operating a vehicle while the driver possesses alcohol orcontrolled substances in any amount.
C. Using alcohol while performing safety-sensitive functions.
D. When required to take a post-accident alcohol test, using alcohol within eight hours following the accident or prior to undergoing a post-accident alcohol test, whichever comes first.
E. Refusing to submit to an alcohol or controlled substance test required by post-accident, random, reasonable suspicion, or follow-up testing requirements.
F. Using alcohol, or being under the influence of alcohol within four hours of going on duty, operating, or having physical control of a vehicle requiring a CDL to operate.
G. Reporting for duty or remaining on duty when using any controlled substance, except when the use is pursuant to the instructions of a licensed medical practitionerinstructed by a prescribing authority who has advised the driver and the district in writing that the substance does not adversely affect the driver's ability to perform a safety-sensitive function, including the operation of safely operate a motor vehicle. Drivers shall report to the Executive Director of Human Resources or designee are required to inform thedistrict the use of any prescribed controlled substance and, without identifying the medication, shall provide the written documentation that the prescribing licensed medical practitioner is familiar with the driver's job duties, including the performance of safetysensitive functions, and has advised the driver that the use of the prescribed controlled substance will not impair the driver's ability to safely perform such functions. therapeutic drug use upon it being prescribed, although the specific medication that has been prescribed does not have to be provided. The use of any medication that could affect adriver's safe job performance is prohibited while working.
H. Reporting for duty, remaining on duty, or driving if the driver tests positive or would test positive for controlled substances.

No supervisor having actual knowledge of the above violations will permit a driver to perform or continue to perform safety-sensitive functions.

Violations of this policy will result in appropriate corrective action ranging from removal from the performance of safety-sensitive functions up to and including discharge.

This policy may be affected by Collective Bargaining Agreements/Memorandums of Understanding which can be found on the district website: Employee Agreements

\section*{Cross References}

5281 - Disciplinary Action and Discharge
5201 - Drug-Free Schools, Community and Workplace

\section*{Legal References}

49 CFR 40 Procedures for transportation workplace drug and alcohol testing programs
49 CFR 382 Controlled substances and alcohol use and testing

\section*{Management Resources}

2015 - October Policy Issue
2012 - April Issue
Policy News, December 2001 Federal Government Amends Bus Driver Drug Testing Rules Policy News, February 1999 Bus drivers still tested for marijuana

Adoption Date: 01.17.95
Edmonds School District
Classification: Priority
Revised Dates:
06.27.17, OX.XX.XX

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F. Using alcohol, or being under the influence of alcohol within four hours of going on duty, operating, or having physical control of a vehicle requiring a CDL to operate.
G. Reporting for duty or remaining on duty when using any controlled substance, except when the use is pursuant to the instructions of a licensed medical practitioner who has advised the driver in writing that the substance does not adversely affect the driver's ability to perform a safety-sensitive function, including the operation of a motor vehicle. Drivers shall report to the Executive Director of Human Resources or designee the use of any prescribed controlled substance and, without identifying the medication, shall provide the written documentation that the prescribing licensed medical practitioner is familiar with the driver's job duties, including the performance of safetysensitive functions, and has advised the driver that the use of the prescribed controlled substance will not impair the driver's ability to safely perform such functions.
H. Reporting for duty, remaining on duty, or driving if the driver tests positive or would test positive for controlled substances.

No supervisor having actual knowledge of the above violations will permit a driver to perform or continue to perform safety-sensitive functions.

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\section*{Cross References}

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5201 - Drug-Free Schools, Community and Workplace

\section*{Legal References}

49 CFR 40 Procedures for transportation workplace drug and alcohol testing programs 49 CFR 382 Controlled substances and alcohol use and testing

Management
Resources 2015 -
October Policy Issue
2012 - April Issue
Policy News, December 2001 Federal Government Amends Bus Driver Drug Testing
Rules Policy News, February 1999 Bus drivers still tested for marijuana

Adoption Date: 01.17.95
Edmonds School District
Classification: Priority Revised
Dates: 06.27.17, 06.22.21

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F. Reporting for duty or remaining on duty when using any controlled substance, except when instructed by a prescribing authority who has advised the driver and the district in writing that the substance does not adversely affect the driver's ability to safely operate a vehicle. Drivers are required to inform the district of any therapeutic drug use upon it being prescribed, although the specific medication that has been prescribed does not have to be provided. The use of any medication that could affect a driver's safe job performance is prohibited while working.
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\author{
Cross References: 5281 - Disciplinary Action and Discharge \\ 5201 - Drug-Free Schools, Community, and Workplace \\ Legal References: \\ 49 CFR 40 Procedures for transportation workplace drug and alcohol testing programs
}

49 CFR 382 Controlled substances and alcohol use and testing
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Management Resources: & 2015 - October Policy Issue \\
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& Policy News, December 2001 Federal Government Amends \\
& Bus Driver Drug Testing Rules \\
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Policy News, February 1999 Bus drivers still tested for \\
marijuana
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Adoption Date:
Classification: Encouraged
Revised Dates: 04.98; 02.02; 12.11; 04.12; 10.15
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[^0]:    ** Due to small numbers, grades 7 and 8 are not shown

[^1]:    ${ }^{1}$ A 'cognitive model' is a theory about the progression of understanding and skill necessary to make progress in a content area such as reading.

[^2]:    ${ }^{\circ}$ Learning Sciences International - Michael Toth

