Interactions Between Stakeholders for the Benefit of Career Pathway Instruction of Sixth Through Twelfth Grade Students of Maine

by

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Dedication Page

At any given moment in time, innovation is both intoxicating and disorientating. I dedicate this work to those who charge into this storm, striving to find and execute best practices in the service of our next generation of lifelong learners.

Abstract

The purpose of this action research study was to understand the web of relationship between career exploration programming stakeholders serving public sixth through twelfth grade schools to uncover best practices. This research, originating in the state of Maine, resulted in improved understanding of the personalities, goals, and characteristics of stakeholders, which led to an advised implementation plan benefiting students. Initial data collected consisted of focus groups, interviews, and surveys of stakeholder representatives from businesses, career exploration school educators, and educationally connected nonprofits. Action steps included focus group discussions and interviews attempting to uncover power structures, boundaries, experience, etc. that already existed. Later, data collection took on a similar format and was used to focus in on current business practices, while concurrently, a multi-stakeholder action research focus group reflected and reacted to current U.S. models of career exploration support models. Evaluation from these data resulted in three findings. One, communication that results in understanding needs to include clarity and transparency of purpose from each stakeholder group. Two, the need for a culture of long term, personal engagement by leadership of each stakeholder group. And three, the attributes of commitment are seen in time, infrastructural, and intentionality, supporting long term goals by flexible means. Implications for the stakeholders include the need to perceive each other as representatives of a culture, the need to see partnership as the key that releases innovation, and that the formation of an intermediary hub managed by an independent nonprofit is the most desirable model going forward.

Keywords: career exploration, sixth through twelfth grade, business, stakeholders, relationship, nonprofit, long term, middle school, high school, intermediary, metrics, career pathways

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Section One: Introduction

The purpose of this action research study was to understand the relationships between stakeholders involved in career pathway instruction to identify key characteristics that support best practices and ultimately benefit student programs. This chapter, intended to provide context and background for the ensuing action steps and evaluation of the research study, includes an overview of the problem of practice, the research proposed, and its specific research questions. Ultimately, descriptions of participants will lead to a brief description of Cycle 1 findings. This introduction is followed by a comprehensive description of the action steps taken, data collected, evaluation plan, and subsequent findings.

Problem Statement

To better improve education and opportunity for the next generation, it is necessary to improve communication and partnership between schools and businesses. To do this, one must understand the history, motivations, and barriers faced by each. Currently, a wave of enthusiasm to improve access to education and opportunity is spurring increased interest in pre-graduation career exploration. These programs take many forms and names. Some work to expose youth to possible careers, some help youth explore skills needed, while others allow credit for work experiences. Youth are given access to advocacy and exploration while mapping out their own futures, allowing them to stay in their own communities and help them thrive. Any of these types of programs (i.e., mentorship, internship, field trip, career day, ELO, etc.) require a concert of efforts between stakeholders who are increasingly keen to engage Maine’s future citizens. What are the best ways for these interested parties to build up the future workforce and benefit from the burgeoning trends? It will serve stakeholders to understand the precedent and dynamics surrounding business to school relationships in a way that builds trust, decreases impediments, and puts long-term positive student experience as the pinacol of success.

Business and schools have long operated separate from each other, yet they are dependent upon each other for their long-term survival. How to connect these groups outside of CTE (Career and Technical Education) or Academy School structures is an anomaly. Traditionally, education has attempted to give the student world/career experience through field trips and career fairs, which are dependent upon having enough time not dedicated to curriculum and volunteers to organize and run the events. Students who compel schools to support them in these ways can be limited to those who can afford it, have strong family structures that encourage self-advocacy, or are physically located close to business centers (Traxler, 2018). Developing the student's 21st century thinking skills to prepare them for required work skills, schools have built programing such as STEM/STEAM (Science, Technology, Engineering, (Arts), and Math), Problem Based Learning (PBL), and other special programs (Aparicio, 2020; St. Clair, 2015; Geisinger, 2016; Baggetta, 2016). Trends indicating the benefit and need for more connection for youth to their possible future career has caused surgency in experiential learning and industry-student interaction, but how best to do it is unclear for schools challenged to meet the student's basic needs (Dyer, 2021; Gates, 2016; Middaugh, 2013).

Business leaders are seeing an added need to connect with schools. Employers struggle to find workers to fill positions and the return on investment for them to reach out directly to schools to find willing students leaves a great deal to be desired. Quite often it is specialized programming and funding that allows for student to interact with businesses (Williams, 2021). Regulation, statute, and other boundaries have led to many nonprofits and specialty programs fill the gap between these groups. Nonprofits whose goals are to bridge communication, fill funding and personnel gaps, and serve as innovative proving grounds, scramble for funding and those who support their cause. This catches them in the never-ending cycle of seeking and sometimes fighting for support, financial, cerebral, and moral. Businesses looking for employable bodies are most concerned with age and immediate possession of skills. They are less likely to, or are restricted from, employing the under aged. It is only if they have time, have a feeder program (school to work) initiative, or have an altruistic culture that allows them to justify the time and efforts needed for the work.

But the need to understand how to maximize and streamline the value and experience of school to business partnerships all comes back to the student. Future generations need to find purpose and value in themselves to find purpose and value within their communities so that communities will be built up and not drained of their human capital (Hawkins, 2016). How do industry leaders and front-line educators need to communicate with each other and engage learners? How can they focus on how to recreate the feeling, knowledge, and skills experienced in everyday work and life? (Hattie, 2012). Schools are demonstrating the importance of skills programming as they develop new and multiple pathways to graduation for students who self-advocate or are in danger of stop-out or drop-out. Attentiveness to these issues is addressed by some schools as the number of dedicated career and life readiness educators in general diploma high schools has increased to roughly 14% and best practices have been outlined by the Maine Department of Education (Maine Department of Education: Career, 2019). Many nonprofits and para-school organizations have become active in this space (i.e., G2O, Junior Achievement, JMG, M.A.M.E., and others), but the problem of how to consistently engage with students in the school community still exists for many businesses who, large or small, are unsure of how to proceed with their altruistic and entrepreneurial interests in this space.

Purpose of Research

The purpose of this study was to examine current examples of career exploration programming and the relationships of the stakeholders involved to outline best practices for the building and sustaining of such work going forward. The goal was to offer guidance around career readiness skill development and life-long learning practices for enrolled sixth through twelfth grade public school students. Understanding the experiences and motivations of each stakeholder group yielded a picture of the desires and obligations of each group. From the observations and understanding of one region of

Maine, it may be possible to conclude there are patterns, needs, behaviors, and models that might be open to replication across the state.

Through early Cycle 1 research with nonprofits, business leaders, and educators, it was made clear that educators have increasing programming and spending options at their disposal. Though they have obligations to their curriculum and school boards, community leaders are more willing to spend and experiment, funding dedicated school to community liaison personnel. Nonprofits that serve by filling the gaps in services needed by the community are also active. The need for these groups is indicated by the amount of funding they are given by groups and individuals who believe their missions are important. Dedicated career pathways instructors tend to be found in communities where other basic needs are already being met (Sadick, 2019). Nonprofit career exploration programs are found in others and tend to be funded to execute a very specific mandate. Both schools and the nonprofits need to communicate and understand the third stakeholder—business. This can be a challenge as businesses tend to have a language, calendar, and motivations all their own

It was advantageous to build and engage a partnership of leaders to observe and explore other models already in use through action research. Considering the voices of participants, (i.e., stakeholders, partners, companies of various sizes, etc.), the goal of this work was to establish guidelines for future protocols from which participants can advise their own relationships and programming. The goal was to begin a living outline that will guide the initial and ongoing support needed to build trust and a relationship through a shared pool of understanding (Patterson, 2012). It is desired that the results will be flexible enough to be open to adaptation to different demographics, expectations, philosophies, industries, length of partnership, scope, or distance. The benefit of such understanding is cyclical (within an organization, between stakeholders, and for the length of the partnerships) thus having the potential to buoy all engaged members.

Research Questions

It is within a context of historical and cultural disparity of opportunity across the geography of the state, along with increased private and public trends in innovative career exploration program development that the following research questions emerged. What are the attributes and actions of career exploration programming, currently running through public schools, business leaders' initiatives, and nonprofit funding, that best serve middle and high school students? And, within that programming, are there signs of increased self-efficacy and altruism from students toward their communities and 21st century skill development? Though initially directed more intensely toward career exploration educators, it quickly became apparent that those most unclear as to how to direct their energies in this space, those most free to work entrepreneurially, and those most likely to engage wider groups of students were the members of the business community. Students on the two ends of the engagement spectrum were most likely to be served by this type of program. That is youths who personally or through family already advocate regarding their needs or those who are in the precarious position of dropping out. Career exploration is not uniform or universal, not mandatory or a graduation requirement, though that may change as government leaders develop and pass acts like *LD 572, An Act to Assist Students in Preparing for opportunities to Live and Work in Maine* (Maine DOE News, May 25, 2021). Secondary questions, therefore, revolved around practical and theoretical questions surrounding cost, common language, liability, communications, motivations, and assessment, all with the intent of understanding relationship, roadblocks, and unifying attributes of the intersecting relationship between business, education, and nonprofit groups.

Context

Identifying a unified mission to overcome and build healthy relationships through good leadership is difficult to execute. The cost of such programming in schools, which does not fall into the requirements of a general high school diploma, makes positions of this type vulnerable to the annual budget cycle and fluctuations in economic prosperity. Nonprofit leaders, also, are vulnerable to the whims and foci of their funding sources and filling the needs of the communities they serve. Businesses are concerned not only with their bottom line and their financial stability but also to the company image, work satisfaction, employee time on task, and quality of output of their employees. It is the adaptive leader in schools, business, and nonprofit alike that uses the moral, human imperative to motivate. Many career programming leaders and those who support them have similar attributes in that they create new pathways to solutions and decide what to keep and what to jettison along the continuum of change (Gary, 2005). A strong argument can be made that the building of strong and resilient relationships between members of an organization or business with the school and radiating further out to the state is the best practice, relationship, and model of problem-based learning and 21st century skills.

Participants/Collaborators/Stakeholders

Establishment of relationships and the opening of opportunity to collaborate with businesses, educators, and nonprofits in the Southeastern most counties of the state of Maine was the priority of the research at first. Making sure that those included were from diverse groups but with understanding of the single purpose of the research, along with collecting from a select region of the state (to mitigate excessive variables) yet getting a complete picture of the challenges that each stakeholder faced was challenging. Stakeholders within the action research stage were the Portland Regional Chamber of Commerce, which made introductions and facilitated interactions between these three groups and brought the need for a protocol to light. Partnerships with nonprofits such as Junior Achievement of Maine gave voice to the challenges and concerns facing nonprofits and acted as a possible vehicle through which to carry and support similar organizations. Other partners were educational groups such as Community Coordinators Collaborative (C3), a group of dedicated career exploration educators of Maine who understand the complexities of curriculum and community engagement. Manufacturers Association of Maine (M.A.M.E.), also a nonprofit, partnered with this research to continue its focus to serve the manufacturing industry of Maine through legislative, scholarship, career advocacy, networking, and events. Partnership with a Cumberland County school system administrator and their career pathway educator rounded out the partnerships. Participants representing the ultimate consumers, students, were representatives of the Maine Department of Education Life and Career Readiness Standards Coordinator who brought requirement and standard knowledge as well as an understanding from their partnerships with CTE schools and the Department of Labor and the University of Southern Maine career readiness coordinator who brought experience from historical and current higher education perspective. Participants in the form of collected artifacts from businesses and groups who run or wish to run career exploration programming were brought by the action group members for analysis in its effort to complete this project. Though no site was directly or physically involved, it was the goal of this work between that of stakeholders, partners, and participants to exemplify their unifying characteristics by overcoming roadblocks through relationship building to generate a hopeful and lasting future for all.

Positionality

This researcher holds the unique position of being trained in curriculum and educational consulting services and yet holds no position that is beholden to the administration of any one district, school, business, or nonprofit. Formerly employed within groups that execute the educational practices in homeschool, private, and public school settings, I now find myself supporting a variety of organizations that are not engaged within this study. Using my understanding of nonprofit and independent business funding and practice in innovative educational project management, I quickly saw the power wielded from this position was that of a two-edged sword. The organizations and individuals included here were eager and engaged on the topic but being new acquaintances to myself were unfamiliar and thus required steep learning curves regarding each participant’s position, personality, etc. Therefore, time was needed to develop trust and relationship before work could begin.

Perspectives regarding the data collected was limited to within the geographic locations in which I was able to build networks which could serve as conduits of introduction, the south-eastern counties of York and Cumberland. York and Cumberland counties are considered two of the most affluent, populated, and opportunity rich counties in the state. The noticeable choice of counties partnered with my life-experience, a product of a secure and stable demography, means that there is a potential for the lack of authentic voice speaking to the opportunity challenged communities populating other locations of the state. It should be noted that a challenge to the inclusion of student stakeholders and thus clear student voice was not allowed due to restrictions placed upon the study due to the COVID-19 pandemic and resultant stay-at-home-orders in 2020 and 2021. Due to these restrictions the ultimate consumers of the product, students, career, and life readiness activities, and other direct to student programming was not available.

To assess the problem of inequity, its causes, and why it continues, to release the potential of sixth through twelfth grade's career exploration programming, all persons in the study were encouraged to narrate observations from their experience ((Kraft, 2020). This engagement of personal reflection allows for a window into the motivations and processes of these individuals from which transformational work is being attempted and student experience and success is being affected ((Herr, 2015). The perspectives of these persons in their professional capacities and their relationships to myself may affect their answers and perspectives regarding the success of initiatives within programming which they have, in some cases worked years to develop. The use of semi-structured programming as well as multiple points of data collection from multiple sources were to offer a sweeping picture of motivations through to outcomes.

Synopsis of the Research Design

To partner with and understand the position, experience, and motivations of participants, to increase opportunity for students within the state, the methodology of qualitative action research was used. This form of research, as a natural extension of our daily work, was brought to effective solutions by partnerships between those who contribute in various ways to understand their situations more completely ((Herr, 2015; Stringer, 2014). The use of this collective vision and community surrounding the possible success of students and a possible stronger economic outcome for our state, encouraged collaboration and openness to conveying current experiences. Action research design was chosen for its participatory structure where the researcher is not called to be an expert but a co-collaborator who facilitates relationship and community amongst field members. The 'shoulder-to-shoulder' nature of the work counteracts 'face-off' aggression, and apprehension that can come from bench science research with human subjects diminishing cross-interest group suspicion and aggression. Buy-in from those included is increased as they, one, see the value to be gained by themselves and their work, and two, are then more likely to join in with others they respect and become a part of a larger voice for what they see as good (Stringer, p.15-22). Benefits of all research is the emergence of answers to questions. Questions that have yet to be answered. The benefit of action research is the spiraling practice of 'plan, implement, evaluate' which then culminates in the added state of action. It is this action that changes the outcome from mere knowledge into outcomes that are meant to improve the 'life-world' of the participants (p.63). For more in-depth information about action research can be found in the appendix.

From these philosophical assumptions, specific respondents were chosen and data gathering techniques were used. Two cycles of research were conducted involving individuals from business, education, and nonprofit organizations. In Cycle 1 focus groups, observations, and interviews were conducted, while in Cycle 2 interviews were conducted and an action research committee was formed. Within Cycle one the dynamics were of an equal mixture of all stakeholders participating in focus groups (one from each). and interviews (executing two interviews per each), the exception was the observations of a grassroots organization which brings together educators who specialize in career exploration, ELO's (extended learning opportunities), and school to community connections (Saenz, 2021). Cycle 2 interviews were focused upon business stakeholders actively running career exploration programming, while the action research committee broadened its scope to include government and college administrators with a knowledge of precedent and student needs post high school graduation. From all these actions, verbal recordings were made from which transcription was captured.

Section Two: Results

Cycle 1 Results/Findings

Findings from the first round of research yielded three themes. The analysis of the data showed key issues of unification, roadblocks, and relationship, each of which are described and supported below to show how the attributes and actions of stakeholders involved in career exploration programming affect the product served to, and the service of, six through twelfth grade students in public schools. Longer quotes from participants are referenced and can be found in Appendix A when indicated.

Unification

The constant struggles for change an inclusivity that each of the stakeholder face did not diminish the unified goal they all share, to serve the youth in the communities which they work and live. The drive to serve all youth is clear and needed but impractical. It is impractical because the greatest yield of increased empowerment, altruism, and 21st century skills is shown to be borne out of significant time expended to develop intimate and poignant relationships between stakeholders and students. Understanding motivations (Figure 1) of the educator showed they are led to create life-long learners by building excitement and interest (Ryan, 2020).

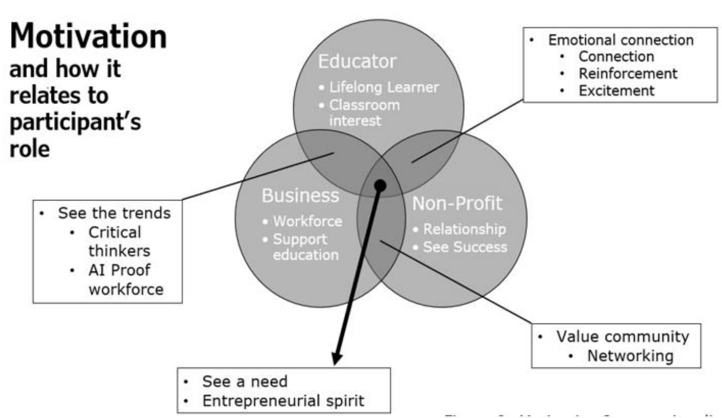


Figure 1: Motivation and how it relates to participant's role

The nonprofit is working to establish a relationship between business and classroom to see success in alignment with their individual mission for which their supporters agree (Figure 1). The business leader is working to share their knowledge with the youth in the community with the added hope that this will improve and strengthen the workforce long term. These groups in various ways also share attributes such as awareness of trends, the value of emotional connections to other persons, the value of personal passion for work, and the value of community. But what is true of most individuals directly interfacing with students is their ability to see the need for career exploration early fueled by a personal entrepreneurial spirit.

Roadblocks

Not surprisingly, roadblocks are prevalent. School representatives are reaching only a small population of students. Those students are of two groups, one, those already engaged in employment where they or their guardian advocate for assistance from school administrators, educators, or their employers, and are looking to make their employment advance them further than just a paycheck. This group is looking for certification, college or high school credit, or skill building. Usually there is an overseeing adult or school standards-based requirement that places them in the direct path of such programming (such as a required class, a grant funded unit/activity within a course, or a graduation requirement of the district). The other group of students are those in peril of dropping out or not graduating from their general diploma high school. These students are often referred to administration or career pathway coordinators for “out of the box” programming where they can gain the credits necessary to graduate through work experience or community involvement. Though numbers of interactions were climbing in the years prior to the 2020 stay at home order, it is evident that across districts who have dedicated personnel and statewide nonprofit actions not every student is being reached (Portland, 2020)

It is not that there are too few opportunities as first thought; instead, it is that students are caught between expectation and a bombardment of choices that they see before them. Participant V said it clearly, “(They have) interests and maybe (they) have goals. A lot of them are just, there is so much that they have at their disposal now with, whether it be technology or opportunities. So, it’s really helping them navigate. I kind of consider myself kind of a coach….” It is coming to an understanding of and developing a plan for how to explore those choices that is the largest roadblock to their future. For the communities, parents, school departments, and businesses new to this type of programming the roadblock is tradition and expectation. Participant W reflected on their own experience and contrasted that to today. They mentioned that upon graduating, every senior was expected to go to a good college. They surmised that it was to sustain the reputation of the school from which they graduated. Upon returning to work at that school, Participant W worked to move the traditional “college fair, to college and career fair…people were not happy” (W1).

Change in tradition of college preparation and tracking school programming and communication is challenging to tackle and justify to parents who see success as graduation and college attendance but also to a family and student who sees personal identity wrapped up in their profession that is being changed (Wrensford, 2019). Two participants reflected on past and not so distant experiences when they spoke of the heritage and pride a family, town, or group put into the generational structure of heritage industries such as paper mills, logging, fishing, etc. (L.1, V.1). Participant V stated, “(student) comes from six generations of fishermen lobstering and his family couldn’t understand…” how to overcome expectations even when career paths are narrow or narrowing as these industries suffer change and regulation. They said, “the opportunities were much narrower, and really it was here are their professions, which one do you want to be as opposed to what do you like and how could that become a profession.” This is an important distinction—not, what do you want to be, but what do you like and how can that be a profession. It is not only the change of mind that is necessary but also getting over the challenge of the unknown that obstruct student and family alike. Participant V went on to say that families will more likely renew your lobster license for you because "'we don't know about them (other careers and the college they may require)". Deconstruction, therefore, of school, family, and student desires that are changing is a societal expectation that is also a roadblock.

The added challenge to public schools, and educators in general, is the definition, action, and assessment of 21st century skills (or soft skills) so often sought by employers of any career field (Henry, 2019). The term "21st century skills" is often used but less often defined. Therefore, what it means to all parties and what portions of the definition are focused upon can vary widely. Two focus group members, in education and nonprofit respectively, responded to each other as to what their organizations are focused on regarding these "skills." Their differing ideas show that there is a lack of significant programming in place to measure and normalize expectations. One spoke of first building a vision of what a graduate should be, which is a current project within their district to be implemented by classroom educators (V.2). The other participant used terms like 'soft skills' and admitted to the focusing on 'emotional intelligence' by their group because as they put it, "these skills are just as important as any technical skill or anything that they (the student). might pick up" (X.1). They went on to show a belief that 21st century skills are 'picked up' because students are in programs that have this material embedded or intrinsically available. Clarity, therefore, as to who defines, distributes, and assesses distribution of 21st century skills is still not evident.

Relationship

A positive was found in the theme of relationship. Emerging from the current pandemic, there is an added awareness of the value of inter-personal and inter-organizational work. Educators with students, students with professionals, nonprofits with communities, district leaders with educators, everyone with parents, and more. There is the added complexity that relationship is a web that is rarely established the exact same way twice. It is through interactive programs that students are getting facts regarding opportunity, but it is long term relationships that are allowing factual knowledge to become personal understanding of soft skills and guiding principles, self-empowerment, and actualization. Relationships are helping students see examples. It is deep relationship that allows them to ask questions, experience, and envision themselves as being change-maker-citizens of Maine's tomorrow.

There are many permutations in the web of interactions that currently exist, but four key issues emerged. One, in the realm of adult and student relationship, educators are usually introduced to a limited number of students, finding them by referral, within alternative course work, or because they are not thriving. Participant G, who was working in schools, told how they are often finding opportunities for students who are "completely disengaged, smart, but isn't engaged" (G.1). Relationship between educator and student is needed to build trust and rapport, to discover the source of the disengagement, and then to best understand the student's interest(s), thus finding opportunity within the programming available. Participant A explained the intentional practice of their non-profit to build "longitudinal mentorship" where they stay in contact with high school students through college, signifying the value of the person themselves.

Finding and preparing for work with different age groups of students is challenging and can be a roadblock or opportunity for stakeholders. Participant D, an educator, joyfully described how developmental changes in students can affect their interest in absorption of the material (D.1). They recounted students interacting with the same material at two different times in their high school career. The first time the material was mostly met with negative reactions and skepticism; the second time, because of its relevance to their impending graduation, it was met with more enthusiasm. But even before you teach them you must reach them. Those who cannot reach each other cannot experience deep learning, whether that is due to shortcomings in technology, finances, demographic, or distance. This reflection by a Participant gave insight to some of the challenges the more rural student faces (A2). Their experience, having come from the more rural areas of the state, was that internet is scarce and only available to those who can pay for it. Over the recent 2020 quarantine period, they had to wait 30 minutes for prerecorded videos to buffer. Physical interactions and limited employment opportunities are realities for these and many students beyond the geography of this study. Contacts between student and business (for field trip, job, or mentoring) and nonprofit to school (for marketing and support) can be stunted by the geographic and cultural differences between locations of origin.

Cycle 2 Action Step(s)

Cycle 1 research incorporated the voice of business, nonprofit, and educators with heavier access and voice of the educators. The results showed that those educators involved in career exploration are active and for the most part supported by their districts. At the state level, the interest in what they are trying to do is of governmental interest. It also showed that nonprofits have a narrow enough goal or mission in this space to be supported or adaptive as they execute and explore similar visions to that of schools. Conspicuous, because of their absence, was the confident voice of business, causing the need for closer inspection.

Action Step(s) Goals and Objectives

The goal of Cycle 2 Action Research was to advance the reflections of stakeholders to develop an outlined protocol for businesses (primarily) and other stakeholders (secondarily) from which career exploration services could be developed. It was hoped that this would guide them in their work to serve students and build the future workforce of Maine through best practices. Stakeholders, presented with a selection of templates or models, shared their reflections and experiences, which were then used for the development of this outline. The use of edits and comments (verbal and written) regarding the models presented would be collected alongside each other and would be used to generate a more complete set of data. The intent of the discussion was to glean understanding of the characteristics of the possible protocol but also any support this protocol would need to be used in each unique setting. An open-ended question format allowed for discussion to be personal and experiential, uncovering the practical alongside expectation and apprehension. It was hoped this would lead to possible paths of connectedness, a consensus or pattern that would advise best practices regarding a protocol's infrastructure, and a possible future program roll out.

The hope was to achieve a consensus surrounding a supported protocol that would be housed and used by the chamber of commerce to educate and advise businesses in their attempts to engage sixth through twelfth grade students and interactions with other stakeholders. Within it would be the attributes and actions of current best career pathway instruction to be found in non-business stakeholder programming conveyed in a business oriented common language (i.e., the stories of those who have experience in these areas to show other stakeholders what activities and support structures are needed to result in the learner gaining a better sense of personal value and confidence in their contributions). The use of research questions, specifically within the context of business and career exploration, along with artifacts that mirrored and gave boundaries to focus group discussions, yielded a unique data and product recommendation.

Action Step(s)Activities

To build the protocol outline for stakeholders wishing to engage in career exploration programming, several steps were taken. For a detailed meeting outline of the following points, please refer to Table 2 in Appendix A. Initially, an Action Research Committee (ARC) was established for the purpose of discussion regarding the value, form, and function of such a research project. It was determined in Cycle 1 that the ARC needed to have voices that spoke for business but had experience in education and nonprofit ventures. Two individuals with current and past experience in education, business, and nonprofit work were met with to discuss the mission, end goals, and feasibility of the work. There were two gaps were found, and actions were taken to mitigate the concern. First, the lack of student participation (due to Covid-19 restrictions) might be filled by the participation of local university undergraduate transition and intern specialists. The hope was that this third-party would, through its experience, reflect the wants, needs, and concerns of recent high school graduates trying to move into jobs and the higher learning needed to enter the workforce. Second, concern with the breadth of businesses (sizes, types, experiences, and histories) led to the decision that the most authentic and advantageous business participants would be those who could generalize and summarize the voice of many, including, if possible, heritage through innovative startups with enough individuals to have experience in supported programming. Therefore, the chamber of commerce of Maine should be invited along with two specific nonprofits supporting school to business partnerships of both blue- and white-collar career paths.

Next, introductions and invitations to join an ARC Focus Group (ARC-FG) were sent to high-level members of education, nonprofit, business communities, groups, and organizations whose work, influence, or physical presence was all within what is called the Greater Portland Area. Their stakeholder reflection and experiences would be vital to the goal of a balanced and widely encompassing product. Video conference or phone call meetings precluded focus group meetings for those who had not been previously consented, and a schedule of four meetings was published to run over several months. Participants were confirmed and a search for artifacts (also called 'models') exemplifying cross-stakeholder organizations and methods for use in the meetings began.

Finding models of career exploration programming that spoke to all stakeholders, addressing general diploma schools, and in states with similar socio-economic and cultural characteristic of Maine was challenging. It was initially proposed that artifacts would lend themselves to a protocol being built by the student researcher from which ARC-FG participants would discuss. The diversity and incompleteness of each model found caused this to not be possible. For example, one artifact spoke to community engagement due to diversity of community constituents. This meant it was written for political activist and nonprofits trying to engage business and community, but not for schools. Another website was for a well-funded business and nonprofit partnership working to serve underserved urban schools. The underserved in the case of career exploration in Maine are not urban and usually not well funded. A last example was that of a chamber of commerce of an urban environment that partners with their CTE Academy system (Career and Technical Education). This research study was for general diploma sixth–twelfth grade schools, not CTE schools, and Maine does not have a public academy system. It was determined that more than four models should be collected so that discussion among the ARC-FG might determine which artifact would be most helpful and applicable to the subject and direction of their concerns and interests. All models had a web presence. These models were collected and prepared for electronic or print dissemination.

Finally, business leaders who run career exploration programming were sought for interviews. Though the process of reaching out for interest, consent, and execution regarding participation was promising in the spring and early summer of 2021, commitment and execution was very challenging because of a resurgence of COVID (the Delta variant) in the fall. The uncertainty and increased stress caused a delay in scheduling and interviewing of participants. Interviewees were ultimately found, consented, scheduled, and conducted all within a two-week period. A search was made for participants from companies that currently, or at least pre-pandemic, were running or participating in career exploration programs. The reason for this characteristic was so that their reflections might speak to key components of a best practice protocol for businesses prioritizing this type of work.

Communication with focus group participants and interviewees was through electronic correspondence and video conferencing. No in-person meetings were made. Artifacts, consent forms, and scheduling were sent through email. Interviews and focus groups met through video conferencing, and all transcripts were generated and comments on artifacts were collected through electronic applications and were then destroyed, being stored as code on an external memory device.

Participants/Collaborators/ Stakeholders Experience

Using a consultancy, participatory method allowed local knowledge and opinions to be sought and yet an outsider's (the student researcher) analysis to recommend a course of action (Herr, 2015). Therefore the relationship of the ARC-FG participants and each interviewee was that of an internal participant while the researcher was that of an external one. Within the grouping of internal participants there were two distinct groups: those with direct and those with tangential career exploration programming focused interactions. Those with direct interaction were those of one educator and two nonprofit business to classroom organization representatives. Those with indirect experience were one education administrator, one chamber of commerce administration representative, one representative of the Department of Education experienced in Life and Career Readiness standard requirements, and a career and internship advisor from a local university. It should be noted that a onetime internal participant, recently retired from education, business, and politics participated in the initial ARC (before data collection began) along with one internal nonprofit representative. Only the later continued to participate in the ARC-FG. All interviewees were considered internal with direct interaction.

It was significant that the information be gathered from those closest to the students' experience. They are the ones who hold a "profound understanding" from immersion within the context of the carrying out of such work. ARC-FG participants were given each artifact up to two weeks in advance of each focus group meeting date in a form that made it easy for the participants to use them electronically or print them out for hand note taking (Stringer, p. 54). The hope was to allow time for reflection upon the model considering the participant's individual and organizational experience. These artifacts were then collected after each meeting. Interviewees were asked about their professional and company histories, roles, and experiences according to interview protocols to best understand their individual and corporate culture and concerns.

Cycle 2 Evaluation

This section describes the steps taken to evaluate the goals and objectives of the previously mentioned action steps. Here will be addressed, those involved in the collection of data and the dissemination of results, how the results were measured, analyzed, and evaluated considering the perspective each audience member contributed or brings to the interpretation of the final product. More in depth information about the evaluation process can be found in Appendix A.

Involved in the preparation and structural planning of the study were one member of the nonprofit community and a former member of the education/business/political community. These two persons along with the student researcher considered the goals, possible format, and participants needed in the study. It was determined that a focus group analyzing possible models or a protocol along with interviews of members of the business community would be advantageous. Introductions, meetings to present the research, and invitations to join the work were distributed to focus group members. The following accepted and signed a consent form. An Assistant Superintendent of schools and a Career Pathways Educator from a Greater Portland area school system. Both educators had personal experience actively encouraging career exploration in sixth through twelfth grades. The Life and Career Readiness Specialist from the Department of Education of the State of Maine was instrumental in writing and passing Life and Career Readiness Standards in 2018. This committee member provided historical, regulatory, and statewide perspectives. The representative of the Portland Regional Chamber of commerce agreed to share the needs and concerns seen from a wide swath of businesses. An administrator from the University of Southern Maine who specialized in career advisory services was included. This person was recommended by the university president as holding the most current understanding of what mindset, barriers, and needs were facing those graduating high school and entering college and the workforce.

These participants along with the original members of the Action Research Committee were scheduled to participate in four focus group meetings and one back-up date to occur in the fall of 2021 by video conferencing. It quickly became apparent, however, that there were too many factors to consider building just one protocol. It was therefore decided that a variety of models would be collected and depending upon the path of each focus group meeting, a model would be chosen for the following meeting. At this point, the creation of a step-by-step protocol initially envisioned became uncertain. Determination of which model chosen for each ARC-FG meeting was based upon the need for balanced voice and consideration of each stakeholder group present. For example, if the discussion in the second meeting centered around nonprofit activity, need, etc., then the next artifact centered around business, if business then the next community, if public education, then the next would-be private philanthropy.

Interviews with private businesses were conducted in the fall of 2021. Three members of the community were found only after significant interruption of normal business and networking due to the surge in the Delta variant of Covid-19. Those consented and interviewed were a semi-retired president of an engineering firm currently titled as Senior Architect; a human resources manager of a jewelry store; and a Senior vice president of a bank directing diversity and inclusion in the human resources department. All three companies represented had multiple branches, over 100 employees, and a long-standing history in the state and/or region. Interviews were executed within a ten-day period to make up for lost time in the search for participants.

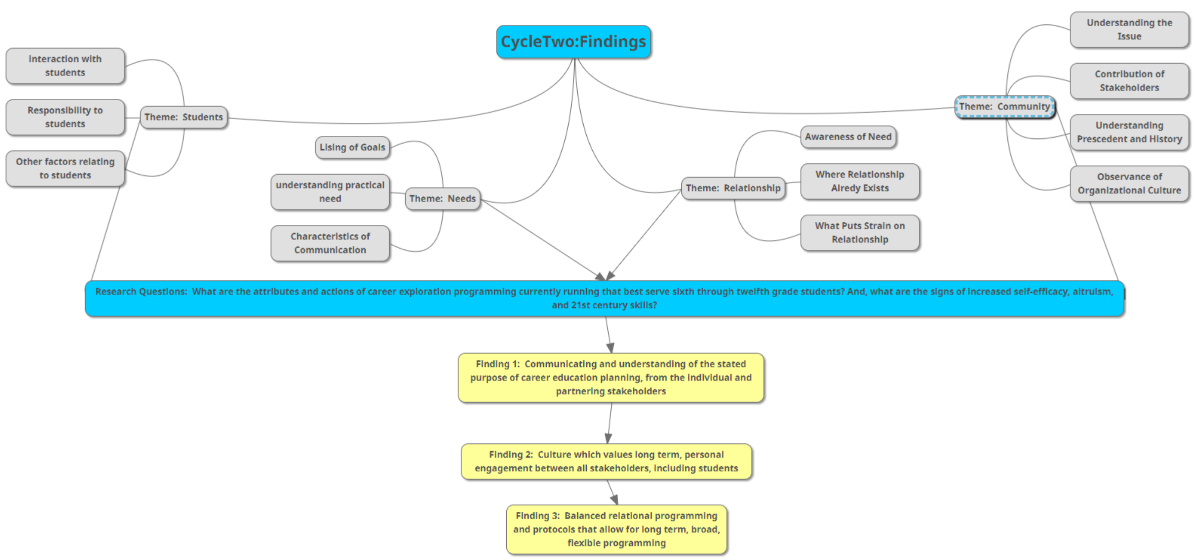
All four action research focus group meetings were executed as anticipated, and the fifth back-up meeting date was cancelled. Participants were all able to attend with two exceptions. One, the original action research committee member, a former member of the education/business/political community, left the study for personal reasons and did not participate in any of the focus group events. Two, the third action research focus group meeting did not include members of the business community due to unforeseen and last-minute circumstances. Otherwise, all participants assisted in the collection of data by allowing for the collection of transcripts of all conversations and personal notes taken (ARC-FG only). All participants spoke equally and sometimes boldly regarding their experience, needs, and concerns. This data was collected and analyzed through three rounds of coding: first, by In Vivo, second, by concept, and third, by another round of concept (Saldana,2016). It was then evaluated for patterns in theme and subtheme. The results of this study were offered to those who participated in Cycle 1 and Cycle 2 rounds of the study for their interpretation and use.

Cycle 2 Results/Findings

From the data analysis, four themes and thirteen sub themes emerged. Theme one was that of community, which included understanding the issue, contribution of stakeholders, understanding of precedence and history, and observance of organizational culture. Theme two was that of needs, included listing of goals, understanding practical need, and noting characteristics of communication. Theme three was that of relationship, which included where there was a need for relationship, where relationship already exists, and where there is and what puts a strain on relationship. And theme four was that of the student, which included comments made relating to interaction with students, responsibility to students, or other references to students.

An analysis of these themes within the context of the research questions produced three findings. A visual representation is provided in Figure 2. The first finding was that communicating and understanding of the stated purpose of career education planning from the individual and partnerships made between stakeholders (including students) is necessary for its success. Two, a culture that values long term, personal engagement between all stakeholders but especially students is desired. And three, for programming to not lose focus and relationship to not become imbalanced, stakeholders must consider practicalities that allow the housing, structure, and communication of career exploration protocols and programming, to continue over the long term with broad and flexible programming.

Figure 2: Cycle 2 Findings and How They Relate to Research Questions



Analysis of the themes in the data showed a stark contrast between personal or individual stakeholders concern and that of concern for the student/child. Though the importance of students and student experience is central to this work respondents included a reference to students (directly or indirectly) less than 25% of the time. A second round of coding, focused upon a theme surrounding students, uncovered sub themes of “relationship to students,” “responsibility to students,” and “other,” defined as the practicalities around executing the relationship and responsibility to students.

Echoing the findings of Cycle 1, the theme of community was used to clarify issues, make sure all stakeholders were present, and set historical perspective, all while trying to define what the term ‘success’ in career exploration looks like. The following addresses the subthemes found under ‘Community’. Each stakeholder group, in their attempts to build and execute this type of work, needs to work within partnership and community. Within this context, they run into the issue of defining whose perspective will guide planning. They cannot look at the product and programming as short term or be inflexible. Supports within the state, which outline who reaches out, how they do it, and to whom should they be connecting, are unclear. All must consider their bottom line versus the level of engagement of which they are capable. This understanding will be affected and constrained by funding issues and physical access. The consensus that Maine youth suffer from the siren call of better and more exciting opportunities outside the state resulted in discussion of the need for native examples and encouragement. All conclusions resulted in the need for a better understanding by current and existing stakeholders as well as how to engage students through flexibility and differentiated instructional programming.

As stated previously, students were not available to be a part of this discussion due to Covid restrictions, but it was possible to explore the historical, regulatory, and cultural precedents in this type of work that shape current events. Economic planning and development, labor laws, and graduation requirements were all mentioned as significantly influencing decision making processes. Each stakeholder, therefore, needs to spend some energy making sure it understands how itself and its partners is affected by their long- and short-term vision and how this vision is given boundaries by community, state, and federal economic and administrative units. Thus, looking at the big picture of stakeholders (including students) and their context within the relationship and responsibility to each other over time is necessary.

Taking the time to set the stage will lessen misunderstandings and open more productive determination of what successful career education looks like within each partnership. Programming must connect with student interests, be open to establishing long term relationships, and include persons with a willingness to learn from each other. Those involved must actively work to stop preconceived notions and underwhelming expectations. Preparations should make opportunities for developing citizens of the world through innovation but be prepared for the culture shocks that can occur between, for example, rural and urban experiences. To keep students within the state and yet develop world-wise citizens, as well as serve students from very different socio-economic and culturally diverse communities within the state itself, a more detailed understanding of needs will allow for efficient planning and communication.

Specific goals and connection to different stakeholders will allow for clearer return-on-investment (ROI) metric collection, internalization of purpose, and development of multifaceted learning opportunities, which allow for practice and earlier involvement. Career exploration can be set up so that all stakeholders experience a win-win scenario, establishing program structures that are established in such a way that they can be adapted and not scrapped when encountering change. When aware of what has been and what is available to stakeholders, they will be better consumers of opportunities. Examples are schools deciding what nonprofit or business to partner with and businesses understanding how to develop programs with broad competencies for students, which will model themselves better and provide multiple take-aways. Proposed structures for a hub that would facilitate this type of relational and educational understanding would need to use and adapt existing models for use in Maine with the initial goal of uncovering and organizing what already exists in the state and secondarily filling the gaps found. This hub would facilitate communication and partnerships going forward.

Communication from the hub to those it serves would need to include the student as a whole child, a life-long learner. This concept would reverse the preconceived notion of the student as only a teen-ager and college bound, the business as only producers, the community as only consumers, the school as only babysitters, and education as only checklist/curriculum driven. Career education does not have to be relegated to only Career and Technical Education (CTE) programs. It does need to be structured, but not necessarily the burden of any one stakeholder group. The hub can bridge the gap between past and present and help each stakeholder know their partners and their audience to set clear goals and engage in meaningful interactions going forward.

Echoing conclusions from Cycle 1, the themes of community and need (and their sub themes of issue, stakeholders, precedent, and culture; goals, practicalities, and communication) are but a context for the consideration of the underlying concepts of relationship and engagement (of students). Relationship, healthy and communicative, is key. It allows for robust and adaptable change of community expectation, parent concern, business culture, nonprofit support, and school structure, all of which need to be prioritized in unison. Programs that now exist show high levels of communication with an emphasis on face-to-face relationship building. These groups show habits that place a high value on practices related to recruitment and retention of participants and demonstrate a level of comfort (lack of vulnerabilities) in their communities. The strain that keeps those from joining in or keeping career exploration activities from continuing were a lack of clarity regarding why they should engage, a lack of understanding of who and what is out there, and a lack of answers around how to provide students with options.

Understanding the ROI of engagement is needed by each stakeholder. Data are that which indicate success and used as one tool to define what they are investing in could be made available using success metrics. Clarity of success comes most easily when the culture of an organization is free from the frenzied need for funding or understands how to balance their bottom line with innovative practices, allowing for innovative engagement that is responsive and personal. The hub could house such metrics or reach out to organizations already in existence and partner to collect desired numbers.

The conclusion that the need for understanding and productive communication between cultures over long term is given credence by the words of the participants themselves. Relationships with students are facilitated and made deepest by stakeholders who are open to learning themselves. Participant 2G mentioned, “I learned more from him than he did for me” regarding a successfully mentored student. The relationship was established when the participant reached out and took the advice of a nonprofit/education group. This participant had developed programming for their business modelled after another industry member’s work from another state. When they ran into trouble recruiting students from advertising on job bulletin boards, they reached out to a nonprofit. This nonprofit facilitated a face to face with students, which then also launched engagement of parents. Because the business believed that relationship and word of mouth spreads good feelings and thus increases business and community, they were willing to learn and explore new methods and practices to satisfy an in-house, historical cultural practice.

Our multifaceted responsibilities to the student were touched on when Participant 2D voiced concern regarding the amount of time spent by adults “projecting what we think students will want and need without actually asking them what they want to need”. Another participant, P, voiced concern for treatment of the whole child. Their point was that a child needs to be addressed in a comprehensive and multi-faceted way to overcome developmental changes, cultural differences, and offer truly equitable programs. Participant H emphatically rebuked the proverbial career pathway objectors by stating, “what's in it for my company or my group, or whatever and it's like, no, no, no, no, no, this is for the students.” Though this is a righteous statement, this is only possible if there are structures in place to support all stakeholders who then have the freedom to do so.

Businesses, nonprofits, education (and students), it was repeated by many, need a structure that was flexible in its programming and message to go forward. Participant H (1) realistically stated that there is so much individualization needed to build the best experience that it is more realistic to look at cultivating culture as a foundation. A culture of firm goals allows for focus on relationship and the allowance for flexible means that can more easily dispel “that there are only one or two jobs out there” for students. Data relating to strengthening community (Cycle One) points to connection and relationship, but increased knowledge of need and precedent takes the intra-institutional culture and allows for inter-institutional culture to develop through partnership. The issue “that we've got all of these group’s kind of still kind of in their silos” and “they see a huge disconnect between the workforce, and education system in the needs of businesses” indicate that there is a disconnect still. Stakeholders see the solution as , “(I think) it's going to take a collection of organizations...we have to meet people where they're at and what where they have what they have for currently sources right now,” “we really do that by bringing volunteer mentors, into the classroom,” and “a coordination of effort, whether it be a small group like this, or the schools are coordinated in this regard and the business community.” Simplistic practices are no longer. While echoes of the past were felt by the comment of a professional who used to call the school and ask, “Have you got a student that might like to work a few hours after school?”, business and educational leaders are looking to national trends and experience and state, “few states that were saying, okay, we've got a situation where we don't have enough students going into the trades. So, we're going to make it mandatory that they have an internship before they go, you know before they graduate from high school” or “we are looking to other (identifier taken out) models.”

It is one thing to see the problem and find a model from which one believes the problem could be solved. It is another thing to have the attitude in place to undertake the process of adapting and implementing that model. Stakeholders, their organizations, and their partnerships need to come from cultures that hold certain values And cultures that uphold altruistic partnership. Multiple participants spoke of “creating partnership” and “work(ing) together.” They realistically addressed solving problems from a “community perspective, and (that) not one company or educational system can solve everything.” Participant 2E spoke positively from their experience that help is out there when they said, "I put out, put out the call for volunteers, (give up) an hour away from your billable time, or whatever, just to (let kids) kind of get in the office I get I get a lot of volunteers!" 2E readily admits that at their company, "We also just believe in partnership".

The need for this work is evident or so many would not be looking to join in and consume the results of this work. But behind the context is a need for group goals and participation "if that's the problem we're trying to solve. Well, then that you know, let's lift that up. For for schools as a as an important investment. And let's provide them with the resources...through (relational) links". Participants looked to intrinsic but also practical answers. They voiced the need to identify who could be the best person for them to reach out to for recruitment, advertising, and networking is a gap that need to be filled. The creation, use, and maintenance of a networking and resource hub was proposed. One that "could be a reliable resource that people could count on" regarding being maintained, up to date, and have identifiable persons behind it should the advertising and web presence not be enough. This would mean funding. An ARC-FG participant stated, "We just need to have the dollars to put behind it, to really make it be what it can be." Still unclear was where the best location or housing for such a hub would be. It was generally agreed that schools and businesses are too "super-busy" and that any hub should be one that stretches across the state to provide equity of opportunity.

When considering the level of detail, individuality that releases creativity, and local knowledge lost at the level of a state-wide organization, concern was voiced. Loss of identity when small groups and businesses join larger organizations is off putting. As Participant M stated, "Branding of the expertise and the specialization that each organization brings is really critical." Not only is it off putting it dilutes the enticement of students when entering portals if individuality of business and nonprofit entities is not readily apparent. Therefore, ROI for those building this hub needs to be aware of presentation to the student almost more than presenting to the business or family of the student. There was a general cry from participants that an age-old message that there is more/better opportunity outside the state of

Maine needs to be actively addressed. Participant 2D stated that they “hear from people, kids...there's so much more to be done outside of Maine and better schools and better opportunities exist outside (of Maine).”

There are success stories within the state yielding positive and productive partnerships: business to student, student to educator, educator to nonprofit, and so on. These stories instill a hope in the building of community and filling the need for Maine’s future workforce. The history of losing youth to opportunity outside the state needs to be staunched and refilled with the positive stories happening all around. A company leader announced, “(our) most successful summer employee is now president of the company.” But this must be balanced with practicality, as another business stakeholder assured their manager as they asked them to take on a mentee, “won't be too much time you know on the manager, too much of a burden on the manager, taking them away from their daily tasks”.

This challenging work, encouragingly, already has many allies and many steps laid out at grade levels above high school. From business and school, it was shown that individuals are, through great effort, making change. Individually they are stating, “Yeah, struggled, because I didn't, I didn't know where to start, so, so it helped that I just had that connection,” all the way up to the state and federal level where they said, “we collaborated with the US Department of Labor, the Maine Department of Labor. And we brought in educators from both CTE and and area high schools.” Because of the infancy and grassroots nature of these changes, there is a great concern that, dye to a lack of communication and relationship, there is a duplication of efforts allowing money and time to be wasted. As an example, several participants commented on the artifact shared in focus group session number four (see Appendix A), “I'm not familiar with the Maine ABC Collaborative, and bet there's about 50 other initiatives out there that sound exactly like Maine ABC Collaborative.” And one stakeholder found their name listed on the artifact site but had no idea how it got there.

This tension of disorganized circumstances and siloed energies resulted in the strain heard from comments which exemplify the need for structure and a change in culture to mitigate possible power struggles and lost opportunity. Relationship can smooth issues like, “terms can be different for school districts, versus business so when I look at Job shadowing and internships mentorship, like those could mean something different to all of us. And so, kind of establishing what those actually mean sequence or essential elements of plan.” More could be reached “for very at-risk kids. And so that they're I mean they're fanned out across the state for a very specific population... their funding from the state is very targeted”.

Succinctly stated, “one of the important missing links right now is a database of statewide school contacts who are directly responsible for this work.” Though this research comes out of an unprecedented and stressful time, stakeholders engaged because they realized that the issue of best practice career education programming being available to sixth through twelfth grade students of Maine was bigger than themselves and more interconnected than teacher to business owner. This issue requires exploration of models and cutting-edge strategies that challenge educational, business, and community traditions and needs long term interpersonal engagement.

Though there are still questions to be answered surrounding student input, funding, and companies with less than 100 employees, this research was successful in achieving the purpose of its action step. It clarified understanding of the issues as they relate to the participant stakeholders and issues relating to community, including the precedent which brought it to this point and the culture needed to move it forward. Though a step-by-step protocol was not written, key attributes to a possible protocol or hub were pinpointed. Those of communicating and understanding the stated purpose of the career education plan from the perspectives of each stakeholder and if working in partnership, that the purpose be one that benefits all partners. Participants need to understand and embrace a culture of long term and personal engagement. And if a program is to not lose focus, not degenerate into power struggles for funding and searching for volunteers, stakeholders must consider practicalities that allow housing, structure, and communication that allow for creative, flexible, and broad or wholistic programming.

Section Three: Literature Review

The purpose of this study was to determine best practices regarding the interactions of stakeholders for the benefit of career pathway instruction of sixth through twelfth grade students in Maine. This literature review contributes insight into the research and publications currently present. It provides a context for the problem of practice illuminating the complex arena to which the study contributes, uncovering this topic as needing further study. This literature review is organized around three central themes. First, the role of schools and nonprofits in career exploration programs. It shows the structure and emphasis they bring to trends in education, their current foci, and the attributes they share in the realm of career exploration. Second, it shows the businesses themselves as representative of individuals who care for their own livelihood as well as that of their communities. It explores their interest, their motivations, and their concerns that affect them working in partnership. Third, the conclusions and recommendations were being made by groups outside the sixth through twelfth grades, the state, those in higher education, and others as stakeholders. These organizations hold great sway due to their history, programming, funding, and regulatory actions, which influence all stakeholders present in this study. The vision, recommendations, and decisions of governmental departments, higher education institutions, and other organizations, therefore, influence the options perceived as, and available to those further down the chain of power.

The literature review concludes with a comparison of other programming recommendations leading to a rational for the research topic at hand, and a summary of conclusions following each strand of literature exposes how this study may help improve communication and practice between stakeholders across the space of business and school interaction. Articles for this review were retrieved from ProQuest, Wiley Online Library, Springer, Sage Journals, Gale Academic, and EBSCO, using key words such as but not limited to learning, experiential, career, business, school, community, middle school, engagement, chamber of commerce, department of labor, sector, and more.

First Literature Strand: Role of Schools and Nonprofits

Schools and nonprofits, two of the three visible and key members in any career exploration programming model, have led the charge and benefitted students in unique ways through recent trends and increased interest in distance or technology assisted/asynchronous learning and 21st century learning (Geisinger, 2016) initiatives. Their laser focus on the educational experience of students has heightened both group's sensitivity to developmental changes in society needing to be addressed outside of common content or core initiatives. These strengths partnered with increased freedom for entrepreneurial and design thinking stratagem has assisted all in innovative ways (Burnett, 2021). But as with all change, there are the challenges of staunch tradition, untested innovation, and procurement of funding. Let us look at the current state of schools and nonprofits, exploring their foci and shared attributes.

Current Foci

Schools, as a source of data, are an extensively researched subject, but focusing in on career exploration within general diploma public schools with non-CTE programming narrowed the field. Schools are challenged to steer into the increased interest in career planning pre-graduation and moving away from the hyper regulated challenges evolved from NCLB (No Child Left Behind) in its many forms acquired at the district level (Congress, 2001; Stosich, 2016; Saenz, 2021). Attempts to offer more variety in schools through specialized programming and added bureaucratic layers has resulted in increased capital and programming expenditures in curriculum development, training, staffing, and execution costs by schools in this space (Allen-Platt, 2021; Bland, 2019; Bethune, 2020). To counter quantitative bureaucratic procedures, educators and nonprofits are working to better engage middle and high school students in the exploration of their future through more personalized and traditional events, such as speakers and career fairs, by leveraging modern technology to offer more points of contact (Anonymous, 2021). The benefits from specialized events such as these show increased knowledge in career decision self-efficacy and career readiness (Babarovic, 2020). The added use of technology to assist these activities, though it has its limitations, is important in balancing access to the experience for all students and their families (Behrendt,2016).

Schools take the unique position of being a significant partner to the student (and their families) in setting pathways to success and post-graduation aspirations of the student. Therefore, it concerns school leaders that in recent years there has been worry surrounding a trend in increased student debt accompanied by an increase in college incompletion rates or college experience satisfaction (Carter, 2019), showing a need to increase, earlier on, the understanding of students (and their families) regarding the cost-benefit analysis of the college experience (Looney, 2015). These types of discussions along with the school's commitment to educating the student in resilience, leadership, and commitment benefit the student by affecting the decisions they will make regarding career decisions (Fenzel, 2019). School, student, and family partnerships are a web of relationships that need to be in concert to support positive experiences, in this case, post-graduation (Jahng, 2019; Wrensford, 2019).

Partnering with school and family is only one way that nonprofits have supported students. Nonprofits also support communities through their innovation and mission to work as intermediaries and project managers (Block, 2011). By nature, these organizations are not constricted by the regulatory environment of schools, they open learning opportunities beyond the classroom providing depth, flexibility, design thinking, and motivation for all groups (Wright, 2017). Standing in the gap, they bring together individuals with the expertise to bridge the gaps and contribute to a shared pool of understanding (Patterson, 2012). They also inherently hold a tension of needing to innovate but also track and justify the expenditures to their funding partners through great focus and data driven decision making (Jones, 2018; M.A.M.E., 2019). Some nonprofit organizations in this space assist schools in organizing the exploration of the massive amount of career choices facing students today while others work to increase understanding of new technologies that threaten historical careers and open opportunities for future ones (Mupinga, 2019; Anoun, 2017). Nonprofits are also filling many of the gaps resulting from initiatives surrounding equity and access issues in education and educational experiences, empowering decision making, and supporting youth-adult partnerships (Zeldin, 2015). Another pattern for schools is that they have so long been siloed from the community at large. Whether it be for reasons of security or their need to focus and lessen distractions, schools are historically out of touch with businesses and vice versa (Anderson, 2017; Congress, 2001). Quite often it is the nonprofit that offers programming and community/business relationships to the educator, assisting both business and school with that 'foot in the door' that is seen as an intimidating step. Here is where smaller closer-knit communities may have the advantage over larger or wealthier ones as their intimacies may minimize the option to silo, making the breaking of the barrier less of an issue.

Increased access to money increases the percentage of opportunities for schools and nonprofits to reach out to businesses. Schools individually and schools partnered with nonprofits are doing this through dedicated positions in schools, such as ELO Coordinators, school to Community Relations positions, expanding CTE and general diploma conversations, and disciplinary arms of administrations. Outside of school curriculums and budgets, nonprofits are running programming, training all age groups, and building connections between businesses and schools. As would be intuitively expected, monies are more prevalent in areas that house more businesses (Maine Philanthropy Center). Therefore, schools and nonprofits with alternative or innovative programming are more prevalent, at least initially, in regions with bigger budgets and bigger industrial centers (Community Coordinators Collaborative).

Attributes Shared

What do these nonprofits and school career coordinator leaders share? The attributes of altruism, entrepreneurial spirit, and at times, design thinking when posed with a problem to solve. Altruism, as used here, means they all share a concern for the next generation. Though the source of their motivation may come from different origins, no one gains directly from such a slow pay off as that of a child growing into a career. Entrepreneurial attributes are exemplified daily but especially through the continuation and adaptation of education and activities through the COVID-19 pandemic disruption. Design thinking is being used by schools and nonprofits to support manufacturing and other skills-based industries having trouble finding employees to fill positions, while also trying to keep students engaged and proficient through to graduation.

It should be noted that both stakeholders are challenged by the need for equity and access to that of access to broadband as a means of supporting any distance or technologically dependent interactions in the 21st Century (Devara, 2020). Though cell phones and computers are quite commonplace in society, the rural and financially challenged portions of the state exacerbate the need for creative and financial efforts to communicate beyond traditional 20th century methods and reach new markets (Vogt, 2021). With the COVID-19 pandemic, schools proved that they could adapt to on-line platforms but were also challenged by technological, emotional, and cultural differences inherent with the medium (Wolinsky, 2021). In the state of Maine, there is a disturbing trend of youth emigration, which has led to “an aging workforce and a population decline,” leaving an aging population (Berensen, 2020; Stein, 2019). Though this is not as simple as more stay than leave, the concern surrounding the need for a skilled workforce has, and increasingly is, being seen as a critical need (Fishell, 2014)

Conclusion

It is encouraging to see the value schools and nonprofits are putting into the next generation of our workforce and how the partnership of each fills the gaps of the other as they continue to serve. Their recognition and analysis of trends in education and the needs of society hold an important place in the support and establishment of curriculum and positions that are critical stopgaps for innovative and equitable community building programs. Their current foci centers are around problem solving, life skills, life and career readiness, equity of access, equity of voice, etc. The strength and power of schools and nonprofit partnerships is seen through their unique funding, their historical and innovative structure, and their laser focus upon their mission. What is still to be addressed is the connectedness between these two groups toward business, as well as the influence from outside sources that restrict and control their decisions and path to the future.

Second Literature Strand: Businesses stopped

Businesses show a stark need regarding the exploration, development, and execution of interactions with K-12th grade public school students. A school's focus on students and their education makes sense, as it is their purpose to prepare the student for adulthood. Nonprofits have the privilege of choosing their mission, existing even for a limited time, and working toward only a limited, focused initiative of their choice to fill a gap in time and services. Participation of these non-government entities vary, but their attributes, work, and data show that their presence increases the likelihood of successful partnerships (Aigner, 2020). Though the research data is sparse regarding the interactions between businesses and nonprofits in partnership, businesses do show a strength advantage over the nonprofit because of their wider base, possible size, and longevity, but they tend to be reluctant or hindered in their outreach and experience with schools due to their need/desire to execute their bottom line or being insecure initially in reaching out into the community and its schools (Bouchard, 2021; Lusambili, 2021). Interest in the topic of younger and younger career exploration is present, desirable, and concerning for businesses for several reasons. These facets of concern coupled with the strength of entrepreneurial spirit company leaders makes it vital for businesses to join the other two stakeholders to form a triumvirate of voice and knowledge in this space.

Interest

The business community is interested in engaging the community. The financial benefits to any company through the engagement of their community is patently obvious. But the engagement of youth using career exploration is specific and has distinctive desired outcomes (de Weger, 2018). The challenges of finding a trained, profession-ready workforce drives many to build streamlined, informed, and mentored youth who can then avoid missteps and misunderstandings about higher education, funding, and profession choices that will result in increased debt, lost time, and dissatisfaction (Bland, 2019). The result of a thus prepared workforce seems to increase job satisfaction and workforce stability. A point less focused upon but with a more immediate benefit is the job satisfaction and stability of the current workforce, which results from engagement in altruistic, volunteer, and giving programs within a company's current employees (Zhang, 2021; Thomas, 2000). And, as with international relations, when a business is successful in building relationship with another stakeholder group, it can be the act of one or two motivated individuals who, if they leave their position, the relationship quite often fails (Miller, 2019). These points act as key linchpins as they acknowledge the beneficial and tenuous nature of business to school career exploration relationships and even though programming, which is usually a low-cost initiative initially with positive effects on the company image within the community (Lund, 2021). But it is a challenge when the seminal point employee moves on because the program usually dies and the contact between the stakeholder groups is lost or at best unclear.

Unification stopped

The phenotypes of the business career exploration members are no different than those of schools and nonprofits, that of entrepreneurial spirited design thinkers led by those who give high credence to relationship building. Entrepreneurship is praised and highly valued in business (and nonprofits) (Burnett, 2021). Though found less in highly structured organizations, it was still the spirit that shone forth and was highly praised through the 2020 – 2021 pandemic (Portland, 2021). Businesses share attributes of strength with other stakeholders, but many schools and nonprofits are leading the charge reaching out to engage with businesses for the benefit of students. So, what are the ways that business is leading and contributing?

Design thinking is a skill honed through time and experience. Design thinking as defined by Liu (2006) is the internal and external workings of individuals that dynamically change to solve actual working situations. In educational circles this can be called 21st Century Skills, Guiding Principles, and other terms (Geisinger, 2016; The Guiding, 2022). This ability is an attribute of business owners that is unique in its daily use and its industry specific iterations. They work relationally with that which they know but are comfortable with and acknowledge ownership of the uncertainty of that which they do not know (Goldratt, 1992; Harrison 2005). They are willing to innovatively collaborate, orchestrate, and instigate developing new pathways to success and the execution of their vision for their company (Battilana, 2017). To this end, leadership and relationship quite often take untraditional or inverted pyramid pathways (Hamilton, 2018). Leadership that supports but does not dictate increases the chance of success in these career exploration programs, which tend to follow grassroots style start-ups (Collins, 2001; Spillane, 2006). This relationship is key and can allow conversation to address the need for freedom by employees versus the perception that to execute such programming has the chance of causing a financial or workflow challenge to companies. More important, as most careers are found in small businesses (99.2% of all businesses in Maine are considered small), the employees are the least likely to afford time off task (The Simple, 2020).

Businesses whose first concern is their survival are understandably up against policy, labor shortages, and low ratings regarding workforce expectations (U.S. Chamber of Commerce Foundation, 2012 – 2015). Looking to the closest statistic we have for workforce development (of adults) continues but noticeably falls short of needs in its traditional forms (U.S. Chamber of Commerce Foundation, 2020). New changes, though, are focusing more on private partnerships, relaxation of regulation, and the development of stronger and wider assessment and measurement techniques and skills that can better manage risks and technologies due to change in foci by public policy makers and reconsiderations by the government in its investments. The traditional form of preparation was that of preparation of the workforce through college education. A private–business partnership approach is more appealing to the student and their families, to businesses, and to the private entrepreneur as it could lead to increased business opportunities, competitiveness, and improve DEI (diversity, equity, inclusion) levels.

How to unify and build relationships is the key needed to unlock the door of partnership. Barriers to this need are, one, the establishment of connection when your time is limited. The typical stopping point for persons interested in developing career exploration is realizing that you don't know who to contact or your one phone call or one email is not answered. Understanding if there is equity of access to electronic connections (emails and website searches) is the first challenge but then understanding how your communication is being received (between any of the stakeholder groups) is also critical to effectiveness (Devara, 2020; Mutch, 2010). True relationship is built over time and with persistence with an emphasis on person-to-person interactions (Sternberg, 2019).

Two, understanding each other's community is important. The biorhythms and structures of business are not the same as that of schools (Mowry, 2019; Morgan, 1986). Businesses tend to feel and act altruistically generationally or by quarters of the calendar. The challenge then can be something like a business owner calls the school to offer to come into a classroom in the owner's calendar's third quarter (fall). The school is just starting up for the year and while schools tend to be open to innovative/field type programming in the school calendar's 3rd-4th quarter (spring), the office and teaching staff in the fall finds itself so overwhelmed with new students and getting to know new procedures the message is taken but nothing comes of it. It is not only the understanding of district energies but that of a classroom can be daunting to even the most senior company leader (Fujiu, 2021).

Three, understanding each other's language can be difficult. Definitions of terms, organizational structures, and anacronyms commonly used in schools and businesses seem like a foreign language to those from another group. Often siloed from one another, it can be challenging to know how to communicate with adults let alone to help young people understand what one does for work (Long, 2019). This can take many forms, but one may be a business that contacts schools about a student for a Computer Science Internship; the school administrator hears that and thinks of laptops and desktop computers, while the nonprofit knows that what they both need is an individual with computational, problem solving skills. Language is one aspect of discomfort, and inspiring youth regarding why one's work is worth it can seem even more intimidating (Aspelin, 2018; McCarthy, 2018). Apprehension of a psychological or social nature plagues easy access and warm camaraderie between age and professional groups that do not regularly practice their interactions but are often kept within interests and professions of their own kind (Long, 2019). Though all participant groups are unified by their altruism and entrepreneurial spirit, this type of cooperation can leave many adults feeling vulnerable, shy, and at a loss for material. Confusion, misunderstanding, intimidation, and frustration can only be overcome by deepening relationship, which allows for transparency and joint solutions (Morgan, 2020; Chapter, 2021).

Conclusion

Business is a vested stakeholder in the improvement of their future workforce. The attributes of successful businesses tend to be the same as those of nonprofits and innovative school programming, that of entrepreneurship, design thinking, and a high value in relationship. The concerns and challenges that business leaders regularly run into are that of efficiency of action, lack of understanding regarding return on investment, inter-community understanding, and interpretation of language. The need for understanding of each stakeholder's community and the tertiary factors that affect it are needed. Therefore, understanding through relationship and partnership is paramount between stakeholders.

Third Literature Strand: Government and Higher Education

Their policies, practices, and histories affect the work of businesses, nonprofits, and education in both government and higher education. Though we must be careful to limit the scope of this study so as not to dilute the results, we must again limit our review of secondary parties and their actions that affect the primary. Government is a major source of regulation and funding. Higher education is an example of what education outside the classroom, at a career site, by distance, etc. can be. While higher education, if publicly funded, is beholden to the government, and if privately funded, is concerned with alumni satisfaction for funding, the societal influence that those with college educations are more likely to earn more over their lifetime may not be enough to keep students attending through graduation (U.S. Bureau, 2020), a unique position that makes their sometimes heavily traditional practices vulnerable to change.

Government

Government policy, practice, and history has led our society to the current practices of public education and tax supported institutions for the benefit of all, while regulations protect the vulnerable and marginalized, inducing the inclusion of new citizens and diversity within our borders. Whether government is too much or too little involved in public and private life, there is an attempt to balance between the expectation of government and local entities in the running of local decisions. But characteristically, when governments involve themselves more in local affairs, transparency and responsibility can wane (Crow, 2016). Thus, the balance of governmental support or involvement in lifelong learning and innovative programming when rescinded can leave private and nonprofit organizations in charge of supporting that which is required by the public to succeed in pressing challenges such as that of childcare and education (Brown, 2018). This possibility of vacillating administrations and their involvement in the private sector can cause disruption. Funding of this kind is a challenge for poor communities and distasteful to communities trying to minimize public control, even if it is evident that, for example, smaller ratios (added personnel in schools) results in improved experience (Lapan, 2012).

Statistics offered at the state and federal level from groups such as the Departments of Labor, Education, and Interior, the Census Bureau, and the Internal Revenue Service speak in quantitative terms as to the needs, strengths, deficiencies, and trends affecting communities. These statistics help predict funding and curriculum choices at the local, state, and federal levels and can affect the interactions, dependencies, as well as innovation levels and opportunities allowed. Positive interactions between government, nonprofits, and schools have resulted in innovative, groundbreaking programming such as the *Learn with MOOSE!* project (Maine DOE, August 2020). Work between nonprofit, state, and schools has resulted in JMG programming growing through the state (Young, 2020). Work between educators, Department of Education, and the Department of Labor has resulted in clear definitions for and safety regulations for student to business interactions (Maine Department, 2021). And inclusion of private and public input resulted in the development of Maine's new Life and Career Readiness Standards for schools (Maine, 2020; 2020; 2019). These are all positive examples of partnership on a project-by-project basis. Business and the workforce have long been dependent upon the training, retraining, and financial support of the federal government during transitions when financial trends, immigration spikes, and industry corrections occur, and nonprofits, again, can fill the gap making changes smoother.

Government is not immune to change, and change can cause issues. Maine is currently facing great challenges with an aging population and a limited workforce both of which are dependent upon financial support that drains the state and puts a heavier burden on taxpayers and businesses themselves (Colgan, 2006; He, 2021). Therefore, the government and its departments are vulnerable to short-term gains and long-term sustainability. An example is that of child welfare; the challenge to change the culture as well as the educational level of the "organization" means adaptation and alignment. For government, as with higher educational institutions, decision's past and present are presenting ongoing challenges (Huffman, 2020; Spence, 2018)

Higher Education

Higher Education institutions have led the way in internships, distance learning, and mentorship driven by research showing the value of learning through experience education, introduction of education for profit, and inter-educational structure benefits (Bartolomei, 2013; Hoenen, 2020). This is partly because regulations and social comfort are eased when the interactions are adult to adult. It is easier for businesses to host a 20-year-old who can more clearly articulate their needs, wants, and ideas and is old enough to be beyond safety and child labor law restrictions. But this assumes the 20-year-old can clearly articulate what they want in the short and long term. Public schools, before college, need to connect the dots between student and work to better engage students in the attempt to have the student own the process. The Journal of Occupational Science published an article concluding that students as early as middle school, when asked to meld their practical with idealistic vision of their future, showed promise regarding career and education choices that better support themselves and their communities (Ryan, 2020). Note that this does not mean that the student must attend college, instead it is the participation by the student in the decision process regarding attending college or not, owning, and confronting the reality of the cost benefit analysis at an earlier stage. Still, the societal expectation of college being a requirement for success at all costs, is challenging and complex.

Support for innovative outreach programming centered around career exploration programming has been active at the higher education level. Interest by Maine government and businesses show great promise and nonprofits (i.e., Live and Work In ME, etc.) support easy and strong college to career transitions to mitigate students graduating with a degree, a career path, and debt they don’t want. But how does this trickle down to those below the age of consent, regulated by labor laws and lives controlled by adults. If membership in groups like C3 (comprised of public school district dedicated career and community outreach specialists) are an indication of the number of high schools running career and community outreach programming this kind of work is running in approximately only 14% of districts within the state (calculus done by comparing the number of members in C3 to the number of districts within the state). Higher Education, private or public, is vulnerable to consumer choice and thus needs to be much more aware of satisfaction rates of its attendees and responsive to the needs of innovation (McNamee, 2021). They can also be more selective and flexible in those they accept and support which puts more pressure on those training students wishing to enter their institutions (Farmer-Hinton, 2010).

Conclusion

Both government and higher educational institutions idealize and shape the work of those further down the chain of power. Government policy making and data driven practices regulate funding and limit the availability of career exploration for middle and high school students under eighteen years of age. Higher Education institutions exemplify many programs that are not a one-to-one fit for lower grades but do show the value of personal interactions, career experiences, and preparatory career envisioning. Increased dependency upon the government by society can lead to vulnerability if sustainability of programming is not possible by the community itself. Higher education uses the competitive nature of enticing students and funders as its impetus for change and needs to increase student satisfaction levels, thus the current push increasing innovation and personal aspects surrounding career exploration and school to career launching programming. This freedom and innovation enjoyed by higher education will continue to entice students and businesses who seek their programs.

Summary

The 2018 report by Excel in Ed, *Building Cross-Sector Partnerships to Support Career and Technical Education Pathways: A Playbook for State Policymakers,* outlines a course of action and structures needed for cross-sector partnerships (Mazera). This playbook, built to outline the steps and elements of healthy, productive cooperative relationships, closely aligns with the work studied here. It is the unique players and the location of this action research study in time and space that make it unique, valuable, and necessary.

A comparison of both this study and the report showed that they share the attributes of desire for economic and life success for our communities and future workforce. Both see the need for cross-sector partnerships through structured, purposeful, and communicative relationship, and both see the need for metrics-based feedback to inform. A review of the contrasts between the report and this study yielded the following conclusions. One, that the study speaks to CTE (Career and Technical Education), schools which only have a unique history, structure (academic, funding, etc.), and objectives and can be housed and regulated by unique groups of bureaucrats and partnerships. This study focused on the general diploma public middle and high schools with standards-based objectives, buoyed expectations for college attendance post-graduation, and siloed relationships to communities and their businesses. CTE schools almost all serve students in grades nine through twelve while this study and the career pathways exploration programming in general track schools were looking at the affects going down to sixth grade and kindergarten respectively.

Two, the Excel in Ed report speaks of stakeholders in schools and businesses, but the unique and strategic work of nonprofits and the important voice of students is deafening because of its absence. The publication integrates the importance of the role of government and governmental agencies. It is broadly written to show many examples and allow for many iterations between public and private stakeholders but stated that it is the government that is to be the mover and originator of incentives in cross-sector scenarios. The government can be the supportive structure to distribute, connect, and train those interested in the development of such partnerships. Government, as mentioned in strand three above, is an influencer of such programming, but whether it is or should be the sole matchmaker is unclear within the location of this study. It is thus important to contrast and understand that this current study sheds light on the nature of the nonprofit within the cross-sector relationship and attempts to integrate if not show the need for the voice of students, nonprofits, and others as important factors in models of career pathway instruction.

Which brings us to the third contrast, that of the location of the study in time and space. Maine is a state that has produced great persons of resolve and innovation, stalwarts. They are a unique mixture of cold-faced, warm-hearted people. Within just the last twenty years, they have taken in many refugees from war torn countries into multiple sanctuary cities, which has challenged its predominantly ancestral northern European population. Yet, as recent as the spring of 2022, one of its largest cities elected a Somalian born woman as mayor (Shoichet, 2021). Within education specifically, Maine has innovatively allowed for the adoption of proficiency-based diploma tracks. They have built an Office of Innovation at the state level and started the publishing of state educator built, asynchronous on-line learning programs in response to the pandemic school closures all while a statewide report was being conducted researching schools now offering ELO (Extended Learning Opportunities) structures (not regulated by the state) for graduation credits (Saenz, 2021). Nonprofits are partnering to reverse brain-drain by supporting veterans in continuing education and integration career placement, partnering educators with continuing education programming, and funding career exploration educator's salaries in marginalized school systems as an interim to communities to self-sustainment in such work.

The distinct natures of each of the sixteen counties of the state of Maine make it a unique challenge to develop innovative programming that could be easily replicated. It is a state highly dependent upon the tourist trade and a haven for retirement and vacation homes of the wealthy from other locations. It has a long and proud tradition of heritage and cottage industries, such as lobstering, farming, and lumbering, which are deeply integrated with the state's identity. As shown on the state seal where life on the sea and life on land are depicted as being different but one, opportunities offered between coastal living and inland living are of the greatest challenge to this research in its evaluation and its resultant/suggested implementation.

In summary, there is a strong and encouraging connection between school communities and nonprofits that fill gaps in services and allow for innovation in an otherwise bureaucratic and siloed public school district system. Career exploration in these schools is of expanding concern due to social and educational trends increasing the desire for in-house expertise. Restraints on both groups include financial limitations due to the need to fulfill basic needs first and social traditions or attitudes toward higher education (i.e., college-for-all) second. Businesses, the third stakeholder active in this study, are an integral participant and recipient of the product career exploration programs support. This integral player, motivated by their need for a skilled workforce, is also challenged by their need to focus on their bottom-line and their apprehensions regarding how and where to engage.

It is important to understand the outside influencers that place pressures and open opportunity for the stakeholders. Based on current literature, it is recommended that this research be conducted to first identify the gaps between business and school community demonstrating the need to educate business on how to engage the educational community. Second, use sound evidence from focus groups to build recommendations as to the constituent parts and actions that a cross-sector protocol should have. And third, take these recommendations to the stakeholders to encourage future steps found in each unique socio-economic, regional, and cultural scenario.

Limitations in the literature reviewed for this study still exist. Initial work for this study, Cycle 1, focused on the school, business, nonprofit relationship from the perspective of the school. Cycle 2 shifted its view about career exploration to the needs of the business community and those who have influence upon the stakeholders in general. In both cycles, connections to the stakeholder group of students was not an option. Student voice and choice was not explored within this literature review.

Section Four: Contextualization

The purpose of this Action Research study was to understand and improve interactions between stakeholders for the benefit of career pathway instruction of sixth through twelfth grade students in Maine**.** For improvement of educational opportunity for the next generation, it was necessary to understand what the best ways for these interested parties are to build up the future workforce while building beneficial partnerships. It is within a context of historical and geographic disparity of opportunity across the geography of the state, along with increased private and public trends to innovate that the following research questions were used. What are the attributes and actions of career exploration programming, currently running through public schools, business leaders' initiatives, and nonprofit funding that best serve middle and high school students? Within that programming, are there signs of increased self-efficacy and altruism from students toward their communities along with 21st century skill development? The following segments will provide an investigation of the context in which career exploration programs of middle and high school general diploma students is and could be run. It will also look at how the findings of the research are situated within the extant literature and implications of the study for the organization and professional practice.

Context Analysis

This study begins and ends with like-minded educators and businesspersons from the region of Maine called Cumberland and York Counties who are leading the charge to bring career education to youth. The interactions that make up this research were amid attempts to develop, construct, fund, define, and explore grassroots programs to reach students and engage tangential stakeholders. The role of this researcher before entering the study was that of a project manager for an independent educational consulting company. From this external vantage point, it was striking how little stakeholders communicated, partnered, and problem solved across the state. Attendance at cross district career exploration educator meetings revealed the tenuousness of individual positions within schools and yet high energy behind this type of work. At chamber of commerce events, there was also high interest. The good news was that career exploration for sixth through twelfth grade students then and now is growing and growing fast. Interest by the Department of Education in the building of a hub of information to build connections between business and schools has been suggested, a government sponsored study regarding extant ELO programs within the state has been executed, and increased nonprofits working to support school to career and higher education transitions are being funded. All hot topics of discussion, while fundamental issues of liability, definition of terms (such as mentorship), and the wide variety of educator's job descriptions were still unclear. Relationships between these intermittently housed educators and the businesses they had individually forged connections with was objectively important and yet subjectively distinct.

At the beginning of this study, the researcher discussed her interest in the exploration of understanding the goals and actions currently in place to tell the story of this grass roots movement. When discussed with the co-leaders of C3 (Community Coordinators Collaborative), both the outgoing, founding leaders and the incoming leaders were in favor of further discussions in pursuit of the topic. These discussions were done in person, by phone, and email. All four leaders offered their support through brainstorming sessions, feedback loops, informal and formal classroom observations, permissions, and introductions to the C3 group at large. Within the first cycle, some members of the C3 group opened themselves to observations, focus groups, and interviews. Within the second cycle, when it became apparent that the study needed to cast another, slightly different net, one of the former leaders availed herself as a thought partner and intermediary to extend to a wider net of participants.

Over the course of the study, this researcher met with educators, businesspersons, nonprofit leaders, government officials, and higher education administrators both formally and informally. During these meetings, loosely structured conversations started with their personal and institutional experience with career exploration programming for any age of student, and then moved to their desires for the future of such work. To gain feedback on the work as it progressed, the researcher met with members of C3 and the ARC-FG (Action Research Committee – Focus Group) to gain insights and challenge the researcher's thinking. Finally, the researcher shared the resultant findings with the Action Research Committee and members of the educational community of Maine, spurring critical reflection on the conclusions made. In the following section, an academic dialog will place the three findings of this research study in the context of the literature to engage and encourage further discussion and study.

Relationship As the Interplay of Cultures

Almost all data collected expressed the need for, and the importance of, relationship. Relationship at the human or organization level involves the interplay of cultures. Within cultures, there are norms and expectations that can affect communication and the ability to trust and build change. Educators showed the importance of relationships when they spoke of finding students to serve and businesses to work with them. Businesses spoke of serving students and the communities they represent by connecting with school systems. Nonprofits, governmental leaders, and higher educational institutions spoke of reaching out to those in need for assistance while trying to not double up on the work being done by other groups already working in the state. But it was not only the relationship building but also how those relationships are built and maintained , how they progress and grow over their life span, that was found as important.

Partnerships with students that lasted through key transitions, middle to high school, high school to college, education to employment, were emphasized as being the goal. Educators spoke of students who were in jeopardy of not graduating, finding success through their work and programming. Businesses spoke of students finding voice and empowerment to solve problems for the company and their communities. But it is not only length of time spent in partnership but depth of understanding between groups that allows for success. The interplay of how these groups is the same and different and the transparency of groups to seek to find mutual motivations was found to be mutually beneficial and desirable. Educators and businesspersons spoke of getting to know the student well enough to understand their interests and to partner well with each other. And when partnerships could not find common ground, it was best to try again, maybe with different participants.

A key point that was only touched upon tangentially in the initial literature review but was mentioned by at least three participants was the importance of including the partnerships and supports of familial and community partners, what this study has deemed tangential stakeholders. As a student's identity extends from one's role in the family, place of origin, and previous school, understanding and union of mission with these entities may have more influence than initially realized (Stahl, 2021; Powell, 2019). The number of community members and parents, many of which fall within the high percentage of small business owners and employees in Maine, might be an untapped source of partnership.

The model of Career Wise Colorado, a 501©3 organization out of Colorado, shows many of the attributes of partnership that this research espouses. This well-funded, highly qualified staff, exemplified an organized program with staff representing and engaging stakeholders, including students, government, and parents. Their work to provide meaningful, certified work experience for student and business partners shows high return on investment through metrics and incentives for all parties. Employer and student are promised network building and opportunities for investment in themselves and their future. This nonprofit works to exemplify best practices of personal interactions, critical thinking, planning, and programming where the business and the student are involved from the beginning to build sustainable approaches to long term engagement practices which Blevins (2020) explained as being ideal. The culture of Career Wise Colorado and those who brought about its existence show an expectation of relationship building through active cross-stakeholder understanding.

If the work, now started in two of the southern counties of Maine, is to reach and replicate into other counties of the state it is imperative that stakeholder partnerships be built in stages that ultimately reach across stakeholder lines moving from grassroots to statewide. Rolle (2019) looked at the need for international partnerships built as a synergy of institutions that would be increasingly needed to serve those from high poverty areas to increase talent. Though this study looks at scenarios on an international scale, it is true that this should be the end goal of career education programs, that of inter-county collaborations that build experiential learning and entrepreneurial students. The value of relationship across borders (or sectors or age groups) is valuable. Mentorship, as an example of personal relationship building, has long been seen as valuable. In the case of career exploration, several success stories were recounted by those involved in the research as being mutually beneficial and longer term. Attributes of these success stories were high engagement and mutual, professional respect with contribution and loyalty being less important to the relationship (Shelhouse, 2021). The merging of a nonprofit structure such as Career Wise Colorado to act as an inter-stakeholder group to facilitate and set a vetting process and matchmaking structure between stakeholders may be the most streamlined way to bring together and formalize and ease the burden of such a heavy lift.

The literature from this study did not consider the need for regulation regarding the process of industry area approvals and a standardized process for career pathways instruction. Approval of such programs for non-CTE and non-Academy structured school systems is based on local control and exists with little to no regulation beyond the level of superintendency. Most adjustments and validations relating to existent, infantile career pathways and ELO programs are made according to budget meetings, and district lawyers, more than qualitative study according to those in the field. This is a challenge to those trying to expand programs and reason for why the C3 group is needed and appreciated in its capacity as a forum. But as programs develop and relationships are needed over a variety of age groups, persons, organizations, communities, and entities both public and private, it will be important to have relationships to explain, convey, and collect the metrics to show to value, extent, and success of such relational, qualitative efforts.

Thus, moving forward, it would be beneficial to extend the study to better understand if relationships can be standardized and quantified, and if so, what metrics each stakeholder would find valuable. But care must be taken or standardization, freedom and innovation can be lost.

Partnership and Freedom to Innovate

Once relationship is initiated, understanding is built through trust filled experiences and actions spurred by goals that are inclusive and valuable to all concerned. When schools and businesses must answer to the bottom line of their histories, funders, and constituencies, it can seem prohibitive to take such effort and time to build that which is subjective and with such a long-term ROI. The paradox between administrative efficiency and student-educator-business motivations can cause great tensions. Henry (2022) in the study "Managing Competing Demands" addressed what was called the 'inclusiveness-efficiency paradox' noting that partnerships go through different tensions at different stages of the relationship's development process. Like onboarding a new employee or a teacher or welcoming a new student to the classroom, these cross-sector partnerships first need to be customized and inviting, then sequential and including, finally maturing to tailored instruction. But where to start?

In *Futures Triangle 2.0* (2019) Alessandro Fergnani suggested that visualizing the concerns of those involved in any project and its planning is a good place to begin. The foresight framework allows each stakeholder to see the influences (push, pull, and weight) of past and present that affect a group's openness and influences toward future events. From this information, groups begin to contribute key systemic characteristics to the shared pool of understanding allowing trust to be developed and planning to be strategic (Patterson, 2012). The more investment by stakeholders and tangential influencers (i.e., family, local community, higher ed.) can be involved in the process, the greater the buy in for any program (Chapter, 2021). Longer term partnership allows for more depth and trust that can result in increased stability of the educator's position and improved business' reputation within the community served. Vision that intentionally builds culture and culture that builds vision is a deliberate move that does not happen quickly, but the outcome can be seen in behavior, satisfaction, and growth (Farmer-Hinton, 2010). Within various focus groups and ARC meetings, stakeholders respectfully listened to one another and learned from each other as they started building relationship. This behavior was encouraging and uplifting to all and yet when familiarity began to mature, concerns for the use and ownership of information dissemination, name recognition, time on task, and funding showed themselves to be sticking points that would have to be addressed if partnerships were to proceed and deepen.

Though the Futures Thinking Model 2.0 is a place to start the number of variables affecting those involved can be many (Erdiaw-Kwasie, 2017). The educational practices called Project Based and Place Based Learning (both called PBL) are currently being used and encouraged in innovative programming suggests that commitment by leadership (of any kind) to guide the learner (of any age) to engage in entrepreneurial design thinking practices to solve local issues relevant to those involved, may be the most productive to progress through active partnerships (Bender, 2012). The training in and incorporation of PBL goals and practices by businesses toward schools, schools toward businesses, and both with the student, could increase understanding and improve buy in from all parties. Though entrepreneurial programming can have a boomerang effect of pulling entrepreneurs out of those communities they could be serving (such as the engineer who leaves corporate life for self-employment, or families who pull their student out of public school to homeschool), formal and informal mentorship can contribute to development and cohesion of partnerships and the inclusion of those who do not find freedom in schools as they now stand (Brail,2017). Educational research is also showing the value of environments that encourage diversity of reflection and creative thinking both collectively and individually. Matheson (2018) crossed the lines between business and education, explored the motivations and engagement of post-graduate students concluding that at this time of key transition from student to employee, the integration of diverse interactions built important identity factors within the student's image of self. Diversity of culture and race is of concern for schools and businesses alike. But students are still siloed in their age and grade groupings and businesses can be as well, being all adults. This finding encourages stakeholders to build into their culture of diversity and inclusion not only diversity of culture, gender, and race, but also the diversity of age, place, and clique. It is the cross culture, at a time of transition, within intentional and trusting environments that proport and encourage increased relationship and the ability to develop shared understanding of goals and tensions, sometimes held below the surface. Long term communication and age group interplay will be needed, with understanding as to how time will bring a need for transitioning of goals, actions, assessment, training, and supports.

Forming an Intermediary Hub

The responsibility it takes to consistently develop, execute, and assess at any career exploration programming is too large for any one person, school educator, or business leader. If career expectation is to move beyond successes as single events or small group, individual stories to that of a universal expectation of opportunity flexible and reliable infrastructures will be needed. Research participants suggested the establishment of a hub which worked as an intermediary to facilitate relationship and provide supportive materials would smooth and simplify processes and calm concerns between schools and businesses. This hub would be a collector and disseminator of information regarding participants, supporters, and coordinators. The findings of this research are that a hub would be very beneficial but it would need to go beyond that of a glorified rolodex. It would need to be housed within an organization without political agenda, does not allow for flux of worldview, and has consistent funding for greatest long-term stability. This hub would need to hold a culture of innovation, independent from the tensions which pull, push, and weigh upon the stakeholders involved.

Within this hub, there would be the repository of contacts but also benefits, services, and other protocols that serve and forward programming. This hub would serve as and support existing intermediaries. Both M.A.M.E. and Junior Achievement of Maine are active in this type of work within the state, one specializing in manufacturing sectors and the other providing specialized entrepreneurial programming. The hub could partner with these types of established groups and then offer beyond their services such as, training and paperwork surrounding insurance, protocols, and regulation (such as Department of Labor vs. Department of Education standards), curriculum, and certifications (Crow, 2016). This toolbox would facilitate the development of purpose statements, agreements, and action plans, as well as incentives (such as service hour trackers and training in PBL). Purposeful stakeholder recruitment has grown significantly on the local level and has spread through cooperation between groups such as C3 and JMG (formerly called Jobs for Maine Graduates), but with a hub could move to a higher level by standardizing and validating participant profiles and reducing the number of mismatched stakeholders by improving recruitment and expanding inclusive programming.

Finally, a hub should include that which, again and again, was asked for by participants, metrics for evaluating and measuring key data points. Judgement for success without metrics leads to personal decisions based in temporary and inconsistent emotion. Metrics, as described in *Excel in Ed*'s 2018 *Cross Sector Partnership Playbook*, would allow for decisions based on effectiveness, use of resources, quality of engagement, impact on target audiences and partnership dynamics. Purpose and protocol partnered with metrics has direct and interactive effects on all engaged communities. Businesses and school administrators and boards of education make key decisions based on data (Zhang, 2021). And ROI, a repeating theme, can be a strong influencer on anyone trying to see the value of an out of classroom experience. This proposed hub, with its many responsibilities, would need funding to support a significant staff. A point ruefully made by ARC-FG members. It will take those with expertise and organizational skills to allow for steady funding, recruitment, programming, and metrics building, collecting, and distribution on such a large scale.

Conclusion

Though the field of career exploration within Maine middle and high schools is expanding, it is critical that a better understanding of the long-term infrastructural supports needed for sustainability and expansion of these programs is needed. Understanding of the existent and desired relationships between stakeholders was found to be of deeper complexity and significance, than first thought (St. Clair, 2015). Professionals in education and business should be aware of and open to developments that prioritize equity and innovation, voicing concerns as a means for deeper relationship and stronger partnership (Hsieh, 2018). Academically, this study just begins to explore the unique time and place of career exploration programming outside of the CTE and before Higher Education environments. This work exemplifies in its execution and findings the principle that worthwhile partnership is born from stakeholders participating as models of life-long learning practices for the benefit of the next generation (Lindner, 2018).

The relationship of such a cross sector study looked at the interplay of cultures by exposing the value of norms and expectations of persons and their stakeholder communities, noting that a wish for change was not necessarily equal to their ability to change (Metropolitan, 2016). Partnership of these groups is tempered and valued differently by these different groups. Where understanding of each other's concerns can lead to deeper and longer-term intimacies, cross sector education in PBL and Design Thinking can expand what different groups deem, 'diversity and inclusion'. To facilitate, support, and sustain communication and expansion of the work already begun, the formation of an intermediary hub is required (i.e., PENCIL model, Career Wise Colorado model, JMG model). This hub, with the structure of a nonprofit, sitting between public and private entities, would allow for single minded support and execution of its proposed mission: collecting, supporting, training, and recruiting.

Implications for The Organization

This section describes how the research generates new knowledge and systemic change between business and educational leaders and other tangential stakeholders in career exploration programming. Social justice contributions and recommendations will be presented. Here it will be explained and what the researcher will do as a scholar practitioner to continue the work started.

Formation of New Knowledge and Systemic Change

This study, unique in its question and timely in its placement, exposes key elements of the interactions between stakeholders of career exploration programming. Uncovering the need for educational practices that partner with businesses, where neither are the sole owner but must work in concert to survive and thrive was key to allow for higher order protocol development in these relationships and programs. From the simple beginnings of bringing those together who previously did not know of the existence of the other, through to stakeholders meaningfully discussing possible models for the establishment of structures to facilitate interactions of more and more groups, the findings of this study exemplify solutions to the paradox between inclusiveness and administrative efficiency. This study also begins the melding of vocabulary, which at first blush seems so diverse but upon closer inspection holds many similarities. Both PBL and Design Thinking, one from education and one from business respectively, encourage the use and development of 21st Century Skills aimed at the solving of real world and community-based problems for the betterment of all constituents.

Organization and outlining of the knowledge uncovered revealed pathways to change that adjust the way traditional systems of school and business practices behave and view one another. The conclusion that long-term and deepening of relationships between business and school is needed flies in the face of typical practice where both previously siloed themselves from one another while the student, alone, moved from one to the other. Instead, this study shows that the school and business community should join hands with each other to form a bridge, supporting the student as they travel between encouraging them to safely travel back and forth to experience, question, reflect, plan, and grow. These findings show that support and scaffolding for the formation and sustainability of a hub to facilitate long-term and widespread relationships was a more significant, structured, and involved outcome than initially expected. An intermediary hub is the structure that serves the most innocuously with singularity of purpose while not closing off the possibility for innovation.

Contribution to Social Justice

Career exploration programming is a unique field of exploration, mutually benefitting all stakeholders in the short and long term. Therefore, the expansion of such work across the state contributes to the diversity and inclusion of all members of the state. It should be noted that findings related to the creation of an intermediary hub is key to the success and proliferation of such work in that the building of relationships between stakeholders, now in its infancy will, using a hub, allow for and encourage inclusion of all ages, races, cultures, public and private sectors, and with the aid of technology bridge geographic distances. Relationships between stakeholders at the local level will be allowed to ultimately build partnership and experiential opportunity across counties, regions, and ultimately the state.

Further Recommendations

It is with regret that the initial proposal for this study was restricted by COVID-19 protocols that negated the inclusion of students into the study. It is strongly recommended that study continue and be encouraged to take the form of a long-term matrix collection executed synchronously with the formation of an intermediary hub to best understand the affects and success of the hub itself in light of all primary and tangentially interested parties, including students. As emphatically contributed by an ARC participant, the whole of the student needs to be central to all of this (career exploration development). discussion and planning. This is another argument for the creation of an independent entity for the administration of the hub, as it would not lose sight of the student-centered directive or swayed by changing motivations and agendas due to clarity of mission and funding requirements. Student contribution and feedback regarding their experiences would fill a wide gap in this study left by the loss of this significant stakeholder group.

Beyond the action steps taken, community engagement practices are encouraged to deepen the involvement and buy-in of business and civic leaders. Educators, nonprofits, and governmental leaders are aware of and actively pursuing such work, it is other sectors of the community that needs to understand, be shown, and supported. With encouragement and involvement, it is believed that relationship and synergistic partnerships can overturn what is initially seen as a poor ROI. Again, this is where the use of an intermediary can help. A hub that actively recruits and trains businesses by offering PBL/Design Thinking training where business leaders develop sector and industry specific experiences, would model, and deepen the experiences hoped for students. This intermediary could support understanding and streamline certification programs while validating student experience using metrics and narrative data collection.

Based on the conclusions of this study, it is recommended that assessment of key nonprofits be made to determine if one already exists in the state that has a mission and vision in which a hub could be developed or housed. If a process or structure is found to have begun, verification of its ability to expanded to include the breadth of features recommended within the results of this work, should be completed. Next, a better understanding of the current short- and long-range plans and funding structures of the organization should be evaluated and should be explored to assess sustainability over the course of expansion and longevity of programs.

References

Aigner, & Pesqueira, L. (2020). The Effects of Organizational Traits on NGO-Business Engagement in Mexico. *Sustainability (Basel, Switzerland)*, *12*(23), 10108–. https://doi.org/10.3390/su12230000

Allen-Platt, Claire, Gerstner, Clara-Christina, Boruch, Robert, & Ruby, Alan. (2021). Toward a Science of Failure Analysis: A Narrative Review. Review of Research in Education, 45(1), 223–252. https://doi.org/10.3102/0091732X20985074

Anderson, Luke. (2017). I'm Known. The Annals of the American Academy of Political and Social Science, 673(1), 98–115. https://doi.org/10.1177/0002716217723613

Anonymous. (2021). Engaging with High School and Middle School Students. Kitchen & Bath Business, 22.

Aoun, J.E. (2017). Robot-Proof: Higher Education in the Age of Artificial Intelligence. MIT Press.

Aparicio, C. E., Hinojosa, K., & Casillas Zapata, A. M. (2020). Integrating Disciplines with PBL at the Autonomous University of Nuevo Leon (UANL). *Journal of Problem Based Learning in Higher Education*, *8*(1), 106–118.

Aspelin, K. (2018). HELPING ANSWER "WHAT DO I WANT TO BE WHEN I GROW UP?" ENGAGING CHILDREN THROUGH ITE'S STEM COMMITTEE. *ITE Journal*, *88*(9), 12–13.

Babarović, Toni, Dević, Ivan, & Blažev, Mirta. (2020). The effects of middle-school career intervention on students' career readiness. International Journal for Educational and Vocational Guidance, 20(2), 429–450. https://doi.org/10.1007/s10775-019-09411-5

Baggetta, P., & Alexander, P. A. (2016). Conceptualization and Operationalization of Executive Function. Mind, Brain, and Education, 10(1), 10–33.

Bartolomei-Suárez, S., Miguel-Vázquez, V., & Grey, W. R. (2013). The Socio-Economic Background Effect on UPRM Engineering Students' Academic Performance. IIE Annual Conference. Proceedings, 587–.

Battilana, J. & Kimsey, M. (2017). Should you agitate, innovate, or orchestrate? Sanford Social Innovation Review. Retrieved from https://ssir.org/articles/entry/should_you_agitate_innovate_or_orchestrate#

Behrendt, M., Machtmes, K. (2016). Photovoice as an Evaluation Tool for Student Learning on a Field Trip. Research in Science & Technological Education, 34:2, 187-203, DOI: 10.1080/02635143.2015.1124410.

Bender, W.N. (2012). Project-Based Learning: Differentiating Instruction for the 21st Century. Corwin

Benjamin Blevins, Guadalupe C. Ramírez & Jonathan B. Wight (2020) Short-Term Study Trips in the Americas: Pedagogy and Logistical Best Practices, Journal of Teaching in International Business, 31:4, 293-311, DOI: 10.1080/08975930.2020.1851622

Berensen, Nicole R, Crandall, Mindy S, & Leahy, Jessica E. (2020). An Educational Needs Assessment of Workforce Supply and Readiness in Maine's Forest Products Industry. Forest Products Journal, 70(1), 22–27. https://doi.org/10.13073/FPJ-D-19-00046

Bertoni, Marco, & Bertoni, Alessandro. (2019). Measuring Experiential Learning: An Approach Based on Lessons Learned Mapping. *Education Sciences*, *10*(1), 11. https://doi.org/10.3390/educsci10010011

Bethune, A.P. (2020). Thinking and Designing at the Intersection of Technology and Civics: A Case Study of an International Civics Coding Camp for Girls. Scholarly Digital Publishing https://arch.library.northwestern.edu/catalog?f%5Bkeyword_sim%5D%5B%5D=STEM+Education&locale=en

Bland, A. (2019). STEM Industries Apprenticeships: Organization Influences, Skill Gaps, and Challenges Facing the 21st-Century Workforce an Evaluation Study. University of Southern California.

Blevins, B., Ramírez, G.C. & Wight, J.B. (2020). Short-Term Study Trips in the

Americas: Pedagogy and Logistical Best Practices, Journal of Teaching in International Business, 31:4, 293-311, DOI: 10.1080/08975930.2020.1851622

Block, P., & Safari, an O'Reilly Media Company. (2011). Flawless Consulting: A Guide to Getting Your Expertise Used (3rd ed.).

Bouchard, & Raufflet, E. (2019). Domesticating the Beast: A “Resource Profile” Framework of Power Relations in Nonprofit–Business Collaboration. Nonprofit and Voluntary Sector Quarterly, 48(6), 1186–1209. https://doi.org/10.1177/0899764019853378

Braga, B, Baum, S. (2018). Where Is Student Debt Highest? Urban Institute: Opportunity and Ownership Initiative. https://www.urban.org/sites/default/files/publication/97751/where_is_student_debt_highest_1.pdf

Brail, S., & Kumar, N. (2017). Community leadership and engagement after the mix: The transformation of Toronto’s Regent Park. *Urban Studies*, *54*(16), 3772–3788. https://doi.org/10.1177/0042098016683122

Brown, T. (2018). Lifelong learning: An organizing principle for reform. Australian Journal of Adult Learning, 58(3), 312-335.

Burnett, B. & Evans, D. (2021). Designing Your Life: How to build a well-lived, joyful life. Knopf.

Bybee, Rodger W. (2010). What Is STEM Education? *Science (American Association for the Advancement of Science)*, *329*(5995), 996–996. https://doi.org/10.1126/science.1194998

Caraballo, L., Lozenski, B.D., Lyiscott, J.J., Morrell, E. (2017). YPAR and Critical Epistemologies: Rethinking Education Research. Review of Research in Education 41.1:311-36.

Career Wise Colorado. (n.d.). https://www.careerwisecolorado.org/en/_ (retrieved 10/16/2021)

Carminati, Lara. (2018). Generalizability in Qualitative Research: A Tale of Two

Traditions. *Qualitative Health Research*, *28*(13), 2094–2101.
https://doi.org/10.1177/1049732318788379

Carter, D.L. (2019) "Skilled Trades, Middle Skills in Schools Battle a Pro-College Bias." Rochester Business Journal 35.10 ProQuest. Web. 22 Mar. 2021.

Caruthers, L. & Friends, J. (2014). Critical pedagogy in online environments as third space: A narrative analysis of voices of candidates in educational preparatory programs. Educational Studies, 50, 8-35.

CHAPTER 6 STAKEHOLDER AND PARTNER ENGAGEMENT. (2021). Planning Advisory Service Report, 598, 76–93.

Children's Cabinet. (n.d.). Governor's Office of Policy Innovation and the Future. (ret. February 21, 2022).

Citarella, A., Briegas, J.J.M., Iglesias, A.I.S., Vicente, F. Castro. (2020). Economic Pressure and Self-Efficacy as Independent Predictors of Academic Grades and Career Indecision for Southern European Middle School Students: A Confirming Study. Frontiers in Education (Lausanne), 5. https://doi.org/10.3389/feduc.2020.559465

Colgan, Charles S. and Muskie School of Public Service. (2006). "Maine's Aging Economy and the Economy of Aging". *Maine Center on Aging Research and Evaluation*. https://digitalcommons.library.umaine.edu/moca_research/33

Collins, J. (2001). Good to Great. Harper Business.

Community Coordinators Collaborative. (n.d.). Who We Are. https://www.mainec3.com/who-we-are (ret. July 1, 2021).

Congress.gov. H.R.1 – No Child Left Behind Act of 2001: 107th Congress (2001-2022).
https://www.congress.gov/bill/107th-congress/house-bill/1#:~:text=1%20%2D%20No%20Child%20Left%20Behind,107th%20Congress%20(2001%2D2

002) (ret. January 29, 2022)

Crow, Albright, E. A., & Koebele, E. (2016). Public Information and Regulatory Processes: What the Public Knows and Regulators Decide. The Review of Policy Research, 33(1), 90–109. https://doi.org/10.1111/ropr.12154

Dahlberg, & Dahlberg, K. (2019). The question of meaning-a momentous issue for qualitative research. *International Journal of Qualitative Studies on Health and Well-Being*, *14*(1), 1598723–1598723. https://doi.org/10.1080/17482631.2019.1598723

de Weger, E.J, Van Vooren, N, Luijkx, K.G, Baan, C.A, & Wes, H.W. (2018). Achieving successful community engagement: A rapid realist review. BMC Health Services Research, 18(1), 285–285. https://doi.org/10.1186/s12913-018-3090-1

Delpit. (1988). The Silenced Dialogue: Power and Pedagogy in Educating Other People's Children. *Harvard Educational Review*, *58*(3), 280–299. https://doi.org/10.17763/haer.58.3.c43481778r528qw4

Destination Occupation. (n.d.) https://destinationoccupation.com/ (ret. July 1, 2017).

Devara, R. (2020). Broadband Internet Access: A Luxury or a Right? Economic and Political Weekly. https://www.epw.in/journal/2020/48/commentary/broadband-internet-access.html

Dweck, C. (2006). Mindset: The new psychology of success. Ballentine Books.

Dyer, S., Lowery-Kappes, H., Hurd, F. (2021). Moving critical management education to praxis: integrating professional services within the critical classroom. *Journal of Work-Applied Management*, *13*(1), 19–35. https://doi.org/10.1108/JWAM-10-2020-0042

Educate Maine. (n.d.). https://www.educatemaine.org/ (Ret. July 1, 2021).

Erdiaw-Kwasie, Alam, K., & Kabir, E. (2017). Modelling Corporate Stakeholder Orientation: Does the Relationship Between Stakeholder Background Characteristics and Corporate Social Performance Matter? *Business Strategy and the Environment*, *26*(4), 465–479. https://doi.org/10.1002/bse.1930

Farmer-Hinton. (2010). On Being College Prep: Examining the Implementation of a “College for All” Mission in an Urban Charter School. The Urban Review, 43(5), 567–596. https://doi.org/10.1007/s11256-010-0168-4

Federal Information & News Dispatch, LLC. (2020). *Senators Collins, Hassan Introduce Bipartisan Legislation to Help Address Critical Need for More Direct Support Professionals.*

Fenzel, L.M. & Richardson, K.D. (2019). Supporting Continued Academic Success, Resilience, and Agency of Boys in Urban Catholic Alternative Middle Schools. Journal of Catholic Education, 22(1), 1. https://doi.org/10.15365/joce.2201012019

Fergnani. (2020). Futures Triangle 2.0: integrating the Futures Triangle with Scenario Planning. *Foresight (Cambridge)*, *22*(2), 178–188. https://doi.org/10.1108/FS-10-2019-0092

Fishell, D. (2014). 'Our workforce is barely growing': Economists say Maine's aging population hinders growth. Bangor Daily News.

Fujiu. (2021). Business Cycles in a Two-Sided Altruism Model. Mathematics (Basel), 9(17), 2054–. https://doi.org/10.3390/math9172054

Gary, L. (2005). THOUGHT LEADERSHIP; Ronald Heifetz - The challenge of adaptive leadership. New Zealand Management, 46.

Gates, A. E. (2016). Benefits of a STEAM Collaboration in Newark, New Jersey: Volcano Simulation Through a Glass-Making Experience, Journal of Geoscience Education, 65(1), 4-11; https://www.tandfonline.com/doi/full/10.5408/16-188.1

Geisinger. (2016). 21st Century Skills: What Are They and How Do We Assess Them? *Applied*

Measurement in Education, *29*(4), 245–249. https://doi.org/10.1080/08957347.2016.1209207

Goldratt, E.M. & Cox, J. (1992). The Goal. (2nd Ed.). North River Press.

Gomez, Karen, & Beachum, Floyd D. (2019). The "Voice" of Children of Poverty: Candid Insights to Their Career Aspirations and Perceptions of Self-Efficacy. *The Urban Review*, *51*(5), 724–747. https://doi.org/10.1007/s11256-019-00503-8

Hamilton, I.A. (2018). Jeff Bezos pictures Amazon as an inverted pyramid, in which he is the least important person at the bottom. *Business Insider*.

Harrison, M.I. (2005). Diagnosing Organizations: Methods, Models, and Process. (3rd Ed.). Applied Social Research Methods Series, Vol. 8. Sage.

Hattie, John. (2012). Visible Learning for Teachers: Maximizing impact on Learning. New York: Routledge.

Hawkins, L. B., & Kaplan, L. G. (2016). Helping the Me Generation Decenter: Service Learning with Refugees. Journal of the National Collegiate Honors Council, 17(2), 157–175.

Hayes, Liz, Hopkinson, Clare, & Taylor, Alan Gordon. (2016). Problematizing qualitative research in organizations. *Qualitative Research in Organizations and Management*, *11*(2), 127–146. https://doi.org/10.1108/QROM-07-2014-1234

He, Smidt, M., Li, W., & Zhang, Y. (2021). Logging Industry in the United States: Employment and Profitability. Forests, 12(12), 1720–. https://doi.org/10.3390/f12121720

Henry, H. (2019). Top Soft Skills in the 21st Century Workplace. Junior Achievement USA. https://jausa.ja.org/news/blog/top-soft-skills-in-the-21st-century-workplace

Herr, K. & Anderson, G. (2015). The action research dissertation: A guide for students and faculty (2nd ed.). Thousand Oaks, CA: Sage Publishing. ISBN: 978-1483333106

Hoenen & Kolympiris, C. (2020). The Value of Insiders as Mentors: Evidence from the Effects of NSF

Rotators on Early-Career Scientists. The Review of Economics and Statistics, 102(5), 852–866. https://doi.org/10.1162/rest_a_00859

Hsieh, Ganotakis, P., Kafouros, M., & Wang, C. (2018). Foreign and Domestic Collaboration, Product Innovation Novelty, and Firm Growth. *The Journal of Product Innovation Management*, *35*(4), 652–672. https://doi.org/10.1111/jpim.12435

Huffman, R. (2020). Thinking out of the box. Journal of Public Child Welfare, 14(1), 5-18.

JMG. (n.d.). Maine Compass Career Collaborative. https://www.jmg.org/ (ret. July 1, 2021)

Jahng, K.E. Exploring Pathways to Middle School Students' Life Satisfaction. Child Ind Res 12, 1643–1662 (2019). https://doi-org.ezproxy.neu.edu/10.1007/s12187-018-9602-z

Jones, R., Mertler, C. (2018) Career Readiness Data Handbook – Measuring What Matters. [pdf]

Junior Achievement of Maine. https://maine.ja.org/ Technical Assistance Center of NY & Successful Practices Network. (ret. February 12, 2022)

Kraft, M.E., Furlong, S.R. (2020). Public Policy: Politics, Analysis, and Alternatives (6th ed). SAGE edge https://edge.sagepub.com/kraft6e/student-resources/chapter-5/chapter-summary

Lapan, R.T., Whitcomb, S.A., Aleman, N.M. (2012). Connecticut Professional School Counselors: College and Career Counseling Services and Smaller Ratios Benefit Students. Professional School Counseling. Dec2012, Vol. 16 Is. 2, 117 - 124.

Lindner. (2018). Entrepreneurship Education for a Sustainable Future. *Discourse and Communication for Sustainable Education*, *9*(1), 115–127. https://doi.org/10.2478/dcse-2018-0009

Liu, Xin, Liao, Hui, Derfler-Rozin, Rellie, Zheng, Xiaoming, Wee, Elijah X M, & Qiu, Feng. (2020). In line and out of the box: How ethical leaders help offset the negative effect of morality on creativity. Journal of Applied Psychology, Journal of applied psychology, 2020-03-12.

Live and Work in Maine. (n.d.) https://liveandworkinmaine.com/ (ret. July 1, 2021).

Long, Elizabeth M, & Gummelt, Ginger. (2020). Experiential Service Learning: Building skills and sensitivity with Kolb's learning theory. Gerontology & Geriatrics Education, 41(2), 219–232. https://doi.org/10.1080/02701960.2019.1673386

Looney, & Yannelis, C. (2015). A crisis in student loans? How changes in the characteristics of borrowers and in the institutions, they attended contributed to rising loan defaults. *Brookings Papers on Economic Activity*, *2015*(Fall), 1–89. https://doi.org/10.1353/eca.2015.0003

Lund, Hansen, J. D., Robicheaux, R. A., & Cid Oreja, C. (2021). The direct and interactive effects of retail community engagement. European Journal of Marketing, 55(12), 3250–3276. https://doi.org/10.1108/EJM-01-2020-0071

Lusambili, Nyanja, N., Chabeda, S. V., Temmerman, M., Nyaga, L., Obure, J., & Ngugi, A. (2021). Community health volunteers' challenges and preferred income generating activities for sustainability: a qualitative case study of rural Kilifi, Kenya. BMC Health Services Research, 21(1), 1–642. https://doi.org/10.1186/s12913-021-06693-w

MAME. (n.d.). https://mainemfg.com/ (retrieved July 1, 2017)

M.A.M.E. (2019). The Economic Impact of Advanced Manufacturing: A global perspective, a local opportunity. Portland.

Maine Department of Education. (2019) Graduation Rates: Graduation Data Set: 2017/2018 & 2018/2019. https://www.maine.gov/doe/data-reporting/reporting/warehouse/graduation-dropout-data

Maine DOE Releases Sneak Peek of MOOSE Learning Module Library – Maine DOE Newsroom. (August 2020). https://mainedoenews.net/2020/08/27/maine-doe-releases-sneak-peek-of-moose-learning-module-library/

Maine Department of Education. (2019) Career & Education Development Review 2019. https://www.maine.gov/doe/learning/content/standardsreview/ced-2019#details

Maine DOE Newsroom. (June 3, 2021). Maine Virtual Career Fair for High School Students Offers

Dynamic Professional Experience. https://mainedoenews.net/2021/06/03/maine-virtual-career-fair-for-high-school-students-offers-dynamic-professional-experience/

Maine Department of Education. (2021) Job Shadow Agreement: A Guidance Document. [pdf] (ret. March 10, 2021).

Maine.gov. (n.d.). Maine Department of Education: Standards – Life and Career Ready. https://www.maine.gov/doe/learning/content/career/standards (ret. July 1, 2018).

Maine Philanthropy Center. (n.d.) Member Listing: Nonprofits. https://www.mainephilanthropy.org/member-listing (ret. July 1, 2021).

Mainebiz. (n.d.). https://www.mainebiz.biz/ (ret. July 1, 2021).

Matheson, & Sutcliffe, M. (2018). Belonging and transition: An exploration of International Business Students' postgraduate experience. *Innovations in Education and Teaching International*, *55*(5), 576–584. https://doi.org/10.1080/14703297.2017.1279558

McCarthy, M.R. (2018). WHY BANKING IS NOT BORING. The RMA Journal, 101(4), 60–63.

McNamee. (2021). Alumni Engagement and Identity: A Case Study on Beliefs and Behaviors. *Philanthropy & Education*, *4*(2), 25–50. https://doi.org/10.2979/phileduc.4.2.02

Mehlenbacher B., Mehlenbacher A.R. (2020) Distance Learning. In: Tatnall A. (eds) Encyclopedia of Education and Information Technologies. Springer, Cham. https://doi-org.ezproxy.neu.edu/10.1007/978-3-030-10576-1_66

Metropolitan Area Planning Council, MAPC. (2016). Community Engagement Guide. [pdf] (ret. August, 2021).

Mezera, D., Suffren, Q. (April 2018). Building Cross-Sector Partnerships to Support Career and Technical Education Pathways: A Playbook for State Policymakers. https://eric.ed.gov/?id=ED609958)content/uploads/2020/10/ExcelinEd.CTEPlaybook2.BuildingCrossSectorPartnerships.May2018.[pdf] (ret. July 1, 2021).

Middaugh, E. & Kahne,J. (2013). New Media as a Tool for Civic Learning/Nuevos medios como herramienta para el aprendizaje cívico. Comunicar, 20(40), 99.

Miller, Welch, R. M., & Vonasch, A. J. (2019). The psychological effects of state socialization: IGO membership loss and respect for human rights. International Interactions, 45(1), 113–143. https://doi.org/10.1080/03050629.2019.1522308

Morgan, A. (2020). Understanding Academic Relevancy: Linking Practice to Classroom Through Adventure STEM Education. West Virginia University Research Repository.

Morgan, G. (1986). Images of Organization. Sage.

Mowry, M.J. (2019). JUMPING AHEAD. *Business NH Magazine*, *36*(4), 46–48.

Mupinga, D., & Caniglia, J. (2019). What Middle School Students Know About Careers and the Influences Surrounding Their Choices. Journal of Technology Studies, 45(1), 36–45.

Mutch. (2010). Technology, Organization, and Structure-A Morphogenetic Approach. Organization Science (Providence, R.I.), 21(2), 507–520. https://doi.org/10.1287/orsc.1090.0441

PENCIL. (n.d.). https://pencilforschools.org/ (ret. July 2021).

Patterson, K., Grenny, J., McMillan, R., Switzler, A. (2012). Crucial Conversations: Tools for Talking When Stakes Are High, 2nd Ed. McGraw Hill, New York.

Portland Regional Chamber of Commerce. (2020) Eggs & Issues: The Future Workforce – Developing Student-Business Partnerships. https://web.portlandregion.com/events/Eggs-Issues-The-Future-Workforce-Developing-StudentBusiness-Partnerships-1438/details

Portland Regional Chamber of Commerce. (2021). Imagine Portland: Annual Awards Event and Community Celebration. https://www.portlandregion.com/imagine.html

Powell, A.M. (2019). Factors influencing choice of major in the College of Agriculture and Life Sciences at Iowa State University.

Prosek, Elizabeth A, & Gibson, Donna M. (2021). Promoting Rigorous Research by Examining

Lived Experiences: A Review of Four Qualitative Traditions. *Journal of Counseling and Development*, *99*(2), 167–177. https://doi.org/10.1002/jcad.12364

Researchers from California Institute of Technology Detail New Studies and Findings in the Area of Teaching (Who Wants to Learn More Science? The Role of Elementary School Science Experiences and Science Self-Perceptions). (2017). In *Education Letter* (p. 166). NewsRX LLC.

Roberts, S. (2020). Bucksport schools receive multi-year grant to support student success: One million dollars over five years will fund the Aspire Initiative. WABI5 News. https://www.wabi.tv/2020/11/17/bucksport-schools-receive-multi-year-grant-to-support-student-success/

Robinson, K. (n.d.). Problem Based Learning. https://problembasedlearningkr.weebly.com/ (ret. February 21, 2022)

Roedell. (2011). Career Day. *Chest*, *139*(2), 470–470. https://doi.org/10.1378/chest.10-0440

Rolle, J. & Kisato, J. (2019). The future of work and entrepreneurship for the underserved. *The Business & Management Review*, *10*(2), 224–234.

Ryan, Sheryl J, Flank, Stephanie, Vesagas, Therese, & Tolentino, Ean. (2020). Occupational ideation and participation among middle school students in a college-going culture program. Journal of Occupational Science, 1–14. https://doi.org/10.1080/14427591.2020.1799848

Sadick, M. A., Li, W., Musah, A.-A. I., Akeji, A. A.-R. A., & Khan, H. S. U. din. (2019). The Role of Development Oriented Non-Governmental Organizations in Creating Shared Value in the Educational Sector of Ghana: The Mediating Role of Basic Needs. *Voluntas: International Journal of Voluntary & Nonprofit Organizations*, *30*(6), 1297–1318. https://doi -org.ezproxy.neu.edu/10.1007/s11266-019-00170-z

Saenz, L., Johnson, A., Pines, M. (2021). Extended Learning Opportunity (ELO) Programs in Maine High Schools. https://usm.maine.edu/sites/default/files/cepare/MEPRI_ELO_Report.final_June_2021.pdf

Sahlgrenska akademin, Göteborgs universitet, Gothenburg University, Institutionen för vårdvetenskap och hälsa, Institute of Health Care Sciences, & Sahlgrenska Academy. (2019). The question of meaning-a momentous issue for qualitative research. *International Journal of Qualitative Studies on Health and Well-Being*, *14*(1), 1598723–1598723. https://doi.org/10.1080/17482631.2019.1598723

St. Clair, R. (2015). Forum: House of Cards: Analyzing "Making Skills Everyone's Business ". *Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education*, *4*(2), 37–42.

Saldana, J. (2016). The Coding Manual for Qualitative Researchers, (3ed.). SAGE.

Schoen, LaTefy, & Fusarelli, Lance D. (2008). Innovation, NCLB, and the Fear Factor. *Educational Policy (Los Altos, Calif.)*, *22*(1), 181–203. https://doi.org/10.1177/0895904807311291

Sensoy, O. & DiAngelo, R. (2019). Critical Thinking and Critical Theory. In O. Sensoy & R. DiAngelo (Eds) Is everyone really equal? (pp. 23-34, 60-79) New York, NY: Teachers College Press.

Shellhouse, Suarez, C. E., Benge, M., & Bunch, J. (2021). Mentoring Mentality: Understanding the Mentorship Experiences of National FFA Officers. *Journal of Agricultural Education*, *62*(1), 29–. https://doi.org/10.5032/jae.2021.01029

Shenton, Andrew K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, *22*(2), 63–75. https://doi.org/10.3233/EFI-2004-22201

Shoicht, C.E. (December 7,2021). A Maine city that's 90% White now has a Somali mayor. CNN. https://www.cnn.com/2021/12/07/us/maine-mayor-deqa-dhalac-somali-cec/index.html

Spence. (2018). “Judgement” versus “metrics” in higher education management. Higher Education, 77(5), 761–775. https://doi.org/10.1007/s10734-018-0300-z

Spillane, J.P. (2006). Distributed Leadership. Josey-Bass.

Stahl, Scholes, L., McDonald, S., & Lunn, J. (2021). Middle years students’ engagement with science in rural and urban communities in Australia: exploring science capital, place-based knowledges and familial relationships. *Pedagogy, Culture & Society*, *29*(1), 43–60. https://doi.org/10.1080/14681366.2019.1684351

Stein, J. (2019). ‘This will be catastrophic’: Maine families face elder boom, worker shortage in preview of nation’s future. The Washington Post.

Sternberg, R. J. (2019). Four Ways to Conceive of Wisdom: Wisdom as a Function of Person, Situation, Person/Situation Interaction, or Action. Journal of Value Inquiry, 53(3), 479–485. https://doi-org.ezproxy.neu.edu/10.1007/s10790-019-09708-2

Stosich. (2016). Building teacher and school capacity to teach to ambitious standards in high-poverty schools. *Teaching and Teacher Education*, *58*, 43–53. https://doi.org/10.1016/j.tate.2016.04.010

Stringer, E. (2014). Action Research (4th ed.). Thousand Oaks, CA: Sage Publishing.

Telling Room. (n.d.). https://www.tellingroom.org/ (ret. July 2021)

The Guiding Principles. (n.d.) https://www.maine.gov/doe/sites/maine.gov.doe/files/inline-files/THE%20GUIDING%20PRINCIPLES.pdf (ret. February 20, 2022).

The Simple Dollar (n.d.) Which States Have the Most Small Businesses? (2020). Newstex.

Thomas, K.W. (2000). Intrinsic Motivation at Work: Building Energy & Commitment. Berrett Koehler.

Tomasik, Martin J, Helbling, Laura A, & Moser, Urs. (2020). Educational gains of in-person vs. distance learning in primary and secondary schools. International Journal of Psychology, 55(Special Issue, Art. 12728), 11–55: Special Issue, Art. 12728<11.

https://doi.org/10.1002/ijop.12728

Traxler, J. (2018). Distance Learning: Predictions and Possibilities. Educ. Sci. 2018, 8(1), 35. https://doi.org/10.3390/educsci8010035

USCCB. (1998). *Sharing Catholic Social Teaching: Challenges and Directions* and (2003). *Faithful Citizenship: A Catholic Call to Political Responsibility*. http://www.usccb.org/beliefs-and-teachings/what-we-believe/catholic-social-teaching/sharing-catholic-social-teaching-challenges-and-directions.cfm https://www.census.gov/library/visualizations/2010/demo/2009-state-county-maps.html

U.S. Bureau of Labor Statistics. (2020) https://www.bls.gov/careeroutlook/2020/data-on-display/education-pays.htm (ret. February 20, 2022).

U.S. Chamber of Commerce Foundation. (n.d.) https://www.uschamberfoundation.org/leaders-and-laggards/#/2015/me/state-profile Retrieved 1/17/2022 (ret. January 2022)

U.S. Chamber of Commerce Foundation. (2020). Talent Finance: A New Consensus and Return-To-Investment. https://www.uschamberfoundation.org/sites/default/files/CEW%20Talent%20Finance%20Report-web.pdf (ret. January 17, 2022

United States Census Bureau. (2009). State and County Maps: Percent in Poverty, 2009.

Vogt, W. (2021). CES panel assesses challenge of broadband access. Farm Industry News.

Wadsworth, Y. (2011). Everyday Evaluation on the Run, (3rd Ed.) Routledge. https://doi.org/10.4324/9781315428857

Wiggins, G. P., & McTighe, J. (2005). Understanding by Design (2nd ed.). Pearson.

Williams & Hawes, S. (2021). Gateway to Opportunity: A promising summer youth employment model to address local workforce needs. *Maine Policy Review*, *30*(1). https://doi.org/10.53558/OZSB7007

Wolinsky, Howard. (2021). Biology lessons in times of COVID: The pandemic has forced educators to teach and instruct online with varying success and challenges. *EMBO Reports*, *22*(3), e52513–e52513. https://doi.org/10.15252/embr.202152513

Wrensford, G.E., Wrensford, Stewart, K-A, Hurley, M.M. (2019). A Health Professions Pipeline for Underrepresented Students: Middle and High School Initiatives. Journal of Racial and Ethnic Health Disparities, 6(1), 207–213. https://doi.org/10.1007/s40615-018-0515-9

Wright, Natalie, & Wrigley, Cara. (2017). Broadening design-led education horizons: Conceptual insights and future research directions. International Journal of Technology and Design Education, 29(1), 1-23.

Zeldin, S., Krauss, S.E., Kim, T., Collura, J., & Abdullah, H. (2015). Pathways to Youth Empowerment and Community Connectedness: A Study of Youth-Adult Partnership in Malaysian After-School, Co-Curricular Programs. Journal of Youth and Adolescence, 45(8), 1638-1651.

Zhang, Hai, Yu, Luyao, Ji, Mengxue, Cui, Yulu, Liu, Dongping, Li, Yan, Liu, Haiqiao, & Wang, Yining. (2020). Investigating high school students' perceptions and presences under VR learning environment. *Interactive Learning Environments*, *28*(5), 635–655. https://doi.org/10.1080/10494820.2019.1709211

Zhang, Wang, J., & Jia, M. (2021). Integrating the Bright and Dark Sides of Corporate Volunteering Climate: Is Corporate Volunteering Climate a Burden or Boost to Employees? British Journal of Management, 32(2), 494–511. https://doi.org/10.1111/1467-8551.12418

Zwerg-Villegas, Anne Marie, & Hiller, George L. (2020). USA-Latin American Experiential Learning Project: The Instructor Balancing Act. Journal of Teaching in International Business, 31(4), 337–357. https://doi.org/10.1080/08975930.2020.1851621

Appendix A: Research Design

The purpose of this appendix is to demonstrate the researchers understanding of action research and provide a rationale for why this methodology was chosen as a vehicle for the research of best methodologies for public school career exploration programming. A description of data collection through Cycles one and two will be used to demonstrate the use of this method. Assertions will be shored up by literature relating to the paradigms, qualitative and action research methods along with ethical and trustworthiness considerations.

Qualitative Research Approach

Qualitative research is a philosophical tradition which pivots around the axis of meaning, that is understanding and related meaning from those participating within the research as they react and interact. (Dahlberg, 2019) In contrast to quantitative research, the concern and emphasis within this study used semi-structured practices, not standardized methods, which caused a dichotomy between description and interpretation with the data. In an act of defiance against that of generalizing findings, in a positivist tradition, to generate quantitative meaning, this study focused on consistent terminology, definitions, and literature citations with the aim to increase consistency and unify data capturing and analysis procedures used to obtain voice and narrative. (Carminati, 2018) The choice of qualitative research was made conscientiously to capture the lived experience of those hungry for and implementing career exploration programming. (Prosek, 2021) This narrative inquiry within the tradition of qualitative research yielded clear differentiated voices of stakeholders, collaborators, and participants within the web of relationships in this space.

The diversity and richness of data collection within this philosophy had the potential for two key and desired outcomes. One, for the richness and understanding of multiple perspectives regarding solutions, and two, diversity of understanding of the issue that is based in subjective experience. (Hayes, 2016) In the case of this research it was key to understand the different perspectives, voices and, experiences key stakeholders. The data collected was then able to be used to distinguish common and unique experience within and between stakeholder groups. This study held the precarious position of working with groups that are often themselves caught between qualitative and quantitatively driven motivations. Leadership of businesses, school districts, and educators themselves are all driven (hired and fired) according to budgetary and statistical data and yet, in this space, all are trying to humanely narrate a new story for the lives of students upon which communities depend and care for.

Action Research Methodology

Social justice is the equal valuation of human beings co-joined with actions resulting in the leveling of impediments that cause any imbalance of power between humans found in society. Action is necessary if the following are not equitable: access to participation, value of personhood and voice, and freedom in its many facets including that of expression. (Stringer, p.14) It is the responsibility, being a part of humanity, to play a constructive role in social teaching that proports the framework as follows. One, proclaim that human life and dignity are to be respected. Two, obligatory participation in and responsibility for community. Three, the poor, the oppressed, the environment, and the worker need to have a voice and be supported with solidarity. (USCCB, 2003) Authentic empathy is thus required to execute this framework and truly understand and validate the subjective experiences of others. From this reality, objective actions need to be erected, collaboratively with long- and short-term feedback to validate, rectify, progress, and grow as a society. (Delpit, p.280)

Stakeholders represented need to be understood as interactive cultures bringing to the table unique traditions, values, and objectives. It will be beneficial to have a working definition of progress and communicate the vision of success considering their unique perspectives within the limited scope of the project. (Sensoy, pp. 24-27) This discourse cannot be a one-time exploration between educational and business leaders, students, nonprofits, and career training organizations and educators. Instead, it must be built with an infrastructure that results in a layered, on-going discourse with a multi-phased mission. Action research as a flexible, practical, participatory, and cyclical practice was used. The research methodology was used to focus, process, and explain with the goal of deeper connectedness, understanding, and greater possibility of success. Action research methodology moving through these complex mission stages was used to systematically investigate complex relationships and design an effective solution for and with participants. These collaborators were not subjects of the study but co-creators of their own solution. Action research works on the assumption that those who experience a problem should be engaged in the solution. (Stringer, 2014)

First, the mission should be, to gather stakeholders to establish a level of comfort and trust so that equality in the transmission of knowledge and experience can be gained. (Caruthers, p. 14). From this collective of constituents there will be a connecting of voices, problems, and solutions forming a base of understanding. Second, the mission should be to clarify actionable solutions and mobilize stakeholders regarding the importance of the adoption of said changes. (Battilana, 2017) Here it will be important to tailor the message of proposed adoptions while maintaining perspective of possible success and outcomes. This measure will be important as there can be a negative outcome should momentum and message be lost or diluted at this juncture. Circumstances at this point may also arise, revealing a level of insight into if the need and changes possibly being successfully propagated in other groups, cultures, states, regions, or anywhere there is a disparity of access between the business and educational sectors. Third, the mission should be to evaluate and analyze beyond just addressing the problem in a feasible way, but to also to assess the extent to which the actions resonate and meld the participants into a common purpose. (Battilana, 2017) This is a distinguishing factor of action research from that of other qualitative methodologies.

To partner with and understand the position, experience, and motivations of participants, to increase opportunity for students, the methodology of qualitative action research was used. This form of research, as a natural extension of our daily work, was brought to effective solutions by partnerships between those who contribute in various ways to understand their situations more completely. (Stringer, p. 5) The use of this collective vision and community surrounding the possible success of students and a possible stronger economic outcome for our state, encouraged collaboration and openness to conveying current experiences. Though initially intending to explore this query using youth participatory action research (YPAR), with access to sixth through twelfth grade students made unavailable due to the pandemic, professional communities of educators, businesspersons, nonprofits tasked with career exploration initiatives were sought. (Caraballo, 2017) Using action research as a foundation to form a narrative within the field, these persons were encouraged into critical reflection to examine assumptions and current practices to emancipate those who are yet to be served. (Herr, p. 35)

Action research was chosen for its participatory structure where the researcher is not called to be an expert but a co-collaborator who facilitates relationship and community amongst field members. The ‘shoulder-to-shoulder’ nature of the work counteracts ‘face-off’ aggression, and apprehension that can come from bench science research with human subjects. Buy-in from those included is increased as they, one, see the value to themselves and their work, and two, are more likely to join in with others they respect and become a part of a larger voice for what they see as good. (Stringer, p. 15-22) Benefits of all research is the emergence of answers to questions. The benefit of action research is the spiraling practice of ‘plan, implement, evaluate’ through historical qualitative research culminating in the added state of action. It is this action that changes the outcome from mere knowledge into outcomes that are meant to improve the ‘life-world’ of the participants. (p. 63)

Data Collection and Analysis: Cycle 1

Participants

Participants included in the study were eighteen educators who possessed a position in a public, middle, or high school in Maine or were a part of a nonprofit (four persons) or (six persons from) businesses running career exploration programming for those in sixth through twelfth grade. All participants were intended to hold positions in which a majority portion of their job description was to facilitate the interactions of students and community business leaders. It was quickly determined that initially, those in positions funded directly through the State Department of Education (of Maine) were not to be included in this study. For, though they were employed for the benefit of sixth through twelfth grade students, and some were employed within programming to emphasize career exploration and life skills needed for employment (21st Century Skills), their direct interaction with students and their knowledge of programming at the community level was minimal. All participants, once consented, were given anonymity using pseudonyms which were used on any form relating to their participation. Members of the educational community came from a consortium of career and credit recovery educators. These persons, along with leaders in businesses (representing retail, technology, biomedical, and commerce), and nonprofit organizations (that provide funding, educational professional development, and consulting) were given the opportunity to participate. The inclusion of these participants, because the researcher was an outsider, were initially found through snowball sampling technique within the purposeful parameters of their professional positions in the groups mentioned above. (Stringer, 2014) Age, gender, and ethnicity information for participants or the student stories/examples of which they narrated was not requested, indicated, or recorded.

Procedures

After training and certification in social and behavioral research with Collaborative Institutional Training Initiative (CITI) and gaining the approval of Northeastern University's Institutional Review Board research was all owed to begin. Cycle 1 data collection began as consented educators, businesses leaders, and nonprofit leaders were given the opportunity to participate in one-hour interviews (six were executed, two being from each participant group) and/or one of three one-hour focus groups. Those members of the educator's consortium who consented were also observed during two of their two-hour, monthly meetings in which they gather to share ideas, concerns, questions, and cooperative endeavors. Each of these three opportunities for data collection were bookended by entry and exit surveys. All methods of data collection were used to understand the motivations, experiences, expectations, and roadblocks that one could experience in the execution of their duties in this space.

Data Analysis

All meetings were performed over Zoom, video conferencing, while consents and surveys were communicated and transmitted electronically. Transcription of consented conversations were collected electronically and then analyzed using open coding practices which looked for similarities and differences between participant's narratives and perspectives given similar questions. (Saldana, 2016) When clarification was needed, secondary questions were asked. The initial round of coding revealed a need for a reanalysis using conceptual coding (bordering on holistic) as wide swaths of narrative, divulged abstractions of practical concepts, resulting in 'meso or macro levels of meaning'. (Saldana, p. 119 -124, 166) The final product yielded a nine-code book. (See example in Table 1). Checks regarding this level and methodology of coding were performed with two participant members. Feedback was positive. From these nine codes three themes materialized, that of unification, roadblocks, and relationships. These three key points at issue were to shape the research in its next cycle/stage.

Table 1: Codebook Sample

Codebook
Code: INFRASTRUCTURE Full definition: The established or attempted practices and support systems build or followed by career exploration practitioners and their organizations that support their interests in human and financial capital. Example: "If I have questions I run them by my AP, and I do because like, like, I just have clear lines, you know like, here's what I can do, and that's what I can do. Yeah. So, you know, when somebody who's like oh I've got this great kid I want to, I'd love to put them in your program. My first question always is, what do they do for work. And, you know, because they have to work at a company that pays minimum wage that they are paid above the board that the work, the workplace has workers compensation that the student's not doing a job that has questionable liability. So, like, you know, so I do and those are those are state indicated right those are those are clear from the state down. Yeah. Yeah, so I definitely have like that Well, you know, and not everybody understands that".

Data Collection and Analysis: Cycle 2

Data Collection

Data collection was carried out, one, through the reviewing of artifacts by focus groups, two, with the collecting of comments made to the artifacts themselves, and three, the interviews of businesses currently engaging sixth – twelfth grade students. The focus groups were built of leadership personnel from those affected directly and tangentially by career exploration programming. They met for an hour at a time to discuss artifacts which modelled different approaches to the challenge of reaching and engaging all stakeholders (including students). Meetings were prearranged, video conferences where the participant was consented in advance. All artifacts were made available to each participant one to two weeks in advance of the meeting. It was requested that artifacts with any comments on them be returned to the researcher for data collection. Encouraged to review any documents in advance all stakeholders were then asked to participate in the semi-structured discussion led by the student researcher through open-ended questions. The focus group meetings, scheduled between September and November of 2021, included five to seven participants at each with the attempt to include at least one representative of each of the participant groups (education, nonprofit, and business) each time. At meeting three there was no business representation. Three one-on-one interviews were also executed during the end of September to the beginning of October 2021. All meetings were recorded through voice recording and then transcribed for analysis. Original recordings were then destroyed, and transcriptions were secured with cycle one data in a separate memory device.

The goal for the evaluation of this data was to assess the possible form and possible next steps the participant groups could use to execute a best practices model of career exploration should and could take. (Stringer, p. 204) The audience for this presentation will be members of the three stakeholders' groups (educators, nonprofits, and businesses) and will address the following: one, the actions taken through these meetings; two, the reflections of the focus group members noting strengths, weaknesses, opportunities, and threats; and three, judgement of the value, gauges for effectiveness, and appropriateness of outcomes. It should be noted that reflections (step two above) were facilitated by the researcher using Wadsworth's Everyday Evaluation on the Run (2011) as referred to in Stringer (p. 206) by asking participants questions regarding definitions of purpose, goals, objectives, activities, gathering of information, judging effectiveness, etc.

Data Analysis

Data collected from meetings and interviews (transcripts and edited artifacts), were analyzed by the student researcher to look for themes through In Vivo extraction and two cycles of concept coding. Checking these concepts considering Cycle 1 themes (unification, roadblocks, and relationship) generated contrast and consistency between the two. Success and deficiencies in the action research outcomes were noted from the analyses of how the concepts and themes met, addressed, and diverged not only from each other but also from the models that other groups (interviewees and artifact models) used. Roadblocks were experienced. Within stakeholder groups there were the stressors of normal activity, compounded by a resurgence of COVID variants, and the restrictions that were forced upon participation and networking. Within focus groups and interviewees and the student researcher experienced the roadblocks of scheduling and connecting highly sought-after individuals as participants. Another barrier experienced was the challenge of finding artifacts that most closely mirrored the socio-economic and career education footprint of the status of the state of Maine. To determine which artifact to use, the student researcher used the tenor of each ARC meeting discussion to determine which artifact would be the most useful to keep the discussions focused upon stakeholder interaction, the bolstering of business in the space of career exploration, and for the benefit of sixth – twelfth grade students.

Measurements of success was evaluated through reflection of upon the outcomes of each focus group and interview. Ultimately the measurement of success was the depth of transparency regarding the communities involved, the level of detail regarding the needs to be addressed, and the level of trust in the relationship between all direct and tangential stakeholders. The result of this research shows that success will occur in this space if and only if discussion, planning, and unified focus on student success and the development of a supportive hub of stakeholder relationship and connectedness.

Ethical Considerations

The breadth of persons and stakeholders that could have been chosen for the development of this action was quite large. The momentum of the issue of workforce development is on the forefront of many industries in the state of Maine at present. Though overwhelmed by COVID-19 safety and funding issues educators and businesses are keen to make sure that day-to-day procedures do not detract from the long-term goals of producing a strong workforce in the state. Many nonprofits are working hard to fill specific gaps in the space of workforce development in the state from youth through adult. The considerations of who to bring to the table for the action research stage therefore was an ethical consideration. Inclusion of balanced and key players without clouding purpose or growing too large for clear and poignant insight was a challenge. The student researcher therefore brought together a small group of five members to first consult regarding the proper number of voices, and individuals, that would balance and specifically drive the research in a manner that did not lose sight of the three original research questions and would work toward a business to school product within the sixth through twelfth grades.

Members of the stakeholder groups therefore would expand from the Cycle one research to include the Department of Education for the state of Maine, the University of Southern Maine, the voice of public-school administration, and a nonprofit from the technical and trade fields. These voices rounded out those who businesses were interacting with in their process to work with schools, some directly, some due to regulation, and some due to the product of the student in their pursuit of higher education or trade training. The following should be noted. One, that students, due to COVID-19 regulations were not included in Cycle 1 or the Cycle 2 (Action step) of this research. Two, limitations on the number of focus group participants were made with the participant members understanding that they were willing to share and promote the product to others in their field once the product was completed. And three, that all of those included within the research were consented, were made aware of their rights as participants, and were aware that anonymity would be attempted but could not be absolute.

Trustworthiness

Within initial discussions surrounding the action step of this research concern was raised regarding the reaction of some stakeholder’s devaluing of narrative and qualitative data. Therefore, the following steps were taken to ensure trustworthiness of the results. Credibility of the data stream would be increased through the integrity with which data was handled and secured. Data outcomes, or results would also be scrutinized by the researcher to demonstrate a true picture of the process of business to school interactions. (Shento, 2004) Transferability of the work will provide enough detail to allow the context of the work to be of fitting use for business stakeholders regardless of their size, their community, the age of those they are attempting to engage, or the field or industry they are housed in. Though the unique situation of this research (outside researcher collecting inside participants from a wide array of stakeholders), all attempts will be made to demonstrate the dependability of the work using memos, field notes, member checks, and copious use of transcripts. Confirmation of dependability was exacted within Cycle 1 in this manner and will be replicated and intensified in Cycle 2.

Limitations

Though every attempt was made for trustworthy and rigorous data collection and analysis there were limitations, restrictions, and constraints in this study. The first limitation was time. The duration of this work was fulfilled within a four-month span. Scheduling and executing meetings with members of such high responsibility and regard within this time frame was a challenge and full pilot implementation testing was impossible. Second, and mentioned previously, was the number of participants. Not all members of the stakeholders' groups could be included in the discussion. Third, the limitation of business interest was a distinct possibility. Narrative, statistical, and past experiential data purported that workforce development is a key issue. These reports, though, all came from a pre-COVID pandemic experience/world. It was a possibility that with an increasingly problematic environment for businesses they would not have the means, interest, or ability to focus on the long-term issue of workforce development but instead would need to focus on their day-to-day survival.

Table 2. Brief description of the action step goal, objectives, tasks, and resources from Cycle 2

Goal:
To understand and convey succinctly the practices and infrastructure needed to assist businesses, educators, and nonprofits in their development of career exploration programming for students in sixth – twelfth grades.

Objective ***What***	**Tasks** ***How***	**Person(s)** ***Who***	**Start** ***When***	**Finish** ***When***	**Location** ***Where***	**Resources**
Establish an Action Research Committee that includes direct and indirect stakeholders	Determine form and function of the research	Representative of Nonprofit educational intermediary of Maine, Former Chamber Board member & Community Relations educator Representative of Regional Chamber of Commerce	Mid-March 2021	Mid-June 2021	Greater Portland Area (Host site) via Zoom and email	Email, Zoom Video conferencing
	Build Focus Group by contacting, through network introduction, stakeholders beyond Cycle 1 participants	Active Career Pathways School District, Administrator Representative, Department of Education, State of Maine, Representative, Nonprofit intermediary of Maine, Representative, Portland Regional Chamber of Commerce, Career Advisor, Higher Education Institution in Maine	Mid-April 2021	Late-June 2021	Greater Portland Area (Host site) via Zoom and email	Email, Zoom Video Conferencing

		Career Pathways Educator Representative of Nonprofit educational intermediary of Maine,				
Schedule and execute Action Research Committee meetings	Build and confirm schedule Artifacts for ARC focus group meetings send to participants 2 weeks in advance of meeting Artifact collected back after meeting	Career Pathways Educator, Representative of Nonprofit educational intermediary of Maine, Former Chamber Board member & Community Relations educator Active Career Pathways School District, Administrator, Representative, Department of Education, State of Maine, Representative, Nonprofit intermediary of Maine, Representative, Portland Regional Chamber of Commerce, Career Advisor, Higher Education	June 2021	Early Novemb er, 2021	Greater Portland Area (Host site) via Zoom and email	Email Zoom Video conferencing Technology

		Institution in Maine				
	ARC meetings Recordings and their transcripts Artifacts sent Artifacts with comments collected	Career Pathways Educator, Representative of Nonprofit educational intermediary of Maine, Active Career Pathways School District, Administrator, Representative, Department of Education, State of Maine, Representative, Nonprofit intermediary of Maine, Representative, Portland Regional Chamber of Commerce, Career Advisor, Higher Education Institution in Maine	September 14, 2021	November 2, 2021	Greater Portland Area (Host site) via Zoom and email	Zoom Video conferencing Email correspondence and artifact collection
	ARC Meeting	All Attend	September 14, 2021		Greater Portland Area (Host site) via Zoom	Artifact by email: Sent to participant two weeks in advance, Collected after meeting

	ARC Meeting	All Attend	September 28, 2021		Greater Portland Area (Host site) via Zoom	Artifact by email: Sent to participant two weeks in advance, Collected after meeting
	ARC Meeting	Partial Attendance: Career Pathways Educator, Representative, Nonprofit intermediary of Maine, Active Career Pathways School District, Administrator, Representative, Department of Education, State of Maine, Career Advisor, Higher Education Institution in Maine	October 12, 2021		Greater Portland Area (Host site) via Zoom	Artifact by email: Sent to participant two weeks in advance, Collected after meeting
	ARC Meeting	All Attend	November 2, 2021		Greater Portland Area (Host site) via Zoom	Artifact by email: Sent to participant two weeks in advance, Collected after meeting
Interviews of business led career exploration programs	Find business stakeholders to interview	Architecture and Engineering firm Administrator Human Resources Manager, Jewelry Store	June 2021	October 2021	Greater Portland Area via Zoom and email	Email, Zoom Video conferencing

		Human Resources Executive, Bank				ARC member share contacts Portland Regional Chamber of Commerce
	Schedule and execute business stakeholder interviews	Architecture and Engineering firm Administrator	Septem ber 16, 2021		Greater Portland Area (Host site) via Zoom and email	Technology (Laptop and A/V presentation equipment) Student capital Zoom Video conferencing
		Human Resources Manager, Jewelry Store	Septem ber 30, 2021		Greater Portland Area (Host site) via Zoom and email	Technology (Laptop and A/V presentation equipment) Student capital Zoom Video conferencing
		Human Resources Executive, Bank	October 4, 2021		Greater Portland Area (Host site) via Zoom and email	Technology (Laptop and A/V presentation equipment) Student capital Zoom Video conferencing

Interview Protocol
Institution (Date/Location):
Interviewee/ Observation of (Name):
Interviewer/ Observer: Joanna Martel

RESEARCH QUESTION: What are the best methodologies for conveying experiential learning opportunities between industry leaders and opportunity challenged or underserved communities containing sixth through twelfth grade students?
Part I: Introductory Protocol
You have been selected to speak with me today because you have been identified as someone who has a great deal to share about educator and industry leader experiential outreach programs in the Maine community. My project focuses on best practices for conveying experiential learning between industrial or professional and educational groups. Through this study, hopefully this will allow me to identify ways in which future groups and organizations can develop programs and products to serve future students in other underserved communities to increase their sense of self-worth and opportunity using 21st century skills and experiential methodologies.
Because your responses are important and I want to make sure to capture everything you say, I would like to record our conversation today. I will also be taking written notes. I can assure you that all responses will be confidential and only a pseudonym will be used when quoting from the transcripts. I will be the only one privy to the tapes which will be eventually destroyed after they are transcribed. These transcriptions (and recordings) are to be used for the purpose of this research and will not be published at this time.
According to Northeastern University policy you are required to sign the following form before we begin. Essentially, this document states that: (1) all information will be held confidential, (2) your participation is voluntary, and you may stop at any time if you feel uncomfortable, and (3) we do not intend to inflict any harm.
This interview should last about 45 minutes while observations run the length of the meeting or event. During this time, I have several questions that I would like to cover. If time begins to run short, it may be necessary to interrupt you to push ahead and complete this line of questioning or record mutually agreed upon data.

Do I have your permission to record this interview/observation today? Thank you
Have you signed the permission form to have this interview/observation?
Do you have any questions about the interview/observation process or how your data will be used?

Part II: Questions
A. Interviewee/Focus Group Background

1. What is your title and industry of work?
    a. How would you describe your position in your industry?
2. What town do you work out of?
    a. How would you explain to an outsider what the community is like here?
    b. What are the goals of your organization/community for the students here?
3. What, if any, is your background (history, experience, or training) regarding experiential or distance learning
    a. What is the background of your school/company regarding this methodology?
    b. How does this methodology fit into the philosophy or mission of your organization or program?

B. Project

One of the things I am interested in is finding patterns regarding the interaction of business leaders and students. I would appreciate hearing about your perspective of actions that you have attempted or executed to bring career leaders and students together. To do this, I am going to ask you some questions about the key experiences you have encountered or observed. If you mention other people, please do not mention names. You can say that you are giving the person a pseudonym.

1. Can you describe one of the first times you tried to connect with someone/group/school/company to get industry/community and students interacting?
    a. Where were the students?
        i. Physically, mentally, maturity level, interest?
    b. Where were the visitors?
        i. Physically, mentally, maturity level, interest?
    c. What were the active or experiential parts of the interaction?
        i. How comfortable were participants?
            1. How did you know?
            2. What could be done in the future to change the level of comfort?
        ii. How did the comfort level affect student response?
    d. What were the pre-activities and post-activities for the interaction?
        i. What was the goal of these activities?
            1. Did the pre/post-activities have any bearing on the event?
            2. Did they have any bearing on the student's participation on the event?
                a. How do you know?
2. What motivation or purpose do you see brings students to you and the events you are organizing?
3. What was the motivation or purpose for the planning and execution of the interaction?
    a. What kind of role did the businesspersons/educators play?
    b. What kind of role did the student play?
    c. What kind of role did any other key persons play?
        i. Yourself?
4. Over the time that you have worked in this position what have you noticed change?
    a. What about businesspersons/educators?
    d. What about students?
    e. What about other key players?
5. With the increase in online interactions as being necessary (COVID-19):
    a. What do you see as being lost?
    b. What do you see as being consistent?
    c. What do you see as being new?
        i. What is good for the student and what is detrimental?
            1. How do you know?

Thank you for your time. Do you have any questions? Here is my contact information should you think of anything later (martel.jo@northeastern.edu).

Focus Group Protocol

Focus Group Script and Questions:

You have been selected to participate in this focus group today because you have been identified as someone who has a great deal to share about educator and industry leader experiential outreach programs in the Maine community. My project focuses on best practices for conveying experiential learning between industrial or professional and educational groups. Through this study, Hopefully this will allow me to identify ways in which future groups and organizations can develop programs and products to serve future students in other underserved communities to increase their sense of self-worth and opportunity using 21st century skills and experiential methodologies.

Because your responses are important and I want to make sure to capture everything you say, I would like to record our conversation today. I will also be taking written notes. I can assure you that all responses will be confidential and only a pseudonym will be used when quoting from the transcripts. I will be the only one privy to the tapes which will be eventually destroyed after they are transcribed. These transcriptions (and recordings) are to be used for the purpose of this research and will not be published at this time. If you do not wish to participate you may leave at any time, choose not to answer, or write your answers on the paper provided. At the end of the focus group, you may choose to, or not to pass the paper into myself.

According to Northeastern University policy you are required to sign the following form before we begin. Essentially, this document states that: (1) all information will be held confidential, (2) your participation is voluntary, and you may stop at any time if you feel uncomfortable, and (3) we do not intend to inflict any harm.

This focus group should last about 45 minutes to 1 hour. During this time, I have several questions that I would like to cover. If time begins to run short, it may be necessary to interrupt you to push ahead and complete this line of questioning or record mutually agreed upon data.

Do I have your permission to record this interview/observation today? *Thank you*

Have you signed the permission form to have this interview/observation?

Do you have any questions about the focus group process or how your data will be used?

B. Project

One of the things I am interested in is finding patterns regarding the interaction of business leaders and students. I would appreciate hearing about your perspective of actions that you have attempted or executed to bring career leaders and students together. To do this, I am going to ask you some questions about the key experiences you have encountered or observed. If you mention other people, please do not mention names. You can say that you are giving the person a pseudonym.

6. Can you describe a time you tried to connect with someone/group/school/company to get industry/community and students interacting?
   a. Where were the students?
      i. Physically, mentally, maturity level, interest?
   b. Where were the visitors?
      i. Physically, mentally, maturity level, interest?

   c. What were the active or experiential parts of the interaction?
      i. How comfortable were participants?
         1. How did you know?
         2. What could be done in the future to change the level of comfort?
      ii. How did the comfort level affect student response?
   d. What were the pre-activities and post-activities for the interaction?
      i. What was the goal of these activities?
         1. Did the pre/post-activities have any bearing on the event?
         2. Did they have any bearing on the student's participation on the event?
            a. How do you know?
7. What motivation or purpose do you see brings students to you and the events you are organizing?
8. What was the motivation or purpose for the planning and execution of the interaction?
   f. What kind of role did the businesspersons/educators play?
   g. What kind of role did the student play?
   h. What kind of role did any other key persons play?
      i. Yourself?
9. Over the time that you have worked in this position what have you noticed change?
   a. What about businesspersons/educators?
   i. What about students?
   j. What about other key players?
10. With the increase in online interactions as being necessary (COVID-19):
    a. What do you see as being lost?
    b. What do you see as being consistent?
    c. What do you see as being new?
       i. What is good for the student and what is detrimental?
          1. How do you know?

If you have written any answers on your paper and would like to give them to me, please feel free to hand them to me or take a photo of them and email them. Any questions or comments on today's focus group can be emailed as well. Martel.jo@northeastern.edu Thank you for your time and participation.

Block Quotes - Cycle 1

Participant A

1. “And one of our big goals is to establish more of like longitudinal mentorship. So, we want to like actually stay in contact with high school students like over the course of their high school and college careers. So, I have a couple of high school students who I have pretty good relationships with that I'm trying to like stay in touch with.”
2. “The first is my own personal experience having lived in a lot of rural areas, we don't get very good internet out there, and if you do want decent internet, it costs a lot of money, and some people just don't have the resources to pay for that. Like I know, over like the quarantine period like this spring and summer I was at home, and it was really hard for me to watch online lectures because it took like 30 minutes for every video to buffer. So that's definitely a problem, and I think the other problem is that so many of our previous connections are in this general area (Southern Maine, Portland area). So, I think that a lot of students in these rural areas just don't know about these programs yet, so we have to figure out a way to more effectively market ourselves to students that haven't heard of us yet.”

Participant D

1. “Yeah, I would say… instead of trying to put everything in one place (class or grade) like target the areas that students are ready for, and they will have more interest like I had (underclassmen) students in my career prep class. And they're like, “No”, … and they're rolling their eyes like, you know, but then (when) they're seniors and they have a different teacher who's pretty much doing the same thing but just when they're seniors, and they're like, “How come I never learned this before?”, and then, you know, because that their teachers in my department she's like, “I know that they have and I know you've done it, they just aren't ready to hear it so they don't hear it”, it's like the Charlie Brown’s teacher in the front of the class.”

Participant G

1. “More often I'm finding you know like I have a counselor who asked me if I would create an ELO (Extended Learning Opportunity) for a student who is completely disengaged, smart, but isn't engaged in their science class and that's a way that I haven't in to help that student see a future. ... But for the most part it's the reality, especially with the way that ELO programs tend to be structured is students choose to participate. And the students who probably most need to choose to participate aren't choosing to.”

Participant L

1. “Well, I think the traditional model for so many families and the children was you know dad works in the mill. So, you’re probably going to work in the mill, or you know mom was a teacher so you’re probably going to be a teacher. I think that they their career paths were narrower and were more identified by socio economics, you know, if you were a man or a woman. So, I think that the, the opportunities were much narrower, and really it was here are their professions, which one do you want to be as opposed to what do you like and how could that become a profession.”

Participant V

1. “This person is (now) actually a first-generation college student from his family and comes from six generations of fishermen lobstering and his family couldn't understand why he wanted to do software engineering and software development. They were all like, well, we're just gonna renew your lobster license for you because we don't know about them, and they didn't know how to help them navigate anything around”
2. “One of the things we're going to be implementing and working on is a vision of a graduate, that's kind of building most 21st century skills within the classroom. So, what that will look like. So, we're, part of building that and that's going to have a lot of student input as well because … what do you want to see your graduates know and be able to do by the time they graduate. So that is something that we're going to have student collaboration on and …, all their classes in high school so that's why it's important to have this student input of like what soft skills do, you need to know and have to be able to be successful. So that's something we're going to be working on in the next two years.”

Participant W

1. “(When I was) a college and career counselor, you can imagine that the culture was very much sort of like, ‘we’ve got to make sure every student goes to college, because that’s what makes our school look good, and they’ve got to be Ivy League schools, and they, we’ve got to shout it from the rooftops because that shows sort of the rigor of our institution’…We tried to make the change from a college fair to a college and career fair, … people were not happy.”

Participant X

1. “I would just say, in terms of the soft skills. We started pivoting and using like emotional intelligence and other terminology because they're these skills are just as important as any technical skill or anything that they might pick up or learn or acquire. And we think that they're super important, the Lifelong Learner piece of being able to be resilient the, you know, what we've seen is that folks that are in either program that are embedding some of this stuff.”

Block Quotes – Cycle 2

Participant H

1. “there's so much that's individualized depending on the organization depending on the student's goals, depending on the structure of the school... it would probably make sense to just have an even more open idea of essentially cultivating a culture of mentoring, and that if we start with the foundation of the culture of mentoring that that from that so many streams can grow so many roots can take place”

Artifacts Used with ARC Focus Groups (Cycle 2)

Artifact #1, reviewed September 14, 2021

Please note, this artifact is from local school district with ties to participants, therefore some personal identifiers are scrubbed.

Mission

To cultivate relationships between schools, the community and businesses resulting in partnerships that expand student learning opportunities in career exploration, business culture, and community responsibilities. Successful partnerships will benefit all parties, will be a model for business engagement, and will demonstrate the role of schools in quality economic development for our community.

Our Vision...

For Students

- Graduate with a resume
- Discover preferences through career experiences
- Encourage flexibility in their career exploration
- Create authentic community experiences
- Become a citizen of the world
- Sample the culture of the working world
- Experience learning beyond the classroom

For Schools

- Bring community resources into culture of education
- Articulate how schools are preparing students
- Attract talent to enrich student experiences
- Develop and describe the access points for partnerships

For Business and Community

- Advocate for and contribute to educational excellence
- Articulate core values and opportunities
- Generate excitement for career exploration, community involvement and authentic learning
- Identify opportunities that create shared benefit

Shared Core Values

- Setting realistic goals
- Establishing a clear mission
- Determining mutual needs
- Securing top management support and commitment
- Recognizing partnerships are both a process and a product
- Clearly defining expectations, roles and responsibilities
- Identifying services and available resources
- Emphasizing clear communications
- Creating on-going monitoring and evaluation systems

(New page)

Partnership Invitation Form

We seek businesses and other organizations who wish to partner with our schools in order to offer

students learning experiences in the broad goal areas of career exploration, workplace skill development, curriculum enrichment, service learning, and community/life skills development.

Below are a list of specific ideas that can address these goals.

If interested in engaging in a conversation to explore the possibilities, please provide us with the information below via traditional mail, email, fax, or give us a call at XXX-XXXX and ask for ABC Smith, Assistant Superintendent.

Check all that you might be interested in pursuing:

___job shadowing ___internships

___mentorship ___special projects

___business experience for teachers ___outside leadership for clubs and activities

___social media/website work ___community project between student/business

___speaker opportunities

___Other idea(s) please list:

We welcome the opportunity to have a conversation about your interest and ideas.

Your contact information

Name:

Title:

Organization/Business:

Website address:

Mission/Product/Service:

Phone:

Email:

Send to: Assistant Superintendent, XYZ Public Schools, P.O. Box 000, Town, ME ZIP00; fax: XXX-XXXX; ABCsmith@email.edu and we will be in touch with you to schedule a conversation.

Success Stories

- High School Internship Program (course where students match interest with an internship within a local area organization)
- Jackson Lab Human Genome Project (onsite teacher training with equipment and lessons provided by Jackson Lab for Biology students)
- Preble Street and the SHS Alternative Education Program (HS students volunteer and sponsor Empty Bowl project resulting in a donation to the organization)
- Education for Employment program (HS students participate in a range of onsite work experiences in a variety of local businesses and organizations)
- Animal Refuge League Life Skills Connection (HS students learn about the league and engage in fundraising)
- Hour of Code (speakers as well as activities where students experience coding and computer science across all grades)
- Junior Achievement (JA for a Day involves all MS students; JA at all K-2 schools)
- C-Port CU partnership (sponsor a college aspirations program delivered through guidance curriculum to all 5th graders with Maine College Counsel speaker and an essay contest culminating in scholarship awards with follow up college visit in 6th grade year)

Artifact #2

Non-Profit Community-School Collaborative Model

Artifact #2 for ARC Review

For Sept 28th, 2021 Mtg

This artifact is copied from a website. If you wish to explore the material in its context, feel free to follow the links below. PLEASE MAKE SURE TO MAKE NOTES of your observations no matter where you experience this material. All hyperlinks are live. Some pictures were resized, and repetitive forms deleted to save space. Thank you.

Contents:

Our Impact

- **Public Education Needs Community Involvement and Leadership**

Our Mission

Linking community resources to Metro Nashville Public Schools to help young people achieve academic success and prepare for life.

Our Vision

PENCIL envisions a world where access and opportunities are equitable for all students to have a successful future.

Our Values

Our work is guided by the needs of MNPS, is student centric, and is achieved through partnerships and tangible engagements. As the PENCIL team, we will be collaborative and transparent, act with integrity, and demonstrate kindness and gratitude.

PENCIL is a non-profit organization that builds *strategic partnerships* between community groups and the needs of Metro Nashville Public Schools (MNPS). We are one of the nation’s largest networks of businesses, universities, and faith-based organizations actively engaged in public schools. We believe community involvement is key to academic success for students.

PENCIL and PENCIL Partners are committed to meeting the needs of MNPS to ensure equitable access to education for all students, and since our founding in 1982, PENCIL has worked with private industry, city officials, and other nonprofits to achieve strategic goals for MNPS students through community partnerships. We address needs through a collective impact model that harnesses the time and talents of the business community and PENCIL Partners to offer invaluable access to mentoring, job shadows, and more. We are committed more than ever to see that all our students have access to these opportunities.

Myra Taylor, Principal at Jones Paideia Elementary Magnet School

“PENCIL has a heart for kids. Their sole purpose is to make resources available for our students in our city to make education equitable for everybody. A lot of people talk the talk, but a lot of people don’t walk the walk. PENCIL does a good job of doing both, quite honestly.”

Together We Can Change Students’ Lives

2019 – 2020 Impact Numbers

37,224

Volunteer Hours

751

PENCIL Partners

$1.8M

Supplies Distributed

$4.9M+

Total Community Investment

PENCIL has evolved the relationship between community and public schools. We've done so by bridging the gap between the community's philanthropic intentions and the support each school needs to advance educational goals. With the help of donors and partners, PENCIL supports 168 schools and over 81,000 Metropolitan Nashville Public School students spanning over a 500 square-mile boundary.

Because Public Education is Everyone's Business

2019 – 2020 MNPS Statistics

75%

of MNPS students live in economically distressed households

28.8%

of 3rd grade students are proficient in English Language Arts

82.4%

MNPS graduation rate

1,000+

MNPS English Learning Students gained yearly

7199 Cockrill Bend Blvd
(615) 242-3167
info@pencil615.org

- Contact Us
- Careers

Keep up with us

Sign Up for Newsletter

- Email
- First Name
- Last Name
- Subscribe

2018 - 2019 Annual Report

Linking Community Resources to Nashville Public Schools to Help Young People Achieve Academic Success and Prepare for Life

We are one of the nation's largest networks of businesses, universities, faith-based organizations and volunteers engaged in public schools.

Here's what PENCIL accomplished this year:

54,509

Volunteer Hours

711

PENCIL Partnerships

$1.44M

In Distributed Supplies

3,557

11th Grade Job Shadows

$5M+

Community Investment

3,950

10th Grade Industry Field Trips

48%

Economically Disadvantaged*

41st

Largest District in the Country

16%

Limited English Proficient

*The striking decrease in the percentage of MNPS students considered economically disadvantaged over the past several years is due to a new state definition. Economically disadvantaged now refers only to students who are directly certified, meaning their families receive certain government assistance. In prior years, this percentage was consistently at or above 70% and included students who were eligible for free or reduced-price lunch. The share of students who are Limited English Proficient (LEP) continues to increase. While just seven percent of students were LEP in 2006-2007, nearly a quarter, 22 percent, of students are LEP in 2017-2018. (2017 Nashville Chamber of Commerce Education Report Card)

PENCIL believes that community investment in schools can bridge the resource gaps so many schools face and that directly impact day-to-day learning. We leverage community resources through the following programs:

PENCIL Partners

PENCIL harnesses the time, treasure, and talent of our rapidly expanding business community in support of individual schools through a collective impact model, known as PENCIL Partners. These partnerships aid in the development of positive school cultures, show teacher appreciation, recruit caring adult role models for students, provide exposure to workforce opportunities, and nurture an overall deeper sense of community between public schools and local businesses.

LP PENCIL Box

Metro Nashville Public School teachers visit the LP PENCIL Box multiple times throughout the year to “shop” for tools necessary to run an effective classroom - completely FREE OF CHARGE. By donating supplies, hosting a supply drive, or volunteering to staff the store, national brands, PENCIL Partners, and the Nashville community bolster teachers with the materials they need.

[Family Resource Centers]

The Family Resource Centers (FRC) act as a school-based hub for community resources, helping families navigate outside agencies that assist with social, emotional, and physical needs. PENCIL Partners support the centers by providing food, clothing, and services to the children and families who need them.

PENCIL Partners

PENCIL Partners are businesses, universities, community organizations, professional associations, faith communities, government departments, and other groups and individuals who agree to partner with Metro Nashville Public Schools. Partners invest time, treasure, and talent in Metro schools to address the lack of equitable access to resources.

Each partnership is unique and designed to serve the individual needs of the school and the partner.

[Contact Us to Learn More]

How PENCIL Partners Support Students

Providing Access to Career Pathways

Many PENCIL Partners directly help students explore career pathways through their connections with the Academies of Nashville (AON). The AON are high school Career Academies that strengthen student skills in workforce-specific focus areas, such as arts, engineering, hospitality, information technology, and healthcare, and are a major part of the Metro Nashville high school experience.

PENCIL's goal is to match industry partners to the appropriate school or Academy, help the partner plan a set of activities and student engagements for the year, and then nurture that partnership so that students gain meaningful career exposure and make valuable real-world connections.

Brandi Coates, Frist Art Museum Education Coordinator and PENCIL Emerging Leaders Board Member

PENCIL has provided many opportunities for students through career explorations and also creative opportunities to express themselves and succeed academically. I am a product of that success through Academies at Antioch High School."

Background Checks

PENCIL's work is to engage groups of volunteers that support initiatives within Metro Nashville Public Schools (MNPS). As part of this work, we facilitate the background checks for all volunteers that fill certain roles within MNPS.

PLEASE NOTE: Not every volunteer role requires a background check. If you do not see your volunteer role listed below, contact your school directly to confirm you need to complete a background check.

A background check is **required** if you will be volunteering in one of the following roles:

- Any virtual engagements with MNPS students
- PENCIL High Impact Tutoring

- PENCIL Connect Volunteer
- Lunch Buddies
- Watch D.O.G.S.
- One-on-one mentoring/tutoring
- Overnight field trip
- Out of state field trip
- Any other MNPS program that involves working one-on-one with a MNPS student

If you would like to volunteer at a Metro Nashville Public School or program outside of PENCIL programs, please **contact the school directly**.

To register as a volunteer and complete a background check (if necessary), please click on the box below that corresponds to your volunteer activity:

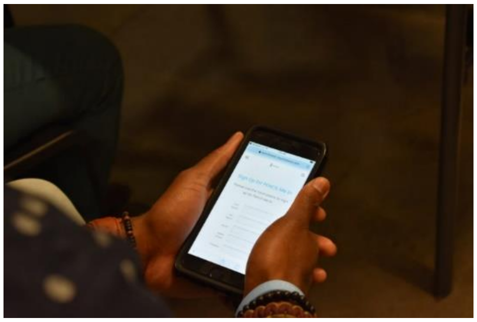
If you are looking to complete a background check for **High-Dosage Tutoring**, please sign up at brightpath.goschoolbox.com/apply first. You will then receive a separate link to complete your High-Dosage Tutoring background check.

STILL HAVE QUESTIONS? LET US HELP!

FAQ

Contact Us

PENCIL Me In



Community Investment Tracker

PENCIL Me in tracks volunteer hours for PENCIL Partners and all others who invest their time and talents into Metro Nashville Public Schools.

This tool gives us a greater ability to more accurately track all of the great work that is happening in MNPS. Thank you for helping us capture the amazing volunteer work taking place within our schools!

Log Volunteer Hours

STILL HAVE QUESTIONS? LET US HELP!

User Tutorial

Step-by-Step tutorials on how to register and log investment hours and in-kind donations

User Tutorial

FAQ

A list of common questions about PENCIL Me In

TOGETHER 4 TEACHERS
PENCIL

Recruiting support Spring - July 2021

Help put a bag of high-need classroom supplies into the hands of every Metro classroom teacher.

This summer, we'll come together to deliver more than 5,000 teacher supply bags so that all Metro teachers:

1. Feel celebrated and appreciated as they build out their classrooms for the year
2. Know about our LP PENCIL Box—a year-round resource where teachers can shop for FREE supplies



Previous

Next

With your help, we can support Metro Teachers and ensure our students have a learning environment stocked with the tools needed to succeed:

Donate

Get Involved

For questions, please contact Jacki Artis, Project Manager, at **JArtis@PENCIL615.org**.

2021 TOGETHER 4 TEACHERS MAJOR SPONSORS

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DOLLAR GENERAL

CHAMPION

NASHVILLE PREDATORS FOUNDATION smile

NISSAN

Cigna.

INGRAM Ingram Charities

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PEP RALLY

FIRST HORIZON FOUNDATION

SUPPORTING

HCA Healthcare | TriStar Health

Part of the HCA Healthcare Family of Hospitals

SPECIAL THANK YOU TO:

COMMUNITY RESOURCE CENTER

School Sponsors

Deloitte

Rogers Group

Price CPAs

UpcomingEvents

- **Principal for a Day**
- **A Little Night of Music**
- **PENCIL Summit, Presented by Deloitte**
- **Back to School Breakfast**

October 21, 2021

Experience *the joys and responsibilities of leading a Metro Nashville Public School*

Principal for a Day (PFAD) is an exclusive annual event that offers community members the opportunity to spend a morning with a Metro principal. As a *Principal for a Day*, guests will meet the school's students and staff throughout the morning in a series of activities unique to each school. The day concludes with a luncheon for principals and their guests at Lipscomb University.

This year's Principal for a Day is scheduled to be in-person on Thursday, October 21, 2021. The in-school experience will be from first bell until ~11 AM, followed by the Luncheon at Lipscomb from 11:30 AM to 1 PM.

For questions, please contact Kiley Johnson, Events & Marketing Manager, at KJohnson@PENCIL615.org.

Register for this year's Principal for a Day using the form below:

Donate

Make a Gift

Your donation to PENCIL enables us to connect community resources to MNPS that support students' academic success.

Every gift to PENCIL means more Reading Partners working one-to-one with struggling students, more school supplies reaching MNPS teachers through the LP PENCIL Box, and more PENCIL Partners bringing real-world experience to Metro's high school students.

We appreciate your gift, and are excited to share these opportunities for you to get even more engaged at our different giving levels.

Donation FAQs

Is my donation tax deductible?

What is company matching?

[**Can I give to PENCIL through my company's United Way campaign?**]

Other Ways to Give

Donate Stock:

PENCIL welcomes stock gifts. For more information on how to support PENCIL through stock transfers, click on the form below.

Transfer of Stock Form

Join a Community Give-Back Program:

Sign up to support PENCIL through the Amazon Smile program or register your Kroger Plus card for the Kroger Community Rewards program and help PENCIL earn dollars with every purchase. It costs you nothing, and every penny helps support our mission!

Register With Amazon Smile

Register Your Kroger Plus Card

Proud Partner Agency of the United Way of Greater Nashville

United Way

United Way of Greater Nashville

Invest to ensure Metro students have equitable resources and opportunities for years to come

Since 1982, PENCIL has been creating vital links between the business community and Metro Nashville Public Schools (MNPS) to bring resources to students that support their academic and life success. To ensure our financial stability and our capacity to always meet these needs for our students, we created the *Our Students, Our Future* endowment campaign, which aims to raise $3 million in endowment funds by June 2024 through contributions and planned gift commitments. These investments will ensure that PENCIL permanently sustains high-impact connections between Nashville businesses and individual public schools.

Donors to the endowment campaign become members of PENCIL's Legacy Society. You may make a one-time gift now that will immediately begin earning income for PENCIL, or a planned gift, such as naming PENCIL as a beneficiary of a will, life insurance policy, or other form of estate gift.

*If you would like to learn more about planned giving, please contact Angie Adams, President & CEO, at **AAdams@PENCIL615.org**.*

Give Now to the Campaign

Campaign Brochure

Testimonial Series

Listen to PENCIL board members and community leaders explain what inspires them about the work PENCIL does.

Testimonials:

Play

Play

Play

Play

Play

Play

Play

Play

Thank you, Legacy Society Donors:

Sue Spickard Fund

Legacy Society for Planned Giving

Teacher of the Year
$35,000 – $75,000 Anonymous **Honor Roll donors** **(Researcher note: Donor names scrubbed for anonymity and space, though of public record)**

Artifact #3, reviewed October 12, 2021

This meeting's artifact is a Community Engagement Guide model from MAPC, in Massachusetts. https://www.mapc.org/wp-content/uploads/2017/08/MAPC-Community-Engagement-Guide-2016.pdf Please take notes on it in whatever format is helpful to you. I look forward to our next meeting

Artifact #4, reviewed November 2, 2021

Artifact #4 Parts A+B

For ARC meeting scheduled for Tues, November 2nd, 2021 at 1 PM

Artifact Part A: The below excerpt is from a website retrieved 10/16/2021: https://www.jmg.org/programs/maine-compass-career-

MAINE COMPASS CAREER COLLABORATIVE

The **Maine Compass Career Collaborative** virtual experience opened to all of Maine's middle and high school students, free of charge, in April of 2021.

This virtual platform was created in partnership by JMG and Maine's GEAR UP. Maine Compass Career Collaborative is an on-demand career and post-secondary resource for Maine's students in grades 7 through 12. The site will be universally accessible to all middle school and high school students in Maine.

The Maine Compass Career Collaborative will allow the virtual capacity to conducting classes, workshops and training seminars in the field of education, career assessment, post-secondary education, job skills, and workforce development. It will also hold as a repository for the distribution of training materials in connection therewith to employers to assist them with providing internship and employment opportunities to high school students. The Maine Compass Career Collaborative will continue to build upon its efforts to connect the worlds of public education and employers and workforce development. This platform offers resources to meet middle school and high school students where they are at to assist them with the transition from school to the workforce and to higher education

Detail of Maine Compass Career Collaborative include:

“This is not a one-time event. The site will always be ‘open’ with on-demand resources to help students develop real-world skills and explore all of the post-secondary and career pathway opportunities that exist in Maine,” explains Debbie Gilmer, President of Syntiro, the non-profit organization that leads Maine’s GEAR UP grant. GEAR UP Maine is a statewide initiative, in collaboration with the University of Maine at Farmington, to support students on pathways to high school graduation and post-secondary education.

- The site will include information about Maine’s public university and community college systems, private colleges such as Thomas College, and other programs that support post-secondary education such as the Bridge Academy and the Alfond Scholarship Foundation. It will also provide an on-going resource for students to learn the wide variety and increasing number of post-secondary credentials offered directly by Maine’s employers such as the E.J. Prescott UP training program.
- “We wanted to include the word “Collaborative” in the title of the Maine Compass Career Collaborative because we are actively seeking partners to join us in this effort. We will continue to build training and education opportunities for both employers and students, consistently building content free to students,” says Craig Larrabee, CEO and President of JMG. “In addition to being informational, it’s also going to be a lot of fun for students. We look forward to welcoming more partners as we continue to build this platform.”
- The Maine Compass Career Collaborative will include a post-secondary exploration hall, an employer engagement experience, financial literacy education, information about how to write a resume and apply for college and jobs, digital literacy resources, including how students can be their own brand ambassadors, and additional support such as public speaking, professional dress guides, and how to make a good impression.

Registration for the platform can be found at:

https://vevents.virtualtradeshowhosting.com/event/Maine/login

Artifact Part B – is copied from another website,

https://www.careerwisecolorado.org/en/retrieved 10/16/2021 feel free to visit the site for more clarity

- Log into the Hub
- English
- Espanol
- DONATE
- CONTACT
- OUR STORY
- PROGRAM
- STUDENTS
- EMPLOYERS
- RESOURCES

MODERN YOUTH APPRENTICESHIP

Modern youth apprenticeship connects students to opportunities and employers to talent.

I'M A STUDENT. I'M A BUSINESS.

Following the Trends

Meaningful Work

Student Resources

Business Benefits

Empowering Educators

Career Direction

In-Demand Jobs

Following the Trends

Meaningful Work

Student Resources

Business Benefits

Empowering Educators

Career Direction

In-Demand Jobs

Following the Trends

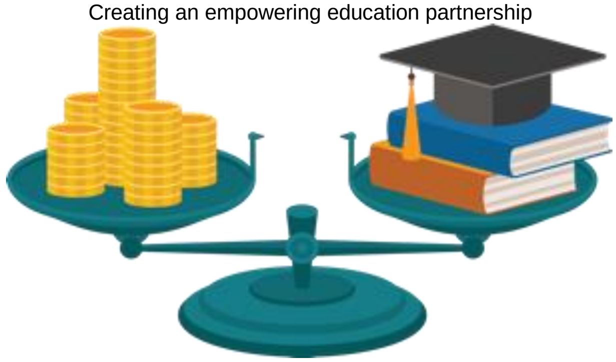
Meaningful Work

Student Resources

Business Benefits

Empowering Educators

Creating an empowering education partnership



The innovative approach provides an environment for learners to apply their classroom studies to a real-world environment with stakes. Apprenticeship has been shown to contribute to positive outcomes for schools by increasing student engagement and attendance, graduation rates and credential and college-credit attainment.

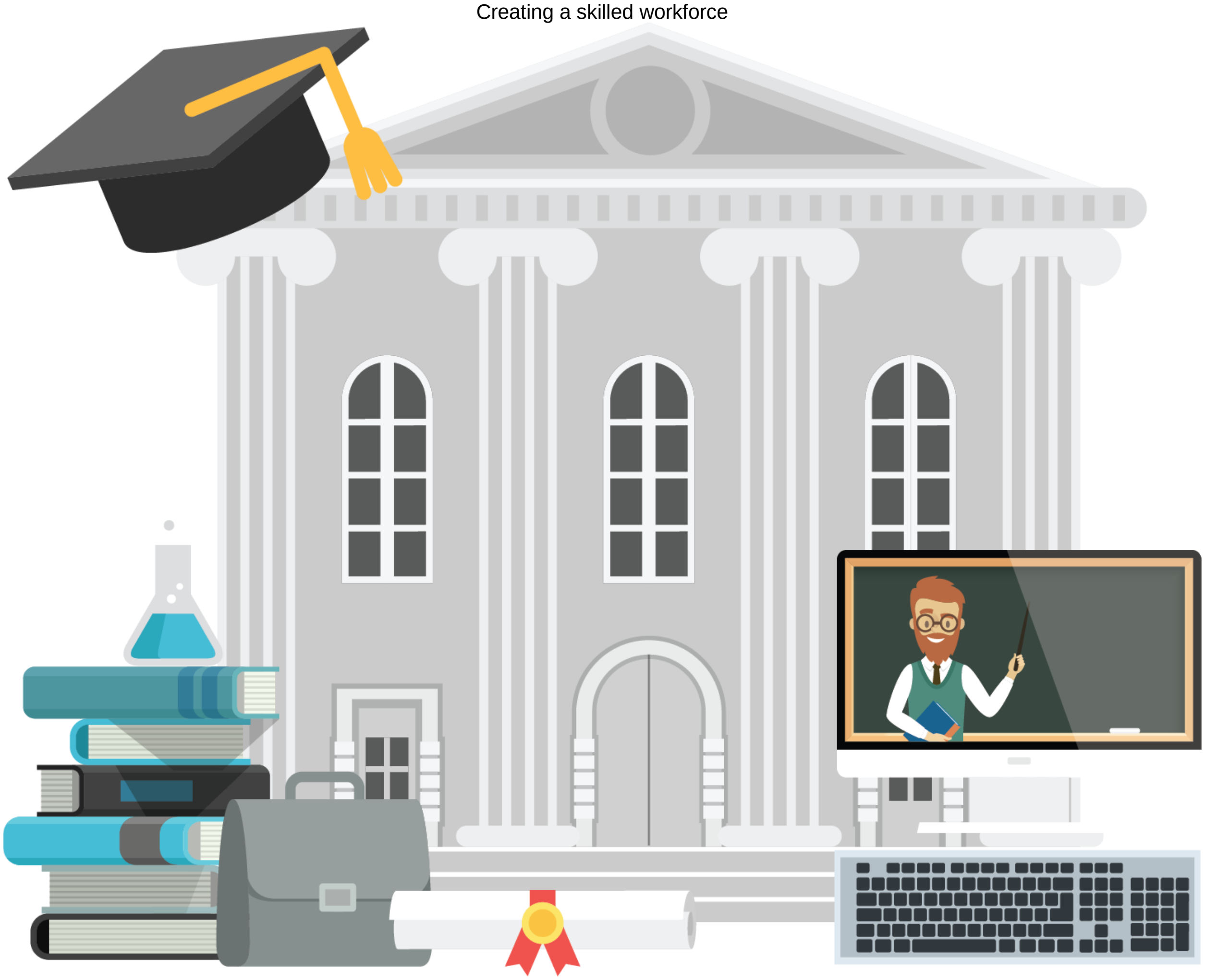
CURRENT DISTRICTS

A targeted path to success

Apprenticeship helps shape ideas about career while building transferable skills. Apprentices complete the program having gained meaningful work experience, an industry certification, debt-free college credit and an established professional network. And, they have options: convert the apprenticeship into a high-demand position in their industry, or continue their higher education…or both!

HOW DO I GET STARTED?

Creating a skilled workforce



In times of low unemployment many jobs go unfilled because employers cannot find people with the right skillset because too often, students graduate from high school and college without the advanced-skills needed to be successful in today's 21st-century workforce.

CURRENT OCCUPATIONS
An innovative approach to an existing model

In Switzerland, more than 70 percent of students take an apprenticeship in fields such as financial services, healthcare and information technology. CareerWise is adapting that model to implement modern youth apprenticeships in the United States.
EXPLORE THE MODEL
A different look at learning

CareerWise offers a multi-year apprenticeship designed by businesses and offered in partnership with schools, taking students out of the classroom and putting them in the workplace in meaningful, paid positions for 16 – 24 hours a week while earning high-school and college credit.
LEARN MORE
Empowering your future
CURRENT DISTRICTS
Together, we are connecting education and industry.
"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has."
Margaret Mead

Students
Modern youth apprenticeship prepares you for college and career, and provides multiple paths to success.
Find Your Future

Employers
Modern youth apprenticeship is not a philanthropy. It's smart business. Let CareerWise help you develop your skilled-talent pipeline.
Explore More

Educators
Modern youth apprenticeship provides applied-learning environments, soft-skill development and competency attainment that prepare any student for success.
Learn More

CURRENTLY WATCHING:
Find Your Future
Apprenticeship is an Opportunity Multiplier
Colorado's Bold Move
What is Modern Youth Apprenticeship?
Find Your Future
Apprenticeship is an Opportunity Multiplier
Colorado's Bold Move
What is Modern Youth Apprenticeship?
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- Program
  - How it Works
  - Colorado Regions
  - Occupations
  - Parent Information
  - Equity First
- Students
  - Getting Started
  - Become an Apprentice
  - Participating Districts
- Employers
  - Our Services
  - Job Functions & Occupations
  - Current Employers
  - Contact Us