# тне CONDITION of EDUCATION 1997 

## Supplemental and Standard Error Tables

## U.S. Department of Education

Richard W. Riley
Secretary
Office of Educational Research and Improvement
Ramon C. Cortines
Acting Assistant Secretary
National Center for Education Statistics
Pascal D. Forgione, Jr.
Commissioner
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## Introduction

The National Center for Education Statistics (NCES) gathers and publishes information on the status and progress of education in the United States. The Condition of Education is an annual, Congressionally mandated report produced by NCES. The Condition is an indicator report, presenting key data analyses that measure the health of education, monitor important developments in the education system, and show trends in major aspects of education. Unlike most other statistics, the indicators presented in The Condition of Education are policy-relevant and prob-lem-oriented. They typically incorporate a standard against which to judge progress or regression. The Condition of Education 1997 Supplemental and Standard Error Tables has been produced for those people who wish to examine issues presented in the The Condition of Education in greater depth and detail. The tables included in this volume provide additional information to complement the data presented in The Condition. For example, Indicator 2 in the main volume compares early signs of school problems across racial/ethnic groups and according to parents' highest education level. Additional tables provided in this supplemental volume compare early signs of school problems by student's age, urbanicity, and household income. Standard errors
for all of the survey estimates presented in this volume have been calculated and are also included. A discussion of standard errors and statistical significance testing is presented on page 296.
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> The Condition of Education 1997 Supplemental and Standard Error Tables includes all of the supplemental tables, notes, and standard error tables prepared for The Condition of Education 1997. Tables listed in bold are included in both The Condition of Education 1997 and this volume. Tables that are not shown in bold are included in this volume only. Section 1 of this volume contains all supplemental tables and notes and Section 2 contains all standard error tables. The electronic version of The Condition of Education 1997 can be viewed on the NCES Internet site at http://www.ed.gov/NCES/ce/.
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## SECTION 1

## Supplemental Tables and Nołes

Table 1-1 Percentage of 3-, 4-, and 5-year-olds enrolled in center-based programs ${ }^{1}$ and kindergarten, by selected student characteristics: 1995

| Student characteristics | 3-year-olds |  |  | 4-year-olds |  |  | 5-year-olds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Centerbased programs | Kindergarten | Total | Centerbased programs | Kindergarten | Total | Centerbased programs | Kindergarten |
| Total | 37.4 | 36.9 | 0.5 | 60.9 | 59.3 | 1.7 | 90.3 | 16.8 | 73.5 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 35.8 | 35.6 | 0.3 | 59.9 | 58.3 | 1.6 | 88.7 | 17.7 | 71.0 |
| Female | 38.9 | 38.3 | 0.6 | 61.5 | 59.8 | 1.7 | 92.1 | 15.8 | 76.3 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 40.2 | 40.0 | 0.3 | 60.8 | 59.5 | 1.3 | 88.6 | 17.8 | 70.8 |
| Black | 41.1 | 40.2 | 0.9 | 68.2 | 66.2 | 2.0 | 93.7 | 17.2 | 76.5 |
| Hispanic | 21.2 | 20.0 | 1.2 | 49.0 | 45.5 | 3.5 | 93.4 | 13.3 | 80.1 |
| Household income |  |  |  |  |  |  |  |  |  |
| \$10,000 or less | 26.2 | 25.8 | 0.4 | 54.3 | 53.6 | 0.7 | 90.9 | 16.7 | 74.2 |
| 10,001-20,000 | 27.0 | 27.0 | 0.0 | 52.3 | 50.1 | 2.3 | 89.7 | 12.7 | 77.0 |
| 20,001-35,000 | 27.7 | 27.3 | 0.4 | 49.7 | 48.5 | 1.2 | 90.7 | 15.4 | 75.4 |
| 35,001-50,000 | 38.1 | 36.8 | 1.3 | 59.5 | 56.5 | 2.9 | 88.5 | 16.6 | 71.9 |
| 50,001 or more | 61.2 | 61.1 | 0.1 | 80.7 | 79.2 | 1.5 | 90.9 | 20.2 | 70.6 |
| Parents' highest education level |  |  |  |  |  |  |  |  |  |
| Less than high school diploma | 16.0 | 14.6 | 1.3 | 42.4 | 41.6 | 0.8 | 92.5 | 11.8 | 80.7 |
| High school diploma or GED | 26.3 | 25.7 | 0.6 | 51.1 | 50.0 | 1.1 | 89.2 | 14.4 | 74.8 |
| Some college/vocational/technical | 35.6 | 35.4 | 0.3 | 63.3 | 61.4 | 1.9 | 90.2 | 16.2 | 74.0 |
| Bachelor's degree | 51.7 | 51.6 | 0.2 | 70.7 | 68.4 | 2.2 | 91.6 | 19.0 | 72.7 |
| Graduate/professional school | 60.8 | 60.4 | 0.4 | 77.9 | 75.6 | 2.3 | 89.8 | 24.4 | 65.3 |
| Family structure |  |  |  |  |  |  |  |  |  |
| Two biological or adoptive parents | 38.6 | 38.0 | 0.6 | 61.3 | 59.5 | 1.7 | 88.8 | 17.6 | 71.2 |
| One biological or adoptive parent | 36.9 | 36.9 | 0.0 | 63.0 | 61.6 | 1.4 | 94.0 | 15.8 | 78.2 |
| One biological and one step parent | 23.1 | 20.4 | 2.7 | 46.9 | 43.9 | 3.0 | 89.4 | 12.2 | 77.2 |
| Other relatives | 20.8 | 20.8 | 0.0 | 61.3 | 61.3 | 0.0 | 88.0 | 20.8 | 67.3 |
| Mother's first language |  |  |  |  |  |  |  |  |  |
| English | 39.5 | 39.1 | 0.4 | 62.2 | 61.0 | 1.2 | 89.9 | 17.3 | 72.6 |
| Spanish | 12.3 | 11.6 | 0.7 | 47.3 | 42.1 | 5.3 | 93.0 | 10.6 | 82.4 |
| Other | 43.2 | 40.2 | 3.0 | 61.5 | 56.2 | 5.3 | 88.8 | 20.9 | 67.9 |
| Poverty status ${ }^{2}$ |  |  |  |  |  |  |  |  |  |
| Poor | 24.2 | 23.9 | 0.3 | 51.7 | 50.9 | 0.8 | 90.1 | 15.7 | 74.4 |
| Non-poor | 42.2 | 41.7 | 0.5 | 63.9 | 61.9 | 1.9 | 90.3 | 17.2 | 73.1 |
| Mother's employment status |  |  |  |  |  |  |  |  |  |
| 35 hours or more per week | 43.4 | 42.7 | 0.7 | 63.3 | 61.0 | 2.2 | 90.3 | 16.5 | 73.8 |
| Less than 35 hours per week | 39.9 | 39.9 | 0.0 | 70.9 | 68.9 | 2.0 | 91.4 | 20.0 | 71.4 |
| Looking for work | 34.7 | 33.3 | 1.4 | 56.3 | 55.3 | 1.0 | 86.0 | 16.6 | 69.4 |
| Not in labor force | 30.8 | 30.4 | 0.4 | 53.6 | 52.5 | 1.1 | 90.0 | 15.6 | 74.4 |

[^0]NOTE: Included in the total but not shown separately are children from other racial/ethnic groups and types of family structures. This analysis includes children aged $3-5$ who were not enrolled in first grade. Age is as of December 31, 1994.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), 1995 (Early Childhood Program Participation File).

Table 1-2 Percentage of 3-, 4-, and 5-year-olds enrolled in center-based programs ${ }^{1}$ and kindergarten, by selected student characteristics: 1993

| Student characteristics | 3-year-olds |  |  | 4-year-olds |  |  | 5-year-olds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Centerbased programs | Kindergarten | Total | Centerbased Kinderprograms garten |  | Center-based Kinder-Total programs garten |  |  |
| Total | 34.1 | 33.8 | 0.3 | 55.3 | 52.8 | 2.5 | 90.0 | 15.8 | 74.1 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 32.3 | 32.0 | 0.3 | 53.6 | 52.1 | 1.5 | 89.9 | 17.4 | 72.5 |
| Female | 36.0 | 35.6 | 0.4 | 57.1 | 53.6 | 3.5 | 90.0 | 14.1 | 75.9 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 33.7 | 33.7 | 0.0 | 53.7 | 51.7 | 2.0 | 88.9 | 18.0 | 70.9 |
| Black | 41.9 | 39.6 | 2.3 | 62.9 | 58.5 | 4.5 | 93.2 | 12.4 | 80.8 |
| Hispanic | 27.2 | 27.2 | 0.0 | 48.9 | 46.8 | 2.1 | 91.4 | 12.0 | 79.4 |
| Household income |  |  |  |  |  |  |  |  |  |
| \$10,000 or less | 32.7 | 31.9 | 0.8 | 52.6 | 49.6 | 3.0 | 89.2 | 12.8 | 76.5 |
| 10,001-20,000 | 21.6 | 20.7 | 1.0 | 47.2 | 45.2 | 2.0 | 90.4 | 11.4 | 79.0 |
| 20,001-35,000 | 22.2 | 22.2 | 0.0 | 47.8 | 46.1 | 1.7 | 86.8 | 17.3 | 69.5 |
| 35,001-50,000 | 37.9 | 37.9 | 0.0 | 57.2 | 54.8 | 2.4 | 90.6 | 16.4 | 74.2 |
| 50,001 or more | 58.7 | 58.6 | 0.1 | 73.2 | 70.0 | 3.2 | 93.7 | 20.4 | 73.3 |
| Parents' highest education level |  |  |  |  |  |  |  |  |  |
| Less than high school diploma | 17.1 | 17.1 | 0.0 | 42.8 | 40.2 | 2.6 | 79.9 | 14.7 | 65.2 |
| High school diploma or GED | 23.0 | 22.1 | 0.9 | 43.2 | 41.6 | 1.7 | 89.0 | 14.7 | 74.4 |
| Some college/vocational/technical | 35.9 | 35.9 | 0.1 | 61.1 | 58.2 | 2.9 | 91.1 | 12.5 | 78.6 |
| Bachelor's degree | 41.1 | 41.1 | 0.0 | 64.1 | 60.9 | 3.1 | 92.5 | 19.4 | 73.1 |
| Graduate/professional school | 61.9 | 61.9 | 0.0 | 73.3 | 70.6 | 2.7 | 94.3 | 24.8 | 69.5 |
| Family structure |  |  |  |  |  |  |  |  |  |
| Two biological or adoptive parents | 34.4 | 34.4 | ${ }^{3} 0.0$ | 55.1 | 52.8 | 2.3 | 89.1 | 16.4 | 72.7 |
| One biological or adoptive parent | 33.8 | 33.0 | 0.8 | 57.2 | 53.9 | 3.3 | 92.1 | 13.6 | 78.6 |
| One biological and one step parent | 32.7 | 32.7 | 0.0 | 49.5 | 48.6 | 0.9 | 87.3 | 13.5 | 73.8 |
| Other relatives | 34.8 | 28.7 | 6.1 | 52.2 | 51.1 | 1.1 | 92.6 | 27.4 | 65.2 |
| Mother's first language |  |  |  |  |  |  |  |  |  |
| English | 35.1 | 34.7 | 0.4 | 55.5 | 53.2 | 2.3 | 89.9 | 16.5 | 73.5 |
| Spanish | 22.9 | 22.9 | 0.0 | 49.0 | 45.9 | 3.1 | 90.4 | 13.7 | 76.8 |
| Other | 35.8 | 35.8 | 0.0 | 66.8 | 63.7 | 3.1 | 89.4 | 2.4 | 86.9 |
| Poverty status ${ }^{2}$ |  |  |  |  |  |  |  |  |  |
| Poor | 28.8 | 27.6 | 1.3 | 49.4 | 46.9 | 2.5 | 88.3 | 11.9 | 76.5 |
| Non-poor | 35.6 | 35.5 | 0.1 | 57.3 | 54.9 | 2.4 | 90.6 | 17.3 | 73.3 |
| Mother's employment status |  |  |  |  |  |  |  |  |  |
| 35 hours or more per week | 39.2 | 38.2 | 0.9 | 58.3 | 55.8 | 2.5 | 93.6 | 16.0 | 77.6 |
| Less than 35 hours per week | 37.7 | 37.7 | 0.0 | 62.4 | 60.6 | 1.8 | 88.3 | 16.3 | 72.0 |
| Looking for work | 28.8 | 28.8 | 0.0 | 56.0 | 50.5 | 5.4 | 85.9 | 15.0 | 70.9 |
| Not in labor force | 29.3 | 29.2 | 0.1 | 49.7 | 47.6 | 2.1 | 88.0 | 15.3 | 72.7 |

Center-based programs include nursery, prekindergarten, and Head Start programs.
${ }^{2}$ The poverty measure presented in this analysis was developed by combining information about household composition and household income. See the supplemental note to this indicator for further discussion.
${ }^{3}$ Percentages less than 0.05 are rounded to 0.0.

NOTE: Included in the total but not shown separately are children from other racial/ethnic groups and types of family structures. This analysis includes children aged $3-5$ who were not enrolled in first grade. Age is as of December 31, 1992.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), 1993 (School Readiness File).

Table 1-3 Percentage of 3-, 4-, and 5-year-olds enrolled in center-based programs* and kindergarten, by selected student characteristics: 1991

| Student characteristics | 3-year-olds |  |  | 4-year-olds |  |  | 5-year-olds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Centerbased programs | Kindergarten | Total | Centerbased programs | Kindergarten | Total | Centerbased programs | Kindergarten |
| Total | 31.4 | 31.0 | 0.4 | 52.7 | 49.3 | 3.4 | 86.4 | 14.8 | 71.6 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 31.5 | 30.9 | 0.6 | 52.8 | 49.2 | 3.6 | 85.6 | 16.1 | 69.5 |
| Female | 31.4 | 31.1 | 0.3 | 52.5 | 49.4 | 3.1 | 87.3 | 13.6 | 73.8 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 33.4 | 32.9 | 0.5 | 52.4 | 49.4 | 3.0 | 85.7 | 15.4 | 70.3 |
| Black | 31.6 | 31.3 | 0.3 | 57.4 | 50.8 | 6.6 | 92.3 | 16.7 | 75.6 |
| Hispanic | 19.8 | 19.7 | 0.1 | 47.5 | 45.0 | 2.5 | 85.3 | 11.3 | 74.0 |
| Household income |  |  |  |  |  |  |  |  |  |
| \$10,000 or less | 25.4 | 25.4 | 0.0 | 43.3 | 40.0 | 3.2 | 86.1 | 18.2 | 67.9 |
| 10,001-20,000 | 23.2 | 22.5 | 0.7 | 45.0 | 42.1 | 2.9 | 84.6 | 13.0 | 71.6 |
| 20,001-30,000 | 21.3 | 20.9 | 0.3 | 48.0 | 43.2 | 4.8 | 85.1 | 13.1 | 71.9 |
| 30,001-50,000 | 33.4 | 32.9 | 0.5 | 52.3 | 49.1 | 3.3 | 87.3 | 15.1 | 72.2 |
| 50,001 or more | 52.9 | 52.3 | 0.6 | 74.8 | 72.0 | 2.8 | 89.0 | 14.8 | 74.2 |
| Parents' highest education level |  |  |  |  |  |  |  |  |  |
| Less than high school diploma | 17.3 | 17.0 | 0.3 | 33.1 | 29.6 | 3.5 | 85.5 | 8.9 | 76.5 |
| High school diploma or GED | 23.0 | 22.3 | 0.8 | 40.8 | 37.9 | 2.9 | 84.8 | 15.0 | 69.8 |
| Some college/vocational/technical | 31.0 | 30.9 | 0.1 | 56.3 | 52.6 | 3.7 | 87.7 | 15.4 | 72.4 |
| Bachelor's degree | 41.5 | 41.3 | 0.3 | 67.2 | 63.2 | 4.0 | 88.1 | 17.0 | 71.1 |
| Graduate/professional school | 53.0 | 52.5 | 0.4 | 72.0 | 70.0 | 2.0 | 87.0 | 17.4 | 69.6 |
| Mother's first language |  |  |  |  |  |  |  |  |  |
| English | 32.3 | 32.0 | 0.3 | 53.2 | 50.0 | 3.2 | 86.5 | 15.7 | 70.7 |
| Spanish | 18.9 | 18.9 | 0.0 | 45.0 | 42.8 | 2.2 | 88.6 | 8.7 | 79.9 |
| Other | 37.1 | 36.0 | 1.1 | 50.0 | 45.2 | 4.8 | 84.1 | 11.5 | 72.7 |
| Mother's employment status |  |  |  |  |  |  |  |  |  |
| 35 hours or more per week | 30.8 | 30.6 | 0.3 | 53.4 | 49.5 | 3.9 | 87.7 | 14.0 | 73.7 |
| Less than 35 hours per week | 38.3 | 37.8 | 0.4 | 57.3 | 55.1 | 2.3 | 88.9 | 17.1 | 71.8 |
| Looking for work | 26.0 | 26.0 | 0.0 | 46.4 | 42.3 | 4.1 | 79.5 | 9.5 | 70.0 |
| Not in labor force | 29.1 | 28.8 | 0.3 | 49.1 | 46.3 | 2.8 | 85.2 | 15.7 | 69.6 |

* Center-based programs include nursery, prekindergarten, and SOURCE: U.S. Department of Education, National Center for Head Start programs.
NOTE: Included in the total but not shown separately are children from other racial/ethnic groups and types of family structures. This analysis includes children aged $3-5$ who were not enrolled in first grade. Age is as of December 31, 1990.


## Note to Indicator 1: Preprimary enrollment rates

## Age of the child

For this analysis, the age of the child was calculated as of December 31, 1990 for 1991 data; as of December 31, 1992 for 1993 data; and as of December 31, 1994 for 1995 data.

## Enrollment rates

The numerator used to calculate the enrollment rates for this analysis was the number of $3-, 4-$, and 5 -year-olds who were enrolled in center-based programs or kindergarten as of December 31, 1990, 1992, and 1994. The denominator used was the total number of children aged 3,4 , and 5 as of December 31, 1990, 1992, and 1994. Children who were enrolled in first grade or higher or who were in the "ungraded" category were excluded from this analysis.

## Race/ethnicity

A child's race/ethnicity was determined by the composite of the National Household Education Survey (NHES) variables "race" and "Hispanic." If the child's ethnicity was Hispanic, he or she was classified as Hispanic, regardless of whether his or her race was classified as white, black, or other. Children of "other" race/ethnicities were included in the totals but were not shown separately in this analysis.

## Parents' highest education level

"Parents' highest education level" is defined as the highest level of education of the child's parents or nonparent guardians who resided in the household. It was based on the highest education level of the mother or female guardian and the highest education level of the father or male guardian. If only one parent resided in the household, that parent's highest education level was used.

## Poverty measure

The poverty measure used in this analysis was developed by combining information about household composition and household income. Household composition is the count of family members based on the relationship among the household members. The number of family members is the number of persons in the immediate family of the
child (e.g., parents, siblings, and the child him/herself). If the child had no parents in the household, the total number of household members was used.

Household income was also used as part of the poverty measure. NHES collects data on household income in increments. Information on the actual household income, which was available for about 7 percent of the population, was also used. Because exact household income was not available in most cases, the measure is an approximation. Households were categorized as "poor" if they met one of the following conditions:

- two family members and the household income was $\$ 5,000$ or less;
- two family members and the actual household income was less than $\$ 10,000$;
- three family members and the household income was $\$ 10,000$ or less;
- three family members and the actual household income was less than $\$ 12,000$;
- four or five family members and the household income was $\$ 15,000$ or less;
- five family members and the actual household income was less than $\$ 18,000$;
- six or seven family members and the household income was $\$ 20,000$ or less;
- seven family members and the actual household income was less than $\$ 23,000$;
- eight family members and the household income was $\$ 25,000$ or less; or
- nine or more family members and the household income was $\$ 30,000$ or less.

This information was available in 1993 and 1995 only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), 1991 (Early Childhood Education File), 1993 (School Readiness File), and 1995 (Early Childhood Program Participation File).

Table 2-1 Percentage of children aged 3-5 who participated in various literacy activities with a parent or family member, by selected characteristics: 1991 and 1995

| Selected characteristics | Read to three or more times in the past week |  | Told a story at least once in the past week |  | Visited a library in the past month |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1995 | 1991 | 1995 | 1991 | 1995 |
| Total | 71.4 | 83.1 | 72.0 | 81.4 | 36.6 | 41.2 |
| Child's age ${ }^{1}$ |  |  |  |  |  |  |
| Age 3 | 72.7 | 83.1 | 74.3 | 81.5 | 31.2 | 34.9 |
| Age 4 | 71.9 | 84.4 | 72.3 | 81.5 | 37.4 | 42.2 |
| Age 5 | 69.6 | 81.7 | 69.5 | 81.0 | 41.3 | 46.6 |
| School enrollment status and level |  |  |  |  |  |  |
| Not enrolled | 68.8 | 81.5 | 72.3 | 80.3 | 30.5 | 32.0 |
| Center-based programs ${ }^{2}$ | 75.2 | 85.8 | 74.1 | 82.7 | 41.0 | 46.3 |
| Kindergarten | 71.1 | 81.3 | 68.8 | 81.0 | 41.7 | 47.3 |
| Race/ethnicity |  |  |  |  |  |  |
| White | 77.7 | 89.0 | 73.8 | 83.9 | 40.7 | 45.1 |
| Black | 59.0 | 73.7 | 66.0 | 74.4 | 27.8 | 34.1 |
| Hispanic | 53.0 | 61.5 | 68.4 | 75.1 | 24.5 | 28.0 |
| Urbanicity |  |  |  |  |  |  |
| Urbanized area | $\left({ }^{3}\right)$ | 81.5 | $\left({ }^{3}\right)$ | 80.4 | $\left({ }^{3}\right)$ | 42.0 |
| Not an urbanized area | $\left({ }^{3}\right)$ | 85.0 | $\left({ }^{3}\right)$ | 83.0 | $\left({ }^{3}\right)$ | 43.5 |
| Rural | $\left({ }^{3}\right)$ | 86.4 | $\left({ }^{3}\right)$ | 83.1 | $\left({ }^{3}\right)$ | 37.9 |
| Household income |  |  |  |  |  |  |
| \$10,000 or less | $\left({ }^{3}\right)$ | 73.8 | $\left({ }^{3}\right)$ | 76.2 | $\left({ }^{3}\right)$ | 28.4 |
| 10,001-20,000 | $\left({ }^{3}\right)$ | 76.0 | $\left({ }^{3}\right)$ | 78.0 | (3) | 30.8 |
| 20,001-30,000 | $\left({ }^{3}\right)$ | 82.3 | $\left({ }^{3}\right)$ | 82.1 | $\left({ }^{3}\right)$ | 40.7 |
| 30,001-40,000 | $\left({ }^{3}\right)$ | 84.1 | $\left({ }^{3}\right)$ | 78.8 | $(3)$ | 43.5 |
| 40,001-50,000 | $\left({ }^{3}\right)$ | 86.6 | $\left({ }^{3}\right)$ | 85.3 | $\left({ }^{3}\right)$ | 42.6 |
| 50,001 or more | $\left({ }^{3}\right)$ | 92.1 | $\left({ }^{3}\right)$ | 86.1 | $\left({ }^{3}\right)$ | 54.2 |
| Parents' highest education level |  |  |  |  |  |  |
| Less than high school diploma | 53.8 | 64.4 | 67.4 | 71.9 | 18.3 | 18.3 |
| High school diploma or GED | 63.5 | 77.9 | 68.2 | 77.6 | 26.0 | 31.5 |
| Some college/vocational/technical | 74.0 | 85.3 | 74.2 | 82.9 | 38.5 | 40.9 |
| Bachelor's degree | 82.1 | 89.7 | 74.7 | 85.0 | 52.0 | 53.5 |
| Graduate/professional school | 88.3 | 94.0 | 78.4 | 88.2 | 59.1 | 62.8 |
| Family structure |  |  |  |  |  |  |
| Two biological or adoptive parents | - | 85.6 | - | 82.8 | - | 45.9 |
| One biological or adoptive parent | - | 77.8 | - | 78.6 | - | 32.4 |
| One biological and one step parent | - | 75.1 | - | 79.1 | - | 32.2 |
| Other relatives | - | 85.5 | - | 79.1 | - | 15.8 |

- Not available.
${ }^{1}$ Age as of December 31, 1990 for 1991 data, and as of December 31, 1994 for 1995 data.
${ }^{2}$ Center-based programs include nursery, prekindergarten, and Head Start programs.
${ }^{3}$ Urbanicity and family income data for 1991 were not comparable to data for 1995.

NOTE: This analysis includes children aged 3-5 who were not enrolled in first grade. Included in the total but not shown separately are children from other racial/ethnic groups.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), 1991 (Early Childhood Education File) and 1995 (Early Childhood Program Participation File).

Table 3-1 Percentage of first- and second-graders aged 6-8 whose parents reported they had behavioral and/or academic problems in school, by selected characteristics: 1991 and 1995

| Selected characteristics | Behavioral problems ${ }^{1}$ |  | Problems with school work ${ }^{1}$ |  | Academically below the middle of the class ${ }^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1995 | 1991 | 1995 | 1991 | 1995 |
| Total | 23.1 | 18.6 | 24.3 | 20.3 | ${ }^{4}$ ) | 6.4 |
| Student's age ${ }^{3}$ |  |  |  |  |  |  |
| Age 6 | 23.3 | 19.0 | 24.0 | 18.8 | $\left({ }^{4}\right)$ | 5.9 |
| Age 7 | 21.8 | 18.6 | 23.8 | 19.6 | $\left({ }^{4}\right)$ | 5.1 |
| Age 8 | 26.0 | 17.7 | 26.4 | 25.7 | $\left({ }^{4}\right)$ | 11.4 |
| Grade level |  |  |  |  |  |  |
| First grade | 23.7 | 19.1 | 23.0 | 18.9 | $\left({ }^{4}\right)$ | 5.6 |
| Second grade | 22.4 | 18.2 | 25.8 | 21.7 | ( ${ }^{4}$ | 7.2 |
| Race/ethnicity |  |  |  |  |  |  |
| White | 19.2 | 16.3 | 20.8 | 18.5 | $\left({ }^{4}\right)$ | 5.5 |
| Black | 35.1 | 31.6 | 31.4 | 29.2 | $\left({ }^{4}\right)$ | 10.6 |
| Hispanic | 29.5 | 18.4 | 34.8 | 21.3 | ( ${ }^{4}$ ) | 6.6 |
| Urbanicity |  |  |  |  |  |  |
| Urbanized area | ( ${ }^{4}$ ) | 19.2 | $\left({ }^{4}\right)$ | 19.9 | $\left({ }^{4}\right)$ | 6.0 |
| Not an urbanized area | $\left({ }^{4}\right)$ | 17.3 | $\left({ }^{4}\right)$ | 18.0 | $\left({ }^{4}\right)$ | 7.4 |
| Rural | $\left({ }^{4}\right)$ | 17.9 | $\left({ }^{4}\right)$ | 22.0 | $\left({ }^{4}\right)$ | 6.8 |
| Household income |  |  |  |  |  |  |
| \$10,000 or less | $\left({ }^{4}\right)$ | 24.1 | $\left({ }^{4}\right)$ | 30.5 | $\left({ }^{4}\right)$ | 11.0 |
| 10,001-20,000 | ( ${ }^{4}$ ) | 24.3 | $\left({ }^{4}\right)$ | 26.2 | ( ${ }^{4}$ ) | 9.8 |
| 20,001-30,000 | $\left({ }^{4}\right)$ | 18.8 | $\left({ }^{4}\right)$ | 20.0 | $\left({ }^{4}\right)$ | 6.6 |
| 30,001-40,000 | ( ${ }^{4}$ ) | 16.5 | ( ${ }^{4}$ ) | 14.4 | ${ }^{4}$ ) | 4.3 |
| 40,001-50,000 | ( ${ }^{4}$ ) | 16.5 | ( ${ }^{4}$ ) | 18.0 | (4) | 3.9 |
| 50,001 or more | $\left({ }^{4}\right)$ | 14.3 | ( ${ }^{4}$ ) | 14.9 | $\left({ }^{4}\right)$ | 3.7 |
| Parents' highest education level |  |  |  |  |  |  |
| Less than high school diploma | 32.9 | 22.9 | 37.8 | 35.2 | $\left({ }^{4}\right)$ | 12.4 |
| High school diploma or GED | 24.7 | 23.3 | 25.7 | 21.3 | $\left({ }^{4}\right)$ | 6.9 |
| Some college/vocational/technical | 21.0 | 19.6 | 24.3 | 21.4 | $\left({ }^{4}\right)$ | 7.0 |
| Bachelor's degree | 17.6 | 10.5 | 18.6 | 14.8 | $\left({ }^{4}\right)$ | 4.0 |
| Graduate/professional school | 19.4 | 12.9 | 16.1 | 11.7 | ( ${ }^{4}$ | 2.4 |
| Family structure |  |  |  |  |  |  |
| Two biological or adoptive parents | - | 13.0 | - | 15.9 | - | 4.4 |
| One biological or adoptive parent | - | 25.8 | - | 26.9 | - | 9.8 |
| One biological and one step parent | - | 33.0 | - | 25.5 | - | 9.1 |
| Other relatives | - | 34.9 | - | 37.8 | - | 12.1 |

[^1]${ }^{3}$ Age was as of December 31, 1990 for 1991 data, and as of December 31, 1994 for 1995 data.
${ }^{4}$ Urbanicity, family income, and academic standing for 1991 were not comparable to data for 1995.
NOTE: Included in the total but not shown separately are children from other racial/ethnic groups.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), 1991 (Early Childhood Education File) and 1995 (Early Childhood Program Participation File).

Table 4-1 Percentage of all 16- to 24-year-olds and those who dropped out of school, by English language usage and proficiency, and disability status: October 1992 and 1995

| English language usage and proficiency, and disability status | 16- to 24-year-olds |  | 16- to 24-year-old dropouts ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1992 | 1995 | 1992 | 1995 |
| Total 16- to 24-year-olds | 100.0 | 100.0 | 11.0 | 12.0 |
| Spoke English at home | 85.7 | 85.1 | 8.8 | 9.6 |
| Spoke a language other than English at home | 14.3 | 14.9 | 21.5 | 24.2 |
| Spanish | 9.4 | 10.9 | 29.0 | 29.6 |
| Other European | 1.6 | 1.4 | 8.8 | 8.0 |
| Asian | 2.0 | 1.2 | 6.5 | 4.2 |
| Other | 1.2 | 1.5 | 4.3 | 7.9 |
| 16- to 24-year-olds who spoke a language other than English at home and: |  |  |  |  |
| Had difficulty speaking English ${ }^{2}$ | 5.1 | 5.3 | 39.7 | 44.3 |
| Did not have difficulty speaking English ${ }^{2}$ | 9.2 | 9.6 | 11.2 | 12.0 |
| Had taken an ESL course | - | 3.8 | - | 22.6 |
| Had not taken an ESL course | - | 1.5 | - | 24.8 |
| Disability status |  |  |  |  |
| No disabling condition | 91.9 | 93.1 | 10.2 | 11.8 |
| Had a disabling condition ${ }^{3}$ | 8.1 | 6.9 | 15.7 | 14.6 |
| Blindness | 0.7 | 0.1 | 16.2 | 16.9 |
| Deafness | 0.8 | 0.2 | 10.3 | 15.6 |
| Other hearing impairment | 1.1 | 0.5 | 13.5 | ${ }^{4}$ ) |
| Emotional disturbance | 1.3 | 0.5 | 19.9 | 23.6 |
| Learning disability | 3.7 | 2.2 | 18.7 | 17.6 |
| Orthopedic impairment | 1.4 | 0.6 | 12.3 | 14.2 |
| Mental retardation | 1.2 | 0.5 | 22.4 | 31.1 |
| Speech impediment | 1.6 | 0.4 | 13.2 | 15.8 |

- Not available.
' Dropouts are those aged 16-24 who had not completed high school and who were not enrolled in school.
${ }^{2}$ Respondents were asked to rate the child's ability to speak English using the following scale: "not at all," "not well," "well," or "very well." If respondents answered "very well," children were categorized as not having difficulty speaking English; all others were categorized as having difficulty speaking English.
${ }^{3}$ Included in the totals are other disabling conditions not presented in the table. Some 16 - to 24 -year-olds with a disabling condition may be included in more than one disability category.
${ }^{4}$ Too few sample observations for a reliable estimate.
NOTE: For many key items in the October CPS, the Bureau of the Census imputes data for cases with missing data due to item nonresponse. However, for some of the items that were used in this
indicator and in Dropout Rates in the United States, 1995 item nonresponse was not imputed by the Bureau of the Census. Using a sequential hot deck procedure, the authors of the Dropout Rates report produced special imputations for nine items from the October 1995 CPS used in their report. To avoid inconsistency between this indicator and the Dropout Rates report, six of these items were also used for the statistics in this table and in table 4-2. Special imputations were not available for the October 1992 CPS at the time this table was prepared. However, different treatment of missing data due to item non-response in the two years is likely to have only small effects on the calculated statistics. For example, the dropout rate in 1995 for 16 - to 24 -year-olds who had repeated a grade was 24.4 when missing data on grade repetition and completing high school with a GED was imputed and 24.1 when these items were imputed. Details may not add to totals due to rounding.
SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys, 1992 and 1995.

Table 4-2 Percentage of all 16- to 24-year-olds who dropped out of school, by retention status, English language usage and proficiency, and disability status: October 1992 and 1995

| English language usage and proficiency, and disability status | 1992 |  |  | 1995 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Had repeated at least one grade | Never repeated a grade | Total | Had repeated at least one grade | Never repeated a grade |
| Total 16- to 24-year-olds | 11.0 | 19.8 | 9.4 | 12.0 | 24.1 | 10.1 |
| Spoke English at home | 8.8 | 19.5 | 7.1 | 9.6 | 24.3 | 7.3 |
| Spoke a language other than English at home | 21.5 | 22.3 | 21.3 | 24.2 | 23.2 | 24.4 |
| Disability status |  |  |  |  |  |  |
| No disabling condition | 10.2 | 19.6 | 9.1 | 11.8 | 24.4 | 10.1 |
| Had a disabling condition* | 15.7 | 21.0 | 13.3 | 14.6 | 22.6 | 11.2 |
| Learning disability | 18.7 | 20.2 | 18.0 | 17.6 | 18.6 | 16.6 |

* Included in the totals are other disabling conditions not presented in the table.

NOTE: For many key items in the October CPS, the Bureau of the Census imputes data for cases with missing data due to item nonresponse. However, for some of the items that were used in this indicator and in Dropout Rates in the United States, 1995 item nonresponse was not imputed by the Bureau of the Census. Using a sequential hot deck procedure, the authors of the Dropout Rates report produced special imputations for nine items from the October 1995 CPS used in their report. To avoid inconsistency between this indicator and the Dropout Rates report, six of these items were also
used for the statistics in this table and in table 4-1. Special imputations were not available for the October 1992 CPS at the time this table was prepared. However, different treatment of missing data due to item non-response in the two years is likely to have only small effects on the calculated statistics. For example, the dropout rate in 1995 for 16 - to 24 -year-olds who had repeated a grade was 24.4 when missing data on grade repetition and completing high school with a GED was imputed and 24.1 when these items were imputed.
SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys, 1992 and 1995.

Table 4-3 Percentage of all children aged 5-17 and those who repeated at least one grade, by type of disability: October 1992 and October 1995

| Type of disability | All children |  | Repeated at least one grade |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1992 | 1995 | 1992 | 1995 |
| Total 5- to 17-year-olds | 100.0 | 100.0 | 10.3 | 9.9 |
| Disability status |  |  |  |  |
| No disabling condition | 90.1 | 91.8 | 8.1 | 8.5 |
| Had a disabling condition* | 9.9 | 8.2 | 29.4 | 24.6 |
| Blindness | 0.3 | 0.1 | 17.1 | - |
| Deafness | 0.4 | 0.2 | 19.6 | 28.1 |
| Other hearing impairment | 1.2 | 0.5 | 22.9 | 17.9 |
| Emotional disturbance | 0.9 | 0.6 | 35.6 | 38.2 |
| Learning disability | 4.3 | 3.1 | 40.4 | 34.5 |
| Orthopedic impairment | 1.0 | 0.4 | 16.4 | 19.2 |
| Mental retardation | 0.7 | 0.4 | 21.2 | 25.0 |
| Speech impediment | 2.5 | 1.3 | 24.0 | 22.2 |

- Too few sample observations for a reliable estimate.
* Included in the totals are other disabling conditions not presented in the table. Children aged 5-17 with a disabling condition may be included in more than one disability category.

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys, 1992 and 1995.

## Note to Indicator 4: Estimates of non-English Ianguage usage and English language proficiency

Questions on language usage and proficiency were asked of the household respondent (usually the household head or the spouse of the household head) about all household members 5 years old and over. For each of these individuals the questions consisted of the following: "Does this person speak a language other than English at home?" If yes, then "What language does this person speak?" and "How well does this person speak English? Very well, Well, Not well, or Not at all." In 1995, the question "Has this person ever taken a course to learn how to read or write English as a second language?" was added.

Researchers and policymakers recognized that the question on English ability is an extremely subjective one: It is not possible to apply an objective standard to a person's report on his or her own English ability, or even worse, that person's report on the English language ability of other household members, to determine whether that person is really limited in his or her English ability. Thus, as a means of validating the English ability question, the English Language Proficiency Survey (ELPS) was sponsored by the Department of Education and carried out by the Census Bureau in 1982. The results
of that survey, which included a lengthier set of questions about language and tests of English ability geared to age, revealed a strong correlation between responses on the English ability question and the test scores.* Using a set pass/fail score, persons who had reported English speaking ability of "Very well" passed at a rate similar to English-only persons (who were used as a control group). Persons who reported less than "Very well," (e.g., "Well," "Not well," or "Not at all") had significantly higher rates of failure. These results indicated that, although it would not be advisable to use a person's response to the English language ability question as a diagnostic tool for determining that person's own need for language services, it was appropriate to use the results as an aggregate measure for the population as a whole. Thus the number of persons who reported speaking English less than "Very well" may be considered one measure of the number of limited-English-proficient persons in the country.

[^2]Table 5-1 Percentage of students who reported using a computer at school or home, by grade and family income: October 1984, 1989, and 1993

| Current education level and family income* | 1984 |  |  | 1989 |  |  | 1993 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Used a computer at school | Used a computer at home | Used a computer at home or school | Used a computer at school | Used a computer at home | Used a computer at home or school | Used a computer at school | Used a computer at home | Used a computer at home or school |
| Grades 1-6 |  |  |  |  |  |  |  |  |  |
| Total | 31.3 | 12.1 | 37.2 | 54.1 | 16.6 | 58.8 | 69.7 | 24.1 | 74.0 |
| Low income | 19.1 | 2.5 | 20.6 | 40.9 | 3.3 | 42.0 | 59.8 | 4.0 | 60.5 |
| Middle income | 30.2 | 10.0 | 35.4 | 54.0 | 13.5 | 58.1 | 69.1 | 18.8 | 72.6 |
| High income | 43.4 | 25.0 | 54.5 | 64.4 | 34.6 | 73.0 | 78.4 | 51.4 | 87.3 |
| Grades 7-12 |  |  |  |  |  |  |  |  |  |
| Total | 30.7 | 14.3 | 38.5 | 47.0 | 23.0 | 57.0 | 61.2 | 29.7 | 70.4 |
| Low income | 21.8 | 3.6 | 24.3 | 42.3 | 6.6 | 44.9 | 53.3 | 6.1 | 54.8 |
| Middle income | 30.2 | 10.8 | 35.7 | 46.3 | 18.4 | 54.3 | 61.2 | 23.7 | 68.4 |
| High income | 35.8 | 26.1 | 50.4 | 50.9 | 41.3 | 68.9 | 65.5 | 55.3 | 83.0 |

* Low income is the bottom 20 percent of all family incomes; high income is the top 20 percent of all family incomes; and middle income is the 60 percent in-between.

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 5-2 Percentage of students who reported using a computer, by grade and location of use: Selected years 1984-94

| Year | At home |  |  | At school* |  |  | At the library |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grade 4 | Grade 8 | Grade 11 | Grade 4 | Grade 8 | Grade 11 | Grade 4 | Grade 8 | Grade 11 |
| 1984 | 44.8 | 36.6 | 30.3 | 38.8 | 33.3 | 45.0 | 25.2 | 20.5 | 22.2 |
| 1988 | 45.5 | 46.2 | 39.7 | 70.2 | 58.2 | 55.3 | 27.6 | 39.8 | 37.4 |
| 1990 | 43.3 | 41.2 | 42.8 | 81.1 | 59.5 | 55.1 | 34.5 | 35.1 | 46.2 |
| 1992 | 43.0 | 44.0 | 50.7 | 83.5 | 62.4 | 72.8 | 45.6 | 47.3 | 62.1 |
| 1994 | 50.0 | 50.1 | 51.0 | 86.0 | 72.3 | 73.9 | 48.1 | 56.8 | 61.3 |

[^3]SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress,

Almanac: Writing, 1984 to 1994, 1996.

## Supplemental Tables and Notes

Table 5-3 Percentage of students who had access to a computer and those who studied mathematics through computer instruction, by age: Selected years 1978-94

| Access to a computer and reason for use | Age 13 |  |  |  |  |  | Age 17 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 |
| Have access to a computer in school | 12.2 | 22.8 | 46.9 | 44.1 | 49.1 | 47.5 | 24.4 | 49.6 | 57.1 | 54.5 | 57.7 | 51.9 |
| Study mathematics through computer instruction | 14.4 | 23.5 | 38.9 | 45.4 | 53.3 | 50.3 | 12.3 | 18.9 | 22.2 | 35.0 | 35.2 | 34.2 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, National Assessment of Educational Progress,
Almanac: Mathematics, 1978 to 1994, 1996.

Table 5-4 Percentage of students who reported ever using a computer, or whose family owns a computer, by age: Selected years 1986-94

|  | Ever used a computer |  | Family owns a computer |  |
| :--- | :---: | ---: | :--- | ---: | ---: |
| Year | Age 9 | Age 13 | Age 9 | Age 13 |
| 1986 | 75.3 | 89.3 | 27.8 | 31.1 |
| 1990 | 79.3 | 93.3 | 31.1 | 37.3 |
| 1992 | 81.8 | 95.3 | 33.5 | 42.2 |
| 1994 | 81.9 | 94.6 | 40.6 | 48.3 |

[^4]
## Note to Indicator 5: Comparability of sources for student computer use

Two primary data sources were used for the analysis in Indicator 5. Each surveyed different populations for different reasons. The full citations for these data sources are as follows:

- U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Almanac: Writing, 1984 to 1994, Mathematics, 1978 to 1994, Science, 1986 to 1994, 1996.
U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys, 1984, 1989, and 1993.

The National Assessment of Educational Progress (NAEP) Almanac data come from a survey administered to $9-13$-, and 17 -year-olds every 2 years. The questions on computer use are background questions administered to the students along with an assessment of their skills in mathematics, science, reading, and writing. The background questionnaire asks, among other things, how much
time students spend on computers and for what activities they use a computer.
The October Current Population Surveys (CPS) are administered to households each year. The computer component of these surveys is included every few years, and has questions concerning the access students in the household have to computers at school and at home. These data can be broken out by race/ethnicity and family income level to provide descriptive information on who has access to computers and where they are using them.
Because one survey is directed toward students and the other toward the heads of households, the results from the two sources are not comparable. In fact, the difference in the respondents for these two surveys may account for the inconsistencies between supplemental tables 5-1 and 5-2, including the fact that household respondents reported students using computers at home less often than students themselves reported using computers at home.

Table 6-1 Percentage of school library media centers that offered selected services and equipment, and library media center expenditures, by control and level of school: School year 1993-94

| Selected services and equipment | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Elementary | Secondary | Total | Elementary | Secondary |
| Percentage of schools' library media centers offering the following equipment: |  |  |  |  |  |  |
| Telephone | 61.2 | 55.8 | 74.7 | 40.8 | 30.7 | 52.8 |
| Fax machine | 7.8 | 4.7 | 15.1 | 5.1 | 3.1 | 7.9 |
| Computer with modem | 34.3 | 28.3 | 48.2 | 19.5 | 12.2 | 30.2 |
| Automated catalog | 24.0 | 20.3 | 32.8 | 9.7 | 5.5 | 15.8 |
| Automated circulation system | 37.9 | 34.1 | 47.7 | 9.5 | 5.4 | 16.0 |
| Database searching with CD-ROM | 31.2 | 23.9 | 48.1 | 13.9 | 6.3 | 25.7 |
| On-line database searching | 9.4 | 5.4 | 18.9 | 5.5 | 0.7 | 12.2 |
| Compact disc for periodical indices, etc. | 46.7 | 39.6 | 63.5 | 19.6 | 12.3 | 33.5 |
| Video laser disc | 31.9 | 30.3 | 36.1 | 6.3 | 4.8 | 9.9 |
| Connection to Internet | 12.0 | 9.5 | 17.5 | 5.3 | 2.8 | 9.2 |
| Cable television | 76.2 | 75.0 | 80.6 | 39.9 | 42.6 | 43.1 |
| Broadcast television | 48.6 | 48.0 | 49.9 | 39.9 | 42.9 | 39.7 |
| Closed circuit television | 25.5 | 22.0 | 34.0 | 8.8 | 5.7 | 19.2 |
| Satellite dish | 22.9 | 14.4 | 41.1 | 8.7 | 5.6 | 15.6 |
|  |  |  |  |  |  |  |
| students each week ${ }^{1}$ | 83 | 89 | 69 | 77 | 85 | 65 |
| Books checked out per 100 students |  |  |  |  |  |  |
| Percentage of schools offering the following services: |  |  |  |  |  |  |
| Microcomputers | 90.1 | 88.5 | 94.0 | 75.8 | 72.8 | 80.6 |
| Long distance learning | 19.0 | 15.9 | 24.8 | 8.8 | 8.3 | 8.2 |
| Average number of items held per 100 students at the end of the 1992-93 school year: |  |  |  |  |  |  |
| Books (number of volumes) | 2,585 | 2,467 | 2,891 | 3,716 | 3,455 | 5,383 |
| Current serial subscriptions (print and microfilm) | 9 | 7 | 14 | 8 | 7 | 16 |
| Video materials (tape and disc) | 38 | 35 | 46 | 47 | 44 | 50 |
| Other audio-visual materials | 116 | 114 | 117 | 76 | 74 | 120 |
| Microcomputer software | 18 | 20 | 12 | 26 | 28 | 11 |
| CD-ROM titles | 1 | 1 | 2 | 1 | ${ }^{2} 0$ | 2 |
| Expenditures ${ }^{3}$ per student for the 1992-93 school year on the following: |  |  |  |  |  |  |
| Books | \$8.52 | \$7.80 | \$10.06 | \$7.86 | \$6.94 | \$12.86 |
| Current serial subscriptions (print and microfilm) | 2.18 | 1.49 | 4.15 | 1.57 | 0.95 | 4.83 |
| Video materials (tape and disc) | 1.24 | 1.04 | 1.77 | 1.07 | 0.87 | 1.49 |
| Other audio-visual materials | 0.82 | 0.77 | 0.87 | 0.55 | 0.55 | 0.72 |
| Microcomputer software | 1.09 | 0.89 | 1.48 | 1.41 | 1.25 | 1.86 |
| CD-ROM titles | 0.63 | 0.38 | 1.24 | 0.69 | 0.59 | 1.69 |

${ }^{1}$ During the most recent full week of school.
${ }^{2}$ Data less than 0.5 are rounded to 0 .
${ }^{3}$ Locally budgeted expenditures exclude federal gifts and grants.

NOTE: Percentages are based on schools that have library media centers. In school year 1990-91, 96 percent of public and 87 percent of private schools had library media centers.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Library Media Center Questionnaire), 1993-94.

Table 6-2 Percentage of public school library media centers that offered selected services and equipment, and library media center expenditures, by selected school characteristics: School year 1993-94

| Selected services and equipment | Percentage of minority enrollment |  | Percentage of students eligible for free or reduced-price lunch |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than 20 percent | 20 percent or more | 0-5 | 6-20 | 21-40 | 41 or more |
| Percentage of schools' library media centers offering the following equipment: |  |  |  |  |  |  |
| Telephone | 61.8 | 60.0 | 75.6 | 71.0 | 63.6 | 50.5 |
| Fax machine | 9.3 | 5.7 | 12.3 | 10.1 | 7.2 | 5.6 |
| Computer with modem | 36.8 | 31.2 | 51.2 | 40.0 | 35.1 | 27.3 |
| Automated catalog | 25.0 | 21.5 | 27.5 | 28.4 | 26.7 | 18.1 |
| Automated circulation system | 38.2 | 36.8 | 42.4 | 46.2 | 40.4 | 30.2 |
| Database searching with CD-ROM | 34.2 | 27.3 | 43.4 | 38.8 | 34.3 | 21.8 |
| On-line database searching | 10.9 | 7.6 | 20.7 | 13.3 | 8.3 | 5.9 |
| Compact disc for periodical indices, etc. | 51.7 | 40.0 | 67.4 | 54.8 | 48.3 | 36.9 |
| Video laser disc | 31.5 | 31.3 | 39.2 | 39.0 | 31.0 | 25.8 |
| Connection to Internet | 12.9 | 11.2 | 21.9 | 16.0 | 11.2 | 9.0 |
| Cable television | 78.6 | 72.3 | 80.7 | 79.4 | 77.5 | 73.5 |
| Broadcast television | 46.1 | 52.2 | 47.6 | 45.1 | 48.5 | 51.2 |
| Closed circuit television | 22.7 | 28.7 | 27.2 | 24.5 | 27.0 | 24.8 |
| Satellite dish | 24.9 | 21.7 | 21.6 | 23.0 | 24.7 | 23.8 |
| Total students using library per 100 <br> students each week ${ }^{1}$ |  |  |  |  |  |  |
| Books checked out per 100 students each week ${ }^{1}$ | 138 | 115 | 108 | 123 | 128 | 136 |
| Percentage of schools offering the following services: |  |  |  |  |  |  |
| Microcomputers | 91.5 | 88.5 | 95.9 | 93.9 | 89.3 | 88.0 |
| Long distance learning | 18.0 | 20.4 | 14.8 | 19.0 | 17.2 | 21.3 |
| Average number of items held per 100 students at the end of the 1992-93 school year: |  |  |  |  |  |  |
| Books (number of volumes) | 2,994 | 2,053 | 2,268 | 2,327 | 2,415 | 2,794 |
| Current serial subscriptions (print and microfilm) | 11 | 7 | 6 | 8 | 9 | 9 |
| Video materials (tape and disc) | 45 | 30 | 43 | 39 | 37 | 39 |
| Other audio-visual materials | 125 | 105 | 100 | 114 | 109 | 125 |
| Microcomputer software | 22 | 14 | 11 | 21 | 15 | 18 |
| CD-ROM titles | 1 | 1 | 1 | 1 | 1 | 1 |
| Expenditures ${ }^{2}$ per student for the 1992-93 school year on the following: |  |  |  |  |  |  |
| Books | \$9.32 | \$7.46 | \$9.32 | \$7.94 | \$8.20 | \$8.67 |
| Current serial subscriptions (print and microfilm) | 2.74 | 1.46 | 2.22 | 2.33 | 2.09 | 2.11 |
| Video materials (tape and disc) | 1.38 | 1.05 | 1.46 | 1.21 | 1.12 | 1.30 |
| Other audio-visual materials | 0.86 | 0.77 | 1.04 | 0.71 | 0.71 | 0.78 |
| Microcomputer software | 1.28 | 0.85 | 0.78 | 1.09 | 1.47 | 0.87 |
| CD-ROM titles | 0.73 | 0.51 | 0.82 | 0.60 | 0.67 | 0.50 |

[^5]SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Library Media Center Questionnaire), 1993-94.

Table 6-3 Percentage of public school library media centers that offered selected services and equipment, and library media center expenditures, by school size: School year 1993-94

| Selected services and equipment | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Less than 150 | 150-499 | 500-749 | 750 or more |
| Percentage of schools' library media centers offering the following equipment: |  |  |  |  |
| Telephone | 41.0 | 52.6 | 67.7 | 83.1 |
| Fax machine | 9.1 | 5.6 | 8.3 | 11.9 |
| Computer with modem | 29.5 | 28.9 | 37.0 | 46.9 |
| Automated catalog | 16.3 | 18.8 | 26.2 | 34.8 |
| Automated circulation system | 17.6 | 30.5 | 41.8 | 59.7 |
| Database searching with CD-ROM | 26.8 | 26.5 | 30.6 | 46.9 |
| On-line database searching | 8.4 | 6.7 | 9.9 | 16.6 |
| Compact disc for periodical indices, etc. | 34.0 | 41.9 | 47.9 | 63.4 |
| Video laser disc | 19.4 | 25.4 | 37.7 | 43.6 |
| Connection to Internet | 7.2 | 10.5 | 13.5 | 17.0 |
| Cable television | 60.3 | 77.7 | 75.9 | 78.7 |
| Broadcast television | 43.7 | 45.3 | 51.7 | 55.8 |
| Closed circuit television | 9.5 | 20.3 | 27.4 | 43.1 |
| Satellite dish | 26.5 | 20.9 | 21.2 | 32.3 |
| Total students using library per 100 <br> students each week ${ }^{1}$ |  |  |  |  |
| Books checked out per 100 students |  |  |  |  |
| Percentage of schools offering the following services: |  |  |  |  |
| Microcomputers | 82.2 | 90.2 | 89.9 | 94.5 |
| Long distance learning | 22.5 | 18.8 | 16.7 | 21.6 |
| Average number of items held per 100 students at the end of the 1992-93 school year: |  |  |  |  |
| Books (number of volumes) | 7,115 | 2,736 | 1,641 | 1,348 |
| Current serial subscriptions (print and microfilm) | 35 | 8 | 5 | 4 |
| Video materials (tape and disc) | 105 | 39 | 26 | 22 |
| Other audio-visual materials | 227 | 122 | 97 | 74 |
| Microcomputer software | 54 | 20 | 10 | 8 |
| CD-ROM titles | 4 | 1 | 1 | 1 |
| Expenditures ${ }^{2}$ per student for the 1992-93 school year on the following: |  |  |  |  |
| Books | \$21.80 | \$8.57 | \$6.43 | \$4.88 |
| Current serial subscriptions (print and microfilm) | 7.54 | 1.99 | 1.26 | 1.41 |
| Video materials (tape and disc) | 3.68 | 1.10 | 0.97 | 0.78 |
| Other audio-visual materials | 1.89 | 0.81 | 0.68 | 0.48 |
| Microcomputer software | 4.04 | 0.97 | 0.75 | 0.45 |
| CD-ROM titles | 2.05 | 0.52 | 0.50 | 0.43 |

${ }^{1}$ During the most recent full week of school.
${ }^{2}$ Locally budgeted expenditures exclude federal gifts and grants.
NOTE: Percentages are based on schools that have library media centers. In school year 1990-91,96 percent of public schools had library media centers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Library Media Center Questionnaire), 1993-94.

Table 6-4 Percentage of public school library media centers that offered selected services and equipment, by state: School year 1993-94

| State | Computer with modem | Automated catalog | Database searching with CD-ROM | On-line database searching | Compact disc for periodical indices, etc. | Connection to the Internet |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 34.3 | 24.0 | 31.2 | 9.4 | 46.7 | 12.0 |
| Alabama | 33.0 | 37.6 | 29.3 | 5.7 | 44.1 | 3.2 |
| Alaska | 34.7 | 34.3 | 39.7 | 6.8 | 44.6 | 15.1 |
| Arizona | 28.1 | 38.3 | 28.0 | 5.6 | 43.0 | 6.0 |
| Arkansas | 19.0 | 18.7 | 20.5 | 5.6 | 29.7 | 8.5 |
| California | 19.9 | 14.0 | 23.4 | 3.1 | 38.0 | 6.2 |
| Colorado | 47.0 | 43.6 | 43.3 | 30.7 | 60.7 | 16.3 |
| Connecticut | 43.8 | 12.8 | 45.4 | 17.9 | 54.4 | 6.5 |
| Delaware | 41.8 | 22.5 | 34.7 | 14.4 | 48.2 | 5.7 |
| District of Columbia | 23.5 | 4.4 | 25.4 | 10.4 | 31.2 | 1.7 |
| Florida | 45.3 | 29.8 | 39.9 | 11.8 | 71.0 | 21.1 |
| Georgia | 29.8 | 48.2 | 34.5 | 13.6 | 46.6 | 10.8 |
| Hawaii | 75.3 | 27.1 | 47.7 | 24.3 | 64.8 | 29.4 |
| Idaho | 29.9 | 15.4 | 21.6 | 6.2 | 32.1 | 8.6 |
| Illinois | 32.2 | 17.7 | 23.0 | 7.9 | 36.6 | 7.1 |
| Indiana | 29.9 | 31.0 | 32.0 | 2.4 | 66.1 | 5.5 |
| lowa | 38.8 | 17.4 | 44.2 | 14.6 | 71.2 | 8.6 |
| Kansas | 24.9 | 31.5 | 20.9 | 9.7 | 46.6 | 10.6 |
| Kentucky | 30.1 | 33.1 | 32.3 | 4.3 | 60.3 | 5.3 |
| Louisiana | 24.2 | 13.9 | 21.9 | 2.3 | 28.1 | 6.2 |
| Maine | 33.3 | 18.9 | 25.5 | 5.4 | 38.9 | 5.4 |
| Maryland | 41.0 | 15.4 | 31.8 | 22.3 | 46.2 | 32.6 |
| Massachusetts | 38.2 | 9.1 | 45.3 | 8.9 | 46.3 | 24.1 |
| Michigan | 42.2 | 12.1 | 38.1 | 10.2 | 57.9 | 15.1 |
| Minnesota | 35.6 | 53.4 | 52.9 | 13.8 | 69.0 | 17.3 |
| Mississippi | 9.4 | 5.2 | 14.2 | 3.0 | 23.2 | 3.1 |
| Missouri | 31.3 | 39.4 | 31.4 | 17.8 | 46.0 | 15.7 |
| Montana | 50.8 | 20.6 | 43.7 | 17.4 | 58.2 | 6.2 |
| Nebraska | 31.6 | 29.0 | 36.3 | 12.1 | 58.8 | 15.8 |
| Nevada | 18.4 | 48.2 | 32.2 | 3.0 | 37.1 | 9.4 |
| New Hampshire | 43.9 | 21.4 | 39.8 | 8.2 | 51.2 | 17.4 |
| New Jersey | 39.1 | 28.5 | 30.2 | 7.2 | 46.2 | 5.2 |
| New Mexico | 32.8 | 21.9 | 32.0 | 3.9 | 43.1 | 7.8 |
| New York | 39.5 | 14.3 | 25.2 | 12.5 | 44.8 | 16.0 |
| North Carolina | 40.4 | 29.4 | 42.0 | 10.8 | 65.0 | 7.9 |
| North Dakota | 65.8 | 18.0 | 27.3 | 39.1 | 41.1 | 36.8 |
| Ohio | 33.1 | 12.9 | 16.9 | 3.3 | 31.9 | 7.1 |
| Oklahoma | 20.1 | 32.7 | 32.5 | 6.7 | 44.1 | 4.0 |
| Oregon | 38.6 | 39.2 | 51.5 | 18.9 | 49.5 | 11.7 |

Table 6-4 Percentage of public school library media centers that offered selected services and equipment, by state: School year 1993-94-Continued

|  | Computer <br> with modem | Automated <br> catalog | Database <br> searching <br> with CD-ROM | On-line <br> database <br> searching | Compact disc <br> for periodical <br> indices, etc. | Connection <br> to the <br> Internet |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| State | 33.9 | 17.3 | 32.6 | 2.5 | 39.2 | 6.4 |
| Pennsylvania | 25.0 | 11.8 | 13.0 | 1.0 | 21.7 | 18.6 |
| Rhode Island | 44.0 | 46.4 | 39.4 | 6.9 | 55.4 | 13.5 |
| South Carolina | 56.2 | 12.6 | 37.7 | 23.1 | 60.2 | 9.0 |
| South Dakota | 15.1 | 18.9 | 16.6 | 2.5 | 34.9 | 3.6 |
| Tennessee | 39.4 | 20.5 | 27.2 | 9.9 | 33.9 | 24.7 |
| Texas | 22.2 | 37.4 | 28.6 | 5.1 | 39.1 | 6.7 |
| Utah | 47.0 | 27.2 | 35.3 | 14.5 | 51.9 | 32.2 |
| Vermont | 61.7 | 35.5 | 38.6 | 10.6 | 72.4 | 31.4 |
| Virginia | 40.2 | 35.7 | 43.1 | 11.7 | 53.1 | 13.0 |
| Washington | 24.7 | 16.7 | 18.0 | 8.3 | 31.0 | 6.4 |
| West Virginia | 34.2 | 27.2 | 36.1 | 14.8 | 57.1 | 9.0 |
| Wisconsin | 39.0 | 28.0 | 32.1 | 8.1 | 41.7 | 6.6 |
| Wyoming |  |  |  |  |  |  |

NOTE: Percentages are based on schools that have library media centers. In school year 1990-91,96 percent of public schools had library media centers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Library Media Center Questionnaire), 1993-94.

Table 7-1 Event dropout rates ${ }^{1}$ for those in grades 10-12, aged 15-24, by parents' highest education level: ${ }^{2}$ October 1990-95

| Parents' highest education level | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Total | 4.0 | 4.0 | 4.4 | $\mathbf{4 . 5}$ | $\mathbf{5 . 3}$ | $\mathbf{5 . 7}$ |
| Less than high school graduate | 9.1 | 7.0 | 12.5 | 9.8 | 10.9 | 11.8 |
| High school graduate | 3.3 | 4.2 | 4.8 | 4.7 | 6.6 | 7.4 |
| Some college | 2.2 | 2.6 | 2.2 | 3.3 | 2.7 | 3.8 |
| Bachelor's degree or higher $^{\text {Not available }}{ }^{3}$ | 0.8 | 1.1 | 0.6 | 1.2 | 1.1 | 1.1 |

'The event dropout rate is the percentage of those in grades 10-12, aged 15-24, who were enrolled the previous October, but who were not enrolled and had not graduated the following October.
${ }^{2}$ Parents' highest education level is defined as either 1) the highest educational attainment of the two parents who reside with the student, or if only one parent is in the residence, the highest educational attainment of that parent; or 2) when neither parent resides with the student ( 8 percent of 15 - to 24 -year-olds in grades 10-12 in 1995), the highest educational attainment of the head of the household and his or her spouse.
${ }^{3}$ Parents' highest education level is not available 1) for those who do not live with their parents and who are classified as the head of the household (not including those who live in college dormitories); and 2) for those whose parents' educational attainment was not reported. In 1995, 15 percent of event dropouts aged 15-24 were in this category.
SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 7-2 Event dropout rates ${ }^{1}$ for those in grades 10-12, aged 15-24, by sex, race/ethnicity, and family income: October 1972-95

| October | Total | Sex |  | Race/ethnicity ${ }^{2}$ |  |  | Family income ${ }^{3}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | White | Black | Hispanic | Low | Middle | High |
| 1972 | 6.1 | 5.9 | 6.3 | 5.3 | 9.5 | 11.2 | 14.1 | 6.7 | 2.5 |
| 1973 | 6.3 | 6.8 | 5.7 | 5.5 | 9.9 | 10.0 | 17.3 | 7.0 | 1.8 |
| 1974 | 6.7 | 7.4 | 6.0 | 5.8 | 11.6 | 9.9 | - | - | - |
| 1975 | 5.8 | 5.4 | 6.1 | 5.0 | 8.7 | 10.9 | 15.7 | 6.0 | 2.6 |
| 1976 | 5.9 | 6.6 | 5.2 | 5.6 | 7.4 | 7.3 | 15.4 | 6.8 | 2.1 |
| 1977 | 6.5 | 6.9 | 6.1 | 6.1 | 8.6 | 7.8 | 15.5 | 7.6 | 2.2 |
| 1978 | 6.7 | 7.5 | 5.9 | 5.8 | 10.2 | 12.3 | 17.4 | 7.3 | 3.0 |
| 1979 | 6.7 | 6.8 | 6.7 | 6.0 | 9.9 | 9.8 | 17.1 | 6.9 | 3.6 |
| 1980 | 6.1 | 6.7 | 5.5 | 5.2 | 8.2 | 11.7 | 15.8 | 6.4 | 2.5 |
| 1981 | 5.9 | 6.0 | 5.8 | 4.8 | 9.7 | 10.7 | 14.4 | 6.2 | 2.8 |
| 1982 | 5.5 | 5.8 | 5.1 | 4.7 | 7.8 | 9.2 | 15.2 | 5.6 | 1.8 |
| 1983 | 5.2 | 5.8 | 4.7 | 4.4 | 7.0 | 10.1 | 10.4 | 6.0 | 2.2 |
| 1984 | 5.1 | 5.4 | 4.8 | 4.4 | 5.7 | 11.1 | 13.9 | 5.1 | 1.8 |
| 1985 | 5.2 | 5.4 | 5.0 | 4.3 | 7.8 | 9.8 | 14.2 | 5.2 | 2.1 |
| 1986 | 4.7 | 4.7 | 4.7 | 3.7 | 5.4 | 11.9 | 10.9 | 5.1 | 1.6 |
| 1987 | 4.1 | 4.3 | 3.8 | 3.5 | 6.4 | 5.4 | 10.3 | 4.7 | 1.0 |
| 1988 | 4.8 | 5.1 | 4.4 | 4.2 | 5.9 | 10.4 | 13.7 | 4.7 | 1.3 |
| 1989 | 4.5 | 4.5 | 4.5 | 3.5 | 7.8 | 7.8 | 10.0 | 5.0 | 1.1 |
| 1990 | 4.0 | 4.0 | 3.9 | 3.3 | 5.0 | 7.9 | 9.5 | 4.3 | 1.1 |
| 1991 | 4.0 | 3.8 | 4.2 | 3.2 | 6.0 | 7.3 | 10.6 | 4.0 | 1.0 |
| 1992 | 4.4 | 3.9 | 4.9 | 3.7 | 5.0 | 8.2 | 10.9 | 4.4 | 1.3 |
| 1993 | 4.5 | 4.6 | 4.3 | 3.9 | 5.8 | 6.7 | 12.3 | 4.3 | 1.3 |
| $1994{ }^{4}$ | 5.3 | 5.2 | 5.4 | 4.2 | 6.6 | 10.0 | 13.0 | 5.2 | 2.1 |
| $1995^{4}$ | 5.7 | 6.2 | 5.3 | 4.5 | 6.4 | 12.4 | 13.3 | 5.7 | 2.0 |

- Not available.
'The event dropout rate is the percentage of those in grades 10-12, aged $15-24$, who were enrolled the previous October, but who were not enrolled and had not graduated the following October.
${ }^{2}$ Included in the total but not shown separately are dropouts from other racial/ethnic groups.
${ }^{3}$ Low income is the bottom 20 percent of all family incomes; high income is the top 20 percent of all family incomes; and middle income is the 60 percent in-between.
${ }^{4}$ In 1994, new survey collection techniques and population weighting were used. See the supplemental note to this indicator for further discussion.

NOTE: Beginning in 1992, the Current Population Survey (CPS) changed the questions used to obtain the educational attainment of respondents. See the supplemental note to this indicator for further discussion.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Dropout Rates in the United States, 1995, table 1 (based on the October Current Population Surveys).

## Note to Indicator 7: Recent school dropouts

In this indicator, recent school dropouts are measured by using the event dropout rate. The event dropout rate is the percentage of students enrolled in grades 10-12 in October of a given year who are not enrolled and have not graduated 1 year later.

Calculating the event dropout rate requires estimating 1) the number of students who left high school before graduating (recent dropouts), and 2) the number of students who were enrolled in grades 10,11 , and 12 the previous October. The event dropout rate for 1995 is calculated by using data from the October Current Population Survey (CPS). The numerator is estimated as the number of persons aged 15-24 who were enrolled in grades 10-12 in October 1994, were not enrolled in grades 10-12 in October 1995, and who had not completed 12 years of school. The denominator is estimated as the event dropouts and those aged 15-24 who attended grades 10, 11, and 12 in October 1994 who were still enrolled in October 1995, or who had completed 12 (or more) years of school and who indicated that they had graduated between October 1994 and 1995. Those enrolled in special schools are counted as "not enrolled in regular school" and may be classified as recent dropouts if they had been enrolled in a regular school the previous October.
Change in questions used to report educational attainment
From 1972 to 1991, the CPS defined educational attainment as "years of school completed." Individuals who completed 12 years of school were regarded as high school graduates and those who completed 16 years of school as college graduates. The number of years of school completed was based on responses to two questions: 1) "What is the highest grade . . . ever attended?" and 2) "Did . . . complete it?" For example, an individual who responded that the highest grade he or she ever attended was the first year of college and that he or she did not complete it was regarded as having completed 12 years of school.

Beginning in 1992, these two questions were combined into a single question: "What is the highest level of school ... has completed or the highest degree ... has received?" Previously, the earlier high school levels were listed as single summary categories such as " 9 th grade, $10^{\text {th }}$ grade, or $11^{\text {th }}$ grade." Then, several new categories were added, including " $12^{\text {th }}$ grade, no diploma;" "H.S. graduate -diploma or equivalent;" and "Some college-no degree." Finally, college degrees were listed by type, allowing for a more exact understanding of educational attainment. See the supplemental note to Indicator 22 for further discussion on the how this change affects the measurement of educational attainment.

## Procedural changes

In 1994, the Bureau of the Census introduced several changes to the procedures used in the CPS. These changes may affect the comparability of current statistics to those derived from earlier surveys. In 1994, the sample weights were calculated using information from both the 1980 and the 1990 Decennial Censuses. In earlier surveys, 1990 population figures were based on the 1980 Decennial Census and information collected during the 1980s on births, deaths, and migration. For some groups, the latter produces different population estimates than the former, the sample weights would change, as would the statistics used to calculate them.
Also, the Bureau began using Computer-Aided Personal (and Telephone) Interviews (CAPI and CATI) to administer the survey in 1994. For earlier surveys, interviewers were given printed questionnaires to use. It is well known that the method in which a survey is administered can have effects on its responses. Although substantial testing was done to minimize or predict these effects, all questions were not tested. Therefore, some statistics, such as dropout rates, may be affected by the change in survey procedures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Dropout Rates in the United States, 1994.

Table 8-1 Percentage of high school graduates aged 16-24 who were enrolled in college the October following graduation, by parents' highest education level: 1990-95

| Parents' highest education level $^{1}$ | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | $\mathbf{6 0 . 1}$ | $\mathbf{6 2 . 5}$ | 61.9 | $\mathbf{6 1 . 5}$ | $\mathbf{6 1 . 9}$ | $\mathbf{6 1 . 9}$ |
| Less than high school graduate | 33.9 | 42.6 | 33.1 | 47.1 | 43.0 | 27.3 |
| High school graduate | 49.0 | 51.0 | 55.5 | 52.3 | 49.9 | 47.0 |
| Some college | 65.6 | 67.5 | 67.5 | 62.7 | 65.0 | 70.2 |
| Bachelor's degree or higher $^{\text {Not available }}{ }^{2}$ | 83.1 | 87.2 | 81.3 | 87.9 | 82.5 | 87.7 |

'Parents' highest education level is defined as either 1) the highest educational attainment of the two parents who reside with the student, or if only one parent is in the residence, the highest educational attainment of that parent; or 2) when neither parent resides with the student ( 6 percent of those enrolled in college in 1995), the highest educational attainment of the head of the household and his or her spouse.
${ }^{2}$ Parents' highest education level is not available 1) for those who do not live with their parents and who are classified as the head of the household (not including those who live in college dormitories); and 2) for those whose parents' educational attainment was not reported. In 1995, 10 percent of high school graduates aged 16-24 were in this category.
SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 8-2 Percentage of high school graduates aged 16-24 who were enrolled in college the October following graduation, by sex and type of institution: 1972-95

| October | Male |  |  | Female |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 2-year | 4 -year | Total | 2-year | 4 -year |
| 1972 | 52.7 | - | - | 46.0 | - | - |
| 1973 | 50.0 | 14.6 | 35.4 | 43.4 | 15.2 | 28.2 |
| 1974 | 49.4 | 16.6 | 32.8 | 45.9 | 13.9 | 32.0 |
| 1975 | 52.6 | 19.0 | 33.6 | 49.0 | 17.4 | 31.6 |
| 1976 | 47.2 | 14.5 | 32.7 | 50.3 | 16.6 | 33.8 |
| 1977 | 52.1 | 17.2 | 35.0 | 49.3 | 17.8 | 31.5 |
| 1978 | 51.1 | 15.6 | 35.5 | 49.3 | 18.3 | 31.0 |
| 1979 | 50.4 | 16.9 | 33.5 | 48.4 | 18.1 | 30.3 |
| 1980 | 46.7 | 17.1 | 29.7 | 51.8 | 21.6 | 30.2 |
| 1981 | 54.8 | 20.9 | 33.9 | 53.1 | 20.1 | 33.0 |
| 1982 | 49.1 | 17.5 | 31.6 | 52.0 | 20.6 | 31.4 |
| 1983 | 51.9 | 20.2 | 31.7 | 53.4 | 18.4 | 35.1 |
| 1984 | 56.0 | 17.7 | 38.4 | 54.5 | 21.0 | 33.5 |
| 1985 | 58.6 | 19.9 | 38.8 | 56.8 | 19.3 | 37.5 |
| 1986 | 55.8 | 21.3 | 34.5 | 51.9 | 17.3 | 34.6 |
| 1987 | 58.3 | 17.3 | 41.0 | 55.3 | 20.3 | 35.0 |
| 1988 | 57.1 | 21.3 | 35.8 | 60.7 | 22.4 | 38.3 |
| 1989 | 57.6 | 18.3 | 39.3 | 61.6 | 23.1 | 38.5 |
| 1990 | 58.0 | 19.6 | 38.4 | 62.2 | 20.6 | 41.6 |
| 1991 | 57.9 | 22.9 | 35.0 | 67.1 | 26.8 | 40.3 |
| 1992 | 60.0 | 22.1 | 37.8 | 63.8 | 23.9 | 40.0 |
| 1993 | 58.7 | 22.4 | 36.3 | 64.0 | 22.4 | 41.6 |
| 1994 | 60.6 | 23.0 | 37.5 | 63.2 | 19.1 | 44.1 |
| 1995 | 62.6 | 25.3 | 37.4 | 61.3 | 18.1 | 43.2 |

- Not available. Data regarding type of institution were not SOURCE: U.S. Department of Commerce, Bureau of the Census, collected until 1973.

[^6]NOTE: Details may not add to totals due to rounding.

Table 8-3 Percentage of high school graduates aged 16-24 who were enrolled in college the October following graduation, by race/ethnicity and type of institution: 1972-95

| October | White |  |  | Black |  |  | Hispanic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 2-year | 4 -year | Total | 2-year | 4-year | Total | 2-year | 4 -year |
| 1972 | 49.7 | - | - | 44.6 | - | - | 45.0 | - | - |
| 1973 | 47.8 | 14.6 | 33.2 | 32.5 | 11.4 | 21.1 | 54.1 | 30.1 | 24.0 |
| 1974 | 47.2 | 13.9 | 33.3 | 47.2 | 16.4 | 30.8 | 46.9 | 30.0 | 16.8 |
| 1975 | 51.1 | 18.0 | 33.1 | 41.7 | 13.1 | 28.7 | 58.0 | 30.6 | 27.5 |
| 1976 | 48.8 | 14.9 | 33.9 | 44.4 | 11.3 | 33.1 | 52.7 | 36.5 | 16.2 |
| 1977 | 50.8 | 16.7 | 34.1 | 49.5 | 16.6 | 32.8 | 50.8 | 32.3 | 18.5 |
| 1978 | 50.5 | 16.4 | 34.1 | 46.4 | 17.5 | 28.9 | 42.0 | 20.4 | 21.6 |
| 1979 | 49.9 | 16.8 | 33.1 | 46.7 | 21.0 | 25.7 | 45.0 | 21.3 | 23.6 |
| 1980 | 49.8 | 18.8 | 31.0 | 42.7 | 18.8 | 23.9 | 52.3 | 30.9 | 21.4 |
| 1981 | 54.9 | 20.2 | 34.3 | 42.7 | 15.5 | 27.3 | 52.1 | 29.7 | 22.4 |
| 1982 | 52.7 | 19.5 | 33.2 | 35.8 | 12.7 | 23.2 | 43.2 | 23.4 | 19.8 |
| 1983 | 55.0 | 19.5 | 35.5 | 38.2 | 15.7 | 22.5 | 54.2 | 16.9 | 37.3 |
| 1984 | 59.0 | 18.7 | 40.3 | 39.8 | 19.8 | 20.0 | 44.3 | 23.9 | 20.4 |
| 1985 | 60.1 | 20.1 | 40.0 | 42.2 | 13.2 | 29.0 | 51.0 | 26.8 | 24.2 |
| 1986 | 56.8 | 19.9 | 36.9 | 36.9 | 12.7 | 24.3 | 44.0 | 28.5 | 15.5 |
| 1987 | 58.6 | 19.2 | 39.4 | 52.2 | 15.8 | 36.4 | 33.5 | 13.4 | 20.1 |
| 1988 | 61.1 | 22.2 | 38.9 | 44.4 | 16.7 | 27.6 | 57.1 | 25.9 | 31.2 |
| 1989 | 60.7 | 19.6 | 41.2 | 53.4 | 20.8 | 32.6 | 55.1 | 37.2 | 17.9 |
| 1990 | 63.0 | 19.7 | 43.3 | 46.8 | 19.6 | 27.2 | 42.7 | 27.0 | 15.7 |
| 1991 | 65.4 | 25.8 | 39.6 | 46.4 | 18.7 | 27.7 | 57.2 | 25.2 | 32.0 |
| 1992 | 64.3 | 23.0 | 41.3 | 48.2 | 17.4 | 30.8 | 55.0 | 29.4 | 25.6 |
| 1993 | 62.9 | 21.9 | 41.0 | 55.6 | 18.9 | 36.7 | 62.2 | 37.8 | 24.4 |
| 1994 | 64.5 | 20.7 | 43.8 | 50.8 | 19.8 | 31.0 | 49.1 | 25.9 | 23.2 |
| 1995 | 64.3 | 20.7 | 43.6 | 51.2 | 22.0 | 29.2 | 53.7 | 22.4 | 31.2 |

- Not available. Data regarding type of institution were not SOURCE: U.S. Department of Commerce, Bureau of the Census, collected until 1973.
NOTE: Details may not add to totals due to rounding.

Table 8-4 Percentage of high school graduates aged 16-24 who were enrolled in college the October following graduation, by type of institution, family income, and race/ ethnicity: 1972-95

| October | Total | Type of institution |  | Family income ${ }^{1}$ |  |  | Race/ethnicity ${ }^{2}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2-year | 4 -year | Low | Middle | High | White | Black | Hispanic |
| 1972 | 49.2 | - | - | 26.1 | 45.2 | 63.8 | 49.7 | 44.6 | 45.0 |
| 1973 | 46.6 | 14.9 | 31.7 | 20.3 | 40.9 | 64.4 | 47.8 | 32.5 | 54.1 |
| 1974 | 47.6 | 15.2 | 32.4 | - | - | - | 47.2 | 47.2 | 46.9 |
| 1975 | 50.7 | 18.2 | 32.6 | 31.2 | 46.2 | 64.5 | 51.1 | 41.7 | 58.0 |
| 1976 | 48.8 | 15.6 | 33.3 | 39.1 | 40.5 | 63.0 | 48.8 | 44.4 | 52.7 |
| 1977 | 50.6 | 17.5 | 33.1 | 27.7 | 44.2 | 66.3 | 50.8 | 49.5 | 50.8 |
| 1978 | 50.1 | 17.0 | 33.1 | 31.4 | 44.3 | 64.0 | 50.5 | 46.4 | 42.0 |
| 1979 | 49.3 | 17.5 | 31.8 | 30.5 | 43.2 | 63.2 | 49.9 | 46.7 | 45.0 |
| 1980 | 49.3 | 19.4 | 29.9 | 32.5 | 42.5 | 65.2 | 49.8 | 42.7 | 52.3 |
| 1981 | 53.9 | 20.5 | 33.5 | 33.6 | 49.2 | 67.6 | 54.9 | 42.7 | 52.1 |
| 1982 | 50.6 | 19.1 | 31.5 | 32.8 | 41.7 | 70.9 | 52.7 | 35.8 | 43.2 |
| 1983 | 52.7 | 19.2 | 33.5 | 34.6 | 45.2 | 70.3 | 55.0 | 38.2 | 54.2 |
| 1984 | 55.2 | 19.4 | 35.8 | 34.5 | 48.4 | 74.0 | 59.0 | 39.8 | 44.3 |
| 1985 | 57.7 | 19.6 | 38.1 | 40.2 | 50.6 | 74.6 | 60.1 | 42.2 | 51.0 |
| 1986 | 53.8 | 19.3 | 34.5 | 33.9 | 48.5 | 71.0 | 56.8 | 36.9 | 44.0 |
| 1987 | 56.8 | 18.9 | 37.9 | 36.9 | 50.0 | 73.8 | 58.6 | 52.2 | 33.5 |
| 1988 | 58.9 | 21.9 | 37.1 | 42.5 | 54.7 | 72.8 | 61.1 | 44.4 | 57.1 |
| 1989 | 59.6 | 20.7 | 38.9 | 48.1 | 55.4 | 70.7 | 60.7 | 53.4 | 55.1 |
| 1990 | 60.1 | 20.1 | 40.0 | 46.7 | 54.4 | 76.6 | 63.0 | 46.8 | 42.7 |
| 1991 | 62.5 | 24.9 | 37.7 | 39.5 | 58.4 | 78.2 | 65.4 | 46.4 | 57.2 |
| 1992 | 61.9 | 23.0 | 38.9 | 40.9 | 57.0 | 79.0 | 64.3 | 48.2 | 55.0 |
| 1993 | 61.5 | 22.4 | 39.1 | 50.4 | 56.9 | 79.3 | 62.9 | 55.6 | 62.2 |
| 1994 | 61.9 | 21.0 | 40.9 | 41.0 | 57.8 | 78.4 | 64.5 | 50.8 | 49.1 |
| 1995 | 61.9 | 21.5 | 40.4 | 34.2 | 56.1 | 83.4 | 64.3 | 51.2 | 53.7 |

- Not available. Data regarding type of institution were not collected until 1973, and data regarding family income were not available in 1974.
${ }^{1}$ Low income is the bottom 20 percent of all family incomes; high income is the top 20 percent of all family incomes; and middle income is the 60 percent in-between. Income data for 1994 are revised from previously published figures.
${ }^{2}$ Included in the total but not shown separately are high school graduates from other racial/ethnic groups.
NOTE: Details may not add to totals due to rounding.
SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.


## Note to Indicator 8: Family income

The Current Population Survey (CPS) includes a family income variable that is used as a measure of a student's economic standing in many indicators in this publication. The three family income categories used in this publication are low, middle, and high income. Low income is the bottom 20 percent of all family incomes; high income is the top 20 percent of all family incomes; and middle income is the 60 percent in-between. The table that follows shows the real dollar amounts, rounded to the nearest $\$ 100$, of the breakpoints between low and middle income and between middle and high income. For example, in 1995, low income was defined as the range from $\$ 0-11,700$; middle income was defined as the range between $\$ 11,701-56,200$; and high income was defined as $\$ 56,201$ and over. Therefore, the breakpoints between low and middle income and between middle and high income are $\$ 11,700$ and $\$ 56,200$, respectively.

Dollar value (in current dollars) at the breakpoint between low and middle and between middle and high income categories of family income: October 1970-95

|  | Breakpoints between: |  |
| :--- | ---: | ---: |
| October | Low and middle | Middle and high |
| 1970 | $\$ 3,300$ | $\$ 11,900$ |
| 1971 | - | - |
| 1972 | 3,500 | 13,600 |
| 1973 | 3,900 | 14,800 |
| 1974 | - | - |
| 1975 | 4,300 | 17,000 |
| 1976 | 4,600 | 18,300 |
| 1977 | 4,900 | 20,000 |
| 1978 | 5,300 | 21,600 |
| 1979 | 5,800 | 23,700 |
| 1980 | 6,000 | 25,300 |
| 1981 | 6,500 | 27,100 |
| 1982 | 7,100 | 31,300 |
| 1983 | 7,300 | 32,400 |
| 1984 | 7,400 | 34,200 |
| 1985 | 7,800 | 36,400 |
| 1986 | 8,400 | 38,200 |
| 1987 | 8,800 | 39,700 |
| 1988 | 9,300 | 42,100 |
| 1989 | 9,500 | 44,000 |
| 1990 | 9,600 | 46,300 |
| 1991 | 10,500 | 48,400 |
| 1992 | 10,700 | 49,700 |
| 1993 | 10,800 | 50,700 |
| 1994 | 11,800 | $* 55,300$ |
| 1995 | 11,700 | 56,200 |
| 1 |  |  |

* Revised from previously published figure.
- Not available.

NOTE: Amounts are rounded to nearest $\$ 100$.

Table 9-1 Percentage of students who attended a postsecondary institution within 2 years following scheduled high school graduation, by highest level of institution attended and selected characteristics: 1974, 1982, and 1994

| Selected | Total |  |  | 4-year |  |  | 2-year |  |  | Vocational, technical, or trade school |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| characteristics | 1974 | 1982 | 1994 | 1974 | 1982 | 1994 | 1974 | 1982 | 1994 | 1974 | 1982 | 1994 |
| Total | 61.1 | 64.6 | 72.3 | 36.5 | 43.7 | 43.1 | 14.8 | 17.4 | 22.4 | 9.7 | 3.5 | 6.9 |
| Sex* |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 62.1 | 64.0 | 68.8 | 38.1 | 44.0 | 40.4 | 15.6 | 17.7 | 22.2 | 8.4 | 2.3 | 6.2 |
| Female | 60.1 | 66.9 | 75.9 | 34.9 | 44.8 | 45.8 | 14.0 | 17.4 | 22.6 | 11.1 | 4.7 | 7.5 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 62.3 | 65.9 | 74.0 | 38.1 | 45.3 | 45.9 | 14.6 | 17.1 | 21.9 | 9.6 | 3.5 | 6.2 |
| Black | 57.8 | 59.5 | 64.7 | 32.4 | 39.9 | 37.8 | 12.7 | 15.3 | 18.8 | 12.7 | 4.2 | 8.1 |
| Hispanic | 56.4 | 56.9 | 65.0 | 22.2 | 30.7 | 28.2 | 24.8 | 23.3 | 27.5 | 9.4 | 2.9 | 9.3 |
| Asian/ |  |  |  |  |  |  |  |  |  |  |  |  |
| Pacific Islander | 82.6 | 89.6 | 84.9 | 57.6 | 63.6 | 49.3 | 21.5 | 24.1 | 26.7 | 3.5 | 2.0 | 8.9 |
| Native American/ Other | 44.1 | 53.4 | 57.4 | 17.1 | 28.7 | 23.2 | 15.9 | 22.5 | 28.7 | 11.0 | 2.1 | 5.5 |
| Control of high school |  |  |  |  |  |  |  |  |  |  |  |  |
| Public | 60.2 | 62.6 | 70.1 | 35.4 | 41.0 | 40.2 | 15.1 | 18.1 | 23.0 | 9.7 | 3.5 | 7.0 |
| Catholic | 73.7 | 83.0 | 91.6 | 52.3 | 66.1 | 70.2 | 11.6 | 13.4 | 16.4 | 9.8 | 3.6 | 5.0 |
| Private, other | 84.4 | 81.9 | 94.7 | 61.8 | 70.5 | 69.8 | 10.1 | 7.4 | 17.6 | 12.5 | 4.0 | 7.3 |
| Urbanicity of high school |  |  |  |  |  |  |  |  |  |  |  |  |
| Central city | 63.1 | 65.6 | 75.6 | 37.8 | 45.3 | 45.8 | 16.4 | 16.7 | 20.9 | 8.9 | 3.6 | 9.0 |
| Urban fringe/ large town | 69.9 | 68.3 | 75.5 | 45.7 | 45.8 | 44.7 | 16.8 | 19.1 | 24.2 | 7.3 | 3.4 | 6.6 |
| Rural/small town | 56.1 | 58.3 | 65.1 | 32.0 | 39.2 | 38.5 | 12.8 | 15.3 | 21.3 | 11.3 | 3.8 | 5.2 |
| Achievement test quartile in high school |  |  |  |  |  |  |  |  |  |  |  |  |
| First (low) | 36.0 | 36.2 | 46.8 | 9.9 | 16.4 | 11.6 | 13.0 | 16.0 | 26.5 | 13.1 | 3.8 | 8.6 |
| Second | 51.2 | 53.8 | 65.6 | 22.3 | 28.7 | 26.6 | 16.8 | 20.5 | 29.5 | 12.2 | 4.6 | 9.5 |
| Third | 66.9 | 72.0 | 79.6 | 40.6 | 48.3 | 49.5 | 17.0 | 19.7 | 24.8 | 9.3 | 4.1 | 5.4 |
| Fourth (high) | 86.4 | 89.2 | 92.6 | 70.2 | 73.7 | 77.2 | 11.1 | 13.0 | 12.3 | 5.1 | 2.5 | 3.1 |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |  |  |  |
| Low quartile | 42.0 | 45.5 | 48.9 | 18.8 | 25.5 | 18.9 | 11.4 | 16.6 | 21.8 | 11.7 | 3.4 | 8.2 |
| Middle quartiles | 58.9 | 63.7 | 70.7 | 31.3 | 40.7 | 37.6 | 16.4 | 18.8 | 25.8 | 11.2 | 4.3 | 7.3 |
| High quartile | 85.1 | 88.1 | 91.3 | 65.1 | 70.3 | 69.5 | 15.1 | 15.7 | 16.7 | 4.9 | 2.0 | 5.1 |

* In 1980, the majority of the respondents missing the sex variable had less than a high school diploma; therefore, estimates of the percentage of male and female students who attended a postsecondary institution within 2 years following their scheduled 1980 high school graduation may be slightly inflated.
NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond (HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

Table 9-2 Percentage of students who attended a postsecondary institution within 2 years following scheduled high school graduation, by socioeconomic status, race/ethnicity, and highest level of institution attended: 1974, 1982, and 1994

| Race/ethnicity and type of institution | Senior in 1972 |  |  | Senior in 1980 |  |  | Senior in 1992 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Socioeconomic status |  |  | Socioeconomic status |  |  | Socioeconomic status |  |  |
|  | $\begin{array}{r} \text { Low } \\ \text { quartile } \end{array}$ | Middle quartiles | $\begin{array}{r} \text { High } \\ \text { quartile } \end{array}$ | $\begin{array}{r} \text { Low } \\ \text { quartile } \end{array}$ | Middle quartiles | $\begin{array}{r} \text { High } \\ \text { quartile } \\ \hline \end{array}$ | $\begin{array}{r} \text { Low } \\ \text { quartile } \end{array}$ | $\begin{array}{r} \text { Middle } \\ \text { quartiles } \end{array}$ | $\begin{array}{r} \text { High } \\ \text { quartile } \\ \hline \end{array}$ |
| Total | 42.0 | 58.9 | 85.1 | 45.5 | 63.7 | 88.1 | 48.9 | 70.7 | 91.3 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 38.0 | 58.9 | 85.1 | 41.4 | 63.4 | 88.2 | 40.6 | 71.3 | 91.2 |
| Black | 51.7 | 64.0 | 88.8 | 53.6 | 66.2 | 88.3 | 54.9 | 66.5 | 89.2 |
| Hispanic | 52.8 | 60.5 | 67.9 | 47.4 | 62.8 | 84.4 | 56.2 | 68.9 | 92.9 |
| Asian/Pacific Islander | 65.7 | 81.7 | 100.0 | 82.6 | 88.3 | 96.6 | 79.7 | 79.6 | 93.4 |
| Native American/Other | 27.8 | 49.3 | - | 51.5 | 49.9 | - | 34.3 | 62.7 | - |
| 4-year | 18.8 | 31.3 | 65.1 | 25.5 | 40.7 | 70.3 | 18.9 | 37.6 | 69.5 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 16.3 | 31.4 | 65.5 | 22.2 | 40.6 | 70.9 | 16.1 | 37.7 | 70.5 |
| Black | 26.4 | 38.8 | 62.9 | 34.2 | 45.9 | 65.8 | 23.1 | 41.5 | 67.1 |
| Hispanic | 20.5 | 21.8 | 37.4 | 23.5 | 33.5 | 58.9 | 18.1 | 31.5 | 58.7 |
| Asian/Pacific Islander | 36.0 | 57.6 | 77.4 | 51.5 | 58.2 | 79.7 | 38.3 | 39.3 | 66.5 |
| Native American/Other | 11.1 | 15.8 | - | 27.7 | 27.3 | - | 8.4 | 29.4 | - |
| 2-year | 11.4 | 16.4 | 15.1 | 16.6 | 18.8 | 15.7 | 21.8 | 25.8 | 16.7 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 9.9 | 16.1 | 14.9 | 16.0 | 18.4 | 15.3 | 17.9 | 26.6 | 16.2 |
| Black | 11.4 | 14.1 | 17.4 | 15.2 | 15.6 | 18.2 | 23.2 | 17.5 | 13.5 |
| Hispanic | 23.0 | 28.5 | 23.8 | 20.3 | 27.6 | 22.0 | 27.9 | 28.6 | 23.4 |
| Asian/Pacific Islander | 26.0 | 20.3 | 19.9 | 30.8 | 25.9 | 16.9 | 27.5 | 31.3 | 20.5 |
| Native American/Other | 8.8 | 18.8 | - | 18.3 | 22.5 | - | 21.0 | 27.8 | - |
| Vocational, technical, or trade school | 11.7 | 11.2 | 4.9 | 3.4 | 4.3 | 2.0 | 8.2 | 7.3 | 5.1 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 11.9 | 11.4 | 4.6 | 3.2 | 4.4 | 1.9 | 6.7 | 6.9 | 4.5 |
| Black | 13.9 | 11.0 | 8.4 | 4.3 | 4.7 | 4.3 | 8.7 | 7.5 | 8.7 |
| Hispanic | 9.4 | 10.2 | 6.8 | 3.6 | 1.7 | 3.5 | 10.1 | 8.8 | 10.8 |
| Asian/Pacific Islander | 3.8 | 3.7 | 2.7 | 0.2 | 4.2 | 0.0 | 13.9 | 9.1 | 6.4 |
| Native American/Other | 7.9 | 14.6 | - | 5.5 | 0.0 | - | 4.9 | 5.5 | 二 |

- Too few sample observations for a reliable estimate.

NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond (HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

Table 9-3 Percentage of students who attended a postsecondary institution within 2 years following scheduled high school graduation, by achievement test quartile, race ethnicity, and highest level of institution attended: 1974, 1982, 1994

| Race/ethnicity and type of institution | Senior in 1972 |  |  |  | Senior in 1980 |  |  |  | Senior in 1992 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Achievement test quartile |  |  |  | Achievement test quartile |  |  |  | Achievement test quartile |  |  |  |
|  | $\begin{array}{r} \text { First } \\ \text { (low) } \\ \hline \end{array}$ | Second | Third | Fourth <br> (high) | $\begin{array}{r} \text { First } \\ \text { (low) } \\ \hline \end{array}$ | Second | Third | Fourth <br> (high) | $\begin{array}{r} \text { First } \\ \text { (low) } \\ \hline \end{array}$ | Second | Third | Fourth (high) |
| Total | 36.0 | 51.2 | 66.9 | 86.4 | 36.2 | 53.8 | 72.0 | 89.2 | 46.8 | 65.6 | 79.6 | 92.6 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 31.5 | 49.5 | 66.2 | 86.1 | 32.4 | 50.6 | 70.3 | 89.0 | 43.1 | 63.7 | 79.0 | 92.6 |
| Black | 47.9 | 65.8 | 77.7 | 96.2 | 43.5 | 68.5 | 87.7 | 95.0 | 48.1 | 69.3 | 83.1 | 95.6 |
| Hispanic | 46.2 | 58.7 | 72.6 | 87.6 | 39.1 | 59.9 | 77.8 | 88.6 | 55.3 | 63.7 | 80.8 | 86.9 |
| Asian/Pacific Islander | - | 72.9 | 87.7 | 93.0 | 71.2 | 86.6 | 87.2 | 97.3 | 54.9 | 89.5 | 88.6 | 96.2 |
| Native American/Other | 27.0 | 48.7 | - | - | 37.6 | 49.2 | - | - | 56.0 | 70.0 | - | - |
| 4-year | 9.9 | 22.3 | 40.6 | 70.2 | 16.4 | 28.7 | 48.3 | 73.7 | 11.6 | 26.6 | 49.5 | 77.2 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 7.1 | 20.1 | 39.3 | 70.1 | 13.0 | 26.1 | 46.7 | 73.7 | 8.8 | 25.3 | 48.8 | 77.3 |
| Black | 18.9 | 44.0 | 62.5 | 88.2 | 24.5 | 46.4 | 69.8 | 80.1 | 19.1 | 37.0 | 58.1 | 85.4 |
| Hispanic | 9.2 | 23.8 | 45.8 | 52.5 | 15.5 | 28.0 | 48.0 | 70.3 | 12.3 | 19.9 | 48.5 | 69.8 |
| Asian/Pacific Islander | - | 25.2 | 72.1 | 75.1 | 33.4 | 47.2 | 61.9 | 88.2 | 2.3 | 33.5 | 48.7 | 78.4 |
| Native American/Other | 7.3 | 14.8 | - | - | 18.6 | 25.0 | - | - | 7.3 | 28.1 | - | - |
| 2-year | 13.0 | 16.8 | 17.0 | 11.1 | 16.0 | 20.5 | 19.7 | 13.0 | 26.5 | 29.5 | 24.8 | 12.3 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 11.6 | 16.7 | 17.3 | 10.7 | 15.3 | 20.0 | 19.7 | 12.7 | 26.3 | 29.5 | 25.1 | 12.3 |
| Black | 13.2 | 12.8 | 8.5 | 6.6 | 15.0 | 16.6 | 13.0 | 12.4 | 21.3 | 22.0 | 17.7 | 9.5 |
| Hispanic | 24.2 | 28.2 | 21.5 | 28.4 | 20.6 | 28.2 | 28.4 | 16.0 | 32.4 | 33.1 | 27.1 | 13.8 |
| Asian/Pacific Islander | - | 32.0 | 14.1 | 18.0 | 34.7 | 39.4 | 18.8 | 9.2 | 34.6 | 40.4 | 32.3 | 13.4 |
| Native American/Other | 10.8 | 22.0 | - | - | 17.0 | 21.5 | - | - | 45.6 | 35.6 | - | - |
| Vocational, technical, or trade school | 13.1 | 12.2 | 9.3 | 5.1 | 3.8 | 4.6 | 4.1 | 2.5 | 8.6 | 9.5 | 5.4 | 3.1 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 12.8 | 12.7 | 9.6 | 5.3 | 4.2 | 4.6 | 3.9 | 2.5 | 8.0 | 8.8 | 5.0 | 3.1 |
| Black | 15.8 | 9.1 | 6.6 | 1.5 | 4.1 | 5.5 | 5.0 | 2.5 | 7.7 | 10.3 | 7.2 | 0.6 |
| Hispanic | 12.9 | 6.8 | 5.3 | 6.7 | 3.0 | 3.7 | 1.4 | 2.3 | 10.7 | 10.7 | 5.1 | 3.2 |
| Asian/Pacific Islander | - | 15.7 | 1.5 | 0.0 | 3.1 | 0.0 | 6.5 | 0.0 | 17.9 | 15.7 | 7.6 | 4.4 |
| Native American/Other | 9.0 | 11.9 | - | - | 1.9 | 2.8 | - | - | 3.0 | 6.3 | - | - |

- Too few sample observations for a reliable estimate.

NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond (HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

Table 9-4 Percentage of students who attended a postsecondary institution within 2 years following scheduled high school graduation, by selected student characteristics: 1974, 1982, and 1994

| Selected student characteristics | Senior in 1972 |  |  | Senior in 1980 |  |  | Senior in 1992 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male* | Female* | Total | Male | Female |
| Total | 61.1 | 62.1 | 60.1 | 65.5 | 64.0 | 66.9 | 72.3 | 68.8 | 75.9 |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |
| Low quartile | 42.0 | 40.9 | 42.9 | 45.5 | 44.2 | 47.3 | 48.9 | 43.7 | 53.5 |
| Middle quartiles | 58.9 | 59.7 | 58.1 | 63.7 | 61.2 | 67.2 | 70.7 | 65.5 | 76.1 |
| High quartile | 85.1 | 84.9 | 85.2 | 88.1 | 86.0 | 91.7 | 91.3 | 90.0 | 92.7 |
| Achievement test quartile in high school |  |  |  |  |  |  |  |  |  |
| First (low) | 36.0 | 32.5 | 38.9 | 36.2 | 32.3 | 39.9 | 46.8 | 44.4 | 49.7 |
| Second | 51.2 | 51.4 | 51.1 | 53.8 | 50.0 | 57.6 | 65.6 | 61.2 | 70.1 |
| Third | 66.9 | 68.2 | 65.6 | 72.0 | 68.8 | 74.9 | 79.6 | 75.6 | 83.3 |
| Fourth (high) | 86.4 | 86.4 | 86.4 | 89.2 | 88.4 | 90.4 | 92.6 | 90.6 | 94.7 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 62.3 | 63.7 | 60.8 | 65.9 | 64.6 | 67.9 | 74.0 | 70.6 | 77.4 |
| Black | 57.8 | 54.7 | 60.1 | 59.5 | 59.5 | 62.5 | 64.7 | 57.5 | 71.6 |
| Hispanic | 56.4 | 56.7 | 56.1 | 56.9 | 57.4 | 58.4 | 65.0 | 62.4 | 67.6 |
| Asian/Pacific Islander | 82.6 | 85.7 | 79.2 | 89.6 | 89.0 | 90.9 | 84.9 | 84.3 | 85.6 |
| Native American/Other | 44.1 | 43.8 | 44.4 | 53.4 | 51.6 | 54.0 | 57.4 | 49.9 | 62.7 |

* In 1980, the majority of the respondents missing the sex variable had less than a high school diploma; therefore, estimates of the percentage of male and female students who attended a postsecondary institution within 2 years following their scheduled 1980 high school graduation may be slightly inflated.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond (HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

Table 9-5 Percentage of students who attended a postsecondary institution the fall immediately following scheduled high school graduation, by socioeconomic status, achievement test quartile, and highest level of institution attended: 1972, 1980, and 1992

| Achievement test quartile and type of of institution | Senior in 1972 |  |  |  | Senior in 1980 |  |  |  | Senior in 1992 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Socioeconomic status |  |  |  | Socioeconomic status |  |  |  | Socioeconomic status |  |  |  |
|  | Total | Low quartile | Middle quartiles | High quartile | Total | Low quartile | Middle quartiles | High quartile | Total | Low quartile | Middle quartiles | High quartile |
| Total* | 52.0 | 33.1 | 49.4 | 76.4 | 54.6 | 35.6 | 54.3 | 76.9 | 54.7 | 35.2 | 52.5 | 70.2 |
| Achievement test quartile in high school |  |  |  |  |  |  |  |  |  |  |  |  |
| First (low) | 25.8 | 22.7 | 25.9 | 41.3 | 25.0 | 20.9 | 23.9 | 49.5 | 33.2 | 24.3 | 35.5 | 53.2 |
| Second | 41.8 | 32.0 | 40.0 | 63.0 | 43.7 | 33.7 | 41.8 | 68.9 | 48.3 | 35.3 | 48.8 | 63.8 |
| Third | 57.5 | 39.1 | 54.7 | 75.4 | 62.6 | 50.4 | 62.1 | 75.7 | 59.9 | 45.2 | 57.6 | 70.8 |
| Fourth (high) | 78.8 | 60.7 | 74.6 | 87.7 | 80.2 | 60.2 | 79.8 | 86.2 | 73.3 | 58.9 | 70.3 | 77.1 |
| 4-year | 29.7 | 15.1 | 24.6 | 54.8 | 33.5 | 18.0 | 31.6 | 54.7 | 35.7 | 16.0 | 31.0 | 55.5 |
| Achievement test quartile in high school |  |  |  |  |  |  |  |  |  |  |  |  |
| First (low) | 7.0 | 6.8 | 6.2 | 12.3 | 10.2 | 7.6 | 10.0 | 22.7 | 9.4 | 6.5 | 9.7 | 17.8 |
| Second | 16.3 | 12.6 | 13.6 | 30.4 | 19.6 | 15.0 | 18.3 | 32.8 | 22.5 | 13.1 | 22.2 | 35.8 |
| Third | 31.9 | 20.2 | 26.8 | 49.8 | 36.9 | 26.7 | 35.5 | 49.8 | 40.1 | 26.6 | 35.1 | 55.8 |
| Fourth (high) | 60.4 | 40.5 | 51.0 | 75.0 | 60.6 | 40.3 | 56.8 | 70.2 | 63.3 | 49.3 | 57.2 | 69.4 |
| 2-year | 14.8 | 9.8 | 16.2 | 17.2 | 17.3 | 14.7 | 18.7 | 18.0 | 14.9 | 13.7 | 17.3 | 11.5 |
| Achievement test quartile in high school |  |  |  |  |  |  |  |  |  |  |  |  |
| First (low) | 9.9 | 7.3 | 10.6 | 20.1 | 12.1 | 10.2 | 11.7 | 24.2 | 18.5 | 12.9 | 20.3 | 29.4 |
| Second | 15.8 | 10.1 | 16.0 | 24.2 | 19.6 | 16.3 | 19.0 | 28.4 | 20.4 | 15.0 | 22.0 | 22.5 |
| Third | 18.3 | 11.0 | 19.3 | 21.5 | 21.0 | 20.3 | 21.5 | 20.7 | 16.6 | 15.1 | 18.8 | 13.1 |
| Fourth (high) | 13.8 | 13.7 | 16.9 | 10.8 | 16.0 | 16.2 | 19.0 | 12.7 | 8.0 | 7.5 | 11.0 | 5.8 |

* Included in the total but not shown separately are those students who attended vocational, technical, and trade schools.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond (HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

Table 9-6 Percentage of students who attended a postsecondary institution the fall immediately following scheduled high school graduation, by selected characteristics: 1972, 1980, and 1992

| Selected characteristics | Total |  |  | 4 -year |  |  | 2-year |  |  | Vocational, technical, or trade school |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1972 | 1980 | 1992 | 1972 | 1980 | 1992 | 1972 | 1980 | 1992 | 1972 | 1980 | 1992 |
| Total | 52.0 | 54.6 | 54.7 | 29.7 | 33.5 | 35.7 | 14.8 | 17.3 | 14.9 | 7.5 | 3.8 | 4.1 |
| Sex* |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 52.4 | 52.9 | 51.7 | 30.7 | 32.7 | 33.4 | 15.8 | 17.5 | 14.7 | 5.8 | 2.7 | 3.6 |
| Female | 51.7 | 57.8 | 57.6 | 28.8 | 35.4 | 38.1 | 13.8 | 17.6 | 15.1 | 9.1 | 4.9 | 4.5 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 53.6 | 56.5 | 56.2 | 31.1 | 35.0 | 38.0 | 15.0 | 17.7 | 14.5 | 7.5 | 3.9 | 3.7 |
| Black | 46.5 | 46.5 | 47.0 | 26.8 | 30.4 | 30.9 | 10.2 | 12.4 | 12.0 | 9.5 | 3.7 | 4.1 |
| Hispanic | 46.1 | 44.9 | 47.9 | 17.1 | 22.3 | 23.3 | 22.8 | 19.7 | 18.7 | 6.1 | 2.9 | 5.9 |
| Asian/ |  |  |  |  |  |  |  |  |  |  |  |  |
| Pacific Islander | 77.7 | 85.4 | 66.5 | 47.4 | 52.1 | 41.4 | 26.4 | 30.9 | 19.3 | 4.0 | 2.4 | 5.8 |
| Native American/ |  |  |  |  |  |  |  |  |  |  |  |  |
| Other | 33.7 | 39.6 | 44.4 | 12.9 | 18.4 | 21.5 | 15.4 | 18.0 | 19.4 | 5.3 | 3.1 | 3.5 |
| Control of high school |  |  |  |  |  |  |  |  |  |  |  |  |
| Public | 51.1 | 52.6 | 53.1 | 28.5 | 31.5 | 33.6 | 15.2 | 17.5 | 15.3 | 7.4 | 3.6 | 4.1 |
| Catholic | 65.6 | 73.1 | 68.9 | 44.8 | 48.4 | 54.5 | 12.1 | 19.1 | 11.7 | 8.7 | 5.7 | 2.7 |
| Private, other | 78.5 | 70.0 | 69.2 | 56.2 | 57.1 | 53.5 | 11.2 | 9.0 | 10.9 | 11.1 | 4.0 | 4.9 |
| Urbanicity of high school |  |  |  |  |  |  |  |  |  |  |  |  |
| Central city | 53.8 | 53.6 | 56.4 | 31.4 | 34.7 | 37.7 | 15.4 | 15.9 | 13.3 | 7.0 | 3.1 | 5.4 |
| Urban fringe/ large town | 60.1 | 57.8 | 56.2 | 37.8 | 35.2 | 36.7 | 16.7 | 18.6 | 15.7 | 5.6 | 4.1 | 3.8 |
| Rural/small town | 47.6 | 50.2 | 51.2 | 25.5 | 30.3 | 32.7 | 13.5 | 16.1 | 15.3 | 8.6 | 3.7 | 3.2 |
| Achievement test quartile in high school |  |  |  |  |  |  |  |  |  |  |  |  |
| First (low) | 25.8 | 25.0 | 33.2 | 7.0 | 10.2 | 9.4 | 9.9 | 12.1 | 18.5 | 8.9 | 2.7 | 5.3 |
| Second | 41.8 | 43.7 | 48.3 | 16.3 | 19.6 | 22.5 | 15.8 | 19.6 | 20.4 | 9.7 | 4.4 | 5.4 |
| Third | 57.5 | 62.6 | 59.9 | 31.9 | 36.9 | 40.1 | 18.3 | 21.0 | 16.6 | 7.3 | 4.7 | 3.2 |
| Fourth (high) | 78.8 | 80.2 | 73.3 | 60.4 | 60.6 | 63.3 | 13.8 | 16.0 | 8.0 | 4.7 | 3.6 | 2.0 |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |  |  |  |
| Low quartile | 33.1 | 35.6 | 35.2 | 15.1 | 18.0 | 16.0 | 9.8 | 14.7 | 13.7 | 8.2 | 2.9 | 5.5 |
| Middle quartiles | 49.4 | 54.3 | 52.5 | 24.6 | 31.6 | 31.0 | 16.2 | 18.7 | 17.3 | 8.7 | 4.0 | 4.1 |
| High quartile | 76.4 | 76.9 | 70.2 | 54.8 | 54.7 | 55.5 | 17.2 | 18.0 | 11.5 | 4.4 | 4.2 | 3.2 |

* In 1980, the majority of the respondents missing the sex variable had less than a high school diploma; therefore, estimates of the percentage of male and female students who attended a postsecondary institution the fall following their scheduled 1980 high school graduation may be slightly inflated.
NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond (HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

Table 9-7 Percentage of students who attended a postsecondary institution the fall immediately following scheduled high school graduation, by socioeconomic status, race/ethnicity, and highest level of institution attended: 1972, 1980, and 1992

| Race/ethnicity and type of institution | Senior in 1972 |  |  | Senior in 1980 |  |  | Senior in 1992 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Socioeconomic status |  |  | Socioeconomic status |  |  | Socioeconomic status |  |  |
|  | $\begin{array}{r} \text { Low } \\ \text { quartile } \\ \hline \end{array}$ | Middle quartiles | High quartile | Low quartile | Middle quartiles | $\begin{array}{r} \text { High } \\ \text { quartile } \\ \hline \end{array}$ | Low quartile | $\begin{array}{r} \text { Middle } \\ \text { quartiles } \end{array}$ | $\begin{array}{r} \text { High } \\ \text { quartile } \end{array}$ |
| Total | 33.1 | 49.4 | 76.4 | 35.6 | 54.3 | 76.9 | 35.2 | 52.5 | 70.2 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 30.2 | 49.8 | 76.4 | 33.1 | 54.6 | 77.3 | 30.1 | 53.2 | 69.7 |
| Black | 40.3 | 52.2 | 79.9 | 40.3 | 53.6 | 72.6 | 37.5 | 47.8 | 72.2 |
| Hispanic | 42.4 | 49.8 | 60.3 | 36.2 | 50.6 | 72.3 | 39.6 | 49.7 | 72.3 |
| Asian/Pacific Islander | 57.6 | 78.7 | 93.0 | 73.8 | 85.0 | 94.3 | 58.4 | 62.3 | 74.2 |
| Native American/Other | 19.8 | 39.7 | - | 45.8 | 29.7 | - | 29.3 | 43.5 | - |
| 4-year | 15.1 | 24.6 | 54.8 | 18.0 | 31.6 | 54.7 | 16.0 | 31.0 | 55.5 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 13.1 | 24.7 | 55.0 | 15.7 | 31.6 | 55.5 | 13.9 | 31.4 | 55.9 |
| Black | 21.1 | 32.7 | 55.9 | 24.7 | 36.0 | 53.0 | 19.7 | 32.5 | 56.4 |
| Hispanic | 16.9 | 15.8 | 24.3 | 17.1 | 24.5 | 41.9 | 14.8 | 25.4 | 47.7 |
| Asian/Pacific Islander | 35.3 | 42.3 | 69.1 | 34.0 | 49.6 | 68.0 | 30.0 | 33.2 | 55.6 |
| Native American/Other | 7.2 | 12.1 | - | 25.0 | 12.7 | - | 7.2 | 26.3 | - |
| 2-year | 9.8 | 16.2 | 17.2 | 14.7 | 18.7 | 18.0 | 13.7 | 17.3 | 11.5 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 8.8 | 16.1 | 17.2 | 14.7 | 18.9 | 17.7 | 11.6 | 17.7 | 11.0 |
| Black | 8.6 | 11.9 | 17.0 | 12.0 | 13.1 | 18.0 | 12.7 | 11.9 | 10.9 |
| Hispanic | 19.5 | 27.3 | 31.1 | 16.2 | 24.2 | 24.0 | 17.7 | 20.0 | 15.5 |
| Asian/Pacific Islander | 14.7 | 33.2 | 21.1 | 39.2 | 32.2 | 23.8 | 19.0 | 23.2 | 14.3 |
| Native American/Other | 10.4 | 18.5 | - | 15.2 | 17.0 | - | 18.8 | 14.0 | - |
| Vocational, technical, or trade school | 8.2 | 8.7 | 4.4 | 2.9 | 4.0 | 4.2 | 5.5 | 4.1 | 3.2 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 8.2 | 9.0 | 4.2 | 2.7 | 4.1 | 4.1 | 4.6 | 4.1 | 2.7 |
| Black | 10.6 | 7.6 | 7.0 | 3.6 | 4.5 | 1.6 | 5.1 | 3.3 | 4.9 |
| Hispanic | 6.0 | 6.8 | 5.0 | 2.9 | 1.9 | 6.4 | 7.1 | 4.2 | 9.1 |
| Asian/Pacific Islander | 7.5 | 3.2 | 2.7 | 0.6 | 3.2 | 2.6 | 9.4 | 5.8 | 4.4 |
| Native American/Other | 2.2 | 9.1 | - | 5.7 | 0.0 | - | 3.4 | 3.2 | 二 |

- Too few sample observations for a reliable estimate.

NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond (HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

Table 9-8 Percentage of students who attended a postsecondary institution the fall immediately following scheduled high school graduation, by achievement test quartile, race ethnicity, and highest level of institution attended: 1972, 1980, and 1992

| Race/ethnicity and type of institution | Senior in 1972 |  |  |  | Senior in 1980 |  |  |  | Senior in 1992 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Achievement test quartile |  |  |  | Achievement test quartile |  |  |  | Achievement test quartile |  |  |  |
|  | $\begin{array}{r} \text { First } \\ \text { (low) } \\ \hline \end{array}$ | Second | Third | Fourth (high) | $\begin{array}{r} \text { First } \\ \text { (low) } \\ \hline \end{array}$ | Second | Third | Fourth (high) | $\begin{array}{r} \text { First } \\ \text { (low) } \\ \hline \end{array}$ | Second | Third | Fourth (high) |
| Total | 25.8 | 41.8 | 57.5 | 78.8 | 25.0 | 43.7 | 62.6 | 80.2 | 33.2 | 48.3 | 59.9 | 73.3 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 22.7 | 39.9 | 56.8 | 78.5 | 21.3 | 41.7 | 61.6 | 80.2 | 31.0 | 46.8 | 60.0 | 73.3 |
| Black | 34.3 | 59.8 | 70.2 | 87.6 | 31.0 | 53.3 | 73.6 | 83.2 | 34.2 | 50.4 | 56.9 | 76.3 |
| Hispanic | 35.7 | 51.4 | 63.1 | 73.8 | 28.5 | 44.8 | 67.6 | 81.7 | 38.2 | 47.0 | 60.2 | 65.7 |
| Asian/Pacific Islander | - | 70.3 | 84.5 | 89.3 | 62.4 | 81.1 | 80.5 | 97.1 | 34.9 | 67.7 | 67.2 | 79.9 |
| Native American/Other | 19.0 | 37.3 | - | - | 32.4 | 37.5 | - | - | 43.9 | 50.0 | - | - |
| 4-year | 7.0 | 16.3 | 31.9 | 60.4 | 10.2 | 19.6 | 36.9 | 60.6 | 9.4 | 22.5 | 40.1 | 63.3 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 4.9 | 14.2 | 30.8 | 60.2 | 7.2 | 17.3 | 35.4 | 60.7 | 7.1 | 21.8 | 39.7 | 63.3 |
| Black | 13.7 | 38.6 | 55.2 | 78.4 | 16.9 | 33.6 | 59.4 | 67.5 | 15.8 | 31.4 | 44.8 | 73.9 |
| Hispanic | 7.0 | 18.9 | 33.8 | 45.2 | 10.1 | 20.5 | 35.4 | 54.9 | 9.3 | 16.2 | 40.1 | 54.9 |
| Asian/Pacific Islander | - | 20.0 | 52.5 | 65.0 | 14.7 | 35.6 | 49.8 | 76.2 | 1.9 | 24.1 | 41.3 | 66.5 |
| Native American/Other | 4.8 | 10.8 | - | - | 13.7 | 17.5 | - | - | 6.5 | 23.9 | - | - |
| 2-year | 9.9 | 15.8 | 18.3 | 13.8 | 12.1 | 19.6 | 21.0 | 16.0 | 18.5 | 20.4 | 16.6 | 8.0 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 9.4 | 15.5 | 18.4 | 13.5 | 11.5 | 19.7 | 21.4 | 15.9 | 18.8 | 20.2 | 17.4 | 8.2 |
| Black | 8.9 | 12.9 | 10.0 | 7.6 | 11.0 | 14.2 | 11.1 | 12.4 | 14.5 | 15.6 | 8.0 | 1.8 |
| Hispanic | 20.5 | 27.4 | 25.6 | 24.4 | 15.7 | 22.4 | 29.1 | 20.9 | 20.8 | 23.1 | 17.3 | 8.6 |
| Asian/Pacific Islander | - | 32.1 | 30.6 | 24.4 | 44.6 | 45.5 | 27.3 | 18.4 | 28.2 | 30.4 | 21.2 | 9.6 |
| Native American/Other | 6.6 | 26.5 | - | - | 16.7 | 17.1 | - | - | 37.4 | 20.4 | - | - |
| Vocational, technical, or trade school | 8.9 | 9.7 | 7.3 | 4.7 | 2.7 | 4.4 | 4.7 | 3.6 | 5.3 | 5.4 | 3.2 | 2.0 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 8.4 | 10.3 | 7.6 | 4.8 | 2.6 | 4.6 | 4.9 | 3.6 | 5.1 | 4.8 | 3.0 | 1.9 |
| Black | 11.8 | 8.3 | 5.0 | 1.5 | 3.2 | 5.5 | 3.2 | 3.3 | 3.9 | 3.4 | 4.1 | 0.6 |
| Hispanic | 8.2 | 5.1 | 3.7 | 4.2 | 2.6 | 1.9 | 3.1 | 6.0 | 8.2 | 7.7 | 2.9 | 2.2 |
| Asian/Pacific Islander | - | 18.1 | 1.5 | 0.0 | 3.2 | 0.0 | 3.4 | 2.5 | 4.9 | 13.3 | 4.7 | 3.9 |
| Native American/Other | 7.6 | 0.0 | - | - | 2.0 | 2.9 | - | - | 0.0 | 5.6 | - | 二 |

- Too few sample observations for a reliable estimate.

NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond (HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

Table 9-9 Percentage of students who attended a postsecondary institution the fall immediately following scheduled high school graduation, by selected student characteristics: 1972, 1980, and 1992

| Selected student characteristics | Senior in 1972 |  |  | Senior in 1980 |  |  | Senior in 1992 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male* | Female* | Total | Male | Female |
| Total | 52.0 | 52.4 | 51.7 | 54.6 | 52.9 | 57.8 | 54.7 | 51.7 | 57.6 |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |
| Low quartile | 33.1 | 32.2 | 33.8 | 35.6 | 33.4 | 37.4 | 35.2 | 30.8 | 39.1 |
| Middle quartiles | 49.4 | 49.4 | 49.5 | 54.3 | 51.1 | 58.4 | 52.5 | 48.3 | 56.6 |
| High quartile | 76.4 | 75.0 | 77.9 | 76.9 | 73.3 | 83.0 | 70.2 | 68.6 | 71.9 |
| Achievement test quartile in high school |  |  |  |  |  |  |  |  |  |
| First (low) | 25.8 | 22.7 | 28.3 | 25.0 | 21.8 | 28.4 | 33.2 | 31.0 | 36.1 |
| Second | 41.8 | 41.4 | 42.2 | 43.7 | 38.2 | 48.3 | 48.3 | 45.1 | 51.5 |
| Third | 57.5 | 57.3 | 57.8 | 62.6 | 57.9 | 66.7 | 59.9 | 55.2 | 64.0 |
| Fourth (high) | 78.8 | 78.1 | 79.7 | 80.2 | 77.3 | 84.1 | 73.3 | 72.2 | 74.4 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 53.6 | 54.1 | 53.1 | 56.5 | 54.0 | 59.8 | 56.2 | 53.1 | 59.2 |
| Black | 46.5 | 44.8 | 47.7 | 46.5 | 46.0 | 49.0 | 47.0 | 41.7 | 52.0 |
| Hispanic | 46.1 | 46.1 | 46.0 | 44.9 | 44.9 | 46.6 | 47.9 | 47.3 | 48.5 |
| Asian/Pacific Islander | 77.7 | 81.6 | 73.7 | 85.4 | 84.0 | 88.6 | 66.5 | 65.8 | 67.3 |
| Native American/Other | 33.7 | 33.1 | 34.3 | 39.6 | 36.6 | 42.5 | 44.4 | 35.0 | 50.8 |

* In 1980, the majority of the respondents missing the sex variable had less than a high school diploma; therefore, estimates of the percentage of male and female students who attended a postsecondary institution the fall following their scheduled 1980 high school graduation may be slightly inflated.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond (HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

## Note to Indicator 9: Postsecondary enrollment rates

## Definition of student percentages

Indicator 9 reports the percentages of high school students from different cohorts who enroll in postsecondary institutions. The data used to calculate enrollment rates came from three different surveys: National Longitudinal Study of the High School Class of 1972 (NLS-72), High School and Beyond (HS\&B), and National Education Longitudinal Study of 1988 (NELS:88). Therefore, the survey respondents' postsecondary institution data were combined to form the following set of postsecondary institution types:

- None (not enrolled in a postsecondary institution)
- 4-year colleges or universities
- 2-year colleges
- Vocational, technical, or trade schools

The lists below describe how the responses from each survey (left column) were translated to postsecondary institution types (right column).

National Longitudinal Study of the High School Class of 1972 (NLS-72)

| Survey response |  | Postsecondary institution <br> Vocational or <br> technical |
| :--- | :--- | :--- |

High School and Beyond (HS\&B), Senior Cohort, Third Follow-up (1986)

Survey response
Part time-other

Full time-other
Part time, public
2-year
Full time, public
2-year
Part time, private
4-year
Full time, private 4-year

Postsecondary institution
Vocational, technical, or trade schools
Vocational, technical, or trade schools
2-year college

2-year college
4-year colleges or universities 4-year colleges or universities

Part time, public
4-year
Full time, public
4-year
Non-student
Missing

4-year colleges or universities 4-year colleges or universities
None Missing

National Education Longitudinal Study of 1988, Third Follow-up (1994) (NELS:88)

Survey response
Private for-profit

Private not-for-profit, less-than-4-year, not working toward an associate's degree

Public less-than-2-year, not working toward an associate's degree

Private not-for-profit, less-than-4-year, working toward an associate's degree

Public less-than-2-year, working toward an associate's degree

| Public 2-year | 2-year college |
| :--- | :--- |
| Private 4-year | 4-year colleges or <br> universities |
| Public 4-year | 4-year colleges or <br> universities |
| Legitimate skip | None |
| Missing | Missing |

## Enrollment in multiple postsecondary institutions

There are cases in which respondents reported having enrolled in more than one type of postsecondary institution (e.g., enrolled in a 2-year college and then transferred to a 4 -year college). For this analysis, only the highest reported level of postsecondary institution was used to calculate survey respondents' enrollment rates. For example, if a respondent reported enrolling in more than one
type of postsecondary institution (2-year and 4-year colleges), the respondent was used in estimating the enrollment rate of the highest reported level of institution (4-year college) and not counted as enrolled in the lower level institution.

Enrollment rates were calculated for student enrollment in the fall following scheduled high school graduation and 2 years later. Since only the highest level of postsecondary institution was used in this analysis, respondents' earlier and later survey reponses may differ because they reported enrolling in more than one type of institution within 2 years after their scheduled high school graduation. Therefore, the percentage of students whose highest level of postsecondary enrollment was a vocational, technical, or trade school or a 2-year college may have decreased between the fall following scheduled high school graduation and 2 years later if sufficient numbers of students enrolled in a second, higher level institution.

## Definition of the fall and 2 years following scheduled high school graduation

Indicator 9 reports enrollment rates in postsecondary institutions the fall immediately following and 2 years following different cohorts' scheduled graduation from high school. Since graduation dates vary between schools and school years, standard dates following each cohort's scheduled high school graduation were selected to estimate enrollment rates rather than calculating the exact time period following graduation for each survey respondent.

Enrollment rates in the fall following scheduled high school graduation were calculated using the enrollment status of survey respondents in the October following their scheduled graduation. For example, a survey respondent in the NLS-72 was considered enrolled in a postsecondary institution in the fall following scheduled high school graduation if he or she reported being enrolled in October 1972. October was selected because enrollment data for October were available for each survey used in this analysis and because the academic year at postsecondary institutions would have begun by then.

Enrollment rates 2 years following scheduled high school graduation were calculated using the enrollment status of survey respondents in February of the second calendar year following scheduled graduation. The second February following scheduled graduation was selected because enrollment status for February was available in all three surveys. Assuming that scheduled high school graduations are in June, then the elapsed time between scheduled graduation and the second February following graduation is 20 months. The actual elapsed time varies among survey respondents, but February is directly comparable across surveys. Therefore, a survey respondent in the NELS:88 Second Follow-up (the class of 1992) was considered to be enrolled in a postsecondary institution 2 years following scheduled high school graduation if he or she reported being enrolled by February 1994.

Table 10-1 Percentage of high school graduates enrolled in college, by age, race/ethnicity, and type of institution: October 1973-95

| October | Aged 18-24 |  |  |  | Aged 25-34 |  |  |  | Aged 35 or older |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | 2-year institutions |  |  |  |  |  |  |  |  |  |  |  |
| 1973 | 6.3 | 6.3 | 4.6 | 9.8 | 2.1 | 2.0 | 2.3 | 3.6 | - | - | - | - |
| 1974 | 7.0 | 6.4 | 7.2 | 14.6 | 2.4 | 2.2 | 3.6 | 3.3 | - | - | - | - |
| 1975 | 8.1 | 7.7 | 9.3 | 13.6 | 3.0 | 2.7 | 5.2 | 5.5 | - | - | - | - |
| 1976 | 7.8 | 7.3 | 8.6 | 14.4 | 3.1 | 2.7 | 4.8 | 6.5 | 0.9 | 0.9 | 1.4 | 2.1 |
| 1977 | 8.0 | 7.5 | 9.8 | 13.9 | 3.1 | 2.8 | 5.5 | 4.6 | - | - | - | - |
| 1978 | 8.0 | 7.6 | 7.9 | 11.9 | 2.7 | 2.5 | 4.1 | 4.6 | 1.0 | 0.9 | 1.7 | 1.9 |
| 1979 | 7.6 | 7.1 | 8.4 | 13.3 | 2.6 | 2.4 | 3.2 | 4.4 | 1.0 | 0.9 | 1.1 | 1.6 |
| 1980 | 8.5 | 8.1 | 9.0 | 11.9 | 2.8 | 2.6 | 3.4 | 3.8 | 0.8 | 0.8 | 1.4 | 1.1 |
| 1981 | 9.0 | 8.6 | 7.9 | 14.3 | 2.7 | 2.5 | 3.2 | 4.2 | 0.9 | 0.8 | 1.5 | 2.6 |
| 1982 | 9.3 | 9.0 | 7.4 | 14.6 | 2.8 | 2.6 | 3.5 | 4.0 | 0.9 | 0.8 | 1.0 | 1.4 |
| 1983 | 8.9 | 8.8 | 7.4 | 12.1 | 2.8 | 2.6 | 3.5 | 5.3 | 0.9 | 0.9 | 0.7 | 1.2 |
| 1984 | 8.6 | 8.2 | 9.2 | 10.8 | 2.7 | 2.6 | 2.8 | 3.5 | 0.8 | 0.7 | 1.0 | 0.8 |
| 1985 | 8.6 | 8.3 | 8.4 | 10.5 | 2.8 | 2.7 | 2.7 | 4.1 | 0.9 | 0.8 | 1.1 | 1.1 |
| 1986 | 9.0 | 9.0 | 6.9 | 12.3 | 2.7 | 2.6 | 2.5 | 4.1 | 0.9 | 0.9 | 1.3 | 0.9 |
| 1987 | 9.8 | 9.5 | 8.7 | 12.0 | 2.5 | 2.3 | 2.6 | 3.8 | 0.9 | 0.8 | 1.0 | 1.0 |
| 1988 | 10.6 | 10.6 | 7.8 | 13.4 | 2.5 | 2.3 | 3.5 | 3.3 | 0.9 | 0.9 | 1.4 | 1.5 |
| 1989 | 9.9 | 9.5 | 9.1 | 13.2 | 2.5 | 2.4 | 2.4 | 3.3 | 0.9 | 0.9 | 0.9 | 2.0 |
| 1990 | 10.5 | 10.2 | 10.6 | 13.2 | 2.8 | 2.7 | 2.7 | 3.5 | 1.0 | 0.9 | 1.1 | 1.9 |
| 1991 | 11.8 | 11.3 | 11.3 | 14.9 | 3.2 | 3.0 | 3.6 | 3.8 | 1.0 | 1.0 | 1.3 | 1.3 |
| 1992 | 12.0 | 11.2 | 10.7 | 17.6 | 2.9 | 2.8 | 2.3 | 3.8 | 0.9 | 0.9 | 0.9 | 1.4 |
| 1993 | 11.7 | 11.5 | 9.4 | 16.2 | 2.7 | 2.4 | 3.4 | 4.2 | 1.0 | 0.9 | 1.4 | 1.5 |
| 1994 | 11.1 | 10.8 | 10.5 | 13.1 | 3.1 | 2.7 | 3.9 | 4.4 | 1.0 | 0.9 | 1.2 | 2.0 |
| 1995 | 10.9 | 10.2 | 11.2 | 13.5 | 2.7 | 2.5 | 3.6 | 3.0 | 0.9 | 0.8 | 1.1 | 1.7 |
|  | 4-year institutions |  |  |  |  |  |  |  |  |  |  |  |
| 1973 | 15.6 | 15.9 | 12.5 | 13.3 | 1.9 | 1.8 | 2.4 | 2.5 | - | - | - | - |
| 1974 | 15.6 | 15.9 | 13.6 | 11.8 | 1.8 | 1.6 | 3.2 | 1.8 | - | - | - | - |
| 1975 | 15.7 | 15.8 | 15.1 | 15.9 | 2.0 | 1.9 | 2.6 | 2.5 | - | - | - | - |
| 1976 | 24.4 | 24.6 | 23.9 | 19.4 | 6.3 | 6.2 | 6.8 | 3.8 | 1.3 | 1.2 | 2.7 | 1.8 |
| 1977 | 23.1 | 23.4 | 19.9 | 16.8 | 6.6 | 6.4 | 7.6 | 7.2 | - | - | - | - |
| 1978 | 22.6 | 22.9 | 20.8 | 14.5 | 6.1 | 6.0 | 6.0 | 5.4 | 1.4 | 1.3 | 2.0 | 2.4 |
| 1979 | 22.8 | 23.5 | 19.6 | 15.7 | 6.2 | 6.2 | 5.3 | 6.6 | 1.4 | 1.4 | 2.1 | 1.2 |
| 1980 | 22.2 | 23.0 | 17.0 | 16.9 | 5.6 | 5.7 | 5.5 | 4.6 | 1.2 | 1.1 | 1.7 | 1.7 |
| 1981 | 22.4 | 23.1 | 18.8 | 15.0 | 5.8 | 5.6 | 6.2 | 5.7 | 1.4 | 1.3 | 2.2 | 1.3 |
| 1982 | 22.7 | 23.4 | 19.5 | 13.6 | 5.8 | 5.8 | 5.6 | 4.5 | 1.3 | 1.2 | 1.7 | 1.5 |
| 1983 | 22.6 | 23.4 | 18.4 | 17.9 | 5.9 | 5.8 | 4.9 | 4.4 | 1.4 | 1.3 | 1.9 | 1.9 |
| 1984 | 23.4 | 24.5 | 16.9 | 17.4 | 5.6 | 5.5 | 4.7 | 6.2 | 1.2 | 1.2 | 1.6 | 0.9 |
| 1985 | 23.8 | 25.3 | 16.4 | 14.8 | 5.6 | 5.7 | 4.1 | 5.3 | 1.4 | 1.3 | 1.8 | 2.1 |
| 1986 | 24.2 | 24.7 | 20.7 | 16.3 | 5.3 | 5.1 | 5.0 | 6.0 | 1.4 | 1.3 | 1.9 | 2.3 |
| 1987 | 26.2 | 27.7 | 20.3 | 16.1 | 5.6 | 5.5 | 5.3 | 5.0 | 1.5 | 1.4 | 1.6 | 1.5 |
| 1988 | 26.4 | 27.8 | 20.0 | 17.4 | 5.4 | 5.5 | 3.9 | 4.5 | 1.8 | 1.7 | 1.9 | 1.9 |
| 1989 | 28.1 | 30.1 | 21.4 | 15.1 | 5.8 | 5.9 | 3.8 | 3.8 | 1.6 | 1.6 | 1.2 | 1.7 |
| 1990 | 28.4 | 30.2 | 21.8 | 15.1 | 5.8 | 6.1 | 3.3 | 3.5 | 1.7 | 1.7 | 1.8 | 2.0 |
| 1991 | 29.1 | 30.9 | 19.5 | 19.1 | 5.8 | 5.7 | 4.5 | 4.8 | 1.7 | 1.7 | 2.1 | 1.6 |
| 1992 | 29.6 | 31.3 | 22.7 | 18.5 | 5.7 | 5.6 | 4.4 | 4.7 | 1.6 | 1.6 | 1.7 | 1.3 |
| 1993 | 29.3 | 30.6 | 22.8 | 18.7 | 5.8 | 5.8 | 4.7 | 5.2 | 1.6 | 1.5 | 2.0 | 1.6 |
| 1994 | 31.1 | 32.8 | 25.1 | 19.8 | 6.5 | 6.4 | 5.8 | 5.7 | 1.7 | 1.6 | 2.3 | 2.3 |
| 1995 | 31.2 | 33.5 | 24.0 | 21.4 | 6.7 | 6.8 | 5.5 | 5.0 | 1.7 | 1.6 | 2.5 | 2.1 |

- Not available.

NOTE: Included in the total but not shown separately are high school graduates from other racial/ethnic groups.

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 10-2 Percentage of high school graduates enrolled in college, by age, race/ethnicity, and enrollment status: October 1972-95

| October | Aged 18-24 |  |  |  | Aged 25-34 |  |  |  | Aged 35 or older |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | Full-time |  |  |  |  |  |  |  |  |  |  |  |
| 1972 | 27.3 | 28.0 | 22.0 | 20.7 | 3.2 | 3.2 | 3.4 | 3.2 | - | - | - | - |
| 1973 | 25.4 | 25.8 | 20.4 | 23.8 | 2.9 | 2.7 | 4.1 | 3.1 | - | - | - | - |
| 1974 | 25.4 | 25.4 | 22.0 | 25.1 | 3.5 | 3.3 | 4.3 | 3.7 | - | - | - | - |
| 1975 | 27.2 | 27.0 | 26.7 | 28.1 | 4.2 | 3.8 | 6.8 | 4.6 | - | - | - | - |
| 1976 | 27.7 | 27.3 | 29.3 | 29.0 | 3.5 | 3.2 | 5.5 | 4.2 | 0.4 | 0.4 | 1.2 | 0.8 |
| 1977 | 26.8 | 26.7 | 25.8 | 25.7 | 3.9 | 3.4 | 7.1 | 4.8 | - | - | - | - |
| 1978 | 25.9 | 25.8 | 25.8 | 18.9 | 3.3 | 3.1 | 4.2 | 3.8 | 0.4 | 0.3 | 0.8 | 0.6 |
| 1979 | 25.9 | 25.8 | 25.2 | 24.3 | 3.1 | 2.9 | 3.7 | 5.7 | 0.4 | 0.3 | 0.9 | 0.7 |
| 1980 | 26.5 | 26.9 | 23.6 | 22.3 | 3.0 | 2.8 | 3.6 | 4.0 | 0.3 | 0.3 | 0.8 | 0.7 |
| 1981 | 27.0 | 27.2 | 23.6 | 24.6 | 3.2 | 2.9 | 4.4 | 3.9 | 0.4 | 0.3 | 1.3 | 1.4 |
| 1982 | 27.1 | 27.6 | 23.1 | 20.4 | 3.5 | 3.3 | 4.2 | 4.3 | 0.4 | 0.4 | 0.9 | *0.0 |
| 1983 | 25.0 | 25.1 | 22.8 | 22.7 | 3.7 | 3.2 | 4.3 | 4.2 | 0.4 | 0.4 | 0.8 | 0.4 |
| 1984 | 27.8 | 28.7 | 21.6 | 23.7 | 3.5 | 3.2 | 3.7 | 4.1 | 0.4 | 0.4 | 0.5 | 0.3 |
| 1985 | 28.3 | 29.6 | 21.4 | 21.1 | 3.3 | 3.0 | 3.7 | 3.7 | 0.4 | 0.4 | 0.7 | 0.8 |
| 1986 | 28.3 | 29.0 | 24.3 | 21.2 | 3.2 | 2.8 | 4.0 | 4.2 | 0.5 | 0.5 | 1.0 | 1.0 |
| 1987 | 29.7 | 30.9 | 23.9 | 20.1 | 2.9 | 2.6 | 3.7 | 3.6 | 0.5 | 0.5 | 0.8 | 0.4 |
| 1988 | 30.7 | 31.9 | 24.1 | 22.7 | 3.1 | 2.9 | 2.8 | 2.8 | 0.5 | 0.5 | 0.7 | 0.5 |
| 1989 | 31.9 | 33.6 | 25.9 | 21.0 | 3.2 | 3.1 | 2.2 | 2.8 | 0.7 | 0.6 | 0.6 | 1.2 |
| 1990 | 32.6 | 34.3 | 25.6 | 20.9 | 3.6 | 3.5 | 3.0 | 2.2 | 0.6 | 0.6 | 0.7 | 1.0 |
| 1991 | 34.6 | 35.9 | 26.5 | 25.7 | 3.9 | 3.6 | 3.5 | 3.7 | 0.6 | 0.6 | 1.0 | 0.4 |
| 1992 | 34.9 | 36.2 | 27.6 | 26.0 | 3.6 | 3.5 | 3.1 | 2.4 | 0.7 | 0.7 | 0.9 | 0.8 |
| 1993 | 31.9 | 31.9 | 27.3 | 26.4 | 3.9 | 3.7 | 3.3 | 4.1 | 0.7 | 0.6 | 1.2 | 0.8 |
| 1994 | 34.6 | 36.2 | 29.6 | 21.4 | 4.3 | 4.0 | 3.8 | 4.4 | 0.8 | 0.7 | 1.0 | 1.5 |
| 1995 | 34.9 | 36.8 | 28.4 | 25.5 | 4.4 | 4.2 | 4.4 | 3.5 | 0.7 | 0.7 | 0.9 | 0.9 |
|  | Part-time |  |  |  |  |  |  |  |  |  |  |  |
| 1972 | 4.6 | 4.5 | 5.2 | 5.1 | 5.2 | 5.2 | 5.4 | 4.3 | - | - | - | - |
| 1973 | 4.3 | 4.4 | 3.5 | 5.3 | 5.3 | 5.4 | 3.6 | 8.5 | - | - | - | - |
| 1974 | 5.1 | 5.1 | 4.2 | 7.2 | 5.8 | 5.8 | 6.5 | 6.3 | - | - | - | - |
| 1975 | 5.3 | 5.3 | 4.8 | 7.4 | 5.7 | 5.8 | 4.7 | 6.7 | - | - | - | - |
| 1976 | 5.4 | 5.5 | 4.2 | 7.0 | 6.1 | 6.0 | 6.4 | 6.8 | 1.9 | 1.7 | 2.9 | 3.1 |
| 1977 | 5.6 | 5.6 | 5.5 | 5.3 | 6.4 | 6.3 | 6.9 | 7.5 | - | - | - | - |
| 1978 | 5.4 | 5.5 | 3.8 | 8.2 | 5.8 | 5.7 | 6.6 | 6.4 | 2.0 | 1.9 | 3.0 | 3.6 |
| 1979 | 5.3 | 5.4 | 4.1 | 5.8 | 6.0 | 6.0 | 5.6 | 5.9 | 2.0 | 2.0 | 2.4 | 2.3 |
| 1980 | 5.3 | 5.3 | 4.1 | 7.6 | 5.9 | 5.9 | 6.0 | 5.3 | 1.8 | 1.7 | 2.6 | 2.2 |
| 1981 | 5.5 | 5.5 | 4.5 | 5.3 | 5.7 | 5.5 | 5.8 | 6.9 | 1.9 | 1.8 | 2.4 | 2.6 |
| 1982 | 5.8 | 5.6 | 5.0 | 8.8 | 5.4 | 5.5 | 5.4 | 5.4 | 1.8 | 1.7 | 1.8 | 2.9 |
| 1983 | 5.4 | 5.3 | 4.2 | 8.8 | 5.4 | 5.5 | 4.5 | 5.5 | 1.9 | 1.8 | 1.9 | 2.7 |
| 1984 | 5.4 | 5.2 | 5.6 | 6.2 | 5.1 | 5.2 | 4.2 | 5.8 | 1.7 | 1.6 | 2.2 | 1.5 |
| 1985 | 5.4 | 5.4 | 4.6 | 5.8 | 5.4 | 5.6 | 3.7 | 6.0 | 1.8 | 1.8 | 2.2 | 2.6 |
| 1986 | 5.7 | 5.6 | 4.3 | 8.3 | 5.1 | 5.1 | 3.9 | 6.2 | 1.8 | 1.8 | 2.3 | 2.3 |
| 1987 | 6.4 | 6.3 | 5.1 | 8.1 | 5.2 | 5.3 | 4.2 | 5.3 | 1.8 | 1.8 | 1.9 | 2.2 |
| 1988 | 6.3 | 6.6 | 3.7 | 8.1 | 4.9 | 5.0 | 4.6 | 5.0 | 2.2 | 2.1 | 2.6 | 2.8 |
| 1989 | 6.0 | 6.1 | 4.6 | 7.3 | 5.1 | 5.2 | 4.0 | 4.4 | 1.9 | 1.9 | 1.5 | 2.5 |
| 1990 | 6.4 | 6.0 | 6.8 | 7.4 | 4.8 | 5.1 | 3.0 | 4.8 | 2.0 | 2.0 | 2.2 | 2.9 |
| 1991 | 6.2 | 6.3 | 4.3 | 8.3 | 5.2 | 5.2 | 4.6 | 4.9 | 2.1 | 2.0 | 2.4 | 2.4 |
| 1992 | 6.7 | 6.4 | 5.8 | 10.2 | 5.0 | 5.0 | 3.5 | 5.9 | 1.8 | 1.8 | 1.7 | 1.9 |
| 1993 | 6.9 | 7.1 | 4.9 | 8.5 | 4.7 | 4.6 | 4.8 | 5.3 | 1.8 | 1.8 | 2.2 | 2.3 |
| 1994 | 7.6 | 7.3 | 5.9 | 11.6 | 5.3 | 5.1 | 5.9 | 5.7 | 2.0 | 1.9 | 2.4 | 2.9 |
| 1995 | 7.2 | 6.9 | 6.8 | 9.4 | 5.0 | 5.1 | 4.7 | 4.5 | 1.9 | 1.7 | 2.7 | 3.0 |

* Percent less than 0.05 is rounded to 0.0 .
- Not available.

NOTE: Included in the total but not shown separately are high school graduates from other racial/ethnic groups.

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 10-3 Percentage of high school graduates enrolled in college, by age, race/ethnicity, and level: October 1972-95

| October | Aged 18-24 |  |  |  | Aged 25-34 |  |  |  | Aged 35 or older |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black Hispanic |  | Total | White Black Hispanic |  |  | Total | White | Black Hispanic |  |
|  | Undergraduates |  |  |  |  |  |  |  |  |  |  |  |
| 1972 | 29.0 | 29.5 | *25.4 | 24.2 | 4.8 | 4.7 | 5.9 | 6.2 | - |  | - | - | - |
| 1973 | 26.9 | 27.1 | 22.5 | 27.2 | 4.6 | 4.4 | 6.0 | 6.6 | - | - | - | - |
| 1974 | 27.6 | 27.6 | 22.6 | 30.9 | 5.4 | 5.0 | 7.9 | 6.4 | - | - | - | - |
| 1975 | 29.4 | 29.0 | 30.3 | 33.1 | 6.2 | 5.7 | 9.4 | 9.8 | - | - | - | - |
| 1976 | 30.1 | 29.6 | 31.4 | 33.6 | 5.7 | 5.1 | 8.9 | 8.8 | 1.4 | 1.2 | 2.8 | 3.4 |
| 1977 | 29.5 | 29.1 | 29.9 | 30.2 | 6.1 | 5.4 | 10.7 | 8.7 | - | - | - | - |
| 1978 | 28.6 | 28.4 | 28.3 | 25.3 | 5.3 | 4.9 | 8.5 | 7.2 | 1.4 | 1.3 | 2.6 | 2.6 |
| 1979 | 28.8 | 28.6 | 27.8 | 29.3 | 5.2 | 4.8 | 7.0 | 8.6 | 1.5 | 1.4 | 2.3 | 2.3 |
| 1980 | 29.2 | 29.3 | 26.0 | 28.8 | 5.3 | 5.0 | 7.0 | 6.6 | 1.3 | 1.2 | 2.5 | 2.3 |
| 1981 | 30.0 | 30.2 | 26.3 | 28.0 | 5.5 | 5.1 | 7.1 | 7.7 | 1.5 | 1.3 | 2.6 | 3.6 |
| 1982 | 30.5 | 30.6 | 26.9 | 28.4 | 5.2 | 4.8 | 7.1 | 7.0 | 1.3 | 1.2 | 1.8 | 2.2 |
| 1983 | 29.9 | 30.2 | 25.5 | 29.8 | 5.5 | 5.1 | 7.0 | 7.6 | 1.4 | 1.3 | 1.8 | 2.4 |
| 1984 | 30.5 | 31.1 | 25.5 | 28.0 | 5.2 | 4.9 | 6.2 | 7.4 | 1.2 | 1.1 | 1.8 | 0.8 |
| 1985 | 31.2 | 32.1 | 25.0 | 25.1 | 5.3 | 5.1 | 5.7 | 6.8 | 1.3 | 1.2 | 2.1 | 2.2 |
| 1986 | 31.3 | 31.7 | 27.0 | 28.3 | 5.3 | 4.9 | 6.3 | 7.8 | 1.4 | 1.3 | 2.6 | 2.1 |
| 1987 | 33.4 | 34.4 | 27.1 | 27.1 | 5.0 | 4.7 | 6.0 | 6.5 | 1.4 | 1.3 | 1.8 | 1.8 |
| 1988 | 34.6 | 35.9 | 26.4 | 30.0 | 5.0 | 4.8 | 5.7 | 5.8 | 1.6 | 1.5 | 2.5 | 2.2 |
| 1989 | 35.3 | 36.7 | 29.1 | 27.2 | 5.1 | 5.0 | 4.9 | 5.9 | 1.5 | 1.5 | 1.4 | 2.7 |
| 1990 | 36.4 | 37.7 | 30.1 | 27.9 | 5.6 | 5.7 | 4.6 | 5.3 | 1.6 | 1.6 | 1.7 | 2.8 |
| 1991 | 37.9 | 39.1 | 29.6 | 32.9 | 5.8 | 5.5 | 6.1 | 6.7 | 1.7 | 1.6 | 2.3 | 1.9 |
| 1992 | 38.9 | 39.4 | 32.3 | 35.3 | 5.7 | 5.5 | 5.5 | 7.3 | 1.6 | 1.6 | 1.9 | 2.3 |
| 1993 | 38.3 | 38.9 | 31.6 | 34.2 | 5.8 | 5.4 | 6.4 | 7.4 | 1.7 | 1.6 | 2.3 | 2.4 |
| 1994 | 39.4 | 40.4 | 34.1 | 31.9 | 6.3 | 5.9 | 7.7 | 7.7 | 1.8 | 1.7 | 2.5 | 3.4 |
| 1995 | 39.5 | 41.0 | 33.4 | 33.4 | 6.0 | 5.8 | 6.6 | 6.6 | 1.6 | 1.5 | 2.2 | 3.1 |
|  | Graduates |  |  |  |  |  |  |  |  |  |  |  |
| 1972 | 2.9 | 3.1 | 1.8 | 1.6 | 3.6 | 3.7 | 2.8 | 1.3 | - | - | - | - |
| 1973 | 2.9 | 3.1 | 1.3 | 1.9 | 3.6 | 3.7 | 1.7 | 4.2 | - | - | - | - |
| 1974 | 2.7 | 2.9 | 1.3 | 1.3 | 3.9 | 4.0 | 2.8 | 3.6 | - | - | - | - |
| 1975 | 3.1 | 3.3 | 1.2 | 2.4 | 3.7 | 3.9 | 2.1 | 1.5 | - | - | - | - |
| 1976 | 3.1 | 3.2 | 2.0 | 2.3 | 3.9 | 4.0 | 2.9 | 2.2 | 0.9 | 0.9 | 1.3 | 0.5 |
| 1977 | 2.9 | 3.1 | 1.4 | 1.3 | 4.3 | 4.3 | 3.2 | 3.7 | - | - | - | - |
| 1978 | 2.8 | 2.9 | 1.3 | 1.8 | 3.8 | 4.0 | 2.3 | 3.0 | 1.0 | 0.9 | 1.2 | 1.6 |
| 1979 | 2.4 | 2.6 | 1.5 | 0.9 | 3.9 | 4.1 | 2.3 | 3.0 | 0.9 | 0.9 | 1.0 | 0.6 |
| 1980 | 2.6 | 2.8 | 1.7 | 1.1 | 3.6 | 3.7 | 2.6 | 2.6 | 0.8 | 0.8 | 0.9 | 0.6 |
| 1981 | 2.4 | 2.5 | 1.7 | 1.9 | 3.4 | 3.4 | 3.0 | 3.1 | 0.9 | 0.8 | 1.1 | 0.4 |
| 1982 | 2.4 | 2.7 | 1.2 | 0.8 | 3.7 | 3.9 | 2.5 | 2.6 | 0.9 | 0.9 | 0.9 | 0.7 |
| 1983 | 2.6 | 2.8 | 1.5 | 1.7 | 3.6 | 3.7 | 1.9 | 2.2 | 0.9 | 0.9 | 0.9 | 0.7 |
| 1984 | 2.7 | 2.9 | 1.6 | 1.8 | 3.4 | 3.5 | 1.8 | 2.5 | 0.9 | 0.8 | 0.9 | 1.0 |
| 1985 | 2.6 | 2.8 | 1.0 | 1.8 | 3.3 | 3.5 | 1.7 | 2.9 | 0.9 | 0.9 | 0.8 | 1.2 |
| 1986 | 2.6 | 2.8 | 1.6 | 1.1 | 2.9 | 3.0 | 1.6 | 2.6 | 1.0 | 1.0 | 0.6 | 1.3 |
| 1987 | 2.6 | 2.8 | 1.9 | 1.0 | 3.1 | 3.1 | 1.9 | 2.4 | 0.9 | 0.9 | 0.8 | 0.7 |
| 1988 | 2.4 | 2.5 | 1.4 | 0.7 | 3.0 | 3.0 | 1.8 | 2.0 | 1.1 | 1.1 | 0.8 | 1.1 |
| 1989 | 2.7 | 2.9 | 1.5 | 1.1 | 3.1 | 3.3 | 1.3 | 1.3 | 1.0 | 1.0 | 0.7 | 1.0 |
| 1990 | 2.6 | 2.7 | 2.2 | 0.5 | 3.0 | 3.1 | 1.3 | 1.7 | 1.0 | 1.0 | 1.1 | 1.1 |
| 1991 | 2.9 | 3.2 | 1.2 | 1.1 | 3.2 | 3.2 | 2.0 | 1.9 | 1.0 | 1.0 | 1.1 | 1.0 |
| 1992 | 2.7 | 3.1 | 1.1 | 0.9 | 2.8 | 2.9 | 1.1 | 1.2 | 0.9 | 0.9 | 0.7 | 0.5 |
| 1993 | 2.7 | 3.1 | 0.7 | 0.7 | 2.8 | 2.8 | 1.7 | 2.0 | 0.9 | 0.8 | 1.0 | 0.8 |
| 1994 | *2.8 | *3.1 | 1.4 | 1.0 | 3.2 | 3.2 | 2.0 | 2.4 | 0.9 | 0.9 | 1.0 | 0.9 |
| 1995 | 2.6 | 2.7 | 1.7 | 1.5 | 3.4 | 3.5 | 2.6 | 1.4 | 1.0 | 1.0 | 1.4 | 0.7 |

- Not available.
* Revised from previously published figures.

NOTE: Included in the total but not shown separately are high school graduates from other racial/ethnic groups.
SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 10-4 Percentage of high school graduates enrolled in college, by age and race/ethnicity: October 1972-95

|  | Aged 18-24 |  |  |  | Aged 25-34 |  |  |  | Aged 35 or older |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total | White | Black | Hispanic | Total | White | Black | Hispanic | Total | White | Black | anic |
| 1972 | 31.9 | 32.6 | 27.2 | 25.8 | 8.4 | 8.4 | 8.8 | 7.5 | - | - | - | - |
| 1973 | 29.7 | 30.2 | 23.8 | 29.1 | 8.2 | 8.1 | 7.7 | 10.7 | - | - | - | - |
| 1974 | 30.5 | 30.6 | 26.2 | 32.3 | 9.3 | 9.1 | 10.8 | 10.0 | - | - | - | - |
| 1975 | 32.5 | 32.3 | 31.5 | 35.5 | 9.9 | 9.6 | 11.5 | 11.3 | - | - | - | - |
| 1976 | 33.1 | 32.8 | 33.4 | 35.9 | 9.6 | 9.2 | 11.9 | 11.0 | 2.3 | 2.1 | 4.1 | 3.9 |
| 1977 | 32.5 | 32.3 | 31.3 | 31.5 | 10.3 | 9.8 | 13.9 | 12.4 | - | - | - | - |
| 1978 | 31.4 | 31.3 | 29.6 | 27.1 | 9.1 | 8.8 | 10.8 | 10.2 | 2.4 | 2.2 | 3.8 | 4.2 |
| 1979 | 31.2 | 31.3 | 29.4 | 30.2 | 9.1 | 8.9 | 9.2 | 11.6 | 2.4 | 2.3 | 3.3 | 2.9 |
| 1980 | 31.8 | 32.1 | 27.6 | 29.9 | 8.9 | 8.7 | 9.6 | 9.2 | 2.1 | 2.0 | 3.4 | 2.9 |
| 1981 | 32.4 | 32.7 | 28.0 | 29.9 | 9.0 | 8.5 | 10.2 | 10.8 | 2.3 | 2.1 | 3.7 | 4.0 |
| 1982 | 33.0 | 33.3 | 28.1 | 29.2 | 8.9 | 8.7 | 9.6 | 9.7 | 2.2 | 2.1 | 2.7 | 2.9 |
| 1983 | 32.5 | 33.0 | 27.0 | 31.5 | 9.1 | 8.7 | 8.8 | 9.8 | 2.3 | 2.2 | 2.7 | 3.1 |
| 1984 | 33.2 | 33.9 | 27.2 | 29.9 | 8.6 | 8.4 | 8.0 | 9.9 | 2.1 | 2.0 | 2.7 | 1.8 |
| 1985 | 33.7 | 34.9 | 26.0 | 26.8 | 8.7 | 8.6 | 7.5 | 9.7 | 2.3 | 2.2 | 2.9 | 3.4 |
| 1986 | 34.0 | 34.5 | 28.6 | 29.4 | 8.3 | 7.9 | 7.9 | 10.4 | 2.4 | 2.2 | 3.3 | 3.4 |
| 1987 | 36.0 | 37.2 | 29.1 | 28.2 | 8.1 | 7.9 | 7.9 | 8.9 | 2.3 | 2.3 | 2.6 | 2.5 |
| 1988 | 37.0 | 38.4 | 27.8 | 30.8 | 8.0 | 7.8 | 7.5 | 7.8 | 2.7 | 2.6 | 3.3 | 3.4 |
| 1989 | 38.0 | 39.7 | 30.5 | 28.3 | 8.2 | 8.3 | 6.2 | 7.1 | 2.5 | 2.5 | 2.1 | 3.7 |
| 1990 | 39.0 | 40.3 | 32.4 | 28.4 | 8.6 | 8.7 | 5.9 | 7.0 | 2.7 | 2.6 | 2.9 | 3.9 |
| 1991 | 40.8 | 42.3 | 30.8 | 33.9 | 9.0 | 8.7 | 8.1 | 8.6 | 2.7 | 2.6 | 3.4 | 2.9 |
| 1992 | 41.6 | 42.5 | 33.4 | 36.1 | 8.6 | 8.5 | 6.7 | 8.5 | 2.5 | 2.5 | 2.6 | 2.7 |
| 1993 | 41.0 | 42.0 | 32.2 | 34.9 | 8.5 | 8.2 | 8.1 | 9.5 | 2.6 | 2.4 | 3.3 | 3.1 |
| 1994 | 42.2 | 43.6 | 35.5 | 32.9 | 9.5 | 9.1 | 9.7 | 10.1 | 2.7 | 2.5 | 3.5 | 4.3 |
| 1995 | 42.1 | 43.7 | 35.2 | 34.9 | 9.4 | 9.3 | 9.1 | 8.0 | 2.6 | 2.4 | 3.5 | 3.8 |

— Not available.
NOTE: Included in the total but not shown separately are high school graduates from other racial/ethnic groups.

Table 11-1 Percentage distribution of 1989-90 beginning postsecondary students seeking an associate's degree at 2 -year institutions, by persistence and attainment as of spring 1994 and selected characteristics

| Selected characteristics | Completed a degree |  |  |  | Did not complete a degree |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Highest degree completed |  |  | Totalanydegree |  | Number of months enrolled ${ }^{1}$ |  |  |  | Average months enrolled |
|  | Bach- | Asso- | Certi- |  |  | Less than | 9-18 | 19-27 | 8 months |  |
|  | elor's | ciate's | ficate |  |  | 9 months | months | months | or more |  |
| Total ${ }^{2}$ | 7.5 | 23.7 | 11.4 | 42.6 | 57.4 | 12.8 | 20.5 | 9.4 | 14.8 | 19.2 |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 6.2 | 20.1 | 13.6 | 39.9 | 60.1 | 13.6 | 19.7 | 10.2 | 16.7 | 20.3 |
| Female | 8.6 | 26.6 | 9.7 | 44.8 | 55.2 | 12.2 | 21.1 | 8.7 | 13.2 | 18.3 |
| Age as of 12/31/89 |  |  |  |  |  |  |  |  |  |  |
| 18 years or younger | 15.2 | 34.2 | 7.8 | 57.2 | 42.9 | 7.7 | 12.8 | 8.2 | 14.2 | 21.8 |
| 19 years | 1.5 | 22.4 | 13.2 | 37.1 | 62.9 | 16.8 | 19.5 | 7.4 | 19.2 | 20.3 |
| 20 years or older | 1.6 | 11.9 | 14.8 | 28.3 | 71.7 | 16.7 | 30.2 | 11.7 | 13.1 | 16.9 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |
| American Indian/Alaskan Native | - | - | - | - | - | - | - | - | - | - |
| Asian/Pacific Islander | - | - | - | - | - | - | - | - | - | - |
| Black | 5.7 | 16.1 | 18.1 | 39.9 | 60.1 | 18.4 | 20.5 | 11.9 | 9.3 | 17.9 |
| Hispanic | 8.9 | 22.4 | 9.8 | 41.0 | 59.0 | 1.9 | 25.9 | 13.5 | 17.7 | - |
| White | 7.6 | 24.6 | 10.8 | 43.1 | 57.0 | 13.7 | 19.8 | 8.4 | 15.1 | 18.9 |
| Marital status in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Never married | 9.3 | 26.9 | 10.6 | 46.7 | 53.3 | 10.8 | 17.8 | 8.8 | 15.8 | 20.2 |
| Married | 3.7 | 17.9 | 12.4 | 33.9 | 66.1 | 17.1 | 28.7 | 8.8 | 11.5 | 15.6 |
| Divorced/separated/widowed | 0.0 | 4.1 | 24.8 | 28.9 | 71.1 | 24.5 | 23.8 | 10.7 | 9.1 | - |
| Number of children in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| None | 9.0 | 25.8 | 9.7 | 44.5 | 55.5 | 12.2 | 18.1 | 9.6 | 15.7 | 20.1 |
| One | 0.5 | 16.6 | 20.2 | 37.3 | 62.7 | 17.0 | 32.2 | 3.9 | 9.6 | - |
| Two | 1.2 | 11.3 | 13.8 | 26.3 | 73.7 | 7.7 | 41.6 | 13.8 | 10.7 | - |
| Three or more | - | - | - | - | - | - | - | - | - | - |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |  |
| Lowest quartile | 2.4 | 17.1 | 13.7 | 33.2 | 66.8 | 19.2 | 27.0 | 5.7 | 14.9 | 17.2 |
| Middle two quartiles | 6.4 | 22.3 | 12.5 | 41.2 | 58.8 | 12.4 | 20.4 | 10.9 | 15.2 | 19.4 |
| Highest quartile | 12.6 | 30.2 | 8.1 | 50.9 | 49.1 | 9.8 | 16.8 | 8.7 | 13.9 | 20.4 |
| Income |  |  |  |  |  |  |  |  |  |  |
| Dependent |  |  |  |  |  |  |  |  |  |  |
| Less than \$20,000 | 7.7 | 25.7 | 11.1 | 44.5 | 55.5 | 13.3 | 19.1 | 6.5 | 16.6 | 19.6 |
| 20,000-39,999 | 11.0 | 27.1 | 11.4 | 49.5 | 50.5 | 14.3 | 13.8 | 11.3 | 11.2 | 18.9 |
| 40,000-59,999 | 13.7 | 32.1 | 10.4 | 56.2 | 43.9 | 7.0 | 16.3 | 5.9 | 14.6 | 21.3 |
| 60,000 or more | 7.2 | 30.9 | 3.1 | 41.2 | 58.8 | 4.4 | 17.9 | 13.2 | 23.3 | 25.5 |
| Independent | 1.8 | 13.8 | 14.3 | 29.9 | 70.1 | 16.6 | 28.7 | 10.3 | 14.5 | 17.3 |
| Parental educational attainment |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 1.7 | 16.3 | 12.0 | 30.0 | 70.0 | 13.2 | 28.0 | 15.5 | 13.4 | 18.1 |
| High school graduate | 8.4 | 20.1 | 11.5 | 40.0 | 60.0 | 15.3 | 19.8 | 12.1 | 12.8 | 15.5 |
| Some postsecondary | 8.5 | 28.7 | 8.7 | 46.0 | 54.1 | 9.2 | 22.7 | 8.9 | 13.3 | 18.0 |
| Bachelor's degree | 5.6 | 36.0 | 18.0 | 59.6 | 40.4 | 8.9 | 13.1 | 2.8 | 15.6 | 20.4 |
| Advanced degree | 12.5 | 31.5 | 2.3 | 46.3 | 53.7 | 6.2 | 16.8 | 5.1 | 25.7 | 27.9 |

Table 11-1 Percentage distribution of 1989-90 beginning postsecondary students seeking an associate's degree at 2 -year institutions, by persistence and attainment as of spring 1994 and selected characteristics - Continued

| Selected characteristics | Completed a degree |  |  |  | Did not complete a degree |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Highest degree completed |  |  |  |  | Number of months enrolled ${ }^{1}$ |  |  |  | Average months enrolled |
|  | Bach- | Asso- |  |  |  | Less than | 9-18 |  | months |  |
|  | elor's | ciate's | ficate |  |  | 9 months | months | months | or more |  |
| High school diploma or equivalency status |  |  |  |  |  |  |  |  |  |  |
| High school diploma | 8.1 | 24.8 | 11.1 | 43.9 | 56.1 | 12.6 | 18.2 | 9.6 | 15.7 | 19.8 |
| GED/Equivalency certificate | 1.6 | 12.2 | 15.4 | 29.1 | 70.9 | 14.8 | 44.5 | 6.9 | 4.8 | 14.1 |
| None | - | - | - | - | - | - | - | - | - | - |
| Diploma/delayed entry status ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |
| Diploma, did not delay | 11.9 | 32.1 | 10.0 | 54.0 | 46.0 | 9.1 | 13.4 | 7.6 | 16.0 | 22.5 |
| Diploma, delayed entry | 1.4 | 12.2 | 12.9 | 26.5 | 73.5 | 18.7 | 26.5 | 13.2 | 15.2 | 17.0 |
| No diploma | 1.6 | 12.2 | 15.4 | 29.1 | 70.9 | 14.8 | 44.5 | 6.9 | 4.8 | 14.1 |
|  |  |  |  |  |  |  |  |  |  |  |
| Less than 2 years of postsecondary education | 1.2 | 21.5 | 13.3 | 36.0 | 64.0 | 18.1 | 28.6 | 3.6 | 13.8 | 17.1 |
| 2 to 3 years postsecondary education | 2.2 | 18.2 | 13.9 | 34.3 | 65.7 | 13.8 | 22.9 | 10.1 | 18.9 | 19.2 |
| Bachelor's degree or higher | 10.1 | 26.4 | 10.6 | 47.1 | 52.9 | 10.9 | 19.1 | 9.3 | 13.7 | 19.7 |
| Enrollment status, first term |  |  |  |  |  |  |  |  |  |  |
| Full-time | 12.0 | 30.0 | 9.7 | 51.6 | 48.4 | 9.4 | 17.6 | 9.9 | 11.5 | 19.0 |
| Less than full-time | 2.1 | 15.5 | 13.1 | 30.7 | 69.3 | 16.5 | 23.7 | 9.2 | 20.0 | 20.0 |
| Enrollment status in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Exclusively part-time | 1.5 | 12.8 | 9.4 | 23.6 | 76.4 | 15.8 | 30.2 | 12.5 | 18.0 | 18.7 |
| Mixed | 6.6 | 35.1 | 11.3 | 53.0 | 47.0 | 0.0 | 20.1 | 6.4 | 20.5 | - |
| Exclusively full-time | 12.0 | 29.3 | 11.7 | 52.9 | 47.1 | 7.9 | 16.1 | 9.3 | 13.8 | 21.2 |
| Field of study in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Humanities and social sciences | 11.0 | 32.7 | 9.3 | 53.0 | 47.0 | 6.6 | 15.7 | 9.3 | 15.5 | 24.3 |
| Physical and life sciences | - | - | - | - | - | - | - | - | - | - |
| Engineering, math, and computers | 3.4 | 15.2 | 15.4 | 34.0 | 66.0 | 15.2 | 27.6 | 4.4 | 18.9 | 20.0 |
| Education | 16.7 | 37.7 | 4.7 | 59.1 | 40.9 | 7.8 | 3.0 | 24.7 | 5.5 | - |
| Business and management | 7.3 | 22.4 | 10.2 | 39.9 | 60.2 | 6.9 | 27.3 | 10.0 | 16.0 | 19.7 |
| Health | 4.7 | 24.4 | 25.6 | 54.7 | 45.3 | 0.0 | 17.1 | 11.4 | 16.9 | - |
| Vocational/technical | 5.5 | 25.2 | 11.2 | 41.9 | 58.1 | 9.4 | 24.2 | 9.8 | 14.6 | 18.4 |
| Employed while enrolled ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |
| None | 3.1 | 19.9 | 14.0 | 37.0 | 63.0 | 27.2 | 16.7 | 15.3 | 3.8 | 18.8 |
| 1-50 percent | 8.4 | 30.7 | 21.0 | 60.1 | 39.9 | 4.5 | 16.7 | 5.3 | 13.5 | 26.0 |
| More than 50 percent | 7.9 | 22.6 | 9.3 | 39.7 | 60.3 | 13.4 | 21.8 | 9.1 | 16.0 | 24.9 |
| Hours worked per week while enrolled |  |  |  |  |  |  |  |  |  |  |
| None | 5.6 | 21.1 | 19.5 | 46.2 | 53.8 | 14.1 | 12.6 | 15.5 | 11.7 | 17.7 |
| 1-20 hours | 11.4 | 30.9 | 14.0 | 56.3 | 43.7 | 5.3 | 17.2 | 6.3 | 14.9 | 23.0 |
| More than 20 hours | 6.9 | 22.3 | 8.6 | 37.8 | 62.2 | 14.6 | 23.5 | 8.7 | 15.5 | 18.8 |

Table 11-1 Percentage distribution of 1989-90 beginning postsecondary students seeking an associate's degree at 2-year institutions, by persistence and attainment as of spring 1994 and selected characteristics - Continued

| Selected characteristics | Completed a degree |  |  |  | Did not complete a degree |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Highest degree completed |  |  |  | Total no degree | Number of months enrolled ${ }^{1}$ |  |  |  | Average months enrolled |
|  | Bachelor's | Associate's | Certi <br> ficate |  |  | Less than <br> 9 months | $\begin{array}{r} 9-18 \\ \text { months } \end{array}$ | $\begin{array}{r} 19-27 \\ \text { months } \end{array}$ | 8 months <br> or more |  |
| Received financial aid in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| No | 6.5 | 21.2 | 12.1 | 39.8 | 60.2 | 14.8 | 20.3 | 10.0 | 15.1 | 18.9 |
| Yes | 9.4 | 28.3 | 10.2 | 47.9 | 52.1 | 9.1 | 20.7 | 8.2 | 14.2 | 19.9 |
| Received grant in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| No | 6.4 | 22.1 | 11.7 | 40.1 | 59.9 | 15.1 | 20.7 | 9.9 | 14.2 | 18.5 |
| Yes | 10.1 | 27.4 | 10.8 | 48.3 | 51.7 | 7.7 | 19.9 | 8.1 | 16.0 | 21.0 |
| Received loan in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| No | 7.8 | 22.4 | 12.0 | 42.2 | 57.8 | 13.2 | 19.5 | 9.8 | 15.4 | 19.6 |
| Yes | 5.2 | 34.2 | 7.2 | 46.6 | 53.4 | 9.7 | 28.2 | 6.2 | 9.4 | 15.8 |
| Grade point average in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Below 2.75 | 8.4 | 18.8 | 11.8 | 38.9 | 61.1 | 13.4 | 20.0 | 12.5 | 15.3 | 19.8 |
| 2.75 to 3.24 | 8.1 | 26.2 | 5.8 | 40.1 | 59.9 | 9.2 | 26.9 | 8.4 | 15.4 | 19.8 |
| 3.25 or higher | 9.5 | 30.4 | 14.1 | 54.0 | 46.0 | 8.2 | 18.6 | 5.5 | 13.7 | 19.2 |
| Academic integration in 1989-90 ${ }^{5}$ |  |  |  |  |  |  |  |  |  |  |
| Low | 1.6 | 13.1 | 8.6 | 23.2 | 76.8 | 26.5 | 24.5 | 0.9 | 25.0 | 17.5 |
| Moderate | 9.3 | 20.0 | 11.3 | 40.6 | 59.4 | 13.9 | 22.6 | 11.5 | 11.4 | 17.8 |
| High | 7.8 | 30.0 | 12.1 | 49.9 | 50.1 | 8.4 | 18.1 | 9.2 | 14.5 | 21.1 |
| Social integration in 1989-90 ${ }^{6}$ |  |  |  |  |  |  |  |  |  |  |
| Low | 3.9 | 11.7 | 8.4 | 24.0 | 76.0 | 19.8 | 28.9 | 10.1 | 17.2 | 17.3 |
| Moderate | 7.6 | 25.8 | 12.4 | 45.8 | 54.2 | 11.8 | 18.2 | 10.0 | 14.3 | 19.5 |
| High | 11.7 | 30.7 | 11.7 | 54.2 | 45.8 | 8.9 | 18.9 | 6.0 | 12.0 | 20.8 |
| Self rating of academic ability |  |  |  |  |  |  |  |  |  |  |
| Above average | 10.9 | 28.9 | 15.4 | 55.2 | 44.8 | 9.6 | 11.6 | 5.8 | 17.8 | 22.9 |
| Average or below | 6.5 | 21.7 | 9.8 | 38.0 | 62.0 | 14.2 | 23.9 | 10.3 | 13.6 | 18.2 |

- Too few sample observations for a reliable estimate.
${ }^{1}$ Includes students who are still enrolled.
${ }^{2}$ Limited to students seeking an associate's degree at 2-year institutions.
${ }^{3}$ Students were considered to have a diploma only if they had a regular high school diploma. Students with a GED or other high school credentials were considered to have no diploma.
${ }^{4}$ Percentage of months enrolled in which the student was also employed in 1989-94.
${ }^{5}$ Examines whether the student attended career-related lectures, participated in study groups with other students, talked about academic matters with faculty, or met with an advisor concerning academic plans.
${ }^{6}$ Examines whether the students had contact with faculty outside of class, went places with friends from school, or participated in student assistance centers/programs or school clubs.
NOTE: The number of total cases in a row is used as the denominator in the calculation of the percentage distribution, whereas the number of cases within the cell is used as the denominator in the calculation of averages. If the number of cases in the cell is below 30, a low number will result, despite available estimates for the row as a whole.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:90/94).

Table 11-2 Percentage distribution of 1989-90 beginning postsecondary students seeking a certificate at 2 -year and less-than-2-year institutions, by persistence and attainment as of spring 1994 and selected characteristics

| Selected characteristics | Completed a degree |  |  |  | Did not complete a degree |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Highest degree completed |  |  | Total any degree | Total no degree | Number of months enrolled ${ }^{1}$ |  |  |  | Average months enrolled |
|  | Bachelor's | Associate's | Certificate |  |  | Less than 9 months | $\begin{array}{r} 9-18 \\ \text { months } \end{array}$ | $\begin{array}{r} \text { 19-27 } \\ \text { months } \end{array}$ | 28 months or more |  |
| Total ${ }^{2}$ | 0.5 | 4.3 | 49.7 | 54.5 | 45.5 | 22.7 | 15.7 | 4.4 | 2.8 | 10.5 |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 0.2 | 2.7 | 49.3 | 52.2 | 47.8 | 28.7 | 12.4 | 5.3 | 1.4 | 8.6 |
| Female | 0.7 | 5.3 | 49.9 | 55.9 | 44.1 | 19.0 | 17.7 | 3.8 | 3.7 | 11.8 |
| Age as of 12/31/89 |  |  |  |  |  |  |  |  |  |  |
| 18 years or younger | 1.0 | 8.7 | 43.1 | 52.8 | 47.2 | 18.7 | 16.4 | 7.8 | 4.2 | 12.9 |
| 19 years | 0.3 | 3.2 | 62.3 | 65.7 | 34.3 | 14.9 | 13.9 | 3.6 | 1.8 | 10.7 |
| 20 years or older | 0.3 | 2.5 | 50.0 | 52.7 | 47.3 | 26.4 | 15.7 | 2.9 | 2.3 | 9.3 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |
| American Indian/Alaskan Native | - | - | - | - | - | - | - | - | - | - |
| Asian/Pacific Islander | - | - | - | - | - | - | - | - | - | - |
| Black | 0.8 | 2.3 | 37.3 | 40.4 | 59.6 | 25.4 | 25.8 | 3.4 | 5.0 | 11.7 |
| Hispanic | 1.8 | 1.2 | 62.9 | 65.9 | 34.1 | 16.0 | 3.7 | 13.0 | 1.4 | 14.2 |
| White | 0.3 | 5.4 | 49.5 | 55.2 | 44.8 | 23.2 | 15.8 | 3.8 | 2.0 | 9.4 |
| Marital status in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Never married | 0.7 | 5.4 | 49.3 | 55.4 | 44.7 | 20.0 | 16.3 | 5.7 | 2.7 | 11.2 |
| Married | 0.3 | 1.5 | 50.9 | 52.7 | 47.3 | 26.3 | 14.9 | 1.7 | 4.4 | 9.9 |
| Divorced/separated/widowed | 0.0 | 3.3 | 51.0 | 54.2 | 45.8 | 26.4 | 16.8 | 2.3 | 0.3 | 8.5 |
| Number of children in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| None | 0.5 | 6.0 | 49.1 | 55.7 | 44.3 | 20.1 | 16.8 | 5.1 | 2.3 | 10.9 |
| One | 0.5 | 2.7 | 49.9 | 53.0 | 47.0 | 22.6 | 13.5 | 5.4 | 5.5 | 12.5 |
| Two | 0.0 | 1.9 | 45.9 | 47.8 | 52.3 | 35.7 | 12.0 | 3.4 | 1.2 | 7.8 |
| Three or more | 1.4 | 1.7 | 51.5 | 54.6 | 45.4 | 18.2 | 21.3 | 0.7 | 5.3 | - |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |  |
| Lowest quartile | 0.5 | 1.3 | 47.6 | 49.4 | 50.6 | 26.6 | 15.6 | 5.1 | 3.3 | 10.7 |
| Middle two quartiles | 0.4 | 4.8 | 52.3 | 57.5 | 42.5 | 22.9 | 14.1 | 2.8 | 2.8 | 10.0 |
| Highest quartile | 0.8 | 10.4 | 44.1 | 55.4 | 44.6 | 11.4 | 22.8 | 9.2 | 1.2 | 12.1 |
| Income |  |  |  |  |  |  |  |  |  |  |
| Dependent |  |  |  |  |  |  |  |  |  |  |
| Less than \$20,000 | 0.0 | 7.1 | 52.9 | 59.9 | 40.1 | 23.1 | 13.8 | 1.6 | 1.6 | 8.6 |
| 20,000-39,999 | 1.0 | 4.9 | 40.6 | 46.4 | 53.6 | 24.7 | 14.2 | 10.4 | 4.3 | 13.0 |
| 40,000-59,999 | 1.0 | 7.6 | 65.2 | 73.9 | 26.1 | 3.9 | 13.4 | 1.5 | 7.3 | - |
| 60,000 or more | 0.0 | 8.9 | 44.8 | 53.8 | 46.2 | 1.1 | 34.7 | 10.4 | 0.0 | - |
| Independent | 0.5 | 2.6 | 49.6 | 52.6 | 47.4 | 26.3 | 15.1 | 3.5 | 2.4 | 9.5 |
| Parental educational attainment |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 0.5 | 1.6 | 50.2 | 52.3 | 47.7 | 29.5 | 10.1 | 3.1 | 5.0 | 11.0 |
| High school graduate | 0.4 | 2.1 | 54.0 | 56.5 | 43.5 | 21.1 | 15.7 | 4.7 | 1.9 | 10.6 |
| Some postsecondary | 0.2 | 7.9 | 49.4 | 57.6 | 42.4 | 16.0 | 21.6 | 1.3 | 3.6 | 10.1 |
| Bachelor's degree | 2.1 | 5.6 | 30.4 | 38.1 | 61.9 | 30.4 | 20.0 | 8.2 | 3.3 | - |
| Advanced degree | 1.1 | 26.5 | 46.4 | 74.0 | 26.0 | 7.7 | 4.2 | 13.4 | 0.6 | - |

Table 11-2 Percentage distribution of 1989-90 beginning postsecondary students seeking a certificate at 2 -year and less-than-2-year institutions, by persistence and attainment as of spring 1994 and selected characteristics - Continued

| Selected characteristics | Completed a degree |  |  |  | Did not complete a degree |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Highest degree completed |  |  | Total any degree |  | Number of months enrolled ${ }^{1}$ |  |  |  | Average months enrolled |
|  | Bachelor's | Associate's | Certi- <br> ficate |  |  | Less than 9 months | $\begin{array}{r} 9-18 \\ \text { months } \end{array}$ | $\begin{array}{r} \text { 19-27 } \\ \text { months } \end{array}$ | 28 months or more |  |
| High school diploma or equivalency status |  |  |  |  |  |  |  |  |  |  |
| High school diploma | 0.5 | 4.9 | 50.7 | 56.1 | 44.0 | 21.2 | 15.4 | 4.3 | 3.1 | 11.0 |
| GED/Equivalency cerrificate | 0.6 | 1.5 | 45.0 | 47.1 | 52.9 | 30.4 | 16.4 | 5.1 | 1.1 | 8.4 |
| None | - | - | - | - | - | - | - | - | - | - |
| Diploma/delayed entry status ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |
| Diploma, did not delay | 0.9 | 8.2 | 49.8 | 58.9 | 41.1 | 15.4 | 15.8 | 5.8 | 4.1 | 13.2 |
| Diploma, delayed entry | 0.2 | 2.9 | 51.2 | 54.3 | 45.7 | 24.7 | 15.2 | 3.3 | 2.5 | 9.9 |
| No diploma | 0.6 | 1.4 | 44.7 | 46.7 | 53.3 | 30.2 | 17.1 | 4.9 | 1.1 | 8.3 |
| Expected educational attainment |  |  |  |  |  |  |  |  |  |  |
| Less than 2 years of postsecondary education | 0.4 | 1.4 | 56.2 | 58.0 | 42.0 | 24.0 | 10.6 | 6.7 | 0.7 | 9.5 |
| 2 to 3 years of postsecondary education | 0.2 | 4.0 | 49.8 | 53.9 | 46.1 | 25.0 | 13.8 | 3.2 | 4.1 | 10.9 |
| Bachelor's degree or higher | 1.0 | 7.7 | 38.2 | 46.9 | 53.1 | 21.7 | 23.7 | 3.1 | 4.6 | 11.5 |
| Level of first institution |  |  |  |  |  |  |  |  |  |  |
| 2-year | 0.2 | 6.0 | 37.9 | 44.0 | 56.0 | 27.2 | 19.2 | 5.3 | 4.3 | 11.2 |
| Less-than-2-year | 0.8 | 2.9 | 60.0 | 63.7 | 36.4 | 18.8 | 12.6 | 3.5 | 1.5 | 9.5 |
| Enrollment status, first term |  |  |  |  |  |  |  |  |  |  |
| Full-time | 0.7 | 4.5 | 56.3 | 61.5 | 38.5 | 23.1 | 11.6 | 1.8 | 2.0 | 8.8 |
| Less than full-time | 0.0 | 2.8 | 38.5 | 41.4 | 58.7 | 22.8 | 23.8 | 7.5 | 4.5 | 12.3 |
| Enrollment status in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Exclusively part-time | 0.3 | 0.3 | 41.1 | 41.6 | 58.4 | 21.4 | 22.7 | 10.3 | 4.0 | 12.5 |
| Mixed | - | - | - | - | - | - | - | - | - | - |
| Exclusively full-time | 0.7 | 5.9 | 52.1 | 58.7 | 41.3 | 22.0 | 13.8 | 2.6 | 2.9 | 10.3 |
| Field of study in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Humanities and social sciences | - | - | - | - | - | - | - | - | - | - |
| Physical and life sciences | - | - | - | - | - | - | - | - | - | - |
| Engineering, math, and computers | 0.0 | 7.0 | 58.6 | 65.6 | 34.4 | 9.0 | 24.4 | 0.0 | 1.0 | - |
| Education | - | - | - | - | - | - | - | - | - | - |
| Business and management | 0.8 | 3.6 | 58.6 | 63.0 | 37.0 | 10.5 | 15.2 | 6.5 | 4.9 | 14.5 |
| Health | 0.9 | 4.5 | 9.5 | 57.5 | 42.5 | 6.0 | 9.5 | 3.2 | 6.2 | - |
| Vocational/technical | 0.0 | 2.1 | 66.9 | 69.0 | 31.0 | 13.9 | 12.4 | 3.8 | 0.9 | 10.9 |
| Employed while enrolled ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |
| None | 0.0 | 1.0 | 56.9 | 57.9 | 42.1 | 25.8 | 14.6 | 1.3 | 0.4 | 7.0 |
| 1-50 percent | 1.1 | 3.6 | 67.5 | 72.1 | 27.9 | 10.3 | 9.8 | 6.6 | 1.3 | 12.9 |
| More than 50 percent | 0.4 | 6.0 | 42.1 | 48.4 | 51.6 | 24.4 | 18.6 | 4.6 | 4.0 | 11.1 |
| Hours worked per week while enrolled |  |  |  |  |  |  |  |  |  |  |
| None | 0.7 | 1.5 | 58.8 | 61.0 | 39.1 | 20.7 | 14.5 | 1.4 | 2.4 | 9.5 |
| 1-20 hours | 0.8 | 2.5 | 71.6 | 74.8 | 25.2 | 12.7 | 10.6 | 0.7 | 1.2 | 10.7 |
| More than 20 hours | 0.3 | 6.2 | 40.6 | 47.2 | 52.8 | 25.6 | 17.3 | 6.7 | 3.3 | 10.9 |

Table 11-2 Percentage distribution of 1989-90 beginning postsecondary students seeking a certificate at 2 -year and less-than-2-year institutions, by persistence and attainment as of spring 1994 and selected characteristics - Continued

| Selected characteristics | Completed a degree |  |  |  | Did not complete a degree |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Highest degree completed |  |  |  | Totalnodegree | Number of months enrolled' |  |  |  | Average months enrolled |
|  | Bachelor's | $\begin{aligned} & \text { Asso- } \\ & \text { ciate's } \end{aligned}$ | Certi- <br> ficate |  |  | Less than 9 months | 9-18 <br> months | $\begin{array}{r} 19-27 \\ \text { months } \end{array}$ | 28 months or more |  |
| Received financial aid in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| No | 0.4 | 5.8 | 39.3 | 45.5 | 54.5 | 26.7 | 18.3 | 7.1 | 2.4 | 10.2 |
| Yes | 0.6 | 3.1 | 57.9 | 61.6 | 38.4 | 19.5 | 13.6 | 2.2 | 3.1 | 10.8 |
| Received grant in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| No | 0.5 | 5.6 | 43.3 | 49.5 | 50.6 | 25.8 | 16.6 | 5.9 | 2.3 | 10.1 |
| Yes | 0.5 | 2.6 | 58.0 | 61.1 | 38.9 | 18.6 | 14.5 | 2.3 | 3.5 | 11.3 |
| Received loan in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| No | 0.5 | 5.0 | 43.6 | 49.0 | 51.0 | 24.5 | 17.3 | 5.6 | 3.6 | 11.0 |
| Yes | 0.5 | 2.8 | 63.8 | 67.1 | 32.9 | 18.6 | 12.1 | 1.4 | 0.9 | 8.6 |
| Grade point average in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Below 2.75 | 0.2 | 3.3 | 46.0 | 49.5 | 50.5 | 17.6 | 21.9 | 9.6 | 1.4 | 11.8 |
| 2.75 to 3.24 | 2.1 | 9.9 | 36.6 | 48.6 | 51.4 | 17.9 | 25.4 | 5.8 | 2.4 | 10.8 |
| 3.25 or higher | 0.5 | 3.0 | 61.9 | 65.4 | 34.6 | 21.8 | 8.2 | 0.2 | 4.3 | 10.6 |
| Academic integration in 1989-90 ${ }^{5}$ |  |  |  |  |  |  |  |  |  |  |
| Low | 0.4 | 5.9 | 31.6 | 37.9 | 62.1 | 32.2 | 17.0 | 3.6 | 9.2 | 11.7 |
| Moderate | 0.5 | 2.3 | 46.4 | 49.2 | 50.8 | 25.4 | 16.1 | 7.5 | 1.7 | 10.6 |
| High | 0.5 | 5.2 | 58.1 | 63.8 | 36.2 | 17.7 | 14.7 | 2.2 | 1.6 | 9.7 |
| Social integration in 1989-90 ${ }^{6}$ |  |  |  |  |  |  |  |  |  |  |
| Low | 0.3 | 1.3 | 37.4 | 38.9 | 61.1 | 34.9 | 17.4 | 4.5 | 4.3 | 9.7 |
| Moderate | 0.5 | 6.0 | 51.3 | 57.8 | 42.2 | 19.0 | 15.5 | 5.3 | 2.4 | 11.1 |
| High | 0.7 | 3.2 | 59.7 | 63.6 | 36.4 | 18.5 | 13.6 | 2.0 | 2.3 | 10.3 |
| Self rating of academic ability |  |  |  |  |  |  |  |  |  |  |
| Above average | 0.0 | 3.0 | 52.4 | 55.4 | 44.6 | 21.6 | 14.9 | 6.8 | 1.3 | 10.3 |
| Average or below | 0.6 | 4.6 | 48.4 | 53.7 | 46.4 | 23.4 | 15.9 | 3.8 | 3.3 | 10.6 |

- Too few sample observations for a reliable estimate.
${ }^{1}$ Includes students who are still enrolled.
${ }^{2}$ Limited to students seeking a certificate at 2-year and less-than-2year institutions.
${ }^{3}$ Students were considered to have a diploma only if they had a regular high school diploma. Students with a GED or other high school credentials were considered to have no diploma.
${ }^{4}$ Percentage of months enrolled in which the student was also employed in 1989-94.
${ }^{5}$ Examines whether the student attended career-related lectures, participated in study groups with other students, talked about academic matters with faculty, or met with an advisor concerning academic plans.
${ }^{6}$ Examines whether the students had contact with faculty outside of class, went places with friends from school, or participated in student assistance centers/programs or school clubs.
NOTE: The number of total cases in a row is used as the denominator in the calculation of the percentage distribution, whereas the number of cases within the cell is used as the denominator in the calculation of averages. If the number of cases in the cell is below 30, a low number will result, despite available estimates for the row as a whole.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:90/94).


## Supplemental Tables and Notes

Table 11-3 Percentage distribution of 1989-90 beginning postsecondary students seeking an associate's degree or certificate, by selected characteristics

| Selected characteristics | Degree attempted |  |
| :---: | :---: | :---: |
|  | Associate's degree | Certificate |
| Total ${ }^{1}$ | 30.9 | 16.3 |
| Sex |  |  |
| Male | 44.7 | 38.0 |
| Female | 55.3 | 62.0 |
| Age as of 12/31/89 |  |  |
| 18 years or younger | 43.7 | 28.2 |
| 19 years | 19.9 | 13.3 |
| 20 years or older | 36.5 | 58.6 |
| Race/ethnicity |  |  |
| American Indian/Alaskan Native | 0.5 | 0.9 |
| Asian/Pacific Islander | 1.3 | 3.5 |
| Black | 9.9 | 14.7 |
| Hispanic | 9.5 | 8.6 |
| White | 78.8 | 72.3 |
| Marital status in 1989-90 |  |  |
| Never married | 77.3 | 62.3 |
| Married | 16.4 | 25.7 |
| Divorced/separated/widowed | 6.2 | 12.0 |
| Number of children in 1989-90 |  |  |
| None | 82.4 | 62.2 |
| One | 7.4 | 17.2 |
| Two | 6.5 | 13.7 |
| Three or more | 3.7 | 6.9 |
| Socioeconomic status |  |  |
| Lowest quartile | 17.3 | 34.0 |
| Middle two quartiles | 53.3 | 53.3 |
| Highest quartile | 29.4 | 12.7 |
| Income |  |  |
| Dependent |  |  |
| Less than \$20,000 | 16.9 | 16.0 |
| 20,000-39,999 | 24.3 | 14.3 |
| 40,000-59,999 | 17.4 | 7.1 |
| 60,000 or more | 8.0 | 5.2 |
| Independent | 33.6 | 57.4 |
| Parental educational attainment |  |  |
| Less than high school | 12.1 | 23.2 |
| High school graduate | 41.4 | 41.4 |
| Some postsecondary | 21.2 | 22.6 |
| Bachelor's degree | 13.7 | 9.0 |
| Advanced degree | 11.7 | 3.8 |

Table 11-3 Percentage distribution of 1989-90 beginning postsecondary students seeking an associate's degree or certificate, by selected characteristics - Continued

| Selected characteristics | Degree attempted |  |
| :---: | :---: | :---: |
|  | Associate's degree | Certificate |
| High school diploma or equivalency status |  |  |
| High school diploma | 91.3 | 83.2 |
| GED/Equivalency certificate | 8.7 | 16.4 |
| None | 0.0 | 0.4 |
| Diploma/delayed entry status ${ }^{2}$ |  |  |
| Diploma, did not delay | 57.9 | 31.4 |
| Diploma, delayed entry | 33.4 | 51.8 |
| No diploma | 8.7 | 16.8 |
| Expected educational attainment Less than 2 years of |  |  |
| Less than 2 years of postsecondary education | 4.7 | 44.3 |
| 2 to 3 years of |  |  |
| postsecondary education | 24.0 | 22.9 |
| Bachelor's degree or higher | 71.3 | 32.8 |
| Level of first institution |  |  |
| 2-year | 100.0 | 46.7 |
| Less-than-2-year | $\left({ }^{3}\right)$ | 53.3 |
| Enrollment status, first term |  |  |
| Full-time | 58.3 | 63.6 |
| Less than full-time | 41.7 | 36.4 |
| Field of study in 1989-90 |  |  |
| Humanities and social sciences | 19.0 | 5.6 |
| Physical and life sciences | 3.4 | 0.0 |
| Engineering, math, and computers | 13.6 | 8.3 |
| Education | 6.2 | 2.5 |
| Business and management | 30.5 | 30.1 |
| Health | 10.5 | 11.2 |
| Vocational/technical | 16.7 | 42.4 |
| Employed while enrolled ${ }^{4}$ |  |  |
| None | 6.8 | 21.6 |
| 1-50 percent | 17.6 | 18.0 |
| More than 50 percent | 75.6 | 60.4 |
| Hours worked per week while enrolled |  |  |
| None | 16.9 | 32.0 |
| 1-20 hours | 18.6 | 10.5 |
| More than 20 hours | 64.5 | 57.5 |

Table 11-3 Percentage distribution of 1989-90 beginning postsecondary students seeking an associate's degree or certificate, by selected characteristics - Continued

|  |  | Degree attempted |
| :--- | :---: | :---: |
| Selected characteristics | Associate's degree | Certificate |
| Received financial aid in 1989-90 |  |  |
| No | 64.7 | 44.3 |
| Yes | 35.3 | 55.7 |
| Received grant in 1989-90 |  |  |
| No | 69.3 | 56.9 |
| Yes | 30.7 | 43.1 |
| Received loan in 1989-90 |  | 69.8 |
| No | 89.0 | 30.2 |
| Yes | 11.0 | 38.7 |
| Grade point average in 1989-90 |  | 19.5 |
| Below 2.75 | 57.5 | 41.8 |
| 2.75 to 3.24 | 20.1 | 16.1 |
| 3.25 or higher | 22.5 | 38.1 |
| Academic integration in 1989-90 |  | 45.8 |
| Low | 12.6 | 25.8 |
| Moderate | 42.2 | 54.2 |
| High | 45.3 | 20.0 |
| Social integration in 1989-90 |  |  |
| Low | 22.7 | 22.9 |
| Moderate | 55.9 | 77.1 |
| High | 21.4 |  |
| Self rating of academic ability | 26.0 | 74.0 |

'Limited to students seeking an associate's degree at 2-year institutions or a certificate at 2-year and less-than-2-year institutions.
${ }^{2}$ Students were considered to have a diploma only if they had a regular high school diploma. Students with a GED or other high school credentials were considered to have no diploma.
${ }^{3}$ Not applicable.
${ }^{4}$ Percentage of months enrolled in which the student was also employed in 1989-94.
${ }^{5}$ Examines whether the student attended career-related lectures, participated in study groups with other students, talked about academic matters with faculty, or met with an advisor concerning academic plans.
${ }^{6}$ Examines whether the students had contact with faculty outside of class, went places with friends from school, or participated in student assistance centers/programs or school clubs.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:90/94).

## Note to Indicator 11: Postsecondary persistence and degree completion

This analysis was constructed using data from the 1990 Beginning Postsecondary Students Longitudinal Study (BPS:90/94). BPS is based on a subsample of the 1990 National Postsecondary Student Aid Study (NPSAS:90), which consists of students beginning their postsecondary education for the first time at community colleges, vocational schools, and institutions granting bachelor's degrees during the 1989-90 academic year. The BPS First Follow-up was conducted in the spring of 1992, 2 years following the students' entry into postsecondary education, and the Second Follow-up was conducted during the spring of 1994. BPS provides detailed information regarding individual students' attendance patterns for 5 years following their first enrollment in postsecondary education.

The analysis examines persistence toward and completion of postsecondary degrees for students whose initial postsecondary degree objective was an associate's degree and who were initially enrolled at a 2 -year institution. It also examines the persistence of students seeking a postsecondary certificate who were initially enrolled at either a 2 -year or less-than-2-year institution. Whether the stu-
dent was seeking an associate's degree or a certificate was determined by their response to the question "Toward which degree or other award are the courses you are taking leading?"

In constructing the analysis, students were first divided into two broad categories: those who completed a postsecondary degree and those who did not. Students who had completed a degree or certificate were categorized according to the highest degree attained. The remaining students who after 5 years had not completed a degree (bachelor's degree, associate's degree, or certificate), or who were still enrolled, were categorized according to the number of months they were (have been) enrolled in postsecondary education. It is important to note that the number of months enrolled is not necessarily continuous months; therefore, those months cannot be used as an indicator of when the student left postsecondary education. Rather, presenting the data in this manner was designed to give the reader a measure of the potential benefit derived from postsecondary attendance, even without having completed a degree.

Table 12-1 Average undergraduate tuition, room, and board (in 1996 constant dollars) as a percentage of income of all families, by control of institution and selected family income percentiles: 1964-95

| Year | Public institutions |  |  |  | Private institutions |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tuition, room, and board | Family income percentiles |  |  | Tuition, room, and board | Family income percentiles |  |  |
|  |  | $20^{\text {th }}$ | $50^{\text {th }}$ | $80^{\text {th }}$ |  | $20^{\text {th }}$ | $50^{\text {th }}$ | $80^{\text {th }}$ |
| 1964 | \$4,772 | 29.0 | 14.4 | 9.2 | \$9,580 | 58.3 | 28.8 | 18.6 |
| 1965 | 4,834 | 27.7 | 14.0 | 9.0 | 9,859 | 56.6 | 28.5 | 18.3 |
| 1966 | 4,891 | 25.6 | 13.4 | 8.7 | 10,124 | 53.1 | 27.7 | 17.9 |
| 1967 | 4,909 | 25.5 | 13.2 | 8.5 | 10,173 | 52.8 | 27.3 | 17.6 |
| 1968 | 4,914 | 24.0 | 12.6 | 8.1 | 10,210 | 49.8 | 26.2 | 16.9 |
| 1969 | 4,997 | 23.4 | 12.4 | 7.9 | 10,508 | 49.1 | 26.0 | 16.7 |
| 1970 | 5,083 | 24.7 | 12.7 | 8.1 | 10,814 | 52.5 | 27.1 | 17.2 |
| 1971 | 5,174 | 25.6 | 13.0 | 8.2 | 11,122 | 55.1 | 27.9 | 17.7 |
| 1972 | 5,344 | 25.4 | 12.8 | 8.0 | 11,135 | 52.9 | 26.7 | 16.7 |
| 1973 | 5,105 | 23.8 | 12.0 | 7.5 | 10,647 | 49.5 | 25.0 | 15.6 |
| 1974 | 4,735 | 22.5 | 11.5 | 7.2 | 10,309 | 48.9 | 25.1 | 15.7 |
| 1975 | 4,713 | 23.4 | 11.8 | 7.3 | 10,363 | 51.4 | 25.9 | 16.1 |
| 1976 | 4,783 | 23.3 | 11.6 | 7.3 | 10,442 | 50.9 | 25.3 | 15.8 |
| 1977 | 4,730 | 23.1 | 11.4 | 7.0 | 10,416 | 50.9 | 25.1 | 15.5 |
| 1978 | 4,567 | 21.8 | 10.8 | 6.6 | 10,339 | 49.3 | 24.4 | 15.0 |
| 1979 | 4,376 | 20.7 | 10.3 | 6.4 | 9,927 | 46.9 | 23.4 | 14.6 |
| 1980 | 4,298 | 21.9 | 10.7 | 6.5 | 9,908 | 50.6 | 24.7 | 15.1 |
| 1981 | 4,440 | 23.6 | 11.5 | 6.9 | 10,280 | 54.6 | 26.6 | 15.9 |
| 1982 | 4,708 | 25.9 | 12.4 | 7.2 | 11,062 | 60.7 | 29.0 | 17.0 |
| 1983 | 4,865 | 26.4 | 12.5 | 7.4 | 11,574 | 62.9 | 29.8 | 17.5 |
| 1984 | 5,056 | 26.8 | 12.7 | 7.4 | 12,167 | 64.5 | 30.5 | 17.8 |
| 1985 | 5,149 | 26.8 | 12.7 | 7.4 | 12,811 | 66.6 | 31.7 | 18.3 |
| 1986 | 5,367 | 27.0 | 12.7 | 7.4 | 13,648 | 68.7 | 32.4 | 18.9 |
| 1987 | 5,485 | 27.5 | 12.9 | 7.5 | 14,238 | 71.4 | 33.4 | 19.5 |
| 1988 | 5,533 | 27.6 | 13.0 | 7.5 | 14,486 | 72.3 | 33.9 | 19.5 |
| 1989 | 5,565 | 27.5 | 12.9 | 7.4 | 14,850 | 73.3 | 34.3 | 19.7 |
| 1990 | 5,573 | 27.6 | 13.1 | 7.5 | 15,126 | 74.8 | 35.6 | 20.5 |
| 1991 | 5,829 | 29.8 | 14.1 | 8.0 | 15,788 | 80.6 | 38.1 | 21.8 |
| 1992 | 5,922 | 31.2 | 14.4 | 8.2 | 16,110 | 84.9 | 39.1 | 22.4 |
| 1993 | 6,110 | 33.0 | 15.1 | 8.4 | 16,628 | 89.8 | 41.2 | 22.8 |
| $1994{ }^{1}$ | 6,223 | 32.7 | 15.1 | 8.4 | 16,907 | 88.7 | 41.1 | 22.8 |
| $1995^{2}$ | 6,349 | 32.2 | 15.2 | 8.5 | 17,474 | 88.5 | 41.7 | 23.4 |

'Revised from previously published figures.
${ }^{2}$ Preliminary data based on fall 1994 enrollment weights.
NOTE: Tuition data are for academic years beginning 1964-95, and family income data are for calendar years 1964-95. Both calendar and school year Consumer Price Indexes (CPIs) were used to calculate constant dollar figures. "Tuition, room, and board" are for 2 -year and 4 -year colleges and universities. In-state tuition and fees were used for public institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, tables 37 and 309 (based on IPEDS "Fall Enrollment" and "Institutional Characteristics" surveys). U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-60, "Income, Poverty and Valuation of Non-Cash Benefits," various years (based on the March Current Population Surveys).

Table 12-2 Average undergraduate tuition, room, and board (in 1996 constant dollars) as a percentage of income of families with children 6 to 17 years old, ${ }^{1}$ by control of institution and selected family income percentiles: 1975-95

| Year | Public institutions |  |  |  |  |  | Private institutions |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tuition, room, and board | Family income percentile |  |  |  | $90^{\text {th }}$ | Tuition, room, and board | Family income percentile |  |  |  |  |
|  |  | $10^{\text {th }}$ | $25^{\text {th }}$ | $50^{\text {th }}$ | $75^{\text {th }}$ |  |  | $10^{\text {th }}$ | $25^{\text {th }}$ | $50^{\text {th }}$ | $75^{\text {th }}$ | $90^{\text {th }}$ |
| 1975 | \$4,713 | 31.1 | 16.4 | 10.2 | 7.3 | 5.4 | \$10,363 | 68.4 | 36.1 | 22.5 | 16.0 | 11.8 |
| 1976 | 4,783 | 30.9 | 16.3 | 10.0 | 7.1 | 5.3 | 10,442 | 67.4 | 35.6 | 21.8 | 15.6 | 11.5 |
| 1977 | 4,730 | 30.8 | 16.3 | 9.8 | 7.0 | 5.2 | 10,416 | 67.7 | 35.8 | 21.6 | 15.4 | 11.4 |
| 1978 | 4,567 | 30.2 | 15.6 | 9.4 | 6.8 | 5.0 | 10,339 | 68.4 | 35.2 | 21.3 | 15.4 | 11.3 |
| 1979 | 4,376 | 28.0 | 15.1 | 9.1 | 6.3 | 4.6 | 9,927 | 63.6 | 34.3 | 20.7 | 14.4 | 10.5 |
| 1980 | 4,298 | 32.3 | 16.3 | 9.6 | 6.6 | 4.8 | 9,908 | 74.6 | 37.6 | 22.1 | 15.1 | 11.1 |
| 1981 | 4,440 | 34.7 | 17.7 | 10.2 | 7.0 | 5.1 | 10,280 | 80.3 | 41.0 | 23.6 | 16.1 | 11.8 |
| 1982 | 4,708 | 41.5 | 19.5 | 11.0 | 7.4 | 5.4 | 11,062 | 97.5 | 45.8 | 25.9 | 17.5 | 12.6 |
| 1983 | 4,865 | 42.4 | 20.4 | 11.5 | 7.5 | 5.4 | 11,574 | 100.9 | 48.4 | 27.3 | 17.9 | 13.0 |
| 1984 | 5,056 | 43.7 | 20.5 | 11.7 | 7.7 | 5.5 | 12,167 | 105.2 | 49.3 | 28.1 | 18.5 | 13.2 |
| 1985 | 5,149 | 43.1 | 20.3 | 11.5 | 7.7 | 5.5 | 12,811 | 107.3 | 50.5 | 28.6 | 19.1 | 13.8 |
| 1986 | 5,367 | 46.4 | 21.3 | 11.9 | 7.8 | 5.6 | 13,648 | 118.0 | 54.1 | 30.2 | 19.8 | 14.2 |
| 1987 | 5,485 | 47.7 | 21.7 | 11.8 | 7.8 | 5.6 | 14,238 | 123.8 | 56.2 | 30.8 | 20.2 | 14.6 |
| 1988 | 5,533 | 44.2 | 21.5 | 12.0 | 7.9 | 5.7 | 14,486 | 115.8 | 56.2 | 31.3 | 20.6 | 14.8 |
| 1989 | 5,565 | 43.6 | 21.4 | 12.0 | 7.9 | 5.6 | 14,850 | 116.3 | 57.1 | 32.1 | 21.2 | 15.0 |
| 1990 | 5,573 | 46.3 | 22.2 | 12.6 | 8.2 | 5.7 | 15,126 | 125.7 | 60.2 | 34.2 | 22.2 | 15.6 |
| 1991 | 5,829 | 52.3 | 23.9 | 13.2 | 8.7 | 6.2 | 15,788 | 141.7 | 64.8 | 35.8 | 23.6 | 16.8 |
| 1992 | 5,922 | 51.5 | 24.8 | 13.6 | 8.8 | 6.2 | 16,110 | 140.1 | 67.5 | 37.0 | 24.0 | 17.0 |
| 1993 | 6,110 | 58.0 | 26.6 | 14.3 | 9.1 | 6.3 | 16,628 | 157.8 | 72.3 | 38.8 | 24.7 | 17.1 |
| $1994{ }^{2}$ | 6,223 | 55.0 | 26.2 | 14.2 | 9.1 | 6.3 | 16,907 | 149.5 | 71.3 | 38.7 | 24.8 | 17.2 |
| $1995{ }^{3}$ | 6,349 | 52.1 | 25.8 | 14.2 | 9.2 | 6.4 | 17,474 | 143.4 | 71.1 | 39.1 | 25.3 | 17.5 |

${ }^{1}$ These families may have children aged 18 and older; however, they have at least one child between the ages of 6 and 17 and none under age 6. All families, not just married-couple families, are included.
${ }^{2}$ Revised from previously published figures.
${ }^{3}$ Preliminary data based on fall 1994 enrollment weights.
NOTE: Tuition data are for academic years beginning 1975-95, and family income data are for calendar years 1975-95. Both calendar and school year Consumer Price Indexes (CPIs) were used to
calculate constant dollar figures. "Tuition, room, and board" are for 2 -year and 4-year colleges and universities. In-state tuition and fees were used for public institutions.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, tables 37 and 309 (based on IPEDS "Fall Enrollment" and "Institutional Characteristics" surveys). U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-60, "Income, Poverty and Valuation of Non-Cash Benefits," various years (based on the March Current Population Surveys).

Table 12-3 Average undergraduate tuition and fees (in 1996 constant dollars) paid by students in higher education institutions, by control and type of institution: Academic years beginning 1964-95

| Academic year beginning | Public institutions |  |  |  | Private institutions |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Other |  |  |  | Other |  |  |  |
|  | Total | Universities | 4 -year | 2-year | Total | Universities | 4 -year | 2-year |
| 1964 | \$1,221 | \$1,497 | \$1,125 | \$497 | \$5,466 | \$6,515 | \$5,139 | \$3,526 |
| 1965 | 1,264 | 1,608 | 1,185 | 536 | 5,674 | 6,732 | 5,340 | 3,776 |
| 1966 | 1,311 | 1,716 | 1,235 | 577 | 5,877 | 6,940 | 5,539 | 4,028 |
| 1967 | 1,306 | 1,689 | 1,236 | 664 | 5,984 | 7,077 | 5,707 | 4,115 |
| 1968 | 1,298 | 1,658 | 1,236 | 748 | 6,084 | 7,206 | 5,873 | 4,206 |
| 1969 | 1,342 | 1,774 | 1,271 | 739 | 6,367 | 7,514 | 6,097 | 4,295 |
| 1970 | 1,386 | 1,888 | 1,311 | 739 | 6,651 | 7,820 | 6,331 | 4,380 |
| 1971 | 1,434 | 2,006 | 1,350 | 732 | 6,939 | 8,133 | 6,562 | 4,469 |
| 1972 | 1,492 | 2,074 | 1,668 | 854 | 6,957 | 8,159 | 6,766 | 4,475 |
| 1973 | 1,474 | 1,955 | 1,558 | 922 | 6,693 | 7,992 | 6,478 | 4,385 |
| 1974 | 1,309 | 1,815 | 1,357 | 839 | 6,413 | 7,919 | 5,920 | 4,141 |
| 1975 | 1,225 | 1,816 | 1,327 | 693 | 6,428 | 8,151 | 5,896 | 4,037 |
| 1976 | 1,280 | 1,842 | 1,507 | 758 | 6,594 | 8,155 | 6,286 | 4,256 |
| 1977 | 1,282 | 1,844 | 1,493 | 768 | 6,573 | 8,117 | 6,312 | 4,272 |
| 1978 | 1,243 | 1,780 | 1,426 | 750 | 6,568 | 7,988 | 6,348 | 4,193 |
| 1979 | 1,179 | 1,697 | 1,338 | 717 | 6,326 | 7,702 | 6,104 | 4,167 |
| 1980 | 1,150 | 1,657 | 1,307 | 708 | 6,336 | 7,743 | 6,141 | 4,370 |
| 1981 | 1,190 | 1,737 | 1,355 | 724 | 6,590 | 8,148 | 6,423 | 4,343 |
| 1982 | 1,276 | 1,861 | 1,496 | 756 | 7,096 | 8,925 | 6,920 | 4,809 |
| 1983 | 1,374 | 1,979 | 1,622 | 814 | 7,477 | 9,584 | 7,285 | 4,777 |
| 1984 | 1,440 | 2,056 | 1,657 | 866 | 7,884 | 10,151 | 7,618 | 5,170 |
| 1985 | 1,506 | 2,215 | 1,668 | 924 | 8,347 | 10,632 | 8,134 | 5,295 |
| 1986 | 1,560 | 2,329 | 1,760 | 932 | 8,909 | 11,450 | 8,705 | 5,196 |
| 1987 | 1,650 | 2,338 | 1,906 | 956 | 9,465 | 11,880 | 8,904 | 5,636 |
| 1988 | 1,663 | 2,390 | 1,962 | 945 | 9,659 | 12,236 | 9,285 | 6,237 |
| 1989 | 1,676 | 2,514 | 1,987 | 934 | 10,067 | 12,787 | 9,611 | 6,421 |
| 1990 | 1,704 | 2,530 | 2,000 | 966 | 10,278 | 13,332 | 9,829 | 6,526 |
| 1991 | 1,844 | 2,736 | 2,194 | 1,063 | 10,709 | 13,841 | 10,278 | 6,530 |
| 1992 | 1,961 | 2,867 | 2,413 | 1,129 | 10,944 | 14,372 | 10,495 | 6,670 |
| 1993 | 2,084 | 3,026 | 2,532 | 1,207 | 11,344 | 14,888 | 10,838 | 6,835 |
| 1994 | 2,146 | 3,106 | 2,607 | 1,244 | 11,591 | 15,165 | 11,113 | 7,213 |
| 1995* | 2,210 | 3,200 | 2,702 | 1,264 | 12,042 | 15,823 | 11,469 | 7,148 |

* Preliminary data based on fall 1994 enrollment weights. NOTE: In-state tuition and fees were used for public institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, tables 37 and 309 (based on IPEDS "Fall Enrollment" and "Institutional Characteristics" surveys).

Table 13-1 Percentage of 1989-90 beginning postsecondary students, by average hours worked per week while enrolled, attendance status up to first attainment, if any, or last enrollment, and selected characteristics

| Selected characteristics | $\begin{array}{r} \text { Did not } \\ \text { work } \\ \hline \end{array}$ | Average hours worked per week while enrolled ${ }^{\prime}$ |  |  | Attendance status |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Less than 15 hours | $\begin{aligned} & 15-33 \\ & \text { hours } \end{aligned}$ | 34 or more hours | Exclusively part time | More than part time |
| Total | 10.9 | 31.2 | 43.4 | 14.5 | 18.8 | 81.2 |
| Sex |  |  |  |  |  |  |
| Male | 8.1 | 29.6 | 45.4 | 16.9 | 19.5 | 80.5 |
| Female | 13.3 | 32.6 | 41.7 | 12.5 | 18.2 | 81.8 |
| Age as of 12/31/89 |  |  |  |  |  |  |
| 18 years or younger | 5.7 | 39.1 | 46.5 | 8.8 | 7.0 | 93.0 |
| 19 years | 10.0 | 31.5 | 44.6 | 13.9 | 15.0 | 85.0 |
| 20 years or older | 22.0 | 14.9 | 36.4 | 26.7 | 45.2 | 54.8 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaskan Native | 5.5 | 24.0 | 59.7 | 10.8 | 32.0 | 68.0 |
| Asian/Pacific Islander | 17.3 | 44.3 | 25.9 | 12.5 | 13.5 | 86.5 |
| Black | 18.9 | 33.9 | 36.1 | 11.0 | 22.9 | 77.1 |
| Hispanic | 11.4 | 28.0 | 45.0 | 15.5 | 22.4 | 77.6 |
| White | 9.6 | 30.6 | 44.8 | 15.0 | 18.1 | 81.9 |
| Marital status in 1989-90 |  |  |  |  |  |  |
| Never married | 7.6 | 34.3 | 46.3 | 11.9 | 12.2 | 87.8 |
| Married | 26.0 | 15.2 | 29.6 | 29.2 | 50.7 | 49.3 |
| Divorced-widowed-separated | 29.5 | 17.8 | 31.6 | 21.1 | 41.8 | 58.2 |
| Number of children in 1989-90 |  |  |  |  |  |  |
| None | 7.5 | 33.5 | 46.1 | 12.8 | 14.1 | 86.0 |
| One | 26.7 | 16.4 | 29.0 | 28.0 | 40.8 | 59.2 |
| Two | 30.8 | 19.0 | 25.6 | 24.6 | 45.0 | 55.0 |
| Three or more | 35.3 | 13.3 | 32.6 | 18.7 | 39.6 | 60.4 |
| Dependency status |  |  |  |  |  |  |
| Dependent | 6.6 | 36.8 | 46.4 | 10.3 | 9.5 | 90.5 |
| Independent | 23.3 | 15.2 | 34.7 | 26.8 | 45.5 | 54.5 |
| Income |  |  |  |  |  |  |
| Dependent |  |  |  |  |  |  |
| Less than \$20,000 | 11.1 | 31.4 | 46.8 | 10.7 | 13.8 | 86.2 |
| 20,000-39,999 | 5.3 | 33.2 | 49.4 | 12.2 | 11.7 | 88.3 |
| 40,000-59,999 | 4.5 | 37.9 | 47.6 | 10.0 | 7.6 | 92.4 |
| 60,000 or more | 6.2 | 46.2 | 40.1 | 7.5 | 4.3 | 95.7 |
| Independent | 23.3 | 15.2 | 34.7 | 26.8 | 45.5 | 54.5 |
| Socioeconomic status |  |  |  |  |  |  |
| Lowest quartile | 21.1 | 18.9 | 36.7 | 23.3 | 40.0 | 60.0 |
| Middle two quartiles | 12.7 | 26.4 | 44.2 | 16.7 | 22.6 | 77.4 |
| Highest quartile | 5.1 | 41.1 | 44.9 | 8.9 | 6.7 | 93.3 |
| Parents' educational attainment |  |  |  |  |  |  |
| Less than high school | 17.4 | 17.7 | 37.5 | 27.4 | 33.8 | 66.3 |
| High school graduate | 11.4 | 25.7 | 46.4 | 16.5 | 24.6 | 75.4 |
| Some postsecondary | 10.0 | 29.6 | 48.3 | 12.1 | 14.2 | 85.8 |
| Bachelor's degree | 5.8 | 43.2 | 41.2 | 9.9 | 8.3 | 91.7 |
| Advanced degree | 7.6 | 43.8 | 42.2 | 6.5 | 5.3 | 94.7 |

Table 13-1 Percentage of 1989-90 beginning postsecondary students, by average hours worked per week while enrolled, attendance status up to first attainment, if any, or last enrollment, and selected characteristics - Continued

| Selected characteristics | Did not work | Average hours worked per week while enrolled ${ }^{\prime}$ |  |  | Attendance status |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Less than 15 hours | $\begin{aligned} & 15-33 \\ & \text { hours } \end{aligned}$ | 34 or more hours | Exclusively part time | More than part time |
| High school diploma or equivalency status |  |  |  |  |  |  |
| High school diploma | 9.8 | 32.0 | 44.2 | 14.1 | 17.7 | 82.3 |
| GED/Equivalency certificate | 26.0 | 20.0 | 32.2 | 21.8 | 35.5 | 64.6 |
| Neither | - | - | - | - | - | - |
| Expected educational attainment 1989-90 |  |  |  |  |  |  |
| Less than 2 years of postsecondary education | 27.1 | 11.7 | 32.8 | 28.4 | 35.0 | 65.0 |
| 2 to 3 years of |  |  |  |  |  |  |
| Bachelor's degree or higher | 7.7 | 35.9 | 45.4 | 11.0 | 12.3 | 87.7 |
| Diploma/delayed entry status ${ }^{2}$ |  |  |  |  |  |  |
| Diploma, did not delay | 6.4 | 38.4 | 46.2 | 9.1 | 7.1 | 92.9 |
| Diploma, delayed entry | 18.5 | 15.5 | 39.1 | 26.8 | 44.8 | 55.2 |
| No diploma | 27.2 | 19.7 | 31.7 | 21.5 | 35.3 | 64.7 |
| Degree working toward 1989-90 |  |  |  |  |  |  |
| Certificate | 28.1 | 13.8 | 32.5 | 25.7 | 36.8 | 63.2 |
| Associate's degree | 9.2 | 24.3 | 49.2 | 17.4 | 22.3 | 77.8 |
| Bachelor's degree | 5.7 | 42.4 | 44.4 | 7.5 | 6.3 | 93.7 |
| Control and type of first institution ${ }^{3}$ |  |  |  |  |  |  |
| Public 4-year | 5.4 | 41.1 | 46.7 | 6.8 | 5.1 | 94.9 |
| Private, not-for-profit 4-year | 5.7 | 52.8 | 36.5 | 4.9 | 5.1 | 94.9 |
| Public 2-year | 9.8 | 22.2 | 46.2 | 21.8 | 29.2 | 70.8 |
| Private, for-profit | 32.2 | 15.9 | 34.6 | 17.3 | 31.1 | 68.9 |
| Field of study 1989-90 |  |  |  |  |  |  |
| Humanities and social sciences | 7.0 | 36.8 | 48.0 | 8.3 | 10.0 | 90.0 |
| Physical and life sciences | 4.1 | 41.1 | 49.6 | 5.2 | 3.3 | 96.7 |
| Engineering, math, and |  |  |  |  |  |  |
| Education | 7.1 | 46.0 | 42.1 | 4.9 | 3.8 | 96.2 |
| Business and management | 11.7 | 29.1 | 43.4 | 15.8 | 20.3 | 79.8 |
| Health | 13.6 | 39.6 | 41.4 | 5.4 | 8.1 | 91.9 |
| Vocational / technical | 13.7 | 23.0 | 47.6 | 15.8 | 24.3 | 75.7 |
| Enrollment status in 1989-90 |  |  |  |  |  |  |
| Exclusively part time | 10.8 | 11.5 | 44.4 | 33.3 | 69.8 | 30.2 |
| Mixed | 5.4 | 33.6 | 52.8 | 8.2 | 0.0 | 100.0 |
| Exclusively full time | 10.4 | 35.6 | 45.0 | 9.0 | 0.0 | 100.0 |
| Attendance status |  |  |  |  |  |  |
| Exclusively part time | 16.4 | 5.9 | 37.2 | 40.5 | 100.0 | 0.0 |
| At least some full time | 9.6 | 37.0 | 44.8 | 8.5 | 0.0 | 100.0 |

Table 13-1 Percentage of 1989-90 beginning postsecondary students, by average hours worked per week while enrolled, attendance status up to first attainment, if any, or last enrollment, and selected characteristics - Continued

| Selected characteristics | Did not work | Average hours worked per week while enrolled ${ }^{\prime}$ |  |  | Attendance status |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Less than 15 hours | $\begin{aligned} & 15-33 \\ & \text { hours } \end{aligned}$ | 34 or more hours | Exclusively part time | More than part time |
| Received financial aid in 1989-90 |  |  |  |  |  |  |
| No | 8.5 | 28.8 | 44.4 | 18.3 | 23.8 | 76.2 |
| Yes | 13.7 | 34.0 | 42.2 | 10.1 | 12.8 | 87.2 |
| Received grant in 1989-90 |  |  |  |  |  |  |
| No | 9.1 | 29.1 | 44.4 | 17.4 | 22.7 | 77.3 |
| Yes | 13.8 | 34.6 | 41.8 | 9.8 | 12.5 | 87.5 |
| Received loan in 1989-90 |  |  |  |  |  |  |
| No | 10.6 | 29.8 | 43.8 | 15.7 | 21.0 | 79.0 |
| Yes | 11.8 | 36.8 | 41.7 | 9.7 | 9.9 | 90.1 |
| Grade point average in 1989-90 |  |  |  |  |  |  |
| Below 2.75 | 8.2 | 31.7 | 47.0 | 13.1 | 13.9 | 86.1 |
| 2.75 to 3.24 | 7.3 | 34.1 | 45.8 | 12.9 | 16.0 | 84.0 |
| 3.25 or higher | 12.1 | 33.5 | 41.6 | 12.9 | 21.4 | 78.6 |
| Self rating of academic ability |  |  |  |  |  |  |
| Above average | 9.9 | 38.9 | 42.3 | 8.9 | 11.7 | 88.3 |
| Average or below | 11.3 | 27.1 | 44.1 | 17.5 | 22.3 | 77.7 |
| Academic integration in 1989-904 |  |  |  |  |  |  |
| Low | 12.7 | 17.6 | 37.4 | 32.2 | 44.7 | 55.3 |
| Moderate | 11.2 | 27.0 | 44.4 | 17.5 | 25.4 | 74.7 |
| High | 10.3 | 36.2 | 44.1 | 9.5 | 9.9 | 90.1 |
| Social integration in 1989-90 ${ }^{5}$ |  |  |  |  |  |  |
| Low | 15.5 | 12.9 | 37.7 | 33.9 | 49.3 | 50.7 |
| Moderate | 12.0 | 31.2 | 42.9 | 13.8 | 17.6 | 82.4 |
| High | 6.8 | 39.3 | 47.1 | 6.9 | 6.6 | 93.4 |
| Average hours worked per week while enrolled |  |  |  |  |  |  |
| Did not work | 100.0 | 0.0 | 0.0 | 0.0 | 28.3 | 71.8 |
| Less than 15 hours | 0.0 | 100.0 | 0.0 | 0.0 | 3.6 | 96.5 |
| 15-33 hours | 0.0 | 0.0 | 100.0 | 0.0 | 16.1 | 83.9 |
| 34 or more hours | 0.0 | 0.0 | 0.0 | 100.0 | 52.4 | 47.7 |

[^7]${ }^{4}$ Includes whether the student attended career-related lectures, participated in study groups with other students, talked about academic matters with faculty, or met with an advisor concerning academic plans.
${ }^{5}$ Includes whether the students had contact with faculty outside of class, went places with friends from school, or participated in student assistance centers/programs or school clubs.
NOTE: Due to rounding, details may not add to 100.0.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:90/94).

Table 13-2 Percentage of 1989-90 beginning postsecondary students who attained a degree or who were still enrolled by spring 1994, by control and type of first institution, average hours worked per week while enrolled, ${ }^{1}$ and attendance status up to first attainment, if any, or last enrollment

|  |  | Control and type of first institution |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: |

- Too few sample observations for a reliable estimate.
' "Average hours worked per week while enrolled" was calculated relative to students' enrollment and included only hours for those months students were both working and enrolled up to first attainment (if any) or last enrollment.
${ }^{2}$ Although not shown separately, totals include students enrolled in either public less-than-2-year or private, not-for-profit less-than-4-year institutions.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:90/94).


## Note to Indicator 13: Employment and postsecondary persistence and attainment

This analysis was constructed using data from the Beginning Postsecondary Student Longitudinal Study (BPS:90/94). BPS is based on a sub-sample of the 1990 National Postsecondary Student Aid Study (NPSAS:90) which consists of students beginning their postsecondary education for the first time at community colleges, vocational schools, and institutions granting bachelor's degrees during the 1989-90 academic year. The first BPS follow-up survey was conducted in the spring of 1992, two years following the student's entry into postsecondary education and the second follow-up was conducted during the spring of 1994. BPS provides detailed information regarding individual students' attendance patterns for five years following their first enrollment into postsecondary education.

The analysis examines the relationship between students' cumulative working status and their postsecondary outcomes according to the first type of institution in which they enrolled. Postsecondary outcomes were defined as whether the student had attained a degree or was still enrolled 5 years after initial entry into postsecondary education.

## Average hours worked per week while enrolled

Students were divided into four categories based on the average number of hours they worked per week while enrolled up to their first attainment (if any) or last enrollment. These categories included no work, worked 1-15 hours per week, worked 1533 hours per week, and worked 34 or more hours per week while enrolled. Average hours worked while enrolled was calculated relative to students' enrollment and included only hours for those months that students were both working and enrolled up to their first attainment (if any) or last enrollment. Students missing employment or enrollment information for any part of this period were excluded from the analysis.

Table 14-1 Percentage of employed individuals who took one or more courses during the previous 12 months to improve their current job skills, by work status and worker characteristics: 1991 and 1995

| Worker characteristics | All workers |  | Full-time |  | Part-time |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1995 | 1991 | 1995 | 1991 | 1995 |
| Total | 29.5 | 32.0 | 33.1 | 35.7 | 16.4 | 20.2 |
| Sex |  |  |  |  |  |  |
| Male | 29.3 | 31.0 | 32.3 | 33.0 | 8.9 | 12.5 |
| Female | 29.7 | 35.3 | 34.2 | 39.5 | 19.7 | 23.6 |
| Race/ethnicity ${ }^{1}$ |  |  |  |  |  |  |
| White | 31.6 | 35.0 | 35.3 | 37.7 | 18.0 | 22.4 |
| Black | 20.1 | 29.7 | 22.6 | 33.3 | 7.5 | 11.3 |
| Hispanic | 22.7 | 19.0 | 26.8 | 20.4 | 10.7 | 12.7 |
| Asian/Pacific Islander | 20.6 | 26.8 | 22.4 | 30.4 | 15.1 | 10.4 |
| Age ${ }^{2}$ |  |  |  |  |  |  |
| 16-19 | 7.3 | 11.4 | 10.4 | 17.4 | 4.8 | 5.6 |
| 20-24 | 20.4 | 22.3 | 26.0 | 25.9 | 9.5 | 14.8 |
| 25-34 | 29.7 | 33.7 | 32.0 | 35.5 | 19.4 | 22.7 |
| 35-44 | 36.1 | 38.0 | 38.4 | 39.6 | 23.9 | 27.8 |
| 45-54 | 29.9 | 38.1 | 32.4 | 39.9 | 15.8 | 24.8 |
| 55-64 | 28.4 | 26.6 | 32.3 | 28.2 | 17.3 | 19.8 |
| 65 and older | 18.6 | 13.2 | 29.1 | 15.7 | 9.2 | 10.9 |
| Educational attainment ${ }^{3}$ |  |  |  |  |  |  |
| Less than high school graduate | 6.8 | 12.9 | 8.2 | 14.8 | 2.8 | 5.4 |
| High school graduate | 19.0 | 23.4 | 21.2 | 25.3 | 10.8 | 14.6 |
| Vocational/trade school | 36.7 | 35.7 | 39.4 | 38.0 | 23.4 | 24.1 |
| Some college | 33.1 | 35.4 | 39.4 | 38.7 | 16.1 | 24.3 |
| Bachelor's degree | 46.6 | 44.9 | 49.4 | 47.5 | 32.4 | 27.4 |
| Advanced degree | 50.3 | 49.9 | 53.4 | 52.0 | 34.9 | 34.1 |
| Occupation ${ }^{4}$ |  |  |  |  |  |  |
| Executive, professional, technical | 49.9 | 49.9 | 51.2 | 51.4 | 41.2 | 39.9 |
| Executive, administrative, managerial | 47.1 | 43.1 | 47.8 | 44.5 | 34.3 | 25.5 |
| Professional | 51.3 | 54.9 | 53.2 | 57.2 | 42.8 | 42.9 |
| Technical | 49.7 | 49.9 | 52.2 | 50.9 | 36.9 | 45.7 |
| Sales and administrative support | 24.0 | 29.4 | 28.4 | 33.0 | 11.2 | 15.5 |
| Sales | 23.5 | 24.8 | 28.0 | 29.5 | 10.1 | 10.9 |
| Administrative support | 24.3 | 32.8 | 28.6 | 35.4 | 11.9 | 20.5 |
| Service | 17.8 | 24.6 | 22.4 | 28.9 | 12.0 | 16.7 |
| Farming | 7.0 | 13.8 | 7.3 | 15.2 | 4.0 | 7.1 |
| Precision production, craft, and repair | 21.4 | 27.4 | 22.4 | 29.5 | 9.9 | 2.5 |

Table 14-1 Percentage of employed individuals who took one or more courses during the previous 12 months to improve their current job skills, by work status and worker characteristics: 1991 and 1995-Continued

| Worker characteristics | All workers |  | Full-time |  | Part-time |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1995 | 1991 | 1995 | 1991 | 1995 |
| Operators, fabricators, laborers | 19.2 | 17.2 | 21.7 | 17.8 | 8.0 | 10.8 |
| Machine operators, assemblers, inspectors | 21.9 | 17.9 | 24.3 | 18.7 | 3.8 | 1.3 |
| Transportation and material movers | 17.2 | 18.3 | 19.9 | 18.2 | 8.3 | 19.4 |
| Handlers, equipment cleaners, laborers | 15.4 | 11.8 | 16.7 | 12.8 | 12.2 | 5.7 |
| Industry ${ }^{4}$ |  |  |  |  |  |  |
| Agriculture, forestry, and fisheries | 9.6 | 17.0 | 10.2 | 18.9 | 6.5 | 7.9 |
| Mining | 28.5 | 41.7 | 28.5 | 42.3 | - | - |
| Construction | 18.5 | 20.5 | 20.1 | 22.5 | 2.5 | 7.2 |
| Manufacturing | 28.7 | 27.1 | 30.8 | 27.8 | 9.1 | 12.1 |
| Transportation, communications, public utilities | 29.2 | 38.2 | 30.7 | 39.1 | 17.3 | 29.8 |
| Trade | 18.4 | 16.0 | 22.2 | 19.1 | 10.0 | 8.0 |
| Finance, insurance, and real estate | 43.8 | 44.2 | 49.8 | 48.0 | 20.4 | 21.6 |
| Services | 32.5 | 39.2 | 37.4 | 43.1 | 20.9 | 27.0 |
| Public administration | 47.3 | 52.9 | 49.2 | 53.8 | 22.5 | 41.6 |

- Too few sample observations for a reliable estimate.
'Included in the total but not shown separately are other racial/ ethnic groups.
${ }^{2}$ Age as of December 31, 1990 for 1991 data, and as of December 31, 1994 for 1995 data.
${ }^{3}$ In 1995, among those currently employed workers who were categorized as "less than high school graduate," 29 percent responded that they had obtained a high school diploma or a GED equivalency.
${ }^{4}$ If respondent had more than one job, "occupation" and "industry" were based on the first job reported.
NOTE: The survey questions were constructed differently in 1995. However, the response categories used in this analysis were similar to those used in the 1991 survey. See the supplemental note to this indicator for further discussion.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey, 1991 and 1995 (Adult Education Component).

Table 14-2 Percentage of employed and unemployed individuals aged 25-64 who participated in job related training during the previous 12 months, by highest education level, country, and sex: 1993

| County and sex | Education level |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Primary | Lower Secondary | Upper Secondary | Non-university tertiary | Universitylevel | All levels |
|  | Employed |  |  |  |  |  |
| Australia ${ }^{1}$ | 20 | 33 | 35 | 53 | 67 | 38 |
| Male | 18 | 32 | 33 | 50 | 66 | 37 |
| Female | 21 | 34 | 38 | 57 | 69 | 40 |
| Canada | 6 | 12 | 25 | 35 | 43 | 28 |
| Male | 6 | 13 | 22 | 36 | 40 | 27 |
| Female | 5 | 11 | 28 | 34 | 47 | 30 |
| Finland ${ }^{2}$ | $\left.{ }^{3}\right)$ | 27 | 40 | 61 | 61 | 41 |
| Male | $\left.{ }^{3}\right)$ | 26 | 37 | 58 | 58 | 38 |
| Female | $\left.{ }^{3}\right)$ | 29 | 44 | 63 | 65 | 44 |
| France ${ }^{4}$ | 8 | 28 | 42 | 72 | 57 | 40 |
| Male | 7 | 26 | 40 | 76 | 46 | 38 |
| Female | 8 | 30 | 46 | 69 | 75 | 43 |
| Germany ${ }^{5}$ | $\left.{ }^{3}\right)$ | 15 | 28 | 43 | 50 | 33 |
| Male | $\left.{ }^{3}\right)$ | - | 29 | 44 | 50 | 35 |
| Female | $\left.{ }^{3}\right)$ | 14 | 28 | 40 | 50 | 31 |
| Switzerland | - | 16 | 39 | 51 | 53 | 38 |
| Male | - | (14) | 41 | 52 | 52 | 42 |
| Female | - | 17 | 37 | 45 | 56 | 34 |
| United States ${ }^{6}$ | 7 | 13 | 24 | 36 | 49 | 34 |
| Male | 8 | 11 | 21 | 34 | 45 | 31 |
| Female | 6 | 15 | 27 | 38 | 54 | 36 |
|  | Unemployed |  |  |  |  |  |
| Australia ${ }^{\text {a }}$ | 12 | 25 | 25 | 43 | 53 | 24 |
| Canada | 6 | 6 | 15 | 24 | 30 | 16 |
| France ${ }^{4}$ | 14 | 22 | 38 | 66 | 75 | 35 |
| Germany ${ }^{5}$ | 8 | 10 | 19 | 24 | 21 | 16 |
| Switzerland | - | - | - | - | - | 33 |
| United States ${ }^{6}$ | 6 | 10 | 11 | 17 | 24 | 14 |

-Not available.
${ }^{1}$ Estimates of continuing education and training include studying part time, enrolling for the whole year or part of the year in external courses, and attending training courses organized within or outside of the work place (including some government training programs). Individuals who enrolled only in full-time programs at any time during the 12 months preceding the survey and those who pursued only on-the-job training are excluded.
${ }^{2}$ Only employer-sponsored training is included.
${ }^{3}$ Data included in another category of the question or in another question.
${ }^{4} 1994$ data. Employees of small enterprises who received training were included.
${ }^{5} 1994$ data. Initial training of students over age 25 in vocational schools and in the dual system is not included. Forms of continuing
vocational training other than formal courses were excluded. These activities may include participation in short events such as lectures or half-day seminars, familiarization at the work place, computeraided learning at the work place, workshop circles, or learning workshops. Data on training for those unemployed include formal training as well as on-the-job training if the training was subsidized by the Federal Labor Agency.
${ }^{6} 1995$ data. Data do not include full-time students. Individuals who completed upper secondary education but did not obtain a diploma were included in "lower secondary education." Employed persons who were on vacation during the survey week were included in the total number of persons employed.
SOURCE: Organization for Economic Co-operation and Development, Education at a Glance: OECD Indicators, Indicator P8, 1996.

## Note to Indicator 14: Skill improvement training

## Change between NHES 1991 and 1995

In 1995, the National Household Education Survey (NHES) questionnaire items on adult education and skill improvement training were constructed differently than those in the NHES 1991 questionaire. In NHES 1991, different types of adult education courses and the main reasons for taking these courses could be obtained from the following item: "What was your main reason for taking (name 1 course)?" Response categories for this question included the following:

- A personal, family, or social reason;
- To improve, advance, or keep up-to-date on current job;
- To train for a new job or a new career;
- To improve your basic reading, writing, or math skills;
- To meet a requirement for a diploma, degree, or certificate of completion;

Some other reason.
The participation rates for skill improvement training for 1991 were based on the number of respondents who chose the second response category, "to improve, advance, or keep up-to-date on current job."

In NHES 1995, respondents were asked about the different types of adult education courses they had taken in the last 12 months in each of five separate sections of the survey questionnaire: English as a Second Language; Basic Skills and GED preparation; Credential; Personal; and Career or Job related
activities. Within each section, the respondents were also asked to choose the main reason for participating in that type of course. Response categories for this question include the following:

- To improve, advance, or keep up-to-data on current job;
- To train for a new job or a new career;
- To improve your basic reading, writing, or math skills;
- To meet a requirement for a diploma, degree, or certificate of completion;
- A personal, family, or social reason;
- Some other reason.

The participation rates for skill improvement training for 1995 were based on the number of respondents who chose the first response category in each of the five sections "to improve, advance, or keep up to date on current job."

## Currently employed workers

Currently employed workers were defined as individuals who were employed during the survey week and who were not full-time students. Individuals who were on vacation during the survey week were not included in this analysis.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey, 1991 and 1995 (Adult Education Component).

## Table 15-1 Explanations of levels of reading proficiency

## Level 350: Learns from specialized reading materials

Readers at this level can extend and restructure the ideas presented in specialized and complex texts. Examples include scientific materials, literary essays, and historical documents. Readers also able to understand the links between ideas even when those links are not explicitly stated, and to make appropriate generalizations. Performance at this level suggests the ability to synthesize and learn from specialized reading materials.

Level 300: Understands complicated information
Readers at this level can understand complicated literary and informational passages, including material about topics they study at school. They can also analyze and integrate less familiar material and provide reactions to and explanations of the text as a whole. Performance at this level suggests the ability to find, understand, summarize, and explain relatively complicated information.

Level 250: Interrelates ideas and makes generalizations
Readers at this level use intermediate skills and strategies to search for, locate, and organize the information they find in relatively lengthy passages and can recognize paraphrases of what they have read. They can also make inferences and reach generalizations about main ideas and author's purpose from passages dealing with literature, science, and social studies. Performance at this level suggests the ability to understand specific or sequentially related information.

Level 200: Partial skills and understanding
Readers at this level can locate and identify facts from simple informational paragraphs, stories, and news articles. In addition, they can combine ideas and make inferences based on short, uncomplicated passages.
Performance at this level suggests the ability to understand specific or sequentially related information.
Level 150: Simple, discrete reading tasks
Readers at this level can follow brief written directions. They can also select words, phrases, or sentences to describe a simple picture and can interpret simple written clues to identify a common object. Performance at this level suggests the simple, discrete reading tasks.
SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.

Table 15-2 Percentage of students aged 9, 13, or 17 scoring at or above five levels of reading proficiency: 1971, 1975, 1980, 1984, 1988, 1990, 1992, and 1994

| Proficiency level | Age | Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1971 | 1975 | 1980 | 1984 | 1988 | 1990 | 1992 | 1994 |
| Level 350: | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Learns from specialized | 13 | '0 | 0 | 0 | 0 | 0 | 0 | 1 | ${ }^{2} 1$ |
| reading materials | 17 | 7 | 6 | ${ }^{2} 5$ | 6 | 1,25 | 7 | 7 | 7 |
| Level 300: | 9 | 1 | 1 | 1 | 1 | 1 | ${ }^{1} 2$ | 1 | 1 |
| Understands complicated | 13 | ${ }^{1} 10$ | ${ }^{1} 10$ | ${ }^{1} 11$ | ${ }^{1} 11$ | ${ }^{1} 11$ | ${ }^{1} 11$ | ${ }^{2} 15$ | ${ }^{2} 14$ |
| information | 17 | 39 | 39 | 38 | 40 | 41 | 41 | ${ }^{2} 43$ | 41 |
| Level 250: | 9 | 16 | 15 | 18 | 17 | 18 | 18 | 16 | 17 |
| Interrelates ideas and | 13 | 58 | 59 | 61 | 59 | 59 | 59 | 62 | 60 |
| makes generalizations | 17 | 79 | 80 | 81 | ${ }^{2} 83$ | 1.286 | ${ }^{2} 84$ | ${ }^{2} 82$ | 81 |
| Level 200: | 9 | 59 | ${ }^{2} 62$ | ${ }^{2} 68$ | 62 | 63 | 59 | 62 | 63 |
| Partial skills and | 13 | 93 | 93 | ${ }^{2} 95$ | 194 | 195 | 94 | 93 | 92 |
| understanding | 17 | 96 | 96 | ${ }^{2} 97$ | 1,298 | 1.299 | ${ }^{2} 98$ | 97 | 97 |
| Level 150: | 9 | 91 | ${ }^{2} 93$ | 1,295 | ${ }^{2} 92$ | 93 | 90 | 92 | 92 |
| Simple, discrete | 13 | ${ }^{1} 100$ | 100 | ${ }^{1} 100$ | 100 | 100 | 100 | 100 | ${ }^{2} 99$ |
| reading tasks | 17 | 100 | 100 | ${ }^{2} 100$ | ${ }^{2} 100$ | ${ }^{2} 100$ | 100 | 100 | 100 |

' Statistically significant difference from 1994.
${ }^{2}$ Statistically significant difference from 1971.
NOTE: See table 15-1 for further explanations of the proficiency levels.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Table 15-3 Percentile distribution of reading proficiency scores, by age and race/ethnicity: 1980, 1984, 1988, 1990, 1992, and 1994

|  | Age 9 |  |  |  |  |  | Age 13 |  |  |  |  |  | Age 17 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentile | 1980 | 1984 | 1988 | 1990 | 1992 | 1994 | 1980 | 1984 | 1988 | 1990 | 1992 | 1994 | 1980 | 1984 | 1988 | 1990 | 1992* | 1994 |
|  | All students |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 149 | 141 | 142 | 135 | 141 | 140 | 199 | 197 | 200 | 196 | 191 | 188 | 209 | 220 | 226 | 220 | 214 | 211 |
| 10 | 165 | 159 | 157 | 150 | 156 | 156 | 213 | 210 | 213 | 210 | 208 | 205 | 228 | 236 | 242 | 237 | 233 | 230 |
| 25 | 191 | 184 | 184 | 179 | 183 | 184 | 235 | 234 | 234 | 233 | 235 | 233 | 258 | 263 | 266 | 264 | 263 | 260 |
| 50 | 217 | 213 | 214 | 210 | 214 | 215 | 260 | 258 | 258 | 257 | 262 | 260 | 288 | 290 | 291 | 291 | 293 | 290 |
| 75 | 241 | 240 | 240 | 240 | 239 | 240 | 283 | 282 | 281 | 282 | 287 | 285 | 316 | 317 | 316 | 319 | 319 | 319 |
| 90 | 262 | 263 | 263 | 266 | 260 | 260 | 302 | 302 | 302 | 302 | 309 | 307 | 340 | 340 | 337 | 343 | 343 | 343 |
| 95 | 273 | 277 | 278 | 280 | 272 | 272 | 314 | 314 | 314 | 314 | 322 | 320 | 354 | 353 | 349 | 356 | 356 | 358 |
|  | White |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 161 | 152 | 150 | 144 | 153 | 152 | 209 | 205 | 204 | 204 | 204 | 200 | 226 | 230 | 233 | 229 | 228 | 222 |
| 10 | 175 | 167 | 165 | 160 | 167 | 168 | 222 | 218 | 217 | 217 | 219 | 217 | 242 | 246 | 247 | 246 | 245 | 241 |
| 25 | 199 | 192 | 192 | 188 | 193 | 194 | 243 | 241 | 238 | 240 | 243 | 242 | 267 | 271 | 271 | 271 | 272 | 270 |
| 50 | 223 | 220 | 219 | 218 | 221 | 221 | 265 | 263 | 262 | 263 | 268 | 267 | 294 | 297 | 295 | 298 | 300 | 298 |
| 75 | 246 | 245 | 244 | 247 | 244 | 244 | 287 | 286 | 285 | 286 | 292 | 290 | 320 | 322 | 320 | 324 | 325 | 324 |
| 90 | 265 | 267 | 267 | 271 | 264 | 263 | 306 | 305 | 304 | 306 | 312 | 311 | 343 | 343 | 340 | 347 | 347 | 347 |
| 95 | 276 | 280 | 281 | 285 | 276 | 275 | 317 | 317 | 316 | 318 | 324 | 324 | 357 | 356 | 352 | 360 | 359 | 361 |
|  | Black |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 123 | 121 | 125 | 115 | 119 | 119 | 179 | 180 | 191 | 182 | 170 | 170 | 176 | 202 | 214 | 201 | 188 | 192 |
| 10 | 139 | 135 | 138 | 129 | 132 | 133 | 191 | 192 | 202 | 194 | 185 | 183 | 191 | 216 | 228 | 217 | 206 | 210 |
| 25 | 165 | 159 | 162 | 153 | 156 | 155 | 211 | 213 | 222 | 217 | 210 | 208 | 217 | 239 | 251 | 242 | 235 | 239 |
| 50 | 192 | 187 | 188 | 182 | 185 | 186 | 233 | 236 | 242 | 243 | 239 | 236 | 244 | 264 | 274 | 268 | 263 | 268 |
| 75 | 216 | 213 | 217 | 211 | 214 | 216 | 255 | 259 | 264 | 266 | 266 | 261 | 270 | 288 | 300 | 294 | 288 | 296 |
| 90 | 236 | 235 | 238 | 236 | 236 | 237 | 275 | 280 | 284 | 286 | 287 | 283 | 293 | 311 | 321 | 316 | 312 | 318 |
| 95 | 247 | 248 | 252 | 251 | 249 | 248 | 286 | 293 | 299 | 299 | 303 | 295 | 307 | 324 | 333 | 331 | 328 | 335 |
|  | Hispanic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 123 | 120 | 122 | 125 | 125 | 119 | 183 | 181 | 181 | 178 | 165 | 174 | 184 | 202 | 204 | 206 | 193 | 187 |
| 10 | 138 | 135 | 140 | 139 | 139 | 134 | 195 | 193 | 195 | 191 | 184 | 187 | 197 | 217 | 218 | 224 | 213 | 203 |
| 25 | 164 | 161 | 165 | 161 | 163 | 157 | 215 | 216 | 219 | 214 | 213 | 211 | 225 | 242 | 246 | 250 | 241 | 236 |
| 50 | 192 | 189 | 196 | 189 | 193 | 184 | 238 | 240 | 240 | 239 | 242 | 236 | 253 | 269 | 274 | 276 | 275 | 264 |
| 75 | 218 | 215 | 222 | 219 | 222 | 216 | 259 | 264 | 262 | 262 | 267 | 260 | 279 | 295 | 298 | 303 | 303 | 294 |
| 90 | 238 | 236 | 247 | 239 | 245 | 243 | 279 | 284 | 284 | 284 | 289 | 282 | 307 | 318 | 316 | 327 | 326 | 318 |
| 95 | 250 | 247 | 259 | 253 | 255 | 255 | 291 | 296 | 297 | 296 | 303 | 298 | 321 | 332 | 328 | 339 | 337 | 331 |

* Scores have been revised from previously published figures. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress,

Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Table 15-4 Average reading proficiency, by age and parents' highest education level: 1971, 1975, 1980, 1984, 1988, 1990, 1992, and 1994

| Parents' highest education level | Year | Age 9 |  | Age 13 |  | Age 17 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percentage of students | Average proficiency | Percentage of students | Average proficiency | Percentage of students | Average proficiency |
| Less than a high | 1971 | ${ }^{1} 10$ | 189 | ${ }^{1} 16$ | 238 | ${ }^{1} 20$ | 261 |
| school graduate | 1975 | ${ }^{1} 10$ | 190 | 1,214 | 239 | ${ }^{1,2} 16$ | 262 |
|  | 1980 | ${ }^{1,26}$ | 194 | ${ }^{1,210}$ | 238 | 1.213 | 262 |
|  | 1984 | 1,26 | ${ }^{2} 195$ | ${ }^{2} 9$ | 240 | ${ }^{1,2} 12$ | ${ }^{2} 269$ |
|  | 1988 | ${ }^{2} 5$ | 192 | ${ }^{2} 8$ | 1,246 | ${ }^{2} 9$ | 267 |
|  | 1990 | ${ }^{2} 5$ | 193 | ${ }^{2} 8$ | 241 | ${ }^{2} 9$ | 270 |
|  | 1992 | ${ }^{2} 5$ | 195 | ${ }^{2} 6$ | 239 | ${ }^{2} 8$ | 271 |
|  | 1994 | ${ }^{2} 4$ | 189 | ${ }^{2} 7$ | 237 | ${ }^{2} 7$ | 268 |
| Graduated from | 1971 | ${ }^{1} 22$ | 208 | '32 | ${ }^{1} 256$ | '31 | ${ }^{1} 283$ |
| high school | 1975 | ${ }^{1} 24$ | 211 | '33 | 255 | ${ }^{1} 34$ | 281 |
|  | 1980 | ${ }^{1,2,3} 25$ | ${ }^{2} 213$ | 31 | 254 | '32 | ${ }^{2} 278$ |
|  | 1984 | 1,2,30 | 209 | 1,2,3 36 | 253 | 1,235 | 281 |
|  | 1988 | ${ }^{2} 16$ | 211 | 31 | 253 | 30 | 282 |
|  | 1990 | ${ }^{2} 17$ | 209 | 31 | ${ }^{1} 251$ | 30 | '283 |
|  | 1992 | ${ }^{2} 16$ | 207 | 28 | 252 | 28 | 280 |
|  | 1994 | ${ }^{2} 16$ | 207 | ${ }^{2} 21$ | ${ }^{2} 251$ | ${ }^{2} 27$ | ${ }^{2} 276$ |
| Some education | 1971 | ${ }^{1} 33$ | 224 | ${ }^{1} 38$ | 270 | ${ }^{1} 42$ | 302 |
| after high school | 1975 | '34 | 222 | ${ }^{1} 40$ | 270 | 1,246 | 301 |
|  | 1980 | ${ }^{1,2} 40$ | ${ }^{1} 226$ | ${ }^{1,2} 49$ | 271 | 1,251 | 299 |
|  | 1984 | 1,2,337 | 223 | 1,2,346 | 268 | ${ }^{1,2} 50$ | 301 |
|  | 1988 | ${ }^{2} 45$ | 220 | ${ }^{2} 52$ | ${ }^{2} 265$ | ${ }^{2} 58$ | 300 |
|  | 1990 | ${ }^{2} 42$ | ${ }^{2} 218$ | ${ }^{1,2} 50$ | 267 | ${ }^{2} 58$ | 300 |
|  | 1992 | ${ }^{2} 45$ | 220 | ${ }^{2} 57$ | 270 | ${ }^{2,3} 61$ | 299 |
|  | 1994 | ${ }^{2} 46$ | 221 | ${ }^{2} 57$ | 269 | ${ }^{2} 62$ | 299 |

[^8]students at age 9 and smaller percentages at ages 13 and 17 who did not know their parents' highest education level.
SOURCE: U. S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Table 15-5 Average reading proficiency scores, by age and grade: 1971, 1975, 1980, 1984, 1988, 1990, 1992, and 1994

| Year | Below modal grade ${ }^{1}$ |  | At modal grade ${ }^{1}$ |  | Above modal grade ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage | Proficiency | Percentage | Proficiency | Percentage | Proficiency |
| Age 9 |  |  |  |  |  |  |
| 1971 | ${ }^{2} 24$ | ${ }^{2} 178$ | ${ }^{2} 75$ | ${ }^{2} 217$ | ${ }^{2} 1$ | ${ }^{2} 232$ |
| 1975 | ${ }^{2} 23$ | ${ }^{2,3} 183$ | ${ }^{2} 75$ | 218 | ${ }^{3} 1$ | ${ }^{2} 226$ |
| 1980 | ${ }^{2} 28$ | ${ }^{3} 189$ | ${ }^{2} 71$ | ${ }^{3} 225$ | ${ }^{3,4} 0$ | 243 |
| 1984 | ${ }^{2,3} 34$ | ${ }^{2,3} 187$ | ${ }^{2,3} 65$ | ${ }^{3} 223$ | ${ }^{3,4} 0$ | ${ }^{3} 254$ |
| 1988 | ${ }^{2,3} 37$ | ${ }^{3} 193$ | ${ }^{2,3} 63$ | ${ }^{3} 223$ | 1 | 262 |
| 1990 | ${ }^{3} 42$ | ${ }^{3} 189$ | ${ }^{2,3} 58$ | ${ }^{3} 224$ | ${ }^{3,4} 0$ | 242 |
| 1992 | ${ }^{3} 43$ | ${ }^{3} 192$ | ${ }^{2,3} 57$ | ${ }^{3} 224$ | ${ }^{3,4} 0$ | 243 |
| 1994 | ${ }^{3} 40$ | ${ }^{3} 194$ | ${ }^{3} 60$ | ${ }^{3} 222$ | ${ }^{3,4} 0$ | ${ }^{3} 268$ |
| Age 13 |  |  |  |  |  |  |
| 1971 | ${ }^{2} 28$ | ${ }^{2} 230$ | ${ }^{2} 71$ | ${ }^{2} 265$ | ${ }^{2} 1$ | ${ }^{2} 278$ |
| 1975 | ${ }^{2} 28$ | ${ }^{2} 232$ | ${ }^{2} 72$ | ${ }^{2} 265$ | ${ }^{2} 1$ | ${ }^{2} 278$ |
| 1980 | ${ }^{2} 28$ | ${ }^{3} 240$ | ${ }^{2} 70$ | 266 | ${ }^{2,3} 1$ | ${ }^{2} 274$ |
| 1984 | ${ }^{2,3} 37$ | ${ }^{3} 239$ | ${ }^{2,3} 62$ | 267 | ${ }^{2,3} 1$ | ${ }^{2} 294$ |
| 1988 | 2,339 | ${ }^{3} 243$ | ${ }^{2,3} 60$ | 267 | 1 | ${ }^{2} 272$ |
| 1990 | ${ }^{2,3} 39$ | ${ }^{3} 243$ | ${ }^{2,3} 60$ | 266 | 1 | ${ }^{2} 290$ |
| 1992 | ${ }^{3} 43$ | ${ }^{3} 243$ | ${ }^{3} 56$ | ${ }^{3} 272$ | 1 | ${ }^{2,3} 312$ |
| 1994 | ${ }^{3} 44$ | ${ }^{3} 244$ | ${ }^{3} 56$ | ${ }^{3} 269$ | ${ }^{3,4} 0$ | - |
| Age 17 |  |  |  |  |  |  |
| 1971 | ${ }^{2} 14$ | ${ }^{2} 238$ | ${ }^{2} 73$ | ${ }^{2} 291$ | ${ }^{2} 13$ | 302 |
| 1975 | ${ }^{2} 15$ | ${ }^{2} 242$ | ${ }^{2} 73$ | ${ }^{2} 292$ | ${ }^{2} 12$ | 302 |
| 1980 | ${ }^{2} 14$ | ${ }^{2} 244$ | ${ }^{2,3} 77$ | ${ }^{2} 291$ | ${ }^{3} 9$ | 300 |
| 1984 | ${ }^{2,3} 22$ | ${ }^{3} 259$ | ${ }^{2,3} 68$ | ${ }^{3} 296$ | ${ }^{3} 10$ | 304 |
| 1988 | ${ }^{2,3} 24$ | ${ }^{3} 265$ | ${ }^{2,3} 65$ | ${ }^{3} 296$ | ${ }^{2} 12$ | 305 |
| 1990 | ${ }^{2,3} 26$ | ${ }^{3} 261$ | ${ }^{2,3} 65$ | ${ }^{3} 299$ | ${ }^{3} 9$ | 310 |
| 1992 | ${ }^{3} 28$ | ${ }^{3} 261$ | ${ }^{3} 64$ | ${ }^{3} 301$ | ${ }^{3} 8$ | 300 |
| 1994 | ${ }^{3} 29$ | ${ }^{3} 261$ | ${ }^{3} 63$ | ${ }^{3} 299$ | ${ }^{3} 7$ | 305 |

-Too few sample observations for a reliable estimate.
${ }^{1}$ The modal grade is the most common grade level for students of a particular age. For example, the modal grade at age 9 is fourth grade. Nine-year-olds in fifth grade are above the modal grade, and 9 -year-olds in third grade are below the modal grade for their age.
${ }^{2}$ Statistically significant difference from 1994.
${ }^{3}$ Statistically significant difference from 1971.
${ }^{4}$ Percentages less than 0.5 are rounded to 0.

NOTE: The modal grades are grade 4 at age 9 , grade 8 at age 13 , and grade 11 at age 17. The modal grade is lower for 17 -year-olds because of differences in age definition and in the time of year the test is given, causing more students to be above the modal grade at age 17 than at any other age. For a more complete explanation see the supplemental note to this indicator.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Table 15-6 Average reading proficiency, by age and number of reading materials in the home: 1971 and 1994

| Number of types of material in the home | Year | Age 9 |  | Age 13 |  | Age 17 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percentage of students | Average proficiency | Percentage of students | Average proficiency | Percentage of students | Average proficiency |
| 0-2 | 1971 | *28 | *186 | *17 | *227 | *11 | *246 |
|  | 1994 | 38 | 197 | 22 | 238 | 18 | 263 |
| 3 | 1971 | 32 | *208 | *25 | *249 | *22 | *274 |
|  | 1994 | 32 | 215 | 32 | 258 | 29 | 287 |
|  | 1971 | *39 | 223 | *58 | 266 | *67 | 296 |
| 4 | 1994 | 30 | 225 | 46 | 269 | 53 | 298 |

* Statistically significant difference from 1994.

NOTE: Students were asked whether they had access to each of four types of reading material: newspapers, magazines, books, and encyclopedias.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

## Note to Indicator 15: NAEP cohorts

## Long-term trend

Three of the NAEP assessments, reading, mathematics, and science, report trends in the progress of students by age. Proficiencies are reported for those students aged 9,13 , and 17 . The modal grades for students at these ages are $4^{\text {th }}, 8^{\text {th }}$, and $11^{\text {th }}$ grade. The fourth assessment, writing, is given to students in grades 4,8 , and 11 , regardless of their age. In all four subjects, it would appear that the time span between the youngest and middle age/grade is greater than between the middle and oldest group. However, the way age is defined (on a calendar or fiscal year basis) and the time at which each age/ grade is assessed (fall, winter, or spring) results in the same length of time (or years of schooling) between the three age/grade groups. A discussion of this methodology follows.
Age is determined on a calendar year basis for 9and 13-year-olds, but on a fiscal year basis for 17-year-olds. In other words, the reading, mathematics, and science scores in 1994 represent students born in 1984 (9-year-olds), students born in 1980 (13-year-olds), and students born between October 1, 1976 and September 30, 1977 (17-yearolds). The writing scores represent students in grades 4,8 , or 11 at the time of the assessment regardless of age.
In addition to different age definitions, the time of the school year when the assessment is administered varies across age levels: 9-year-olds/ $4^{\text {th }}$-graders are tested in the winter; 13 -year-olds/ $8^{\text {th }}$-graders are tested in the fall; and 17 -year-olds/ $11^{\text {th }}$-graders are tested in the spring for all the assessments. Since 9 -year-olds are tested between January and February of the year in which they turn 10 , and 13 -year-olds are tested between October and December of the year in which they turn 13, the 13-year-olds have had almost $3^{3 / 4}$ more years of schooling than the 9 -year-olds. Likewise, since 17-year-olds are tested between March and May, they are between $16^{1 / 2}$ and $17^{1 / 2}$ at the time of the assess-
ment (the difference is due to age being determined on a fiscal year basis); thus, they have had about $3^{3 / 4}$ more years of exposure to school than 13-year-olds.
These different means of determining a student's age and the various testing times have been adopted in order to measure a uniform period of growth among the three age/grade groups. Comparing age/grade cohorts over time can be more problematic, however. Nine-year-olds in 1990 generally represent the same age cohort as 13 -year-olds in 1994-two points in time not quite 4 years apart. However, the 17 -year-olds tested in 1994 were generally younger than the 1990 13-year-old age cohort was in 1994. Therefore, care must be taken when examining student cohorts across assessments in different years.

## Short-term trend

Although Indicator 18 (Trends in the mathematics proficiency of $9-13$-, and 17-year-olds) focused primarily on the trend data described above, supplemental data from the NAEP 1996 Mathematics Report Card were also included. These more recent data allow for trend comparisons just over the short term, as only the scores from the 1990, 1992, and 1996 surveys are comparable. These data were based on a separate survey instrument than those from the long-term trend data and were given to different students. The short-term trend assessment was designed using a framework influenced by the National Council for Teachers of Mathematics (NCTM) Curriculum and Evaluation Standards for School Mathematics. The long-term trend assessment has remained unchanged since its original design in 1973 and can be used to make comparisons in the performance of students over the past 21 years. One important difference of the shortterm trend data is that $4^{\text {th }}-8^{\text {th }}$-, and $12^{\text {th }}$-graders were assessed rather than 9 -, 13-, and 17 -year-olds, thus allowing for comparisons across cohorts.

## Table 16-1 Explanations of levels of writing proficiency

## Level 350: Effective, coherent writing

The writing at this level provides clear complete responses to the assigned task. It tends to contain supportive details and discussion that contribute to the effectiveness of the response. This writing is also characterized by an overall unity and coherence not found at the lower levels.

## Level 300: Complete, sufficient writing

Responses at this level tend to be complete and to contain sufficient information to accomplish the basic task.
Level 250: Beginning, focused, clear writing
Writing at this level tends to be more focused and clear, containing enough development and detail likely to accomplish the assigned task successfully.
Level 200: Incomplete, vague writing
The writing at this level, although clearer and more detailed than at the previous level, still tends to be vague and incomplete.
Level 150: Disjointed, unclear writing
Writing at this level tends to be too brief and disjointed to be considered a response to the task or, when longer, so vague and unclear that it is hard to understand.

SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.
Trends in Academic Progress: Achievement of U.S. Students in

Table 16-2 Percentage of students at or above each of the five writing proficiency levels, by grade: 1984, 1988, 1990, 1992, and 1994

|  |  | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Proficiency levels | Grade | 1984 | 1988 | 1990 | 1992 | 1994 |
| Level 350: | 4 | 0 | 0 | 0 | 0 | 0 |
| Effective, coherent | 8 | '0 | 0 | ${ }^{2} 1$ | 1,22 | ${ }^{2} 1$ |
| writing | 11 | 2 | ${ }^{1} 1$ | ${ }^{1} 4$ | 2 | 3 |
| Level 300: | 4 | 1 | 1 | 0 | 0 | 0 |
| Complete, sufficient | 8 | 13 | 13 | ${ }^{1} 12$ | ${ }^{1,2} 25$ | 17 |
| writing | 11 | 39 | 139 | 37 | 36 | 33 |
| Level 250: | 4 | 10 | ${ }^{2} 15$ | 12 | 13 | 12 |
| Beginning, focused, | 8 | 72 | 67 | 1.257 | '75 | 67 |
| clear writing | 11 | '89 | '93 | ${ }^{2} 84$ | 87 | ${ }^{2} 85$ |
| Level 200: | 4 | 54 | 56 | 53 | 58 | 56 |
| Incomplete, vague | 8 | 98 | 97 | 1.293 | 98 | 96 |
| writing | 11 | 100 | 100 | 99 | 100 | 99 |
| Level 150: | 4 | 93 | 91 | 89 | 93 | 92 |
| Disjointed, unclear | 8 | 100 | 100 | ${ }^{2} 100$ | 100 | 100 |
| writing | 11 | 100 | 100 | 100 | 100 | 100 |

${ }^{1}$ Statistically significant difference from 1994. SOURCE: U.S. Department of Education, National Center for
${ }^{2}$ Statistically significant difference from 1984. NOTE: See table 16-1 for further description of the proficiency levels.

Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Table 16-3 Percentile distribution of writing proficiency scores, by grade and race/ethnicity: 1984, 1988, 1990, 1992, and 1994

|  | Grade 4 |  |  |  |  | Grade 8 |  |  |  |  | Grade 11 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentile | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 |
|  | All students |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 144 | 135 | 131 | 142 | 140 | 216 | 209 | 195 | 214 | 204 | 236 | 244 | 227 | 233 | 227 |
| 10 | 157 | 151 | 147 | 157 | 155 | 227 | 222 | 208 | 227 | 218 | 249 | 255 | 240 | 246 | 240 |
| 25 | 179 | 177 | 174 | 182 | 180 | 247 | 242 | 231 | 250 | 242 | 269 | 273 | 262 | 266 | 262 |
| 50 | 204 | 207 | 203 | 208 | 206 | 268 | 264 | 257 | 275 | 266 | 291 | 292 | 288 | 288 | 285 |
| 75 | 229 | 235 | 231 | 233 | 232 | 288 | 286 | 282 | 300 | 290 | 312 | 311 | 312 | 310 | 308 |
| 90 | 250 | 259 | 255 | 256 | 253 | 304 | 305 | 304 | 320 | 311 | 330 | 326 | 334 | 328 | 328 |
| 95 | 263 | 274 | 268 | 269 | 266 | 313 | 316 | 318 | 332 | 323 | 340 | 335 | 347 | 338 | 340 |
|  | White |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 155 | 151 | 146 | 159 | 156 | 224 | 216 | 202 | 220 | 214 | 249 | 252 | 235 | 244 | 237 |
| 10 | 167 | 165 | 162 | 172 | 170 | 235 | 229 | 215 | 234 | 228 | 260 | 263 | 247 | 256 | 248 |
| 25 | 188 | 189 | 186 | 194 | 192 | 253 | 248 | 237 | 256 | 250 | 277 | 279 | 269 | 275 | 269 |
| 50 | 211 | 216 | 211 | 217 | 215 | 273 | 270 | 262 | 280 | 273 | 298 | 297 | 294 | 295 | 291 |
| 75 | 233 | 242 | 237 | 240 | 238 | 291 | 290 | 287 | 304 | 295 | 316 | 314 | 317 | 314 | 313 |
| 90 | 255 | 265 | 260 | 261 | 258 | 306 | 309 | 308 | 324 | 315 | 333 | 329 | 338 | 331 | 333 |
| 95 | 266 | 278 | 272 | 273 | 270 | 315 | 319 | 322 | 335 | 327 | 343 | 338 | 350 | 341 | 344 |
|  | Black |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 124 | 109 | 105 | 117 | 114 | 201 | 194 | 182 | 200 | 190 | 222 | 232 | 213 | 216 | 214 |
| 10 | 135 | 122 | 120 | 130 | 127 | 212 | 205 | 193 | 212 | 201 | 232 | 243 | 225 | 226 | 226 |
| 25 | 160 | 148 | 144 | 152 | 150 | 228 | 226 | 216 | 232 | 222 | 252 | 258 | 245 | 245 | 246 |
| 50 | 182 | 173 | 172 | 176 | 173 | 248 | 247 | 240 | 257 | 245 | 270 | 276 | 268 | 264 | 267 |
| 75 | 205 | 200 | 198 | 198 | 196 | 265 | 266 | 263 | 282 | 268 | 290 | 294 | 291 | 283 | 289 |
| 90 | 228 | 224 | 223 | 218 | 217 | 281 | 285 | 284 | 306 | 288 | 309 | 309 | 311 | 300 | 309 |
| 95 | 240 | 238 | 239 | 229 | 231 | 292 | 296 | 297 | 319 | 300 | 318 | 318 | 324 | 309 | 320 |
|  | Hispanic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 130 | 125 | 120 | 132 | 131 | 197 | 199 | 187 | 203 | 192 | 208 | 228 | 217 | 220 | 212 |
| 10 | 141 | 139 | 135 | 144 | 143 | 207 | 210 | 199 | 219 | 204 | 216 | 236 | 232 | 234 | 224 |
| 25 | 162 | 163 | 159 | 166 | 164 | 225 | 230 | 220 | 242 | 227 | 238 | 256 | 253 | 252 | 250 |
| 50 | 188 | 191 | 184 | 189 | 188 | 247 | 251 | 246 | 265 | 252 | 260 | 274 | 275 | 275 | 273 |
| 75 | 214 | 218 | 210 | 213 | 213 | 268 | 271 | 270 | 288 | 276 | 281 | 294 | 301 | 294 | 294 |
| 90 | 234 | 241 | 234 | 234 | 234 | 286 | 290 | 292 | 310 | 298 | 297 | 309 | 324 | 314 | 313 |
| 95 | 247 | 256 | 248 | 247 | 245 | 298 | 301 | 305 | 324 | 308 | 306 | 316 | 338 | 324 | 327 |

SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.
Trends in Academic Progress: Achievement of U.S. Students in

Table 16-4 Average writing proficiency, by grade and parents' highest education level: 1984, 1988, 1990, 1992, and 1994

|  |  | Grade 4 |  |  | Grade 8 |  |  | Grade 11 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |

'Statistically significant difference from 1994.
${ }^{2}$ Statistically significant difference from 1984.
NOTE: "Percentage of students" represents the percentage of all students in each subgroup. Not shown are about one-third of students at age 9 and smaller percentages at ages 13 and 17 who did not know their parents' highest education level.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Supplemental Tables and Notes
Table 16-5 Average writing proficiency scores, by age and grade: 1984, 1988, 1990, 1992, and 1994

| Year | Above modal age ${ }^{1}$ |  | At modal age ${ }^{1}$ |  | Below modal age ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage | Proficiency | Percentage | Proficiency | Percentage | Proficiency |
|  | Grade 4 |  |  |  |  |  |
| 1984 | 36 | 190 | 63 | 212 | 1 | 204 |
| 1988 | 38 | 199 | 61 | 210 | 1 | ${ }^{2} 225$ |
| 1990 | ${ }^{3} 40$ | 196 | 59 | 205 | 0 | 226 |
| 1992 | ${ }^{2,3} 44$ | 201 | 2,356 | 212 | 0 | 166 |
| 1994 | 39 | 200 | 60 | 208 | 1 | 173 |
|  | Grade 8 |  |  |  |  |  |
| 1984 | ${ }^{2} 35$ | 258 | ${ }^{2} 64$ | 272 | 1 | ${ }^{2} 242$ |
| 1988 | ${ }^{3} 40$ | 254 | ${ }^{3} 59$ | 271 | 1 | 259 |
| 1990 | ${ }^{3} 40$ | ${ }^{2,3} 248$ | ${ }^{2,3} 59$ | ${ }^{2,3} 262$ | 1 | ${ }^{3} 304$ |
| 1992 | ${ }^{3} 41$ | ${ }^{2} 263$ | ${ }^{3} 58$ | ${ }^{3} 282$ | 1 | ${ }^{3} 289$ |
| 1994 | ${ }^{3} 42$ | 256 | ${ }^{3} 57$ | 272 | 1 | ${ }^{3} 279$ |
|  | Grade 11 |  |  |  |  |  |
| 1984 | ${ }^{2} 20$ | 267 | ${ }^{2} 67$ | ${ }^{2} 296$ | 13 | 294 |
| 1988 | ${ }^{2} 21$ | 270 | ${ }^{2} 68$ | ${ }^{2} 297$ | 11 | 299 |
| 1990 | ${ }^{3} 25$ | 270 | ${ }^{3} 64$ | 292 | 11 | 295 |
| 1992 | ${ }^{3} 26$ | 269 | 64 | 293 | 10 | 295 |
| 1994 | ${ }^{3} 26$ | 269 | ${ }^{3} 64$ | ${ }^{3} 289$ | 11 | 291 |

'The modal age is the most common age of students in a particular grade level. For example, the modal age in fourth grade is nine years old. Ten-year-olds in fourth grade are above the modal age, and 8 -year-olds in fourth grade are below the modal age.
${ }^{2}$ Statistically significant difference from 1994.
${ }^{3}$ Statistically significant difference from 1984.
NOTE: The modal age is the age that the average student has reached at a certain grade level. Students above the modal age are older than their average cohort, and students below the modal age are younger than their average cohort. The modal ages are:
age 9 at grade 4, age 13 at grade 8, and age 17 at grade 11. The modal age is higher for 11 th-graders because of differences in the time of year the test is given to the different grade levels, causing more students to be below the modal age at 11 th-grade than at any other grade. For more information on the ages and grades of students tested, see the supplemental note to Indicator 15 .
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Table 17-1 Average reading proficiency scores of students who read for fun, by frequency and age: Selected years 1984-94

|  | Age 9 |  |  |  |  | Age 13 |  |  |  |  | Age 17 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 |
| Almost every day | 214 | 213 | 215 | 215 | 215 | 264 | 266 | 269 | 269 | 272 | 297 | 296 | 304 | 304 | 302 |
| 1-2 times a week | 212 | 212 | 211 | 212 | 214 | 255 | 260 | 255 | 260 | 255 | 290 | 284 | 294 | 291 | 286 |
| 1-2 times a month | 204 | 201 | 210 | 204 | 213 | 255 | 257 | 251 | 257 | 255 | 290 | 285 | 288 | 287 | 286 |
| Few times a year | 197 | 200 | 198 | 197 | 193 | 252 | 248 | 245 | 250 | 252 | 280 | 274 | 280 | 282 | 281 |
| Never/hardly ever | 198 | 198 | 192 | 189 | 193 | 239 | 241 | 247 | 246 | 237 | 269 | 277 | 266 | 268 | 258 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, National Assessment of Educational Progess,
Almanac: Reading, 1984 to 1994, 1996.

Table 17-2 Percentage of students assigned various types of writing during the previous week, by English class assignment and grade: Selected years 1984-94

| English class assignment | Grade 4 |  |  |  |  | Grade 8 |  |  |  |  | Grade 11 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 |
| Story | 37.2 | 43.3 | 42.9 | 46.7 | 46.3 | 41.5 | 48.9 | 48.9 | 51.4 | 52.4 | 39.7 | 39.7 | 39.4 | 41.4 | 41.4 |
| Essay | 19.3 | 25.1 | 24.2 | 25.2 | 24.9 | 41.0 | 48.4 | 45.0 | 48.5 | 54.4 | 59.6 | 63.6 | 63.5 | 64.4 | 69.0 |
| Poem | 25.7 | 29.7 | 27.0 | 26.4 | 26.6 | 14.7 | 14.7 | 17.3 | 19.5 | 20.1 | 18.3 | 20.9 | 25.4 | 23.8 | 27.3 |
| Play | 13.9 | 15.6 | 14.1 | 15.1 | 14.2 | 10.4 | 12.2 | 11.7 | 11.8 | 13.8 | 12.6 | 11.3 | 14.1 | 11.5 | 12.9 |
| Letter | 38.5 | 38.7 | 42.5 | 38.8 | 39.3 | 20.8 | 25.3 | 24.4 | 26.9 | 29.3 | 15.9 | 19.6 | 18.2 | 19.3 | 21.6 |
| Book report | 36.1 | 40.5 | 38.2 | 37.8 | 38.1 | 35.4 | 34.8 | 33.9 | 33.7 | 35.0 | 30.4 | 30.7 | 28.2 | 28.4 | 28.1 |
| Other reports | 28.3 | 32.0 | 30.6 | 33.0 | 33.3 | 26.5 | 29.4 | 29.5 | 30.8 | 36.1 | 37.7 | 38.4 | 38.7 | 42.2 | 42.7 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, National Assessment of Educational Progess,
Almanac: Writing, 1984 to 1994, 1996.

Table 17-3 Percentage of students who reported most recently having read various types of materials at school and at home, by type of material and age: Selected years 1984-94

| Type of material | Age 9 |  |  |  |  | Age 13 |  |  |  |  | Age 17 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 |
|  | At school |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Newspaper |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| or magazine | 4.3 | 4.5 | 4.4 | 5.3 | 5.5 | 4.8 | 4.0 | 5.6 | 5.2 | 5.2 | 6.4 | 6.1 | 6.2 | 6.4 | 6.4 |
| Play | 1.9 | 1.8 | 2.5 | 1.8 | 1.5 | 1.9 | 2.7 | 2.4 | 2.4 | 2.4 | 5.9 | 8.8 | 6.3 | 6.7 | 6.8 |
| Poem | 2.9 | 2.6 | 2.9 | 3.5 | 3.7 | 1.2 | 1.4 | 1.2 | 1.6 | 1.1 | 4.1 | 4.7 | 4.4 | 4.6 | 5.4 |
| Story/novel | 16.9 | 18.1 | 19.6 | 23.7 | 27.5 | 22.5 | 27.9 | 26.6 | 28.7 | 32.2 | 39.7 | 40.1 | 41.1 | 42.6 | 41.1 |
| Science book | 17.3 | 18.8 | 16.3 | 16.8 | 16.5 | 21.3 | 20.2 | 22.3 | 18.4 | 18.7 | 11.5 | 12.1 | 12.3 | 12.6 | 12.6 |
| Social studies book | 20.5 | 22.8 | 20.3 | 18.1 | 14.8 | 25.6 | 24.2 | 22.1 | 22.3 | 18.8 | 15.7 | 13.1 | 14.5 | 14.0 | 13.4 |
| Mathematics book | 17.5 | 15.3 | 16.6 | 15.2 | 14.6 | 16.2 | 14.8 | 15.2 | 16.3 | 16.8 | 11.1 | 11.1 | 11.5 | 10.4 | 10.7 |
| Workbook | 18.8 | 16.2 | 17.5 | 15.6 | 16.0 | 6.5 | 4.9 | 4.7 | 5.0 | 4.7 | 5.6 | 4.0 | 3.8 | 2.8 | 3.5 |
| At home |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Newspaper | 8.9 | 7.0 | 5.7 | 6.1 | 5.5 | 16.3 | 12.7 | 11.8 | 12.3 | 11.5 | 25.7 | 23.5 | 23.1 | 24.9 | 20.7 |
| Magazine | 17.4 | 15.4 | 17.4 | 17.0 | 19.9 | 31.1 | 36.2 | 37.1 | 35.2 | 35.6 | 36.6 | 39.9 | 38.4 | 38.1 | 38.9 |
| Play | 3.2 | 2.8 | 2.6 | 2.4 | 1.6 | 0.8 | 0.9 | 0.9 | 1.2 | 0.8 | 0.8 | 0.7 | 0.6 | 0.8 | 0.8 |
| Poem | 5.8 | 4.3 | 5.5 | 6.4 | 5.1 | 1.3 | 1.8 | 2.0 | 2.0 | 1.5 | 1.7 | 2.2 | 2.3 | 2.7 | 2.5 |
| Story/novel | 36.5 | 37.6 | 37.2 | 42.9 | 39.4 | 39.0 | 36.9 | 36.9 | 40.8 | 40.5 | 29.3 | 27.3 | 28.4 | 26.7 | 30.3 |
| Science book | 3.8 | 4.8 | 3.8 | 3.7 | 3.3 | 1.6 | 1.2 | 1.3 | 1.3 | 1.4 | 1.1 | 0.8 | 1.0 | 1.0 | 0.9 |
| Social studies book | 3.3 | 3.1 | 3.2 | 2.8 | 2.2 | 1.5 | 1.5 | 1.4 | 1.0 | 1.1 | 0.5 | 0.5 | 0.4 | 0.8 | 0.3 |
| Mathematics book | 3.6 | 3.5 | 2.9 | 3.2 | 2.7 | 1.3 | 0.7 | 0.9 | 0.5 | 0.7 | 0.5 | 0.5 | 0.7 | 0.7 | 0.3 |
| Workbook | 4.4 | 3.4 | 2.8 | 2.9 | 3.4 | 0.7 | 0.5 | 0.3 | 0.4 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 |
| Something else | 13.0 | 18.0 | 19.0 | 12.5 | 16.9 | 6.4 | 7.6 | 7.3 | 5.4 | 6.5 | 3.6 | 4.5 | 5.1 | 4.2 | 4.9 |

[^9]Table 17-4 Percentage of students who reported reading various amounts per day in school and for homework, by pages read and age: Selected years 1984-94

| Pages read | Age 9 |  |  |  |  | Age 13 |  |  |  |  | Age 17 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 |
| More than 20 | 12.9 | 15.5 | 14.4 | 18.7 | 17.3 | 10.5 | 12.6 | 11.3 | 14.4 | 14.2 | 20.3 | 20.8 | 20.2 | 22.3 | 23.2 |
| 16-20 | 13.3 | 13.5 | 12.9 | 13.6 | 14.4 | 10.9 | 12.6 | 11.1 | 12.8 | 12.6 | 14.4 | 13.9 | 13.6 | 13.7 | 13.3 |
| 11-15 | 13.9 | 15.0 | 13.7 | 13.5 | 14.4 | 17.5 | 17.8 | 16.3 | 18.8 | 16.6 | 18.0 | 18.4 | 18.0 | 17.3 | 17.6 |
| 6-10 | 24.9 | 28.1 | 25.1 | 25.1 | 25.7 | 34.6 | 32.9 | 34.4 | 31.1 | 31.1 | 26.2 | 25.5 | 25.6 | 26.5 | 25.3 |
| 5 or fewer | 35.1 | 27.7 | 33.8 | 29.0 | 28.3 | 26.5 | 24.1 | 27.0 | 22.9 | 25.5 | 21.1 | 21.3 | 22.6 | 20.3 | 20.7 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, National Assessment of Educational Progess,
Almanac: Reading, 1984 to 1994, 1996.

Table 17-5 Percentage of students who wrote outside of class at least once a week, by writing habit and grade: Selected years 1984-94

|  | Grade 4 |  |  |  |  | Grade 8 |  |  |  |  | Grade 11 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Writing habit | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 |
| Keep a diary or journal | - | - | - | - | - | 25.9 | 28.6 | 30.9 | 29.8 | 32.8 | 19.0 | 22.2 | 21.3 | 22.5 | 27.0 |
| Do crossword puzzle | - | - | - | - | - | 38.0 | 39.1 | 42.3 | 40.7 | 39.3 | 29.5 | 21.1 | 22.6 | 21.7 | 23.7 |
| Write for school newspaper | - | - | - | - | - | 8.0 | 8.1 | 9.2 | 11.1 | 10.2 | 5.3 | 4.8 | 7.1 | 5.7 | 8.5 |
| Help others with writing | - | - | - | - | - | 29.3 | 30.7 | 31.5 | 31.7 | 32.0 | 28.3 | 24.4 | 25.7 | 27.3 | 27.3 |
| Write letters to relatives | 32.5 | 32.3 | 36.5 | 33.6 | 34.9 | 37.3 | 41.9 | 47.2 | 45.8 | 45.1 | 36.2 | 43.9 | 38.5 | 38.0 | 38.1 |
| Write notes or messages | 43.7 | 44.7 | 45.9 | 45.4 | 43.9 | 67.9 | 70.8 | 73.5 | 72.5 | 71.5 | 73.7 | 81.5 | 78.2 | 78.9 | 77.2 |
| Write stories | 25.9 | 24.2 | 25.6 | 28.8 | 25.5 | 10.2 | 15.3 | 14.3 | 16.8 | 18.0 | 11.7 | 15.3 | 14.2 | 15.8 | 15.9 |

- Not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progess, Almanac: Writing, 1984 to 1994, 1996.

Table 17-6 Average writing proficiency of students who wrote on their own away from school, by writing habit, frequency, and grade: Selected years 1984-94

| Writing habit and frequency | Grade 4 |  |  |  |  | Grade 8 |  |  |  |  | Grade 11 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 |
| Write stories |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| At least once a week | 197 | 202 | 198 | 205 | 199 | 266 | 265 | 260 | 273 | 267 | 290 | 289 | 292 | 286 | 283 |
| Once or twice a month | 208 | 214 | 206 | 212 | 213 | 271 | 270 | 263 | 282 | 271 | 293 | 296 | 291 | 290 | 287 |
| Never or hardly ever | 206 | 207 | 205 | 208 | 204 | 266 | 263 | 255 | 274 | 264 | 292 | 291 | 286 | 287 | 284 |
| Keep a diary or journal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| At least once a week | - | - | - | - | - | 270 | 266 | 260 | 279 | 269 | 291 | 297 | 293 | 295 | 289 |
| Once or twice a month | - | - | - | - | - | 270 | 270 | 262 | 282 | 268 | 287 | 298 | 290 | 293 | 293 |
| Never or hardly ever | - | - | - | - | - | 266 | 261 | 253 | 269 | 262 | 286 | 288 | 284 | 283 | 281 |

[^10]SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progess, Almanac: Writing, 1984 to 1994, 1996.

Table 17-7 Percentage of students with various reading habits, by frequency, habit, and age: Selected years 1984-94

| Frequency | Age 9 |  | Age 13 |  | Age 17 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Takes books out of library | Spends own money on books | Takes books out of library | Spends own money on books | Takes books out of library | Spends own money on books |
| Almost every day |  |  |  |  |  |  |
| 1984 | 15.4 | 8.9 | 7.1 | 3.7 | 2.4 | 2.8 |
| 1988 | 18.8 | 10.2 | 3.1 | 2.7 | 1.3 | 2.0 |
| 1990 | 19.9 | 10.5 | 3.3 | 2.8 | 1.6 | 1.6 |
| 1992 | 21.3 | 10.8 | 2.3 | 4.1 | 1.1 | 1.5 |
| 1994 | 21.6 | 14.7 | 5.9 | 3.6 | 1.2 | 2.0 |
| 1-2 times a week |  |  |  |  |  |  |
| 1984 | 60.2 | 10.9 | 34.4 | 10.2 | 13.8 | 7.3 |
| 1988 | 55.1 | 12.8 | 32.8 | 9.3 | 13.5 | 6.3 |
| 1990 | 51.8 | 11.4 | 33.4 | 11.4 | 14.2 | 9.5 |
| 1992 | 53.8 | 11.5 | 33.3 | 10.8 | 11.9 | 5.5 |
| 1994 | 51.6 | 9.9 | 29.2 | 9.3 | 14.0 | 6.9 |
| 1-2 times a month |  |  |  |  |  |  |
| 1984 | 12.6 | 21.6 | 32.4 | 24.7 | 36.6 | 22.7 |
| 1988 | 12.3 | 17.3 | 37.0 | 23.9 | 36.2 | 22.6 |
| 1990 | 12.8 | 20.0 | 34.3 | 25.5 | 34.7 | 24.6 |
| 1992 | 12.5 | 20.6 | 35.7 | 25.9 | 36.1 | 21.1 |
| 1994 | 12.6 | 18.7 | 36.6 | 26.3 | 33.1 | 22.8 |
| Few times a year |  |  |  |  |  |  |
| 1984 | 4.5 | 17.0 | 12.7 | 25.3 | 27.9 | 29.7 |
| 1988 | 5.8 | 19.5 | 15.2 | 25.1 | 26.0 | 25.0 |
| 1990 | 5.3 | 16.3 | 15.9 | 21.6 | 26.9 | 24.8 |
| 1992 | 4.6 | 17.3 | 18.5 | 22.3 | 34.0 | 30.2 |
| 1994 | 5.4 | 18.3 | 15.7 | 20.5 | 32.9 | 31.0 |
| Never/hardly ever |  |  |  |  |  |  |
| 1984 | 7.2 | 41.6 | 13.3 | 36.2 | 19.3 | 37.5 |
| 1988 | 8.0 | 40.1 | 11.9 | 39.0 | 23.0 | 44.2 |
| 1990 | 10.2 | 41.9 | 13.1 | 38.6 | 22.5 | 39.6 |
| 1992 | 7.8 | 39.8 | 10.3 | 36.9 | 16.9 | 41.7 |
| 1994 | 8.8 | 38.4 | 12.6 | 40.2 | 18.8 | 37.3 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progess, Almanac: Reading, 1984 to 1994, 1996.

## Table 18-1 Explanations of levels of mathematics proficiency

## Level 350: Multi-step problem solving and algebra

Students at this level can apply a range of reasoning skills to solve multi-step problems. They can solve routine problems involving fractions and percents, recognize properties of basic geometric figures, and work with exponents and square roots. They can solve a variety of two-step problems using variables, identify equivalent algebraic expressions, and solve linear equations and inequalities. They are developing an understanding of functions and coordinate systems.

Level 300: Moderately complex procedures and reasoning
Students at this level are developing an understanding of number systems. They can compute with decimals, simple fractions, and commonly encountered percents. They can identify geometric figures, measure lengths and angles, and calculate areas of rectangles. These students are also able to interpret simple inequalities, evaluate formulas, and solve simple linear equations. They can find averages, make decisions on information drawn from graphs, and use logical reasoning to solve problems. They are developing the skills to operate with signed numbers, exponents, and square roots.

## Level 250: Numerical operations and beginning problem solving

Students at this level have an initial understanding of the four basic operations. They are able to apply whole number addition and subtraction skills to one-step word problems and money situations. In multiplication, they can find the product of a two-digit and a one-digit number. They can also compare information from graphs and charts, and are developing an ability to analyze simple logical relations.

## Level 200: Beginning skills and understandings

Students at this level have considerable understanding of two-digit numbers. They can add two-digit numbers, but are still developing an ability to regroup in subtraction. They know some basic multiplication and division facts, recognize relations among coins, can read information from charts and graphs, and use simple measurement instruments. They are developing some reasoning skills.

## Level 150: Simple arithmetic facts

Students at this level know some basic addition and subtraction facts, and most can add two-digit numbers without regrouping. They recognize simple situations in which addition and subtraction apply. They also are developing rudimentary classification skills.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in

Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Table 18-2 Average mathematics scale scores, by grade: 1990-96

| Grade | 1990 | 1992 | 1996 |
| :--- | :---: | :---: | :---: |
| $4^{\text {th }}$ | 213 | ${ }^{1} 220$ | ${ }^{1} 268$ |
| $8^{\text {th }}$ | 263 | ${ }^{1} 2224$ |  |
| $12^{\text {th }}$ | 294 | ${ }^{2} 299$ | 1,2272 |

'Statistically significant difference from 1990.
${ }^{2}$ Statistically significant difference from 1992.

SOURCE: U.S. Department of Education, National Center for Education Statistics, NAEP 1996 Mathematics Report Card for the Nation and the States: Findings from the National Assessment of Educational Progress, 1997.

Table 18-3 Average mathematics scale scores of public school $4^{\text {th }}$ - and $8^{\text {th }}$-graders, and change in scores from 1992, by grade and state: 1996

| State or jurisdiction | Grade 4 |  | Grade 8 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average scale score | Change from 1992 average scale score | Average scale score | Change from 1992 average scale score | Change from 1990 average scale score |
| Nation | 222 | ${ }^{2} 4$ | 271 | 5 | 8 |
| Alabama | 212 | 3 | 257 | 4 | 4 |
| Alaska' | 224 | - | 278 | - | - |
| Arizona ${ }^{1}$ | 218 | 2 | 268 | 3 | ${ }^{3} 8$ |
| Arkansas | 216 | ${ }^{2} 6$ | 262 | ${ }^{2} 5$ | ${ }^{3} 5$ |
| California | 209 | 1 | 263 | 2 | $3^{3} 6$ |
| Colorado | 226 | ${ }^{2} 5$ | 276 | 3 | ${ }^{3} 8$ |
| Connecticut | 232 | ${ }^{2} 5$ | 280 | ${ }^{2} 6$ | ${ }^{3} 10$ |
| Delaware | 215 | ${ }^{2}-3$ | 267 | ${ }^{2} 4$ | ${ }^{3} 6$ |
| District of Columbia | 187 | ${ }^{2}-5$ | 233 | -2 | 1 |
| Florida | 216 | 2 | 264 | 4 | ${ }^{3} 8$ |
| Georgia | 215 | 0 | 262 | 3 | 4 |
| Hawaii | 215 | 1 | 262 | ${ }^{2} 5$ | ${ }^{3} 11$ |
| Indiana | 229 | ${ }^{2} 8$ | 276 | ${ }^{2} 5$ | ${ }^{3} 8$ |
| lowa ${ }^{1}$ | 229 | -1 | 284 | 1 | ${ }^{3} 6$ |
| Kentucky | 220 | ${ }^{2} 5$ | 267 | ${ }^{2} 4$ | ${ }^{3} 9$ |
| Lousiana | 209 | ${ }^{2} 5$ | 252 | 2 | $3^{3} 6$ |
| Maine | 232 | 1 | 284 | ${ }^{2} 5$ | - |
| Maryland | 221 | 3 | 270 | 5 | ${ }^{3} 9$ |
| Massachusetts | 229 | 2 | 278 | 5 | - |
| Michigan ${ }^{1}$ | 227 | ${ }^{2} 6$ | 277 | ${ }^{2} 10$ | ${ }^{3} 12$ |
| Minnesota | 232 | ${ }^{2} 4$ | 284 | 2 | ${ }^{3} 9$ |
| Mississippi | 208 | ${ }^{2} 7$ | 250 | 4 | - |
| Missouri | 225 | 3 | 273 | 2 | - |
| Montana ${ }^{1}$ | 228 | - | 283 | - | 3 |
| Nebraska | 229 | 2 | 283 | ${ }^{2} 5$ | ${ }^{3} 7$ |
| Nevada ${ }^{1}$ | 218 | - | - | - | - |
| New Jersey ${ }^{1}$ | 228 | 0 | - | - | - |
| New Mexico | 214 | 1 | 262 | 2 | ${ }^{3} 6$ |
| New York ${ }^{1}$ | 223 | ${ }^{2} 4$ | 270 | 4 | ${ }^{3} 9$ |
| North Carolina | 225 | ${ }^{2} 11$ | 268 | ${ }^{2} 9$ | ${ }^{3} 17$ |
| North Dakota | 231 | 2 | 284 | 1 | 3 |
| Oregon | 224 | - | 276 | - | ${ }^{3} 5$ |
| Pennsylvania ${ }^{1}$ | 226 | 2 | - | - | - |
| Rhode Island | 220 | ${ }^{2} 5$ | 269 | ${ }^{2} 3$ | ${ }^{3} 9$ |

Table 18-3 Average mathematics scale scores of public school $4^{\text {th }}$ - and $8^{\text {th }}$-graders, and change in scores from 1992, by grade and state: 1996 -Continued

|  | Grade 4 |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |

- State did not participate in the assessment in one or more years.
${ }^{1}$ State did not satisfy one or more of the guidelines for school participation rates in 1996.
${ }^{2}$ Change between 1992 and 1996 is statistically significant at the .05 level.
${ }^{3}$ Change between 1990 and 1996 is statistically significant at the .05 level.
SOURCE: U.S. Department of Education, National Center for Education Statistics, NAEP 1996 Mathematics Report Card for the Nation and the States: Findings from the National Assessment of Educational Progress, 1997.

Table 18-4 Percentage of students scoring at or above five levels of mathematics proficiency: 1978, 1982, 1986, 1990, 1992, and 1994

|  |  | Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Proficiency levels | Age | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 |
| Level 350: | 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| Multi-step problem | 13 | 1 | 0 | ${ }^{2} 0$ | ${ }^{2} 0$ | 0 | 1 |
| solving and algebra | 17 | 7 | ${ }^{2} 6$ | 6 | 7 | 7 | 7 |
| Level 300: | 9 | 1 | 1 | 1 | 1 | 1 | 1 |
| Moderately complex | 13 | 18 | 17 | ${ }^{1} 16$ | 17 | 19 | 21 |
| procedures and reasoning | 17 | ${ }^{1} 52$ | ${ }^{1} 48$ | ${ }^{1} 52$ | 56 | ${ }^{2} 59$ | ${ }^{2} 59$ |
| Level 250: | 9 | ${ }^{1} 20$ | ${ }^{1} 19$ | ${ }^{1} 21$ | ${ }^{2} 28$ | ${ }^{2} 28$ | ${ }^{2} 30$ |
| Numerical operations and | 13 | '65 | 1,271 | ${ }^{2} 73$ | ${ }^{2} 75$ | ${ }^{2} 78$ | ${ }^{2} 78$ |
| beginning problem solving | 17 | ${ }^{1} 92$ | ${ }^{1} 93$ | ${ }^{2} 96$ | ${ }^{2} 96$ | ${ }^{2} 97$ | ${ }^{2} 97$ |
| Level 200: | 9 | ${ }^{1} 70$ | ${ }^{1} 71$ | ${ }^{1} 74$ | ${ }^{2} 82$ | ${ }^{2} 81$ | ${ }^{2} 82$ |
| Beginning skills and | 13 | ${ }^{1} 95$ | ${ }^{2} 98$ | ${ }^{2} 99$ | ${ }^{2} 98$ | ${ }^{2} 99$ | ${ }^{2} 99$ |
| understandings | 17 | ${ }^{1} 100$ | ${ }^{1} 100$ | 100 | 100 | 100 | ${ }^{2} 100$ |
| Level 150: | 9 | ${ }^{1} 97$ | '97 | 1.298 | ${ }^{2} 99$ | ${ }^{2} 99$ | ${ }^{2} 99$ |
| Simple arithmetic | 13 | ${ }^{1} 100$ | 100 | 100 | 100 | 100 | ${ }^{2} 100$ |
| facts | 17 | 100 | 100 | 100 | 100 | 100 | 100 |
| 'Statistically significant difference from 1994. ${ }^{2}$ Statistically significant difference from 1978. |  |  | SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996. |  |  |  |  |

Table 18-5 Average mathematics proficiency scores, by age and parents' highest education level: 1978, 1982, 1986, 1990, 1992, and 1994

| Parents' highest education level | Year | Age 9 |  | Age 13 |  | Age 17 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percentage of students | Average proficiency | Percentage of students | Average proficiency | Percentage of students | Average proficiency |
| Less than high school graduate | 1978 | ${ }^{1} 8$ | ${ }^{1} 200$ | ${ }^{1} 12$ | ${ }^{1} 245$ | ${ }^{1} 13$ | 280 |
|  | 1982 | ${ }^{1} 8$ | ${ }^{1} 199$ | ${ }^{1} 11$ | ${ }^{2} 251$ | ${ }^{1} 14$ | 279 |
|  | 1986 | ${ }^{2} 4$ | 201 | ${ }^{2} 8$ | ${ }^{2} 252$ | ${ }^{2} 8$ | 279 |
|  | 1990 | ${ }^{2} 5$ | ${ }^{2} 210$ | ${ }^{2} 8$ | ${ }^{2} 253$ | ${ }^{2} 8$ | 285 |
|  | 1992 | ${ }^{2} 4$ | ${ }^{2} 217$ | ${ }^{2} 6$ | ${ }^{2} 256$ | ${ }^{2} 8$ | 286 |
|  | 1994 | ${ }^{2} 4$ | ${ }^{2} 210$ | ${ }^{2} 6$ | ${ }^{2} 254$ | ${ }^{2} 7$ | 284 |
| Graduated from | 1978 | ${ }^{1} 23$ | ${ }^{1} 219$ | ${ }^{1} 33$ | 263 | ${ }^{1} 33$ | 294 |
| high school | 1982 | ${ }^{1} 25$ | ${ }^{1} 218$ | ${ }^{1} 34$ | 263 | ${ }^{1} 33$ | 293 |
|  | 1986 | ${ }^{2} 16$ | ${ }^{1} 218$ | ${ }^{1} 31$ | 263 | ${ }^{1,2} 28$ | 293 |
|  | 1990 | ${ }^{2} 16$ | ${ }^{2} 226$ | ${ }^{1,2} 27$ | 263 | 1,226 | 294 |
|  | 1992 | ${ }^{2} 14$ | 222 | ${ }^{2} 23$ | 263 | ${ }^{2} 21$ | 298 |
|  | 1994 | ${ }^{2} 14$ | ${ }^{2} 225$ | ${ }^{2} 23$ | 266 | ${ }^{2} 22$ | 295 |
| Some education | 1978 | 19 | ${ }^{\prime} 230$ | ${ }^{1} 14$ | ${ }^{1} 273$ | ${ }^{1} 16$ | 305 |
| after high school | 1982 | ${ }^{1} 9$ | ${ }^{1} 225$ | ${ }^{1} 14$ | 275 | ${ }^{1} 18$ | 304 |
|  | 1986 | ${ }^{2} 7$ | ${ }^{1} 229$ | 16 | 274 | ${ }^{2} 24$ | 305 |
|  | 1990 | 7 | 236 | ${ }^{2} 17$ | ${ }^{2} 277$ | ${ }^{2} 24$ | 308 |
|  | 1992 | 8 | ${ }^{2} 237$ | ${ }^{2} 18$ | ${ }^{2} 278$ | ${ }^{2} 25$ | 308 |
|  | 1994 | ${ }^{2} 7$ | ${ }^{2} 239$ | ${ }^{2} 17$ | ${ }^{2} 277$ | ${ }^{2} 24$ | 305 |
| Graduated from college | 1978 | ${ }^{1} 24$ | ${ }^{1} 231$ | ${ }^{1} 26$ | 284 | ${ }^{1} 32$ | 317 |
|  | 1982 | 1,230 | ${ }^{1} 229$ | 1,232 | 282 | ${ }^{1} 32$ | 1,2312 |
|  | 1986 | 1,238 | ${ }^{1} 231$ | 1,238 | ${ }^{1} 280$ | 1,237 | 314 |
|  | 1990 | ${ }^{2} 40$ | ${ }^{2} 238$ | ${ }^{1,2} 41$ | ${ }^{1} 280$ | 1,239 | 316 |
|  | 1992 | ${ }^{2} 42$ | ${ }^{2} 236$ | ${ }^{2} 44$ | 283 | ${ }^{2} 43$ | 316 |
|  | 1994 | ${ }^{2} 45$ | ${ }^{2} 238$ | ${ }^{2} 46$ | 285 | ${ }^{2} 44$ | 318 |

${ }^{1}$ Statistically significant difference from 1994.
${ }^{2}$ Statistically significant difference from 1978.
NOTE: "Percentage of students" represents the percentage of all students in each subgroup. Not shown are about one-third of students at age 9 and smaller percentages at ages 13 and 17 who did not know their parents' highest education level.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Table 18-6 Percentile distribution of mathematics proficiency scores, by age and race/ethnicity: 1978, 1982, 1986, 1990, 1992, and 1994

|  | Age 9 |  |  |  |  |  | Age 13 |  |  |  |  |  | Age 17 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentile | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 |
| All students |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 157 | 159 | 163 | 173 | 172 | 174 | 198 | 212 | 218 | 218 | 221 | 220 | 241 | 245 | 252 | 253 | 256 | 256 |
| 10 | 171 | 173 | 177 | 186 | 185 | 187 | 213 | 225 | 230 | 230 | 233 | 233 | 254 | 256 | 263 | 264 | 267 | 267 |
| 25 | 195 | 196 | 199 | 208 | 208 | 209 | 238 | 246 | 248 | 250 | 253 | 253 | 276 | 276 | 281 | 283 | 286 | 286 |
| 50 | 220 | 220 | 223 | 231 | 231 | 233 | 265 | 270 | 269 | 271 | 274 | 276 | 301 | 299 | 301 | 305 | 308 | 306 |
| 75 | 244 | 243 | 246 | 252 | 253 | 255 | 291 | 292 | 290 | 292 | 294 | 297 | 325 | 322 | 323 | 327 | 328 | 327 |
| 90 | 264 | 263 | 264 | 271 | 271 | 272 | 313 | 311 | 309 | 310 | 312 | 315 | 345 | 341 | 343 | 345 | 345 | 346 |
| 95 | 276 | 274 | 276 | 282 | 282 | 283 | 327 | 322 | 321 | 320 | 323 | 326 | 356 | 351 | 354 | 356 | 355 | 356 |
| White |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 166 | 168 | 171 | 182 | 182 | 182 | 212 | 223 | 226 | 228 | 231 | 231 | 252 | 253 | 261 | 260 | 264 | 265 |
| 10 | 179 | 181 | 184 | 194 | 194 | 195 | 226 | 234 | 236 | 239 | 242 | 243 | 263 | 264 | 270 | 270 | 274 | 275 |
| 25 | 201 | 202 | 205 | 215 | 215 | 217 | 248 | 254 | 254 | 257 | 260 | 262 | 284 | 282 | 287 | 289 | 293 | 293 |
| 50 | 225 | 225 | 228 | 236 | 236 | 238 | 272 | 275 | 273 | 277 | 279 | 282 | 307 | 304 | 307 | 310 | 313 | 312 |
| 75 | 248 | 247 | 250 | 256 | 256 | 259 | 296 | 296 | 293 | 296 | 298 | 301 | 329 | 325 | 328 | 330 | 332 | 332 |
| 90 | 267 | 265 | 267 | 274 | 274 | 275 | 317 | 314 | 312 | 313 | 315 | 318 | 347 | 343 | 346 | 347 | 348 | 349 |
| 95 | 278 | 276 | 278 | 285 | 284 | 286 | 330 | 325 | 323 | 323 | 325 | 329 | 358 | 353 | 356 | 357 | 357 | 359 |
| Black |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 134 | 137 | 146 | 156 | 155 | 160 | 170 | 189 | 202 | 202 | 200 | 202 | 217 | 225 | 237 | 245 | 238 | 241 |
| 10 | 147 | 150 | 158 | 167 | 166 | 171 | 184 | 200 | 213 | 212 | 212 | 213 | 228 | 234 | 244 | 254 | 249 | 251 |
| 25 | 169 | 172 | 180 | 186 | 186 | 191 | 206 | 219 | 231 | 230 | 231 | 231 | 246 | 251 | 260 | 269 | 267 | 268 |
| 50 | 193 | 197 | 203 | 208 | 209 | 213 | 229 | 241 | 249 | 249 | 251 | 251 | 268 | 271 | 279 | 287 | 287 | 286 |
| 75 | 216 | 218 | 224 | 231 | 230 | 234 | 254 | 261 | 267 | 268 | 271 | 271 | 290 | 291 | 296 | 307 | 304 | 303 |
| 90 | 236 | 237 | 241 | 249 | 249 | 252 | 276 | 280 | 284 | 285 | 286 | 292 | 310 | 311 | 312 | 326 | 321 | 317 |
| 95 | 248 | 248 | 251 | 259 | 259 | 262 | 288 | 291 | 296 | 296 | 297 | 304 | 321 | 321 | 325 | 338 | 331 | 326 |
| Hispanic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 144 | 148 | 155 | 162 | 159 | 159 | 180 | 202 | 206 | 206 | 212 | 209 | 224 | 232 | 236 | 229 | 248 | 244 |
| 10 | 156 | 161 | 164 | 173 | 169 | 170 | 192 | 214 | 216 | 216 | 224 | 219 | 234 | 241 | 248 | 242 | 258 | 254 |
| 25 | 179 | 181 | 185 | 193 | 190 | 190 | 214 | 231 | 236 | 234 | 241 | 238 | 253 | 255 | 265 | 264 | 273 | 271 |
| 50 | 204 | 205 | 206 | 216 | 212 | 211 | 237 | 252 | 254 | 255 | 259 | 256 | 275 | 275 | 283 | 282 | 292 | 290 |
| 75 | 227 | 226 | 226 | 235 | 234 | 230 | 262 | 274 | 274 | 275 | 279 | 274 | 298 | 297 | 301 | 304 | 311 | 311 |
| 90 | 250 | 246 | 245 | 252 | 253 | 249 | 284 | 293 | 292 | 292 | 295 | 293 | 320 | 315 | 319 | 325 | 328 | 329 |
| 95 | 260 | 257 | 254 | 262 | 263 | 259 | 296 | 304 | 301 | 303 | 304 | 304 | 332 | 327 | 329 | 336 | 336 | 338 |

SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.
Trends in Academic Progress: Achievement of U.S. Students in

Table 18-7 Average mathematics proficiency scores, by age and grade: 1978, 1982, 1986, 1990, 1992, and 1994

| Year | Below modal grade ${ }^{1}$ |  | At modal grade ${ }^{1}$ |  | Above modal grade ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage | Proficiency | Percentage | Proficiency | Percentage | Proficiency |
|  | Age 9 |  |  |  |  |  |
| 1978 | ${ }^{2} 26$ | ${ }^{2} 191$ | ${ }^{2} 72$ | ${ }^{2} 228$ | ${ }^{2} 1$ | 241 |
| 1982 | 30 | ${ }^{2} 193$ | ${ }^{2} 69$ | ${ }^{2} 230$ | 1 | 258 |
| 1986 | ${ }^{3} 34$ | ${ }^{2,3} 198$ | ${ }^{3} 66$ | ${ }^{2,3} 234$ | ${ }^{3,4} 0$ | - |
| 1990 | ${ }^{3} 35$ | ${ }^{3} 207$ | ${ }^{3} 65$ | ${ }^{3} 242$ | ${ }^{4} 0$ | - |
| 1992 | ${ }^{3} 38$ | ${ }^{3} 208$ | ${ }^{3} 62$ | ${ }^{3} 242$ | ${ }^{3,4} 0$ | - |
| 1994 | ${ }^{3} 33$ | ${ }^{3} 211$ | ${ }^{3} 66$ | ${ }^{3} 241$ | - | - |
|  | Age 13 |  |  |  |  |  |
| 1978 | ${ }^{2} 27$ | ${ }^{2} 240$ | ${ }^{2} 70$ | ${ }^{2} 274$ | 1 | 298 |
| 1982 | ${ }^{2} 28$ | ${ }^{2,3} 247$ | ${ }^{2} 70$ | ${ }^{2} 277$ | 1 | 304 |
| 1986 | 33 | ${ }^{2,3} 251$ | 67 | ${ }^{2,3} 278$ | 1 | 297 |
| 1990 | ${ }^{3} 36$ | ${ }^{2,3} 253$ | ${ }^{3} 63$ | ${ }^{3} 280$ | 1 | 278 |
| 1992 | ${ }^{3} 37$ | ${ }^{3} 258$ | ${ }^{3} 62$ | ${ }^{3} 282$ | ${ }^{4} 0$ | - |
| 1994 | ${ }^{3} 38$ | ${ }^{3} 259$ | ${ }^{3} 62$ | ${ }^{3} 283$ | - | - |
|  | Age 17 |  |  |  |  |  |
| 1978 | ${ }^{2} 15$ | ${ }^{2} 273$ | 75 | ${ }^{2} 305$ | ${ }^{2} 10$ | ${ }^{2} 309$ |
| 1982 | ${ }^{2} 16$ | ${ }^{2} 274$ | 75 | ${ }^{2} 302$ | ${ }^{2} 10$ | ${ }^{2} 306$ |
| 1986 | 17 | ${ }^{2} 277$ | 75 | ${ }^{2} 307$ | 8 | 309 |
| 1990 | ${ }^{3} 22$ | ${ }^{3} 282$ | ${ }^{3} 70$ | ${ }^{3} 311$ | 8 | 311 |
| 1992 | ${ }^{3} 24$ | ${ }^{3} 285$ | ${ }^{3} 70$ | ${ }^{3} 313$ | ${ }^{3} 6$ | ${ }^{3} 318$ |
| 1994 | ${ }^{3} 21$ | ${ }^{3} 284$ | 73 | ${ }^{3} 312$ | ${ }^{3} 6$ | ${ }^{3} 316$ |

- Too few sample observations for a reliable estimate.
'The modal grade is the most common grade level for students of a particular age. For example, the modal grade at age 9 is fourth grade. Nine-year-olds in fifth grade are above the modal grade for their age, and 9 -year-olds in third grade are below the modal grade for their age.
${ }^{2}$ Statistically significant difference from 1994.
${ }^{3}$ Statistically significant difference from 1978.
${ }^{4}$ Percentages less than 0.5 are rounded to 0.0 .

NOTE: The modal grades are grade 4 at age 9 , grade 8 at age 13, and grade 11 at age 17. The modal grade is lower for 17-year-olds because of differences in age definition and in the time of year the test is given, causing more students to be above the modal grade at age 17 than at any other age. For a more complete explanation, see the supplemental note to Indicator 15.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

## Table 19-1 Explanations of levels of science proficiency

## Level 350: Integrates specialized scientific information

Students at this level can infer relationships and draw conclusions using detailed scientific knowledge from the physical sciences, particularly chemistry. They also can apply basic principles of genetics and interpret the societal implications of research in this field.
Level 300: Analyzes scientific procedures and data
Students at this level can evaluate the appropriateness of the design of an experiment. They have more detailed scientific knowledge, and the skill to apply their knowledge in interpreting information from text and graphs. These students also exhibit a growing understanding of principles from the physical sciences.

## Level 250: Applies general scientific information

Students at this level can interpret data from simple tables and make inferences about the outcomes of experimental procedures. They exhibit knowledge and understanding of the life sciences, including a familiarity with some aspects of animal behavior and of ecological relationships. These students also demonstrate some knowledge of basic information from the physical sciences.

## Level 200: Understands simple scientific principles

Students at this level are developing some understanding of simple scientific principles, particularly in the life sciences. For example, they exhibit some rudimentary knowledge of the structure and function of plants and animals.
Level 150: Knows everyday science facts
Students at this level know some general scientific facts of the type that could be learned from everyday experiences. They can read simple graphs, match the distinguishing characteristics of animals, and predict the operation of familiar apparatus that work according to mechanical principles.

[^11]Table 19-2 Percentage of students scoring at or above five levels of science proficiency: 1977, 1982, 1986, 1990, 1992, and 1994

|  |  | Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Proficiency level | Age | 1977 | 1982 | 1986 | 1990 | 1992 | 1994 |
| Level 350: | 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| Integrates specialized | 13 | ${ }^{1} 1$ | 0 | ${ }^{2} 0$ | 0 | ${ }^{2} 0$ | ${ }^{2} 0$ |
| scientific information | 17 | 9 | ${ }^{1} 7$ | 8 | 9 | 10 | 10 |
| Level 300: | 9 | 3 | 2 | 3 | 3 | 3 | 4 |
| Analyzes scientific | 13 | 11 | 10 | 9 | 11 | 12 | 12 |
| procedures and data | 17 | ${ }^{1} 42$ | 1.237 | ${ }^{1} 41$ | 43 | ${ }^{2} 47$ | ${ }^{2} 48$ |
| Level 250: | 9 | ${ }^{1} 26$ | ${ }^{1} 24$ | ${ }^{1} 28$ | ${ }^{2} 31$ | ${ }^{2} 33$ | ${ }^{2} 34$ |
| Applies general | 13 | ${ }^{1} 49$ | ${ }^{1} 51$ | ${ }^{1} 52$ | ${ }^{1,2} 56$ | ${ }^{2} 61$ | ${ }^{2} 60$ |
| scientific information | 17 | 82 | 1,277 | 81 | 81 | 83 | 83 |
| Level 200: | 9 | ${ }^{1} 68$ | ${ }^{1} 71$ | 1,272 | ${ }^{2} 76$ | ${ }^{2} 78$ | ${ }^{2} 77$ |
| Understands simple | 13 | ${ }^{1} 86$ | 1.290 | ${ }^{2} 92$ | ${ }^{2} 92$ | ${ }^{2} 93$ | ${ }^{2} 92$ |
| scientific principles | 17 | 97 | 96 | 97 | 97 | 98 | 97 |
| Level 150: | 9 | ${ }^{1} 94$ | 95 | 1,296 | ${ }^{2} 97$ | ${ }^{2} 97$ | ${ }^{2} 97$ |
| Knows everyday | 13 | ${ }^{1} 99$ | ${ }^{2} 100$ | ${ }^{2} 100$ | ${ }^{2} 100$ | ${ }^{2} 100$ | ${ }^{2} 100$ |
| science facts | 17 | 100 | 100 | 100 | 100 | ${ }^{2} 100$ | 100 |

' Statistically significant difference from 1994.
${ }^{2}$ Statistically significant difference from 1977. NOTE: Some scores were revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Table 19-3 Percentile distribution of science proficiency scores, by age and race/ethnicity: 1977, 1982, 1986, 1990, 1992, and 1994

|  | Age 9 |  |  |  |  |  | Age 13 |  |  |  |  |  | Age 17 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentile | 1977 | 1982 | 1986 | 1990 | 1992 | 1994 | 1977 | 1982 | 1986 | 1990 | 1992 | 1994 | 1977 | 1982 | 1986 | 1990 | 1992 | 1994 |
|  | All students |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 144 | 151 | 155 | 160 | 163 | 161 | 174 | 185 | 189 | 191 | 193 | 191 | 213 | 203 | 212 | 210 | 218 | 212 |
| 10 | 161 | 167 | 170 | 176 | 178 | 177 | 191 | 200 | 203 | 206 | 209 | 207 | 231 | 222 | 230 | 229 | 234 | 232 |
| 25 | 190 | 194 | 196 | 202 | 204 | 203 | 218 | 224 | 227 | 230 | 235 | 233 | 261 | 252 | 260 | 260 | 264 | 265 |
| 50 | 222 | 221 | 225 | 230 | 232 | 233 | 249 | 251 | 252 | 256 | 260 | 259 | 291 | 285 | 290 | 292 | 296 | 297 |
| 75 | 251 | 249 | 253 | 257 | 258 | 260 | 278 | 277 | 276 | 281 | 284 | 283 | 320 | 315 | 319 | 323 | 327 | 326 |
| 90 | 276 | 272 | 277 | 279 | 281 | 282 | 302 | 299 | 298 | 302 | 303 | 303 | 346 | 342 | 344 | 348 | 350 | 350 |
| 95 | 291 | 286 | 291 | 292 | 294 | 295 | 317 | 313 | 310 | 315 | 315 | 314 | 362 | 357 | 360 | 363 | 364 | 363 |
|  | White |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 163 | 167 | 166 | 177 | 178 | 177 | 191 | 198 | 204 | 209 | 213 | 212 | 231 | 223 | 228 | 233 | 234 | 238 |
| 10 | 178 | 182 | 181 | 190 | 192 | 191 | 205 | 211 | 216 | 220 | 226 | 225 | 246 | 239 | 245 | 249 | 251 | 254 |
| 25 | 202 | 204 | 206 | 213 | 214 | 215 | 229 | 233 | 237 | 241 | 246 | 245 | 270 | 266 | 271 | 273 | 277 | 280 |
| 50 | 230 | 229 | 233 | 238 | 240 | 242 | 256 | 258 | 259 | 264 | 268 | 267 | 298 | 294 | 299 | 301 | 306 | 308 |
| 75 | 257 | 255 | 259 | 262 | 264 | 266 | 283 | 282 | 282 | 287 | 289 | 289 | 325 | 321 | 325 | 329 | 333 | 334 |
| 90 | 281 | 278 | 282 | 284 | 285 | 286 | 307 | 303 | 302 | 307 | 307 | 307 | 350 | 346 | 349 | 352 | 355 | 356 |
| 95 | 295 | 291 | 295 | 296 | 298 | 300 | 321 | 316 | 314 | 319 | 318 | 318 | 365 | 361 | 364 | 367 | 368 | 369 |
|  | Black |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 107 | 124 | 133 | 131 | 138 | 138 | 144 | 160 | 168 | 170 | 162 | 168 | 172 | 166 | 189 | 182 | 192 | 186 |
| 10 | 123 | 137 | 147 | 145 | 152 | 152 | 158 | 173 | 180 | 182 | 177 | 180 | 187 | 181 | 202 | 197 | 207 | 202 |
| 25 | 147 | 159 | 170 | 170 | 174 | 175 | 181 | 194 | 198 | 202 | 199 | 198 | 212 | 206 | 225 | 220 | 230 | 229 |
| 50 | 174 | 188 | 196 | 196 | 201 | 202 | 207 | 217 | 221 | 226 | 224 | 223 | 240 | 235 | 252 | 252 | 255 | 258 |
| 75 | 203 | 214 | 223 | 224 | 226 | 228 | 235 | 241 | 244 | 249 | 251 | 247 | 268 | 263 | 280 | 283 | 282 | 285 |
| 90 | 229 | 236 | 246 | 247 | 248 | 252 | 260 | 262 | 264 | 269 | 272 | 272 | 293 | 289 | 306 | 314 | 308 | 310 |
| 95 | 244 | 246 | 260 | 260 | 260 | 263 | 275 | 275 | 277 | 283 | 286 | 286 | 310 | 305 | 323 | 329 | 325 | 322 |
|  | Hispanic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 125 | 127 | 134 | 146 | 143 | 139 | 147 | 166 | 171 | 174 | 180 | 175 | 194 | 178 | 194 | 189 | 197 | 186 |
| 10 | 140 | 142 | 148 | 159 | 157 | 152 | 161 | 179 | 181 | 185 | 193 | 187 | 208 | 194 | 209 | 204 | 215 | 199 |
| 25 | 164 | 162 | 173 | 181 | 179 | 176 | 186 | 201 | 202 | 206 | 215 | 207 | 234 | 219 | 232 | 231 | 242 | 226 |
| 50 | 191 | 191 | 200 | 206 | 205 | 200 | 213 | 226 | 226 | 231 | 238 | 231 | 262 | 248 | 259 | 260 | 273 | 263 |
| 75 | 219 | 216 | 226 | 233 | 230 | 227 | 240 | 249 | 250 | 256 | 261 | 258 | 290 | 278 | 286 | 293 | 298 | 296 |
| 90 | 246 | 236 | 252 | 253 | 254 | 251 | 266 | 271 | 270 | 280 | 282 | 277 | 317 | 302 | 310 | 317 | 323 | 321 |
| 95 | 261 | 246 | 265 | 267 | 265 | 264 | 282 | 285 | 283 | 294 | 292 | 290 | 331 | 321 | 324 | 330 | 339 | 336 |

NOTE: Some scores were revised from previously published figures. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress,

Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Table 19-4 Average science proficiency, by age and parents' highest education level: 1977, 1982, 1986, 1990, 1992, and 1994

| Parents' highest education level | Year | Age 9 |  | Age 13 |  | Age 17 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percentage of students | Average proficiency | Percentage of students | Average proficiency | Percentage of students | Average proficiency |
| Less than high | 1977 | ${ }^{1} 9$ | ${ }^{1} 198$ | ${ }^{1} 13$ | ${ }^{1} 224$ | ${ }^{1} 15$ | 265 |
| school graduate | 1982 | ${ }^{1} 6$ | 198 | ${ }^{1,2} 10$ | ${ }^{1} 225$ | ${ }^{1} 13$ | 258 |
|  | 1986 | ${ }^{2} 4$ | 204 | ${ }^{2} 8$ | 229 | ${ }^{2} 8$ | 258 |
|  | 1990 | ${ }^{2} 5$ | ${ }^{2} 210$ | ${ }^{2} 8$ | ${ }^{2} 233$ | ${ }^{2} 8$ | 261 |
|  | 1992 | ${ }^{2} 4$ | ${ }^{2} 217$ | ${ }^{2} 6$ | ${ }^{2} 234$ | ${ }^{2} 8$ | 262 |
|  | 1994 | ${ }^{2} 4$ | ${ }^{2} 211$ | ${ }^{2} 6$ | ${ }^{2} 234$ | ${ }^{2} 7$ | 256 |
| Graduated from | 1977 | ${ }^{1} 27$ | 223 | ${ }^{1} 33$ | 245 | ${ }^{1} 33$ | ${ }^{1} 284$ |
| high school | 1982 | ${ }^{2} 15$ | 218 | ${ }^{2} 26$ | 243 | 1,29 2 | ${ }^{2} 275$ |
|  | 1986 | ${ }^{2} 16$ | ${ }^{1} 220$ | '31 | 245 | 1,228 | ${ }^{2} 277$ |
|  | 1990 | ${ }^{2} 16$ | 226 | ${ }^{1,2} 27$ | 247 | 1,226 | ${ }^{2} 276$ |
|  | 1992 | ${ }^{2} 14$ | 222 | ${ }^{2} 23$ | 246 | ${ }^{2} 21$ | 280 |
|  | 1994 | ${ }^{2} 14$ | 225 | ${ }^{2} 23$ | 247 | ${ }^{2} 22$ | ${ }^{2} 279$ |
| Some education | 1977 | 7 | 237 | 15 | 260 | ${ }^{1} 17$ | 296 |
| after high school | 1982 | 8 | 229 | 17 | 259 | ${ }^{2} 22$ | ${ }^{2} 290$ |
|  | 1986 | 7 | 236 | 16 | 258 | ${ }^{2} 24$ | 295 |
|  | 1990 | 7 | 238 | 17 | 263 | ${ }^{2} 24$ | 296 |
|  | 1992 | 8 | 237 | ${ }^{2} 18$ | ${ }^{2} 266$ | ${ }^{2} 25$ | 296 |
|  | 1994 | 7 | 239 | ${ }^{2} 17$ | 260 | ${ }^{2} 24$ | 295 |
| Graduated from | 1977 | ${ }^{1} 23$ | ${ }^{1} 232$ | ${ }^{1} 27$ | 266 | ${ }^{1} 30$ | 309 |
| college | 1982 | ${ }^{2} 42$ | ${ }^{1} 230$ | 1,237 | ${ }^{1} 264$ | ${ }^{1} 32$ | 1,2300 |
|  | 1986 | 1,238 | 235 | 1,238 | 264 | 1,237 | 304 |
|  | 1990 | 1,240 | 236 | 1,241 | 268 | 1,239 | 306 |
|  | 1992 | ${ }^{2} 42$ | ${ }^{2} 239$ | ${ }^{2} 44$ | 269 | ${ }^{2} 43$ | 308 |
|  | 1994 | ${ }^{2} 45$ | ${ }^{2} 238$ | ${ }^{2} 46$ | 269 | ${ }^{2} 44$ | 311 |

' Statistically significant difference from 1994.
${ }^{2}$ Statistically significant difference from 1977.
NOTE: "Percentage of students" represents the percentage of all students in each subgroup. Not shown are approximately one-third of students at age 9 and smaller percentages at ages 13 and 17 who did not know their parents' highest education level.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of American Students in Science, 1969 to 1994; Mathematics 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Table 19-5 Average science proficiency scores, by age and grade: 1977, 1982, 1986, 1990, 1992, and 1994

| Year | Below modal grade ${ }^{1}$ |  | At modal grade ${ }^{1}$ |  | Above modal grade ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage | Proficiency | Percentage | Proficiency | Percentage | Proficiency |
|  | Age 9 |  |  |  |  |  |
| 1977 | ${ }^{2} 24$ | ${ }^{2} 197$ | ${ }^{2} 75$ | ${ }^{2} 227$ | ${ }^{2} 1$ | 244 |
| 1982 | ${ }^{3} 30$ | ${ }^{2} 198$ | ${ }^{2} 70$ | ${ }^{2} 231$ | 1 | 266 |
| 1986 | ${ }^{3} 34$ | ${ }^{2,3} 205$ | ${ }^{3} 66$ | ${ }^{2,3} 234$ | ${ }^{3,4} 0$ | 235 |
| 1990 | ${ }^{3} 35$ | ${ }^{3} 211$ | ${ }^{3} 65$ | ${ }^{3} 238$ | ${ }^{3,4} 0$ | 235 |
| 1992 | ${ }^{3} 38$ | ${ }^{3} 215$ | ${ }^{3} 62$ | ${ }^{3} 240$ | ${ }^{3,4} 0$ | 248 |
| 1994 | ${ }^{3} 33$ | ${ }^{3} 215$ | ${ }^{3} 66$ | ${ }^{3} 239$ | ${ }^{3,4} 0$ | 236 |
|  | Age 13 |  |  |  |  |  |
| 1977 | ${ }^{2} 27$ | ${ }^{2} 223$ | ${ }^{2} 72$ | ${ }^{2} 256$ | 1 | 285 |
| 1982 | ${ }^{2} 28$ | ${ }^{2} 229$ | ${ }^{2} 72$ | ${ }^{2} 258$ | ${ }^{4} 0$ | 287 |
| 1986 | 33 | ${ }^{2,3} 234$ | 67 | 260 | 1 | 266 |
| 1990 | ${ }^{3} 36$ | ${ }^{3} 240$ | ${ }^{3} 63$ | ${ }^{3} 264$ | 1 | 262 |
| 1992 | ${ }^{3} 37$ | ${ }^{3} 244$ | ${ }^{3} 62$ | ${ }^{3} 266$ | ${ }^{4} 0$ | 313 |
| 1994 | ${ }^{3} 38$ | ${ }^{3} 244$ | ${ }^{3} 62$ | ${ }^{3} 264$ | 1 | 291 |
|  | Age 17 |  |  |  |  |  |
| 1977 | ${ }^{2} 14$ | ${ }^{2} 253$ | 75 | ${ }^{2} 295$ | ${ }^{2} 11$ | 301 |
| 1982 | ${ }^{2} 16$ | ${ }^{2} 251$ | 75 | ${ }^{2,3} 289$ | ${ }^{2} 9$ | ${ }^{3} 292$ |
| 1986 | 17 | 259 | 75 | ${ }^{2} 294$ | ${ }^{3} 8$ | 299 |
| 1990 | ${ }^{3} 22$ | ${ }^{3} 260$ | ${ }^{3} 70$ | ${ }^{3} 299$ | ${ }^{3} 8$ | 298 |
| 1992 | ${ }^{3} 24$ | ${ }^{3} 263$ | ${ }^{3} 70$ | ${ }^{3} 304$ | ${ }^{3} 6$ | 305 |
| 1994 | ${ }^{3} 21$ | ${ }^{3} 262$ | 73 | ${ }^{3} 302$ | ${ }^{3} 6$ | 303 |

${ }^{1}$ The modal grade is the most common grade level for students of a particular age. For example, the modal grade at age 9 is fourth grade. Nine-year-olds in fifth grade are above the modal grade, and 9 -year-olds in third grade are below the modal grade for their age.
${ }^{2}$ Statistically significant difference from 1994.
${ }^{3}$ Statistically significant difference from 1977.
${ }^{4}$ Percentages less than 0.5 are rounded to 0 .

NOTE: The modal grades are: grade 4 at age 9 , grade 8 at age 13, and grade 11 at age 17. The modal grade is lower for 17 -year-olds because of differences in age definition and in the time of year the test is given, causing more students to be above the modal grade at age 17 than at any other age. For a more complete explanation, see the supplemental note to Indicator 15.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Table 20-1 Average mathematics proficiency scores of eighth-grade students, by country and sex: 1995

|  | Average score |  |  | Percentile distribution |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | Total | Boys | Girls | $5^{\text {th }}$ | $25^{\text {th }}$ | $50^{\text {th }}$ | $75^{\text {th }}$ | $95^{\text {th }}$ |
| Singapore | 643 | 642 | 645 | 499 | 584 | 642 | 704 | 792 |
| Korea | 607 | 615 | 598 | 418 | 540 | 609 | 682 | 786 |
| Japan | 605 | 609 | 600 | 435 | 536 | 608 | 676 | 771 |
| Hong Kong | 588 | 597 | 577 | 415 | 526 | 595 | 659 | 742 |
| Belgium (FI) ${ }^{1}$ | 565 | 563 | 567 | 416 | 502 | 566 | 631 | 710 |
| Czech Republic | 564 | 569 | 558 | 423 | 496 | 558 | 633 | 725 |
| Slovak Republic | 547 | 549 | 545 | 401 | 483 | 543 | 612 | 700 |
| Switzerland ${ }^{2}$ | 545 | 548 | 543 | 401 | 485 | 549 | 607 | 685 |
| Netherlands ${ }^{3}$ | 541 | 545 | 536 | 397 | 477 | 543 | 604 | 688 |
| Slovenia ${ }^{3}$ | 541 | 545 | 537 | 404 | 477 | 535 | 604 | 690 |
| Bulgaria ${ }^{3}$ | 540 | - | - | 378 | 460 | 530 | 621 | 728 |
| Austria ${ }^{3}$ | 539 | 544 | 536 | 393 | 474 | 537 | 608 | 693 |
| France | 538 | 542 | 536 | 415 | 484 | 534 | 591 | 666 |
| Hungary | 537 | 537 | 537 | 391 | 471 | 534 | 602 | 693 |
| Russian Federation | 535 | 535 | 536 | 388 | 471 | 536 | 600 | 687 |
| Australia ${ }^{3}$ | 530 | 527 | 532 | 372 | 460 | 529 | 600 | 690 |
| Canada | 527 | 526 | 530 | 389 | 468 | 527 | 587 | 670 |
| Ireland | 527 | 535 | 520 | 381 | 462 | 526 | 594 | 681 |
| Belgium ( Fr$)^{3}$ | 526 | 530 | 524 | 385 | 467 | 532 | 587 | 658 |
| \|srael ${ }^{3}$ | 522 | 539 | 509 | 371 | 459 | 523 | 586 | 672 |
| Thailand ${ }^{3}$ | 522 | 517 | 526 | 388 | 462 | 518 | 580 | 669 |
| Sweden | 519 | 520 | 518 | 384 | 460 | 515 | 579 | 661 |
| Germany ${ }^{1,2,3}$ | 509 | 512 | 509 | 368 | 448 | 506 | 572 | 661 |
| New Zealand | 508 | 512 | 503 | 366 | 443 | 503 | 570 | 663 |
| England ${ }^{1,2}$ | 506 | 508 | 504 | 361 | 443 | 501 | 570 | 665 |
| Norway | 503 | 505 | 501 | 372 | 445 | 499 | 560 | 649 |
| Denmark ${ }^{3}$ | 502 | 511 | 494 | 369 | 443 | 500 | 561 | 641 |
| United States ${ }^{2}$ | 500 | 502 | 497 | 356 | 435 | 494 | 563 | 653 |
| Scotland ${ }^{3}$ | 498 | 506 | 490 | 364 | 436 | 493 | 559 | 649 |
| Latvia (LSS) ${ }^{2}$ | 493 | 496 | 491 | 375 | 435 | 487 | 550 | 638 |
| Iceland | 487 | 488 | 486 | 365 | 435 | 481 | 540 | 615 |
| Spain | 487 | 492 | 483 | 376 | 436 | 481 | 536 | 616 |
| Greece ${ }^{3}$ | 484 | 490 | 478 | 347 | 422 | 478 | 546 | 633 |
| Romania ${ }^{3}$ | 482 | 483 | 480 | 343 | 418 | 476 | 544 | 635 |
| Lithuania ${ }^{2}$ | 477 | 477 | 478 | 348 | 422 | 473 | 533 | 616 |
| Cyprus | 474 | 472 | 475 | 333 | 412 | 469 | 535 | 621 |
| Portugal | 454 | 460 | 449 | 357 | 411 | 449 | 495 | 569 |
| Iran, Islamic Rep. | 428 | 434 | 421 | 336 | 388 | 424 | 466 | 535 |
| Kuwait ${ }^{3}$ | 392 | - | - | 302 | 355 | 389 | 427 | 493 |
| Colombia ${ }^{3}$ | 385 | 386 | 384 | 292 | 343 | 379 | 421 | 496 |
| South Africa ${ }^{3}$ | 354 | 360 | 349 | 259 | 313 | 347 | 386 | 484 |

- Not available.
${ }^{1}$ A participation rate of 75 percent of the schools and students combined was achieved only after replacement for refusals were substituted. See the supplemental note to this indicator for further explanation.
${ }^{2}$ More than 10 percent of the population was excluded from testing.
See the supplemental note to this indicator for further explanation. Latvia is designated LSS because only Latvian-speaking schools were tested.
${ }^{3}$ Countries which did not meet international guidelines. See the supplemental note to this indicator for further explanation.
SOURCE: International Association for the Evaluation of Educational Achievement, TIMSS International Study Center, Mathematics Achievement in the Middle School Years, IEA's Third International Mathematics and Science Study, 1996, tables 1.1, 1.6, and E.1.

Table 20-2 Average science proficiency scores of eighth-grade students, by country and sex: 1995

|  | Average score |  |  | Percentile distribution |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | Total | Boys | Girls | $5^{\text {th }}$ | $25^{\text {th }}$ | $50^{\text {th }}$ | $75^{\text {th }}$ | $95^{\text {th }}$ |
| Singapore | 607 | 612 | 603 | 457 | 541 | 603 | 674 | 768 |
| Czech Republic | 574 | 586 | 562 | 438 | 513 | 570 | 634 | 716 |
| Japan | 571 | 579 | 562 | 421 | 514 | 573 | 632 | 715 |
| Bulgaria ${ }^{1}$ | 565 | - | - | 386 | 488 | 560 | 641 | 747 |
| Korea | 565 | 576 | 551 | 408 | 504 | 564 | 629 | 719 |
| Netherlands ${ }^{1}$ | 560 | 570 | 550 | 419 | 505 | 561 | 619 | 701 |
| Slovenia ${ }^{1}$ | 560 | 573 | 548 | 421 | 501 | 556 | 620 | 709 |
| Austria ${ }^{1}$ | 558 | 566 | 549 | 395 | 499 | 558 | 623 | 721 |
| Hungary | 554 | 563 | 545 | 408 | 497 | 552 | 616 | 703 |
| England ${ }^{2,3}$ | 552 | 562 | 542 | 380 | 484 | 549 | 625 | 727 |
| Belgium ( FI$)^{3}$ | 550 | 558 | 543 | 416 | 499 | 548 | 609 | 680 |
| Australia ${ }^{1}$ | 545 | 550 | 540 | 371 | 475 | 545 | 619 | 720 |
| Slovak Republic | 544 | 552 | 537 | 396 | 484 | 543 | 607 | 696 |
| Ireland | 538 | 544 | 532 | 383 | 471 | 536 | 605 | 694 |
| Russian Federation | 538 | 544 | 533 | 386 | 474 | 535 | 606 | 697 |
| Sweden | 535 | 543 | 528 | 386 | 476 | 533 | 598 | 686 |
| United States ${ }^{3}$ | 534 | 539 | 530 | 359 | 465 | 537 | 608 | 705 |
| Canada | 531 | 537 | 525 | 380 | 472 | 529 | 594 | 685 |
| Germany ${ }^{1,2,3}$ | 531 | 542 | 524 | 362 | 463 | 535 | 602 | 691 |
| Norway | 527 | 534 | 520 | 385 | 470 | 526 | 588 | 671 |
| New Zealand | 525 | 538 | 512 | 364 | 458 | 524 | 594 | 692 |
| Thailand ${ }^{\prime}$ | 525 | 524 | 526 | 409 | 479 | 525 | 575 | 646 |
| Israel ${ }^{\text { }}$ | 524 | 545 | 512 | 356 | 460 | 526 | 591 | 694 |
| Hong Kong | 522 | 535 | 507 | 376 | 467 | 524 | 583 | 669 |
| Switzerland ${ }^{2}$ | 522 | 529 | 514 | 371 | 460 | 524 | 587 | 669 |
| Scotland ${ }^{1}$ | 517 | 527 | 507 | 357 | 451 | 513 | 584 | 686 |
| Spain | 517 | 526 | 508 | 393 | 465 | 514 | 571 | 649 |
| France | 498 | 506 | 490 | 374 | 446 | 498 | 553 | 623 |
| Greece ${ }^{1}$ | 497 | 505 | 489 | 363 | 439 | 495 | 557 | 643 |
| Iceland | 494 | 501 | 486 | 363 | 442 | 491 | 555 | 623 |
| Romania' | 486 | 492 | 480 | 321 | 420 | 484 | 556 | 653 |
| Latvia (LSS) ${ }^{2}$ | 485 | 492 | 478 | 353 | 432 | 482 | 540 | 625 |
| Portugal | 480 | 490 | 468 | 362 | 429 | 477 | 531 | 602 |
| Denmark ${ }^{1}$ | 478 | 494 | 463 | 334 | 423 | 477 | 541 | 615 |
| Lithuania ${ }^{2}$ | 476 | 484 | 470 | 346 | 421 | 476 | 533 | 613 |
| Belgium (Fr) ${ }^{1}$ | 471 | 479 | 463 | 332 | 415 | 472 | 532 | 609 |
| Iran, Islamic Rep. | 470 | 477 | 461 | 355 | 422 | 467 | 520 | 592 |
| Cyprus | 463 | 461 | 465 | 316 | 403 | 462 | 526 | 605 |
| Kuwait ${ }^{1}$ | 430 | - | - | 316 | 380 | 427 | 484 | 551 |
| Colombia ${ }^{1}$ | 411 | 418 | 405 | 291 | 358 | 410 | 467 | 533 |
| South Africa ${ }^{1}$ | 326 | 337 | 315 | 185 | 261 | 313 | 376 | 526 |

- Not available.
${ }^{1}$ Countries which did not meet international guidelines. See the supplemental note to this indicator for further explanation.
${ }^{2}$ More than 10 percent of the population were excluded from testing. See the supplemental note to this indicator for further explanation. Latvia is designated LSS because only Latvian-speaking schools were tested.
${ }^{3}$ A participation rate of 75 percent of the schools and students combined was achieved only after replacement for refusals were substituted. See the supplemental note to this indicator for further explanation.
SOURCE: International Association for the Evaluation of Educational Achievement, TIMSS International Study Center, Science Achievement in the Middle School Years, IEA's Third International Mathematics and Science Study, 1996, tables 1.1, 1.6, and E.1.


## Note to Indicator 20: Data collection and sampling guidelines for TIMSS

All countries that participated in the Third International Mathematics and Science Study (TIMSS) were required to administer tests to students representing Population 2, defined as "students enrolled in the two adjacent grades that contained the largest proportion of 13-year-old students at the time of testing-seventh-and eighth-grade students in most countries."

In some situations, where it was not possible to implement testing for the entire International Desired Population (Population 2), countries were permitted to define a National Desired Population, which excluded some portion of the International Desired Population. For example, Israel's, Latvia's, and Lithuania's populations covered less than 100 percent of the International Desired Population because they needed to define their population according to the structure of school systems. In the case of Germany and Switzerland, however, some regions simply did not wish to participate in the study.

| Country | International Desired Population |  |
| :---: | :---: | :---: |
|  | Coverage | Note on Coverage |
| Germany | 88\% | 15 of 16 regions |
| Israel | $74 \%$ | Hebrew Public Education System |
| Latvia | 51\% | Latvian-speaking schools |
| Lithuania | 84\% | Lithuanianspeaking schools |
| Switzerland | 86\% | 22 of 26 cantons |

Countries were also permitted to, within their desired population, define a population that excluded a small percentage (less than 10 percent) of schools or students that would be difficult to test (e.g., very small schools or schools located in a remote area). England was the only country that exceeded the 10 percent level, excluding 11.3 percent of schools from the desired population.

The TIMSS used a two-stage sample design, in which the first stage involved selecting 150 public and private schools within each country. Random sampling methods were then used to select one mathematics class and one science class from each school for each grade level (seventh and eighth). The required participation rates from the samples were at least 85 percent of both schools and students or a combined rate of 75 percent.

| Compliance with Sampling Guidelines | Countries |
| :---: | :---: |
| Countries satisfying guidelines for sample participation rates, grade selection, and sampling procedures | Canada <br> Cyprus <br> Czech Republic <br> France <br> Hong Kong <br> Hungary <br> Iceland <br> Iran, Islamic Rep. <br> Ireland <br> Japan <br> Korea <br> Latvia <br> Lithuania <br> New Zealand <br> Norway <br> Portugal <br> Russian Federation <br> Singapore <br> Slovak Republic <br> Spain <br> Sweden |
| Countries satisfying guidelines for sample participation rates, with replacement schools | Belgium (Fl) <br> England <br> Germany <br> United States |
| Countries not satisfying guidelines for sample participation rates | Australia <br> Austria <br> Belgium (Fr) <br> Bulgaria <br> Netherlands <br> Scotland |
| Countries not meeting age/grade specifications | Colombia Germany Romania Slovenia |
| Countries with unapproved sampling procedures at the classroom level | Denmark <br> Greece <br> Israel <br> Kuwait <br> South Africa <br> Thailand |

Belgium (Fl), England, Germany, and the United States met sampling guidelines only after including replacement schools for those schools refusing or unable to participate. Australia, Austria, Belgium (Fr), Bulgaria, the Netherlands, and Scotland failed to meet sampling participation standards. These countries either did not reach a 50 percent participation rate without the inclusion of replacement schools, or failed to reach the required rate even with the inclusion of replacement schools.

Four countries (Colombia, Germany, Romania, and Slovenia) chose to test their seventh- and eighthgrade students even though these were not the two
adjacent grade levels with the highest proportion of 13 -year-olds. Although this was done in order to increase the similarity of curricula, it resulted in their students being somewhat older than the students from other countries who participated in the study.

Denmark, Greece, Israel, Kuwait, South Africa, and Thailand, for various reasons, had difficulty complying with guidelines for sampling classrooms. Kuwait tested a single grade with relatively few 13-year-olds, and South Africa and Thailand had low sampling participation rates, contributing to additional difficulties.

SOURCE: International Association for the Evaluation of Educational Achievement, TIMSS International Study Center, Mathematics Achievement in the Middle School Years, Science Achievement in the Middle School Years, IEA's Third International Mathematics and Science Study (TIMSS), 1996.

Table 21-1 Percentage distribution of the population in selected age groups scoring at each of the five literacy levels, by literacy scale and country: 1994

| Country and age | Prose scale |  |  |  |  | Document scale |  |  |  |  | Quantitative scale |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Level 1 Level 2 Level 3 Level 4/5 |  |  |  |  | Total Level 1 Level 2 Level 3 Level 4/5 |  |  |  |  | Total Level 1 Level 2 Level 3 Level 4/5 |  |  |  |  |
|  | Canada |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16-25 | 100.0 | 10.7 | 25.7 | 43.7 | 19.9 | 100.0 | 10.4 | 22.3 | 36.4 | 31.0 | 100.0 | 10.1 | 28.6 | 44.6 | 16.7 |
| 26-35 | 100.0 | 12.3 | 28.5 | 33.1 | 26.1 | 100.0 | 13.5 | 25.3 | 33.8 | 27.5 | 100.0 | 12.0 | 25.5 | 35.1 | 27.5 |
| 36-45 | 100.0 | 13.3 | 18.6 | 36.8 | 31.3 | 100.0 | 13.8 | 22.0 | 36.8 | 27.4 | 100.0 | 11.9 | 22.4 | 35.6 | 30.1 |
| 46-55 | 100.0 | 20.6 | 30.2 | 30.9 | 18.4 | 100.0 | 23.0 | 31.0 | 23.6 | 22.4 | 100.0 | 23.9 | 32.2 | 24.8 | 19.0 |
| 56-65 | 100.0 | 37.6 | 26.4 | 28.0 | 8.1 | 100.0 | 43.8 | 23.7 | 23.8 | 8.7 | 100.0 | 39.7 | 21.5 | 31.4 | 7.4 |
| Germany |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16-25 | 100.0 | 8.9 | 29.5 | 46.2 | 15.4 | 100.0 | 5.2 | 29.0 | 43.0 | 22.8 | 100.0 | 4.4 | 26.4 | 47.1 | 22.0 |
| 26-35 | 100.0 | 12.4 | 30.6 | 37.3 | 19.7 | 100.0 | 5.9 | 29.2 | 40.0 | 24.9 | 100.0 | 4.9 | 23.3 | 42.9 | 28.9 |
| 36-45 | 100.0 | 14.5 | 31.5 | 39.4 | 14.5 | 100.0 | 9.5 | 30.6 | 38.5 | 21.4 | 100.0 | 6.5 | 22.9 | 44.3 | 26.3 |
| 46-55 | 100.0 | 14.2 | 37.4 | 37.5 | 10.9 | 100.0 | 7.4 | 35.0 | 43.1 | 14.5 | 100.0 | 7.0 | 27.1 | 41.2 | 24.7 |
| 56-65 | 100.0 | 22.1 | 43.2 | 30.1 | 4.7 | 100.0 | 17.7 | 40.9 | 32.6 | 8.8 | 100.0 | 10.8 | 34.9 | 40.8 | 13.5 |
| Netherlands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16-25 | 100.0 | 8.3 | 22.1 | 50.1 | 19.5 | 100.0 | 6.1 | 16.8 | 51.1 | 26.0 | 100.0 | 7.7 | 21.0 | 50.1 | 21.1 |
| 26-35 | 100.0 | 6.4 | 20.5 | 50.6 | 22.5 | 100.0 | 5.9 | 19.2 | 45.7 | 29.3 | 100.0 | 6.7 | 19.9 | 45.3 | 28.2 |
| 36-45 | 100.0 | 8.6 | 30.4 | 46.6 | 14.3 | 100.0 | 9.2 | 24.2 | 49.5 | 17.1 | 100.0 | 10.1 | 25.0 | 46.0 | 18.9 |
| 46-55 | 100.0 | 13.9 | 38.8 | 37.5 | 9.8 | 100.0 | 12.6 | 35.7 | 38.0 | 13.7 | 100.0 | 12.8 | 31.0 | 39.8 | 16.4 |
| 56-65 | 100.0 | 20.1 | 47.5 | 27.7 | 4.7 | 100.0 | 22.6 | 40.5 | 30.1 | 6.8 | 100.0 | 17.6 | 36.2 | 36.9 | 9.3 |
| Poland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16-25 | 100.0 | 26.7 | 38.3 | 29.1 | 5.9 | 100.0 | 32.2 | 33.1 | 26.2 | 8.5 | 100.0 | 29.6 | 32.6 | 31.0 | 6.7 |
| 26-35 | 100.0 | 35.0 | 39.0 | 22.2 | 3.7 | 100.0 | 39.2 | 33.8 | 19.7 | 7.4 | 100.0 | 32.7 | 33.0 | 25.6 | 8.7 |
| 36-45 | 100.0 | 42.0 | 38.0 | 17.2 | 2.8 | 100.0 | 42.6 | 33.6 | 18.1 | 5.7 | 100.0 | 36.1 | 32.1 | 23.4 | 8.4 |
| 46-55 | 100.0 | 53.5 | 29.6 | 16.0 | 1.0 | 100.0 | 55.6 | 27.0 | 13.3 | 4.1 | 100.0 | 47.7 | 26.9 | 19.5 | 5.9 |
| 56-65 | 100.0 | 69.5 | 20.5 | 9.8 | 0.2 | 100.0 | 70.1 | 20.9 | 7.6 | 1.4 | 100.0 | 60.8 | 21.4 | 15.6 | 2.2 |
| Sweden |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16-25 | 100.0 | 3.8 | 16.7 | 39.8 | 39.7 | 100.0 | 3.1 | 16.6 | 39.6 | 40.7 | 100.0 | 4.9 | 17.6 | 39.0 | 38.4 |
| 26-35 | 100.0 | 4.9 | 14.2 | 39.2 | 41.7 | 100.0 | 3.9 | 10.4 | 38.1 | 47.6 | 100.0 | 4.0 | 14.3 | 36.3 | 45.4 |
| 36-45 | 100.0 | 7.1 | 19.7 | 41.5 | 31.7 | 100.0 | 6.6 | 18.2 | 39.8 | 35.4 | 100.0 | 7.0 | 16.5 | 41.2 | 35.2 |
| 46-55 | 100.0 | 8.2 | 21.8 | 41.8 | 28.2 | 100.0 | 6.8 | 19.7 | 43.1 | 30.3 | 100.0 | 5.8 | 19.7 | 40.5 | 34.0 |
| 56-65 | 100.0 | 15.9 | 32.7 | 35.3 | 16.2 | 100.0 | 12.2 | 33.3 | 36.0 | 18.5 | 100.0 | 12.9 | 27.0 | 37.5 | 22.6 |
| Switzerland (French) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16-25 | 100.0 | 10.5 | 31.0 | 43.1 | 15.4 | 100.0 | 8.7 | 24.9 | 40.4 | 26.0 | 100.0 | 6.2 | 21.4 | 47.0 | 25.4 |
| 26-35 | 100.0 | 11.1 | 29.4 | 46.5 | 13.0 | 100.0 | 11.5 | 22.4 | 44.5 | 21.6 | 100.0 | 8.8 | 20.6 | 47.8 | 22.9 |
| 36-45 | 100.0 | 22.1 | 33.5 | 35.5 | 8.9 | 100.0 | 19.2 | 32.9 | 34.2 | 13.7 | 100.0 | 16.6 | 25.2 | 36.4 | 21.8 |
| 46-55 | 100.0 | 20.9 | 35.1 | 36.1 | 7.9 | 100.0 | 18.0 | 29.8 | 42.4 | 9.7 | 100.0 | 16.1 | 22.7 | 43.2 | 18.0 |
| 56-65 | 100.0 | 27.7 | 43.3 | 26.8 | 2.3 | 100.0 | 27.5 | 38.1 | 29.8 | 4.6 | 100.0 | 19.2 | 36.0 | 33.8 | 11.0 |
| Switzerland (German) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16-25 | 100.0 | 7.3 | 35.5 | 43.4 | 13.8 | 100.0 | 7.1 | 25.7 | 41.0 | 26.3 | 100.0 | 6.9 | 21.9 | 48.2 | 22.9 |
| 26-35 | 100.0 | 16.6 | 26.8 | 44.6 | 12.0 | 100.0 | 17.4 | 20.7 | 38.8 | 23.1 | 100.0 | 13.1 | 20.7 | 40.8 | 25.4 |
| 36-45 | 100.0 | 24.2 | 34.3 | 32.4 | 9.1 | 100.0 | 21.5 | 30.3 | 36.3 | 12.0 | 100.0 | 19.0 | 26.3 | 37.9 | 16.9 |
| 46-55 | 100.0 | 19.4 | 41.7 | 34.7 | 4.2 | 100.0 | 21.0 | 33.8 | 35.0 | 10.2 | 100.0 | 14.8 | 28.5 | 41.2 | 15.5 |
| 56-65 | 100.0 | 30.4 | 46.0 | 19.5 | 4.1 | 100.0 | 22.8 | 39.9 | 30.6 | 6.7 | 100.0 | 15.8 | 37.6 | 35.7 | 10.8 |
| United States |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16-25 | 100.0 | - | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - | - | - |
| 26-35 | 100.0 | 19.6 | 23.2 | 35.7 | 21.6 | 100.0 | 21.6 | 22.9 | 34.5 | 21.0 | 100.0 | 20.1 | 20.9 | 35.6 | 23.5 |
| 36-45 | 100.0 | 19.5 | 21.4 | 30.0 | 29.2 | 100.0 | 23.5 | 19.7 | 31.4 | 25.4 | 100.0 | 18.2 | 23.2 | 26.9 | 31.6 |
| 46-55 | 100.0 | 18.3 | 25.7 | 32.2 | 23.8 | 100.0 | 21.4 | 28.2 | 33.2 | 17.3 | 100.0 | 19.0 | 25.2 | 32.3 | 23.6 |
| 56-65 | 100.0 | 23.6 | 30.7 | 31.1 | 14.7 | 100.0 | 29.3 | 32.9 | 26.0 | 11.7 | 100.0 | 22.4 | 29.6 | 32.0 | 16.0 |

- Data for this age group are inaccurate due to sampling and non- SOURCE: Organization for Economic Co-operation and response problems.
NOTE: Details may not add to totals due to rounding.

Development and Statistics Canada, Literacy, Economy and Society, Results of the International Adult Literacy Survey, 1995.

Table 21-2 Percentage distribution of the population in selected occupations scoring at each of the five literacy levels, by literacy scale and country: 1994

| Country and occupation | Prose scale |  |  |  |  | Document scale |  |  |  |  | Quantitative scale |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Level I Level 2 Level 3 Level 4/5 |  |  |  |  | Total | Level I Level 2 Level 3 Level 4/5 |  |  |  | Total | Level I Level 2 Level 3 Level 4/5 |  |  |  |
| Canada |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manager/professional | 100.0 | 3.2 | 17.4 | 36.5 | 42.9 | 100.0 | 2.6 | 14.9 | 32.4 | 50.1 | 100.0 | 2.2 | 15.0 | 36.4 | 46.4 |
| Technician | 100.0 | 4.3 | 26.4 | 26.3 | 43.0 | 100.0 | 3.5 | 12.1 | 58.6 | 25.9 | 100.0 | 3.9 | 17.7 | 33.4 | 45.0 |
| Clerk | 100.0 | 6.0 | 27.8 | 51.2 | 15.1 | 100.0 | 8.2 | 26.8 | 36.7 | 28.3 | 100.0 | 4.9 | 34.6 | 40.7 | 19.7 |
| Sales/service | 100.0 | 10.9 | 29.2 | 34.5 | 25.4 | 100.0 | 16.4 | 29.7 | 29.0 | 24.8 | 100.0 | 15.2 | 30.7 | 40.8 | 13.4 |
| Skilled crafts workers | 100.0 | 29.7 | 23.1 | 33.4 | 13.8 | 100.0 | 24.7 | 30.5 | 28.8 | 16.1 | 100.0 | 22.2 | 34.5 | 29.3 | 13.9 |
| Machine operator/assembler | 100.0 | 29.1 | 19.6 | 39.9 | 11.4 | 100.0 | 27.7 | 31.3 | 26.4 | 14.6 | 100.0 | 29.0 | 28.6 | 33.7 | 8.8 |
| Agriculture/primary | 100.0 | 18.6 | 27.9 | 39.6 | 13.8 | 100.0 | 17.5 | 31.4 | 32.7 | 18.4 | 100.0 | 21.2 | 25.0 | 36.1 | 17.7 |
| Germany |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manager/professional | 100.0 | 4.5 | 19.1 | 44.4 | 32.0 | 100.0 | 1.5 | 20.0 | 36.4 | 42.1 | 100.0 | 1.9 | 14.1 | 37.3 | 46.7 |
| Technician | 100.0 | 3.9 | 22.9 | 49.0 | 24.2 | 100.0 | 2.3 | 14.0 | 54.2 | 29.6 | 100.0 | 1.7 | 15.4 | 51.6 | 31.3 |
| Clerk | 100.0 | 9.6 | 39.0 | 38.9 | 12.5 | 100.0 | 5.4 | 31.1 | 44.2 | 19.3 | 100.0 | 5.2 | 26.1 | 45.6 | 23.1 |
| Sales/service | 100.0 | 10.4 | 36.9 | 36.3 | 16.5 | 100.0 | 5.5 | 37.3 | 39.3 | 17.9 | 100.0 | 5.0 | 25.2 | 44.5 | 25.3 |
| Skilled crafts workers | 100.0 | 14.4 | 35.6 | 42.9 | 7.1 | 100.0 | 6.7 | 33.0 | 46.5 | 13.7 | 100.0 | 3.2 | 23.8 | 48.2 | 24.8 |
| Machine operator/assembler | 100.0 | 21.6 | 52.8 | 20.0 | 5.7 | 100.0 | 11.7 | 48.3 | 32.1 | 7.8 | 100.0 | 11.2 | 40.6 | 36.0 | 12.3 |
| Agriculture/primary | 100.0 | 36.8 | 31.3 | 28.0 | 3.9 | 100.0 | 19.0 | 39.1 | 28.7 | 13.2 | 100.0 | 17.6 | 27.2 | 38.5 | 16.7 |
| Netherlands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manager/professional | 100.0 | 3.2 | 20.0 | 52.1 | 24.7 | 100.0 | 2.3 | 17.1 | 52.5 | 28.0 | 100.0 | 1.9 | 15.1 | 48.9 | 34.2 |
| Technician | 100.0 | 2.7 | 19.6 | 54.4 | 23.3 | 100.0 | 2.6 | 15.1 | 49.6 | 32.7 | 100.0 | 2.9 | 17.4 | 50.7 | 29.0 |
| Clerk | 100.0 | 6.0 | 24.2 | 53.2 | 16.5 | 100.0 | 5.0 | 20.3 | 55.1 | 19.5 | 100.0 | 4.5 | 26.7 | 51.9 | 16.8 |
| Sales/service | 100.0 | 8.5 | 29.5 | 44.2 | 17.8 | 100.0 | 7.1 | 24.1 | 49.0 | 19.8 | 100.0 | 7.8 | 24.1 | 47.1 | 21.0 |
| Skilled crafts workers | 100.0 | 10.4 | 44.6 | 37.8 | 7.1 | 100.0 | 9.1 | 36.2 | 39.1 | 15.6 | 100.0 | 10.1 | 31.9 | 44.4 | 13.6 |
| Machine operator/assembler | 100.0 | 19.1 | 36.5 | 36.8 | 7.6 | 100.0 | 12.8 | 33.4 | 36.2 | 17.5 | 100.0 | 13.4 | 24.8 | 41.5 | 20.3 |
| Agriculture/primary | 100.0 | 16.9 | 31.6 | 43.1 | 8.4 | 100.0 | 16.4 | 24.2 | 43.7 | 15.7 | 100.0 | 18.3 | 27.2 | 44.0 | 10.4 |
| Poland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manager/professional | 100.0 | 13.1 | 31.2 | 40.9 | 14.8 | 100.0 | 19.2 | 28.4 | 33.9 | 18.4 | 100.0 | 11.5 | 26.3 | 37.5 | 24.7 |
| Technician | 100.0 | 23.4 | 45.1 | 28.0 | 3.6 | 100.0 | 22.2 | 39.2 | 29.8 | 8.8 | 100.0 | 18.5 | 32.7 | 36.1 | 12.7 |
| Clerk | 100.0 | 25.1 | 43.3 | 28.5 | 3.1 | 100.0 | 33.1 | 31.7 | 28.1 | 7.1 | 100.0 | 27.5 | 31.7 | 29.5 | 11.3 |
| Sales/service | 100.0 | 30.5 | 43.4 | 22.0 | 4.2 | 100.0 | 34.3 | 32.9 | 25.8 | 6.9 | 100.0 | 28.2 | 36.8 | 28.1 | 6.8 |
| Skilled crafts workers | 100.0 | 47.2 | 38.6 | 14.0 | 0.3 | 100.0 | 47.1 | 30.4 | 16.6 | 5.9 | 100.0 | 41.8 | 29.3 | 24.2 | 4.6 |
| Machine operator/assembler | 100.0 | 48.7 | 35.0 | 15.7 | 0.5 | 100.0 | 57.7 | 27.3 | 12.7 | 2.3 | 100.0 | 42.7 | 31.0 | 19.8 | 6.5 |
| Agriculture/primary | 100.0 | 62.9 | 27.8 | 8.5 | 0.7 | 100.0 | 60.5 | 29.3 | 8.9 | 1.3 | 100.0 | 54.3 | 28.5 | 15.2 | 2.0 |
| Sweden |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manager/professional | 100.0 | 2.4 | 12.1 | 38.4 | 47.0 | 100.0 | 1.6 | 13.7 | 38.2 | 46.4 | 100.0 | 1.5 | 15.4 | 37.0 | 46.1 |
| Technician | 100.0 | 3.3 | 16.5 | 43.1 | 37.1 | 100.0 | 2.8 | 14.8 | 41.7 | 40.8 | 100.0 | 3.5 | 15.0 | 41.5 | 40.0 |
| Clerk | 100.0 | 3.4 | 18.5 | 43.2 | 35.0 | 100.0 | 2.2 | 15.8 | 41.1 | 40.9 | 100.0 | 3.9 | 14.7 | 42.1 | 39.4 |
| Sales/service | 100.0 | 6.6 | 22.4 | 38.8 | 32.1 | 100.0 | 5.9 | 21.5 | 41.3 | 31.3 | 100.0 | 7.3 | 21.4 | 39.8 | 31.5 |
| Skilled crafts workers | 100.0 | 10.0 | 26.4 | 42.5 | 21.1 | 100.0 | 8.4 | 17.3 | 44.5 | 29.8 | 100.0 | 6.4 | 19.5 | 44.0 | 30.0 |
| Machine operator/assembler | 100.0 | 7.7 | 27.5 | 41.4 | 23.4 | 100.0 | 7.3 | 19.3 | 45.3 | 28.1 | 100.0 | 7.9 | 16.1 | 42.0 | 34.0 |
| Agriculture/primary | 100.0 | 11.6 | 30.0 | 39.4 | 19.0 | 100.0 | 11.0 | 25.5 | 37.8 | 25.8 | 100.0 | 8.0 | 26.5 | 39.1 | 26.4 |
| Switzerland (French) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manager/professional | 100.0 | 7.0 | 17.3 | 53.3 | 22.4 | 100.0 | 5.4 | 15.9 | 49.0 | 29.7 | 100.0 | 4.0 | 10.8 | 44.8 | 40.5 |
| Technician | 100.0 | 8.4 | 29.5 | 48.5 | 13.5 | 100.0 | 6.9 | 30.4 | 47.9 | 14.8 | 100.0 | 3.7 | 18.7 | 57.6 | 20.0 |
| Clerk | 100.0 | 3.5 | 39.1 | 45.7 | 11.6 | 100.0 | 6.3 | 31.2 | 46.1 | 16.4 | 100.0 | 3.2 | 25.1 | 52.0 | 19.6 |
| Sales/service | 100.0 | 27.0 | 45.7 | 24.6 | 2.6 | 100.0 | 16.7 | 39.5 | 34.9 | 8.9 | 100.0 | 19.7 | 36.3 | 34.4 | 9.6 |
| Skilled crafts workers | 100.0 | 25.2 | 35.7 | 37.7 | 1.4 | 100.0 | 21.8 | 28.8 | 32.0 | 17.3 | 100.0 | 12.2 | 28.4 | 40.3 | 19.0 |
| Machine operator/assembler | 100.0 | 28.0 | 30.4 | 31.9 | 9.7 | 100.0 | 27.9 | 34.7 | 23.3 | 14.1 | 100.0 | 27.4 | 31.5 | 33.0 | 8.2 |
| Agriculture/primary | 100.0 | 24.8 | 48.2 | 24.2 | 2.8 | 100.0 | 19.6 | 45.1 | 28.5 | 6.7 | 100.0 | 18.6 | 39.0 | 36.7 | 5.7 |

Supplemental Tables and Notes
Table 21-2 Percentage distribution of the population in selected occupations scoring at each of the five literacy levels, by literacy scale and country: 1994-Continued

| Country and occupation | Prose scale |  |  |  |  | Document scale |  |  |  |  | Quantitative scale |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Level I Level 2 Level 3 Level 4/5 |  |  |  |  | Total | Level I Level 2 Level 3 Level 4/5 |  |  |  | Total | Level I Level 2 Level 3 Level 4/5 |  |  |  |
| Switzerland (German) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manager/professional | 100.0 | 5.1 | 31.4 | 50.4 | 13.0 | 100.0 | 5.0 | 28.6 | 44.0 | 22.4 | 100.0 | 3.6 | 16.5 | 49.8 | 30.1 |
| Technician | 100.0 | 3.5 | 29.9 | 52.6 | 14.0 | 100.0 | 4.4 | 22.4 | 47.7 | 25.4 | 100.0 | 2.6 | 20.5 | 49.4 | 27.5 |
| Clerk | 100.0 | 6.3 | 38.0 | 40.4 | 15.3 | 100.0 | 7.1 | 32.0 | 42.4 | 18.5 | 100.0 | 8.5 | 26.4 | 45.4 | 19.7 |
| Sales/service | 100.0 | 15.9 | 44.3 | 34.7 | 5.0 | 100.0 | 20.1 | 38.1 | 36.0 | 5.8 | 100.0 | 12.1 | 38.8 | 38.2 | 10.9 |
| Skilled crafts workers | 100.0 | 24.8 | 46.5 | 26.2 | 2.4 | 100.0 | 22.0 | 36.8 | 32.7 | 8.5 | 100.0 | 11.5 | 36.5 | 39.5 | 12.5 |
| Machine operator/assembler | 100.0 | 40.1 | 35.9 | 24.0 | 0.0 | 100.0 | 30.6 | 27.3 | 31.0 | 11.1 | 100.0 | 27.9 | 24.5 | 39.6 | 8.1 |
| Agriculture/primary | 100.0 | 33.3 | 43.9 | 20.5 | 2.3 | 100.0 | 31.3 | 31.9 | 24.6 | 12.2 | 100.0 | 26.2 | 32.7 | 27.0 | 14.0 |
| United States |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manager/professional | 100.0 | 3.9 | 15.6 | 37.0 | 43.4 | 100.0 | 5.1 | 14.9 | 41.0 | 39.1 | 100.0 | 3.7 | 14.1 | 36.6 | 45.6 |
| Technician | 100.0 | 2.4 | 16.3 | 47.3 | 34.0 | 100.0 | 4.2 | 17.0 | 48.7 | 30.1 | 100.0 | 2.3 | 10.8 | 44.4 | 42.5 |
| Clerk | 100.0 | 7.3 | 29.8 | 41.7 | 21.2 | 100.0 | 11.1 | 34.0 | 33.1 | 21.8 | 100.0 | 10.6 | 31.7 | 35.5 | 22.1 |
| Sales/service | 100.0 | 24.2 | 26.1 | 32.3 | 17.4 | 100.0 | 26.6 | 25.4 | 32.8 | 15.2 | 100.0 | 25.1 | 28.5 | 29.3 | 17.2 |
| Skilled crafts workers | 100.0 | 29.4 | 38.0 | 25.5 | 7.1 | 100.0 | 29.9 | 37.6 | 25.0 | 7.4 | 100.0 | 28.7 | 31.5 | 28.9 | 10.9 |
| Machine operator/assembler | 100.0 | 28.9 | 36.9 | 27.8 | 6.3 | 100.0 | 35.4 | 32.2 | 25.8 | 6.6 | 100.0 | 30.4 | 30.9 | 27.5 | 11.2 |
| Agriculture/primary | 100.0 | 31.7 | 21.2 | 24.5 | 22.7 | 100.0 | 36.4 | 12.2 | 27.3 | 24.1 | 100.0 | 33.6 | 9.5 | 42.5 | 14.4 |

[^12]SOURCE: Organization for Economic Co-operation and Development and Statistics Canada, Literacy, Economy and Society, Results of the International Adult Literacy Survey, 1995.

Table 21-3 Percentage distribution of the five literacy levels within selected income quintiles, by literacy scale and country: 1994

| Country and income quintile | Prose scale |  |  |  | Document scale |  |  |  | Quantitative scale |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Level |  |  |  | Level |  |  |  | Level |
|  | Levell | Level 2 | Level 3 | 4/5 | Level 1 | Level 2 | Level 3 | 4/5 | Level I | Level 2 | Level 3 | 4/5 |
| Canada |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| No income | 46.0 | 30.0 | 21.6 | 12.6 | 51.7 | 27.7 | 20.3 | 11.9 | 51.8 | 27.9 | 21.4 | 10.7 |
| Quintile 1 | 13.8 | 16.3 | 17.8 | 15.3 | 12.1 | 17.6 | 16.5 | 17.2 | 13.8 | 16.9 | 19.6 | 11.5 |
| Quintile 2 | 18.0 | 14.0 | 14.5 | 13.2 | 18.8 | 13.6 | 13.9 | 13.6 | 15.2 | 17.6 | 14.4 | 11.2 |
| Quintile 3 | 11.2 | 11.9 | 14.9 | 15.9 | 7.4 | 15.1 | 17.8 | 11.9 | 11.5 | 15.4 | 10.5 | 18.7 |
| Quintile 4 | 7.1 | 17.1 | 15.1 | 17.9 | 5.0 | 13.1 | 18.8 | 18.9 | 4.5 | 9.7 | 20.6 | 19.5 |
| Quintile 5 | 3.9 | 10.7 | 16.2 | 25.1 | 5.0 | 12.8 | 12.7 | 26.5 | 3.2 | 12.5 | 13.4 | 28.3 |
| Germany |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| No income | 34.0 | 34.3 | 33.2 | 31.5 | 42.2 | 34.6 | 33.5 | 27.7 | 39.6 | 37.4 | 32.8 | 28.6 |
| Quintile 1 | 8.6 | 7.9 | 8.8 | 9.1 | 5.6 | 9.9 | 8.0 | 8.4 | 8.0 | 10.4 | 8.3 | 6.8 |
| Quintile 2 | 24.3 | 16.7 | 14.2 | 9.5 | 25.8 | 17.5 | 13.6 | 13.3 | 21.3 | 17.9 | 15.0 | 13.4 |
| Quintile 3 | 15.2 | 15.7 | 13.4 | 13.9 | 11.8 | 17.7 | 13.2 | 13.2 | 14.0 | 15.5 | 14.8 | 13.1 |
| Quintile 4 | 10.2 | 15.6 | 15.0 | 12.3 | 10.6 | 12.0 | 16.4 | 14.7 | 10.7 | 10.4 | 15.6 | 16.8 |
| Quintile 5 | 7.6 | 9.8 | 15.4 | 23.6 | 4.1 | 8.3 | 15.2 | 22.7 | 6.5 | 8.3 | 13.5 | 21.3 |
| Netherlands |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| No income | 52.0 | 39.9 | 25.9 | 21.6 | 58.0 | 41.2 | 25.7 | 22.0 | 56.8 | 40.3 | 27.6 | 19.9 |
| Quintile 1 | 7.6 | 8.6 | 11.8 | 13.0 | 8.2 | 8.4 | 12.2 | 10.9 | 11.3 | 9.1 | 11.4 | 10.3 |
| Quintile 2 | 9.5 | 8.0 | 12.2 | 10.6 | 6.1 | 8.8 | 12.7 | 9.7 | 6.4 | 10.6 | 12.5 | 7.8 |
| Quintile 3 | 19.5 | 19.5 | 20.9 | 22.8 | 20.1 | 20.2 | 20.5 | 21.8 | 17.6 | 20.3 | 21.3 | 21.1 |
| Quintile 4 | 8.7 | 14.6 | 12.1 | 12.8 | 6.2 | 12.5 | 13.3 | 14.2 | 6.5 | 12.5 | 13.1 | 14.6 |
| Quintile 5 | 2.7 | 9.3 | 17.1 | 19.3 | 1.4 | 8.8 | 15.6 | 21.5 | 1.4 | 7.3 | 14.1 | 26.4 |
| Poland |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| No income | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.8 |
| Quintile 1 | 22.9 | 20.3 | 14.7 | 11.5 | 24.4 | 16.4 | 18.8 | 11.1 | 26.4 | 18.0 | 16.9 | 9.5 |
| Quintile 2 | 22.0 | 17.5 | 16.2 | 10.1 | 20.0 | 20.1 | 15.8 | 13.1 | 20.4 | 20.0 | 18.2 | 9.3 |
| Quintile 3 | 21.3 | 24.1 | 22.1 | 20.2 | 20.1 | 24.4 | 24.0 | 23.4 | 20.9 | 23.0 | 23.5 | 23.5 |
| Quintile 4 | 14.4 | 21.2 | 22.3 | 26.3 | 16.7 | 22.7 | 17.1 | 22.4 | 14.2 | 22.5 | 19.4 | 24.1 |
| Quintile 5 | 19.1 | 16.9 | 24.8 | 32.0 | 18.9 | 16.4 | 24.2 | 29.0 | 18.1 | 16.4 | 21.9 | 32.8 |
| Sweden |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| No income | 1.8 | 0.6 | 0.2 | 0.1 | 3.5 | 0.0 | 0.3 | 0.2 | 3.3 | 0.0 | 0.4 | 0.1 |
| Quintile 1 | 7.4 | 8.6 | 13.7 | 18.9 | 5.0 | 13.2 | 12.9 | 17.2 | 10.0 | 11.9 | 13.4 | 16.6 |
| Quintile 2 | 21.8 | 15.3 | 12.6 | 9.9 | 26.3 | 18.7 | 11.8 | 9.2 | 26.1 | 17.3 | 12.7 | 8.9 |
| Quintile 3 | 28.2 | 22.8 | 17.2 | 16.6 | 27.7 | 21.0 | 20.1 | 15.1 | 25.1 | 25.9 | 19.6 | 13.7 |
| Quintile 4 | 21.4 | 28.5 | 24.2 | 17.4 | 24.4 | 27.2 | 23.7 | 18.7 | 27.3 | 24.7 | 24.5 | 18.6 |
| Quintile 5 | 19.5 | 24.2 | 32.0 | 37.1 | 13.0 | 20.0 | 31.3 | 39.6 | 8.3 | 20.3 | 29.4 | 42.1 |
| Switzerland (French) |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| No income | - | - | - | - | 33.4 | 22.4 | 20.1 | 23.5 | - | - | - | - |
| Quintile 1 | 26.3 | 26.3 | 19.7 | 20.9 | 28.8 | 21.1 | 19.2 | 13.9 | 34.2 | 24.5 | 20.2 | 22.5 |
| Quintile 2 | 26.8 | 21.4 | 15.6 | 22.7 | 19.3 | 22.6 | 19.2 | 20.0 | 25.2 | 22.0 | 20.0 | 15.7 |
| Quintile 3 | 23.0 | 19.3 | 21.2 | 17.7 | 13.5 | 21.3 | 21.8 | 22.2 | 26.4 | 24.9 | 21.2 | 11.6 |
| Quintile 4 | 18.3 | 19.7 | 24.0 | 15.4 | 5.0 | 12.6 | 19.7 | 20.3 | 8.7 | 18.2 | 24.7 | 20.5 |
| Quintile 5 | 5.5 | 13.3 | 19.5 | 23.3 | - | - | - | - | 5.5 | 10.5 | 14.0 | 29.7 |

Supplemental Tables and Notes
Table 21-3 Percentage distribution of the five literacy levels within selected income quintiles, by literacy scale and country: 1994-Continued

| Country and income quintile | Prose scale |  |  |  | Document scale |  |  |  | Quantitative scale |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Level |  |  |  | Level |  |  |  | Level |
|  | Levell | Level 2 | Level 3 | 4/5 | Level 1 | Level 2 | Level 3 | 4/5 | Level I | Level 2 | Level 3 | 4/5 |
| Switzerland (German) |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| No income | - | - | - | - | - | - | - | - | - | - | - | - |
| Quintile 1 | 34.9 | 25.2 | 23.4 | 30.2 | 33.2 | 26.6 | 23.8 | 26.7 | 34.1 | 28.6 | 25.4 | 22.4 |
| Quintile 2 | 19.1 | 14.4 | 10.5 | 8.1 | 22.3 | 14.9 | 9.7 | 9.3 | 20.5 | 20.2 | 8.8 | 8.5 |
| Quintile 3 | 20.7 | 26.3 | 18.6 | 19.5 | 22.0 | 20.9 | 22.3 | 22.4 | 26.5 | 21.5 | 22.1 | 19.6 |
| Quintile 4 | 20.5 | 17.3 | 22.8 | 9.5 | 18.3 | 17.7 | 21.5 | 16.5 | 17.0 | 15.2 | 22.9 | 16.8 |
| Quintile 5 | 4.8 | 16.8 | 24.6 | 32.7 | 4.1 | 20.0 | 22.7 | 25.1 | 1.8 | 14.4 | 20.7 | 32.7 |
| United States |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| No income | 45.2 | 31.3 | 20.6 | 11.9 | 44.2 | 30.5 | 19.2 | 11.4 | 44.2 | 29.6 | 22.2 | 12.1 |
| Quintile 1 | 26.1 | 22.0 | 19.7 | 16.3 | 25.9 | 20.2 | 21.5 | 14.6 | 27.6 | 22.6 | 21.2 | 12.4 |
| Quintile 2 | 17.9 | 20.2 | 19.2 | 16.3 | 15.9 | 21.8 | 18.1 | 17.7 | 18.3 | 22.9 | 17.6 | 15.7 |
| Quintile 3 | 8.0 | 15.5 | 21.3 | 21.6 | 10.4 | 16.3 | 19.6 | 22.9 | 8.5 | 16.3 | 19.9 | 22.6 |
| Quintile 4 | 2.6 | 8.0 | 15.1 | 21.8 | 2.9 | 9.0 | 15.9 | 21.7 | 1.2 | 6.9 | 14.1 | 25.4 |
| Quintile 5 | 0.3 | 3.0 | 4.1 | 12.1 | 0.7 | 2.0 | 5.7 | 11.8 | 0.3 | 1.7 | 5.0 | 11.9 |

- Not available.

NOTE: Details may not add to totals due to rounding.

SOURCE: Organization for Economic Co-operation and Development and Statistics Canada, Literacy, Economy and Society, Results of the International Adult Literacy Survey, 1995.

Table 21-4 Percentage distribution of the population with selected educational attainment levels scoring at each of the five literacy levels, by literacy scale and country: 1994

| Country and level of educational attainment | Prose scale |  |  |  |  | Document scale |  |  |  |  | Quantitative scale |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Level 1 |  | Level |  |  | Total Level 1 Level 2 |  |  | Level |  | Total | Level 1 Level 2 |  | Level 3 | Level <br> 4/5 |
|  |  |  | Level 2 | Level 3 | 4/5 |  |  |  | Level 3 | 4/5 |  |  |  |  |  |
| Canada |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Preprimary/primary | 100.0 | 67.5 | 22.1 | 9.9 | 0.5 | 100.0 | 73.6 | 15.4 | 9.7 | 1.3 | 100.0 | 69.4 | 18.5 | 11.3 | 0.8 |
| Lower secondary | 100.0 | 22.2 | 36.8 | 33.0 | 8.1 | 100.0 | 23.2 | 40.2 | 26.3 | 10.3 | 100.0 | 23.1 | 41.5 | 27.6 | 7.8 |
| Upper secondary | 100.0 | 10.0 | 29.3 | 41.2 | 19.5 | 100.0 | 10.5 | 28.4 | 36.9 | 24.1 | 100.0 | 8.8 | 31.7 | 42.8 | 16.6 |
| Higher education (non-university) | 100.0 | 4.4 | 20.9 | 46.9 | 27.7 | 100.0 | 4.2 | 17.6 | 39.1 | 39.1 | 100.0 | 4.2 | 20.7 | 48.6 | 26.4 |
| Higher education (university) | 100.0 | 0.2 | 10.8 | 29.8 | 59.1 | 100.0 | 3.3 | 10.1 | 38.5 | 48.1 | 100.0 | 2.2 | 4.4 | 29.4 | 64.0 |
| Germany |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Preprimary/primary | 100.0 | 67.7 | 14.5 | 17.8 | 0.0 | 100.0 | 55.5 | 30.2 | 14.3 | 0.0 | 100.0 | 42.5 | 20.8 | 29.2 | 7.5 |
| Lower secondary | 100.0 | 17.5 | 38.6 | 36.0 | 7.9 | 100.0 | 10.5 | 38.3 | 39.2 | 12.0 | 100.0 | 7.6 | 31.0 | 44.1 | 17.2 |
| Upper secondary | 100.0 | 7.9 | 33.6 | 44.5 | 14.0 | 100.0 | 4.7 | 26.7 | 43.5 | 25.1 | 100.0 | 4.1 | 21.0 | 49.3 | 25.7 |
| Higher education (non-university) | 100.0 | 4.1 | 14.0 | 49.2 | 32.6 | 100.0 | 4.7 | 20.2 | 48.3 | 26.8 | 100.0 | 2.7 | 11.1 | 59.4 | 26.9 |
| Higher education (university) | 100.0 | 4.0 | 17.0 | 39.4 | 39.6 | 100.0 | 1.1 | 17.9 | 34.8 | 46.2 | 100.0 | 2.0 | 13.2 | 28.6 | 56.2 |
| Netherlands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Preprimary/primary | 100.0 | 37.8 | 42.1 | 17.2 | 3.0 | 100.0 | 36.0 | 38.7 | 19.2 | 6.2 | 100.0 | 35.5 | 35.5 | 23.7 | 5.3 |
| Lower secondary | 100.0 | 11.9 | 44.8 | 38.3 | 4.9 | 100.0 | 11.2 | 36.9 | 43.1 | 8.8 | 100.0 | 11.9 | 35.5 | 41.7 | 10.9 |
| Upper secondary | 100.0 | 2.7 | 23.3 | 55.2 | 18.8 | 100.0 | 2.9 | 18.2 | 52.4 | 26.5 | 100.0 | 2.7 | 22.1 | 52.0 | 23.2 |
| Higher education (non-university) | 100.0 | - | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - | - | - |
| Higher education (university) | 100.0 | 1.3 | 11.9 | 52.3 | 34.5 | 100.0 | 1.3 | 13.8 | 50.0 | 34.9 | 100.0 | 1.7 | 9.7 | 49.4 | 39.3 |
| Poland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Preprimary/primary | 100.0 | 75.2 | 19.0 | 5.7 | 0.2 | 100.0 | 74.6 | 18.8 | 5.2 | 1.4 | 100.0 | 69.4 | 21.3 | 7.9 | 1.3 |
| Lower secondary | 100.0 | 42.5 | 39.7 | 15.9 | 1.8 | 100.0 | 46.9 | 33.9 | 15.2 | 4.0 | 100.0 | 39.4 | 34.3 | 22.1 | 4.1 |
| Upper secondary | 100.0 | 24.9 | 44.4 | 28.5 | 2.3 | 100.0 | 27.8 | 38.3 | 27.2 | 6.8 | 100.0 | 20.9 | 36.2 | 32.9 | 10.1 |
| Higher education (non-university) | 100.0 | 11.8 | 38.8 | 40.7 | 8.6 | 100.0 | 16.4 | 35.5 | 36.1 | 12.1 | 100.0 | 15.5 | 25.7 | 47.7 | 11.1 |
| Higher education (university) | 100.0 | 11.2 | 30.4 | 42.0 | 16.4 | 100.0 | 15.6 | 29.6 | 32.8 | 22.0 | 100.0 | 9.1 | 25.9 | 38.6 | 26.5 |
| Sweden |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Preprimary/primary | 100.0 | 25.2 | 42.5 | 24.7 | 7.6 | 100.0 | 22.5 | 38.1 | 33.2 | 6.2 | 100.0 | 21.7 | 32.0 | 35.3 | 11.1 |
| Lower secondary | 100.0 | 7.0 | 20.7 | 47.3 | 25.0 | 100.0 | 6.8 | 16.9 | 45.5 | 30.8 | 100.0 | 7.1 | 21.0 | 40.8 | 31.1 |
| Upper secondary | 100.0 | 5.7 | 20.5 | 42.7 | 31.1 | 100.0 | 3.9 | 19.1 | 42.1 | 34.9 | 100.0 | 4.8 | 18.5 | 41.9 | 34.8 |
| Higher education (non-university) | 100.0 | 1.4 | 9.4 | 43.4 | 45.8 | 100.0 | 1.1 | 11.1 | 37.8 | 50.1 | 100.0 | 0.6 | 14.6 | 38.5 | 46.3 |
| Higher education (university) | 100.0 | 0.7 | 6.3 | 32.2 | 60.7 | 100.0 | 0.7 | 8.1 | 29.8 | 61.4 | 100.0 | 1.0 | 5.9 | 29.3 | 63.7 |
| Switzerland (French) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Preprimary/primary | 100.0 | 48.8 | 34.7 | 14.9 | 1.6 | 100.0 | 41.9 | 39.7 | 16.4 | 2.0 | 100.0 | 40.2 | 37.1 | 22.4 | 0.3 |
| Lower secondary | 100.0 | 28.9 | 51.5 | 19.6 | 0.0 | 100.0 | 31.1 | 46.9 | 19.9 | 2.1 | 100.0 | 22.6 | 44.0 | 29.5 | 4.0 |
| Upper secondary | 100.0 | 11.1 | 36.4 | 43.5 | 9.1 | 100.0 | 9.0 | 31.1 | 45.1 | 14.8 | 100.0 | 5.6 | 24.2 | 48.2 | 22.0 |
| Higher education (non-university) | 100.0 | 7.0 | 25.6 | 56.8 | 10.7 | 100.0 | 2.0 | 19.5 | 47.9 | 30.6 | 100.0 | 3.2 | 13.8 | 51.8 | 31.2 |
| Higher education (university) | 100.0 | 4.8 | 13.4 | 49.4 | 32.4 | 100.0 | 4.9 | 7.1 | 47.9 | 40.1 | 100.0 | 4.2 | 9.1 | 45.4 | 41.4 |
| Switzerland (German) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Preprimary/primary | 100.0 | 65.8 | 28.8 | 5.4 | 0.0 | 100.0 | 72.6 | 16.7 | 10.6 | 0.0 | 100.0 | 51.0 | 26.3 | 19.7 | 3.0 |
| Lower secondary | 100.0 | 34.2 | 42.9 | 18.7 | 4.2 | 100.0 | 31.6 | 40.2 | 17.9 | 10.3 | 100.0 | 22.0 | 44.0 | 21.3 | 12.7 |
| Upper secondary | 100.0 | 11.0 | 39.8 | 39.4 | 9.8 | 100.0 | 9.7 | 30.9 | 42.9 | 16.5 | 100.0 | 6.9 | 27.2 | 46.7 | 19.2 |
| Higher education (non-university) | 100.0 | 6.8 | 30.1 | 54.1 | 9.0 | 100.0 | 5.1 | 24.9 | 49.1 | 20.9 | 100.0 | 3.7 | 14.3 | 54.2 | 27.9 |
| Higher education (university) | 100.0 | 6.7 | 21.1 | 46.7 | 25.5 | 100.0 | 6.8 | 15.7 | 39.1 | 38.4 | 100.0 | 6.8 | 18.3 | 36.0 | 38.9 |
| United States |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Preprimary/primary | 100.0 | 69.3 | 19.9 | 8.9 | 1.8 | 100.0 | 74.0 | 18.8 | 6.3 | 1.0 | 100.0 | 66.8 | 23.2 | 9.1 | 0.8 |
| Lower secondary | 100.0 | 44.7 | 30.1 | 22.3 | 2.8 | 100.0 | 45.2 | 27.9 | 21.1 | 5.9 | 100.0 | 44.7 | 22.8 | 28.0 | 4.5 |
| Upper secondary | 100.0 | 16.9 | 33.7 | 35.4 | 13.9 | 100.0 | 21.2 | 33.7 | 32.5 | 12.6 | 100.0 | 18.4 | 34.2 | 33.0 | 14.5 |
| Higher education (non-university) | 100.0 | 9.5 | 24.8 | 39.9 | 25.8 | 100.0 | 11.7 | 25.0 | 39.4 | 24.0 | 100.0 | 8.8 | 23.1 | 41.3 | 26.8 |
| Higher education (university) | 100.0 | 4.9 | 11.9 | 35.7 | 47.5 | 100.0 | 6.7 | 13.3 | 38.9 | 41.1 | 100.0 | 4.9 | 11.3 | 32.1 | 51.8 |

- Not available.

NOTE: Details may not add to totals due to rounding.

SOURCE: Organization for Economic Co-operation and
Development and Statistics Canada, Literacy, Economy and Society,
Development and Statistics Canada, Literacy, Economy and Society, Results of the International Adult Literacy Survey, 1995.

## Note to Indicator 21: Definitions of literacy scales and levels

This analysis reports the results of a wide-ranging test of literacy skills given to a large sample of adults (ranging from 1,500 to 1,800 per country) in Europe and North America in fall 1994. The International Adult Literacy Survey (IALS) was a collaborative effort among seven governments and three intergovernmental organizations. Each country was required to draw a probability sample that could be representative of the civilian, noninstitutionalized population aged 16-65. In six countries, the survey was conducted in the national language; in Canada, respondents were given a choice of taking the survey in either English or French; in Switzerland, respondents in Frenchspeaking and German-speaking cantons responded to survey questions in their respective languages.

As literacy cannot be narrowed down to a single skill suited for dealing with all types of text, nor defined as an infinite set of skills, the IALS defined literacy in terms of three scales, each encompassing a common set of skills relevant for diverse tasks:

Prose literacy: The knowledge and skills required to understand and use information from texts, including editorials, news stories, poems, and fiction;

Document literacy: The knowledge and skills required to locate and use information contained in various formats, including job applications, payroll forms, transportation schedules, maps, tables, and graphics; and

Quantitative literacy: The knowledge and skills required to apply arithmetic operations, either alone or sequentially, to numbers embedded in printed materials, such as balancing a checkbook, figuring a tip, completing an order form, or determining the amount of interest on a loan from an advertisement.

In each of these three scales, rather than expressing a threshold for achieving literacy, a scale from $0-$ 500 was constructed, upon which tasks of varying difficulty were placed. These scales were developed through the item response theory (IRT) scaling procedures. First, the difficulty of tasks was ranked on a scale according to how well respondents actually performed. Then, each scale was divided into five levels, reflecting the empirically determined progression of information-processing skills and strategies. Next, individuals were assigned scores between 0 and 500 according to how well they performed on a variety of tasks at different levels. Finally, the percentage of readers falling into each skill level was calculated.

A person's ability in each literacy scale can be expressed by a score, defined as the point at which he or she has an 80 percent chance of successfully performing a given task. If a person scores at level 2 , it means that this individual has an 80 percent chance of successfully performing level 2 tasks and a greater than 80 percent chance of performing level 1 tasks. It does not mean, however, that individuals with low proficiency cannot succeed at tasks that are rated at higher skill levels - only that the probability of their success is relatively low. Below is a description of the three literacy scales and the tasks required at each proficiency level:
Prose literacy includes text from newspapers, magazines, and brochures accompanied by one or more questions or directives asking the reader to perform specific tasks. These tasks represent three major aspects of information processing: locating, integrating, and generating. Locating tasks require the reader to find information in the text based on conditions or features specified in the question or directive. Integrating tasks ask the reader to pull together two or more pieces of information in the text. Generating tasks ask the reader to produce a written response by processing information from the text, making text-based references, and drawing on background knowledge.
Prose Level 1 (Difficulty values 0-225). Most of the tasks at this level require the reader to locate and match a single piece of information in the text that is identical to or synonymous with the information given in the directive. If a plausible incorrect answer is present in the text, it tends not to be near the correct information.

Prose Level 2 (Difficulty values 226-275). Tasks at this level tend to require the reader to locate one or more pieces of information in the text; however, several distracters may be present and the reader may need to make low-level inferences. Tasks at this level also begin to ask readers to integrate two or more pieces of information, or to compare and contrast information.

Prose Level 3 (Difficulty values 276-325). Tasks at this level tend to direct readers to search the text to match information, requiring the reader to make low-level inferences or to locate text that meets specified conditions. Sometimes the reader is required to identify several pieces of information that are located in different sentences or paragraphs rather than search for information located in a single sentence. Readers may also be asked to integrate
or to compare and contrast information across paragraphs or sections of text.

Prose Level 4 (Difficulty values 326-375). These tasks require readers to perform multiple-feature matching or to provide several responses where the requested information must be identified through text-based inferences. Tasks at this level may also require the reader to integrate or contrast pieces of information that are sometimes presented in relatively lengthy texts. Typically, these texts contain more distracting information, and the information that is requested is more abstract.

Prose Level 5 (Difficulty values 376-500). Some tasks at this level require the reader to search for information in dense text that contains a number of plausible distracters. Some tasks require readers to make high-level inferences or use specialized knowledge.

Document literacy involves using materials such as tables, schedules, charts, graphs, maps, and forms. Questions or directives associated with the various document tasks are categorized into four basic types: locating, cycling, integrating, and generating. Locating, integrating, and generating refer to the same skills as those in prose literacy. Cycling tasks require the reader to locate and match one or more features of information, but differ from locating tasks in that they require the reader to engage in a series of feature matches to satisfy conditions given in the question.
Document Level 1 (Difficulty values 0-225). Most of the tasks at this level require the reader to locate a piece of information based on a literal match. Distracting information, if present, is typically located away from the correct answer. Some tasks may direct the reader to enter personal information onto a form.

Document Level 2 (Difficulty values 226-275). Document tasks at this level are more varied. While some still require the reader to match a single feature, more distracting information may be present, and the match may require a low-level inference. Some tasks at this level may require the reader to enter information onto a form or to cycle through information in a document.

Document Level 3 (Difficulty values 276-325). Tasks at this level appear to be the most varied. Some require the reader to make identical or synonymous matches; however, these matches usually require the reader to take conditional information into account or to match multiple features of information.

Document Level 4 (Difficulty values 326-375). Tasks at this level, like those in the previous levels, ask the reader to match multiple features of information, to cycle through documents, and to integrate information; frequently, these tasks require the reader to make higher order inferences to arrive at the correct answer. Sometimes the reader must take conditional information into account.

Document Level 5 (Difficulty values 376-500). Tasks at this level require the reader to search through complex displays of information that contain multiple distracters, make high-level inferences, process conditional information, or use specialized knowledge.

Quantitative literacy involves using numbers and arithmetic operations to complete a task. These tasks require the reader to locate and extract numbers from different types of documents that contain similar but irrelevant information, infer numbers from printed directions, or calculate numbers using multiple operations.

Quantitative Level 1 (Difficulty values 0-225). Although no quantitative tasks used in the IALS fall below the score of 225, experience suggests that such tasks would require the reader to perform a single, relatively simple operation (usually addition) for which either the numbers are already entered into the given document and the operation is stipulated, or the numbers are provided and the operation does not require the reader to borrow.
Quantitative Level 2 (Difficulty values 226-275). Tasks at this level typically require readers to perform a single arithmetic operation (frequently addition or subtraction) using numbers that are easily located in the text or document. The operation to be performed may be easily inferred from the wording of the question or the format of the material (for example, a bank deposit form or an order form).

Quantitative Level 3 (Difficulty values 276-325). Tasks at this level typically require the reader to perform a single operation. However, the operations are more varied - some multiplication and division tasks are found at this level. Sometimes two or more numbers are needed to solve the problem, and the numbers are frequently embedded in more complex displays. While semantic relation terms such as "how many" or "calculate the difference" are often used, some of the tasks require the reader to make higher order inferences to determine the appropriate operation.

Quantitative Level 4 (Difficulty values 326-375). With one exception, the tasks at this level require the
reader to perform a single arithmetic operation in which the quantities or the operations are not easily determined. That is, for most of the tasks at this level, the question or directive does not provide a semantic relation term such as "how many" or "calculate the difference" to help the reader.
Quantitative Level 5 (Difficulty values 376-500). Tasks at this level require readers to perform multiple op-
erations sequentially; the reader must pull out the features of the problem from the material provided or rely on background knowledge to determine the quantities or operations needed.

[^13]Table 22-1 Percentage of 25- to 29-year-olds who have completed high school, by race/ethnicity and sex: March 1971-96

|  | All |  |  | White |  |  | Black |  |  | Hispanic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| March | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 1971 | 77.7 | 79.1 | 76.5 | 81.7 | 83.0 | 80.5 | 58.8 | 56.7 | 60.5 | 48.3 | 51.3 | 45.7 |
| 1972 | 79.8 | 80.5 | 79.2 | 83.4 | 84.1 | 82.7 | 64.1 | 61.7 | 66.0 | 47.6 | 47.1 | 47.9 |
| 1973 | 80.2 | 80.6 | 79.8 | 84.0 | 84.2 | 83.9 | 64.1 | 63.2 | 64.9 | 52.3 | 54.2 | 50.6 |
| 1974 | 81.9 | 83.1 | 80.8 | 85.5 | 86.0 | 85.0 | 68.4 | 71.5 | 65.8 | 54.1 | 55.9 | 52.5 |
| 1975 | 83.1 | 84.5 | 81.7 | 86.6 | 88.0 | 85.2 | 71.1 | 72.3 | 70.1 | 53.1 | 52.2 | 53.9 |
| 1976 | 84.7 | 86.0 | 83.5 | 87.7 | 89.0 | 86.4 | 74.0 | 72.8 | 74.9 | 58.1 | 57.6 | 58.4 |
| 1977 | 85.4 | 86.6 | 84.2 | 88.6 | 89.2 | 88.0 | 74.5 | 77.5 | 72.0 | 58.0 | 61.9 | 54.6 |
| 1978 | 85.3 | 86.0 | 84.6 | 88.5 | 88.8 | 88.2 | 77.4 | 78.7 | 76.3 | 56.5 | 58.5 | 54.6 |
| 1979 | 85.6 | 86.3 | 84.9 | 89.2 | 89.8 | 88.5 | 74.7 | 74.0 | 75.3 | 57.1 | 55.5 | 58.6 |
| 1980 | 85.4 | 85.4 | 85.5 | 89.2 | 89.1 | 89.2 | 76.7 | 74.8 | 78.3 | 57.9 | 57.0 | 58.8 |
| 1981 | 86.3 | 86.5 | 86.1 | 89.8 | 89.7 | 89.9 | 77.6 | 78.8 | 76.6 | 59.8 | 59.1 | 60.4 |
| 1982 | 86.2 | 86.3 | 86.1 | 89.1 | 89.1 | 89.1 | 81.0 | 80.4 | 81.5 | 61.0 | 60.6 | 61.2 |
| 1983 | 86.0 | 86.0 | 86.0 | 89.3 | 89.3 | 89.3 | 79.5 | 79.0 | 79.9 | 58.4 | 57.8 | 58.9 |
| 1984 | 85.9 | 85.6 | 86.3 | 89.4 | 89.4 | 89.4 | 79.1 | 75.9 | 81.7 | 58.6 | 56.7 | 60.1 |
| 1985 | 86.2 | 85.9 | 86.4 | 89.5 | 89.2 | 89.9 | 80.5 | 80.6 | 80.5 | 61.0 | 58.6 | 63.1 |
| 1986 | 86.1 | 85.9 | 86.4 | 89.6 | 88.7 | 90.4 | 83.5 | 86.4 | 81.0 | 59.1 | 58.2 | 60.0 |
| 1987 | 86.0 | 85.5 | 86.4 | 89.4 | 88.9 | 90.0 | 83.5 | 84.5 | 82.6 | 59.8 | 58.6 | 61.0 |
| 1988 | 85.9 | 84.7 | 87.1 | 89.7 | 88.4 | 90.9 | 80.9 | 80.9 | 80.9 | 62.3 | 59.9 | 64.8 |
| 1989 | 85.5 | 84.4 | 86.5 | 89.3 | 88.2 | 90.4 | 82.3 | 80.5 | 83.8 | 61.0 | 61.0 | 61.1 |
| 1990 | 85.7 | 84.4 | 87.0 | 90.1 | 88.6 | 91.6 | 81.8 | 81.4 | 82.0 | 58.2 | 56.6 | 59.9 |
| 1991 | 85.4 | 84.9 | 85.8 | 89.8 | 89.2 | 90.5 | 81.8 | 83.6 | 80.1 | 56.7 | 56.4 | 57.2 |
| High school diploma or equivalency certificate |  |  |  |  |  |  |  |  |  |  |  |  |
| 1992 | 86.3 | 86.1 | 86.5 | 90.6 | 90.3 | 91.1 | 80.9 | 82.7 | 79.3 | 60.9 | 61.1 | 60.6 |
| 1993 | 86.7 | 86.0 | 87.4 | 91.2 | 90.7 | 91.8 | 82.7 | 84.8 | 80.8 | 60.9 | 58.2 | 63.9 |
| 1994 | 86.1 | 84.5 | 87.6 | 91.1 | 90.0 | 92.3 | 84.1 | 82.8 | 85.3 | 60.3 | 58.0 | 63.0 |
| 1995 | 86.9 | 86.3 | 87.4 | 92.5 | 92.0 | 93.0 | 86.8 | 88.4 | 85.3 | 57.2 | 55.7 | 58.7 |
| 1996 | 87.3 | 86.5 | 88.1 | 92.6 | 92.0 | 93.1 | 86.0 | 87.9 | 84.5 | 61.1 | 59.7 | 62.9 |

NOTE: In 1992, the Current Population Survey (CPS) changed the SOURCE: U.S. Department of Commerce, Bureau of the Census, questions used to obtain the educational attainment of respondents. The category "diploma or equivalency certificate" includes those who have a high school diploma or an equivalency certificate. See the supplemental note to this indicator for further discussion.

Table 22-2 Percentage of 25- to 29-year-old high school graduates who have completed 1 or more years of college, by race/ethnicity and sex: March 1971-96

|  | All |  |  | White |  |  | Black |  |  | Hispanic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| March | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 1971 | 43.6 | 48.7 | 38.4 | 44.9 | 50.2 | 39.5 | 30.9 | 29.0 | 32.2 | 30.6 | 38.3 | 22.8 |
| 1972 | 45.1 | 50.7 | 39.5 | 46.3 | 52.3 | 40.2 | 33.3 | 31.7 | 34.6 | 32.1 | 37.2 | 28.3 |
| 1973 | 45.3 | 51.4 | 39.4 | 46.6 | 53.0 | 40.2 | 33.5 | 33.5 | 33.5 | 31.6 | 39.4 | 24.5 |
| 1974 | 48.9 | 53.8 | 44.1 | 50.4 | 55.6 | 45.2 | 35.4 | 36.9 | 34.1 | 39.2 | 44.1 | 34.5 |
| 1975 | 50.1 | 56.0 | 44.1 | 51.2 | 57.3 | 44.9 | 38.7 | 41.0 | 36.8 | 41.1 | 50.4 | 32.6 |
| 1976 | 52.1 | 58.2 | 46.0 | 53.8 | 60.1 | 47.4 | 37.2 | 40.5 | 34.7 | 36.3 | 42.3 | 31.2 |
| 1977 | 53.2 | 58.0 | 48.5 | 54.8 | 59.9 | 49.7 | 41.7 | 44.2 | 39.6 | 41.1 | 42.6 | 39.5 |
| 1978 | 54.4 | 59.3 | 49.6 | 55.9 | 61.4 | 50.3 | 44.9 | 45.2 | 44.4 | 43.6 | 47.2 | 40.1 |
| 1979 | 54.1 | 57.7 | 50.6 | 55.7 | 59.4 | 51.9 | 41.7 | 40.7 | 42.5 | 44.0 | 50.7 | 38.0 |
| 1980 | 52.3 | 55.8 | 49.0 | 53.8 | 57.3 | 50.3 | 42.3 | 43.6 | 41.3 | 39.9 | 45.5 | 34.7 |
| 1981 | 50.1 | 52.7 | 47.5 | 51.2 | 54.1 | 48.3 | 42.5 | 43.0 | 42.2 | 39.6 | 41.7 | 37.7 |
| 1982 | 49.9 | 51.5 | 48.3 | 50.7 | 52.2 | 49.1 | 45.8 | 47.4 | 44.6 | 39.6 | 40.6 | 38.7 |
| 1983 | 50.6 | 52.1 | 49.0 | 51.6 | 53.4 | 49.7 | 41.6 | 42.0 | 41.2 | 42.9 | 41.1 | 44.6 |
| 1984 | 50.1 | 50.9 | 49.3 | 51.0 | 51.7 | 50.3 | 41.6 | 41.6 | 41.7 | 45.6 | 47.5 | 44.0 |
| 1985 | 50.8 | 51.5 | 50.1 | 51.8 | 52.5 | 51.2 | 42.7 | 42.4 | 42.9 | 44.2 | 45.9 | 42.9 |
| 1986 | 51.0 | 51.4 | 50.8 | 52.3 | 52.8 | 51.8 | 43.4 | 41.5 | 45.2 | 42.9 | 42.8 | 43.0 |
| 1987 | 50.7 | 50.4 | 51.0 | 51.4 | 51.5 | 51.4 | 43.0 | 38.4 | 47.0 | 44.6 | 46.3 | 43.1 |
| 1988 | 50.8 | 51.6 | 50.1 | 51.8 | 52.4 | 51.2 | 41.2 | 42.9 | 39.7 | 44.9 | 44.3 | 45.6 |
| 1989 | 51.3 | 52.0 | 50.5 | 52.8 | 53.4 | 52.2 | 42.1 | 42.2 | 41.9 | 44.3 | 44.8 | 43.9 |
| 1990 | 52.0 | 51.8 | 52.1 | 53.6 | 53.4 | 53.8 | 44.1 | 43.0 | 45.0 | 40.1 | 40.4 | 39.8 |
| 1991 | 53.1 | 52.3 | 53.8 | 54.9 | 54.7 | 55.1 | 43.2 | 38.3 | 47.7 | 42.2 | 40.9 | 43.4 |
| Some college |  |  |  |  |  |  |  |  |  |  |  |  |
| 1992 | 56.7 | 56.0 | 57.4 | 58.8 | 58.3 | 59.2 | 44.7 | 42.3 | 46.9 | 46.8 | 44.5 | 49.6 |
| 1993 | 58.9 | 57.6 | 60.1 | 61.0 | 60.3 | 61.6 | 48.4 | 43.6 | 52.5 | 48.8 | 46.1 | 51.9 |
| 1994 | 60.5 | 58.9 | 62.0 | 62.7 | 61.0 | 64.3 | 49.6 | 48.7 | 50.3 | 51.5 | 48.3 | 55.0 |
| 1995 | 62.2 | 60.6 | 63.9 | 64.6 | 62.6 | 66.7 | 52.0 | 51.2 | 52.5 | 50.3 | 48.0 | 52.7 |
| 1996 | 64.7 | 63.1 | 66.3 | 67.0 | 65.5 | 68.4 | 55.9 | 54.5 | 57.1 | 50.9 | 47.0 | 55.6 |

NOTE: In 1992, the Current Population Survey (CPS) changed the questions used to obtain the educational attainment of respondents. The category "some college" includes those with an associate's degree or vocational certificate. See the supplemental note to this indicator for further discussion.

Table 22-3 Percentage of 25- to 29-year-old high school graduates who have completed 4 or more years of college, by race/ethnicity and sex: March 1971-96

|  | All |  |  | White |  |  | Black |  |  | Hispanic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| March | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 1971 | 22.0 | 25.8 | 18.1 | 23.1 | 27.0 | 19.1 | 11.5 | 12.1 | 10.9 | 10.5 | 15.4 | 5.8 |
| 1972 | 23.7 | 27.3 | 20.2 | 24.9 | 28.6 | 21.1 | 13.1 | 11.6 | 14.3 | 7.8 | 9.5 | 6.4 |
| 1973 | 23.6 | 26.8 | 20.5 | 24.8 | 28.3 | 21.3 | 12.7 | 11.3 | 13.8 | 10.8 | 12.4 | 9.7 |
| 1974 | 25.3 | 28.7 | 21.8 | 27.2 | 31.1 | 23.2 | 11.5 | 12.3 | 11.0 | 10.1 | 8.9 | 11.2 |
| 1975 | 26.3 | 29.7 | 22.9 | 27.5 | 31.1 | 23.7 | 14.7 | 15.3 | 14.2 | 16.6 | 19.7 | 13.4 |
| 1976 | 28.0 | 32.0 | 24.1 | 29.3 | 33.5 | 25.0 | 17.6 | 16.5 | 18.6 | 12.7 | 17.9 | 8.2 |
| 1977 | 28.1 | 31.2 | 25.1 | 29.8 | 33.4 | 26.3 | 16.9 | 16.5 | 17.3 | 11.5 | 11.3 | 11.7 |
| 1978 | 27.3 | 30.2 | 24.4 | 28.9 | 32.6 | 25.3 | 15.2 | 13.6 | 16.5 | 17.1 | 16.4 | 17.9 |
| 1979 | 27.0 | 29.9 | 24.2 | 28.6 | 31.6 | 25.5 | 16.6 | 17.8 | 15.7 | 12.9 | 14.2 | 11.4 |
| 1980 | 26.3 | 28.1 | 24.5 | 28.0 | 30.1 | 26.0 | 15.0 | 14.0 | 15.8 | 13.2 | 15.0 | 11.8 |
| 1981 | 24.7 | 26.6 | 22.8 | 26.3 | 28.4 | 24.2 | 14.9 | 15.4 | 14.5 | 12.5 | 14.4 | 10.9 |
| 1982 | 25.2 | 26.9 | 23.4 | 26.7 | 28.8 | 24.6 | 15.6 | 14.6 | 16.4 | 15.9 | 17.8 | 14.2 |
| 1983 | 26.2 | 27.8 | 24.6 | 27.4 | 29.4 | 25.4 | 16.2 | 16.5 | 15.9 | 17.8 | 16.8 | 18.8 |
| 1984 | 25.5 | 27.1 | 24.0 | 27.0 | 28.5 | 25.4 | 14.8 | 17.1 | 13.0 | 18.1 | 17.0 | 19.2 |
| 1985 | 25.7 | 26.9 | 24.6 | 27.3 | 28.6 | 26.0 | 14.4 | 12.9 | 15.6 | 18.2 | 18.6 | 17.7 |
| 1986 | 26.0 | 26.7 | 25.3 | 28.1 | 29.1 | 27.1 | 14.2 | 11.9 | 16.3 | 15.3 | 15.4 | 15.2 |
| 1987 | 25.6 | 26.1 | 25.2 | 27.6 | 28.0 | 27.1 | 13.8 | 14.0 | 13.6 | 14.5 | 15.7 | 13.4 |
| 1988 | 26.4 | 27.6 | 25.2 | 28.0 | 29.1 | 26.9 | 14.8 | 15.3 | 14.4 | 18.1 | 19.8 | 16.3 |
| 1989 | 27.3 | 28.3 | 26.5 | 29.5 | 30.5 | 28.5 | 15.4 | 15.0 | 15.6 | 16.5 | 15.7 | 17.2 |
| 1990 | 27.1 | 28.0 | 26.2 | 29.3 | 30.0 | 28.6 | 16.4 | 18.6 | 14.5 | 14.0 | 12.9 | 15.2 |
| 1991 | 27.2 | 27.0 | 27.3 | 29.7 | 29.7 | 29.8 | 13.4 | 13.7 | 13.1 | 16.3 | 14.4 | 18.1 |
| Bachelor's degree or higher |  |  |  |  |  |  |  |  |  |  |  |  |
| 1992 | 27.3 | 26.9 | 27.8 | 30.0 | 29.5 | 30.4 | 13.7 | 14.2 | 13.2 | 15.6 | 14.3 | 17.0 |
| 1993 | 27.3 | 27.2 | 27.4 | 29.8 | 30.0 | 29.5 | 16.1 | 14.8 | 17.2 | 13.6 | 12.1 | 15.3 |
| 1994 | 27.0 | 26.6 | 27.4 | 29.7 | 29.8 | 29.6 | 16.2 | 14.0 | 17.9 | 13.3 | 11.3 | 15.5 |
| 1995 | 28.4 | 28.4 | 28.5 | 31.2 | 30.9 | 31.4 | 17.8 | 19.7 | 16.1 | 15.5 | 14.0 | 17.1 |
| 1996 | 31.1 | 30.2 | 32.0 | 34.1 | 33.6 | 34.7 | 17.0 | 13.9 | 19.6 | 16.4 | 17.1 | 15.6 |

NOTE: In 1992, the Current Population Survey (CPS) changed the questions used to obtain the educational attainment of respondents. The category "bachelor's degree or higher" includes those with an advanced degree. See the supplemental note to this indicator for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

## Note to Indicator 22: Educational attainment

The Current Population Survey (CPS), which is used for Indicators 22, 32,33, and others, changed the questions used to obtain a respondent's educational attainment beginning in 1992. Before 1992, the educational attainment questions were 1) "What is the highest grade or year of regular school...has ever attended?" and 2) "Did ...complete the grade?" There were 19 response categories for grades 1-8, for the $1^{\text {st }}-4^{\text {th }}$ year of high school, and for the $1^{\text {st }}-6^{\text {th }}$ year of college.
If respondents attended grade 12 , for example, but did not complete it, it was assumed that they had completed grade 11. If the highest grade respondents had completed was 9,10 , or 11 , they were classified as high school dropouts. If the highest grade completed was 12 or greater, they were considered to have completed high school. If they had completed the 4th year of college or greater, they were considered to have completed college.

Beginning in 1992, the two questions were changed to a single question: "What is the highest level of school...has completed or the highest degree...has received?" In the new response categories, several of the lower levels were collapsed into a single summary category such as " 1 st $, 2^{\text {nd }}, 3$, $3^{\text {rd }}$, or $4^{\text {th }}$ grades." At the high school level, a new category " $12^{\text {th }}$ grade, no diploma" was added. The biggest change was in the categories for high school completion and beyond, which are as follows:

- High school graduate, high school diploma or equivalent (e.g., GED);
- Some college but no degree;
- Associate's degree in college, academic program;
- Associate's degree in college, occupational or vocational program;

■ Bachelor's degree (e.g., B.A., A.B., B.S.);

- Master's degree (e.g., M.A., M.S., M.Eng., M.Ed., M.S.W., M.B.A.);
- Professional school degree (e.g., M.D., D.D.S., D.V.M., L.L.B., J.D.); and

Doctor's degree (e.g., Ph.D., Ed.D.).

The new question puts more emphasis on credentials received beginning at the high school level and puts less emphasis on the level attended or completed in college if that attendance did not lead to a credential.

This change created some uncertainty about the comparability of measures, such as high school completion rates and college completion rates over time. Below is a discussion of the possible effects the new question may have on high school and college completion rates.
High school completion: The earlier educational attainment question did not explicitly address high school equivalency certificates. Therefore, it is possible that an individual who attended grade 10, dropped out without completing that grade, and later took the GED test and received a high school equivalency credential would not have been counted as completing high school. The new question, however, explicitly treats these individuals as high school graduates. Since 1988, an additional question has been added to the October CPS to explicitly ask respondents whether they had taken the GED. The vast majority of those who responded "yes" were classified as high school graduates using the educational attainment question.
The earlier educational attainment question treated individuals who completed grade 12 as high school graduates. However, the new question added a new response category called " $12^{\text {th }}$ grade, no diploma," and these respondents were not treated as graduates. However, the number of individuals in this category historically has been very small. In summary, it appears that the question change has had minor effects on measured high school completion rates.

College completion: With the increasing prevalence of individuals taking more than 4 years to earn a bachelor's degree, some researchers are concerned that the college completion rate based on the category " $4^{\text {th }}$ year or higher of college completed" would overstate the bachelor's degree (or higher) completion rate. However, the college completion rates among those aged 25-29 in 1992 and 1993 using the new CPS question were very similar to the completion rates for those in 1990 and 1991 using the old questions. In summary, it appears that the question change has had a very small effect on measured college completion rates.

Some college: With the new question, someone who attends college for only a few months should respond "some college," but with the old question they should have responded "attended first year of college and did not complete it." In the past, the calculation of the percentage of the population with 1-3 years of college excluded these individuals. However, with the new question, the information to exclude them is not available, and those with only a few months of college are included in the "some college" category. So, in principle, the percentage of individuals with "some college" or an associate's degree would be expected to be larger than the percentage with 1-3 years of college. Therefore, it does not appear useful to compare the percentage of those with "some college or an associate's degree" using the new question, to the percentage of those who completed "1-3 years of college" using the old question.
Indicators 32 and 33 use labor force statistics for the civilian population and annual median earnings for wage and salary workers with different levels of educational attainment. The discussion above suggests that the "high school graduate with no further
education" category based on the new item is larger than before, because it includes all those with an equivalency certificate; however, it is actually smaller than before because it excludes those who completed " $12^{\text {th }}$ grade, no diploma" and those with only a few months of college. The latter group is now included in the "1-3 years of college" category.

Nevertheless, the employment and earnings of the respondents who have been added and dropped from each category are similar; therefore, the net effect of the misclassification on employment rates and average annual earnings is likely to be minor. For this reason, it is still useful to compare the employment rates and median annual earnings of recent cohorts with "some college or an associate's degree" to older cohorts who completed " $1-3$ years of college."
For further information on this issue, see Robert Kominski and Paul M. Siegel, "Measuring Education in the Current Population Survey," Monthly Labor Review, September 1993.

Table 23-1 Percentage of the population who had completed secondary and higher education, by sex, country, and age: 1994

| Country | Total |  | Male |  | Female |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Secondary education ${ }^{1}$ | Higher education | Secondary education' | Higher education | Secondary education ${ }^{\prime}$ | Higher education |
|  |  |  | 25-64 years |  |  |  |
| Large countries |  |  |  |  |  |  |
| Canada | 74.1 | 16.9 | 73.6 | 18.5 | 74.5 | 15.2 |
| France ${ }^{2}$ | 67.1 | 9.2 | 71.3 | 10.6 | 63.0 | 7.9 |
| Germany | 84.0 | 12.6 | 90.0 | 15.7 | 77.7 | 9.3 |
| Italy | 33.2 | 7.5 | 35.0 | 8.5 | 31.4 | 6.5 |
| Japan ${ }^{3}$ | 69.7 | 13.3 | 70.9 | 21.5 | 68.5 | 5.2 |
| United Kingdom | 74.5 | 11.7 | 80.1 | 14.8 | 68.9 | 8.6 |
| United States | 85.1 | 24.4 | 84.7 | 26.7 | 85.6 | 22.3 |
| Other countries |  |  |  |  |  |  |
| Australia | 50.2 | 13.4 | 60.1 | 14.2 | 40.3 | 12.6 |
| Austria | 68.1 | 5.6 | 75.4 | 7.2 | 60.7 | 4.1 |
| Belgium | 49.4 | 10.1 | 50.8 | 13.0 | 47.9 | 7.2 |
| Denmark | 60.0 | 13.7 | 64.1 | 14.2 | 55.8 | 13.1 |
| Finland | 63.6 | 10.9 | 62.8 | 12.5 | 64.4 | 9.2 |
| Greece | 44.5 | 12.1 | 46.5 | 13.6 | 42.6 | 10.6 |
| Ireland | 45.2 | 8.8 | 41.7 | 10.2 | 48.7 | 7.4 |
| Netherlands | 59.8 | 21.4 | 65.3 | 24.5 | 54.2 | 18.2 |
| New Zealand | 57.3 | 9.2 | 62.9 | 10.7 | 51.8 | 7.8 |
| Norway | 80.7 | 16.4 | 81.2 | 17.2 | 80.2 | 15.5 |
| Portugal | 19.1 | 7.2 | 18.8 | 7.8 | 19.4 | 6.7 |
| Spain | 26.2 | 11.0 | 28.6 | 11.2 | 23.9 | 10.8 |
| Sweden | 72.3 | 12.2 | 70.7 | 12.6 | 73.9 | 11.9 |
| Switzerland | 82.2 | 8.4 | 88.8 | 11.6 | 75.6 | 5.2 |
| Turkey | 19.8 | 7.0 | 22.2 | 8.2 | 16.2 | 5.3 |
|  | 25-34 years old |  |  |  |  |  |
| Large countries |  |  |  |  |  |  |
| Canada | 82.3 | 18.4 | 80.6 | 18.0 | 84.0 | 18.9 |
| France ${ }^{2}$ | 84.4 | 11.6 | 86.4 | 11.9 | 82.3 | 11.3 |
| Germany | 89.6 | 11.9 | 91.6 | 12.7 | 87.5 | 11.0 |
| Italy | 47.3 | 7.9 | 45.6 | 7.7 | 49.0 | 8.1 |
| Japan ${ }^{3}$ | 90.6 | 22.9 | 89.3 | 34.2 | 91.8 | 11.5 |
| United Kingdom | 86.1 | 13.7 | 87.3 | 15.7 | 84.9 | 11.7 |
| United States | 86.4 | 23.4 | 85.2 | 23.4 | 87.5 | 23.5 |
| Other countries |  |  |  |  |  |  |
| Australia | 54.3 | 14.7 | 61.8 | 13.9 | 46.9 | 15.6 |
| Austria | 79.3 | 6.3 | 82.6 | 7.0 | 75.8 | 5.6 |
| Belgium | 65.2 | 13.5 | 63.4 | 15.3 | 67.2 | 11.6 |
| Denmark | 67.9 | 13.6 | 68.1 | 13.1 | 67.6 | 14.2 |
| Finland | 81.9 | 11.8 | 79.3 | 12.7 | 84.7 | 10.8 |
| Greece | 62.5 | 15.3 | 62.2 | 14.6 | 62.7 | 16.0 |
| Ireland | 61.4 | 10.8 | 55.9 | 10.9 | 66.7 | 10.6 |
| Netherlands | 69.4 | 23.9 | 69.1 | 25.0 | 69.7 | 22.9 |
| New Zealand | 61.5 | 9.9 | 65.5 | 10.6 | 57.8 | 9.3 |
| Norway | 88.9 | 18.2 | 87.5 | 16.6 | 90.3 | 19.9 |
| Portugal | 30.2 | 9.6 | 25.9 | 8.1 | 34.1 | 11.0 |
| Spain | 45.3 | 17.1 | 44.0 | 14.8 | 46.6 | 19.3 |
| Sweden | 84.6 | 9.7 | 83.4 | 9.5 | 85.9 | 9.9 |
| Switzerland | 88.7 | 8.9 | 92.1 | 11.4 | 85.1 | 6.4 |
| Turkey | 23.6 | 6.6 | 27.2 | 7.5 | 19.5 | 5.6 |

Table 23-1 Percentage of the population who had completed secondary and higher education, by sex, country, and age: 1994-Continued


## Supplemental Tables and Notes

Table 23-1 Percentage of the population who had completed secondary and higher education, by sex, country, and age: 1994-Continued

| Country | Total |  | Male |  | Female |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Secondary education ${ }^{1}$ | Higher education | Secondary education ${ }^{1}$ | Higher education | Secondary education | Higher education |
| Other countries |  |  |  |  |  |  |
| Australia | 47.3 | 12.2 | 58.0 | 13.7 | 36.2 | 10.6 |
| Austria | 63.7 | 5.1 | 72.6 | 7.4 | 54.7 | 2.8 |
| Belgium | 42.9 | 8.9 | 45.8 | 12.5 | 39.9 | 5.3 |
| Denmark | 59.3 | 13.6 | 64.2 | 15.3 | 54.2 | 11.9 |
| Finland | 55.9 | 11.5 | 55.5 | 14.1 | 56.4 | 8.9 |
| Greece | 34.6 | 10.2 | 39.0 | 12.9 | 30.3 | 7.5 |
| Ireland | 35.2 | 7.5 | 32.8 | 9.7 | 37.6 | 5.3 |
| Netherlands | 53.9 | 19.4 | 62.5 | 23.9 | 45.0 | 14.8 |
| New Zealand | 55.8 | 8.8 | 62.4 | 10.9 | 49.1 | 6.7 |
| Norway | 77.8 | 14.8 | 79.0 | 17.3 | 76.6 | 12.1 |
| Portugal | 14.7 | 6.3 | 15.9 | 8.0 | 13.7 | 4.7 |
| Spain | 16.0 | 8.0 | 20.5 | 10.2 | 11.7 | 6.0 |
| Sweden | 68.6 | 14.7 | 66.3 | 15.1 | 71.0 | 14.2 |
| Switzerland | 79.3 | 7.9 | 87.8 | 11.3 | 70.8 | 4.5 |
| Turkey | 16.3 | 8.0 | 18.4 | 9.7 | 12.4 | 4.8 |

'Includes individuals who had at least completed secondary NOTE: In the United States, completing secondary education is education.
${ }^{2}$ France's definitions of ISCED levels were changed so that they would be more similar to EUROSTAT definitions and would be easier to compare to the definitions of other countries. As a result, data for 1994 are not directly comparable with data for other years.
${ }^{3}$ Data are for 1989.
defined as graduating from high school or earning a GED; completing higher education is defined as earning a bachelor's degree or higher.
SOURCE: Organization for Economic Cooperation and Development, Indicators of Education Systems, OECD Education Statistics 1985-1994.

Table 24-1 Percentage of high school graduates taking selected mathematics and science courses in high school, by race/ethnicity: 1982, 1987, 1990, and 1994

| Mathematics and science Courses (credits) | 1982 |  |  |  |  | 1987 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White | Black | $\begin{array}{r} \text { His- } \\ \text { panic } \end{array}$ | Asian/ <br> Pacific <br> Islander | American Indian/ Alaskan Native | White | Black | Hispanic | Asian/ <br> Pacific <br> Islander | American Indian/ Alaskan Native |
| Mathematics ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |
| Any mathematics (1.00) | 98.7 | 99.2 | 97.2 | 100.0 | 99.6 | 98.9 | 98.2 | 99.1 | 99.8 | 98.7 |
| Algebra I (1.00) | 57.8 | 42.4 | 42.4 | 55.5 | 33.2 | 66.1 | 54.6 | 53.6 | 63.6 | 60.9 |
| Geometry (1.00) | 51.0 | 28.8 | 25.6 | 64.9 | 33.2 | 63.0 | 42.2 | 39.6 | 81.1 | 43.2 |
| Algebra II (0.50) | 36.0 | 22.0 | 18.0 | 45.6 | 10.8 | 51.6 | 30.8 | 29.2 | 66.4 | 27.6 |
| Trigonometry (0.50) | 13.7 | 6.0 | 6.4 | 26.8 | 3.0 | 20.4 | 10.6 | 9.8 | 41.3 | 4.2 |
| Analysis/pre-calculus (0.50) | 6.8 | 2.2 | 2.8 | 14.5 | 1.8 | 13.2 | 5.1 | 7.3 | 39.4 | 5.4 |
| Statistics/probability (0.50) | 1.2 | 0.5 | 0.1 | 1.7 | ${ }^{2} 0.0$ | 1.4 | 0.3 | 0.2 | 1.5 | ${ }^{2} 0.0$ |
| Calculus (1.00) | 5.4 | 1.3 | 1.7 | 12.8 | 4.0 | 5.6 | 2.2 | 3.6 | 29.4 | 0.4 |
| AP calculus (1.00) | 1.8 | 0.3 | 0.4 | 5.5 | 0.1 | 2.7 | 1.4 | 2.6 | 23.5 | 0.4 |
| Science |  |  |  |  |  |  |  |  |  |  |
| Any science (1.00) | 96.9 | 97.4 | 93.8 | 96.2 | 92.1 | 98.8 | 98.1 | 98.6 | 99.3 | 99.8 |
| Biology (1.00) | 78.3 | 73.0 | 68.2 | 83.7 | 66.7 | 88.7 | 84.7 | 85.4 | 91.5 | 90.2 |
| AP/honors biology (1.00) | 7.4 | 4.6 | 3.1 | 11.9 | 0.6 | 2.7 | 1.4 | 1.6 | 4.2 | 0.3 |
| Chemistry (1.00) | 34.1 | 21.9 | 15.5 | 52.8 | 25.9 | 46.6 | 28.4 | 29.1 | 69.8 | 26.4 |
| AP/honors chemistry (1.00) | 3.3 | 1.6 | 1.3 | 5.8 | 0.9 | 3.4 | 1.1 | 2.2 | 15.3 | 0.6 |
| Physics (1.00) | 16.3 | 7.3 | 5.7 | 34.8 | 8.1 | 20.6 | 9.7 | 9.9 | 46.5 | 8.3 |
| AP/honors physics (1.00) | 1.2 | 0.9 | 0.4 | 3.4 | ${ }^{2} 0.0$ | 1.6 | 0.4 | 0.8 | 5.6 | 1.4 |
| Engineering (1.00) | 0.2 | 0.1 | 0.1 | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | 0.1 | 0.4 | 0.1 | 0.4 | ${ }^{2} 0.0$ |
| Astronomy (0.50) | 1.3 | 0.4 | 0.7 | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | 0.9 | 0.3 | 0.7 | 0.7 | 0.5 |
| Geology/earth science (0.50) | 14.0 | 10.0 | 11.2 | 9.6 | 18.8 | 14.0 | 18.1 | 11.6 | 12.4 | 12.3 |
| Biology and chemistry (2.00) | 31.3 | 19.7 | 14.2 | 48.5 | 21.9 | 45.1 | 27.2 | 27.9 | 66.3 | 24.8 |
| Biology, chemistry, and physics (3.00) | 12.2 | 4.8 | 3.9 | 28.4 | 7.8 | 17.6 | 8.3 | 8.2 | 41.8 | 6.2 |

Table 24-1 Percentage of high school graduates taking selected mathematics and science courses in high school, by race/ethnicity: 1982, 1987, 1990, and 1994-Continued

| Mathematics and science courses (credits) | 1990 |  |  |  |  | 1994 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White | Black | $\begin{array}{r} \text { His- } \\ \text { panic } \end{array}$ |  | American Indian/ Alaskan Native | White | Black | $\begin{array}{r} \text { His- } \\ \text { panic } \\ \hline \end{array}$ | Asian/ <br> Pacific <br> Islander | $\begin{array}{r} \text { American } \\ \text { Indian/ } \\ \text { Alaskan Native } \end{array}$ |
| Mathematics ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |
| Any mathematics (1.00) | 99.5 | 99.5 | 99.9 | 99.9 | 100.0 | 99.6 | 99.3 | 99.2 | 100.0 | 98.9 |
| Algebral (1.00) | 64.2 | 65.1 | 64.8 | 63.2 | 61.7 | 67.5 | 65.0 | 70.7 | 61.7 | 58.7 |
| Geometry (1.00) | 65.6 | 56.2 | 53.6 | 70.6 | 55.7 | 72.7 | 58.1 | 69.4 | 75.8 | 60.0 |
| Algebra II (0.50) | 55.0 | 41.4 | 35.7 | 59.9 | 47.1 | 61.6 | 43.7 | 51.0 | 66.6 | 39.2 |
| Trigonometry (0.50) | 19.3 | 14.0 | 10.8 | 35.1 | 14.7 | 18.6 | 13.6 | 9.8 | 25.3 | 6.7 |
| Analysis/pre-calculus (0.50) | 14.8 | 6.2 | 7.2 | 25.3 | 7.6 | 18.2 | 9.8 | 13.9 | 33.9 | 8.7 |
| Statistics/probability (0.50) | 1.0 | 1.1 | 0.9 | 1.5 | 0.3 | 2.3 | 1.7 | 1.0 | 1.1 | 1.2 |
| Calculus (1.00) | 6.9 | 2.8 | 3.8 | 18.5 | 4.2 | 9.6 | 3.8 | 6.0 | 23.4 | 3.8 |
| AP calculus (1.00) | 4.2 | 1.2 | 3.0 | 15.6 | 3.0 | 7.3 | 2.0 | 4.6 | 21.0 | 2.2 |
| Science |  |  |  |  |  |  |  |  |  |  |
| Any science (1.00) | 99.3 | 99.6 | 99.3 | 99.8 | 100.0 | 99.7 | 99.5 | 99.3 | 99.3 | 99.7 |
| Biology (1.00) | 91.5 | 91.3 | 90.3 | 90.4 | 90.5 | 94.4 | 91.3 | 94.0 | 90.9 | 91.2 |
| AP/honors biology (1.00) | 5.0 | 3.8 | 2.4 | 6.3 | 1.9 | 4.6 | 2.7 | 3.3 | 8.3 | 1.7 |
| Chemistry (1.00) | 51.5 | 40.3 | 38.4 | 63.6 | 35.5 | 58.5 | 43.8 | 46.5 | 69.3 | 41.3 |
| AP/honors chemistry (1.00) | 3.7 | 2.5 | 1.1 | 7.7 | 4.5 | 4.3 | 2.1 | 2.5 | 7.7 | 0.6 |
| Physics (1.00) | 23.1 | 14.6 | 13.3 | 38.4 | 14.7 | 26.1 | 14.7 | 16.0 | 42.3 | 10.3 |
| AP/honors physics (1.00) | 2.1 | 0.7 | 1.0 | 5.9 | 0.5 | 2.5 | 1.4 | 1.8 | 6.0 | 0.3 |
| Engineering (1.00) | 0.1 | 0.1 | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | 0.2 | 0.4 | 0.1 | 1.0 | ${ }^{2} 0.0$ |
| Astronomy (0.50) | 1.4 | 0.4 | 1.1 | 0.7 | 1.7 | 2.0 | 0.6 | 0.4 | 0.8 | 2.2 |
| Geology/earth science (0.50) | 27.6 | 15.9 | 14.0 | 15.7 | 31.0 | 23.8 | 23.3 | 15.3 | 16.7 | 23.2 |
| Biology and chemistry (2.00) | 50.2 | 39.5 | 36.5 | 60.1 | 34.2 | 56.4 | 42.2 | 45.1 | 64.8 | 39.6 |
| Biology, chemistry, and physics (3.00) | 20.6 | 12.0 | 10.2 | 33.7 | 10.8 | 22.7 | 13.0 | 13.4 | 37.2 | 8.0 |

${ }^{1}$ These data only report the percentage of students who earned credit in each mathematics course while in high school and do not count those students who took these courses prior to entering high school. In 1992, for example, approximately 93 percent of students had taken algebral at some point before graduating high school, either before or during high school, and about 70 percent had taken geometry.
${ }^{2}$ Percents less than 0.05 are rounded to 0.0 .
SOURCE: U.S. Department of Education, National Center for Education Statistics, The 1994 High School Transcript Study Tabulations: Comparative Data on Credits Earned and Demographics for 1994, 1990, 1987, and 1982 High School Graduates, 1996.

Table 24-2 Percentage of high school graduates taking selected mathematics and science course in high school, by sex: 1982, 1987, 1990, and 1994

| Mathematics and science courses (credits) | 1982 |  |  | 1987 |  |  | 1990 |  |  | 1994 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Male Female |  |  | Total | Male Female |  | Total Male Female |  |  | Total Male Female |  |  |
| Mathematics ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Any mathematics (1.00) | 98.5 | 98.8 | 98.3 | 98.9 | 98.7 | 99.1 | 99.6 | 99.5 | 99.6 | 99.6 | 99.5 | 99.6 |
| Algebra I (1.00) | 53.9 | 52.2 | 55.4 | 64.0 | 62.3 | 65.7 | 64.2 | 61.7 | 66.5 | 66.4 | 64.7 | 68.1 |
| Geometry (1.00) | 45.5 | 45.0 | 45.9 | 59.7 | 58.8 | 60.4 | 63.4 | 62.4 | 64.4 | 70.4 | 68.3 | 72.4 |
| Algebra II (0.50) | 32.2 | 32.4 | 32.0 | 48.6 | 47.3 | 48.9 | 51.7 | 50.0 | 53.3 | 58.6 | 55.4 | 61.6 |
| Trigonometry (0.50) | 12.1 | 13.2 | 11.1 | 18.6 | 19.5 | 17.6 | 18.2 | 18.1 | 18.2 | 17.2 | 16.6 | 17.8 |
| Analysis/pre-calculus (0.50) | 5.9 | 6.2 | 5.6 | 12.6 | 13.5 | 11.6 | 13.4 | 14.0 | 12.8 | 17.3 | 16.3 | 18.2 |
| Statistics/probability (0.50) | 1.0 | 1.1 | 0.9 | 1.3 | 1.1 | 1.2 | 1.0 | 1.2 | 0.8 | 2.0 | 2.0 | 2.1 |
| Calculus (1.00) | 4.6 | 5.1 | 4.1 | 6.0 | 7.4 | 4.6 | 6.5 | 7.5 | 5.6 | 9.2 | 9.4 | 9.1 |
| AP calculus (1.00) | 1.5 | 1.6 | 1.4 | 3.2 | 3.8 | 2.7 | 4.1 | 5.0 | 3.4 | 7.0 | 7.2 | 6.8 |
| Science |  |  |  |  |  |  |  |  |  |  |  |  |
| Any science (1.00) | 96.6 | 96.4 | 96.7 | 98.7 | 98.4 | 99.0 | 99.4 | 99.1 | 99.6 | 99.5 | 99.3 | 99.8 |
| Biology (1.00) | 76.4 | 74.2 | 78.4 | 87.8 | 86.3 | 89.4 | 91.3 | 90.0 | 92.5 | 93.5 | 92.3 | 94.7 |
| AP/honors biology (1.00) | 6.6 | 6.1 | 7.1 | 2.7 | 2.8 | 2.6 | 4.9 | 4.4 | 5.4 | 4.6 | 4.0 | 5.1 |
| Chemistry (1.00) | 30.9 | 31.9 | 30.0 | 43.7 | 44.3 | 43.2 | 49.0 | 47.9 | 50.0 | 56.0 | 53.2 | 58.7 |
| AP/honors chemistry (1.00) | 2.9 | 3.5 | 2.3 | 3.3 | 3.9 | 2.7 | 3.5 | 4.1 | 2.9 | 3.9 | 4.1 | 3.7 |
| Physics (1.00) | 14.2 | 18.8 | 10.0 | 19.2 | 24.0 | 14.6 | 21.5 | 25.4 | 18.0 | 24.4 | 26.9 | 22.0 |
| AP/honors physics (1.00) | 1.0 | 1.4 | 0.7 | 1.6 | 2.4 | 0.9 | 2.0 | 2.5 | 1.6 | 2.4 | 3.0 | 1.8 |
| Engineering (1.00) | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | ${ }^{2} 0.0$ | 0.3 | 0.4 | 0.2 |
| Astronomy (0.50) | 1.1 | 1.3 | 0.9 | 1.0 | 1.1 | 0.8 | 1.2 | 1.4 | 1.1 | 1.7 | 2.0 | 1.5 |
| Geology/earth science (0.50) | 13.2 | 14.2 | 12.3 | 14.5 | 15.0 | 13.8 | 24.8 | 25.7 | 24.1 | 23.0 | 22.8 | 23.2 |
| Biology and chemistry (2.00) | 28.1 | 28.2 | 28.0 | 42.1 | 42.2 | 42.0 | 47.6 | 46.4 | 48.8 | 53.8 | 50.9 | 56.6 |
| Biology, chemistry, and physics (3.00) | 10.6 | 13.4 | 7.9 | 16.4 | 20.2 | 12.8 | 18.8 | 21.8 | 16.1 | 21.3 | 23.1 | 19.6 |

${ }^{1}$ These data only report the percentage of students who earned credit in each mathematics course while in high school and do not count those students who took these courses prior to entering high school. In 1992, for example, approximately 93 percent of students had taken algebra I at some point before graduating from high school, either before or during high school, and about 70 percent had taken geometry.
${ }^{2}$ Percent less than 0.05 is rounded to 0.0.

Table 24-3 Percentage of high school graduates taking selected mathematics and science courses in high school, by control of school: 1982, 1987, 1990, and 1994

| Mathematics and science courses (credits) | 1982 |  | 1987 |  | 1990 |  | 1994 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Public | Private | Public | Private | Public | Private | Public | Private |
| Mathematics ${ }^{1}$ |  |  |  |  |  |  |  |  |
| Any mathematics (1.00) | 98.4 | 99.8 | 98.8 | 99.9 | 99.6 | 99.8 | 99.5 | 99.9 |
| Algebral (1.00) | 51.3 | 75.2 | 62.7 | 77.8 | 62.7 | 79.9 | 65.4 | 78.1 |
| Geometry (1.00) | 41.9 | 75.0 | 57.1 | 85.5 | 61.3 | 84.3 | 68.8 | 88.8 |
| Algebra II (0.50) | 29.7 | 52.8 | 45.0 | 78.7 | 49.3 | 75.5 | 56.4 | 81.8 |
| Trigonometry (0.50) | 11.0 | 21.4 | 17.4 | 28.0 | 17.2 | 27.3 | 16.2 | 29.5 |
| Analysis/pre-calculus (0.50) | 5.0 | 12.8 | 11.4 | 22.8 | 12.2 | 25.3 | 16.2 | 29.6 |
| Statistics/probability (0.50) | 0.9 | 1.9 | 1.1 | 1.6 | 0.8 | 2.6 | 2.1 | 1.6 |
| Calculus (1.00) | 3.7 | 12.0 | 5.5 | 10.9 | 6.2 | 9.6 | 8.8 | 14.4 |
| AP calculus (1.00) | 1.3 | 3.0 | 3.0 | 5.4 | 3.8 | 7.0 | 6.5 | 11.9 |
| Science |  |  |  |  |  |  |  |  |
| Any science (1.00) | 96.2 | 99.0 | 98.6 | 100.0 | 99.3 | 99.9 | 99.5 | 100.0 |
| Biology (1.00) | 74.5 | 91.9 | 87.0 | 96.7 | 90.7 | 97.1 | 93.5 | 97.4 |
| AP/honors biology (1.00) | 6.5 | 7.5 | 2.2 | 7.9 | 5.0 | 3.9 | 4.2 | 9.1 |
| Chemistry (1.00) | 28.7 | 49.2 | 41.0 | 70.9 | 47.2 | 66.8 | 54.4 | 74.8 |
| AP/honors chemistry (1.00) | 2.6 | 4.9 | 3.1 | 5.0 | 3.6 | 2.1 | 4.0 | 3.2 |
| Physics (1.00) | 13.3 | 22.0 | 18.3 | 28.6 | 20.6 | 31.5 | 23.7 | 32.1 |
| AP/honors physics (1.00) | 1.0 | 1.4 | 1.3 | 4.6 | 1.9 | 3.2 | 2.4 | 2.2 |
| Engineering (1.00) | 0.2 | 0.1 | 0.1 | ${ }^{2} 0.0$ | 0.1 | 0.1 | 0.3 | ${ }^{2} 0.0$ |
| Astronomy (0.50) | 1.2 | 0.1 | 1.0 | 0.3 | 1.3 | 0.6 | 1.8 | 0.3 |
| Geology/earth science (0.50) | 13.8 | 8.6 | 14.9 | 10.5 | 25.1 | 22.1 | 23.1 | 21.6 |
| Biology and chemistry (2.00) | 25.9 | 46.8 | 39.3 | 69.4 | 45.9 | 65.2 | 52.2 | 72.6 |
| Biology, chemistry, and physics (3.00) | 9.7 | 17.5 | 15.6 | 25.0 | 17.9 | 28.3 | 20.5 | 30.1 |

${ }^{1}$ These data only report the percentage of students who earned credit in each mathematics course while in high school and do not count those students who took these courses prior to entering high school. In 1992, for example, approximately 93 percent of students had taken algebra I at some point before graduating high school, either before or during high school, and about 70 percent had taken geometry.
${ }^{2}$ Percents less than 0.05 are rounded to 0.0 .

SOURCE: U.S. Department of Education, National Center for Education Statistics, The 1994 High School Transcript Study Tabulations: Comparative Data on Credits Earned and Demographics for 1994, 1990, 1987, and 1982 High School Graduates, 1996.

Table 24-4 Percentage of high school graduates taking selected mathematics and science courses in high school, by urbanicity: 1987 and 1994

| Mathematics and science courses (credits) | 1987 |  |  |  | 1994 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Big city Urban fringe Medium city Small place |  |  |  | Big city Urban fringe Medium city Small place |  |  |  |
| Mathematics ${ }^{1}$ |  |  |  |  |  |  |  |  |
| Any mathematics (1.00) | 98.8 | 99.2 | 98.7 | 98.8 | 99.6 | 99.6 | 99.5 | 99.5 |
| Algebra I (1.00) | 58.3 | 63.1 | 65.6 | 66.0 | 71.4 | 59.9 | 64.6 | 69.0 |
| Geometry (1.00) | 56.4 | 66.2 | 60.3 | 56.2 | 78.2 | 73.5 | 72.8 | 64.6 |
| Algebra II (0.50) | 42.0 | 52.2 | 51.0 | 46.4 | 65.2 | 59.3 | 57.2 | 55.9 |
| Trigonometry (0.50) | 19.3 | 25.1 | 20.7 | 13.1 | 18.1 | 21.1 | 19.2 | 13.8 |
| Analysis/pre-calculus (0.50) | 15.0 | 13.8 | 14.7 | 10.1 | 21.2 | 20.0 | 18.9 | 13.5 |
| Statistics/probability (0.50) | 1.3 | 1.2 | 0.5 | 1.3 | 2.1 | 3.2 | 2.0 | 1.3 |
| Calculus (1.00) | 7.1 | 8.9 | 5.3 | 3.9 | 9.6 | 12.4 | 11.1 | 6.5 |
| AP calculus (1.00) | 5.0 | 5.7 | 2.4 | 1.4 | 7.7 | 9.7 | 8.6 | 4.5 |
| Science |  |  |  |  |  |  |  |  |
| Any science (1.00) | 98.9 | 98.9 | 98.1 | 98.7 | 99.7 | 99.5 | 99.8 | 99.4 |
| Biology (1.00) | 86.7 | 87.8 | 87.2 | 88.4 | 89.6 | 93.5 | 93.5 | 95.1 |
| AP/honors biology (1.00) | 2.4 | 3.8 | 3.9 | 1.6 | 3.4 | 6.8 | 5.8 | 3.2 |
| Chemistry (1.00) | 39.0 | 50.9 | 44.9 | 40.1 | 61.0 | 60.0 | 56.0 | 51.4 |
| AP/honors chemistry (1.00) | 3.2 | 3.8 | 5.6 | 2.2 | 2.3 | 4.0 | 4.4 | 4.4 |
| Physics (1.00) | 19.1 | 22.2 | 17.4 | 18.0 | 26.6 | 31.1 | 25.9 | 19.0 |
| AP/honors physics (1.00) | 1.7 | 2.0 | 2.8 | 0.9 | 3.6 | 4.3 | 3.2 | 0.4 |
| Engineering (1.00) | 0.4 | 0.1 | ${ }^{2} 0.0$ | 0.1 | 0.2 | 0.7 | 0.3 | 0.1 |
| Astronomy (0.50) | 1.4 | 1.6 | 0.7 | 0.5 | 0.9 | 2.5 | 2.7 | 1.2 |
| Geology/earth science (0.50) | 13.5 | 18.3 | 12.4 | 13.0 | 26.5 | 27.2 | 18.6 | 20.5 |
| Biology and chemistry (2.00) | 37.0 | 48.8 | 43.4 | 38.9 | 56.2 | 58.4 | 53.2 | 50.3 |
| Biology, chemistry, and physics (3.00) | 20.2 | 20.8 | 19.3 | 17.2 | 23.0 | 27.9 | 21.8 | 16.4 |

[^14]Table 24-5 Percentage of high school graduates taking selected mathematics and science courses, by geographic region: 1982 and 1994

| Mathematics and science courses (credits) | 1982 |  |  |  | 1994 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Northeast | South | Midwest | West | Northeast | South | Midwest | West |
| Mathematics ${ }^{1}$ |  |  |  |  |  |  |  |  |
| Any mathematics (1.00) | 97.9 | 99.4 | 98.7 | 97.6 | 99.5 | 99.7 | 99.5 | 99.3 |
| Algebra I (1.00) | 51.7 | 55.3 | 56.8 | 49.3 | 62.2 | 68.5 | 67.5 | 63.5 |
| Geometry (1.00) | 48.4 | 40.4 | 49.8 | 43.3 | 74.9 | 70.6 | 68.9 | 68.6 |
| Algebra II (0.50) | 40.0 | 33.2 | 28.1 | 26.9 | 70.4 | 59.4 | 55.6 | 51.6 |
| Trigonometry (0.50) | 16.0 | 10.0 | 12.2 | 10.4 | 22.2 | 17.6 | 17.3 | 11.4 |
| Analysis/pre-calculus (0.50) | 8.4 | 3.9 | 6.2 | 5.5 | 18.7 | 15.2 | 16.8 | 21.5 |
| Statistics/probability (0.50) | 2.2 | 0.4 | 1.1 | 0.4 | 1.8 | 1.4 | 3.3 | 1.6 |
| Calculus (1.00) | 10.9 | 2.6 | 2.4 | 3.4 | 13.6 | 8.1 | 8.7 | 9.1 |
| AP calculus (1.00) | 3.6 | 0.8 | 0.6 | 1.4 | 9.0 | 6.0 | 6.9 | 7.5 |
| Science |  |  |  |  |  |  |  |  |
| Any science (1.00) | 97.4 | 98.2 | 95.0 | 95.0 | 99.7 | 99.8 | 99.5 | 98.9 |
| Biology (1.00) | 81.2 | 80.3 | 71.1 | 71.7 | 95.4 | 96.5 | 90.4 | 90.3 |
| AP/honors biology (1.00) | 9.7 | 5.9 | 6.6 | 3.9 | 7.3 | 5.1 | 2.6 | 4.3 |
| Chemistry (1.00) | 44.2 | 26.4 | 30.3 | 21.8 | 65.0 | 53.2 | 56.3 | 54.0 |
| AP/honors chemistry (1.00) | 6.0 | 1.6 | 1.9 | 2.6 | 3.2 | 4.8 | 4.3 | 2.1 |
| Physics (1.00) | 22.6 | 9.3 | 14.9 | 10.7 | 35.9 | 20.8 | 24.6 | 22.6 |
| AP/honors physics (1.00) | 1.9 | 0.6 | 1.0 | 0.9 | 4.6 | 1.9 | 1.8 | 2.4 |
| Engineering (1.00) | 0.4 | ${ }^{2} 0.0$ | 0.1 | 0.1 | 0.6 | 0.4 | ${ }^{2} 0.0$ | 0.1 |
| Astronomy (0.50) | 1.6 | 1.0 | 1.2 | 0.4 | 1.5 | 1.2 | 3.2 | 0.6 |
| Geology/earth science (0.50) | 22.7 | 9.3 | 11.2 | 11.1 | 34.5 | 19.2 | 22.3 | 23.0 |
| Biology and chemistry (2.00) | 41.6 | 24.4 | 27.2 | 18.1 | 63.6 | 52.2 | 53.0 | 50.5 |
| Biology, chemistry, and physics (3.00) | 18.9 | 6.6 | 10.3 | 6.8 | 33.0 | 18.2 | 21.1 | 18.7 |

${ }^{1}$ These data only report the percentage of students who earned credit in mathematics courses while in high school and do not count those students who took these courses prior to entering high school. In 1992, for example, approximately 93 percent of students had taken algebra I at any time prior to graduating from high school, and about 70 percent had taken geometry.
${ }^{2}$ Percents less than 0.05 are rounded to 0.0.

SOURCE: U.S. Department of Education, National Center for Education Statistics, The 1994 High School Transcript Study Tabulations: Comparative Data on Credits Earned and Demographics for 1994, 1990, 1987, and 1982 High School Graduates, 1996.

Table 24-6 Percentage of high school graduates taking selected mathematics and science courses, by school program: ${ }^{1} 1982$ and 1994

| Mathematics and science courses (credits) | 1982 |  |  |  | 1994 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Academic | Vocational | Both | Neither | Academic | Vocational | Both | Neither |
| Mathematics ${ }^{2}$ |  |  |  |  |  |  |  |  |
| Any mathematics (1.00) | 99.9 | 96.6 | 100.0 | 97.8 | 100.0 | 97.7 | 100.0 | 95.6 |
| Algebra I (1.00) | 67.2 | 42.0 | 60.0 | 42.2 | 69.8 | 41.1 | 72.0 | 42.8 |
| Geometry (1.00) | 72.7 | 18.3 | 53.7 | 28.7 | 81.5 | 21.0 | 68.6 | 29.0 |
| Algebra II (0.50) | 55.7 | 9.4 | 39.2 | 16.8 | 70.3 | 10.5 | 55.2 | 15.2 |
| Trigonometry (0.50) | 24.3 | 1.4 | 14.4 | 3.4 | 22.5 | 0.8 | 12.6 | 3.2 |
| Analysis/pre-calculus (0.50) | 12.6 | 0.4 | 5.2 | 1.9 | 23.4 | 0.5 | 10.8 | 2.4 |
| Statistics/probability (0.50) | 2.0 | 0.1 | 1.2 | 0.3 | 2.6 | 0.3 | 1.6 | 0.4 |
| Calculus (1.00) | 10.8 | 0.1 | 3.1 | 0.4 | 12.9 | 0.2 | 4.9 | 1.2 |
| AP calculus (1.00) | 3.4 | ${ }^{3} 0.0$ | 1.2 | 0.2 | 9.9 | 0.1 | 3.3 | 0.7 |
| Science |  |  |  |  |  |  |  |  |
| Any science (1.00) | 99.8 | 92.7 | 99.4 | 94.1 | 100.0 | 97.0 | 100.0 | 96.3 |
| Biology (1.00) | 91.4 | 59.1 | 87.2 | 66.3 | 95.6 | 82.1 | 95.6 | 78.6 |
| AP/honors biology (1.00) | 12.8 | 1.3 | 6.2 | 3.1 | 6.4 | 0.1 | 2.4 | 0.3 |
| Chemistry (1.00) | 60.0 | 5.6 | 35.8 | 9.9 | 69.8 | 5.6 | 47.2 | 15.2 |
| AP/honors chemistry (1.00) | 6.1 | 0.2 | 3.4 | 0.4 | 5.5 | ${ }^{3} 0.0$ | 2.2 | 0.2 |
| Physics (1.00) | 30.4 | 1.3 | 15.6 | 1.9 | 32.6 | 1.4 | 16.2 | 3.2 |
| AP/honors physics (1.00) | 2.4 | 0.1 | 1.0 | ${ }^{3} 0.0$ | 3.6 | ${ }^{3} 0.0$ | 0.6 | 0.2 |
| Engineering (1.00) | 0.3 | 0.1 | ${ }^{3} 0.0$ | 0.1 | 0.3 | ${ }^{3} 0.0$ | 0.4 | 0.1 |
| Astronomy (0.50) | 1.7 | 0.9 | 0.9 | 0.4 | 2.1 | 0.5 | 1.2 | 1.6 |
| Geology/earth science (0.50) | 14.5 | 10.2 | 18.6 | 11.7 | 22.2 | 21.2 | 26.2 | 21.0 |
| Biology and chemistry (2.00) | 56.3 | 3.9 | 32.4 | 7.7 | 67.3 | 4.8 | 45.9 | 11.6 |
| Biology, chemistry, and physics (3.00) | 24.3 | 0.2 | 9.8 | 0.6 | 29.4 | ${ }^{3} 0.0$ | 12.5 | 0.8 |

'For definitions of school program categories, see the supplemental note to Indicator 24.
${ }^{2}$ These data only report the percentage of students who earned credit in mathematics courses while in high school and do not count those students who took these courses prior to entering high school. In 1992, for example, approximately 93 percent of students had taken
algebra I at any time prior to graduating high school, and about 70 percent had taken geometry.
${ }^{3}$ Percents less than 0.05 are rounded to 0.0.
SOURCE: U.S. Department of Education, National Center for Education Statistics, The 1994 High School Transcript Study Tabulations: Comparative Data on Credits Earned and Demographics for 1994, 1990, 1987, and 1982 High School Graduates, 1996.

## Note to Indicator 24: High school transcript studies

This analysis contains data from high school transcript studies conducted by the National Center for Education Statistics (NCES). Data on average course credits, or Carnegie units, for high school graduates come from the following studies: the 1987, 1990, and 1994 National Assessment of Educational Progress (NAEP) High School Transcript Studies (1987, 1990, and 1994 data); and the High School and Beyond (HS\&B) Transcript Study (1982 data). A description of these studies, including descriptions of the sampled populations, follows.
The 1987, 1990, and 1994 NAEP High School Transcript Studies were conducted using nearly identical methodology and techniques. The sample of schools was nationally representative, and included schools having grade 12 or 17-year-old students. The sample was also representative of graduating seniors from each school. Since the focus of the transcript studies was high school graduates, schools with 17-year-olds but without $12^{\text {th }}$ grade were not included in the subsample used in these analyses. Of the remaining schools, only those students who graduated were selected.

Between May and November of 1994, high school transcripts were collected from 25,573 students who graduated in 1994. To be consistent with the 1982 study, students with an Individualized Education Program (IEP) were omitted from all estimates in the tables. Also, students with incomplete transcripts were dropped, bringing the number of transcripts analyzed to 24,374 . These students attended 340 schools that had been sampled by the NAEP. In spring 1991, transcripts were collected from 21,607 students who graduated from high school in 1990. These students attended 330 schools that had been sampled for the NAEP.

The sample of schools for the 1987 High School Transcript Study consisted of a nationally representative sample of 497 secondary schools selected for the 1986 NAEP for grade 11, 17-yearold students, of which 433 schools participated. The 1987 study was restricted to students who were in grade 11 during the 1985-86 school year. There are 27,732 graduates from 1987 represented in the tables. Data for 1987, 1990, and 1994 in this analysis are from the NCES publication The 1994 High School Transcript Study Tabulations.
In 1982, HS\&B collected high school transcripts for members of the sophomore cohort who were selected for the second follow-up survey (about 12,000 transcripts). As in the 1987, 1990, and 1994 NAEP

High School Transcript Studies, records were obtained from all types of high schools. However, because the 1982 HS\&B used a different method to identify disabled students, students who had participated in a special education program were excluded from the tabulations to make the figures consistent.

Each of the transcript studies used the taxonomy of Classification of Secondary School Courses (CSSC), which contains approximately 2,200 course codes used to define course content and level. These studies also included additional course and student information, such as grade and credit received, grade level, graduation status, age, gender, and race/ethnicity.
The numbers in all the tables differ from previous editions of The Condition of Education for two reasons. First, a new exclusionary rule was applied to the transcripts beginning in 1996. Each year the transcripts must be examined for validity and completeness. Incomplete transcripts, those of students receiving special education diplomas, or those from schools which have unique definitions of credit hours were excluded. In previous years, transcripts showing that a student had taken more than 32 credit hours were excluded based on the supposition that their schools must be using shorter class periods than other schools, and thus one credit hour would not mean the same thing in these schools as in the average school. A case-by-case analysis of these schools showed that their class periods were no shorter than the average school; instead, these schools had particularly stringent graduation requirements. Therefore, the data for all years were recalculated to include these transcripts.

Second, in previous editions of The Condition, students who had taken algebra II or beyond in high school but had not taken algebra I or geometry were assumed to have taken these courses prior to entering high school and were included in the percentage of students who had taken these courses. Beginning with the 1996 edition, the numbers reflect only those students who took these courses while in high school. The numbers for these two subjects appear to have dropped from previous years, but in actuality, only the number of students who were included in the analysis has dropped.

[^15]Table 25-1 Number of participants in the AP program, by schools, candidates, examinations, colleges, candidates per school, examinations per candidate, and candidates per college: 1956-96

| Year | Secondary schools | Candidates | Examinations | Colleges | Candidates per secondary school | Exams per candidate | Candidates per college |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1956 | 104 | 1,229 | 2,199 | 130 | 11.8 | 1.8 | 9.5 |
| 1957 | 212 | 2,068 | 3,772 | 201 | 9.8 | 1.8 | 10.3 |
| 1958 | 355 | 3,715 | 6,800 | 279 | 10.5 | 1.8 | 13.3 |
| 1959 | 560 | 5,862 | 8,265 | 391 | 10.5 | 1.4 | 15.0 |
| 1960 | 890 | 10,531 | 14,158 | 567 | 11.8 | 1.3 | 18.6 |
| 1961 | 1,126 | 13,283 | 17,603 | 617 | 11.8 | 1.3 | 21.5 |
| 1962 | 1,358 | 16,255 | 21,451 | 683 | 12.0 | 1.3 | 23.8 |
| 1963 | 1,681 | 21,769 | 28,762 | 765 | 13.0 | 1.3 | 28.5 |
| 1964 | 2,086 | 28,874 | 37,829 | 888 | 13.8 | 1.3 | 32.5 |
| 1965 | 2,369 | 34,278 | 45,110 | 994 | 14.5 | 1.3 | 34.5 |
| 1966 | 2,518 | 38,178 | 50,104 | 1,076 | 15.2 | 1.3 | 35.5 |
| 1967 | 2,746 | 42,383 | 54,812 | 1,133 | 15.4 | 1.3 | 37.4 |
| 1968 | 2,863 | 46,917 | 60,674 | 1,193 | 16.4 | 1.3 | 39.3 |
| 1969 | 3,095 | 53,363 | 69,418 | 1,288 | 17.2 | 1.3 | 41.4 |
| 1970 | 3,186 | 55,442 | 71,495 | 1,368 | 17.4 | 1.3 | 40.5 |
| 1971 | 3,342 | 57,850 | 74,409 | 1,382 | 17.3 | 1.3 | 41.9 |
| 1972 | 3,397 | 58,828 | 75,199 | 1,483 | 17.3 | 1.3 | 39.7 |
| 1973 | 3,240 | 54,778 | 70,651 | 1,437 | 16.9 | 1.3 | 38.1 |
| 1974 | 3,357 | 60,863 | 79,036 | 1,507 | 18.1 | 1.3 | 40.4 |
| 1975 | 3,498 | 65,635 | 85,786 | 1,517 | 18.8 | 1.3 | 43.3 |
| 1976 | 3,937 | 75,651 | 98,898 | 1,580 | 19.2 | 1.3 | 47.9 |
| 1977 | 4,079 | 82,728 | 108,870 | 1,672 | 20.3 | 1.3 | 49.5 |
| 1978 | 4,323 | 93,313 | 122,561 | 1,735 | 21.6 | 1.3 | 53.8 |
| 1979 | 4,585 | 106,052 | 139,544 | 1,795 | 23.1 | 1.3 | 59.1 |
| 1980 | 4,950 | 119,918 | 160,214 | 1,868 | 24.2 | 1.3 | 64.2 |
| 1981 | 5,253 | 133,702 | 178,159 | 1,955 | 25.5 | 1.3 | 68.4 |
| 1982 | 5,525 | 141,626 | 188,933 | 1,976 | 25.6 | 1.3 | 71.7 |
| 1983 | 5,827 | 157,973 | 211,160 | 2,130 | 27.1 | 1.3 | 74.2 |
| 1984 | 6,273 | 177,406 | 239,666 | 2,153 | 28.3 | 1.4 | 82.4 |
| 1985 | 6,720 | 205,650 | 280,972 | 2,170 | 30.6 | 1.4 | 94.8 |
| 1986 | 7,201 | 231,378 | 319,224 | 2,125 | 32.1 | 1.4 | 108.9 |
| 1987 | 7,776 | 262,081 | 369,207 | 2,197 | 33.7 | 1.4 | 119.3 |
| 1988 | 8,247 | 292,164 | 424,844 | 2,184 | 35.4 | 1.5 | 133.8 |
| 1989 | 8,768 | 314,686 | 463,664 | 2,256 | 35.9 | 1.5 | 139.5 |
| 1990 | 9,292 | 330,080 | 490,299 | 2,537 | 35.5 | 1.5 | 130.1 |
| 1991 | 9,786 | 359,122 | 535,191 | 2,587 | 36.7 | 1.5 | 138.8 |
| 1992 | 10,191 | 378,692 | 566,036 | 2,722 | 37.2 | 1.5 | 139.1 |
| 1993 | 10,594 | 413,939 | 623,933 | 2,825 | 39.1 | 1.5 | 146.5 |
| 1994 | 10,863 | 447,972 | 684,449 | 2,823 | 41.2 | 1.5 | 158.7 |
| 1995 | 11,274 | 493,263 | 767,881 | 2,875 | 43.8 | 1.6 | 171.6 |
| 1996 | 11,712 | 525,072 | 824,329 | 2,895 | 44.8 | 1.6 | 181.4 |

[^16]
## Note to Indicator 25: Advanced Placement examinations

The Advanced Placement (AP) examinations are offered to high school students annually to give them an opportunity to demonstrate college-level achievement. Although students who have not studied extensively beyond the normal secondary school level are not advised to take these examinations, the AP program is open to all students. Most high school students take the examinations voluntarily; however, several states have legislation that supports and encourages participation in the AP program.
In this analysis, the number of students who took AP examinations and the number of examinations taken by these students were compared to $1,00011^{\text {th }}-$ and $12^{\text {th }}$-grade students, as defined by the October Supplement to the Current Population Survey (CPS). Data from the CPS include both public and private schools. This methodology differs somewhat from the methodology shown in The National Education Goals Report, 1995, which calculated enrollment figures based on the Common Core of Data (CCD). The CCD does not include data from private schools. Consequently, to produce private school enrollment data, the public school figures in the Goals Report were multiplied by a private school enrollment adjustment factor. As a result, data shown in this analysis are not directly comparable to data found in the Goals Report.

## Subject definitions

The following are the specific subjects that comprise the AP examination subject areas presented in this analysis:

| Social studies | U.S. History, European History, <br> U.S. Government and Politics, <br> Comparative Government and <br> Politics, and Psychology; |
| :--- | :--- |
| English | English Language and Compo- <br> sition, and English Literature <br> and Composition; |
| Foreign | French Language, French Lit- <br> erature, German Language, <br> Latin/Virgil, Latin Literature, |
| Calculus | Spanish Language, and Spanish <br> Literature; |
| Computer | Calculus AB and Calculus BC; <br> science |
| $l$ |  |

Science

## Examinations

Most of the AP examinations contain multiple choice and free-response sections. The examinations are graded based on scores from both types of responses. The program's examinations are cri-terion-referenced not normed-referenced, with cut scores established at five different points along these scales to designate a grade of $5,4,3,2$, or 1 (grade of 5: extremely well qualified; grade of 4: well qualified; grade of 3: qualified; grade of 2: possibly qualified; and grade of 1: no recommendation). The grades are determined by the chief readers who rely on their subject matter expertise, statistical equating data, and data from comparability studies. Cut scores frequently vary from year to year for each examination, reflecting changes in the level of exam difficulty. Therefore, the College Board does not recommend the use of grade data for trend analysis. Grades of 3 and above are usually accepted for college credit and advanced placement at participating colleges and universities, although credit varies among institutions. Descriptions of the AP examinations for these various subject areas are provided below.
Biology: A 3-hour examination on a college fullyear introduction to biology: 90 minutes of multiple-choice questions, 90 minutes of selected problems, short essays, and chemical reactions.
Chemistry: A 3-hour examination on a college fullyear introduction to chemistry: 90 minutes of multiple-choice questions and 90 minutes of selected problems, short essays, and chemical reactions.

Computer Science: Two examinations: Computer Science A ( 75 minutes of multiple-choice questions, 105 minutes of free-response questions), a college first-semester introduction to Computer Science (programming, methodology, programming in Pascal including recursion, data structures not including pointers, applications), and Computer Science AB ( 75 minutes of multiple-choice questions, 105 minutes of free-response questions), a college full-year introduction to Computer Science (programming methodology, programming in Pascal, algorithms, data structures). The Computer Science $A B$ examinations no longer include a sepa
rate grade report for the Computer Science A examination.

English: Two 180-minute examinations: English Language and Composition, and English Literature and Composition. Each examination covers a college full-year introductory English course. Both are 60 minutes of multiple-choice questions and 120 minutes of free-response questions. Candidates may take either or both examinations.
French: Two examinations, one on each of two college third-year courses: French Language (80-95 minutes of multiple-choice questions on listening and reading and 55-70 minutes of free-response writing and speaking); and French Literature (8095 minutes of multiple-choice questions on literary passages, 35-50 minutes on one or more required works, and a 35-50 minute analysis of a presented text from the required reading list). Candidates may take either or both examinations.

German: A 3-hour examination on a college thirdyear German Language course: 110 minutes of multiple-choice questions on listening and reading and 70 minutes of free-response writing and speaking.
Government and Politics: Two 120-minute examinations ( 45 minutes of multiple-choice questions and 75 minutes of free-response questions) on each of two single-semester introductory college courses on government and politics: comparative and United States. Candidates may take either or both examinations.

History, European: A 3-hour examination on a college full-year introduction to European history in its global context from c. 1450 through 1970: 60-90 minutes of multiple-choice questions, a 15-minute reading period, a 30-50 minute exercise on the use of historical evidence, and one 40-60 minute essay chosen from several offered.

History, United States: A 3-hour examination on a college full-year introduction to United States history from colonial times to the present: 60-90 minutes of multiple-choice questions, a 15 -minute reading period, a 30-50 minute exercise on the use of historical evidence, and a 40-60 minute selected essay.

Latin: Two 2-hour examinations on college middlelevel Latin courses (Virgil and Catullus-Horace): each has 40-55 minutes of multiple-choice questions on Latin sight reading (common to both examinations) and 65-80 minutes of brief essays on required reading. Candidates may take either or both examinations.
Mathematics: Two 3-hour examinations, one on each of two college full-year mathematics courses: Calculus AB (introductory differential and integral calculus) and Calculus BC (extending one semester beyond AB and including advanced topics in integral calculus and sequences and series). Each examination has a 90 -minute multiple-choice section and a 90 minute free-response section. A scientific, nonprogrammable, nongraphing calculator is required for each examination. Candidates may take only one examination.

Physics: Three examinations: Physics B, a 3-hour examination (half multiple-choice questions, half free-response questions) covering a college full-year, non-calculus course on general physics; Physics C (Mechanics); and Physics C (Electricity and Magnetism): two 90 -minute examinations (half multiple-choice questions, half free-response questions) on each of two college semesters of introductory physics with calculus. Candidates may take either Physics B or C, not both.

Psychology: A 2-hour examination on a college onesemester introduction to psychology: a 75 minute free-response section consisting of two mandatory questions.

Spanish: Two examinations, one on each of two college third-year Spanish courses: Spanish Language ( 90 minutes of multiple-choice questions on listening comprehension, vocabulary, structure, and reading comprehension and 75-85 minutes of freeresponse writing and speaking); and Spanish literature ( 80 minutes of multiple-choice questions on listening comprehension, reading comprehension, and literary analysis, and 100 minutes of free-response essays on required authors and poetry analysis). Candidates may take either or both examinations.

SOURCE: The College Board, A Guide to the Advanced Placement Program, 1992.

Table 27-1 Number of bachelor's degrees conferred, by field of study: Academic years ending 1971-94

| Field of study | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 839,730 | 887,273 | 922,362 | 945,776 | 922,933 | 925,746 |
| Humanities and social and behavioral sciences | 337,022 | 350,651 | 357,170 | 358,412 | 338,924 | 327,289 |
| Humanities | 143,511 | 149,158 | 153,260 | 155,953 | 152,489 | 150,615 |
| Social and behavioral sciences | 193,511 | 201,493 | 203,910 | 202,459 | 186,435 | 176,674 |
| Natural sciences | 82,092 | 81,845 | 86,115 | 91,279 | 90,979 | 92,069 |
| Life sciences | 35,743 | 37,293 | 42,233 | 48,340 | 51,741 | 54,275 |
| Physical sciences | 21,412 | 20,745 | 20,696 | 21,178 | 20,778 | 21,465 |
| Mathematics | 24,937 | 23,807 | 23,186 | 21,761 | 18,460 | 16,329 |
| Computer sciences and engineering | 52,434 | 54,566 | 55,569 | 55,042 | 51,885 | 51,983 |
| Computer and information sciences | 2,388 | 3,402 | 4,304 | 4,756 | 5,033 | 5,652 |
| Engineering and engineering technologies | 50,046 | 51,164 | 51,265 | 50,286 | 46,852 | 46,331 |
| Engineering | 44,898 | 45,392 | 46,411 | 42,840 | 39,388 | 38,388 |
| Engineering technologies | 5,148 | 5,772 | 4,854 | 7,446 | 7,464 | 7,943 |
| Technical/professional | 368,182 | 400,211 | 423,508 | 440,479 | 441,145 | 454,405 |
| Education | 176,307 | 190,880 | 193,984 | 184,907 | 166,758 | 154,437 |
| Business management | 114,729 | 121,266 | 126,144 | 131,640 | 132,731 | 142,034 |
| Health sciences | 25,226 | 28,611 | 33,564 | 41,459 | 49,090 | 53,958 |
| Other technical/professional | 51,920 | 59,454 | 69,816 | 82,473 | 92,566 | 103,976 |
| Not classified in a field of study | - | - | - | - | - | - |
| Field of study | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
| Total | 917,549 | 921,204 | 921,390 | 929,417 | 935,140 | 952,998 |
| Humanities and social and behavioral sciences | 311,116 | 300,998 | 288,705 | 281,866 | 275,582 | 276,479 |
| Humanities | 146,215 | 143,167 | 137,949 | 136,111 | 134,001 | 135,562 |
| Social and behavioral sciences | 164,901 | 157,831 | 150,756 | 145,755 | 141,581 | 140,917 |
| Natural sciences | 90,497 | 87,553 | 84,382 | 81,652 | 78,601 | 77,917 |
| Life sciences | 53,605 | 51,502 | 48,846 | 46,370 | 43,216 | 41,639 |
| Physical sciences | 22,497 | 22,986 | 23,207 | 23,410 | 23,952 | 24,052 |
| Mathematics | 14,395 | 13,065 | 12,329 | 11,872 | 11,433 | 12,226 |
| Computer sciences and engineering | 55,690 | 62,855 | 71,094 | 80,047 | 90,121 | 100,272 |
| Computer and information sciences | 6,407 | 7,201 | 8,719 | 11,154 | 15,121 | 20,267 |
| Engineering and engineering technologies | 49,283 | 55,654 | 62,375 | 68,893 | 75,000 | 80,005 |
| Engineering | 40,936 | 46,869 | 53,021 | 58,402 | 63,287 | 67,021 |
| Engineering technologies | 8,347 | 8,785 | 9,354 | 10,491 | 11,713 | 12,984 |
| Technical/professional | 460,246 | 469,798 | 477,209 | 485,852 | 490,836 | 498,290 |
| Education | 143,234 | 135,821 | 125,873 | 118,038 | 108,074 | 100,932 |
| Business management | 148,765 | 159,691 | 171,241 | 184,867 | 198,983 | 213,374 |
| Health sciences | 57,328 | 59,434 | 62,085 | 63,920 | 63,649 | 63,653 |
| Other technical/professional | 110,919 | 114,852 | 118,010 | 119,027 | 120,130 | 120,331 |
| Not classified in a field of study | - | - | - | - | - | - |

Table 27-1 Number of bachelor's degrees conferred, by field of study: Academic years ending 1971-94-Continued

| Field of study | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 969,510 | 974,309 | 979,477 | 987,823 | 991,264 | 994,829 |
| Humanities and social and behavioral sciences | 269,225 | 267,406 | 263,883 | 267,094 | 276,060 | 286,304 |
| Humanities | 133,537 | 134,128 | 132,413 | 132,626 | 136,724 | 140,657 |
| Social and behavioral sciences | 135,688 | 133,278 | 131,470 | 134,468 | 139,336 | 145,647 |
| Natural sciences | 76,082 | 76,055 | 78,010 | 77,388 | 75,190 | 71,169 |
| Life sciences | 39,982 | 38,640 | 38,445 | 38,524 | 38,121 | 36,755 |
| Physical sciences | 23,381 | 23,651 | 23,704 | 21,717 | 20,070 | 17,806 |
| Mathematics | 12,719 | 13,764 | 15,861 | 17,147 | 16,999 | 16,608 |
| Computer sciences and engineering | 113,528 | 126,357 | 134,706 | 137,549 | 132,405 | 123,029 |
| Computer and information sciences | 24,510 | 32,172 | 38,878 | 41,889 | 39,589 | 34,523 |
| Engineering and engineering technologies | 89,018 | 94,185 | 95,828 | 95,660 | 92,816 | 88,506 |
| Engineering | 72,163 | 75,638 | 77,066 | 76,225 | 73,747 | 69,380 |
| Engineering technologies | 16,855 | 18,547 | 18,762 | 19,435 | 19,069 | 19,126 |
| Technical/professional | 510,675 | 504,479 | *502,878 | 505,752 | 507,609 | 512,526 |
| Education | 97,895 | 92,299 | 88,072 | 87,114 | 86,936 | 91,112 |
| Business management | 226,627 | 229,478 | 232,636 | 237,319 | 240,546 | 243,021 |
| Health sciences | 64,685 | 64,288 | 64,422 | 64,396 | 63,103 | 60,644 |
| Other technical/professional | 121,468 | 118,414 | *117,748 | 116,923 | 117,024 | 117,749 |
| Not classified in a field of study | - | - | - | - | - | 1,801 |
| Field of study | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| Total | 1,018,755 | 1,051,344 | 1,094,538 | 1,136,553 | 1,165,178 | 1,169,275 |
| Humanities and social and behavioral sciences | 306,852 | 332,807 | 356,021 | 383,281 | 396,818 | 397,411 |
| Humanities | 149,791 | 160,772 | 172,259 | 185,794 | 194,387 | 194,472 |
| Social and behavioral sciences | 157,061 | 172,035 | 183,762 | 197,487 | 202,431 | 202,939 |
| Natural sciences | 69,239 | 68,446 | 71,184 | 74,684 | 79,395 | 84,179 |
| Life sciences | 36,059 | 37,204 | 39,530 | 42,941 | 47,038 | 51,383 |
| Physical sciences | 17,186 | 16,066 | 16,344 | 16,960 | 17,545 | 18,400 |
| Mathematics | 15,994 | 15,176 | 15,310 | 14,783 | 14,812 | 14,396 |
| Computer sciences and engineering | 115,456 | 108,579 | 103,733 | 102,098 | 102,251 | 102,425 |
| Computer and information sciences | 30,454 | 27,257 | 25,083 | 24,557 | 24,200 | 24,200 |
| Engineering and engineering technologies | 85,002 | 81,322 | 78,650 | 77,541 | 78,051 | 78,225 |
| Engineering | 66,099 | 63,609 | 61,531 | 61,206 | 61,973 | 62,220 |
| Engineering technologies | 18,903 | 17,713 | 17,119 | 16,335 | 16,078 | 16,005 |
| Technical/professional | 524,803 | 538,799 | 550,342 | 569,770 | 581,467 | 581,958 |
| Education | 96,913 | 105,112 | 110,807 | 108,006 | 107,781 | 107,600 |
| Business management | 246,399 | 248,698 | 249,311 | 256,603 | 256,842 | 246,654 |
| Health sciences | 59,005 | 58,302 | 59,070 | 61,720 | 67,089 | 74,421 |
| Other technical/professional | 122,486 | 126,687 | 131,154 | 143,441 | 149,755 | 153,283 |
| Not classified in a field of study | 2,405 | 2,713 | 13,258 | 6,720 | 5,247 | 3,302 |

- Not available before the 1987-88 school year.
* Revised from previously published figures.

NOTE: See the supplemental note to this indicator for a description of the fields of study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 246 (based on IPEDS/HÉGIS "Completions" surveys).

Table 27-2 Percentage distribution of bachelor's degrees conferred, by field of study: Academic years ending 1971-94

| Field of study | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Humanities and social and behavioral sciences | 40.1 | 39.5 | 38.7 | 37.9 | 36.7 | 35.4 | 33.9 | 32.7 |
| Humanities | 17.1 | 16.8 | 16.6 | 16.5 | 16.5 | 16.3 | 15.9 | 15.5 |
| Social and behavioral sciences | 23.0 | 22.7 | 22.1 | 21.4 | 20.2 | 19.1 | 18.0 | 17.1 |
| Natural sciences | 9.8 | 9.2 | 9.3 | 9.7 | 9.9 | 9.9 | 9.9 | 9.5 |
| Life sciences | 4.3 | 4.2 | 4.6 | 5.1 | 5.6 | 5.9 | 5.8 | 5.6 |
| Physical sciences | 2.5 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.5 | 2.5 |
| Mathematics | 3.0 | 2.7 | 2.5 | 2.3 | 2.0 | 1.8 | 1.6 | 1.4 |
| Computer sciences and engineering | 6.2 | 6.1 | 6.0 | 5.8 | 5.6 | 5.6 | 6.1 | 6.8 |
| Computer and information sciences | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 |
| Engineering and engineering technologies | 6.0 | 5.8 | 5.6 | 5.3 | 5.1 | 5.0 | 5.4 | 6.0 |
| Engineering | 5.3 | 5.1 | 5.0 | 4.5 | 4.3 | 4.1 | 4.5 | 5.1 |
| Engineering technologies | 0.6 | 0.7 | 0.5 | 0.8 | 0.8 | 0.9 | 0.9 | 1.0 |
| Technical/professional | 43.8 | 45.1 | 45.9 | 46.6 | 47.8 | 49.1 | 50.2 | 51.0 |
| Education | 21.0 | 21.5 | 21.0 | 19.6 | 18.1 | 16.7 | 15.6 | 14.7 |
| Business management | 13.7 | 13.7 | 13.7 | 13.9 | 14.4 | 15.3 | 16.2 | 17.3 |
| Health sciences | 3.0 | 3.2 | 3.6 | 4.4 | 5.3 | 5.8 | 6.2 | 6.5 |
| Other technical/professional | 6.2 | 6.7 | 7.6 | 8.7 | 10.0 | 11.2 | 12.1 | 12.5 |
| Not classified in a field of study | - | - | - | - | - | - | - | - |
| Field of study | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Humanities and social and behavioral sciences | 31.3 | 30.3 | 29.5 | 29.0 | 27.8 | 27.4 | 26.9 | 27.0 |
| Humanities | 15.0 | 14.6 | 14.3 | 14.2 | 13.8 | 13.8 | 13.5 | 13.4 |
| Social and behavioral sciences | 16.4 | 15.7 | 15.1 | 14.8 | 14.0 | 13.7 | 13.4 | 13.6 |
| Natural sciences | 9.2 | 8.8 | 8.4 | 8.2 | 7.8 | 7.8 | 8.0 | 7.8 |
| Life sciences | 5.3 | 5.0 | 4.6 | 4.4 | 4.1 | 4.0 | 3.9 | 3.9 |
| Physical sciences | 2.5 | 2.5 | 2.6 | 2.5 | 2.4 | 2.4 | 2.4 | 2.2 |
| Mathematics | 1.3 | 1.3 | 1.2 | 1.3 | 1.3 | 1.4 | 1.6 | 1.7 |
| Computer sciences and engineering | 7.7 | 8.6 | 9.6 | 10.5 | 11.7 | 13.0 | 13.8 | 13.9 |
| Computer and information sciences | 0.9 | 1.2 | 1.6 | 2.1 | 2.6 | 3.3 | 4.0 | 4.2 |
| Engineering and engineering technologies | 6.8 | 7.4 | 8.0 | 8.4 | 9.2 | 9.7 | 9.8 | 9.7 |
| Engineering | 5.8 | 6.3 | 6.8 | 7.0 | 7.4 | 7.8 | 7.9 | 7.7 |
| Engineering technologies | 1.0 | 1.1 | 1.3 | 1.4 | 1.7 | 1.9 | 1.9 | 2.0 |
| Technical/professional | 51.8 | 52.3 | 52.5 | 52.3 | 52.7 | 51.8 | *51.3 | 51.2 |
| Education | 13.7 | 12.7 | 11.6 | 10.6 | 10.1 | 9.5 | 9.0 | 8.8 |
| Business management | 18.6 | 19.9 | 21.3 | 22.4 | 23.4 | 23.6 | 23.8 | 24.0 |
| Health sciences | 6.7 | 6.9 | 6.8 | 6.7 | 6.7 | 6.6 | 6.6 | 6.5 |
| Other technical/professional | 12.8 | 12.8 | 12.8 | 12.6 | 12.5 | 12.2 | *12.0 | 11.8 |
| Not classified in a field of study | - | - | - | - | - | - | - | - |

Table 27-2 Percentage distribution of bachelor's degrees conferred, by field of study: Academic years ending 1971-94-Continued

| Field of study | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Humanities and social and behavioral sciences | 27.8 | 28.8 | 30.1 | 31.7 | 32.5 | 33.7 | 34.1 | 34.0 |
| Humanities | 13.8 | 14.1 | 14.7 | 15.3 | 15.7 | 16.3 | 16.7 | 16.6 |
| Social and behavioral sciences | 14.1 | 14.6 | 15.4 | 16.4 | 16.8 | 17.4 | 17.4 | 17.4 |
| Natural sciences | 7.6 | 7.2 | 6.8 | 6.5 | 6.5 | 6.6 | 6.8 | 7.2 |
| Life sciences | 3.8 | 3.7 | 3.5 | 3.5 | 3.6 | 3.8 | 4.0 | 4.4 |
| Physical sciences | 2.0 | 1.8 | 1.7 | 1.5 | 1.5 | 1.5 | 1.5 | 1.6 |
| Mathematics | 1.7 | 1.7 | 1.6 | 1.4 | 1.4 | 1.3 | 1.3 | 1.2 |
| Computer sciences and engineering | 13.4 | 12.4 | 11.3 | 10.3 | 9.5 | 9.0 | 8.8 | 8.8 |
| Computer and information sciences | 4.0 | 3.5 | 3.0 | 2.6 | 2.3 | 2.2 | 2.1 | 2.1 |
| Engineering and engineering technologies | 9.4 | 8.9 | 8.3 | 7.7 | 7.2 | 6.8 | 6.7 | 6.7 |
| Engineering | 7.4 | 7.0 | 6.5 | 6.1 | 5.6 | 5.4 | 5.3 | 5.3 |
| Engineering technologies | 1.9 | 1.9 | 1.9 | 1.7 | 1.6 | 1.4 | 1.4 | 1.4 |
| Technical/professional | 51.2 | 51.5 | 51.5 | 51.2 | 50.3 | 50.1 | 49.9 | 49.8 |
| Education | 8.8 | 9.2 | 9.5 | 10.0 | 10.1 | 9.5 | 9.3 | 9.2 |
| Business management | 24.3 | 24.4 | 24.2 | 23.7 | 22.8 | 22.6 | 22.0 | 21.1 |
| Health sciences | 6.4 | 6.1 | 5.8 | 5.5 | 5.4 | 5.4 | 5.8 | 6.4 |
| Other technical/professional | 11.8 | 11.8 | 12.0 | 12.1 | 12.0 | 12.6 | 12.9 | 13.1 |
| Not classified in a field of study | - | 0.2 | 0.2 | 0.3 | 1.2 | 0.6 | 0.5 | 0.3 |

- Not available before the 1987-88 school year.
* Revised from previously published figures.

NOTE: See the supplemental note to this indicator for a description of the fields of study.

Table 27-3 Index of the number of bachelor's degrees conferred (1981=100), by field of study: Academic years ending 1971-94

| Field of study | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 89.8 | 94.9 | 98.6 | 101.1 | 98.7 | 99.0 | 98.1 | 98.5 |
| Humanities and social and behavioral sciences | 122.3 | 127.2 | 129.6 | 130.1 | 123.0 | 118.8 | 112.9 | 109.2 |
| Humanities | 107.1 | 111.3 | 114.4 | 116.4 | 113.8 | 112.4 | 109.1 | 106.8 |
| Social and behavioral sciences | 136.7 | 142.3 | 144.0 | 143.0 | 131.7 | 124.8 | 116.5 | 111.5 |
| Natural sciences | 104.4 | 104.1 | 109.6 | 116.1 | 115.7 | 117.1 | 115.1 | 111.4 |
| Life sciences | 82.7 | 86.3 | 97.7 | 111.9 | 119.7 | 125.6 | 124.0 | 119.2 |
| Physical sciences | 89.4 | 86.6 | 86.4 | 88.4 | 86.7 | 89.6 | 93.9 | 96.0 |
| Mathematics | 218.1 | 208.2 | 202.8 | 190.3 | 161.5 | 142.8 | 125.9 | 114.3 |
| Computer sciences and engineering | 58.2 | 60.5 | 61.7 | 61.1 | 57.6 | 57.7 | 61.8 | 69.7 |
| Computer and information sciences | 15.8 | 22.5 | 28.5 | 31.5 | 33.3 | 37.4 | 42.4 | 47.6 |
| Engineering and engineering technologies | 66.7 | 68.2 | 68.4 | 67.0 | 62.5 | 61.8 | 65.7 | 74.2 |
| Engineering | 70.9 | 71.7 | 73.3 | 67.7 | 62.2 | 60.7 | 64.7 | 74.1 |
| Engineering technologies | 44.0 | 49.3 | 41.4 | 63.6 | 63.7 | 67.8 | 71.3 | 75.0 |
| Technical/professional | 75.0 | 81.5 | 86.3 | 89.7 | 89.9 | 92.6 | 93.8 | 95.7 |
| Education | 163.1 | 176.6 | 179.5 | 171.1 | 154.3 | 142.9 | 132.5 | 125.7 |
| Business management | 57.7 | 60.9 | 63.4 | 66.2 | 66.7 | 71.4 | 74.8 | 80.3 |
| Health sciences | 39.6 | 45.0 | 52.7 | 65.1 | 77.1 | 84.8 | 90.1 | 93.4 |
| Other technical/professional | 43.2 | 49.5 | 58.1 | 68.7 | 77.1 | 86.6 | 92.3 | 95.6 |
|  |  |  |  |  |  |  |  |  |
| Field of study | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
| Total | 98.5 | 99.4 | 100.0 | 101.9 | 103.7 | 104.2 | 104.7 | 105.6 |
| Humanities and social and behavioral sciences | 104.8 | 102.3 | 100.0 | 100.3 | 97.7 | 97.0 | 95.8 | 96.9 |
| Humanities | 102.9 | 101.6 | 100.0 | 101.2 | 99.7 | 100.1 | 98.8 | 99.0 |
| Social and behavioral sciences | 106.5 | 102.9 | 100.0 | 99.5 | 95.8 | 94.1 | 92.9 | 95.0 |
| Natural sciences | 107.4 | 103.9 | 100.0 | 99.1 | 96.8 | 96.8 | 99.2 | 98.5 |
| Life sciences | 113.0 | 107.3 | 100.0 | 96.4 | 92.5 | 89.4 | 89.0 | 89.1 |
| Physical sciences | 96.9 | 97.7 | 100.0 | 100.4 | 97.6 | 98.7 | 99.0 | 90.7 |
| Mathematics | 107.8 | 103.8 | 100.0 | 106.9 | 111.2 | 120.4 | 138.7 | 150.0 |
| Computer sciences and engineering | 78.9 | 88.8 | 100.0 | 111.3 | 126.0 | 140.2 | 149.5 | 152.6 |
| Computer and information sciences | 57.7 | 73.8 | 100.0 | 134.0 | 162.1 | 212.8 | 257.1 | 277.0 |
| Engineering and engineering technologies | 83.2 | 91.9 | 100.0 | 106.7 | 118.7 | 125.6 | 127.8 | 127.5 |
| Engineering | 83.8 | 92.3 | 100.0 | 105.9 | 114.0 | 119.5 | 121.8 | 120.4 |
| Engineering technologies | 79.9 | 89.6 | 100.0 | 110.9 | 143.9 | 158.3 | 160.2 | 165.9 |
| Technical/professional | 97.2 | 99.0 | 100.0 | 101.5 | 104.0 | 102.8 | *102.5 | 103.0 |
| Education | 116.5 | 109.2 | 100.0 | 93.4 | 90.6 | 85.4 | 81.5 | 80.6 |
| Business management | 86.1 | 92.9 | 100.0 | 107.2 | 113.9 | 115.3 | 116.9 | 119.3 |
| Health sciences | 97.5 | 100.4 | 100.0 | 100.0 | 101.6 | 101.0 | 101.2 | 101.2 |
| Other technical/professional | 98.2 | 99.0 | 100.0 | 100.2 | 101.1 | 98.6 | *98.0 | 97.3 |

Table 27-3 Index of the number of bachelor's degrees conferred (1981=100), by field of study: Academic years ending 1971-94-Continued

| Field of study | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 106.0 | 106.4 | 108.9 | 112.4 | 117.0 | 121.5 | 124.6 | 125.0 |
| Humanities and social and behavioral sciences | 100.2 | 103.9 | 111.3 | 120.8 | 129.2 | 139.1 | 144.0 | 144.2 |
| Humanities | 102.0 | 105.0 | 111.8 | 120.0 | 128.6 | 138.7 | 145.1 | 145.1 |
| Social and behavioral sciences | 98.4 | 102.9 | 110.9 | 121.5 | 129.8 | 139.5 | 143.0 | 143.3 |
| Natural sciences | 95.7 | 90.5 | 88.1 | 87.1 | 90.6 | 95.0 | 101.0 | 107.1 |
| Life sciences | 88.2 | 85.0 | 83.4 | 86.0 | 91.5 | 99.4 | 108.8 | 118.9 |
| Physical sciences | 83.8 | 74.3 | 71.8 | 67.1 | 68.2 | 70.8 | 73.3 | 76.8 |
| Mathematics | 148.7 | 145.3 | 139.9 | 132.7 | 133.9 | 129.3 | 129.6 | 125.9 |
| Computer sciences and engineering | 146.9 | 136.5 | 128.1 | 120.5 | 115.1 | 113.3 | 113.5 | 113.7 |
| Computer and information sciences | 261.8 | 228.3 | 201.4 | 180.3 | 165.9 | 162.4 | 160.0 | 160.0 |
| Engineering and engineering technologies | 123.8 | 118.0 | 113.3 | 108.4 | 104.9 | 103.4 | 104.1 | 104.3 |
| Engineering | 116.5 | 109.6 | 104.4 | 100.5 | 97.2 | 96.7 | 97.9 | 98.3 |
| Engineering technologies | 162.8 | 163.3 | 161.4 | 151.2 | 146.2 | 139.5 | 137.3 | 136.6 |
| Technical/professional | 103.4 | 104.4 | 106.9 | 109.8 | 112.1 | 116.1 | 118.5 | 118.6 |
| Education | 80.4 | 84.3 | 89.7 | 97.3 | 102.5 | 99.9 | 99.7 | 99.6 |
| Business management | 120.9 | 122.1 | 123.8 | 125.0 | 125.3 | 129.0 | 129.1 | 124.0 |
| Health sciences | 99.1 | 95.3 | 92.7 | 91.6 | 92.8 | 97.0 | 105.4 | 116.9 |
| Other technical/professional | 97.4 | 98.0 | 102.0 | 105.5 | 109.2 | 119.4 | 124.7 | 127.6 |

* Revised from previously published figures.

NOTE: See the supplemental note to this indicator for a description of the fields of study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 246 (based on IPEDS/HEGIS "Completions" surveys).

Table 27-4 Number of bachelor's degrees conferred, by race/ethnicity and field of study: Selected academic years ending 1977-94

| Race/ethnicity and field of study | 1977 | 1979 | 1981 | 1985 | 1987 | 1989 | 1991 | 1992 | 1993 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White |  |  |  |  |  |  |  |  |  |
| Total degrees | 805,186 | 799,617 | 807,319 | 826,106 | 841,820 | 859,699 | 904,062 | 936,771 | 947,309 | 936,227 |
| Humanities and social and behavioral |  |  |  |  |  |  |  |  |  |  |
| sciences | 271,490 | 249,100 | 238,522 | 224,152 | 237,293 | 262,603 | 301,946 | 320,841 | 326,894 | 321,033 |
| Humanities | 130,327 | 120,305 | 118,286 | 113,084 | 118,620 | 129,701 | 147,970 | 157,513 | 161,895 | 159,037 |
| Social and behavioral sciences | 141,163 | 128,795 | 120,236 | 111,068 | 118,673 | 132,902 | 153,976 | 163,328 | 164,999 | 161,996 |
| Natural sciences | 80,313 | 73,523 | 67,967 | 64,629 | 61,994 | 55,845 | 56,948 | 59,129 | 61,908 | 65,043 |
| Life sciences | 47,623 | 42,705 | 37,276 | 31,807 | 31,279 | 28,874 | 30,994 | 33,179 | 35,766 | 38,736 |
| Physical sciences | 20,189 | 20,650 | 21,246 | 20,660 | 17,159 | 14,492 | 13,500 | 14,044 | 14,275 | 15,007 |
| Mathematics | 12,501 | 10,168 | 9,445 | 12,162 | 13,556 | 12,479 | 12,454 | 11,906 | 11,867 | 11,300 |
| Computer sciences and engineering | 46,864 | 59,178 | 73,413 | 107,759 | 103,539 | 88,927 | 77,839 | 76,427 | 75,368 | 74,657 |
| Computer and information sciences | 5,473 | 7,384 | 12,565 | 31,321 | 30,251 | 22,366 | 17,903 | 17,311 | 16,502 | 16,191 |
| Engineering* | 41,391 | 51,794 | 60,848 | 76,438 | 73,288 | 66,561 | 59,936 | 59,116 | 58,866 | 58,466 |
| Technical/professional | 406,519 | 417,816 | 427,417 | 429,566 | 438,994 | 452,324 | 467,329 | 480,374 | 483,139 | 475,494 |
| Education | 125,148 | 108,949 | 93,724 | 77,531 | 78,216 | 88,276 | 100,141 | 97,460 | 96,857 | 95,482 |
| Business management | 132,814 | 150,759 | 174,198 | 196,915 | 205,118 | 208,325 | 206,308 | 209,768 | 205,083 | 191,111 |
| Health sciences | 51,513 | 55,746 | 56,790 | 55,501 | 55,410 | 51,053 | 49,876 | 52,281 | 56,464 | 62,756 |
| Other technical/professional | 97,044 | 102,362 | 102,705 | 99,619 | 100,250 | 104,670 | 111,004 | 120,865 | 124,735 | 126,145 |
|  | Black |  |  |  |  |  |  |  |  |  |
| Total degrees | 58,515 | 60,130 | 60,673 | 57,473 | 56,555 | 58,065 | 65,341 | 72,326 | 77,872 | 83,576 |
| Humanities and social and behavioral |  |  |  |  |  |  |  |  |  |  |
| sciences | 20,107 | 19,266 | 18,045 | 15,272 | 15,060 | 16,384 | 20,222 | 23,157 | 25,392 | 27,445 |
| Humanities | 6,567 | 7,014 | 6,608 | 6,505 | 6,583 | 7,022 | 8,300 | 9,698 | 10,701 | 11,626 |
| Social and behavioral sciences | 13,540 | 12,252 | 11,437 | 8,767 | 8,477 | 9,362 | 11,922 | 13,459 | 14,691 | 15,819 |
| Natural sciences | 3,785 | 3,830 | 3,759 | 3,640 | 3,622 | 3,447 | 3,794 | 4,180 | 4,612 | 4,972 |
| Life sciences | 2,413 | 2,487 | 2,269 | 2,045 | 1,932 | 1,942 | 2,154 | 2,428 | 2,784 | 3,022 |
| Physical sciences | 665 | 691 | 906 | 829 | 844 | 704 | 772 | 836 | 850 | 946 |
| Mathematics | 707 | 652 | 584 | 766 | 846 | 801 | 868 | 916 | 978 | 1,004 |
| Computer sciences and engineering | 1,729 | 2,261 | 3,235 | 5,302 | 6,429 | 5,752 | 5,528 | 5,742 | 5,972 | 6,371 |
| Computer and information sciences | 361 | 505 | 786 | 2,143 | 2,928 | 2,533 | 2,063 | 2,147 | 2,261 | 2,455 |
| Engineering* | 1,368 | 1,756 | 2,449 | 3,159 | 3,501 | 3,219 | 3,465 | 3,595 | 3,711 | 3,916 |
| Technical/professional | 32,894 | 34,773 | 35,634 | 33,259 | 31,444 | 32,482 | 35,797 | 39,247 | 41,896 | 44,788 |
| Education | 12,922 | 11,509 | 9,494 | 5,456 | 4,253 | 4,245 | 4,816 | 5,226 | 5,590 | 6,316 |
| Business management | 9,976 | 11,430 | 13,400 | 14,999 | 14,686 | 15,105 | 16,648 | 18,304 | 19,187 | 20,366 |
| Health sciences | 3,135 | 3,380 | 3,603 | 3,836 | 3,822 | 3,981 | 4,209 | 4,222 | 4,744 | 4,896 |
| Other technical/professional | 6,861 | 8,454 | 9,137 | 8,968 | 8,683 | 9,151 | 10,124 | 11,495 | 12,375 | 13,210 |
|  | Hispanic |  |  |  |  |  |  |  |  |  |
| Total degrees | 18,663 | 20,029 | 21,832 | 25,874 | 26,990 | 29,910 | 36,612 | 40,761 | 45,376 | 50,241 |
| Humanities and social and behavioral |  |  |  |  |  |  |  |  |  |  |
| sciences | 7,764 | 7,594 | 7,754 | 8,049 | 8,468 | 10,412 | 13,438 | 16,386 | 18,503 | 20,842 |
| Humanities | 3,537 | 3,469 | 3,561 | 3,872 | 4,184 | 4,950 | 6,362 | 7,751 | 9,261 | 10,410 |
| Social and behavioral sciences | 4,227 | 4,125 | 4,193 | 4,177 | 4,284 | 5,462 | 7,076 | 8,635 | 9,242 | 10,432 |
| Natural sciences | 1,534 | 1,642 | 1,734 | 1,915 | 1,951 | 1,956 | 2,294 | 2,510 | 2,730 | 3,186 |
| Life sciences | 981 | 1,109 | 1,144 | 1,241 | 1,259 | 1,258 | 1,503 | 1,673 | 1,855 | 2,137 |
| Physical sciences | 332 | 339 | 405 | 417 | 423 | 386 | 390 | 382 | 438 | 523 |
| Mathematics | 221 | 194 | 185 | 257 | 269 | 312 | 401 | 455 | 437 | 526 |
| Computer sciences and engineering | 980 | 1,272 | 1,735 | 3,068 | 3,630 | 3,343 | 3,550 | 3,548 | 3,800 | 4,005 |
| Computer and information sciences | 93 | 155 | 302 | 826 | 1,077 | 896 | 917 | 901 | 860 | 899 |
| Engineering* | 887 | 1,117 | 1,433 | 2,242 | 2,553 | 2,447 | 2,633 | 2,647 | 2,940 | 3,106 |
| Technical/professional | 8,385 | 9,521 | 10,609 | 12,842 | 12,941 | 14,199 | 17,330 | 18,317 | 20,343 | 22,208 |
| Education | 3,050 | 3,029 | 2,847 | 2,533 | 2,223 | 2,281 | 3,503 | 3,116 | 2,973 | 3,295 |
| Business management | 2,588 | 3,196 | 4,114 | 5,771 | 6,397 | 7,017 | 7,831 | 8,466 | 9,588 | 10,264 |
| Health sciences | 863 | 1,066 | 1,153 | 1,550 | 1,332 | 1,397 | 1,709 | 1,765 | 2,009 | 2,274 |
| Other technical/professional | 1,884 | 2,230 | 2,495 | 2,988 | 2,989 | 3,504 | 4,287 | 4,970 | 5,773 | 6,375 |

Table 27-4 Number of bachelor's degrees conferred, by race/ethnicity and field of study: Selected academic years ending 1977-94-Continued

| Race/ethnicity and field of study | 1977 | 1979 | 1981 | 1985 | 1987 | 1989 | 1991 | 1992 | 1993 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Asian/Pacific Islander |  |  |  |  |  |  |  |  |  |
| Total degrees | 13,745 | 15,336 | 18,794 | 25,395 | 32,618 | 37,686 | 41,618 | 46,720 | 51,463 | 55,660 |
| Humanities and social and behavioral |  |  |  |  |  |  |  |  |  |  |
| sciences | 4,442 | 4,400 | 4,807 | 5,618 | 7,895 | 10,108 | 12,022 | 14,032 | 15,644 | 17,240 |
| Humanities | 1,993 | 2,032 | 2,323 | 2,754 | 3,765 | 4,572 | 5,457 | 6,368 | 7,336 | 7,991 |
| Social and behavioral sciences | 2,449 | 2,368 | 2,484 | 2,864 | 4,130 | 5,536 | 6,565 | 7,664 | 8,308 | 9,249 |
| Natural sciences | 1,996 | 2,204 | 2,476 | 3,593 | 4,588 | 4,914 | 5,580 | 6,381 | 7,256 | 8,153 |
| Life sciences | 1,314 | 1,458 | 1,489 | 1,950 | 2,620 | 2,954 | 3,634 | 4,488 | 5,203 | 6,083 |
| Physical sciences | 367 | 425 | 596 | 763 | 918 | 931 | 1,004 | 1,025 | 1,124 | 1,126 |
| Mathematics | 315 | 321 | 391 | 880 | 1,050 | 1,029 | 942 | 868 | 929 | 944 |
| Computer sciences and engineering | 1,362 | 2,099 | 3,735 | 7,057 | 9,043 | 9,264 | 9,202 | 9,323 | 9,617 | 9,682 |
| Computer and information sciences | 163 | 262 | 669 | 2,044 | 2,546 | 2,361 | 2,075 | 2,140 | 2,294 | 2,301 |
| Engineering* | 1,199 | 1,837 | 3,066 | 5,013 | 6,497 | 6,903 | 7,127 | 7,183 | 7,323 | 7,381 |
| Technical/professional | 5,945 | 6,633 | 7,776 | 9,127 | 11,092 | 13,400 | 14,814 | 16,984 | 18,946 | 20,585 |
| Education | 894 | 785 | 723 | 770 | 1,092 | 1,106 | 890 | 977 | 1,100 | 1,122 |
| Business management | 2,596 | 3,135 | 3,943 | 5,274 | 6,002 | 7.973 | 9,100 | 10,592 | 11,780 | 12,486 |
| Health sciences | 1,018 | 1,087 | 1,312 | 1,310 | 1,577 | 1,710 | 2,018 | 2,261 | 2,513 | 3,070 |
| Other technical/professional | 1,437 | 1,626 | 1,798 | 1,773 | 2,421 | 2,611 | 2,806 | 3,154 | 3,553 | 3,907 |
|  | American Indian/Alaskan Native |  |  |  |  |  |  |  |  |  |
| Total degrees | 3,319 | 3,404 | 3,593 | 4,246 | 3,971 | 3,954 | 4,513 | 5,176 | 5,671 | 6,189 |
| Humanities and social and behavioral |  |  |  |  |  |  |  |  |  |  |
| sciences | 1,143 | 1,144 | 1,211 | 1,260 | 1,246 | 1,237 | 1,501 | 1,828 | 2,116 | 2,283 |
| Humanities | 504 | 470 | 541 | 612 | 596 | 611 | 737 | 903 | 1,000 | 1,096 |
| Social and behavioral sciences | 639 | 674 | 670 | 648 | 650 | 626 | 764 | 925 | 1,116 | 1,187 |
| Natural sciences | 250 | 252 | 220 | 318 | 274 | 259 | 297 | 297 | 364 | 398 |
| Life sciences | 157 | 148 | 137 | 161 | 147 | 146 | 180 | 185 | 215 | 252 |
| Physical sciences | 67 | 63 | 65 | 98 | 74 | 62 | 70 | 66 | 93 | 85 |
| Mathematics | 26 | 41 | 18 | 59 | 53 | 51 | 47 | 46 | 56 | 61 |
| Computer sciences and engineering | 149 | 173 | 216 | 452 | 405 | 368 | 317 | 356 | 367 | 403 |
| Computer and information sciences | 15 | 11 | 21 | 139 | 116 | 88 | 82 | 81 | 83 | 79 |
| Engineering* | 134 | 162 | 195 | 313 | 289 | 280 | 235 | 275 | 284 | 324 |
| Technical/professional | 1,777 | 1,835 | 1,946 | 2,216 | 2,046 | 2,090 | 2,398 | 2,695 | 2,824 | 3,105 |
| Education | 707 | 645 | 569 | 483 | 452 | 533 | 618 | 654 | 644 | 739 |
| Business management | 433 | 505 | 636 | 921 | 783 | 797 | 868 | 949 | 1,051 | 1,036 |
| Health sciences | 154 | 206 | 209 | 273 | 274 | 239 | 285 | 332 | 348 | 398 |
| Other technical/professional | 483 | 479 | 532 | 539 | 537 | 521 | 627 | 760 | 781 | 932 |

[^17]
## Note to Indicator 27: Classification of fields of study

The data on degrees conferred by specific fields of study were obtained from the Integrated Postsecondary Education Data System (IPEDS) "Degrees and Other Formal Awards Conferred" surveys and the "Completions" surveys. The list below shows how related degree fields were reclassified into a consolidated degree field for this analysis.

## Consolidated degree Degree fields field

| Humanities | Area and ethnic studies <br> English language and <br> literature/letters |
| :--- | :--- |
|  | Foreign languages <br> Liberal/general studies <br> Multi/interdisciplinary <br> studies |
|  | Philosophy and religion |
|  | Theology |
|  | Visual and performing |
| arts |  |

Other technical/ professional

Agriculture
Architecture
Communications
Communication
technology
Home economics
Law
Library/archival
sciences
Military sciences
Parks and recreation
Precision production
trades
Protective services
Public administration
and services
Transportation and
material moving
In the 1991-92 academic year, a new classification of instructional programs was initiated. The figures for the earlier years were reclassified when necessary to make them conform to the new taxonomy. To facilitate trend comparisons, certain aggregations have been made of the degree fields as reported in the IPEDS "Completions" surveys: "Agriculture and natural resources" includes Agribusiness and agriculture production, Agricultural sciences, and Conservation and renewable natural resources; "Business management and administrative services" includes Business and management, Business (administrative support), Marketing and distribution, and Consumer, personal, and miscellaneous services; and "Engineering-related technologies" includes Engineering-related technologies, Mechanics and repairers, and Construction trades.

Table 28-1 Female field concentration ratio ${ }^{1}$ of master's degrees conferred, by field of study: Academic years ending 1971-94

| Field of study | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Humanities | 1.58 | 1.52 | 1.45 | 1.34 | 1.32 | 1.24 | 1.17 | 1.16 | 1.12 | 1.08 | 1.03 | 1.08 |
| Social and behavioral sciences | 0.69 | 0.69 | 0.68 | 0.67 | 0.69 | 0.73 | 0.76 | 0.77 | 0.84 | 0.88 | 0.91 | 0.92 |
| Natural sciences | 0.48 | 0.48 | 0.44 | 0.43 | 0.41 | 0.41 | 0.44 | 0.42 | 0.44 | 0.43 | 0.43 | 0.45 |
| Life sciences | 0.76 | 0.72 | 0.62 | 0.58 | 0.53 | 0.54 | 0.57 | 0.59 | 0.62 | 0.60 | 0.63 | 0.69 |
| Physical sciences | 0.23 | 0.24 | 0.22 | 0.22 | 0.21 | 0.20 | 0.22 | 0.22 | 0.23 | 0.23 | 0.26 | 0.27 |
| Mathematics | 0.56 | 0.58 | 0.56 | 0.53 | 0.54 | 0.53 | 0.55 | 0.50 | 0.49 | 0.51 | 0.45 | 0.43 |
| Computer sciences and engineering | 0.03 | 0.04 | 0.04 | 0.05 | 0.05 | 0.06 | 0.07 | 0.09 | 0.09 | 0.11 | 0.12 | 0.14 |
| Computer and information sciences | 0.17 | 0.19 | 0.17 | 0.20 | 0.21 | 0.20 | 0.22 | 0.25 | 0.24 | 0.27 | 0.30 | 0.35 |
| Engineering | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 | 0.10 |
| Technical/professional | 1.27 | 1.25 | 1.26 | 1.26 | 1.24 | 1.23 | 1.23 | 1.24 | 1.22 | 1.23 | 1.24 | 1.25 |
| Education | 1.92 | 1.98 | 1.98 | 1.99 | 2.04 | 2.10 | 2.18 | 2.26 | 2.28 | 2.42 | 2.48 | 2.54 |
| Business management | 0.06 | 0.06 | 0.07 | 0.09 | 0.11 | 0.15 | 0.19 | 0.22 | 0.25 | 0.30 | 0.33 | 0.38 |
| Health professions | 1.85 | 1.90 | 1.91 | 2.00 | 1.99 | 2.29 | 2.37 | 2.53 | 2.54 | 2.66 | 2.80 | 3.03 |
| Other technical/ professional ${ }^{2}$ | 1.56 | 1.46 | 1.34 | 1.24 | 1.15 | 1.08 | 1.04 | 1.07 | 1.08 | 1.10 | 1.14 | 1.15 |
| Field of study | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| Humanities | 1.06 | 1.08 | 1.12 | 1.12 | 1.06 | 1.06 | 1.06 | 1.06 | 1.09 | 1.08 | 1.08 | 1.09 |
| Social and behavioral sciences | 0.99 | 1.04 | 1.06 | 1.08 | 1.05 | 1.06 | 1.07 | 1.06 | 1.10 | 1.05 | 1.08 | 1.10 |
| Natural sciences | 0.48 | 0.52 | 0.52 | 0.53 | 0.55 | 0.54 | 0.56 | 0.55 | 0.55 | 0.54 | 0.55 | 0.55 |
| Life sciences | 0.77 | 0.82 | 0.91 | 0.91 | 0.91 | 0.92 | 0.92 | 0.93 | 0.92 | 0.91 | 0.87 | 0.92 |
| Physical sciences | 0.27 | 0.31 | 0.30 | 0.32 | 0.32 | 0.31 | 0.34 | 0.32 | 0.33 | 0.32 | 0.35 | 0.35 |
| Mathematics | 0.47 | 0.50 | 0.49 | 0.50 | 0.57 | 0.58 | 0.57 | 0.55 | 0.56 | 0.54 | 0.55 | 0.51 |
| Computer sciences and engineering | 0.15 | 0.18 | 0.18 | 0.20 | 0.20 | 0.19 | 0.19 | 0.20 | 0.19 | 0.19 | 0.19 | 0.19 |
| Computer and information sciences | 0.39 | 0.42 | 0.40 | 0.42 | 0.40 | 0.35 | 0.36 | 0.35 | 0.36 | 0.32 | 0.31 | 0.29 |
| Engineering | 0.10 | 0.12 | 0.12 | 0.13 | 0.14 | 0.13 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 |
| Technical/professional | 1.25 | 1.25 | 1.26 | 1.26 | 1.28 | 1.29 | 1.28 | 1.28 | 1.27 | 1.27 | 1.27 | 1.27 |
| Education | 2.64 | 2.63 | 2.64 | 2.66 | 2.71 | 2.84 | 2.84 | 2.84 | 2.81 | 2.84 | 2.81 | 2.75 |
| Business management | 0.41 | 0.44 | 0.45 | 0.45 | 0.47 | 0.48 | 0.47 | 0.47 | 0.46 | 0.46 | 0.47 | 0.48 |
| Health professions | 3.01 | 3.16 | 3.23 | 3.16 | 3.58 | 3.41 | 3.29 | 3.14 | 3.24 | 3.30 | 3.31 | 3.19 |
| Other technical/ professional ${ }^{2}$ | 1.22 | 1.25 | 1.29 | 1.27 | 1.28 | 1.27 | 1.30 | 1.32 | 1.30 | 1.33 | 1.35 | 1.33 |

[^18]NOTE: See the supplemental note to Indicator 27 for a description of fields of study.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 263 (based on IPEDS/HEGIS "Completions" surveys).

Table 28-2 Percentage distribution of master's degrees conferred, by field of study and sex: Academic years ending 1971-94

| Field of study | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female |  |  |  |  |  |  |  |  |  |  |  |
| Total number of degrees | 92,363 | 102,083 | 108,903 | 119,191 | 130,880 | 144,523 | 149,381 | 150,408 | 147,709 | 147,332 | 148,696 | 150,014 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Humanities | 16.3 | 15.2 | 13.9 | 13.2 | 12.5 | 11.2 | 10.6 | 10.4 | 10.0 | 10.0 | 9.6 | 9.9 |
| Social and behavioral sciences | 7.6 | 7.6 | 7.5 | 7.4 | 7.2 | 7.0 | 7.2 | 7.0 | 7.0 | 6.9 | 7.2 | 7.1 |
| Natural sciences | 4.7 | 4.4 | 3.9 | 3.7 | 3.3 | 2.9 | 3.1 | 3.0 | 3.2 | 3.1 | 2.9 | 3.1 |
| Life sciences | 2.1 | 2.0 | 1.8 | 1.7 | 1.5 | 1.4 | 1.6 | 1.6 | 1.7 | 1.6 | 1.6 | 1.6 |
| Physical sciences | 0.9 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 |
| Mathematics | 1.7 | 1.5 | 1.4 | 1.3 | 1.1 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 |
| Computer sciences and engineering | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.0 | 1.0 | 1.3 | 1.6 | 2.0 |
| Computer and information sciences | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.7 | 0.9 |
| Engineering | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.6 | 0.8 | 0.9 | 1.1 |
| Technical/professional | 71.0 | 72.3 | 74.2 | 75.2 | 76.5 | 78.2 | 78.4 | 78.6 | 78.8 | 78.7 | 78.7 | 77.9 |
| Education | 53.4 | 54.4 | 55.5 | 55.6 | 56.1 | 56.2 | 54.9 | 52.7 | 51.1 | 48.5 | 46.5 | 44.2 |
| Business management | 1.1 | 1.2 | 1.4 | 1.8 | 2.3 | 3.4 | 4.4 | 5.4 | 6.5 | 8.3 | 9.7 | 11.3 |
| Health professions | 3.4 | 4.0 | 4.4 | 4.8 | 5.0 | 5.8 | 5.9 | 6.7 | 7.4 | 7.7 | 8.2 | 8.3 |
| Other technical/ professional ${ }^{1}$ | 13.1 | 12.8 | 12.9 | 13.0 | 13.0 | 12.9 | 13.2 | 13.9 | 13.8 | 14.2 | 14.3 | 14.1 |
|  | Male |  |  |  |  |  |  |  |  |  |  |  |
| Total number of degrees | 138,146 | 149,550 | 154,468 | 157,842 | 161,570 | 167,248 | 167,783 | 161,212 | 153,370 | 150,749 | 147,043 | 145,532 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Humanities | 10.3 | 10.0 | 9.6 | 9.8 | 9.4 | 9.0 | 9.0 | 9.0 | 8.9 | 9.3 | 9.3 | 9.2 |
| Social and behavioral sciences | 11.0 | 11.0 | 11.0 | 11.0 | 10.5 | 9.6 | 9.4 | 9.0 | 8.3 | 7.9 | 7.8 | 7.8 |
| Natural sciences | 9.8 | 9.0 | 8.8 | 8.6 | 8.0 | 7.2 | 7.1 | 7.2 | 7.3 | 7.0 | 6.8 | 6.9 |
| Life sciences | 2.8 | 2.7 | 2.8 | 2.9 | 2.8 | 2.7 | 2.8 | 2.7 | 2.8 | 2.7 | 2.5 | 2.4 |
| Physical sciences | 4.0 | 3.6 | 3.5 | 3.3 | 3.1 | 2.8 | 2.7 | 2.9 | 2.9 | 2.8 | 2.9 | 3.0 |
| Mathematics | 3.0 | 2.7 | 2.5 | 2.4 | 2.1 | 1.8 | 1.6 | 1.6 | 1.6 | 1.5 | 1.4 | 1.6 |
| Computer sciences and engineering | 12.8 | 12.3 | 11.8 | 10.8 | 10.5 | 10.8 | 10.6 | 11.2 | 11.1 | 11.9 | 12.6 | 13.7 |
| Computer and information sciences | 1.0 | 1.2 | 1.2 | 1.3 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.9 | 2.2 | 2.5 |
| Engineering | 11.8 | 11.2 | 10.6 | 9.5 | 9.3 | 9.4 | 9.3 | 9.6 | 9.5 | 10.0 | 10.4 | 11.2 |
| Technical/professional | 56.1 | 57.6 | 58.8 | 59.9 | 61.6 | 63.4 | 63.8 | 63.6 | 64.4 | 63.9 | 63.4 | 62.5 |
| Education | 27.8 | 27.5 | 28.0 | 27.9 | 27.5 | 26.8 | 25.2 | 23.4 | 22.4 | 20.1 | 18.7 | 17.4 |
| Business management | 18.1 | 19.3 | 18.9 | 19.0 | 20.3 | 22.2 | 23.5 | 24.7 | 26.3 | 28.1 | 29.2 | 30.1 |
| Health professions | 1.9 | 2.1 | 2.3 | 2.4 | 2.5 | 2.5 | 2.5 | 2.6 | 2.9 | 2.9 | 2.9 | 2.8 |
| Other technical/ professional ${ }^{1}$ | 8.4 | 8.7 | 9.6 | 10.5 | 11.3 | 11.9 | 12.7 | 13.0 | 12.8 | 12.8 | 12.5 | 12.3 |
| Index of dissimilarity ${ }^{2}$ | 37.9 | 38.0 | 37.2 | 36.0 | 35.9 | 35.8 | 35.1 | 35.7 | 35.3 | 35.3 | 35.1 | 35.0 |

Table 28-2 Percentage distribution of master's degrees conferred, by field of study and sex: Academic years ending 1971-94-Continued

| Field of study | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female |  |  |  |  |  |  |  |  |  |  |  |
| Total number of degrees | 145,224 | 140,668 | 142,861 | 145,059 | 148,080 | 151,883 | 160,898 | 169,539 | 176,849 | 189,139 | 199,947 | 210,064 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Humanities | 9.5 | 10.1 | 10.0 | 10.0 | 9.7 | 9.5 | 9.5 | 9.6 | 9.5 | 9.5 | 9.3 | 9.2 |
| Social and behavioral sciences | 7.3 | 7.2 | 7.3 | 7.3 | 7.1 | 6.8 | 7.0 | 7.1 | 7.5 | 6.7 | 6.9 | 7.2 |
| Natural sciences | 3.2 | 3.4 | 3.4 | 3.5 | 3.5 | 3.5 | 3.4 | 3.2 | 3.1 | 2.9 | 2.8 | 2.8 |
| Life sciences | 1.7 | 1.7 | 1.7 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 | 1.4 | 1.3 | 1.2 | 1.3 |
| Physical sciences | 0.8 | 0.9 | 0.9 | 1.0 | 1.0 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| Mathematics | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 | 1.0 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 |
| Computer sciences and engineering | 2.3 | 2.8 | 3.0 | 3.4 | 3.6 | 3.5 | 3.6 | 3.6 | 3.6 | 3.4 | 3.5 | 3.5 |
| Computer and information sciences | 1.0 | 1.3 | 1.4 | 1.7 | 1.7 | 1.6 | 1.6 | 1.6 | 1.6 | 1.4 | 1.4 | 1.3 |
| Engineering | 1.2 | 1.5 | 1.6 | 1.7 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| Technical/professional | 77.7 | 76.5 | 76.2 | 75.8 | 76.0 | 76.7 | 76.5 | 76.4 | 76.4 | 77.5 | 77.5 | 77.3 |
| Education | 41.6 | 38.8 | 37.9 | 37.6 | 37.0 | 37.8 | 38.0 | 38.0 | 37.8 | 37.8 | 36.9 | 36.1 |
| Business management | 12.9 | 14.2 | 14.6 | 14.3 | 15.0 | 15.3 | 15.2 | 15.4 | 15.5 | 15.8 | 16.0 | 16.2 |
| Health professions | 8.8 | 9.4 | 9.3 | 9.8 | 9.8 | 9.6 | 9.3 | 9.3 | 9.5 | 9.7 | 10.2 | 10.6 |
| Other technical/ professional ${ }^{1}$ | 14.3 | 14.2 | 14.5 | 14.2 | 14.3 | 13.9 | 13.9 | 13.7 | 13.6 | 14.2 | 14.3 | 14.4 |
|  | Male |  |  |  |  |  |  |  |  |  |  |  |
| Total number of degrees | 144,697 | 143,595 | 143,390 | 143,508 | 141,269 | 143,290 | 148,872 | 152,926 | 151,796 | 159,543 | 168,754 | 175,355 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Humanities | 9.0 | 9.3 | 8.9 | 8.9 | 9.2 | 9.0 | 8.9 | 9.1 | 8.7 | 8.8 | 8.7 | 8.4 |
| Social and behavioral sciences | 7.3 | 6.9 | 6.9 | 6.8 | 6.8 | 6.4 | 6.5 | 6.7 | 6.8 | 6.4 | 6.3 | 6.6 |
| Natural sciences | 6.7 | 6.6 | 6.5 | 6.6 | 6.4 | 6.4 | 6.1 | 5.9 | 5.7 | 5.4 | 5.1 | 5.1 |
| Life sciences | 2.2 | 2.1 | 1.8 | 1.8 | 1.8 | 1.7 | 1.7 | 1.6 | 1.5 | 1.4 | 1.4 | 1.4 |
| Physical sciences | 2.9 | 3.0 | 3.1 | 3.1 | 3.0 | 3.0 | 2.8 | 2.6 | 2.5 | 2.5 | 2.3 | 2.3 |
| Mathematics | 1.6 | 1.5 | 1.6 | 1.7 | 1.6 | 1.7 | 1.6 | 1.7 | 1.6 | 1.5 | 1.5 | 1.4 |
| Computer sciences and engineering | 14.8 | 15.9 | 17.0 | 17.3 | 18.3 | 19.0 | 18.9 | 18.5 | 18.4 | 18.2 | 18.9 | 18.7 |
| Computer and information sciences | 2.6 | 3.0 | 3.5 | 3.9 | 4.2 | 4.7 | 4.6 | 4.6 | 4.3 | 4.3 | 4.4 | 4.4 |
| Engineering | 12.1 | 12.9 | 13.4 | 13.4 | 14.0 | 14.3 | 14.4 | 14.0 | 14.1 | 13.9 | 14.5 | 14.3 |
| Technical/professional | 62.2 | 61.2 | 60.6 | 60.4 | 59.4 | 59.2 | 59.5 | 59.8 | 60.4 | 61.2 | 61.0 | 61.1 |
| Education | 15.8 | 14.7 | 14.3 | 14.1 | 13.7 | 13.3 | 13.4 | 13.4 | 13.5 | 13.3 | 13.2 | 13.1 |
| Business management | 31.8 | 32.2 | 32.2 | 32.0 | 31.8 | 32.1 | 32.6 | 33.1 | 33.5 | 34.3 | 34.2 | 33.8 |
| Health professions | 2.9 | 3.0 | 2.9 | 3.1 | 2.7 | 2.8 | 2.8 | 3.0 | 2.9 | 2.9 | 3.1 | 3.3 |
| Other technical/ professional ${ }^{1}$ | 11.7 | 11.4 | 11.2 | 11.1 | 11.2 | 11.0 | 10.7 | 10.4 | 10.4 | 10.6 | 10.6 | 10.8 |
| Index of dissimilarity ${ }^{2}$ | 33.6 | 32.9 | 33.1 | 33.2 | 32.8 | 33.7 | 33.8 | 33.6 | 33.9 | 34.0 | 35.9 | 35.2 |

' Principally composed of public administration at the master's degree level and agriculture and natural resources at the doctor's degree level. See the glossary for a full definition of "other technical/ professional" fields.
${ }^{2}$ The index of dissimilarity is calculated as the sum of the absolute difference between the proportions of females and males earning degrees in each of the fields, divided by two. For this analysis, it was calculated using the 11 detailed categories shown above. (For example, the "life sciences," "physical sciences," and "mathematics" categories were used in this analysis, but the "natural sciences"
category was not). Here, the index of dissimilarity represents the percentage, by field, one sex would need to vary to reach the field distribution of the other sex.
NOTE: Details may not add to totals due to rounding. Includes degrees conferred to U.S. and non-U.S. citizens. See the supplemental note to Indicator 27 for a description of fields of study.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 263 (based on IPEDS/HEGIS "Completions" surveys).

Table 28-3 Number of master's degrees conferred, by field of study and sex: Academic years ending 1971-94

| Field of study | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female |  |  |  |  |  |  |  |  |  |  |  |
| Total | 92,363 | 102,083 | 108,903 | 119,191 | 130,880 | 144,523 | 149,381 | 150,408 | 147,709 | 147,332 | 148,696 | 150,014 |
| Humanities | 15,079 | 15,550 | 15,126 | 15,716 | 16,357 | 16,184 | 15,791 | 15,658 | 14,744 | 14,725 | 14,297 | 14,859 |
| Social and behavioral sciences | 7,028 | 7,735 | 8,166 | 8,785 | 9,461 | 10,066 | 10,686 | 10,485 | 10,295 | 10,224 | 10,645 | 10,658 |
| Natural sciences | 4,315 | 4,458 | 4,271 | 4,395 | 4,259 | 4,257 | 4,624 | 4,574 | 4,697 | 4,503 | 4,376 | 4,650 |
| Life sciences | 1,923 | 2,014 | 1,909 | 1,997 | 1,963 | 2,085 | 2,396 | 2,406 | 2,566 | 2,412 | 2,324 | 2,448 |
| Physical sciences | 846 | 883 | 843 | 876 | 838 | 818 | 881 | 941 | 990 | 971 | 1,084 | 1,196 |
| Mathematics | 1,546 | 1,561 | 1,519 | 1,522 | 1,458 | 1,354 | 1,347 | 1,227 | 1,141 | 1,120 | 968 | 1,006 |
| Computer sciences and engineering | 349 | 497 | 503 | 649 | 713 | 959 | 1,186 | 1,432 | 1,526 | 1,906 | 2,333 | 2,938 |
| Computer and information sciences | 164 | 225 | 225 | 293 | 338 | 377 | 466 | 567 | 575 | 764 | 971 | 1,310 |
| Engineering | 185 | 272 | 278 | 356 | 375 | 582 | 720 | 865 | 951 | 1,142 | 1,362 | 1,628 |
| Technical/professional | 65,592 | 73,843 | 80,837 | 89,646 | 100,090 | 113,057 | 117,094 | 118,259 | 116,447 | 115,974 | 117,045 | 116,909 |
| Education | 49,301 | 55,527 | 60,479 | 66,290 | 73,411 | 81,230 | 81,959 | 79,254 | 75,456 | 71,519 | 69,165 | 66,262 |
| Business management | 1,010 | 1,183 | 1,510 | 2,128 | 3,026 | 4,909 | 6,606 | 8,094 | 9,581 | 12,196 | 14,411 | 16,956 |
| Health professions | 3,182 | 4,066 | 4,795 | 5,780 | 6,600 | 8,339 | 8,788 | 10,060 | 10,991 | 11,347 | 12,199 | 12,497 |
| Other technical/ professional* | 12,099 | 13,067 | 14,053 | 15,448 | 17,053 | 18,579 | 19,741 | 20,851 | 20,419 | 20,912 | 21,270 | 21,194 |
|  | Male |  |  |  |  |  |  |  |  |  |  |  |
| Total | 138,146 | 149,550 | 154,468 | 157,842 | 161,570 | 167,248 | 167,783 | 161,212 | 153,370 | 150,749 | 147,043 | 145,532 |
| Humanities | 14,273 | 14,962 | 14,820 | 15,512 | 15,244 | 15,064 | 15,168 | 14,456 | 13,635 | 13,956 | 13,723 | 13,319 |
| Social and behavioral sciences | 15,228 | 16,474 | 16,930 | 17,304 | 16,910 | 16,054 | 15,706 | 14,515 | 12,800 | 11,890 | 11,523 | 11,291 |
| Natural sciences | 13,475 | 13,467 | 13,646 | 13,525 | 12,914 | 12,106 | 11,930 | 11,655 | 11,138 | 10,608 | 9,960 | 10,001 |
| Life sciences | 3,805 | 4,087 | 4,354 | 4,555 | 4,587 | 4,497 | 4,718 | 4,400 | 4,265 | 4,098 | 3,654 | 3,426 |
| Physical sciences | 5,521 | 5,404 | 5,414 | 5,186 | 4,969 | 4,648 | 4,450 | 4,620 | 4,461 | 4,248 | 4,200 | 4,318 |
| Mathematics | 4,149 | 3,976 | 3,878 | 3,784 | 3,358 | 2,961 | 2,762 | 2,635 | 2,412 | 2,262 | 2,106 | 2,257 |
| Computer sciences and engineering | 17,682 | 18,440 | 18,229 | 17,006 | 16,934 | 17,986 | 17,857 | 18,004 | 17,024 | 17,984 | 18,594 | 19,936 |
| Computer and information sciences | 1,424 | 1,752 | 1,888 | 1,983 | 1,961 | 2,226 | 2,332 | 2,471 | 2,480 | 2,883 | 3,247 | 3,625 |
| Engineering | 16,258 | 16,688 | 16,341 | 15,023 | 14,973 | 15,760 | 15,525 | 15,533 | 14,544 | 15,101 | 15,347 | 16,311 |
| Technical/professional | 77,488 | 86,207 | 90,843 | 94,495 | 99,568 | 106,038 | 107,122 | 102,582 | 98,773 | 96,311 | 93,243 | 90,985 |
| Education | 38,365 | 41,141 | 43,298 | 44,112 | 44,430 | 44,831 | 42,308 | 37,662 | 34,410 | 30,300 | 27,548 | 25,339 |
| Business management | 24,967 | 28,845 | 29,128 | 30,044 | 32,732 | 37,145 | 39,400 | 39,743 | 40,274 | 42,288 | 42,980 | 43,807 |
| Health professions | 2,567 | 3,141 | 3,567 | 3,819 | 4,092 | 4,217 | 4,163 | 4,265 | 4,494 | 4,357 | 4,316 | 4,006 |
| Other technical/ professiona** | 11,589 | 13,080 | 14,850 | 16,520 | 18,314 | 19,845 | 21,251 | 20,912 | 19,595 | 19,366 | 18,399 | 17,833 |

Table 28-3 Number of master's degrees conferred, by field of study and sex: Academic years ending 1971-94-Continued

| Field of study | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female |  |  |  |  |  |  |  |  |  |  |  |
| Total | 145,224 | 140,668 | 142,861 | 145,059 | 148,080 | 151,883 | 160,898 | 169,539 | 176,849 | 189,139 | 199,947 | 210,064 |
| Humanities | 13,844 | 14,182 | 14,334 | 14,526 | 14,379 | 14,423 | 15,229 | 16,263 | 16,757 | 17,920 | 18,677 | 19,223 |
| Social and behavioral sciences | 10,565 | 10,151 | 10,467 | 10,643 | 10,523 | 10,359 | 11,242 | 12,089 | 13,237 | 12,692 | 13,728 | 15,189 |
| Natural sciences | 4,697 | 4,784 | 4,880 | 5,039 | 5,226 | 5,246 | 5,478 | 5,491 | 5,530 | 5,508 | 5,583 | 5,956 |
| Life sciences | 2,482 | 2,410 | 2,412 | 2,397 | 2,414 | 2,361 | 2,469 | 2,474 | 2,463 | 2,484 | 2,413 | 2,731 |
| Physical sciences | 1,133 | 1,308 | 1,344 | 1,432 | 1,410 | 1,409 | 1,524 | 1,439 | 1,472 | 1,465 | 1,558 | 1,661 |
| Mathematics | 1,082 | 1,066 | 1,124 | 1,210 | 1,402 | 1,476 | 1,485 | 1,578 | 1,595 | 1,559 | 1,612 | 1,564 |
| Computer sciences and engineering | 3,304 | 3,966 | 4,345 | 4,904 | 5,346 | 5,380 | 5,833 | 6,132 | 6,289 | 6,480 | 7,025 | 7,292 |
| Computer and information sciences | 1,508 | 1,811 | 2,037 | 2,412 | 2,496 | 2,471 | 2,639 | 2,717 | 2,761 | 2,646 | 2,753 | 2,692 |
| Engineering | 1,796 | 2,155 | 2,308 | 2,492 | 2,850 | 2,909 | 3,194 | 3,415 | 3,528 | 3,834 | 4,272 | 4,600 |
| Technical/professional | 112,814 | 107,585 | 108,835 | 109,947 | 112,606 | 116,475 | 123,116 | 129,564 | 135,036 | 146,539 | 154,934 | 162,404 |
| Education | 60,427 | 54,522 | 54,117 | 54,506 | 54,752 | 57,458 | 61,218 | 64,414 | 66,895 | 71,424 | 73,831 | 75,930 |
| Business management | 18,759 | 19,972 | 20,787 | 20,751 | 22,180 | 23,250 | 24,525 | 26,091 | 27,372 | 29,937 | 31,964 | 34,102 |
| Health professions | 12,812 | 13,160 | 13,266 | 14,145 | 14,520 | 14,610 | 15,042 | 15,787 | 16,756 | 18,374 | 20,491 | 22,211 |
| Other technical/ professional* | 20,816 | 19,931 | 20,665 | 20,545 | 21,154 | 21,157 | 22,331 | 23,272 | 24,013 | 26,804 | 28,648 | 30,161 |
|  | Male |  |  |  |  |  |  |  |  |  |  |  |
| Total | 144,697 | 143,595 | 143,390 | 143,508 | 141,269 | 143,290 | 148,872 | 152,926 | 151,796 | 159,543 | 168,754 | 175,355 |
| Humanities | 13,037 | 13,423 | 12,827 | 12,781 | 12,993 | 12,851 | 13,240 | 13,855 | 13,249 | 14,045 | 14,598 | 14,774 |
| Social and behavioral sciences | 10,621 | 9,951 | 9,927 | 9,766 | 9,545 | 9,233 | 9,721 | 10,275 | 10,345 | 10,225 | 10,700 | 11,553 |
| Natural sciences | 9,687 | 9,442 | 9,388 | 9,483 | 9,085 | 9,138 | 9,109 | 8,973 | 8,585 | 8,662 | 8,606 | 9,019 |
| Life sciences | 3,214 | 2,996 | 2,647 | 2,616 | 2,538 | 2,423 | 2,492 | 2,395 | 2,302 | 2,301 | 2,343 | 2,465 |
| Physical sciences | 4,157 | 4,268 | 4,452 | 4,470 | 4,219 | 4,324 | 4,199 | 4,010 | 3,837 | 3,909 | 3,808 | 4,018 |
| Mathematics | 2,316 | 2,178 | 2,289 | 2,397 | 2,328 | 2,391 | 2,418 | 2,568 | 2,446 | 2,452 | 2,455 | 2,536 |
| Computer sciences and engineering | 21,361 | 22,879 | 24,311 | 24,823 | 25,789 | 27,202 | 28,149 | 28,317 | 27,993 | 29,027 | 31,864 | 32,878 |
| Computer and information sciences | 3,813 | 4,379 | 5,064 | 5,658 | 5,985 | 6,726 | 6,775 | 6,960 | 6,563 | 6,884 | 7,410 | 7,724 |
| Engineering | 17,548 | 18,500 | 19,247 | 19,165 | 19,804 | 20,476 | 21,374 | 21,357 | 21,430 | 22,143 | 24,454 | 25,154 |
| Technical/professional | 89,991 | 87,900 | 86,937 | 86,655 | 83,857 | 84,866 | 88,653 | 91,506 | 91,624 | 97,584 | 102,986 | 107,131 |
| Education | 22,823 | 21,142 | 20,537 | 20,295 | 19,293 | 19,108 | 19,956 | 20,467 | 20,448 | 21,244 | 22,197 | 23,008 |
| Business management | 45,999 | 46,178 | 46,209 | 45,938 | 44,913 | 45,980 | 48,540 | 50,585 | 50,883 | 54,705 | 57,651 | 59,335 |
| Health professions | 4,235 | 4,251 | 4,119 | 4,428 | 3,874 | 4,047 | 4,226 | 4,534 | 4,444 | 4,691 | 5,227 | 5,814 |
| Other technical/ professional* | 16,934 | 16,329 | 16,072 | 15,994 | 15,777 | 15,731 | 15,931 | 15,920 | 15,849 | 16,944 | 17,911 | 18,974 |

* Principally composed of public administration at the master's degree level and agriculture and natural resources at the doctor's degree level. See the glossary for a full definition of "other technical/ professional" fields.

NOTE: See the supplemental table to Indicator 27 for a description of fields of study. Includes degrees conferred to U.S. and non-U.S. citizens.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 263 (based on IPEDS/HEGIS "Completions" surveys).

Table 28-4 Female field concentration ratio ${ }^{1}$ of doctor's degrees conferred, by field of study: Academic years ending 1971-94

| Field of study | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Humanities | 1.89 | 1.87 | 1.77 | 1.71 | 1.59 | 1.50 | 1.41 | 1.32 | 1.18 | 1.10 | 1.15 | 1.15 |
| Social and behavioral sciences | 1.29 | 1.22 | 1.21 | 1.28 | 1.26 | 1.21 | 1.29 | 1.23 | 1.28 | 1.30 | 1.26 | 1.26 |
| Natural sciences | 0.67 | 0.66 | 0.65 | 0.63 | 0.62 | 0.57 | 0.56 | 0.57 | 0.59 | 0.56 | 0.56 | 0.57 |
| Life sciences | 1.17 | 1.09 | 1.12 | 1.08 | 1.04 | 0.92 | 0.84 | 0.89 | 0.88 | 0.83 | 0.87 | 0.87 |
| Physical sciences | 0.36 | 0.38 | 0.33 | 0.32 | 0.33 | 0.32 | 0.33 | 0.31 | 0.33 | 0.34 | 0.30 | 0.34 |
| Mathematics | 0.50 | 0.45 | 0.48 | 0.43 | 0.44 | 0.40 | 0.46 | 0.49 | 0.50 | 0.37 | 0.40 | 0.33 |
| Computer sciences and engineering | 0.04 | 0.05 | 0.09 | 0.08 | 0.09 | 0.10 | 0.11 | 0.08 | 0.11 | 0.11 | 0.11 | 0.13 |
| Computer and information sciences | 0.14 | 0.41 | 0.38 | 0.20 | 0.26 | 0.35 | 0.30 | 0.23 | 0.37 | 0.30 | 0.24 | 0.19 |
| Engineering | 0.04 | 0.03 | 0.07 | 0.07 | 0.08 | 0.08 | 0.09 | 0.07 | 0.09 | 0.09 | 0.09 | 0.12 |
| Technical/professional | 1.27 | 1.28 | 1.23 | 1.21 | 1.26 | 1.33 | 1.32 | 1.41 | 1.43 | 1.51 | 1.54 | 1.56 |
| Education | 1.60 | 1.61 | 1.48 | 1.52 | 1.61 | 1.66 | 1.61 | 1.79 | 1.84 | 1.86 | 1.98 | 1.99 |
| Business management | 0.17 | 0.12 | 0.28 | 0.24 | 0.16 | 0.19 | 0.21 | 0.26 | 0.34 | 0.41 | 0.39 | 0.47 |
| Health professions | 1.19 | 1.18 | 1.53 | 1.24 | 1.48 | 1.36 | 1.46 | 1.75 | 1.49 | 1.91 | 1.71 | 1.78 |
| Other technical/ professional ${ }^{2}$ | 0.76 | 0.77 | 0.81 | 0.70 | 0.72 | 0.89 | 0.88 | 0.80 | 0.77 | 0.87 | 0.87 | 0.93 |
| Field of study | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| Humanities | 1.09 | 1.08 | 1.07 | 1.08 | 1.08 | 1.06 | 1.05 | 1.06 | 1.13 | 1.13 | 1.13 | 1.09 |
| Social and behavioral sciences | 1.38 | 1.37 | 1.38 | 1.42 | 1.43 | 1.54 | 1.48 | 1.58 | 1.71 | 1.50 | 1.56 | 1.54 |
| Natural sciences | 0.59 | 0.57 | 0.60 | 0.58 | 0.61 | 0.63 | 0.64 | 0.65 | 0.64 | 0.69 | 0.70 | 0.69 |
| Life sciences | 0.96 | 0.88 | 0.94 | 0.93 | 0.99 | 1.01 | 1.00 | 1.06 | 1.01 | 1.04 | 1.08 | 1.09 |
| Physical sciences | 0.33 | 0.35 | 0.37 | 0.37 | 0.38 | 0.41 | 0.43 | 0.42 | 0.42 | 0.47 | 0.45 | 0.44 |
| Mathematics | 0.40 | 0.42 | 0.35 | 0.37 | 0.38 | 0.36 | 0.42 | 0.38 | 0.41 | 0.46 | 0.51 | 0.45 |
| Computer sciences and engineering | 0.11 | 0.12 | 0.14 | 0.15 | 0.15 | 0.15 | 0.18 | 0.19 | 0.18 | 0.19 | 0.18 | 0.21 |
| Computer and information sciences | 0.30 | 0.23 | 0.22 | 0.28 | 0.30 | 0.23 | 0.32 | 0.30 | 0.27 | 0.26 | 0.27 | 0.29 |
| Engineering | 0.09 | 0.12 | 0.13 | 0.13 | 0.14 | 0.14 | 0.17 | 0.17 | 0.17 | 0.18 | 0.17 | 0.20 |
| Technical/professional | 1.50 | 1.54 | 1.57 | 1.61 | 1.65 | 1.69 | 1.73 | 1.69 | 1.70 | 1.76 | 1.73 | 1.76 |
| Education | 1.99 | 1.99 | 2.09 | 2.10 | 2.18 | 2.25 | 2.32 | 2.35 | 2.34 | 2.47 | 2.35 | 2.48 |
| Business management | 0.41 | 0.54 | 0.40 | 0.52 | 0.58 | 0.58 | 0.65 | 0.59 | 0.60 | 0.51 | 0.63 | 0.63 |
| Health professions | 1.57 | 2.03 | 2.17 | 1.94 | 2.12 | 2.41 | 2.35 | 2.07 | 2.27 | 2.33 | 2.18 | 2.25 |
| Other technical/ professional ${ }^{2}$ | 0.83 | 0.88 | 0.89 | 1.00 | 1.01 | 1.03 | 0.98 | 1.00 | 0.99 | 1.01 | 1.09 | 1.07 |

[^19]NOTE: See the supplemental note to Indicator 27 for a description of fields of study.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 266 (based on IPEDS/HEGIS "Completions" surveys).

Table 28-5 Percentage distribution of doctor's degrees conferred, by field of study and sex: Academic years ending 1971-94

| Field of study | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female |  |  |  |  |  |  |  |  |  |  |  |
| Total number of degrees | 4,577 | 5,273 | 6,206 | 6,451 | 7,266 | 7,797 | 8,090 | 8,473 | 9,189 | 9,672 | 10,247 | 10,483 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Humanities | 22.8 | 23.4 | 24.1 | 23.5 | 22.0 | 21.4 | 20.0 | 19.0 | 18.4 | 16.2 | 15.8 | 15.7 |
| Social and behavioral |  |  |  |  |  |  |  |  |  |  |  |  |
| Natural sciences | 20.5 | 18.7 | 17.4 | 16.3 | 15.9 | 14.4 | 14.3 | 14.6 | 15.0 | 14.8 | 15.1 | 15.6 |
| Life sciences | 13.0 | 11.8 | 11.4 | 10.8 | 10.2 | 9.3 | 9.0 | 9.4 | 9.9 | 9.8 | 10.3 | 10.4 |
| Physical sciences | 5.4 | 5.2 | 4.3 | 3.9 | 4.1 | 3.8 | 3.9 | 3.7 | 3.8 | 4.0 | 3.7 | 4.3 |
| Mathematics | 2.1 | 1.7 | 1.6 | 1.6 | 1.5 | 1.2 | 1.4 | 1.5 | 1.4 | 1.1 | 1.2 | 0.9 |
| Computer sciences and engineering | 0.6 | 0.6 | 1.1 | 1.0 | 1.1 | 1.1 | 1.1 | 0.8 | 1.2 | 1.3 | 1.3 | 1.5 |
| Computer and information sciences | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 |
| Engineering | 0.5 | 0.4 | 0.9 | 0.9 | 0.9 | 0.8 | 0.9 | 0.7 | 0.9 | 1.0 | 1.0 | 1.3 |
| Technical/professional | 33.9 | 34.9 | 34.6 | 34.0 | 36.1 | 38.2 | 38.5 | 41.2 | 41.4 | 43.4 | 44.2 | 44.0 |
| Education | 27.7 | 29.3 | 26.8 | 27.6 | 29.2 | 30.5 | 31.0 | 32.3 | 32.6 | 33.2 | 33.5 | 32.3 |
| Business management | 0.5 | 0.4 | 0.8 | 0.8 | 0.5 | 0.6 | 0.6 | 0.8 | 1.1 | 1.1 | 1.2 | 1.4 |
| Health professions | 1.7 | 1.5 | 2.6 | 2.0 | 2.4 | 2.1 | 2.1 | 3.0 | 2.9 | 3.6 | 3.6 | 4.0 |
| Other technical/ professional ${ }^{1}$ | 4.0 | 3.7 | 4.3 | 3.6 | 3.9 | 5.0 | 4.8 | 5.1 | 4.9 | 5.4 | 5.9 | 6.2 |
|  | Male |  |  |  |  |  |  |  |  |  |  |  |
| Total number of degrees | 27,530 | 28,090 | 28,571 | 27,365 | 26,817 | 26,267 | 25,142 | 23,658 | 23,541 | 22,943 | 22,711 | 22,224 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Humanities | 12.0 | 12.5 | 13.6 | 13.7 | 13.8 | 14.3 | 14.2 | 14.4 | 15.5 | 14.7 | 13.8 | 13.6 |
| Social and behavioral sciences | 17.4 | 18.4 | 18.8 | 19.6 | 19.8 | 20.5 | 20.2 | 19.8 | 18.7 | 18.6 | 18.8 | 18.4 |
| Natural sciences | 30.3 | 28.3 | 26.8 | 26.0 | 25.7 | 25.2 | 25.6 | 25.6 | 25.6 | 26.4 | 26.8 | 27.5 |
| Life sciences | 11.1 | 10.8 | 10.2 | 10.0 | 9.8 | 10.1 | 10.6 | 10.6 | 11.2 | 11.7 | 11.7 | 11.9 |
| Physical sciences | 15.1 | 13.6 | 13.1 | 12.3 | 12.4 | 11.9 | 12.0 | 11.9 | 11.7 | 11.8 | 12.2 | 12.8 |
| Mathematics | 4.2 | 3.8 | 3.5 | 3.6 | 3.5 | 3.1 | 3.0 | 3.1 | 2.7 | 2.9 | 2.9 | 2.8 |
| Computer sciences and engineering | 13.6 | 13.5 | 12.7 | 12.6 | 12.1 | 11.3 | 10.8 | 10.8 | 11.2 | 11.4 | 11.8 | 12.3 |
| Computer and information sciences | 0.5 | 0.6 | 0.6 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 | 1.0 | 1.0 |
| Engineering | 13.1 | 13.0 | 12.0 | 11.9 | 11.3 | 10.5 | 10.0 | 10.1 | 10.3 | 10.5 | 10.8 | 11.2 |
| Technical/professional | 26.7 | 27.3 | 28.1 | 28.1 | 28.5 | 28.8 | 29.2 | 29.3 | 29.0 | 28.8 | 28.8 | 28.2 |
| Education | 17.3 | 18.2 | 18.2 | 18.2 | 18.1 | 18.4 | 19.2 | 18.1 | 17.7 | 17.9 | 16.9 | 16.3 |
| Business management | 2.7 | 3.0 | 3.0 | 3.2 | 3.3 | 3.2 | 3.1 | 3.2 | 3.1 | 2.8 | 3.0 | 3.0 |
| Health professions | 1.4 | 1.3 | 1.7 | 1.6 | 1.6 | 1.6 | 1.5 | 1.7 | 1.9 | 1.9 | 2.1 | 2.3 |
| Other technical/ professional ${ }^{1}$ | 5.3 | 4.8 | 5.3 | 5.1 | 5.4 | 5.6 | 5.4 | 6.3 | 6.3 | 6.2 | 6.8 | 6.7 |
| Index of dissimilarity ${ }^{2}$ | 28.3 | 27.2 | 25.3 | 26.0 | 25.5 | 24.1 | 24.1 | 24.6 | 24.0 | 24.2 | 25.0 | 24.7 |

Table 28-5 Percentage distribution of doctor's degrees conferred, by field of study and sex: Academic years ending 1971-94-Continued

| Field of study | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female |  |  |  |  |  |  |  |  |  |  |  |
| Total number of degrees | 10,873 | 11,145 | 11,243 | 11,834 | 11,980 | 12,012 | 13,062 | 13,865 | 14,214 | 14,922 | 16,041 | 16,618 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Humanities | 14.8 | 14.7 | 14.1 | 14.2 | 13.9 | 13.2 | 12.8 | 13.3 | 13.4 | 14.0 | 13.7 | 14.0 |
| Social and behavioral sciences | 24.4 | 23.7 | 23.4 | 24.1 | 23.7 | 23.6 | 23.2 | 23.3 | 24.4 | 20.8 | 21.8 | 21.2 |
| Natural sciences | 15.2 | 15.0 | 15.9 | 15.6 | 16.4 | 17.4 | 17.1 | 17.5 | 18.0 | 18.9 | 18.8 | 18.7 |
| Life sciences | 9.9 | 9.5 | 10.0 | 9.5 | 10.0 | 10.7 | 9.8 | 10.5 | 10.7 | 10.9 | 11.0 | 11.1 |
| Physical sciences | 4.2 | 4.4 | 4.9 | 5.0 | 5.3 | 5.7 | 5.9 | 5.8 | 5.9 | 6.4 | 6.0 | 6.1 |
| Mathematics | 1.1 | 1.2 | 1.0 | 1.1 | 1.1 | 1.1 | 1.4 | 1.2 | 1.4 | 1.5 | 1.8 | 1.5 |
| Computer sciences and engineering | 1.5 | 1.7 | 2.1 | 2.3 | 2.6 | 2.8 | 3.7 | 3.9 | 4.1 | 4.2 | 4.2 | 4.7 |
| Computer and information sciences | 0.3 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | 0.8 |
| Engineering | 1.1 | 1.5 | 1.9 | 1.9 | 2.2 | 2.4 | 3.1 | 3.2 | 3.4 | 3.5 | 3.5 | 4.0 |
| Technical/professional | 44.2 | 44.9 | 44.5 | 43.7 | 43.5 | 42.9 | 43.1 | 42.0 | 40.2 | 42.1 | 41.5 | 41.4 |
| Education | 32.3 | 31.1 | 30.6 | 29.7 | 29.0 | 27.6 | 27.8 | 26.9 | 25.1 | 27.3 | 26.0 | 25.3 |
| Business management | 1.2 | 1.8 | 1.3 | 1.7 | 2.1 | 2.1 | 2.3 | 2.0 | 2.2 | 1.9 | 2.4 | 2.3 |
| Health professions | 4.7 | 5.3 | 5.6 | 5.4 | 5.4 | 5.9 | 6.3 | 6.0 | 6.5 | 6.5 | 6.3 | 6.7 |
| Other technical/ professional ${ }^{1}$ | 6.0 | 6.7 | 7.0 | 6.9 | 6.9 | 7.3 | 6.7 | 7.1 | 6.4 | 6.3 | 6.8 | 7.1 |
|  | Male |  |  |  |  |  |  |  |  |  |  |  |
| Total number of degrees | 21,902 | 22,064 | 21,700 | 21,819 | 22,061 | 22,279 | 22,597 | 24,248 | 24,333 | 25,168 | 25,980 | 26,531 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
|  | 13.5 | 13.5 | 13.2 | 13.2 | 12.9 | 12.4 | 12.2 | 12.5 | 11.8 | 12.4 | 12.2 | 12.8 |
| Social and behavioral sciences | 17.7 | 17.2 | 16.9 | 16.9 | 16.5 | 15.4 | 15.7 | 14.8 | 14.3 | 13.8 | 13.9 | 13.8 |
| Natural sciences | 26.0 | 26.3 | 26.6 | 26.8 | 26.7 | 27.6 | 26.8 | 27.0 | 28.2 | 27.4 | 27.0 | 27.3 |
| Life sciences | 10.3 | 10.8 | 10.6 | 10.2 | 10.1 | 10.5 | 9.9 | 9.9 | 10.6 | 10.4 | 10.3 | 10.1 |
| Physical sciences | 12.8 | 12.8 | 13.1 | 13.6 | 13.8 | 14.0 | 13.7 | 13.8 | 14.2 | 13.6 | 13.2 | 13.7 |
| Mathematics | 2.8 | 2.8 | 2.9 | 3.0 | 2.8 | 3.0 | 3.3 | 3.3 | 3.4 | 3.4 | 3.5 | 3.4 |
| Computer sciences and |  |  |  |  |  |  |  |  |  |  |  |  |
| Computer and information sciences | 1.0 | 1.0 | 1.0 | 1.4 | 1.5 | 1.7 | 2.1 | 2.2 | 2.4 | 2.7 | 2.7 | 2.6 |
| Engineering | 12.4 | 12.8 | 13.9 | 14.6 | 16.1 | 17.5 | 18.2 | 18.7 | 19.7 | 19.8 | 20.3 | 20.0 |
| Technical/professional | 29.4 | 29.1 | 28.3 | 27.2 | 26.3 | 25.5 | 25.0 | 24.8 | 23.6 | 23.9 | 23.9 | 23.5 |
| Education | 16.2 | 15.6 | 14.6 | 14.2 | 13.3 | 12.3 | 12.0 | 11.4 | 10.7 | 11.1 | 11.0 | 10.2 |
| Business management | 2.9 | 3.3 | 3.2 | 3.3 | 3.7 | 3.6 | 3.5 | 3.4 | 3.6 | 3.8 | 3.7 | 3.7 |
| Health professions | 3.0 | 2.6 | 2.6 | 2.8 | 2.6 | 2.5 | 2.7 | 2.9 | 2.9 | 2.8 | 2.9 | 3.0 |
| Other technical/ professional ${ }^{1}$ | 7.3 | 7.6 | 7.9 | 6.9 | 6.8 | 7.1 | 6.8 | 7.1 | 6.5 | 6.3 | 6.3 | 6.6 |
| Index of dissimilarity ${ }^{2}$ | 25.7 | 25.8 | 26.4 | 26.4 | 26.8 | 28.1 | 27.7 | 28.5 | 29.8 | 29.1 | 29.1 | 28.8 |

[^20]category was not). Here, the index of dissimilarity represents the percentage, by field, one sex would need to vary to reach the field distribution of the other sex.

NOTE: Details may not add to totals due to rounding. Includes degrees conferred to U.S. and non-U.S. citizens. See the supplemental note to Indicator 27 for a description of fields of study.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 266 (based on IPEDS/HEGIS "Completions" surveys).

Table 28-6 Number of doctor's degrees conferred, by field of study and sex: Academic years ending 1971-94

| Field of study | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female |  |  |  |  |  |  |  |  |  |  |  |
| Total | 4,577 | 5,273 | 6,206 | 6,451 | 7,266 | 7,797 | 8,090 | 8,473 | 9,189 | 9,672 | 10,247 | 10,483 |
| Humanities | 1,043 | 1,233 | 1,496 | 1,513 | 1,597 | 1,667 | 1,622 | 1,613 | 1,687 | 1,571 | 1,621 | 1,645 |
| Social and behavioral sciences | 1,022 | 1,181 | 1,414 | 1,626 | 1,812 | 1,937 | 2,104 | 2,062 | 2,203 | 2,347 | 2,422 | 2,429 |
| Natural sciences | 936 | 985 | 1,080 | 1,053 | 1,156 | 1,125 | 1,156 | 1,236 | 1,381 | 1,434 | 1,547 | 1,638 |
| Life sciences | 595 | 622 | 710 | 699 | 743 | 729 | 726 | 798 | 906 | 946 | 1,052 | 1,089 |
| Physical sciences | 246 | 273 | 268 | 253 | 301 | 299 | 319 | 312 | 350 | 384 | 376 | 451 |
| Mathematics | 95 | 90 | 102 | 101 | 112 | 97 | 111 | 126 | 125 | 104 | 119 | 98 |
| Computer sciences and engineering | 26 | 34 | 69 | 64 | 80 | 89 | 92 | 72 | 113 | 122 | 129 | 161 |
| Computer and information sciences | 3 | 12 | 15 | 9 | 14 | 23 | 19 | 15 | 30 | 27 | 25 | 21 |
| Engineering | 23 | 22 | 54 | 55 | 66 | 66 | 73 | 57 | 83 | 95 | 104 | 140 |
| Technical/professional | 1,550 | 1,840 | 2,147 | 2,195 | 2,621 | 2,979 | 3,116 | 3,490 | 3,805 | 4,198 | 4,528 | 4,610 |
| Education | 1,270 | 1,544 | 1,666 | 1,783 | 2,119 | 2,376 | 2,506 | 2,737 | 2,996 | 3,214 | 3,436 | 3,387 |
| Business management | 21 | 19 | 52 | 49 | 39 | 49 | 52 | 70 | 97 | 111 | 120 | 147 |
| Health professions | 77 | 80 | 161 | 131 | 177 | 166 | 172 | 252 | 264 | 351 | 367 | 422 |
| Other technical/ professional* | 182 | 197 | 268 | 232 | 286 | 388 | 386 | 431 | 448 | 522 | 605 | 654 |
|  | Male |  |  |  |  |  |  |  |  |  |  |  |
| Total | 27,530 | 28,090 | 28,571 | 27,365 | 26,817 | 26,267 | 25,142 | 23,658 | 23,541 | 22,943 | 22,711 | 22,224 |
| Humanities | 3,317 | 3,510 | 3,889 | 3,757 | 3,711 | 3,749 | 3,565 | 3,410 | 3,649 | 3,378 | 3,128 | 3,021 |
| Social and behavioral sciences | 4,782 | 5,177 | 5,370 | 5,370 | 5,313 | 5,377 | 5,084 | 4,696 | 4,396 | 4,278 | 4,276 | 4,093 |
| Natural sciences | 8,348 | 7,936 | 7,651 | 7,105 | 6,902 | 6,607 | 6,441 | 6,054 | 6,032 | 6,054 | 6,087 | 6,112 |
| Life sciences | 3,050 | 3,031 | 2,926 | 2,740 | 2,641 | 2,663 | 2,671 | 2,511 | 2,636 | 2,690 | 2,666 | 2,654 |
| Physical sciences | 4,144 | 3,830 | 3,738 | 3,373 | 3,325 | 3,132 | 3,022 | 2,821 | 2,752 | 2,705 | 2,765 | 2,835 |
| Mathematics | 1,154 | 1,075 | 987 | 992 | 936 | 812 | 748 | 722 | 644 | 659 | 656 | 623 |
| Computer sciences and engineering | 3,740 | 3,804 | 3,619 | 3,446 | 3,241 | 2,976 | 2,710 | 2,564 | 2,629 | 2,625 | 2,684 | 2,726 |
| Computer and information sciences | 125 | 155 | 181 | 189 | 199 | 221 | 197 | 181 | 206 | 213 | 227 | 230 |
| Engineering | 3,615 | 3,649 | 3,438 | 3,257 | 3,042 | 2,755 | 2,513 | 2,383 | 2,423 | 2,412 | 2,457 | 2,496 |
| Technical/professional | 7,343 | 7,663 | 8,042 | 7,687 | 7,650 | 7,558 | 7,342 | 6,934 | 6,835 | 6,608 | 6,536 | 6,272 |
| Education | 4,771 | 5,104 | 5,191 | 4,974 | 4,856 | 4,826 | 4,832 | 4,281 | 4,174 | 4,100 | 3,843 | 3,612 |
| Business management | 736 | 840 | 850 | 870 | 897 | 851 | 775 | 753 | 724 | 642 | 675 | 668 |
| Health professions | 389 | 362 | 485 | 447 | 441 | 411 | 366 | 402 | 454 | 435 | 475 | 503 |
| Other technical/ professional* | 1,447 | 1,357 | 1,516 | 1,396 | 1,456 | 1,470 | 1,369 | 1,498 | 1,483 | 1,431 | 1,543 | 1,489 |

Table 28-6 Number of doctor's degrees conferred, by field of study and sex: Academic years ending 1971-94-Continued

| Field of study | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female |  |  |  |  |  |  |  |  |  |  |  |
| Total | 10,873 | 11,145 | 11,243 | 11,834 | 11,980 | 12,012 | 13,062 | 13,865 | 14,214 | 14,922 | 16,041 | 16,618 |
| Humanities | 1,604 | 1,634 | 1,588 | 1,683 | 1,663 | 1,580 | 1,677 | 1,844 | 1,901 | 2,091 | 2,205 | 2,324 |
| Social and behavioral sciences | 2,653 | 2,642 | 2,626 | 2,854 | 2,835 | 2,839 | 3,031 | 3,236 | 3,468 | 3,106 | 3,493 | 3,527 |
| Natural sciences | 1,653 | 1,676 | 1,791 | 1,846 | 1,959 | 2,094 | 2,234 | 2,430 | 2,558 | 2,816 | 3,015 | 3,105 |
| Life sciences | 1,075 | 1,056 | 1,125 | 1,129 | 1,194 | 1,280 | 1,286 | 1,450 | 1,516 | 1,623 | 1,771 | 1,844 |
| Physical sciences | 458 | 491 | 552 | 588 | 634 | 686 | 770 | 808 | 843 | 962 | 961 | 1,008 |
| Mathematics | 120 | 129 | 114 | 129 | 131 | 128 | 178 | 172 | 199 | 231 | 283 | 253 |
| Computer sciences and engineering | 159 | 191 | 233 | 274 | 315 | 341 | 485 | 538 | 577 | 630 | 676 | 789 |
| Computer and information sciences | 34 | 26 | 25 | 45 | 52 | 48 | 85 | 93 | 92 | 103 | 116 | 125 |
| Engineering | 125 | 165 | 208 | 229 | 263 | 293 | 400 | 445 | 485 | 527 | 560 | 664 |
| Technical/professional | 4,804 | 5,002 | 5,005 | 5,177 | 5,208 | 5,158 | 5,635 | 5,817 | 5,710 | 6,279 | 6,652 | 6,873 |
| Education | 3,510 | 3,465 | 3,440 | 3,517 | 3,476 | 3,321 | 3,633 | 3,726 | 3,574 | 4,081 | 4,163 | 4,202 |
| Business management | 132 | 199 | 143 | 205 | 254 | 253 | 300 | 275 | 309 | 289 | 377 | 384 |
| Health professions | 506 | 590 | 634 | 637 | 649 | 713 | 828 | 832 | 919 | 963 | 1,014 | 1,113 |
| Other technical/ professional* | 656 | 748 | 788 | 818 | 829 | 871 | 874 | 984 | 908 | 946 | 1,098 | 1,174 |
|  | Male |  |  |  |  |  |  |  |  |  |  |  |
| Total | 21,902 | 22,064 | 21,700 | 21,819 | 22,061 | 22,279 | 22,597 | 24,248 | 24,333 | 25,168 | 25,980 | 26,531 |
| Humanities | 2,959 | 2,982 | 2,867 | 2,876 | 2,840 | 2,766 | 2,759 | 3,029 | 2,871 | 3,125 | 3,168 | 3,398 |
| Social and behavioral sciences | 3,880 | 3,804 | 3,672 | 3,694 | 3,641 | 3,422 | 3,539 | 3,585 | 3,476 | 3,485 | 3,618 | 3,663 |
| Natural sciences | 5,688 | 5,810 | 5,778 | 5,840 | 5,892 | 6,140 | 6,059 | 6,544 | 6,861 | 6,900 | 7,002 | 7,236 |
| Life sciences | 2,266 | 2,381 | 2,307 | 2,229 | 2,225 | 2,349 | 2,234 | 2,394 | 2,577 | 2,620 | 2,664 | 2,690 |
| Physical sciences | 2,811 | 2,815 | 2,851 | 2,963 | 3,039 | 3,123 | 3,088 | 3,356 | 3,447 | 3,429 | 3,432 | 3,642 |
| Mathematics | 611 | 614 | 620 | 648 | 628 | 668 | 737 | 794 | 837 | 851 | 906 | 904 |
| Computer sciences and engineering | 2,934 | 3,041 | 3,245 | 3,480 | 3,877 | 4,278 | 4,589 | 5,070 | 5,371 | 5,641 | 5,972 | 6,000 |
| Computer and information sciences | 228 | 225 | 223 | 299 | 322 | 380 | 466 | 534 | 584 | 669 | 689 | 685 |
| Engineering | 2,706 | 2,816 | 3,022 | 3,181 | 3,555 | 3,898 | 4,123 | 4,536 | 4,787 | 4,972 | 5,283 | 5,315 |
| Technical/professional | 6,441 | 6,427 | 6,138 | 5,929 | 5,811 | 5,673 | 5,651 | 6,020 | 5,754 | 6,017 | 6,220 | 6,234 |
| Education | 3,547 | 3,446 | 3,172 | 3,088 | 2,931 | 2,739 | 2,704 | 2,776 | 2,613 | 2,783 | 2,867 | 2,706 |
| Business management | 644 | 730 | 688 | 729 | 808 | 810 | 800 | 818 | 876 | 953 | 969 | 980 |
| Health professions | 649 | 574 | 565 | 604 | 564 | 548 | 609 | 704 | 694 | 698 | 753 | 789 |
| Other technical/ professional* | 1,601 | 1,677 | 1,713 | 1,508 | 1,508 | 1,576 | 1,538 | 1,722 | 1,571 | 1,583 | 1,631 | 1,759 |

* Principally composed of public administration at the master's degree level and agriculture and natural resources at the doctor's degree level. See the glossary for a full definition of "other technical/ professional" fields.

NOTE: See the supplemental note to Indicator 27 for a description of fields of study. Includes degrees conferred to U.S. and non-U.S. citizens.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 263 (based on IPEDS/HEGIS "Completions" surveys).

Table 28-7 Number of master's degrees conferred, by race/ethnicity and field of study: Academic years ending 1989-94

| Race/ethnicity and field of study | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White |  |  |  |  |  |
| Total | 242,756 | 251,689 | 255,281 | 268,371 | 278,829 | 288,288 |
| Humanities | 23,102 | 24,322 | 24,140 | 25,424 | 26,132 | 26,588 |
| Social and behavioral sciences | 15,102 | 15,897 | 18,392 | 17,771 | 18,831 | 20,580 |
| Natural sciences | 9,883 | 9,580 | 9,380 | 9,223 | 9,073 | 9,534 |
| Life sciences | 3,807 | 3,668 | 3,514 | 3,404 | 3,281 | 3,621 |
| Physical sciences | 3,947 | 3,620 | 3,351 | 3,296 | 3,262 | 3,354 |
| Mathematics | 2,129 | 2,292 | 2,515 | 2,523 | 2,530 | 2,559 |
| Computer sciences and engineering | 19,561 | 19,800 | 19,101 | 19,046 | 20,351 | 20,752 |
| Computer and information sciences | 5,316 | 5,536 | 4.958 | 4,678 | 4,700 | 4,605 |
| Engineering | 14,245 | 14,264 | 14,143 | 14,368 | 15,651 | 16,147 |
| Technical/professional | 175,108 | 182,090 | 184,268 | 196,907 | 204,442 | 210,834 |
| Education | 71,119 | 73,860 | 74,764 | 78,874 | 81,290 | 83,065 |
| Business management | 57,785 | 60,793 | 61,087 | 65,320 | 66,535 | 67,669 |
| Health professions | 16,277 | 17,143 | 17,746 | 19,220 | 21,328 | 23,175 |
| Other technical/professional* | 29,927 | 30,294 | 30,671 | 33,493 | 35,289 | 36,925 |
|  | Black |  |  |  |  |  |
| Total | 14,096 | 15,446 | 16,139 | 18,116 | 19,780 | 21,937 |
| Humanities | 744 | 840 | 856 | 1,104 | 1,225 | 1,270 |
| Social and behavioral sciences | 810 | 937 | 1,166 | 1,164 | 1,223 | 1,396 |
| Natural sciences | 265 | 281 | 348 | 345 | 358 | 403 |
| Life sciences | 124 | 115 | 144 | 156 | 141 | 149 |
| Physical sciences | 79 | 91 | 80 | 105 | 112 | 136 |
| Mathematics | 62 | 75 | 124 | 84 | 105 | 118 |
| Computer sciences and engineering | 626 | 713 | 770 | 884 | 964 | 1,073 |
| Computer and information sciences | 211 | 276 | 303 | 334 | 324 | 391 |
| Engineering | 415 | 437 | 467 | 550 | 640 | 682 |
| Technical/professional | 11,651 | 12,675 | 12,999 | 14,619 | 16,010 | 17,795 |
| Education | 5,310 | 5,625 | 5,731 | 6,444 | 6,725 | 7,199 |
| Business management | 3,062 | 3,345 | 3,517 | 3,966 | 4,474 | 5,213 |
| Health professions | 855 | 934 | 1,051 | 1,136 | 1,301 | 1,496 |
| Other technical/professiona** | 2,424 | 2,771 | 2,700 | 3,073 | 3,510 | 3,887 |
|  | Hispanic |  |  |  |  |  |
| Total | 7,282 | 7,954 | 8,386 | 9,358 | 10,665 | 11,913 |
| Humanities | 753 | 843 | 836 | 987 | 1,012 | 1,172 |
| Social and behavioral sciences | 546 | 596 | 694 | 680 | 821 | 942 |
| Natural sciences | 219 | 220 | 267 | 296 | 316 | 299 |
| Life sciences | 112 | 94 | 101 | 141 | 140 | 126 |
| Physical sciences | 77 | 78 | 86 | 91 | 107 | 102 |
| Mathematics | 30 | 48 | 80 | 64 | 69 | 71 |
| Computer sciences and engineering | 609 | 588 | 628 | 699 | 802 | 876 |
| Computer and information sciences | 146 | 136 | 137 | 158 | 167 | 176 |
| Engineering | 463 | 452 | 491 | 541 | 635 | 700 |
| Technical/professional | 5,155 | 5,707 | 5,961 | 6,696 | 7,714 | 8,624 |
| Education | 2,194 | 2,542 | 2,692 | 2,838 | 3,181 | 3,601 |
| Business management | 1,581 | 1,643 | 1,680 | 1,944 | 2,241 | 2,568 |
| Health professions | 402 | 460 | 446 | 559 | 638 | 710 |
| Other technical/professional* | 978 | 1,062 | 1,143 | 1,355 | 1,654 | 1,745 |

Table 28-7 Number of master's degrees conferred, by race/ethnicity and field of study: Academic years ending 1989-94-Continued

| Race/ethnicity and field of study | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Asian/Pacific Islander |  |  |  |  |  |
| Total | 10,336 | 10,578 | 11,180 | 12,658 | 13,866 | 15,267 |
| Humanities | 830 | 826 | 833 | 979 | 1,099 | 1,190 |
| Social and behavioral sciences | 444 | 488 | 559 | 590 | 625 | 761 |
| Natural sciences | 704 | 674 | 725 | 810 | 791 | 898 |
| Life sciences | 229 | 230 | 242 | 276 | 317 | 347 |
| Physical sciences | 286 | 247 | 268 | 318 | 262 | 301 |
| Mathematics | 189 | 197 | 215 | 216 | 212 | 250 |
| Computer sciences and engineering | 3,045 | 3,049 | 3,260 | 3,603 | 3,604 | 3,940 |
| Computer and information sciences | 947 | 1,060 | 1,085 | 1,171 | 1,163 | 1,317 |
| Engineering | 2,098 | 1,989 | 2,175 | 2,432 | 2,441 | 2,623 |
| Technical/professional | 5,313 | 5,541 | 5,803 | 6,676 | 7,747 | 8,478 |
| Education | 961 | 1,023 | 1,103 | 1,192 | 1,391 | 1,534 |
| Business management | 2,924 | 2,979 | 3,140 | 3,635 | 4,304 | 4,625 |
| Health professions | 551 | 639 | 627 | 739 | 864 | 1,007 |
| Other technical/professional* | 877 | 900 | 933 | 1,110 | 1,188 | 1,312 |
| American Indian/Alaskan Native |  |  |  |  |  |  |
| Total | 1,086 | 1,099 | 1,136 | 1,273 | 1,407 | 1,697 |
| Humanities | 88 | 110 | 81 | 125 | 135 | 157 |
| Social and behavioral sciences | 85 | 86 | 105 | 91 | 133 | 136 |
| Natural sciences | 39 | 30 | 38 | 36 | 48 | 41 |
| Life sciences | 16 | 14 | 13 | 13 | 27 | 18 |
| Physical sciences | 17 | 10 | 14 | 19 | 13 | 17 |
| Mathematics | 6 | 6 | 11 | 4 | 8 | 6 |
| Computer sciences and engineering | 79 | 50 | 60 | 67 | 76 | 84 |
| Computer and information sciences | 41 | 7 | 15 | 16 | 15 | 19 |
| Engineering | 38 | 43 | 45 | 51 | 61 | 65 |
| Technical/professional | 795 | 823 | 852 | 954 | 1,015 | 1,279 |
| Education | 381 | 411 | 405 | 457 | 459 | 605 |
| Business management | 181 | 188 | 201 | 220 | 269 | 299 |
| Health professions | 79 | 83 | 95 | 94 | 120 | 137 |
| Other technical/professional* | 154 | 141 | 151 | 183 | 167 | 238 |

* Principally composed of public administration at the master's degree level and agriculture and natural resources at the doctor's degree level. See the glossary for a full definition of "other technical/ professional" fields.

NOTE: See the supplemental note to Indicator 27 for a description of fields of study. Includes degrees conferred to U.S. and non-U.S. citizens.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 263 (based on IPEDS/HEGIS "Completions" surveys).

Table 28-8 Number of doctor's degrees conferred, by race/ethnicity and field of study: Academic years ending 1989-94

| Race/ethnicity and field of study | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White |  |  |  |  |  |
| Total | 24,882 | 25,880 | 25,328 | 25,813 | 26,700 | 27,156 |
| Humanities | 3,580 | 2,835 | 3,623 | 3,921 | 4,001 | 4,190 |
| Social and behavioral sciences | 4,720 | 4,862 | 5,298 | 4,983 | 5,326 | 5,345 |
| Natural sciences | 5,514 | 5,776 | 5,766 | 5,715 | 5,699 | 5,858 |
| Life sciences | 2,666 | 2,801 | 2,764 | 2,785 | 2,810 | 2,828 |
| Physical sciences | 2,441 | 2,578 | 2,566 | 2,470 | 2,405 | 2,536 |
| Mathematics | 407 | 397 | 436 | 460 | 484 | 494 |
| Computer sciences and engineering | 2,233 | 2,400 | 2,390 | 2,473 | 2,602 | 2,576 |
| Computer and information sciences | 297 | 316 | 332 | 366 | 383 | 366 |
| Engineering | 1,936 | 2,084 | 2,058 | 2,107 | 2,219 | 2,210 |
| Technical/professional | 8,835 | 9,014 | 8,251 | 8,721 | 9,072 | 9,187 |
| Education | 5,458 | 5,570 | 4,907 | 5,404 | 5,497 | 5,393 |
| Business management | 745 | 659 | 714 | 700 | 815 | 847 |
| Health professions | 1,107 | 1,120 | 1,157 | 1,161 | 1,205 | 1,282 |
| Other technical/professional* | 1,525 | 1,665 | 1,473 | 1,456 | 1,555 | 1,665 |
|  | Black |  |  |  |  |  |
| Total | 1,065 | 1,152 | 1,211 | 1,223 | 1,352 | 1,393 |
| Humanities | 122 | 107 | 162 | 187 | 203 | 230 |
| Social and behavioral sciences | 218 | 218 | 275 | 225 | 225 | 249 |
| Natural sciences | 94 | 77 | 95 | 90 | 108 | 117 |
| Life sciences | 56 | 44 | 46 | 57 | 63 | 64 |
| Physical sciences | 30 | 28 | 38 | 31 | 37 | 46 |
| Mathematics | 8 | 5 | 11 | 2 | 8 | 7 |
| Computer sciences and engineering | 28 | 38 | 51 | 50 | 49 | 71 |
| Computer and information sciences | 1 | 4 | 4 | 5 | 6 | 11 |
| Engineering | 27 | 34 | 47 | 45 | 43 | 60 |
| Technical/professional | 603 | 682 | 628 | 671 | 767 | 726 |
| Education | 454 | 528 | 441 | 513 | 552 | 523 |
| Business management | 19 | 18 | 24 | 27 | 29 | 38 |
| Health professions | 41 | 39 | 59 | 45 | 66 | 59 |
| Other technical/professional* | 89 | 97 | 104 | 86 | 120 | 106 |
|  | Hispanic |  |  |  |  |  |
| Total | 628 | 788 | 732 | 811 | 827 | 903 |
| Humanities | 89 | 141 | 123 | 137 | 130 | 149 |
| Social and behavioral sciences | 148 | 197 | 192 | 165 | 210 | 213 |
| Natural sciences | 111 | 155 | 146 | 175 | 160 | 190 |
| Life sciences | 50 | 75 | 66 | 89 | 84 | 96 |
| Physical sciences | 54 | 75 | 67 | 75 | 68 | 83 |
| Mathematics | 7 | 5 | 13 | 11 | 8 | 11 |
| Computer sciences and engineering | 46 | 44 | 59 | 64 | 59 | 57 |
| Computer and information sciences | 4 | 2 | 6 | 6 | 7 | 5 |
| Engineering | 42 | 42 | 53 | 58 | 52 | 52 |
| Technical/professional | 234 | 251 | 222 | 270 | 268 | 294 |
| Education | 166 | 164 | 148 | 187 | 185 | 201 |
| Business management | 13 | 9 | 6 | 11 | 10 | 13 |
| Health professions | 16 | 33 | 39 | 26 | 26 | 26 |
| Other technical/professiona** | 39 | 45 | 29 | 46 | 47 | 54 |

Table 28-8 Number of doctor's degrees conferred, by race/ethnicity and field of study: Academic years ending 1989-94-Continued

| Race/ethnicity and field of study | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Asian/Pacific Islander |  |  |  |  |  |
| Total | 1,324 | 1,235 | 1,459 | 1,559 | 1,582 | 2,025 |
| Humanities | 120 | 129 | 151 | 130 | 142 | 179 |
| Social and behavioral sciences | 162 | 149 | 159 | 170 | 174 | 223 |
| Natural sciences | 387 | 347 | 424 | 493 | 537 | 697 |
| Life sciences | 174 | 158 | 206 | 214 | 265 | 291 |
| Physical sciences | 183 | 152 | 177 | 224 | 215 | 323 |
| Mathematics | 30 | 37 | 41 | 55 | 57 | 83 |
| Computer sciences and engineering | 363 | 341 | 411 | 460 | 437 | 528 |
| Computer and information sciences | 40 | 32 | 39 | 45 | 56 | 64 |
| Engineering | 323 | 309 | 372 | 415 | 381 | 464 |
| Technical/professional | 292 | 269 | 314 | 306 | 292 | 398 |
| Education | 125 | 87 | 121 | 100 | 123 | 152 |
| Business management | 58 | 56 | 54 | 63 | 45 | 66 |
| Health professions | 44 | 62 | 64 | 68 | 64 | 104 |
| Other technical/professiona** | 65 | 64 | 75 | 75 | 60 | 76 |
| American Indian/Alaskan Native |  |  |  |  |  |  |
| Total | 85 | 99 | 102 | 118 | 106 | 134 |
| Humanities | 9 | 13 | 7 | 17 | 17 | 21 |
| Social and behavioral sciences | 18 | 20 | 28 | 25 | 29 | 23 |
| Natural sciences | 24 | 9 | 15 | 19 | 9 | 16 |
| Life sciences | 10 | 4 | 5 | 11 | 5 | 9 |
| Physical sciences | 13 | 5 | 9 | 6 | 4 | 6 |
| Mathematics | 1 | 0 | 1 | 2 | 0 | 1 |
| Computer sciences and engineering | 3 | 6 | 8 | 12 | 3 | 6 |
| Computer and information sciences | 0 | 1 | 1 | 1 | 1 | 1 |
| Engineering | 3 | 5 | 7 | 11 | 2 | 5 |
| Technical/professional | 31 | 51 | 44 | 45 | 48 | 68 |
| Education | 25 | 36 | 35 | 36 | 35 | 42 |
| Business management | 2 | 3 | 2 | 2 | 3 | 7 |
| Health professions | 2 | 9 | 3 | 3 | 4 | 7 |
| Other technical/professional* | 2 | 3 | 4 | 4 | 6 | 12 |

* Principally composed of public administration at the master's degree level and agriculture and natural resources at the doctor's degree level. See the glossary for a full definition of "other technical/ professional" fields.

NOTE: See the supplemental note to Indicator 27 for a description of fields of study. Includes degrees conferred to U.S. and non-U.S. citizens.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 263 (based on IPEDS/HEGIS "Completions" surveys).

Table 29-1 Employment rates for recent high school graduates not enrolled in college and for recent school dropouts, by sex: October 1960-95

| October | Recent high school graduates not enrolled in college |  |  | Recent school dropouts |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female |
| 1960 | 65.0 | 75.3 | 58.8 | 50.9 | 61.8 | 40.8 |
| 1961 | 65.4 | 70.1 | 62.5 | 49.4 | 60.3 | 38.3 |
| 1962 | 68.3 | 77.8 | 61.5 | 40.4 | 61.9 | 23.3 |
| 1963 | 64.7 | 72.6 | 59.5 | 45.1 | 64.4 | 27.0 |
| 1964 | 63.4 | 79.2 | 53.5 | 41.6 | 63.0 | 24.0 |
| 1965 | 71.9 | 84.3 | 63.2 | 47.9 | 66.8 | 26.8 |
| 1966 | 64.9 | 79.7 | 55.8 | 51.4 | 69.4 | 33.6 |
| 1967 | 65.9 | 78.3 | 57.7 | 50.3 | 65.0 | 34.4 |
| 1968 | 67.3 | 79.1 | 60.2 | 50.0 | 65.5 | 34.0 |
| 1969 | 70.1 | 83.1 | 61.1 | 51.0 | 69.8 | 30.9 |
| 1970 | 63.2 | 76.1 | 52.6 | 44.7 | 56.5 | 31.9 |
| 1971 | 65.1 | 77.5 | 55.6 | 46.8 | 59.3 | 31.7 |
| 1972 | 70.1 | 79.9 | 62.2 | 46.8 | 64.7 | 28.3 |
| 1973 | 70.7 | 81.7 | 61.9 | 52.7 | 62.5 | 40.0 |
| 1974 | 69.1 | 76.0 | 63.2 | 49.3 | 63.8 | 32.2 |
| 1975 | 65.1 | 74.1 | 57.5 | 41.9 | 54.8 | 29.5 |
| 1976 | 68.8 | 75.9 | 61.7 | 44.8 | 58.0 | 28.2 |
| 1977 | 72.0 | 77.7 | 67.2 | 52.7 | 64.0 | 39.3 |
| 1978 | 74.9 | 81.6 | 67.5 | 51.2 | 63.7 | 34.8 |
| 1979 | 72.4 | 79.2 | 66.7 | 49.7 | 65.3 | 34.3 |
| 1980 | 68.9 | 72.6 | 65.0 | 44.6 | 51.9 | 34.8 |
| 1981 | 65.9 | 70.0 | 62.1 | 42.1 | 54.1 | 29.3 |
| 1982 | 60.4 | 64.9 | 56.0 | 38.0 | 44.4 | 30.5 |
| 1983 | 63.0 | 66.1 | 60.1 | 44.4 | 51.6 | 35.8 |
| 1984 | 64.0 | 69.1 | 59.7 | 44.0 | 53.1 | 33.7 |
| 1985 | 62.0 | 65.0 | 59.3 | 44.2 | 51.9 | 35.8 |
| 1986 | 65.2 | 69.4 | 61.6 | 48.0 | 57.9 | 36.8 |
| 1987 | 68.9 | 76.9 | 61.9 | 41.8 | 46.0 | 36.6 |
| 1988 | 71.9 | 74.2 | 69.5 | 43.6 | 53.7 | 30.6 |
| 1989 | 71.7 | 77.4 | 65.6 | 46.7 | 52.2 | 40.1 |
| 1990 | 67.8 | 73.1 | 61.9 | 46.3 | 51.3 | 40.6 |
| 1991 | 59.6 | 62.2 | 56.1 | 36.8 | 48.8 | 25.0 |
| 1992 | 62.7 | 68.8 | 55.8 | 36.2 | 44.8 | 28.7 |
| 1993 | 64.2 | 67.6 | 60.6 | 46.9 | 61.6 | 30.1 |
| 1994 | 64.2 | 70.4 | 57.7 | 42.9 | 58.2 | 27.1 |
| 1995 | 63.1 | 64.1 | 62.3 | 47.7 | 52.8 | 41.1 |

NOTE: Recent high school graduates are individuals aged 16-24 who graduated during the survey year. Recent school dropouts are individuals aged 16-24 who did not graduate and who were in school 12 months earlier but who were not enrolled during the survey month.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Labor Force Statistics Derived from the Current Population Survey: 194087. U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 29-2 Employment rates for recent high school graduates not enrolled in college and for recent school dropouts, by family income: October 1972-95

| October | Recent high school graduates not enrolled in college |  |  | Recent school dropouts |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Low | Middle | High | Low | Middle | High |
| 1972 | 67.0 | 68.1 | 77.5 | 34.5 | 49.0 | ${ }^{1}$ ) |
| 1973 | 54.2 | 72.5 | 77.6 | 47.0 | 53.5 | $\left.{ }^{1}\right)$ |
| 1974 | $\left.{ }^{2}\right)$ | $\left(^{2}\right)$ | $\left.1^{2}\right)$ | ${ }^{2}$ ) | $\left(^{2}\right)$ | $\left.{ }^{2}\right)$ |
| 1975 | 52.0 | 65.6 | 71.9 | 33.2 | 45.3 | 45.6 |
| 1976 | 50.2 | 69.7 | 74.5 | 33.5 | 47.7 | 56.1 |
| 1977 | 56.2 | 72.1 | 81.5 | 44.5 | 53.4 | 68.0 |
| 1978 | 59.6 | 74.3 | 80.9 | 42.9 | 52.8 | 59.1 |
| 1979 | 67.8 | 69.9 | 80.4 | 26.4 | 54.4 | 70.8 |
| 1980 | 56.6 | 70.1 | 74.1 | 30.0 | 47.9 | 64.8 |
| 1981 | 53.5 | 64.4 | 77.1 | 27.3 | 43.9 | 63.9 |
| 1982 | 44.3 | 61.3 | 70.1 | 27.8 | 40.8 | ( ${ }^{1}$ ) |
| 1983 | 48.8 | 65.6 | 65.2 | 28.1 | 46.1 | $\left.{ }^{1}\right)$ |
| 1984 | 51.7 | 65.4 | 71.9 | 29.3 | 48.0 | ${ }^{1}$ ) |
| 1985 | 47.4 | 61.7 | 74.3 | 29.1 | 51.0 | ${ }^{1}$ ) |
| 1986 | 57.1 | 63.9 | 77.2 | 39.8 | 50.6 | ( ${ }^{1}$ ) |
| 1987 | 56.6 | 67.5 | 83.6 | 24.7 | 48.7 | ${ }^{1}$ ) |
| 1988 | 55.8 | 73.2 | 82.2 | 36.5 | 45.6 | ( ${ }^{1}$ ) |
| 1989 | 60.1 | 72.3 | 78.4 | 36.1 | 51.8 | ( ${ }^{1}$ ) |
| 1990 | 49.0 | 71.2 | 71.7 | 30.9 | 53.3 | ${ }^{1}$ ) |
| 1991 | 48.5 | 59.0 | 73.4 | 26.8 | 42.1 | $\left.{ }^{1}\right)$ |
| 1992 | 44.0 | 67.7 | 67.5 | 20.2 | 42.4 | $\left.{ }^{1}\right)$ |
| 1993 | 60.9 | 63.8 | 69.4 | 37.6 | 53.2 | $\left.{ }^{1}\right)$ |
| $1994{ }^{3}$ | 53.6 | 67.0 | 66.7 | 28.9 | 47.9 | $\left.{ }^{1}\right)$ |
| 1995 | 56.4 | 65.3 | 66.4 | 36.5 | 53.5 | ( ${ }^{1}$ ) |

'Too few sample observations for a reliable estimate.
${ }^{2}$ Data regarding family income are not available for 1974.
${ }^{3}$ Revised from previously published figures.
NOTE: Recent high school graduates are individuals aged 16-24 who graduated during the survey year. Recent school dropouts are individuals aged 16-24 who did not graduate and who were in
school 12 months earlier but who were not enrolled during the survey month. Low income is the bottom 20 percent of all family incomes; high income is the top 20 percent of all family incomes; and middle income is the 60 percent in-between.

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 29-3 Employment rates for recent high school graduates not enrolled in college and for recent school dropouts, by parents' highest education level: ${ }^{1}$ October 1995

| Parents' highest education level | Percentage distribution | Recent high school graduates not enrolled in college | Recent school dropouts |
| :---: | :---: | :---: | :---: |
| Total | 100.0 | 63.1 | 47.7 |
| Less than high school graduate | 19.8 | 50.1 | 39.1 |
| High school graduate | 33.8 | 64.6 | 49.2 |
| Some college and higher | 28.8 | 67.5 | 44.0 |
| Not available ${ }^{2}$ | 17.6 | 64.3 | 63.3 |

'Parents' highest education level is defined as either 1) the highest educational attainment of the two parents who reside with the student, or if only one parent is in the residence, the highest educational attainment of that parent; or 2) when neither parent resides with the student ( 7 percent of high school graduates in 1995), the highest educational attainment of the head of the household and his or her spouse.
2Parents' highest education level is not available 1) for those who do not live with their parents and who are classified as the head of the household (not including those who live in college dormitories);
and 2) for those whose parents' educational attainment was not reported. In 1995, 18 percent of recent high school graduates were in this category.

NOTE: Recent high school graduates are individuals aged 16-24 who graduated during the survey year. Recent school dropouts are individuals aged 16-24 who did not graduate and who were in school 12 months earlier but who were not enrolled during the survey month.
SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 29-4 Employment rates for recent high school graduates not enrolled in college and for recent school dropouts, by race/ethnicity: October 1972-95

|  | Recent high school graduates not enrolled in college |  |  |  | Recent school dropouts |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total* | White | Black | Hispanic | Total* | White | Black | Hispanic |
| 1972 | 70.1 | 73.5 | 48.3 | - | 46.8 | 47.0 | 42.8 | - |
| 1973 | 70.7 | 74.9 | 49.7 | - | 52.7 | 55.1 | 44.1 | - |
| 1974 | 69.1 | 72.9 | 46.0 | - | 49.3 | 53.9 | 36.2 | - |
| 1975 | 65.1 | 68.9 | 37.2 | - | 41.9 | 46.3 | 21.9 | 46.0 |
| 1976 | 68.8 | 73.1 | 38.6 | - | 44.8 | 49.6 | 20.9 | - |
| 1977 | 72.0 | 76.0 | 43.3 | 65.7 | 52.7 | 56.6 | 34.8 | - |
| 1978 | 74.9 | 79.0 | 45.8 | 68.9 | 51.2 | 54.2 | 22.3 | - |
| 1979 | 72.4 | 76.5 | 44.2 | 68.8 | 49.7 | 54.3 | 27.3 | - |
| 1980 | 68.9 | 74.6 | 34.7 | - | 44.6 | 51.2 | 20.9 | 47.8 |
| 1981 | 65.9 | 73.0 | 31.2 | - | 42.1 | 51.3 | 11.7 | 50.7 |
| 1982 | 60.4 | 68.4 | 29.3 | 43.5 | 38.0 | 44.6 | 16.2 | - |
| 1983 | 63.0 | 69.7 | 34.7 | - | 44.4 | 49.3 | 26.3 | - |
| 1984 | 64.0 | 70.7 | 44.8 | 49.4 | 44.0 | 51.4 | 24.2 | 35.7 |
| 1985 | 62.0 | 70.9 | 34.5 | - | 44.2 | 50.1 | 29.4 | 37.7 |
| 1986 | 65.2 | 71.5 | 41.1 | 64.6 | 48.0 | 50.4 | 31.5 | 46.5 |
| 1987 | 68.9 | 75.2 | 46.9 | 54.0 | 41.8 | 48.1 | 25.9 | - |
| 1988 | 71.9 | 78.2 | 55.8 | 57.3 | 43.6 | 47.6 | 17.6 | 56.1 |
| 1989 | 71.7 | 77.6 | 53.7 | 49.4 | 46.7 | 57.6 | 26.4 | - |
| 1990 | 67.8 | 75.0 | 45.2 | - | 46.3 | 56.3 | 30.9 | - |
| 1991 | 59.6 | 67.0 | 32.3 | - | 36.8 | 38.6 | 24.7 | - |
| 1992 | 62.7 | 71.9 | 37.0 | 54.2 | 36.2 | 43.1 | - | 28.3 |
| 1993 | 64.2 | 71.8 | 42.3 | 42.9 | 46.9 | 52.6 | 27.1 | - |
| 1994 | 64.2 | 73.1 | 38.0 | 46.0 | 42.9 | 51.7 | 34.1 | 28.6 |
| 1995 | 63.1 | 71.4 | 51.5 | 42.1 | 47.7 | 51.6 | 33.5 | 48.5 |

- Too few sample observations for a reliable estimate.
* Included in the total but not shown separately are high school graduates from other racial/ethnic groups.
NOTE: Recent high school graduates are individuals aged 16-24 who graduated during the survey year. Recent school dropouts are
individuals aged 16-24 who did not graduate and who were in school 12 months earlier but who were not enrolled during the survey month.

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 30-1 Average number of months non-college-bound high school graduates were employed, unemployed, or not in the labor force, and average earnings, hours worked per week, number of jobs, and the percentage who worked continuously in the first year after high school, by selected student characteristics: 1983 and 1993

| Student characteristics | Average months employed | Average months unemployed | Average months not in labor force | Average earnings ${ }^{1}$ | Average hours worked per week ${ }^{2}$ | Average number of jobs | Percentage continuously employed ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1982 Graduates |  |  |  |  |  |  |
| Total | 8.0 | 1.0 | 3.1 | \$11,272 | 39.2 | 1.2 | 47.6 |
| Academic achievement test quartile |  |  |  |  |  |  |  |
| Lowest | 6.7 | 1.3 | 4.0 | 9,638 | 37.6 | 1.0 | 38.4 |
| Lower middle | 8.4 | 0.8 | 2.8 | 12,372 | 39.7 | 1.2 | 51.9 |
| Upper middle | 8.8 | 0.9 | 2.3 | 10,925 | 39.3 | 1.3 | 51.7 |
| Highest | 9.0 | 0.5 | 2.5 | 12,632 | 42.0 | 1.3 | 55.4 |
| High school mathematics credits |  |  |  |  |  |  |  |
| 1 credit or less | 7.8 | 1.0 | 3.2 | 11,422 | 38.6 | 1.2 | 47.0 |
| More than 1 to 2 credits | 7.9 | 1.1 | 2.9 | 10,866 | 38.8 | 1.1 | 47.7 |
| More than 2 to 3 credits | 8.2 | 0.7 | 3.1 | 11,582 | 39.8 | 1.2 | 48.1 |
| More than 3 to 4 credits | 8.1 | 0.5 | 3.4 | 12,324 | 40.8 | 1.1 | 50.5 |
| More than 4 credits | 7.0 | 0.9 | 4.2 | 10,359 | 38.2 | 1.3 | 31.3 |
| High school academic credits |  |  |  |  |  |  |  |
| 12 credits or less | 8.0 | 0.9 | 3.1 | 11,982 | 39.4 | 1.2 | 48.7 |
| More than 12 to less than 17 credits | 7.8 | 1.1 | 3.1 | 10,472 | 38.8 | 1.2 | 45.0 |
| 17 to less than 20 credits | 8.2 | 0.8 | 3.0 | 10,774 | 39.9 | 1.2 | 53.8 |
| 20 or more credits | 7.5 | 0.2 | 4.3 | 10,438 | 36.4 | 1.0 | 55.5 |
| High school vocational credits |  |  |  |  |  |  |  |
| Less than 2 credits | 7.8 | 0.8 | 3.3 | 11,202 | 38.0 | 1.1 | 47.6 |
| 2 to less than 4 credits | 8.0 | 1.0 | 3.0 | 10,562 | 37.4 | 1.2 | 45.6 |
| 4 to less than 6 credits | 7.7 | 1.0 | 3.2 | 11,669 | 40.0 | 1.1 | 45.8 |
| 6 to less than 8 credits | 7.8 | 0.9 | 3.3 | 10,698 | 38.5 | 1.1 | 45.2 |
| 8 or more credits | 8.5 | 0.9 | 2.6 | 11,997 | 40.4 | 1.2 | 53.6 |
| Type of high school program |  |  |  |  |  |  |  |
| Academic | 7.6 | 1.0 | 3.5 | 10,577 | 38.4 | 1.1 | 44.1 |
| Vocational | 8.4 | 0.8 | 2.8 | 11,856 | 39.6 | 1.2 | 52.3 |
| Both | 8.4 | 1.1 | 2.6 | 10,931 | 40.8 | 1.3 | 49.4 |
| Other | 7.6 | 1.1 | 3.3 | 12,148 | 38.0 | 1.1 | 45.1 |
| Control of high school |  |  |  |  |  |  |  |
| Public | 7.9 | 1.0 | 3.1 | 11,230 | 39.2 | 1.2 | 47.2 |
| Catholic | 9.2 | 0.6 | 2.2 | 11,792 | 37.7 | 1.3 | 58.3 |
| Private | 7.6 | 0.4 | 4.0 | - | - | 1.0 | 48.1 |

Table 30-1 Average number of months non-college-bound high school graduates were employed, unemployed, or not in the labor force, and average earnings, hours worked per week, number of jobs, and the percentage who worked continuously in the first year after high school, by selected student characteristics: 1983 and 1993-Continued

| Student characteristics | Average months employed | Average months unemployed | Average months not in labor force | Average earnings ${ }^{1}$ | Average hours worked per week ${ }^{2}$ | Average number of jobs | Percentage continuously employed ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SES quartile |  |  |  |  |  |  |  |
| Lowest | 7.1 | 1.2 | 3.7 | 10,441 | 38.3 | 1.0 | 40.4 |
| Lower middle | 8.7 | 0.8 | 2.5 | 11,151 | 39.6 | 1.3 | 54.0 |
| Upper middle | 8.3 | 0.8 | 2.8 | 12,512 | 39.7 | 1.2 | 51.0 |
| Highest | 8.4 | 0.6 | 3.0 | 12,187 | 39.7 | 1.2 | 50.0 |
| Sex |  |  |  |  |  |  |  |
| Male | 8.5 | 0.8 | 2.7 | 12,394 | 42.5 | 1.2 | 53.2 |
| Female | 7.4 | 1.1 | 3.5 | 9,837 | 35.0 | 1.2 | 41.2 |
| Race/ethnicity |  |  |  |  |  |  |  |
| White | 8.4 | 0.7 | 2.9 | 11,453 | 39.7 | 1.2 | 50.8 |
| Black | 5.9 | 2.2 | 3.9 | 9,884 | 37.1 | 0.8 | 34.5 |
| Hispanic | 7.4 | 0.9 | 3.7 | 12,045 | 37.2 | 1.0 | 40.8 |
| Asian/Pacific Islander | 6.9 | 0.8 | 4.3 | 6,745 | 34.7 | 1.3 | 37.0 |
| American Indian/Alaskan Native | 7.2 | 1.8 | 3.0 | 10,404 | 39.8 | 1.2 | 49.0 |
|  | 1992 Graduates |  |  |  |  |  |  |
| Total | 9.6 | 0.9 | 1.5 | \$10,168 | 40.4 | 1.6 | 66.8 |
| Academic achievement test quartile |  |  |  |  |  |  |  |
| Lowest | 9.7 | 1.2 | 1.1 | 10,164 | 39.9 | 1.5 | 69.2 |
| Lower middle | 9.5 | 1.0 | 1.5 | 9,814 | 40.2 | 1.5 | 64.7 |
| Upper middle | 10.5 | 0.4 | 1.1 | 10,635 | 39.7 | 1.6 | 74.4 |
| Highest | 9.8 | 0.6 | 1.6 | 9,449 | 41.2 | 1.6 | 66.3 |
| High school mathematics credits |  |  |  |  |  |  |  |
| 1 credit or less | 8.7 | 1.4 | 2.0 | 11,841 | 43.9 | 1.6 | 56.2 |
| More than 1 to 2 credits | 9.2 | 1.0 | 1.8 | 10,635 | 41.8 | 1.7 | 63.4 |
| More than 2 to 3 credits | 9.8 | 0.9 | 1.3 | 10,449 | 40.8 | 1.5 | 67.8 |
| More than 3 to 4 credits | 9.7 | 0.8 | 1.5 | 9,343 | 39.0 | 1.6 | 69.1 |
| More than 4 credits | 9.7 | 1.0 | 1.3 | 8,746 | 37.0 | 1.5 | 70.2 |
| High school academic credits |  |  |  |  |  |  |  |
| 12 credits or less | 9.0 | 1.3 | 1.6 | 11,645 | 42.9 | 1.5 | 59.5 |
| More than 12 to less than 17 credits | 9.8 | 0.8 | 1.3 | 10,122 | 40.5 | 1.6 | 69.6 |
| 17 to less than 20 credits | 9.6 | 0.7 | 1.6 | 9,688 | 39.2 | 1.5 | 67.3 |
| 20 or more credits | 9.3 | 1.0 | 1.7 | 7,793 | 37.1 | 1.7 | 64.8 |

Table 30-1 Average number of months non-college-bound high school graduates were employed, unemployed, or not in the labor force, and average earnings, hours worked per week, number of jobs, and the percentage who worked continuously in the first year after high school, by selected student characteristics: 1983 and 1993-Continued

| Student characteristics | Average months employed | Average months unemployed | Average months not in labor force | Average earnings' | Average hours worked per week ${ }^{2}$ | Average number of jobs | Percentage continuously employed ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| High school vocational credits |  |  |  |  |  |  |  |
| Less than 2 credits | 9.0 | 0.7 | 2.3 | 9,291 | 39.8 | 1.4 | 65.3 |
| 2 to less than 4 credits | 9.8 | 0.9 | 1.3 | 9,474 | 39.3 | 1.5 | 68.0 |
| 4 to less than 6 credits | 9.3 | 1.1 | 1.5 | 10,808 | 40.7 | 1.7 | 63.4 |
| 6 to less than 8 credits | 10.0 | 0.8 | 1.2 | 10,681 | 41.8 | 1.5 | 69.0 |
| 8 or more credits | 9.7 | 0.8 | 1.4 | 10,013 | 40.4 | 1.5 | 69.7 |
| Type of high school program |  |  |  |  |  |  |  |
| Academic | 9.6 | 1.0 | 1.4 | 9,937 | 39.4 | 1.6 | 66.4 |
| Vocational | 10.0 | 1.1 | 0.9 | 10,495 | 42.1 | 1.5 | 68.5 |
| Both | 10.0 | 0.6 | 1.4 | 10,451 | 41.5 | 1.4 | 71.8 |
| Other | 5.9 | 2.6 | 3.5 | 10,519 | 44.3 | 1.6 | 35.3 |
| Control of high school |  |  |  |  |  |  |  |
| Public | 9.6 | 0.9 | 1.5 | 10,207 | 40.5 | 1.6 | 66.5 |
| Catholic | 11.0 | 0.3 | 0.7 | 9,080 | 37.2 | 1.6 | 85.2 |
| Private | 9.2 | 1.4 | 1.4 | - | - | 1.2 | 64.3 |
| SES quartile |  |  |  |  |  |  |  |
| Lowest | 9.7 | 1.0 | 1.3 | 9,442 | 39.0 | 1.5 | 67.4 |
| Lower middle | 9.8 | 0.8 | 1.4 | 9,793 | 40.1 | 1.6 | 64.8 |
| Upper middle | 10.4 | 0.6 | 1.0 | 11,361 | 41.1 | 1.5 | 78.6 |
| Highest | 9.3 | 0.8 | 1.9 | 10,207 | 41.3 | 1.6 | 64.8 |
| Sex |  |  |  |  |  |  |  |
| Male | 10.2 | 0.8 | 1.0 | 11,899 | 43.6 | 1.5 | 75.1 |
| Female | 8.8 | 1.1 | 2.1 | 7,583 | 36.2 | 1.6 | 56.0 |
| Race/ethnicity |  |  |  |  |  |  |  |
| White | 10.1 | 0.6 | 1.3 | 10,633 | 40.9 | 1.6 | 72.4 |
| Black | 8.1 | 2.2 | 1.7 | 7.959 | 36.7 | 1.5 | 48.8 |
| Hispanic | 8.8 | 1.2 | 2.1 | 9,650 | 41.1 | 1.4 | 56.9 |
| Asian/Pacific Islander | 9.6 | 0.9 | 1.5 | 9,406 | 40.2 | 1.3 | 70.2 |
| American Indian/Alaskan Native | 8.1 | 1.9 | 2.0 | - | - | - | 47.2 |

- Too few sample observations for a reliable estimate.
' In constant 1996 dollars for those with positive earnings.
${ }^{2}$ Among those with positive hours worked.
${ }^{3}$ Defined as working 12 consecutive months after high school.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) study, Sophomore Cohort, Fourth Follow-up Survey, and National Education Longitudinal Study of 1988, First, Second, and Third Follow-up Surveys.

## Note to Indicator 30: Labor market outcomes for non-college-bound high school graduates

The data for this analysis were drawn from the 1980 High School and Beyond (HS\&B) Sophomore Cohort and the National Education Longitudinal Study of 1988 (NELS:88) sophomore cohort. The cases represented in the tables and figures are for early or on-time high school graduates who had earned at least 16 credits as shown on their high school transcripts and who had not entered postsecondary education within 2 years after graduation. Information about what courses students took, the number of credits they earned, and their overall grade point average is derived from high school transcript files for each cohort.

The labor market outcomes are for the first complete year after high school-1983 for the HS\&B sophomores, and 1993 for the NELS graduates. To ensure comparability, the NELS sample was selected using a filter variable designed for this purpose (G10CHRT). The 1980 sophomore data and 1988 NELS samples were chosen for the analysis because they provided the most current and complete information available about non-college-bound high school graduates among NCES data sets.

NOTE: The estimates for the percentage of each cohort who worked were based on the ratio of the total who reported positive hours worked per week to the total sample size.

Supplemental Tables and Notes
Table 31-1 Percentage of 1992-93 college graduates who were working in administrative or clerical support occupations, and the percentage who were unemployed, by sex and field of study: April 1994

| Field of study | Percentage in administrative or clerical support occupations |  | Percentage unemployed |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female |
| Total | 13.0 | 21.8 | 4.8 | 4.3 |
| Business and management | 17.1 | 31.4 | 3.8 | 3.4 |
| Education | 12.9 | 13.5 | 2.9 | 3.5 |
| Engineering | 4.7 | 7.3 | 6.0 | 7.6 |
| Health professions | 7.0 | 7.6 | 4.3 | 4.6 |
| Public affairs/social services | 6.8 | 21.4 | 4.2 | 4.8 |
| Biological sciences | 12.1 | 21.5 | 6.5 | 8.3 |
| Mathematics and science | 12.5 | 22.1 | 5.6 | 3.8 |
| Social sciences | 19.5 | 33.5 | 4.6 | 4.9 |
| History | 15.3 | 22.3 | 6.5 | 3.6 |
| Humanities | 13.4 | 26.8 | 7.3 | 3.3 |
| Psychology | 22.6 | 22.0 | 5.2 | 5.0 |
| Other | 9.0 | 21.4 | 3.5 | 5.2 |

[^21]Table 32-1 Percentage of 25- to 34-year-olds who were employed, by sex and years of school completed: March 1971-96

| March | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \text { Grades } \\ 9-11 \end{array}$ | High school diploma | Some college | Bachelor's degree or higher | $\begin{array}{r} \text { Grades } \\ 9-11 \\ \hline \end{array}$ | High school diploma | Some college | Bachelor's degree or higher |
| 1971 | 87.9 | 93.6 | 89.9 | 92.5 | 35.4 | 43.1 | 44.9 | 56.9 |
| 1972 | 88.5 | 93.7 | 90.4 | 93.6 | 36.2 | 44.9 | 47.3 | 59.7 |
| 1973 | 88.8 | 93.8 | 88.5 | 93.5 | 38.4 | 46.5 | 51.0 | 62.7 |
| 1974 | 90.2 | 92.9 | 89.9 | 93.9 | 39.8 | 47.6 | 54.2 | 66.6 |
| 1975 | 78.0 | 88.4 | 87.7 | 93.5 | 35.4 | 48.1 | 53.6 | 66.3 |
| 1976 | 79.6 | 89.6 | 89.0 | 92.9 | 39.5 | 49.8 | 56.5 | 68.8 |
| 1977 | 81.5 | 89.5 | 89.1 | 93.3 | 41.0 | 53.0 | 58.0 | 69.5 |
| 1978 | 82.4 | 90.8 | 91.2 | 93.5 | 42.4 | 55.9 | 63.3 | 72.1 |
| 1979 | 80.5 | 91.3 | 90.9 | 94.1 | 43.2 | 58.0 | 64.2 | 74.0 |
| 1980 | 77.7 | 88.4 | 88.5 | 93.4 | 45.6 | 59.4 | 66.3 | 75.5 |
| 1981 | 76.7 | 86.9 | 88.5 | 93.7 | 42.7 | 61.3 | 67.6 | 76.4 |
| 1982 | 73.2 | 83.3 | 85.2 | 91.9 | 39.7 | 59.6 | 68.2 | 77.7 |
| 1983 | 69.3 | 78.6 | 83.8 | 91.1 | 37.1 | 58.8 | 68.3 | 79.2 |
| 1984 | 72.1 | 84.8 | 87.9 | 91.9 | 41.3 | 61.0 | 69.5 | 80.5 |
| 1985 | 76.1 | 86.1 | 89.7 | 92.2 | 40.3 | 63.9 | 71.0 | 80.6 |
| 1986 | 73.3 | 86.2 | 89.0 | 93.7 | 44.1 | 63.8 | 70.6 | 80.3 |
| 1987 | 75.0 | 86.8 | 89.0 | 92.1 | 44.0 | 65.6 | 72.2 | 81.4 |
| 1988 | 75.5 | 87.2 | 89.8 | 93.7 | 46.9 | 66.8 | 74.8 | 81.2 |
| 1989 | 77.6 | 87.8 | 91.1 | 93.7 | 43.0 | 66.9 | 74.0 | 82.1 |
| 1990 | 76.0 | 88.6 | 89.7 | 93.0 | 44.4 | 67.5 | 74.5 | 83.2 |
| 1991 | 69.9 | 84.9 | 88.6 | 91.8 | 42.3 | 67.0 | 73.5 | 82.6 |
| 1992 | 69.9 | 84.7 | 86.7 | 90.9 | 41.7 | 65.4 | 74.0 | 82.5 |
| 1993 | 71.0 | 83.6 | 87.2 | 92.3 | 42.2 | 66.0 | 73.0 | 81.6 |
| 1994 | 70.0 | 85.2 | 88.0 | 92.8 | 40.1 | 66.2 | 74.3 | 81.6 |
| 1995 | 71.8 | 86.6 | 89.6 | 92.9 | 45.8 | 67.2 | 73.0 | 83.4 |
| 1996 | 74.9 | 86.3 | 87.6 | 92.1 | 45.5 | 66.3 | 76.4 | 83.7 |

[^22]Table 32-2 Percentage of 25- to 34-year-olds in the labor force who were unemployed, by sex and years of school completed: March 1971-96

| March | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grades $9-11$ | High school diploma | Some college | Bachelor's degree or higher | $\begin{array}{r} \text { Grades } \\ 9-11 \end{array}$ | High school diploma | Some college | Bachelor's degree or higher |
| 1971 | 8.3 | 4.4 | 4.6 | 2.8 | 12.8 | 6.6 | 5.9 | 4.0 |
| 1972 | 7.3 | 4.1 | 3.9 | 2.0 | 11.4 | 5.1 | 5.1 | 2.8 |
| 1973 | 6.9 | 3.5 | 3.7 | 2.4 | 8.2 | 5.6 | 3.7 | 2.6 |
| 1974 | 6.3 | 4.0 | 3.9 | 2.4 | 10.5 | 5.3 | 4.2 | 3.1 |
| 1975 | 16.8 | 9.0 | 6.6 | 2.6 | 16.8 | 10.0 | 6.9 | 3.5 |
| 1976 | 13.2 | 7.5 | 6.1 | 2.8 | 13.9 | 8.8 | 7.2 | 3.6 |
| 1977 | 13.9 | 7.1 | 5.4 | 3.0 | 15.8 | 8.3 | 6.8 | 4.1 |
| 1978 | 10.5 | 6.0 | 3.8 | 2.4 | 13.8 | 7.2 | 4.7 | 2.9 |
| 1979 | 12.1 | 5.4 | 4.5 | 2.0 | 13.5 | 6.2 | 4.7 | 3.5 |
| 1980 | 14.2 | 8.2 | 6.0 | 2.4 | 13.6 | 7.6 | 5.9 | 2.6 |
| 1981 | 16.3 | 9.5 | 6.1 | 2.4 | 16.5 | 8.5 | 5.6 | 2.9 |
| 1982 | 19.6 | 13.1 | 9.2 | 4.0 | 17.8 | 10.6 | 6.7 | 3.7 |
| 1983 | 24.8 | 17.2 | 11.1 | 4.3 | 24.3 | 11.3 | 7.8 | 4.1 |
| 1984 | 19.5 | 10.6 | 6.7 | 3.0 | 19.2 | 10.1 | 6.4 | 3.1 |
| 1985 | 15.3 | 9.5 | 4.9 | 2.8 | 18.8 | 8.6 | 5.9 | 2.7 |
| 1986 | 17.6 | 9.3 | 5.0 | 2.1 | 19.4 | 8.6 | 6.1 | 2.5 |
| 1987 | 16.0 | 8.2 | 5.3 | 3.0 | 18.0 | 7.9 | 5.0 | 2.5 |
| 1988 | 14.6 | 7.6 | 4.2 | 2.3 | 15.1 | 6.1 | 4.4 | 2.4 |
| 1989 | 13.1 | 6.7 | 3.9 | 2.3 | 15.0 | 5.9 | 4.4 | 2.4 |
| 1990 | 14.5 | 6.3 | 4.8 | 2.3 | 16.6 | 6.4 | 4.4 | 2.1 |
| 1991 | 19.1 | 9.7 | 5.6 | 3.6 | 17.0 | 7.1 | 5.0 | 2.7 |
| 1992 | 20.3 | 10.4 | 7.8 | 3.7 | 18.5 | 9.1 | 6.0 | 2.3 |
| 1993 | 19.1 | 10.5 | 6.9 | 3.1 | 18.3 | 8.0 | 5.5 | 3.4 |
| 1994 | 16.6 | 8.3 | 6.4 | 2.3 | 17.0 | 8.0 | 5.7 | 3.6 |
| 1995 | 14.3 | 6.6 | 4.6 | 2.8 | 13.8 | 6.9 | 5.4 | 2.6 |
| 1996 | 14.5 | 7.6 | 5.8 | 2.7 | 15.4 | 7.0 | 4.0 | 1.7 |

NOTE: In 1992, the Current Population Survey (CPS) changed the questions used to obtain the educational attainment of respondents. See the supplemental note to Indicator 22 for further discussion. An unemployed individual is someone who has no job, but who is available for work and has made specific efforts to find employment some time during the prior 4 weeks. Also included are those persons waiting to be recalled to a job from which they had been laid off,
and those who are waiting to report to a new job within the next 30 days. The labor force is made up of all persons classified as employed or unemployed. The unemployment rate represents the number of unemployed individuals as a percentage of those in the labor force. SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Table 33-1 Median annual earnings (in 1996 constant dollars) of wage and salary workers aged 25-34 whose highest education level was a bachelor's degree or higher, by sex and race/ethnicity: 1970-95

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | All wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$42,174 | \$41,965 | (*) | (*) | \$28,368 | \$24,640 | \$30,643 | (*) |
| 1971 | 42,155 | 41,746 | \$37,496 | (*) | 28,720 | 26,232 | 29,291 | (*) |
| 1972 | 42,773 | 42,442 | 39,432 | (*) | 28,484 | 25,797 | 29,427 | (*) |
| 1973 | 42,552 | 41,923 | 36,905 | (*) | 28,170 | 25,626 | 27,896 | (*) |
| 1974 | 38,716 | 39,395 | 32,152 | (*) | 25,023 | 24,867 | 26,606 | (*) |
| 1975 | 36,527 | 36,901 | 32,630 | (*) | 24,828 | 24,391 | 27,526 | (*) |
| 1976 | 37,612 | 37,928 | 35,138 | (*) | 23,844 | 23,468 | 27,499 | (*) |
| 1977 | 37,516 | 37,888 | 33,691 | (*) | 23,469 | 23,045 | 27,318 | (*) |
| 1978 | 37,741 | 37,858 | 35,946 | \$36,078 | 23,198 | 22,986 | 24,065 | (*) |
| 1979 | 36,476 | 36,687 | 31,964 | 31,595 | 23,480 | 23,467 | 23,934 | (*) |
| 1980 | 34,845 | 35,426 | 29,128 | 30,411 | 22,817 | 22,675 | 24,611 | (*) |
| 1981 | 35,253 | 35,701 | 29,853 | 28,227 | 22,575 | 22,414 | 23,417 | \$23,529 |
| 1982 | 33,943 | 34,303 | 29,377 | 32,626 | 23,281 | 23,106 | 24,271 | 22,163 |
| 1983 | 34,450 | 34,947 | 27,360 | 30,767 | 24,089 | 23,987 | 24,840 | 23,668 |
| 1984 | 35,411 | 36,519 | 28,545 | 30,345 | 24,330 | 24,235 | 25,168 | 23,944 |
| 1985 | 37,609 | 38,019 | 34,722 | 37,363 | 25,561 | 25,559 | 24,805 | 25,483 |
| 1986 | 37,911 | 38,580 | 29,587 | 38,183 | 26,821 | 26,697 | 26,504 | 25,734 |
| 1987 | 38,034 | 39,661 | 26,272 | 34,917 | 27,484 | 27,277 | 28,031 | 28,248 |
| 1988 | 37,102 | 39,198 | 28,072 | 29,027 | 27,454 | 27,670 | 27.285 | 25,537 |
| 1989 | 37,043 | 38,607 | 27,409 | 26,809 | 28,145 | 28,131 | 27,037 | 29,357 |
| 1990 | 35,325 | 36,200 | 30,934 | 32,233 | 27,792 | 28,043 | 27,756 | 24,976 |
| 1991 | 35,552 | 36,262 | 27,112 | 29,630 | 26,893 | 27,461 | 24,674 | 22,849 |
| 1992 | 35,599 | 36,792 | 29,893 | 29,679 | 27,958 | 28,079 | 26,643 | 26,809 |
| 1993 | 34,581 | 35,492 | 28,689 | 28,955 | 27,535 | 27,978 | 24,503 | 24,508 |
| 1994 | 33,956 | 35,563 | 25,497 | 29,440 | 27,125 | 27,527 | 24,581 | 24,622 |
| 1995 | 33,367 | 35,839 | 29,536 | 29,235 | 26,611 | 26,800 | 23,053 | 26,176 |

Table 33-1 Median annual earnings (in 1996 constant dollars) of wage and salary workers aged 25-34 whose highest education level was a bachelor's degree or higher, by sex and race/ethnicity: 1970-95-Continued

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | Year-round, full-time wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$45,156 | \$45,375 | (*) | (*) | \$32,276 | \$32,042 | (*) | (*) |
| 1971 | 44,679 | 45,106 | (*) | (*) | 31,488 | 31,640 | \$31,019 | (*) |
| 1972 | 45,410 | 45,708 | \$41,171 | (*) | 32,126 | 32,187 | 30,970 | (*) |
| 1973 | 45,590 | 46,178 | 39,732 | (*) | 31,968 | 31,879 | 32,879 | (*) |
| 1974 | 42,975 | 43,466 | 37,056 | (*) | 29,930 | 30,174 | 27,811 | (*) |
| 1975 | 41,005 | 41,311 | 34,530 | (*) | 29,885 | 30,072 | 28,354 | (*) |
| 1976 | 41,495 | 41,576 | 38,205 | (*) | 30,082 | 30,010 | 30,479 | (*) |
| 1977 | 41,117 | 36,682 | 30,661 | (*) | 29,170 | 26,702 | 25,177 | (*) |
| 1978 | 41,137 | 41,252 | 38,961 | (*) | 28,472 | 28,507 | 26,603 | (*) |
| 1979 | 39,995 | 39,984 | 38,478 | (*) | 28,198 | 28,377 | 26,131 | (*) |
| 1980 | 38,466 | 38,799 | 31,593 | \$34,032 | 28,350 | 28,492 | 27,503 | (*) |
| 1981 | 38,628 | 38,859 | 34,306 | 36,072 | 28,362 | 28,543 | 26,343 | (*) |
| 1982 | 37,148 | 37,672 | 33,016 | 35,653 | 28,041 | 28,298 | 26,076 | (*) |
| 1983 | 38,828 | 39,281 | 33,397 | 33,729 | 28,034 | 28,346 | 26,018 | \$26,451 |
| 1984 | 39,257 | 39,607 | 31,954 | 35,443 | 29,400 | 29,547 | 28,208 | 29,641 |
| 1985 | 40,077 | 40,860 | 37,518 | 40,262 | 30,663 | 31,119 | 26,654 | 30,056 |
| 1986 | 41,786 | 42,636 | 33,690 | 41,810 | 31,421 | 31,705 | 28,782 | 29,059 |
| 1987 | 42,050 | 42,796 | 32,420 | 38,651 | 30,803 | 31,311 | 28,852 | 30,690 |
| 1988 | 41,164 | 41,811 | 29,377 | 34,003 | 31,867 | 32,554 | 29,007 | 30,702 |
| 1989 | 40,467 | 41,849 | 29,594 | 33,235 | 32,686 | 32,806 | 30,222 | 32,450 |
| 1990 | 38,212 | 38,716 | 32,590 | 37,424 | 32,203 | 32,458 | 30,900 | 29,203 |
| 1991 | 40,520 | 41,221 | 31,579 | 36,518 | 31,307 | 31,658 | 27,088 | 27,997 |
| 1992 | 39,907 | 40,733 | 33,796 | 32,122 | 31,552 | 31,677 | 30,209 | 29,744 |
| 1993 | 39,188 | 39,942 | 29,833 | 32,918 | 32,541 | 32,962 | 28,071 | 28,026 |
| 1994 | 38,139 | 38,775 | 27,006 | 33,681 | 31,310 | 31,927 | 27,154 | 27,519 |
| 1995 | 38,033 | 39,313 | 31,428 | 34,087 | 30,750 | 31,120 | 26,669 | 29,235 |

* Too few sample observations for a reliable estimate.

NOTE: In 1992, the Current Population Survey (CPS) changed the questions used to obtain the educational attainment of respondents. See the supplemental note to Indicator 22 for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Table 33-2 Median annual earnings (in 1996 constant dollars) of wage and salary workers aged 25-34 whose highest education level was grades 9 -11, by sex and race/ethnicity: 1970-95

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | All wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$28,434 | \$29,909 | \$19,563 | \$27,485 | \$11,673 | \$8,166 | \$7,600 | (*) |
| 1971 | 29,088 | 30,003 | 20,032 | 24,148 | 12,562 | 9,187 | 8,804 | (*) |
| 1972 | 28,832 | 30,856 | 20,640 | 25,617 | 12,323 | 8,267 | 11,537 | (*) |
| 1973 | 30,608 | 32,431 | 22,433 | 23,386 | 12,110 | 9,833 | 10,607 | (*) |
| 1974 | 27,303 | 29,222 | 21,635 | 23,718 | 8,959 | 8,350 | 9,814 | \$10,202 |
| 1975 | 24,493 | 26,416 | 17,662 | 21,361 | 9,258 | 8,934 | 9,692 | (*) |
| 1976 | 24,775 | 26,066 | 19,144 | 25,723 | 9,184 | 8,308 | 10,071 | 12,296 |
| 1977 | 24,574 | 26,670 | 18,757 | 23,261 | 9,591 | 8,934 | 10,593 | 11,538 |
| 1978 | 24,536 | 26,589 | 18,177 | 23,231 | 8,054 | 8,116 | 8,234 | 7,459 |
| 1979 | 23,885 | 26,082 | 18,606 | 21,163 | 10,648 | 10,697 | 10,389 | 10,121 |
| 1980 | 21,480 | 23,272 | 16,259 | 21,859 | 9,680 | 9,243 | 10,864 | 10,356 |
| 1981 | 19,989 | 21,171 | 14,636 | 20,759 | 8,967 | 8,726 | 8,309 | 11,558 |
| 1982 | 18,016 | 18,985 | 14,972 | 16,543 | 9,500 | 9,031 | 10,181 | 11,547 |
| 1983 | 17,856 | 19,425 | 11,999 | 16,719 | 9,606 | 9,268 | 10,197 | 9,433 |
| 1984 | 16,502 | 17,440 | 11,404 | 18,175 | 8,511 | 8,622 | 7,865 | 9,208 |
| 1985 | 17,672 | 19,368 | 13,706 | 17,360 | 9,489 | 9,279 | 9,093 | 10,779 |
| 1986 | 17,498 | 18,619 | 15,269 | 17,696 | 9,741 | 9,474 | 10,571 | 8,706 |
| 1987 | 18,501 | 20,480 | 15,081 | 16,353 | 10,391 | 11,224 | 8,075 | 10,266 |
| 1988 | 17,740 | 20,037 | 11,428 | 15,625 | 8,478 | 7,955 | 8,722 | 9,646 |
| 1989 | 17,821 | 19,971 | 11,829 | 15,519 | 9,145 | 9,587 | 6,579 | 10,477 |
| 1990 | 16,973 | 18,729 | 13,431 | 14,967 | 8,327 | 8,324 | 5,850 | 9,492 |
| 1991 | 15,007 | 17,307 | 12,055 | 14,097 | 9,029 | 9,028 | 7,040 | 9,415 |
| 1992 | 15,122 | 17,384 | 10,551 | 13,886 | 10,682 | 11,192 | 8,448 | 10,848 |
| 1993 | 14,761 | 17,133 | 11,328 | 13,150 | 8,114 | 7,866 | 6,535 | 9,406 |
| 1994 | 15,094 | 17,269 | 10,970 | 13,568 | 8,415 | 9,113 | 7,757 | 7,029 |
| 1995 | 16,229 | 17,952 | 12,013 | 14,049 | 8,581 | 9,306 | 7,203 | 7,964 |

Table 33-2 Median annual earnings (in 1996 constant dollars) of wage and salary workers aged 25-34 whose highest education level was grades 9-11, by sex and race/ethnicity: 1970-95-Continued

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | Year-round, full-time wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$30,663 | \$32,346 | \$22,814 | \$29,254 | \$17,614 | \$18,296 | \$15,740 | (*) |
| 1971 | 30,607 | 32,479 | 24,087 | 25,609 | 17,349 | 17,929 | 16,089 | (*) |
| 1972 | 31,574 | 33,626 | 23,852 | 28,853 | 18,021 | 18,929 | 16,685 | (*) |
| 1973 | 32,295 | 34,898 | 24,384 | (*) | 19,050 | 19,800 | 16,030 | (*) |
| 1974 | 31,145 | 32,421 | 26,070 | (*) | 16,910 | 17,405 | 15,023 | (*) |
| 1975 | 29,688 | 31,101 | 22,731 | (*) | 16,971 | 16,804 | 16,426 | (*) |
| 1976 | 29,087 | 30,726 | 23,554 | 28,450 | 17,227 | 18,594 | 15,725 | (*) |
| 1977 | 29,045 | 27,616 | 20,184 | (*) | 17,716 | 14,921 | 14,585 | (*) |
| 1978 | 28,414 | 30,058 | 22,522 | 26,271 | 18,283 | 18,802 | 16,775 | (*) |
| 1979 | 28,033 | 30,716 | 22,008 | 24,823 | 17,589 | 17,991 | 17,340 | (*) |
| 1980 | 25,510 | 28,602 | 17,804 | 25,427 | 16,526 | 16,918 | 16,420 | (*) |
| 1981 | 24,967 | 26,719 | 18,555 | 24,520 | 15,405 | 15,442 | (*) | (*) |
| 1982 | 24,215 | 25,774 | 19,313 | 20,297 | 16,347 | 16,234 | 17,752 | (*) |
| 1983 | 22,847 | 24,541 | 16,708 | 21,518 | 15,789 | 15,749 | (*) | (*) |
| 1984 | 22,958 | 24,888 | 16,164 | 24,211 | 16,346 | 17,249 | 12,984 | (*) |
| 1985 | 22,828 | 24,517 | 16,569 | 21,390 | 16,272 | 16,834 | (*) | (*) |
| 1986 | 22,853 | 24,457 | 17,235 | 22,291 | 16,484 | 17,292 | 15,229 | (*) |
| 1987 | 23,685 | 25,448 | 19,536 | 20,005 | 16,285 | 16,472 | (*) | (*) |
| 1988 | 22,695 | 24,580 | 18,464 | 20,225 | 14,634 | 14,906 | 13,846 | (*) |
| 1989 | 22,215 | 24,191 | 17,274 | 20,526 | 15,295 | 15,544 | (*) | \$13,866 |
| 1990 | 20,966 | 23,298 | 16,466 | 19,524 | 15,124 | 16,518 | (*) | 13,282 |
| 1991 | 20,380 | 22,999 | 15,739 | 18,616 | 13,925 | 14,460 | 12,083 | (*) |
| 1992 | 19,464 | 22,792 | 17,399 | 16,318 | 15,102 | 16,487 | 14,496 | (*) |
| 1993 | 19,420 | 22,170 | 15,775 | 17,051 | 14,535 | 14,515 | (*) | 14,845 |
| 1994 | 19,259 | 21,785 | 17,866 | 15,982 | 14,251 | 15,852 | (*) | 12,497 |
| 1995 | 19,996 | 21,682 | 17,977 | 17,481 | 14,154 | 15,401 | 11,828 | 12,604 |

* Too few sample observations for a reliable estimate.

NOTE: In 1992, the Current Population Survey (CPS) changed the questions used to obtain the educational attainment of respondents. See the supplemental note to Indicator 22 for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Table 33-3 Median annual earnings (in 1996 constant dollars) of wage and salary workers aged 25-34 whose highest education level was a high school diploma, by sex and race/ ethnicity: 1970-95

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | All wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$33,948 | \$34,551 | \$25,196 | \$30,115 | \$16,846 | \$13,583 | \$14,699 | \$14,586 |
| 1971 | 34,343 | 34,765 | 25,816 | 28,716 | 17,233 | 14,287 | 13,773 | 13,762 |
| 1972 | 35,837 | 36,455 | 27,568 | 32,252 | 17,527 | 14,807 | 14,526 | 15,125 |
| 1973 | 36,474 | 36,808 | 29,492 | 30,010 | 17,142 | 14,238 | 15,154 | 15,786 |
| 1974 | 33,824 | 34,573 | 28,866 | 31,911 | 14,410 | 14,028 | 15,783 | 17,001 |
| 1975 | 31,269 | 32,127 | 26,302 | 28,327 | 14,405 | 13,931 | 16,275 | 15,326 |
| 1976 | 31,653 | 32,627 | 23,948 | 28,770 | 15,074 | 14,596 | 17,310 | 14,649 |
| 1977 | 31,861 | 33,463 | 24,236 | 27,159 | 15,326 | 15,053 | 16,749 | 15,178 |
| 1978 | 32,069 | 33,620 | 24,691 | 28,739 | 14,965 | 14,542 | 17,290 | 14,997 |
| 1979 | 31,464 | 33,077 | 23,812 | 25,780 | 15,111 | 14,989 | 15,909 | 15,190 |
| 1980 | 29,248 | 30,416 | 21,523 | 23,649 | 15,006 | 15,068 | 15,036 | 14,544 |
| 1981 | 27,241 | 28,338 | 21,282 | 22,877 | 14,629 | 14,478 | 14,907 | 15,329 |
| 1982 | 25,316 | 26,427 | 19,487 | 22,379 | 14,287 | 14,142 | 14,713 | 14,430 |
| 1983 | 25,462 | 26,786 | 18,536 | 23,182 | 14,448 | 14,263 | 15,660 | 13,755 |
| 1984 | 26,079 | 28,114 | 17,438 | 23,711 | 15,092 | 15,084 | 14,906 | 15,219 |
| 1985 | 25,090 | 26,975 | 19,808 | 20,562 | 15,142 | 15,391 | 13,916 | 14,856 |
| 1986 | 25,203 | 27,032 | 17,488 | 21,362 | 15,065 | 15,264 | 13,496 | 15,431 |
| 1987 | 25,587 | 27,655 | 17,592 | 22,239 | 15,428 | 15,649 | 14,566 | 15,192 |
| 1988 | 26,204 | 27,568 | 20,504 | 22,319 | 15,161 | 15,539 | 14,149 | 14,979 |
| 1989 | 25,549 | 26,827 | 19,456 | 20,722 | 14,596 | 14,923 | 13,170 | 14,474 |
| 1990 | 23,926 | 25,561 | 18,581 | 19,344 | 14,462 | 14,821 | 13,273 | 13,138 |
| 1991 | 23,292 | 24,853 | 17,668 | 18,600 | 14,158 | 14,571 | 12,499 | 14,215 |
| 1992 | 22,222 | 23,782 | 16,320 | 19,183 | 13,976 | 14,489 | 12,486 | 13,539 |
| 1993 | 22,065 | 23,395 | 17,228 | 18,082 | 13,824 | 14,776 | 10,999 | 13,456 |
| 1994 | 22,361 | 23,510 | 16,977 | 18,666 | 14,544 | 15,112 | 13,636 | 13,367 |
| 1995 | 21,965 | 23,774 | 16,667 | 17,985 | 13,916 | 14,556 | 12,505 | 12,613 |

Table 33-3 Median annual earnings (in 1996 constant dollars) of wage and salary workers aged 25-34 whose highest education level was a high school diploma, by sex and race/ ethnicity: 1970-95-Continued

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | Year-round, full-time wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$35,486 | \$36,350 | \$28,333 | \$31,657 | \$22,278 | \$22,697 | \$19,710 | (*) |
| 1971 | 35,864 | 36,596 | 28,811 | 32,383 | 21,998 | 22,054 | 21,523 | (*) |
| 1972 | 37,165 | 38,131 | 29,255 | 33,181 | 22,618 | 22,859 | 21,374 | \$22,988 |
| 1973 | 37,658 | 38,361 | 32,110 | 33,388 | 22,056 | 22,142 | 21,859 | 22,617 |
| 1974 | 35,822 | 36,325 | 32,580 | 34,622 | 21,741 | 21,725 | 21,724 | 22,184 |
| 1975 | 34,407 | 34,944 | 31,264 | 31,080 | 21,820 | 21,738 | 22,323 | 21,107 |
| 1976 | 34,293 | 35,057 | 29,267 | 31,629 | 22,071 | 22,262 | 21,570 | 21,281 |
| 1977 | 35,235 | 31,028 | 27,760 | 27,597 | 22,419 | 19,302 | 19,821 | 18,742 |
| 1978 | 36,213 | 36,772 | 30,837 | 33,869 | 22,141 | 22,420 | 21,472 | 21,276 |
| 1979 | 34,680 | 35,721 | 28,094 | 29,743 | 21,445 | 21,766 | 20,023 | 19,999 |
| 1980 | 32,199 | 32,993 | 26,151 | 27,531 | 21,154 | 21,404 | 20,121 | 20,375 |
| 1981 | 30,845 | 31,856 | 26,671 | 26,500 | 20,284 | 20,494 | 19,930 | 19,050 |
| 1982 | 29,782 | 31,019 | 24,666 | 26,528 | 19,906 | 20,072 | 19,032 | 19,772 |
| 1983 | 30,002 | 31,460 | 22,305 | 26,453 | 20,105 | 20,441 | 19,167 | 19,374 |
| 1984 | 30,863 | 32,076 | 21,458 | 28,123 | 20,519 | 21,121 | 18,372 | 19,853 |
| 1985 | 29,262 | 30,845 | 23,267 | 23,962 | 20,796 | 21,373 | 17,852 | 20,246 |
| 1986 | 29,315 | 30,569 | 23,110 | 26,211 | 20,733 | 21,095 | 17,711 | 22,296 |
| 1987 | 29,379 | 30,616 | 21,987 | 26,837 | 20,983 | 21,395 | 18,768 | 20,516 |
| 1988 | 28,937 | 30,078 | 22,454 | 26,149 | 20,502 | 21,122 | 17,798 | 19,820 |
| 1989 | 27,758 | 29,051 | 23,052 | 24,045 | 20,370 | 20,599 | 18,850 | 19,809 |
| 1990 | 26,558 | 28,638 | 20,606 | 22,347 | 19,671 | 20,126 | 17,189 | 17,577 |
| 1991 | 25,916 | 27,705 | 19,918 | 22,731 | 20,107 | 20,576 | 18,221 | 19,429 |
| 1992 | 25,437 | 26,959 | 19,243 | 22,331 | 19,814 | 20,351 | 18,559 | 19,743 |
| 1993 | 24,401 | 26,097 | 20,164 | 21,360 | 19,476 | 20,576 | 15,919 | 18,038 |
| 1994 | 25,117 | 26,227 | 21,300 | 21,884 | 18,929 | 19,507 | 16,953 | 18,219 |
| 1995 | 24,558 | 26,314 | 20,072 | 20,654 | 17,985 | 18,672 | 16,760 | 17,186 |

* Too few sample observations for a reliable estimate.

NOTE: In 1992, the Current Population Survey (CPS) changed the questions used to obtain the educational attainment of respondents. See the supplemental note to Indicator 22 for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Table 33-4 Median annual earnings (in 1996 constant dollars) of wage and salary workers aged 25-34 whose highest education level was some college, by sex and race/ethnicity: 1970-95

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | All wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$37,504 | \$37,075 | \$33,272 | (*) | \$19,996 | \$15,343 | \$19,312 | (*) |
| 1971 | 36,436 | 36,111 | 30,416 | (*) | 19,866 | 15,622 | 19,868 | (*) |
| 1972 | 37,277 | 36,721 | 31,936 | \$32,407 | 20,358 | 17,004 | 18,209 | (*) |
| 1973 | 36,758 | 36,595 | 30,466 | 31,494 | 20,946 | 17,778 | 20,981 | (*) |
| 1974 | 34,410 | 35,177 | 29,075 | 31,193 | 17,207 | 16,645 | 20,075 | (*) |
| 1975 | 33,422 | 34,265 | 28,338 | 28,758 | 17,853 | 17,276 | 20,909 | (*) |
| 1976 | 32,729 | 33,724 | 25,927 | 28,132 | 17,144 | 16,845 | 20,125 | \$16,382 |
| 1977 | 32,600 | 33,786 | 27,692 | 26,182 | 18,782 | 18,617 | 20,098 | 17,174 |
| 1978 | 33,532 | 34,069 | 32,846 | 28,769 | 17,438 | 17,013 | 20,859 | 16,195 |
| 1979 | 33,216 | 34,119 | 28,005 | 29,953 | 18,030 | 18,081 | 19,673 | 17,301 |
| 1980 | 30,486 | 31,358 | 25,134 | 28,735 | 18,637 | 18,761 | 18,710 | 16,143 |
| 1981 | 29,019 | 30,014 | 24,063 | 26,196 | 18,019 | 17,941 | 18,132 | 19,235 |
| 1982 | 28,273 | 29,526 | 20,225 | 25,227 | 17,225 | 17,014 | 17,788 | 18,476 |
| 1983 | 28,813 | 29,836 | 24,316 | 26,266 | 17,915 | 18,031 | 17,231 | 18,622 |
| 1984 | 30,063 | 31,155 | 21,241 | 26,544 | 18,289 | 18,055 | 18,813 | 18,883 |
| 1985 | 29,801 | 30,975 | 22,209 | 26,115 | 17,842 | 18,293 | 16,303 | 16,542 |
| 1986 | 29,705 | 31,033 | 23,132 | 27,095 | 18,292 | 18,415 | 17,347 | 19,454 |
| 1987 | 28,979 | 29,944 | 22,707 | 25,340 | 19,290 | 19,088 | 19,371 | 20,855 |
| 1988 | 28,765 | 29,834 | 22,776 | 24,572 | 19,845 | 20,181 | 18,745 | 17,137 |
| 1989 | 28,682 | 29,833 | 23,411 | 25,521 | 19,242 | 19,328 | 19,133 | 18,587 |
| 1990 | 27,381 | 28,843 | 23,501 | 25,267 | 19,337 | 19,761 | 17,251 | 19,243 |
| 1991 | 26,570 | 28,485 | 20,497 | 24,434 | 18,710 | 19,185 | 16,327 | 18,318 |
| 1992 | 25,210 | 26,705 | 21,243 | 22,992 | 18,747 | 19,195 | 16,279 | 18,552 |
| 1993 | 24,777 | 26,283 | 20,138 | 21,326 | 18,140 | 18,537 | 16,277 | 17,331 |
| 1994 | 25,601 | 26,780 | 22,114 | 23,308 | 17,511 | 17,506 | 17,194 | 18,766 |
| 1995 | 24,366 | 26,065 | 22,624 | 19,585 | 17,866 | 18,311 | 17,727 | 15,347 |

Table 33-4 Median annual earnings (in 1996 constant dollars) of wage and salary workers aged 25-34 whose highest education level was some college, by sex and race/ethnicity: 1970-95-Continued

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | Year-round, full-time wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$39,552 | \$40,074 | \$35,321 | (*) | \$24,991 | \$25,098 | \$24,980 | (*) |
| 1971 | 39,030 | 39,642 | 35,577 | (*) | 25,078 | 24,864 | (*) | (*) |
| 1972 | 39,691 | 40,539 | 33,919 | (*) | 26,260 | 26,688 | (*) | (*) |
| 1973 | 38,812 | 39,503 | 34,315 | \$35,815 | 26,317 | 26,604 | 25,159 | (*) |
| 1974 | 37,130 | 37,708 | 32,864 | 34,375 | 24,797 | 24,790 | 24,042 | (*) |
| 1975 | 37,330 | 38,292 | 31,899 | 32,550 | 24,735 | 24,808 | 24,987 | (*) |
| 1976 | 37,202 | 37,768 | 31,775 | 34,586 | 24,667 | 24,962 | 23,683 | (*) |
| 1977 | 36,908 | 34,001 | 28,325 | 28,903 | 25,024 | 22,028 | 22,187 | (*) |
| 1978 | 37,139 | 37,422 | 36,565 | 31,360 | 24,176 | 24,155 | 24,359 | (*) |
| 1979 | 36,320 | 37,115 | 30,481 | 34,764 | 24,238 | 24,388 | 23,728 | (*) |
| 1980 | 33,865 | 34,749 | 28,047 | 32,495 | 23,088 | 23,286 | 21,649 | \$23,041 |
| 1981 | 33,413 | 34,273 | 27,476 | 32,807 | 23,133 | 23,543 | 21,713 | 23,391 |
| 1982 | 33,073 | 33,867 | 25,650 | 28,321 | 23,525 | 23,820 | 22,894 | 21,341 |
| 1983 | 33,003 | 33,739 | 27,198 | 29,349 | 24,340 | 24,746 | 22,834 | 23,213 |
| 1984 | 33,408 | 34,488 | 26,584 | 30,493 | 23,720 | 24,163 | 21,345 | 22,853 |
| 1985 | 33,103 | 34,701 | 24,986 | 33,138 | 24,021 | 24,723 | 20,468 | 23,985 |
| 1986 | 33,514 | 35,250 | 27,006 | 29,697 | 23,941 | 24,575 | 21,038 | 23,317 |
| 1987 | 32,235 | 33,316 | 25,520 | 30,729 | 24,503 | 24,595 | 24,190 | 24,066 |
| 1988 | 33,182 | 34,446 | 27,897 | 28,245 | 24,721 | 25,045 | 23,730 | 26,837 |
| 1989 | 32,261 | 33,332 | 26,272 | 28,195 | 24,331 | 24,802 | 22,965 | 23,918 |
| 1990 | 31,255 | 32,234 | 27,209 | 27,995 | 24,098 | 24,664 | 21,288 | 22,013 |
| 1991 | 30,511 | 31,262 | 25,107 | 28,615 | 23,902 | 24,440 | 21,437 | 24,121 |
| 1992 | 29,674 | 30,232 | 26,803 | 27,045 | 23,665 | 24,142 | 20,775 | 24,297 |
| 1993 | 28,290 | 29,118 | 24,285 | 24,541 | 23,090 | 23,693 | 20,589 | 22,523 |
| 1994 | 28,191 | 29,079 | 24,599 | 25,239 | 22,574 | 22,783 | 21,013 | 23,618 |
| 1995 | 27,295 | 28,118 | 26,011 | 22,482 | 22,160 | 22,563 | 21,628 | 20,564 |

* Too few sample observations for a reliable estimate.

NOTE: In 1992, the Current Population Survey (CPS) changed the
questions used to obtain the educational attainment of respondents. See the supplemental note to Indicator 22 for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Table 33-5 Ratio* of median annual earnings of wage and salary workers aged 25-34 whose highest education level was grades 9-11, some college, or a bachelor's degree or higher to those with a high school diploma, by sex: 1970-95

| Year | Grades 9-11 |  | Some college |  | Bachelor's degree or higher |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female |
| 1970 | 0.84 | 0.69 | 1.10 | 1.19 | 1.24 | 1.68 |
| 1971 | 0.85 | 0.73 | 1.06 | 1.15 | 1.23 | 1.67 |
| 1972 | 0.80 | 0.70 | 1.04 | 1.16 | 1.19 | 1.63 |
| 1973 | 0.84 | 0.71 | 1.01 | 1.22 | 1.17 | 1.64 |
| 1974 | 0.81 | 0.62 | 1.02 | 1.19 | 1.14 | 1.74 |
| 1975 | 0.78 | 0.64 | 1.07 | 1.24 | 1.17 | 1.72 |
| 1976 | 0.78 | 0.61 | 1.03 | 1.14 | 1.19 | 1.58 |
| 1977 | 0.77 | 0.63 | 1.02 | 1.23 | 1.18 | 1.53 |
| 1978 | 0.77 | 0.54 | 1.05 | 1.17 | 1.18 | 1.55 |
| 1979 | 0.76 | 0.70 | 1.06 | 1.19 | 1.16 | 1.55 |
| 1980 | 0.73 | 0.65 | 1.04 | 1.24 | 1.19 | 1.52 |
| 1981 | 0.73 | 0.61 | 1.07 | 1.23 | 1.29 | 1.54 |
| 1982 | 0.71 | 0.66 | 1.12 | 1.21 | 1.34 | 1.63 |
| 1983 | 0.70 | 0.66 | 1.13 | 1.24 | 1.35 | 1.67 |
| 1984 | 0.63 | 0.56 | 1.15 | 1.21 | 1.36 | 1.61 |
| 1985 | 0.70 | 0.63 | 1.19 | 1.18 | 1.50 | 1.69 |
| 1986 | 0.69 | 0.65 | 1.18 | 1.21 | 1.50 | 1.78 |
| 1987 | 0.72 | 0.67 | 1.13 | 1.25 | 1.49 | 1.78 |
| 1988 | 0.68 | 0.56 | 1.10 | 1.31 | 1.42 | 1.81 |
| 1989 | 0.70 | 0.63 | 1.12 | 1.32 | 1.45 | 1.93 |
| 1990 | 0.71 | 0.58 | 1.14 | 1.34 | 1.48 | 1.92 |
| 1991 | 0.64 | 0.64 | 1.14 | 1.32 | 1.53 | 1.90 |
| 1992 | 0.68 | 0.76 | 1.13 | 1.34 | 1.60 | 2.00 |
| 1993 | 0.67 | 0.59 | 1.12 | 1.31 | 1.57 | 1.99 |
| 1994 | 0.68 | 0.58 | 1.14 | 1.20 | 1.52 | 1.86 |
| 1995 | 0.74 | 0.62 | 1.11 | 1.28 | 1.52 | 1.91 |

[^23]NOTE: In 1992, the Current Population Survey (CPS) changed the questions used to obtain the educational attainment of respondents. See the supplemental note to Indicator 22 for further discussion.
SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Table 34-1 Median starting salaries (in 1996 constant dollars) of college graduates who worked full time and who were not enrolled in college 1 year after graduation, by field of study, sex, and race/ethnicity: Selected years of graduation 1977-93

| Major field of study, sex, and race/ethnicity | 1977 | 1980 | 1984 | 1986 | 1990 | 1993 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All graduates | \$25,880 | \$23,283 | \$25,367 | \$27,017 | \$25,453 | \$23,600 |
| Major field of study |  |  |  |  |  |  |
| Humanities and social and behavioral sciences | 22,527 | 20,179 | 21,508 | 23,518 | 22,671 | 21,265 |
| Humanities | 20,625 | 19,687 | 20,657 | 22,398 | 21,942 | 20,974 |
| Social and behavioral sciences | 23,129 | 20,630 | 22,170 | 24,646 | 23,057 | 21,478 |
| Natural and computer sciences and engineering | 32,219 | 32,734 | 34,076 | 33,702 | 33,442 | 27,805 |
| Natural sciences | 25,405 | 23,097 | 24,099 | 25,338 | 24,992 | 21,832 |
| Computer sciences and engineering | 37,900 | 37,480 | 36,719 | 36,275 | 35,883 | 32,045 |
| Technical/professional | 25,897 | 23,177 | 24,765 | 26,240 | 25,278 | 23,898 |
| Education | 22,220 | 18,958 | 20,257 | 21,985 | 22,487 | 19,985 |
| Business | 29,605 | 26,352 | 26,575 | 27,714 | 26,683 | 26,044 |
| Other professional or technical | 26,601 | 24,865 | 25,038 | 26,220 | 26,015 | 24,384 |
| Sex |  |  |  |  |  |  |
| Male | 29,216 | 26,696 | 28,048 | 29,297 | 27,714 | 26,122 |
| Female | 22,503 | 20,597 | 23,095 | 24,874 | 23,978 | 21,989 |
| Race/ethnicity |  |  |  |  |  |  |
| White | 25,959 | 23,422 | 25,437 | 26,996 | 25,366 | 23,611 |
| Black | 23,925 | 21,811 | 22,629 | 24,442 | 24,335 | 21,919 |
| Hispanic | 26,754 | 25,495 | 26,325 | 27,218 | 25,981 | 23,509 |
| Asian/Pacific Islander | 28,996 | 22,097 | 26,842 | 30,182 | 29,122 | 24,795 |
| American Indian/Alaskan Native | - | - | - | 27,369 | 24,751 | 22,797 |

[^24]SOURCE: U.S. Department of Education, National Center for Education Statistics, Recent College Graduates Surveys (1977-90) and 1993 Baccalaureate and Beyond Longitudinal Study, First Followup (B\&B:93/94).

Table 34-2 Percentage distribution of college graduates who worked full time and who were not enrolled in college 1 year after graduation, by field of study, sex, and race/ethnicity: Selected years of graduation 1977-93

| Major field of study, sex, and race/ethnicity | 1977 | 1980 | 1984 | 1986 | 1990 | 1993 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All graduates | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Major field of study |  |  |  |  |  |  |
| Humanities | 8.2 | 9.1 | 9.0 | 7.4 | 9.2 | 10.9 |
| Social and behavioral sciences | 14.7 | 11.9 | 11.7 | 10.3 | 14.0 | 14.1 |
| Natural sciences | 7.5 | 7.1 | 5.6 | 5.3 | 4.8 | 6.7 |
| Computer sciences and engineering | 9.1 | 9.6 | 15.8 | 17.3 | 12.2 | 9.0 |
| Education | 17.9 | 14.3 | 9.6 | 8.9 | 9.7 | 11.6 |
| Business | 24.0 | 25.3 | 28.5 | 31.8 | 28.5 | 27.4 |
| Other professional or technical | 18.5 | 22.6 | 19.7 | 19.0 | 21.6 | 20.3 |
| Sex |  |  |  |  |  |  |
| Male | 57.1 | 51.2 | 50.5 | 49.6 | 48.2 | 46.4 |
| Female | 42.9 | 48.8 | 49.5 | 50.4 | 51.8 | 53.4 |
| Race/ethnicity |  |  |  |  |  |  |
| White | 90.2 | 92.1 | 90.0 | 88.9 | 86.6 | 85.0 |
| Black | 6.1 | 5.2 | 4.9 | 3.9 | 6.1 | 5.5 |
| Hispanic | 1.5 | 1.4 | 2.3 | 3.3 | 3.5 | 4.6 |
| Asian/Pacific Islander | 1.6 | 1.0 | 2.4 | 2.0 | 3.3 | 4.4 |
| American Indian/Alaskan Native | 0.2 | 0.4 | 0.4 | 0.8 | 0.5 | 0.6 |
| Other | 0.4 | - | - | 1.1 | (*) | (*) |

- Too few sample observations for a reliable estimate.
* Not applicable.

NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Recent College Graduates Surveys (1977-90) and 1993 Baccalaureate and Beyond Longitudinal Study, First Followup (B\&B:93/94).

Table 35-1 Percentage of 1992 high school seniors who in 1994 reported performing community service during the previous year, by college attendance, performance of community service in high school, and selected characteristics

| Selected characteristics | Attended postsecondary institution' |  |  | Had not attended postsecondary institution |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | No service in high school ${ }^{2}$ | Service in high school ${ }^{2}$ | Total | No service in high school ${ }^{2}$ | Service in high school ${ }^{2}$ |
| Total | 50.3 | 35.7 | 64.6 | 23.8 | 18.5 | 39.0 |
| Sex |  |  |  |  |  |  |
| Male | 49.6 | 37.4 | 65.3 | 25.8 | 20.5 | 42.0 |
| Female | 50.9 | 33.6 | 64.1 | 21.2 | 15.8 | 35.6 |
| Race/ethnicity |  |  |  |  |  |  |
| White | 51.0 | 34.7 | 65.7 | 24.1 | 18.4 | 39.7 |
| Black | 51.6 | 42.9 | 63.4 | 25.2 | 21.1 | 39.7 |
| Hispanic | 43.5 | 31.5 | 57.3 | 20.6 | 15.7 | 34.7 |
| Asian/Pacific Islander | 50.0 | 39.9 | 60.0 | 18.5 | 11.4 | 29.1 |
| American Indian/Alaskan Native | 39.9 | 28.9 | - | 34.2 | 29.9 | - |
| Control of high school |  |  |  |  |  |  |
| Public | 49.1 | 35.1 | 63.9 | 24.0 | 18.5 | 40.3 |
| Catholic | 58.8 | 39.8 | 67.2 | 21.5 | 26.0 | 15.5 |
| Private, other | 56.8 | 33.0 | 72.7 | 37.1 | - | - |
| Urbanicity of high school |  |  |  |  |  |  |
| Central city | 49.4 | 35.0 | 60.7 | 23.3 | 16.3 | 42.8 |
| Urban fringe/large town | 50.8 | 34.6 | 67.9 | 24.4 | 18.6 | 39.8 |
| Rural/small town | 49.8 | 36.2 | 64.4 | 24.2 | 20.2 | 37.3 |
| Achievement test quartile in 1992 |  |  |  |  |  |  |
| First (low) | 37.4 | 33.0 | 47.9 | 18.6 | 15.5 | 32.9 |
| Second | 42.3 | 31.8 | 58.5 | 24.5 | 19.2 | 40.4 |
| Third | 48.1 | 35.1 | 62.9 | 26.4 | 18.0 | 42.4 |
| Fourth (high) | 62.8 | 41.9 | 72.9 | 42.0 | 37.1 | 50.0 |
| Parents' highest education level |  |  |  |  |  |  |
| Less than a high school diploma | 38.4 | 27.7 | 58.5 | 20.4 | 15.2 | 39.6 |
| High school diploma or GED | 37.6 | 28.3 | 52.0 | 17.8 | 14.3 | 31.5 |
| Some college | 47.2 | 35.1 | 60.3 | 25.5 | 20.5 | 39.7 |
| Bachelor's degree or higher | 60.7 | 41.7 | 72.9 | 34.8 | 29.2 | 41.1 |
| High school program |  |  |  |  |  |  |
| General | 41.7 | 30.6 | 56.5 | 23.8 | 18.3 | 38.6 |
| College preparatory | 58.5 | 41.6 | 70.6 | 32.7 | 27.4 | 42.7 |
| Vocational/technical | 37.0 | 29.5 | 50.1 | 21.8 | 18.2 | 38.3 |
| Other specialized program | 43.9 | 35.3 | 55.5 | 17.7 | 12.3 | 32.5 |

- Too few sample observations for a reliable estimate.
${ }^{1}$ Students were asked if they had attended at least one postsecondary institution (university, 2- or 4-year college, or a vocational, technical, or trade school) since 1992; students may not be enrolled in 1994, however.
${ }^{2}$ In 1992, high school seniors were asked if they had performed community service during the previous two years.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, Second Follow-up (1992) and Third Follow-up (1994).

Table 35-2 Percentage of 1992 high school seniors who in 1994 reported performing community service during the previous year, by community service in high school and selected characteristics

| Selected characteristics | No communityservice inTotal $\quad$ high school ${ }^{1}$ |  | Reported performing community service in high school ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Strictly |  |  |
|  |  |  | Total ${ }^{2}$ | voluntary ${ }^{2}$ | Required ${ }^{2}$ |
| Total | 43.3 | 29.7 | 60.6 | 63.2 | 57.5 |
| Sex |  |  |  |  |  |
| Male | 42.5 | 31.2 | 60.9 | 64.6 | 55.7 |
| Female | 44.2 | 27.9 | 60.4 | 62.3 | 58.9 |
| Race/ethnicity |  |  |  |  |  |
| White | 44.4 | 29.3 | 62.0 | 64.3 | 59.1 |
| Black | 42.9 | 34.3 | 58.6 | 58.7 | 58.1 |
| Hispanic | 35.8 | 25.2 | 52.3 | 58.6 | 49.6 |
| Asian/Pacific Islander | 45.4 | 34.7 | 57.1 | 61.1 | 51.8 |
| American Indian/Alaskan Native | 37.4 | 29.3 | 66.1 | 75.1 | - |
| Control of high school |  |  |  |  |  |
| Public | 42.1 | 29.1 | 59.9 | 62.5 | 56.4 |
| Catholic | 55.9 | 37.9 | 64.9 | 70.0 | 62.6 |
| Private, other | 55.9 | 33.2 | 71.6 | 71.9 | 64.7 |
| Urbanicity of high school |  |  |  |  |  |
| Central city | 43.6 | 29.1 | 58.5 | 61.2 | 56.9 |
| Urban fringe/large town | 44.7 | 29.8 | 64.1 | 67.3 | 62.8 |
| Rural/small town | 41.4 | 29.5 | 59.1 | 60.8 | 50.9 |
| Achievement test quartile in 1992 |  |  |  |  |  |
| First (low) | 27.8 | 23.5 | 41.9 | 46.8 | 36.4 |
| Second | 36.4 | 27.0 | 54.1 | 57.0 | 50.9 |
| Third | 44.0 | 31.2 | 59.8 | 60.4 | 60.0 |
| Fourth (high) | 61.4 | 41.3 | 72.0 | 73.8 | 68.9 |
| Parents' highest education level |  |  |  |  |  |
| Less than a high school diploma | 29.9 | 21.3 | 51.9 | 54.6 | 40.7 |
| High school diploma or GED | 29.3 | 21.5 | 46.4 | 48.6 | 42.1 |
| Some college | 41.4 | 30.2 | 56.8 | 59.6 | 52.9 |
| Bachelor's degree or higher | 58.5 | 40.2 | 71.1 | 72.4 | 68.2 |
| High school program |  |  |  |  |  |
| General | 35.5 | 25.7 | 52.3 | 55.7 | 50.2 |
| College preparatory | 56.1 | 39.7 | 69.0 | 70.2 | 65.0 |
| Vocational/technical | 29.3 | 23.1 | 45.9 | 48.5 | 46.6 |
| Other specialized program | 32.4 | 23.5 | 48.5 | 51.9 | 40.1 |

- Too few sample observations for a reliable estimate.
' In 1992, high school seniors were asked if they had performed community service during the previous two years.
${ }^{2}$ Seniors were asked to give as many responses as were applicable when reporting whether the community service they performed was
voluntary or required; therefore, seniors may be counted in both "strictly voluntary," and "required" categories but are only counted once in "total."
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, Second Follow-up (1992) and Third Follow-up (1994).

Table 35-3 Percentage of 1992 high school seniors who in 1994 reported performing community service during the previous year, by type of organization associated with the service and selected characteristics

| Selected characteristics | Youth organization | Union/farm/ professional organization | Political club | Churchrelated group | Service organization | Sports team or club | Education organization | Other groups |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 10.4 | 1.8 | 3.1 | 12.2 | 10.6 | 7.3 | 6.1 | 7.4 |
| Sex |  |  |  |  |  |  |  |  |
| Male | 11.2 | 1.9 | 3.0 | 11.5 | 8.4 | 9.7 | 5.0 | 7.3 |
| Female | 9.5 | 1.7 | 3.3 | 13.0 | 12.8 | 5.0 | 7.2 | 7.5 |
| Race/ethnicity |  |  |  |  |  |  |  |  |
| White | 10.4 | 2.0 | 3.2 | 11.6 | 11.8 | 7.7 | 5.9 | 7.8 |
| Black | 11.8 | 1.1 | 3.2 | 16.5 | 5.9 | 6.3 | 6.4 | 6.2 |
| Hispanic | 8.9 | 0.8 | 2.4 | 11.8 | 6.9 | 6.3 | 6.6 | 5.5 |
| Asian/Pacific Islander | 8.3 | 1.4 | 3.4 | 10.7 | 13.2 | 5.6 | 7.3 | 8.4 |
| American Indian/Alaskan Native | 13.2 | 4.0 | 4.2 | 14.8 | 5.0 | 12.1 | 6.8 | 3.8 |
| Control of high school |  |  |  |  |  |  |  |  |
| Public | 9.9 | 1.8 | 3.0 | 12.3 | 10.0 | 7.2 | 5.8 | 7.1 |
| Catholic | 11.5 | 1.4 | 5.3 | 13.3 | 15.8 | 9.0 | 8.7 | 10.7 |
| Private, other | 14.7 | 1.3 | 5.1 | 9.6 | 18.7 | 9.9 | 10.7 | 9.4 |
| Urbanicity of high school |  |  |  |  |  |  |  |  |
| Central city | 9.6 | 1.5 | 3.3 | 12.9 | 10.2 | 7.0 | 6.8 | 8.1 |
| Urban fringe/large town | 10.0 | 2.0 | 3.3 | 11.4 | 11.4 | 6.9 | 6.1 | 7.7 |
| Rural/small town | 11.0 | 1.8 | 2.8 | 12.9 | 10.3 | 8.4 | 5.6 | 6.2 |
| Achievement test quartile in 1992 |  |  |  |  |  |  |  |  |
| First (low) | 6.2 | 1.6 | 1.2 | 10.2 | 4.0 | 6.5 | 2.3 | 3.8 |
| Second | 8.8 | 1.6 | 2.7 | 10.8 | 7.6 | 7.2 | 3.6 | 5.7 |
| Third | 11.5 | 1.5 | 3.0 | 13.0 | 10.7 | 7.9 | 6.5 | 7.2 |
| Fourth (high) | 13.0 | 2.3 | 5.6 | 15.0 | 17.3 | 8.6 | 11.2 | 11.8 |
| Parents' highest education level |  |  |  |  |  |  |  |  |
| Less than a high school diploma | 6.7 | 1.4 | 1.2 | 11.8 | 5.9 | 4.4 | 4.3 | 5.9 |
| High school diploma or GED | 7.8 | 1.2 | 2.4 | 9.8 | 5.9 | 5.7 | 2.7 | 4.1 |
| Some college | 9.8 | 2.0 | 2.4 | 11.9 | 9.1 | 7.0 | 5.3 | 7.0 |
| Bachelor's degree or higher | 13.7 | 2.3 | 5.0 | 15.4 | 16.8 | 9.2 | 9.9 | 11.0 |
| High school program |  |  |  |  |  |  |  |  |
| General | 8.7 | 1.5 | 1.7 | 11.2 | 7.5 | 6.2 | 4.0 | 5.7 |
| College preparatory | 13.3 | 2.1 | 4.9 | 14.3 | 15.6 | 9.6 | 9.1 | 10.0 |
| Vocational/technical | 6.1 | 1.4 | 1.6 | 11.5 | 5.2 | 6.1 | 2.1 | 4.6 |
| Other specialized program | 8.3 | 1.4 | 2.2 | 7.5 | 6.5 | 3.3 | 5.2 | 5.8 |

[^25]Table 36-1 Percentage of elementary ${ }^{1}$ teachers who reported assigning types of homework and teachers' use of homework, by control of school and years of teaching experience: School year 1994-95


## Note to Indicator 36: The Teacher Follow-up Survey

The Teacher Follow-up Survey (TFS) provides information on movement within and outside of the teaching profession in public and private schools. TFS is a subsample of teachers in the Schools and Staffing Survey (SASS) and is conducted one year after each SASS cycle. The third TFS was conducted in the 1994-95 school year; two previous cycles of TFS were conducted in school years 1988-89 and 1991-92. The survey identifies and collects data from the following groups of teachers who participated in the SASS interview the previous year: 1) those who remained in the teaching profession, including those who remained in the same school and those who moved; and 2 ) those who left the teaching profession.

The 1994-95 TFS included questions on teaching methods, such as the use of homework and student portfolios. Respondents to the questions on teaching methods were those teachers who taught in both the 1993-94 and 1994-95 school years; therefore, the teachers' responses about their teaching methods represented a measurement of their actions in the 1994-95 school year, but do not consist of a complete random sample of the 1994-95 teacher work force. New teachers in the 1994-95 school year were left out of the survey.

## Elementary teachers

The TFS questions asked teachers to identify their main teaching assignment. For Indicators 36, 37, and 38 , the elementary teacher category consists of those teachers who responded that their main teaching assignment was "general elementary." The elementary teacher category excluded those elementary teachers who taught special subject areas, such as art, foreign language, science, or special education. However, special area elementary teachers were included in the "total" column of Indicators 37 and 38.

## Grouping of responses

In most cases, questions were asked in terms of "how many times in the past semester did you....?" In these cases, the response choices included: "almost every day," "once or twice a week," "once or twice a month,"" "once or twice a semester," or "never." For the indicators in the Condition, the responses "almost every day" and "once or twice a week" were combined to create the "at least once a week" response category. For the indicator on the assignment of homework by elementary teachers, two questions that asked "how often did you....?" were used to create the response category. The responses to the questions included "always," "often," "sometimes," "rarely," and "never." "Always" and "often" were combined to create the "often" response category used in this analysis.

Table 37-1 Percentage of teachers ${ }^{1}$ who used selected teaching methods, by years of teaching experience and level of education: School year 1994-95

| Selected teaching methods | Total | Years of teaching experience |  | Higest degree attained |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \text { Less } \\ \text { than } 4 \end{array}$ | $\begin{gathered} \hline 4 \text { or } \\ \text { more } \end{gathered}$ | Associate's | Bachelor's | Master's | Ed specialist or doctor's |
| Percentage of teachers who reported using the following instructional strategies at least once a week ${ }^{2}$ |  |  |  |  |  |  |  |
| Provide instruction to the class as a whole | 97.8 | 98.2 | 97.8 | 89.4 | 97.4 | 98.6 | 99.6 |
| Facilitate a discussion | 91.5 | 92.2 | 91.4 | 85.3 | 91.9 | 90.7 | 97.2 |
| Demonstrate a concept using the board or overhead projector | 87.1 | 89.7 | 86.7 | 79.3 | 86.4 | 87.8 | 88.7 |
| Work with individual students | 96.3 | 96.7 | 96.3 | 97.3 | 96.7 | 95.7 | 99.1 |
| Demonstrate a concept using a computer, videotape, or other electronic medium | 55.1 | 48.0 | 56.2 | 53.2 | 54.3 | 56.0 | 62.0 |
| Lecture | 62.5 | 65.9 | 62.0 | 58.2 | 63.1 | 61.0 | 68.2 |
| Work with small groups of students | 86.3 | 84.5 | 86.5 | 89.9 | 86.0 | 86.7 | 88.8 |
| Lead a question-and-answer session | 85.2 | 84.3 | 85.3 | 85.1 | 85.9 | 84.0 | 88.2 |
| Demonstrate a concept using manipulatives, models, other tools, or objects | 73.4 | 73.2 | 73.4 | 77.3 | 75.0 | 70.6 | 77.8 |
| Administer a test or quiz for less than a full period | 54.8 | 52.2 | 55.2 | 27.0 | 54.4 | 53.6 | 70.7 |
| Administer a test or quiz for a full period | 17.0 | 18.6 | 16.8 | 13.1 | 17.6 | 16.4 | 14.2 |
| Percentage of teachers who emphasized the following at least once a week ${ }^{2}$ |  |  |  |  |  |  |  |
| Generalizing from patterns or examples | 76.5 | 75.7 | 76.7 | 89.7 | 74.2 | 79.4 | 78.5 |
| Analyzing and interpreting information | 81.7 | 82.2 | 81.7 | 91.3 | 79.7 | 84.0 | 85.7 |
| Organizing, summarizing, or displaying information | 77.9 | 78.5 | 77.8 | 85.9 | 76.0 | 80.2 | 80.3 |

Percentage of teachers who responded in the following ways at least once a week ${ }^{2}$ if a student gave an incorrect response

| Call on other students to get their responses and |
| :--- |
| then discuss what is correct |


| Ask the student another question to help him |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| or her get the correct response |
| :--- |

Call on another student likely to give the

[^26]Table 37-2 $\begin{aligned} & \text { Percentage of teachers }{ }^{1} \text { who used selected teaching methods, by control and level of } \\ & \text { school: School year 1994-95 }\end{aligned}$

| Selected teaching methods | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total ${ }^{2}$ | Elementary | Secondary | Total ${ }^{2}$ | Elementary ${ }^{2}$ | Secondary |
| Percentage of teachers who reported using the following instructional strategies at least once a week ${ }^{3}$ |  |  |  |  |  |  |
| Provide instruction to the class as a whole | 97.9 | 99.2 | 98.0 | 97.2 | 98.7 | 98.1 |
| Facilitate a discussion | 91.6 | 98.3 | 87.2 | 90.8 | 97.8 | 88.8 |
| Demonstrate a concept using the board or overhead projector | 87.1 | 96.9 | 86.7 | 87.1 | 96.2 | 88.6 |
| Work with individual students | 96.6 | 99.6 | 94.9 | 94.4 | 99.1 | 91.8 |
| Demonstrate a concept using a computer, videotape, or other electronic medium | 56.5 | 74.5 | 46.9 | 45.3 | 56.9 | 38.6 |
| Lecture | 61.6 | 68.7 | 66.9 | 69.0 | 78.4 | 73.3 |
| Work with small groups of students | 87.0 | 95.9 | 79.7 | 81.0 | 90.5 | 72.1 |
| Lead a question-and-answer session | 85.3 | 95.0 | 81.3 | 84.5 | 95.1 | 81.4 |
| Demonstrate a concept using manipulatives, models, other tools, or objects | 74.6 | 92.8 | 57.8 | 64.4 | 85.3 | 45.7 |
| Administer a test or quiz for less than a full period | 54.4 | 72.1 | 56.0 | 57.3 | 76.9 | 59.9 |
| Administer a test or quiz for a full period | 16.1 | 26.5 | 14.4 | 23.4 | 40.6 | 18.9 |
| Percentage of teachers who emphasized the following at least once a week ${ }^{3}$ |  |  |  |  |  |  |
| Generalizing from patterns or examples | 76.7 | 83.4 | 73.2 | 75.3 | 78.9 | 74.6 |
| Analyzing and interpreting information | 81.6 | 85.5 | 80.7 | 82.4 | 85.0 | 85.7 |
| Organizing, summarizing, or displaying information | 78.1 | 83.1 | 76.5 | 76.3 | 81.6 | 77.4 |

Percentage of teachers who responded in the following ways if a student gave an incorrect response ${ }^{3}$ Call on other students to get their responses and

| then discuss what is correct <br> Ask the student another question to help him <br> or her get the correct response | 84.0 | 88.4 | 82.0 | 87.4 | 92.7 | 87.8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Call on another student likely to give the | 93.5 | 97.2 | 91.0 | 93.2 | 97.5 | 94.7 |
| correct response | 69.5 | 76.9 | 63.7 | 71.4 | 78.3 | 71.8 |
| Provide the correct response | 61.0 | 64.9 | 58.0 | 59.0 | 62.5 | 60.9 |

${ }^{1}$ Includes only those teachers who taught in both the 1993-94 and 1994-95 school years; therefore, new teachers are not included in this analysis.
${ }^{2}$ "Total" includes all elementary and secondary teachers, while "elementary" includes only those whose main assignment was teaching "general elementary." See the supplemental note to Indicator 36 for further discussion.
${ }^{3}$ Includes those teachers who responded "almost every day" and "once or twice a week."

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey, 1994-95.
$\begin{array}{ll}\text { Table 37-3 } & \begin{array}{l}\text { Percentage of teachers }{ }^{1} \text { who reported that their students participated in selected } \\ \text { teaching methods, by control and level of school: School year 1993-94 }\end{array}\end{array}$

| Selected teaching methods | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total ${ }^{2}$ | Elementary ${ }^{2}$ | Secondary | Total ${ }^{2}$ | Elementary ${ }^{2}$ | Secondary |
| Percentage of teachers who required students to perform the following in-class activities at least once a week ${ }^{3}$ |  |  |  |  |  |  |
| Respond orally to questions testing recall | 90.3 | 96.0 | 86.8 | 88.8 | 94.5 | 89.7 |
| Use school- or student-owned calculators | 24.4 | 29.1 | 25.6 | 22.8 | 28.0 | 25.7 |
| Lead whole group discussions | 50.9 | 62.1 | 44.5 | 47.8 | 55.5 | 46.0 |
| Listen to or observe teacher presentations | 75.6 | 82.0 | 74.6 | 76.0 | 83.8 | 72.9 |
| Use hands-on materials or objects | 79.9 | 91.0 | 68.1 | 71.8 | 82.8 | 54.9 |
| Complete a worksheet or workbook emphasizing routine practice | 67.1 | 86.3 | 62.2 | 70.4 | 93.0 | 57.9 |
| Use a textbook | 71.7 | 88.3 | 75.7 | 79.2 | 92.3 | 83.6 |
| Engage in discussion primarily with the teacher | 85.2 | 94.6 | 80.7 | 86.3 | 92.1 | 86.7 |
| Use school computers for writing | 29.3 | 49.8 | 17.8 | 27.1 | 39.9 | 21.5 |
| Use supplementary printed materials other than textbooks | 79.1 | 93.5 | 71.1 | 69.1 | 87.8 | 56.6 |
| Engage in discussion primarily with other students | 74.0 | 88.2 | 64.7 | 70.8 | 85.2 | 63.1 |
| Respond orally to open-ended questions | 85.4 | 93.6 | 80.1 | 84.2 | 93.5 | 81.8 |
| Work on a performing arts project | 21.8 | 33.4 | 10.7 | 26.9 | 41.9 | 11.2 |


| Percentage of teachers who reported that students performed the following at least once a week ${ }^{3}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Explained how what they learned in class |  |  |  |  |  |  |
| related to the real world | 63.5 | 75.7 | 58.6 | 62.4 | 75.1 | 55.3 |
| Worked individually on projects or presentations | 46.3 | 58.5 | 38.0 | 45.1 | 48.5 | 39.3 |
| Worked on projects that required at least one week to complete | 18.6 | 17.9 | 18.3 | 18.5 | 19.3 | 17.5 |
| Evaluated and improved their own work | 61.2 | 69.6 | 56.9 | 54.2 | 61.5 | 47.7 |
| Worked on problems for which there were several appropriate answers | 59.5 | 73.3 | 53.3 | 54.4 | 61.6 | 53.5 |
| Worked on problems for which there were several appropriate methods of solution | 58.8 | 71.9 | 53.5 | 55.7 | 63.5 | 54.9 |
| Worked as part of a group on projects or presentations to earn individual grades | 33.5 | 37.3 | 32.5 | 25.7 | 31.7 | 25.2 |
| Evaluated the work of other students | 29.7 | 37.5 | 25.1 | 26.8 | 30.8 | 22.5 |
| Worked as part of a group on projects or presentations to earn a group grade | 18.7 | 22.8 | 18.6 | 13.6 | 18.9 | 11.0 |
| Put events or things in order and explained why they were organized that way | 39.0 | 52.5 | 28.4 | 31.3 | 36.7 | 26.0 |
| Discussed with the whole class solutions developed in small groups | 31.5 | 49.3 | 22.2 | 27.4 | 33.3 | 22.6 |
| Conferred with other student about their work | 66.2 | 75.1 | 63.8 | 59.3 | 61.7 | 58.3 |

[^27]${ }^{3}$ "Includes those teachers who responded "almost every day" and "once or twice a week."
SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey, 1994-95.

Table 37-4 Percentage of teachers ${ }^{1}$ who reported that their students participated in selected teaching methods, by years of teaching experience and level of education: School year 1994-95

| Selected teaching methods | Total | Years of teaching experience |  | Level of education |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Less | $4 \text { or }$ | Associate's | Bachelor's | Master's | Ed specialist |
| Percentage of teachers who required students to perform the following in-class activities at least once a week ${ }^{2}$ |  |  |  |  |  |  |  |
| Respond orally to questions testing recall | 90.1 | 89.7 | 90.1 | 86.7 | 91.2 | 88.8 | 89.1 |
| Use school- or student-owned calculators | 24.2 | 21.8 | 24.6 | 8.4 | 21.8 | 26.9 | 33.3 |
| Lead whole group discussions | 50.5 | 53.5 | 50.0 | 45.6 | 51.5 | 48.3 | 58.2 |
| Listen to or observe teacher presentations | 75.7 | 73.5 | 76.0 | 78.0 | 77.0 | 75.3 | 65.9 |
| Use hands-on materials or objects | 78.9 | 75.9 | 79.3 | 88.5 | 79.9 | 77.0 | 82.7 |
| Complete a worksheet or workbook emphasizing routine practice | 67.5 | 66.9 | 67.6 | 57.1 | 69.3 | 65.4 | 67.7 |
| Use a textbook | 72.7 | 73.5 | 72.5 | 69.4 | 73.4 | 71.5 | 76.2 |
| Engage in discussion primarily with the teacher | 85.3 | 84.3 | 85.5 | 89.6 | 85.4 | 85.2 | 85.5 |
| Use school computers for writing | 29.0 | 28.3 | 29.1 | 9.6 | 29.2 | 29.0 | 28.5 |
| Use supplementary printed materials other than textbooks | 77.8 | 77.3 | 77.9 | 86.5 | 77.8 | 76.5 | 90.7 |
| Engage in discussion primarily with other students | 73.6 | 74.4 | 73.5 | 70.4 | 73.7 | 72.0 | 85.7 |
| Respond orally to open-ended questions | 85.2 | 85.6 | 85.2 | 93.9 | 84.2 | 85.5 | 91.7 |
| Work on a performing arts project | 22.4 | 24.6 | 22.1 | 25.3 | 23.9 | 20.1 | 23.6 |
| Percentage of teachers who reported that students performed the following at least once a week ${ }^{2}$ |  |  |  |  |  |  |  |
| Explained how what they learned in class related to the real world | $63.4$ | $66.2$ | $63.0$ | $81.0$ | 64.0 | 61.8 | 66.9 |
| Worked individually on projects or presentations | 46.2 | 44.2 | 46.5 | 64.7 | 46.4 | 45.5 | 48.3 |
| Worked on projects that required at least one week to complete | 18.5 | 17.0 | 18.8 | 48.0 | 16.4 | 20.1 | 24.0 |
| Evaluated and improved their own work | 60.3 | 58.8 | 60.6 | 80.4 | 59.1 | 60.7 | 70.0 |
| Worked on problems for which there were several appropriate answers | 58.8 | 61.2 | 58.5 | 72.5 | 56.9 | 59.7 | 70.3 |
| Worked on problems for which there were several appropriate methods of solution | 58.4 | 60.2 | 58.1 | 68.8 | 55.9 | 60.6 | 65.9 |
| Worked as part of a group on projects or presentations to earn individual grades | 32.6 | 34.3 | 32.3 | 52.9 | 29.1 | 36.3 | 38.0 |
| Evaluated the work of other students | 29.3 | 30.3 | 29.2 | 42.3 | 28.7 | 29.8 | 29.2 |
| Worked as part of a group on projects or presentations to earn a group grade | 18.1 | 18.8 | 17.9 | 27.5 | 15.7 | 20.8 | 19.1 |
| Put events or things in order and explained why they were organized that way | 38.1 | 37.3 | 38.2 | 61.6 | 36.9 | 38.6 | 45.4 |
| Discussed with the whole class solutions developed in small groups | 31.0 | 34.5 | 30.4 | 40.8 | 29.6 | 32.5 | 33.4 |
| Conferred with other student about their work | 65.4 | 66.9 | 65.2 | 71.6 | 66.8 | 63.7 | 64.1 |

[^28]SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey, 1994-95.

Table 38-1 Percentage of public elementary teachers ${ }^{1}$ who used student portfolios and how portfolios were used, by urbanicity and percentage of minority students enrolled: School year 1994-95


Table 38-2 Percentage of public elementary teachers ${ }^{1}$ who used student portfolios and how portfolios were used, by percentage of students eligible for free or reduced-price lunch: School year 1994-95


Table 38-3 Percentage of elementary teachers* using student portfolios who used them for specific types of work and subject areas, and those who received directives and suggestions on the use of student portfolios, by control of school and years of teaching experience: School year 1994-95

| Types of work and subject areas | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | $\begin{aligned} & \text { ss than } \\ & 4 \text { years } \end{aligned}$ | $\begin{array}{r} \hline 4 \text { or more } \\ \text { years } \\ \hline \end{array}$ | Total | ss than 4 years | 4 or more years |
| Types of work |  |  |  |  |  |  |
| Worksheets | 52.3 | 49.9 | 52.6 | 66.2 | 66.5 | 66.1 |
| Open-ended problems | 45.9 | 48.3 | 45.6 | 39.3 | 35.4 | 39.9 |
| Exploratory investigation | 31.3 | 32.0 | 31.2 | 29.2 | 33.3 | 28.5 |
| Long-term projects | 40.5 | 45.6 | 39.8 | 50.3 | 39.4 | 52.2 |
| Interdisciplinary problems | 23.5 | 18.5 | 24.3 | 23.9 | 23.4 | 24.0 |
| Journal entries | 61.3 | 65.2 | 60.8 | 45.6 | 46.6 | 45.4 |
| Regularly assigned homework | 28.8 | 29.0 | 28.7 | 39.2 | 25.2 | 41.5 |
| Self-reflective writing | 67.7 | 68.8 | 67.6 | 59.2 | 51.0 | 60.6 |
| Narrative writing | 68.5 | 64.1 | 69.1 | 57.6 | 68.8 | 55.8 |
| Audio/video examples | 9.4 | 8.1 | 9.6 | - | - | - |
| Group work | 30.6 | 32.8 | 30.3 | 35.2 | 32.1 | 35.7 |
| Independent work | 75.2 | 74.4 | 75.3 | 76.4 | 76.7 | 76.3 |
| Tests and assessments | 60.9 | 59.1 | 61.1 | 68.2 | 67.1 | 68.4 |
| Subject areas |  |  |  |  |  |  |
| English/language arts | 84.6 | 89.7 | 83.9 | 87.0 | 92.6 | 86.1 |
| Mathematics | 60.8 | 71.1 | 59.3 | 61.1 | 59.0 | 61.4 |
| Reading | 62.3 | 71.1 | 61.0 | 63.7 | 60.3 | 64.3 |
| Social studies | 40.7 | 37.9 | 41.2 | 43.9 | 40.5 | 44.5 |
| Science | 36.4 | 35.0 | 36.6 | 43.6 | 40.1 | 44.2 |
| Art | 24.0 | 26.6 | 23.6 | 21.5 | 26.5 | 20.7 |
| Other | 6.6 | 7.8 | 6.5 | - | - | - |
| Source of directives and suggestions |  |  |  |  |  |  |
| School administration | 48.0 | 52.3 | 47.6 | 49.8 | 50.1 | 49.7 |
| School committee or task force | 41.4 | 41.1 | 41.4 | 21.0 | 17.8 | 21.5 |
| District staff | 39.9 | 37.1 | 40.3 | 10.7 | 15.8 | 9.8 |
| District committee or task force | 35.5 | 32.9 | 35.9 | 9.7 | 9.1 | 9.8 |
| State administration | 19.6 | 23.8 | 19.0 | 8.9 | 13.3 | 8.2 |
| State committee or task force | 16.4 | 22.4 | 15.5 | 8.1 | 8.0 | 8.1 |
| Classroom teacher | 90.5 | 95.2 | 89.8 | 94.0 | 90.9 | 94.5 |
| Students | 63.0 | 68.4 | 62.2 | 55.6 | 47.6 | 57.0 |
| Other | 12.9 | 9.8 | 13.3 | 9.9 | 10.7 | 9.8 |

- Too few sample observations for a reliable estimate.
*Includes only those elementary teachers whose main assignment
was teaching "general elementary" and who taught in both the
1993-94 and 1994-95 school years; therefore, new teachers were
not included in this analysis. See the supplemental note to Indicator 36 for further discussion.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey, 1994-95.

Table 38-4 Percentage of public elementary teachers* using student portfolios who used them for specific types of work and subject areas, and those who received directives and suggestions on the use of student portfolios, by urbanicity and percentage of minority students enrolled: School year 1994-95

| Types of work and subject areas | Urbanicity |  |  | Percentage of minority students enrolled |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Central <br> city | Urban fringe/ large town | $\begin{array}{r} \text { Rural/ } \\ \text { small town } \end{array}$ | Less than 20 percent | 20 percent or more |
| Types of work |  |  |  |  |  |
| Worksheets | 56.0 | 42.6 | 58.0 | 46.7 | 59.3 |
| Open-ended problems | 46.9 | 48.8 | 42.5 | 46.9 | 46.6 |
| Exploratory investigation | 34.0 | 33.0 | 27.8 | 32.1 | 32.8 |
| Long-term projects | 34.6 | 44.8 | 41.2 | 46.8 | 36.7 |
| Interdisciplinary problems | 17.8 | 24.4 | 27.2 | 26.3 | 21.9 |
| Journal entries | 63.0 | 65.9 | 55.9 | 61.3 | 59.6 |
| Regularly assigned homework | 34.0 | 19.8 | 32.7 | 25.4 | 35.2 |
| Self-reflective writing | 61.5 | 71.0 | 69.6 | 71.1 | 63.4 |
| Narrative writing | 70.0 | 69.0 | 66.8 | 68.0 | 67.4 |
| Audio/video examples | 7.0 | 10.4 | 10.3 | 10.1 | 10.2 |
| Group work | 31.9 | 25.7 | 34.1 | 30.7 | 32.0 |
| Independent work | 68.7 | 76.5 | 79.1 | 75.5 | 75.4 |
| Tests and assessments | 65.4 | 57.5 | 60.4 | 53.7 | 69.2 |
| Subject areas |  |  |  |  |  |
| English/language arts | 81.8 | 88.2 | 83.6 | 84.4 | 85.0 |
| Mathematics | 62.0 | 62.9 | 58.1 | 56.1 | 68.1 |
| Reading | 69.2 | 56.9 | 61.9 | 56.8 | 71.2 |
| Social studies | 48.5 | 40.6 | 34.9 | 35.6 | 47.3 |
| Science | 38.4 | 36.8 | 34.4 | 33.3 | 41.9 |
| Art | 25.3 | 30.2 | 17.3 | 20.9 | 26.9 |
| Other | 6.5 | 10.4 | 3.4 | 7.4 | 5.4 |
| Source of directives and suggestions |  |  |  |  |  |
| School administration | 48.6 | 57.0 | 39.4 | 40.3 | 55.3 |
| School committee or task force | 40.0 | 48.4 | 36.2 | 39.0 | 41.6 |
| District staff | 38.8 | 44.3 | 36.6 | 34.7 | 45.3 |
| District committee or task force | 32.1 | 44.9 | 29.8 | 30.5 | 39.5 |
| State administration | 18.9 | 18.6 | 21.1 | 13.3 | 24.4 |
| State committee or task force | 15.7 | 16.7 | 16.7 | 11.4 | 19.7 |
| Classroom teacher | 91.8 | 86.5 | 92.9 | 92.4 | 88.9 |
| Students | 56.5 | 63.3 | 67.8 | 72.7 | 55.1 |
| Other | 17.5 | 16.4 | 6.1 | 10.6 | 17.2 |

[^29]Table 38-5 Percentage of public elementary teachers* using student portfolios who used them for specific types of work and subject areas, and those who received directives and suggestions on the use of student portfolios, by percentage of students eligible for free or reduced-price lunch: School year 1994-95

| Types of work and subject areas | 0-5 | 6-20 | 21-40 | 41 or more |
| :---: | :---: | :---: | :---: | :---: |
| Types of work |  |  |  |  |
| Worksheets | 52.1 | 36.3 | 49.3 | 61.6 |
| Open-ended problems | 45.9 | 56.5 | 42.4 | 41.8 |
| Exploratory investigation | 39.1 | 36.6 | 32.9 | 27.5 |
| Long-term projects | 64.9 | 38.4 | 41.9 | 38.6 |
| Interdisciplinary problems | 30.7 | 26.2 | 19.9 | 23.9 |
| Journal entries | 58.3 | 62.1 | 67.4 | 54.6 |
| Regularly assigned homework | 13.2 | 16.9 | 29.3 | 39.3 |
| Self-reflective writing | 81.3 | 71.2 | 61.7 | 34.4 |
| Narrative writing | 68.9 | 68.6 | 71.5 | 64.7 |
| Audio/video examples | 20.0 | 8.5 | 2.6 | 12.3 |
| Group work | 34.4 | 29.9 | 31.5 | 30.4 |
| Independent work | 70.3 | 72.3 | 72.9 | 79.4 |
| Tests and assessments | 67.9 | 52.4 | 60.4 | 65.4 |
| Subject areas |  |  |  |  |
| English/language arts | 88.5 | 87.8 | 82.7 | 82.5 |
| Mathematics | 64.6 | 55.0 | 61.0 | 64.9 |
| Reading | 60.3 | 59.2 | 52.1 | 71.7 |
| Social studies | 50.3 | 36.0 | 34.4 | 44.1 |
| Science | 50.9 | 30.0 | 29.2 | 40.7 |
| Art | 31.4 | 16.0 | 21.1 | 27.1 |
| Other | 5.8 | 9.2 | 8.5 | 4.5 |
| Source of directives and suggestions |  |  |  |  |
| School administration | 48.1 | 48.7 | 37.2 | 51.4 |
| School committee or task force | 43.3 | 44.6 | 43.2 | 34.7 |
| District staff | 25.3 | 39.0 | 36.7 | 44.5 |
| District committee or task force | 26.7 | 39.2 | 27.0 | 35.9 |
| State administration | 14.4 | 12.5 | 14.5 | 23.4 |
| State committee or task force | 6.8 | 14.2 | 12.9 | 17.8 |
| Classroom teacher | 100.0 | 89.8 | 86.3 | 91.0 |
| Students | 75.5 | 66.8 | 77.5 | 55.9 |
| Other | 17.8 | 14.0 | 9.4 | 14.5 |

* Includes only those elementary teachers whose main assignment was teaching "general elementary" and who taught in both the 1993-94 and 1994-95 school years; therefore, new teachers were not included in this analysis. See the supplemental note to Indicator 36 for further discussion.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey, 1994-95.

Table 39-1 Percentage of teachers who team taught, by control of school: School years 1987-88, 1990-91, and 1993-94

| Control of school | $1987-88$ | $1990-91$ | $1993-94$ |
| :--- | ---: | ---: | ---: |
| Public | 4.6 | 5.9 | 7.1 |
| Private | 4.2 | 5.3 | 4.9 |

[^30]Table 39-2 Public school teachers' average class size, by teacher level and state: School year 199394

| State | Elementary | Secondary |
| :---: | :---: | :---: |
| Total | 24.1 | 23.6 |
| Alabama | 21.7 | 24.2 |
| Alaska | 22.6 | 22.0 |
| Arizona | 25.8 | 25.5 |
| Arkansas | 21.0 | 21.3 |
| California | 29.3 | 29.7 |
| Colorado | 24.7 | 24.5 |
| Connecticut | 21.4 | 19.7 |
| Delaware | 24.8 | 24.1 |
| District of Columbia | 21.8 | 20.7 |
| Florida | 26.0 | 26.6 |
| Georgia | 22.2 | 24.2 |
| Hawaii | 23.6 | 23.6 |
| Idaho | 24.0 | 23.7 |
| Illinois | 24.5 | 24.0 |
| Indiana | 21.9 | 23.0 |
| lowa | 22.5 | 21.4 |
| Kansas | 20.6 | 20.7 |
| Kentucky | 24.4 | 23.5 |
| Lovisiana | 22.9 | 23.7 |
| Maine | 21.5 | 18.5 |
| Maryland | 26.3 | 25.0 |
| Massachusetts | 23.1 | 20.9 |
| Michigan | 27.3 | 25.5 |
| Minnesota | 24.5 | 25.9 |
| Mississippi | 23.6 | 22.5 |
| Missouri | 23.7 | 22.5 |
| Montana | 21.2 | 19.3 |
| Nebraska | 20.0 | 18.7 |
| Nevada | 24.4 | 26.6 |
| New Hampshire | 21.8 | 20.5 |
| New Jersey | 23.2 | 20.5 |
| New Mexico | 21.9 | 24.5 |
| New York | 23.9 | 23.2 |
| North Carolina | 24.8 | 22.4 |
| North Dakota | 20.7 | 19.7 |
| Ohio | 25.0 | 22.3 |
| Oklahoma | 20.5 | 20.5 |
| Oregon | 24.4 | 23.9 |
| Pennsylvania | 25.2 | 24.1 |
| Rhode Island | 23.2 | 20.8 |
| South Carolina | 23.3 | 22.5 |
| South Dakota | 19.2 | 20.9 |
| Tennessee | 24.4 | 25.2 |
| Texas | 20.1 | 22.5 |
| Utah | 27.5 | 28.8 |
| Vermont | 19.7 | 19.2 |
| Virginia | 22.6 | 21.6 |
| Washington | 25.9 | 25.5 |
| West Virginia | 20.9 | 22.5 |
| Wisconsin | 23.1 | 23.1 |
| Wyoming | 21.0 | 19.3 |

NOTE: In this analysis, "elementary" teachers are those who taught self-contained classes at the elementary level and "secondary" teachers are those who taught departmentalized classes (e.g., science, art, social science, or other course subjects) at the secondary level. Excludes special education teachers. Teachers were classified
as elementary or secondary on the basis of the grades they taught, rather than on the level of the school in which they taught.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94.

Table 40-1 Percentage of teachers who participated in a formal teacher induction or master or mentor program, by years of teaching experience and control and level of school: 1994

|  | Participated in a formal teacher induction <br> program during first year of teaching |  | Master or |  |
| :---: | ---: | ---: | ---: | ---: |
| Control and level of school | 1 year | $2-3$ years | 4 years or more | mentor program |
| Public | $\mathbf{5 9 . 9}$ | $\mathbf{5 4 . 8}$ | $\mathbf{2 3 . 3}$ | $\mathbf{1 1 . 3}$ |
| Elementary | 59.4 | 54.5 | 23.8 | 11.4 |
| Secondary | 60.7 | 55.3 | 22.5 | 11.3 |
| Private | 30.2 | 33.8 | $\mathbf{2 4 . 2}$ | $\mathbf{1 0 . 1}$ |
| Elementary | 26.8 | 31.7 | 23.5 | 8.9 |
| Secondary | 42.7 | 39.5 | 26.0 | 13.7 |

NOTE: Excludes a small number of teachers whose schools did not SOURCE: U.S. Department of Education, National Center for respond to the questionnaire. Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table 40-2 Percentage of teachers who participated in professional development activities during the 1993-94 school year, by topic, type of support and activity, outcomes, and level, control and urbanicity of school

| Topic, type of support and activity, and outcomes of professional development | Elementary teachers |  |  |  | Secondary teachers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Central |  | Urban fringe/ large town | Rural/ small town | Central |  | Urban fringe/ large town | Rural/ small town |
|  | Public |  |  |  |  |  |  |  |
| In-service education or professional development topic |  |  |  |  |  |  |  |  |
| Uses of educational technology for instruction | 49.7 | 51.6 | 51.7 | 46.7 | 50.7 | 50.8 | 51.8 | 49.9 |
| Methods of teaching in specific subject field | 69.7 | 73.4 | 70.8 | 65.9 | 55.0 | 59.1 | 55.3 | 52.2 |
| In-depth study in specific field | 31.6 | 36.6 | 31.1 | 28.1 | 27.5 | 30.8 | 27.5 | 25.4 |
| Student assessment | 55.4 | 56.8 | 58.2 | 52.2 | 45.8 | 46.7 | 45.7 | 45.3 |
| Cooperative learning in the classroom | 52.7 | 56.6 | 50.7 | 51.4 | 49.2 | 52.1 | 49.0 | 47.5 |
| Type of support received during 1993-94 school year for in-service education or professional development |  |  |  |  |  |  |  |  |
| Released time from teaching | 50.7 | 50.4 | 52.8 | 49.3 | 43.5 | 42.2 | 43.6 | 44.2 |
| Scheduled time (built-in time) | 43.6 | 47.1 | 42.5 | 41.9 | 35.4 | 37.9 | 34.1 | 35.0 |
| Travel and/or per diem expenses | 21.2 | 15.3 | 18.2 | 28.1 | 26.9 | 21.5 | 23.5 | 32.7 |
| Tuition and/or fees | 24.3 | 20.9 | 24.2 | 26.9 | 20.7 | 17.0 | 20.3 | 23.2 |
| Professional growth credits | 34.8 | 35.5 | 34.1 | 34.8 | 28.9 | 30.7 | 27.5 | 29.0 |
| None of above | 19.4 | 20.1 | 18.4 | 19.7 | 27.1 | 27.0 | 28.3 | 26.3 |
| Type of professional development activity |  |  |  |  |  |  |  |  |
| School district sponsored workshop or in-service | 89.6 | 87.7 | 91.0 | 89.9 | 84.9 | 82.8 | 84.7 | 86.3 |
| School sponsored workshop or in-service | 83.7 | 86.4 | 83.2 | 82.1 | 79.1 | 81.5 | 78.7 | 78.0 |
| University extension or adult education course | 25.1 | 25.3 | 25.1 | 24.9 | 25.5 | 23.9 | 26.5 | 25.7 |
| College course in specific subject field | 26.1 | 26.5 | 25.1 | 26.6 | 24.3 | 22.6 | 23.8 | 25.7 |
| Professional association sponsored workshop | 50.5 | 49.2 | 52.0 | 50.3 | 51.9 | 51.3 | 53.1 | 51.5 |
| Those who agreed with the following statements about their in-service education or professional development* |  |  |  |  |  |  |  |  |
| Provided information that was new to me | 85.4 | 85.3 | 86.4 | 84.8 | 83.0 | 81.2 | 83.4 | 83.7 |
| Changed my views on teaching | 44.0 | 45.4 | 41.4 | 44.9 | 38.6 | 38.7 | 38.8 | 38.4 |
| Caused me to change my teaching practices | 68.0 | 66.6 | 69.3 | 68.0 | 59.5 | 57.6 | 61.5 | 59.1 |
| Caused me to seek further information or training | 64.6 | 64.5 | 66.0 | 63.4 | 59.1 | 59.5 | 59.6 | 58.3 |
| Were generally a waste of my time | 9.1 | 9.7 | 8.0 | 9.6 | 13.8 | 15.9 | 13.1 | 13.2 |

Table 40-2 Percentage of teachers who participated in professional development activities during the 1993-94 school year, by topic, type of support and activity, outcomes, and level, control and urbanicity of school-Continued

| Topic, type of support and activity, and outcomes of professional development | Elementary teachers |  |  |  | Secondary teachers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Central |  | Urban <br> fringe/ <br> large town | Rural/ small town | Central |  | Urban <br> fringe/ <br> large town | Rural/ small town |
|  | Private |  |  |  |  |  |  |  |
| In-service education or professional development topic |  |  |  |  |  |  |  |  |
| Uses of educational technology for instruction | 32.8 | 33.9 | 33.1 | 29.4 | 38.5 | 37.0 | 39.7 | 40.0 |
| Methods of teaching in specific subject field | 63.1 | 66.7 | 60.6 | 60.1 | 50.8 | 52.1 | 50.5 | 48.0 |
| In-depth study in specific field | 24.7 | 24.6 | 25.3 | 23.6 | 29.2 | 28.8 | 29.7 | 29.3 |
| Student assessment | 42.5 | 46.8 | 40.3 | 37.2 | 34.7 | 36.2 | 34.0 | 32.4 |
| Cooperative learning in the classroom | 45.5 | 49.7 | 44.2 | 38.5 | 38.5 | 40.8 | 37.0 | 35.3 |
| Type of support received during 1993-94 school year for in-service education or professional development |  |  |  |  |  |  |  |  |
| Released time from teaching | 42.6 | 41.4 | 42.6 | 45.4 | 39.2 | 38.2 | 38.9 | 42.7 |
| Scheduled time (built-in time) | 37.1 | 39.4 | 35.7 | 34.7 | 34.3 | 36.2 | 34.1 | 29.3 |
| Travel and/or per diem expenses | 19.8 | 18.2 | 17.2 | 29.6 | 24.6 | 21.8 | 22.7 | 36.4 |
| Tuition and/or fees | 36.0 | 32.3 | 38.5 | 39.3 | 33.3 | 28.6 | 35.9 | 40.7 |
| Professional growth credits | 27.7 | 28.7 | 25.3 | 30.6 | 21.3 | 21.0 | 21.9 | 20.9 |
| None of above | 25.1 | 25.4 | 25.3 | 24.0 | 28.4 | 30.0 | 26.8 | 27.6 |
| Type of professional development activity |  |  |  |  |  |  |  |  |
| School district sponsored workshop or in-service | 78.9 | 78.7 | 78.2 | 80.9 | 68.9 | 71.0 | 67.9 | 65.3 |
| School sponsored workshop or in-service | 78.0 | 77.9 | 79.0 | 75.8 | 78.4 | 80.6 | 78.8 | 71.4 |
| University extension or adult education course | 24.8 | 26.6 | 21.3 | 28.0 | 23.6 | 24.7 | 22.8 | 22.4 |
| College course in specific subject field | 23.7 | 25.3 | 20.9 | 26.1 | 24.1 | 25.0 | 22.9 | 23.9 |
| Professional association sponsored workshop | 46.8 | 47.7 | 45.5 | 47.6 | 48.2 | 49.0 | 48.2 | 45.8 |
| Those who agreed with the following statements about their in-service education or professional development* |  |  |  |  |  |  |  |  |
| Provided information that was new to me | 85.2 | 84.8 | 84.9 | 86.8 | 87.1 | 84.4 | 88.4 | 92.0 |
| Changed my views on teaching | 41.9 | 41.9 | 40.0 | 46.4 | 43.7 | 40.3 | 46.5 | 47.3 |
| Caused me to change my teaching practices | 65.0 | 63.9 | 64.1 | 70.0 | 62.8 | 61.0 | 65.8 | 61.6 |
| Caused me to seek further information or training | 61.2 | 60.6 | 60.6 | 64.1 | 62.5 | 60.6 | 64.5 | 63.5 |
| Were generally a waste of my time | 6.8 | 7.2 | 6.8 | 5.8 | 9.4 | 11.3 | 8.6 | 5.6 |

[^31]Table 40-3 Percentage of public teachers who participated in professional development activities during the 1993-94 school year, by topic, type of support and activity, outcomes, level of school, and percentage of students eligible for free or reduced-price lunch

| Topic, type of support and activity, and outcomes of professional development | Elementary teachers |  |  |  | Secondary teachers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-5 | 6-20 | 21-40 | 41-100 | 0-5 | 6-20 | 21-40 | 41-100 |
| In-service education or professional development topic |  |  |  |  |  |  |  |  |
| Uses of educational technology for instruction | 55.6 | 53.6 | 50.2 | 46.7 | 55.0 | 51.0 | 48.2 | 50.1 |
| Methods of teaching in specific subject field | 70.3 | 68.8 | 69.0 | 70.7 | 54.3 | 53.2 | 55.1 | 58.2 |
| In-depth study in specific field | 33.2 | 31.7 | 28.8 | 32.8 | 26.6 | 26.7 | 27.6 | 28.9 |
| Student assessment | 62.7 | 55.0 | 54.5 | 55.2 | 45.5 | 42.9 | 47.9 | 48.2 |
| Cooperative learning in the classroom | 49.2 | 51.3 | 50.3 | 55.4 | 50.1 | 46.9 | 49.2 | 52.2 |
| Type of support received during 1993-94 school year for in-service education or professional development |  |  |  |  |  |  |  |  |
| Released time from teaching | 56.2 | 54.9 | 49.0 | 48.7 | 43.0 | 45.0 | 42.6 | 42.2 |
| Scheduled time (built-in time) | 42.2 | 40.4 | 42.8 | 45.7 | 34.6 | 33.8 | 36.0 | 38.2 |
| Travel and/or per diem expenses | 19.5 | 22.2 | 23.6 | 20.0 | 26.7 | 26.7 | 27.5 | 26.9 |
| Tuition and/or fees | 28.5 | 26.4 | 25.9 | 21.6 | 20.4 | 21.6 | 21.1 | 19.1 |
| Professional growth credits | 37.0 | 33.7 | 36.4 | 34.4 | 28.7 | 28.0 | 28.6 | 30.3 |
| None of above | 16.0 | 19.2 | 19.4 | 20.0 | 26.8 | 27.1 | 27.7 | 27.2 |
| Type of professional development activity |  |  |  |  |  |  |  |  |
| School district sponsored workshop or in-service | 90.4 | 91.0 | 90.5 | 88.5 | 83.9 | 85.2 | 85.5 | 84.3 |
| School sponsored workshop or in-service | 79.4 | 83.8 | 84.2 | 84.6 | 77.6 | 77.9 | 80.5 | 81.5 |
| University extension or adult education course | 25.8 | 26.4 | 25.2 | 24.4 | 27.1 | 25.6 | 25.1 | 24.4 |
| College course in specific subject field | 25.7 | 26.3 | 25.0 | 26.4 | 25.0 | 23.7 | 24.1 | 24.1 |
| Professional association sponsored workshop | 53.4 | 55.5 | 49.9 | 48.2 | 55.0 | 51.7 | 51.1 | 50.5 |
| Those who agreed with the following statements about their in-service education or professional development* |  |  |  |  |  |  |  |  |
| Provided information that was new to me | 87.8 | 86.1 | 86.8 | 84.0 | 84.0 | 83.2 | 82.8 | 82.2 |
| Changed my views on teaching | 44.7 | 44.3 | 42.2 | 44.5 | 40.5 | 38.7 | 37.4 | 38.5 |
| Caused me to change my teaching practices | 73.4 | 67.2 | 68.0 | 67.2 | 60.7 | 60.6 | 58.6 | 57.8 |
| Caused me to seek further information or training | 67.2 | 66.1 | 63.5 | 63.9 | 58.4 | 59.1 | 59.9 | 58.8 |
| Were generally a waste of my time | 8.9 | 9.1 | 7.8 | 9.9 | 12.6 | 13.6 | 14.2 | 14.6 |

* Includes those who responded "strongly agree" or "agree."

NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table 40-4 Percentage of teachers who participated in professional development activities during the 1993-94 school year, by topic, type of support and activity, outcomes, level and control of school, and school size


In-service education or professional development topic

|  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Uses of educational technology for instruction | 42.4 | 48.0 | 50.5 | 52.2 | 50.9 | 50.3 | 48.9 | 51.3 |
| Methods of teaching in specific subject field | 57.4 | 68.9 | 70.2 | 71.4 | 50.0 | 52.7 | 54.9 | 55.8 |
| In-depth study in specific field | 26.8 | 31.0 | 31.8 | 32.6 | 26.0 | 25.6 | 26.6 | 28.2 |
| Student assessment | 47.8 | 56.3 | 55.0 | 55.2 | 44.8 | 45.9 | 48.0 | 45.3 |
| Cooperative learning in the classroom | 43.2 | 51.6 | 52.9 | 55.4 | 42.4 | 45.9 | 50.0 | 50.1 |

Type of support received during 1993-94 school year for in-service education or professional development

|  | 51.0 | 51.5 | 50.9 | 49.0 | 50.1 | 47.9 | 44.4 | 41.8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Released time from teaching | 38.0 | 43.7 | 44.1 | 43.3 | 34.0 | 34.3 | 35.7 | 35.7 |
| Scheduled time (built-in time) | 27.8 | 24.2 | 19.1 | 18.6 | 37.2 | 34.2 | 28.7 | 24.1 |
| Travel and/or per diem expenses | 30.4 | 26.8 | 22.8 | 21.5 | 24.0 | 23.8 | 21.4 | 19.6 |
| Tuition and/or fees | 31.2 | 35.1 | 34.7 | 34.6 | 34.8 | 29.9 | 26.9 | 28.9 |
| Professional growth credits | 21.1 | 18.2 | 19.5 | 21.3 | 22.5 | 25.7 | 26.6 | 27.9 |
| None of above |  |  |  |  |  |  |  |  |
| Type of professional development activity |  |  |  | 87.0 | 86.3 | 85.9 | 84.1 |  |
| School district sponsored workshop or in-service | 89.0 | 90.3 | 90.6 | 86.8 | 81.9 | 78.4 | 79.0 | 79.2 |
| School sponsored workshop or in-service | 79.5 | 81.9 | 84.4 | 86.2 | 81.8 |  |  |  |
| University extension or adult education course | 31.7 | 25.2 | 25.6 | 23.6 | 28.9 | 26.6 | 25.9 | 24.9 |
| College course in specific subject field | 34.8 | 27.1 | 25.0 | 25.0 | 30.0 | 25.8 | 24.0 | 23.7 |
| Professional association sponsored workshop | 53.5 | 51.9 | 50.5 | 47.9 | 47.6 | 55.1 | 52.1 | 51.3 |
| Those who agreed with the following statements about their in-service education or professional development* |  |  |  |  |  |  |  |  |
| Provided information that was new to me | 84.4 | 85.3 | 86.9 | 83.5 | 82.9 | 83.2 | 83.2 | 82.9 |
| Changed my views on teaching | 40.9 | 44.1 | 45.2 | 42.1 | 33.6 | 40.4 | 40.3 | 38.0 |
| Caused me to change my teaching practices | 64.5 | 68.0 | 69.7 | 65.6 | 55.2 | 60.0 | 60.8 | 59.2 |
| Caused me to seek further information or training | 64.8 | 65.2 | 64.6 | 63.4 | 57.5 | 60.5 | 58.8 | 58.8 |
| Were generally a waste of my time | 5.3 | 9.4 | 8.6 | 9.8 | 13.4 | 13.0 | 13.5 | 14.2 |

Table 40-4 Percentage of teachers who participated in professional development activities during the 1993-94 school year, by topic, type of support and activity, outcomes, level and control of school, and school size-Continued

| Topic, type of support and activity, and outcomes of professional development | Elementary teachers |  |  |  | Secondary teachers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than $150$ | 150-499 | 500-749 | $\begin{array}{r} 750 \text { or } \\ \text { more } \\ \hline \end{array}$ | $\begin{array}{r} \hline \text { Less than } \\ 150 \\ \hline \end{array}$ | 150-499 | 500-749 | $\begin{array}{r} 750 \text { or } \\ \text { more } \\ \hline \end{array}$ |
| Private |  |  |  |  |  |  |  |  |
| In-service education or professional development topic |  |  |  |  |  |  |  |  |
| Uses of educational technology for instruction | 26.6 | 34.4 | 36.6 | 41.9 | 26.2 | 39.4 | 42.2 | 39.9 |
| Methods of teaching in specific subject field | 55.4 | 65.0 | 68.0 | 78.9 | 46.6 | 51.2 | 51.3 | 51.8 |
| In-depth study in specific field | 20.3 | 25.7 | 27.1 | 36.0 | 21.9 | 30.7 | 31.3 | 28.7 |
| Student assessment | 33.8 | 44.4 | 51.4 | 52.7 | 25.0 | 37.2 | 35.2 | 35.2 |
| Cooperative learning in the classroom | 35.1 | 48.1 | 52.8 | 61.7 | 33.6 | 39.1 | 37.8 | 40.3 |
| Type of support received during 1993-94 school year for in-service education or professional development |  |  |  |  |  |  |  |  |
| Released time from teaching | 38.6 | 43.7 | 46.6 | 41.3 | 35.7 | 41.0 | 42.4 | 36.0 |
| Scheduled time (built-in time) | 36.7 | 37.1 | 37.8 | 36.1 | 34.1 | 33.2 | 31.7 | 37.7 |
| Travel and/or per diem expenses | 25.2 | 18.6 | 12.8 | 18.9 | 25.0 | 25.1 | 25.5 | 23.0 |
| Tuition and/or fees | 34.1 | 36.5 | 36.1 | 42.0 | 22.1 | 37.1 | 34.3 | 31.8 |
| Professional growth credits | 23.9 | 28.4 | 34.9 | 24.1 | 15.3 | 19.4 | 24.3 | 24.4 |
| None of above | 28.0 | 24.2 | 22.9 | 27.3 | 39.4 | 28.6 | 23.7 | 26.9 |
| Type of professional development activity |  |  |  |  |  |  |  |  |
| School district sponsored workshop or in-service | 71.2 | 81.0 | 82.5 | 92.6 | 66.0 | 68.5 | 70.1 | 69.9 |
| School sponsored workshop or in-service | 65.6 | 81.7 | 85.5 | 85.7 | 69.1 | 77.1 | 81.4 | 82.1 |
| University extension or adult education course | 23.2 | 25.9 | 20.8 | 25.3 | 24.7 | 24.3 | 21.5 | 23.7 |
| College course in specific subject field | 22.7 | 24.1 | 27.2 | 11.8 | 18.0 | 24.7 | 25.6 | 24.7 |
| Professional association sponsored workshop | 42.1 | 47.6 | 56.4 | 43.4 | 33.5 | 46.1 | 54.7 | 52.7 |
| Those who agreed with the following statements about their in-service education or professional development* |  |  |  |  |  |  |  |  |
| Provided information that was new to me | 83.7 | 86.3 | 84.7 | 72.7 | 93.9 | 88.5 | 85.8 | 83.5 |
| Changed my views on teaching | 40.3 | 43.4 | 41.9 | 21.0 | 51.2 | 40.6 | 35.9 | 50.9 |
| Caused me to change my teaching practices | 66.9 | 64.9 | 64.1 | 55.6 | 69.7 | 60.0 | 60.3 | 66.2 |
| Caused me to seek further information or training | 61.4 | 61.9 | 59.5 | 49.2 | 72.2 | 61.3 | 64.9 | 58.8 |
| Were generally a waste of my time | 4.6 | 7.5 | 5.4 | 11.7 | 7.6 | 10.7 | 7.9 | 9.3 |

* Includes those who responded "strongly agree" or "agree." NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table 40-5 Percentage of public school teachers who participated in professional development activities during the 1993-94 school year, by topic, type of support and activity, outcomes, and percentage of students eligible for free or reduced-priced lunch within urbanicity

| Topic, type of support and activity, and | Central city |  |  |  | Urban fringe/large town |  |  |  | Rural/small town |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| outcomes of professional development | 0-5 6-20 21-40 41-100 |  |  |  | 0-5 6-20 21-40 41-100 |  |  |  | 0-5 | 6-20 | 21-40 | 41-100 |
| In-service education or professional development topic |  |  |  |  |  |  |  |  |  |  |  |  |
| Uses of educational technology for instruction | 61.3 | 59.6 | 49.7 | 48.2 | 55.4 | 52.1 | 51.1 | 48.2 | 52.1 | 48.8 | 48.5 | 46.2 |
| Methods of teaching in specific subject field | 64.3 | 65.7 | 69.2 | 70.5 | 62.3 | 64.3 | 66.5 | 68.7 | 60.3 | 55.3 | 59.8 | 65.6 |
| In-depth study in specific field | 36.6 | 33.0 | 32.7 | 35.9 | 27.8 | 31.1 | 29.3 | 30.4 | 30.7 | 25.5 | 25.6 | 28.8 |
| Student assessment | 58.2 | 49.4 | 51.7 | 54.7 | 54.3 | 51.5 | 57.4 | 54.5 | 50.4 | 46.3 | 49.3 | 52.5 |
| Cooperative learning in the classroom | 54.6 | 51.2 | 53.3 | 57.4 | 47.9 | 49.8 | 47.8 | 54.1 | 51.1 | 47.3 | 49.3 | 52.3 |
| Type of support received during 1993-94 school year for in-service education or professional development |  |  |  |  |  |  |  |  |  |  |  |  |
| Released time from teaching | 43.2 | 52.5 | 46.4 | 46.9 | 51.1 | 50.9 | 48.4 | 47.2 | 48.5 | 47.8 | 46.0 | 48.0 |
| Scheduled time (built-in time) | 40.4 | 42.0 | 42.1 | 46.0 | 37.4 | 37.8 | 40.4 | 42.6 | 39.1 | 33.9 | 39.3 | 43.2 |
| Travel and/or per diem expenses | 20.7 | 25.1 | 18.3 | 14.0 | 22.2 | 20.0 | 21.2 | 17.6 | 26.8 | 28.7 | 30.5 | 31.0 |
| Tuition and/or fees | 19.8 | 20.8 | 20.3 | 18.5 | 25.0 | 23.6 | 23.6 | 18.6 | 24.9 | 25.9 | 26.3 | 25.0 |
| Professional growth credits | 40.3 | 35.0 | 35.7 | 31.9 | 30.1 | 30.1 | 34.0 | 34.0 | 34.5 | 29.5 | 32.1 | 35.1 |
| None of above | 22.4 | 21.9 | 21.6 | 22.7 | 22.6 | 22.4 | 22.2 | 21.7 | 19.0 | 24.5 | 23.1 | 20.0 |
| Type of professional development activity |  |  |  |  |  |  |  |  |  |  |  |  |
| School district sponsored workshop or in-service | 83.9 | 87.3 | 88.2 | 85.3 | 87.1 | 89.3 | 90.2 | 87.9 | 88.3 | 87.3 | 88.1 | 89.9 |
| School sponsored workshop or in-service | 83.9 | 84.6 | 85.1 | 84.8 | 78.1 | 80.7 | 83.8 | 84.3 | 76.7 | 79.1 | 81.2 | 82.9 |
| University extension or adult education course | 21.9 | 24.7 | 25.5 | 25.1 | 27.0 | 26.5 | 26.2 | 22.9 | 27.5 | 26.2 | 24.4 | 24.4 |
| College course in specific subject field | 22.7 | 23.7 | 23.1 | 26.5 | 24.4 | 24.1 | 25.9 | 24.0 | 28.7 | 26.7 | 24.8 | 26.2 |
| Professional association sponsored workshop | 56.6 | 53.3 | 53.0 | 47.0 | 53.0 | 53.9 | 51.2 | 49.9 | 55.6 | 53.4 | 48.6 | 49.7 |
| Those who agreed with the following statements about their in-service education or professional development* |  |  |  |  |  |  |  |  |  |  |  |  |
| Provided information that was new to me | 84.1 | 84.5 | 84.7 | 83.7 | 85.8 | 85.5 | 85.2 | 84.7 | 87.1 | 83.9 | 85.8 | 83.1 |
| Changed my views on teaching | 41.6 | 41.2 | 41.7 | 44.9 | 41.7 | 41.1 | 36.4 | 41.8 | 45.0 | 42.4 | 42.2 | 42.5 |
| Caused me to change my teaching practices | 69.2 | 61.7 | 63.3 | 64.3 | 66.2 | 65.6 | 65.7 | 68.8 | 67.6 | 63.7 | 64.8 | 65.0 |
| Caused me to seek further information or training | 65.9 | 63.2 | 63.3 | 62.8 | 62.9 | 64.3 | 62.5 | 64.5 | 61.0 | 60.9 | 61.5 | 62.2 |
| Were generally a waste of my time | 13.7 | 12.6 | 10.2 | 11.3 | 10.2 | 10.3 | 9.2 | 9.3 | 10.5 | 11.5 | 10.5 | 11.1 |

[^32]Table 40-6 Percentage of all teachers who participated in professional development activities, by professional development topic and state: 1994

| State | Uses of educational technology for instruction | Methods of teaching in specific subject field | In-depth study in specific field | Student assessment | Cooperative learning in the classroom |
| :---: | :---: | :---: | :---: | :---: | :---: |
| All states | 48.8 | 64.0 | 29.8 | 51.1 | 50.8 |
| Alabama | 43.2 | 71.2 | 35.2 | 52.1 | 54.1 |
| Alaska | 63.9 | 63.0 | 35.6 | 50.9 | 43.2 |
| Arizona | 45.8 | 56.0 | 26.4 | 53.8 | 43.5 |
| Arkansas | 33.3 | 68.4 | 27.8 | 47.5 | 49.1 |
| California | 52.6 | 75.8 | 39.8 | 66.8 | 51.3 |
| Colorado | 53.1 | 58.4 | 30.5 | 55.7 | 40.2 |
| Connecticut | 46.4 | 70.7 | 37.6 | 58.9 | 52.7 |
| Delaware | 45.6 | 66.1 | 30.4 | 59.5 | 48.6 |
| District of Columbia | 49.9 | 66.0 | 36.4 | 48.5 | 66.4 |
| Florida | 62.2 | 66.9 | 30.6 | 45.5 | 53.3 |
| Georgia | 45.2 | 59.6 | 24.6 | 37.7 | 48.6 |
| Hawaii | 54.8 | 69.8 | 39.9 | 57.1 | 62.2 |
| Idaho | 42.2 | 61.0 | 28.8 | 40.7 | 45.7 |
| Illinois | 39.0 | 53.1 | 21.6 | 53.5 | 42.8 |
| Indiana | 49.7 | 55.7 | 22.7 | 37.7 | 46.3 |
| lowa | 55.5 | 57.9 | 25.8 | 54.0 | 42.8 |
| Kansas | 58.2 | 63.3 | 27.5 | 54.2 | 46.3 |
| Kentucky | 75.1 | 75.0 | 37.0 | 87.3 | 72.1 |
| Louisiana | 39.9 | 67.1 | 29.1 | 47.6 | 50.6 |
| Maine | 39.3 | 59.5 | 27.4 | 50.7 | 51.7 |
| Maryland | 46.4 | 65.2 | 23.1 | 54.4 | 58.5 |
| Massachusetts | 42.1 | 60.9 | 29.6 | 43.8 | 54.5 |
| Michigan | 42.3 | 62.3 | 25.6 | 51.4 | 47.5 |
| Minnesota | 53.2 | 62.9 | 32.4 | 49.7 | 44.2 |
| Mississippi | 45.1 | 65.9 | 30.8 | 66.3 | 65.7 |
| Missouri | 45.2 | 57.1 | 24.0 | 42.9 | 44.9 |
| Montana | 54.7 | 59.8 | 28.3 | 43.1 | 45.9 |
| Nebraska | 56.7 | 55.2 | 24.6 | 46.4 | 42.7 |
| Nevada | 30.0 | 62.7 | 31.4 | 40.2 | 44.6 |
| New Hampshire | 49.3 | 71.4 | 43.9 | 53.0 | 55.4 |
| New Jersey | 49.2 | 64.4 | 26.7 | 47.6 | 49.4 |
| New Mexico | 43.0 | 55.2 | 24.3 | 43.9 | 52.5 |
| New York | 37.0 | 57.6 | 25.0 | 43.0 | 44.3 |
| North Carolina | 55.6 | 69.8 | 32.2 | 57.6 | 55.3 |
| North Dakota | 54.9 | 56.3 | 27.0 | 33.8 | 40.5 |
| Ohio | 40.9 | 61.9 | 29.0 | 44.3 | 47.8 |
| Oklahoma | 46.4 | 65.0 | 27.7 | 54.1 | 60.4 |
| Oregon | 45.6 | 63.2 | 26.9 | 55.3 | 39.0 |
| Pennsylvania | 42.1 | 57.8 | 24.0 | 48.7 | 50.2 |
| Rhode Island | 37.5 | 53.8 | 21.9 | 46.5 | 48.5 |
| South Carolina | 40.5 | 61.5 | 24.6 | 45.4 | 53.6 |
| South Dakota | 55.3 | 52.7 | 22.8 | 41.7 | 49.0 |
| Tennessee | 55.8 | 66.5 | 24.5 | 47.9 | 49.5 |
| Texas | 60.2 | 74.9 | 40.0 | 56.8 | 66.2 |

Table 40-6 Percentage of all teachers who participated in professional development activities, by professional development topic and state: 1994-Continued

|  | Uses of educational <br> technology <br> for instruction | Methods of <br> teaching in specific <br> subject field | In-depth study in <br> specific field | Student <br> assessment | Cooperative <br> learning in the <br> classroom |
| :--- | ---: | ---: | ---: | ---: | ---: |
| State | 59.4 | 64.7 | 33.8 | 43.1 | 50.9 |
| Utah | 49.8 | 58.0 | 33.0 | 53.7 | 36.3 |
| Vermont | 49.4 | 61.0 | 27.8 | 46.6 | 52.5 |
| Virginia | 62.3 | 63.7 | 34.9 | 49.3 | 45.2 |
| Washington | 49.2 | 67.1 | 29.4 | 54.3 | 57.2 |
| West Virginia | 48.7 | 58.2 | 28.6 | 44.4 | 37.6 |
| Wisconsin | 56.4 | 53.3 | 30.0 | 46.0 | 43.7 |
| Wyoming |  |  |  |  |  |

NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table 41-1 Public elementary teachers' perceptions of the amount of influence or control teachers had over selected school and classroom decisions in their school, by percentage of students eligible for free or reduced-price lunch and school size: School year 1993-94

| Percentage of students eligible for free or reduced-price lunch |  |  |  |  |  | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School and classroom | Total | 0-5 | 6-20 | 21-40 41-100 |  | $\begin{array}{r} \hline \text { Less than } \\ 150 \\ \hline \end{array}$ | 150-499 | 500-749 | 750 and more |
| decisions |  |  |  |  |  |  |  |  |  |
| Percentage of teachers who reported that teachers had a good deal* of influence in their school over: |  |  |  |  |  |  |  |  |  |
| Setting discipline policy | 41.8 | 47.0 | 42.6 | 46.1 | 38.4 | 52.9 | 43.1 | 42.4 | 34.4 |
| Determining the content of inservice programs | 32.6 | 37.2 | 34.1 | 35.0 | 30.3 | 35.3 | 31.8 | 33.5 | 32.3 |
| Establishing curriculum | 32.2 | 37.0 | 35.7 | 36.4 | 27.8 | 46.5 | 34.6 | 29.6 | 27.7 |
| Percentage of teachers who reported a good deal* of control in their classroom over: |  |  |  |  |  |  |  |  |  |
| Selecting textbooks and other instructional materials | 49.1 | 51.2 | 49.4 | 53.6 | 46.7 | 69.9 | 52.9 | 46.3 | 39.9 |
| Selecting content, topics, and skills to be taught | 54.2 | 48.5 | 50.7 | 58.1 | 54.8 | 73.5 | 56.6 | 50.1 | 51.9 |
| Selecting teaching techniques | 83.8 | 85.3 | 83.6 | 87.3 | 81.9 | 90.3 | 84.0 | 83.5 | 82.6 |
| Evaluating and grading students | 84.0 | 85.9 | 83.2 | 86.4 | 83.1 | 86.7 | 84.8 | 83.3 | 83.0 |
| Disciplining students | 73.4 | 75.7 | 77.1 | 75.8 | 70.2 | 79.2 | 74.2 | 73.6 | 69.9 |
| Determining the amount of homework to be assigned | 83.7 | 79.7 | 82.6 | 84.8 | 84.8 | 88.6 | 84.1 | 83.5 | 81.8 |

* Respondents were asked about influence and control on a scale of $0-5$, with 0 meaning "no influence" or "no control" and 5 meaning a "great deal of influence" or "complete control." Responses 4 and 5 were combined in this analysis.
NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table 41-2 Public elementary principals' perceptions of the amount of influence groups had over selected school and classroom decisions, by percentage of students eligible for free or reduced-price lunch and school size: School year 1993-94

| School and classroom decisions | Percentage of students eligible for free or reduced-price lunch |  |  |  |  | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 0-5 | 6-20 | 21-40 | 41-100 | $\begin{array}{r} \hline \text { Less than } \\ 150 \\ \hline \end{array}$ | 150-499 | 500-749 | 750 and more |
| Percentage of principals who reported that a group had a good deal* of influence over: |  |  |  |  |  |  |  |  |  |
| Setting discipline policy |  |  |  |  |  |  |  |  |  |
| State Department of Education | 18.4 | 11.3 | 15.3 | 15.0 | 22.6 | 19.7 | 17.6 | 18.5 | 21.0 |
| School district staff | 55.4 | 58.4 | 56.6 | 53.7 | 55.5 | 58.7 | 53.1 | 57.4 | 58.1 |
| School board | 61.5 | 56.7 | 60.7 | 63.3 | 61.9 | 67.7 | 60.6 | 60.4 | 63.9 |
| Principal | 85.5 | 90.4 | 86.7 | 88.3 | 82.9 | 89.3 | 84.7 | 86.1 | 85.1 |
| Teachers | 75.5 | 80.7 | 79.8 | 79.1 | 71.3 | 83.3 | 74.6 | 75.8 | 73.2 |
| Parent association | 19.4 | 25.0 | 20.2 | 20.5 | 18.2 | 11.0 | 18.1 | 22.1 | 24.1 |
| Determining the content of in-service programs |  |  |  |  |  |  |  |  |  |
| State Department of Education | 22.0 | 12.9 | 16.9 | 20.2 | 27.0 | 20.3 | 23.4 | 18.5 | 24.0 |
| School district staff | 67.8 | 65.5 | 67.9 | 68.7 | 67.3 | 53.4 | 69.4 | 67.7 | 70.8 |
| School board | 20.8 | 20.1 | 18.8 | 19.1 | 22.6 | 14.8 | 21.2 | 20.2 | 24.6 |
| Principal | 72.5 | 76.2 | 74.4 | 71.0 | 71.3 | 75.7 | 70.8 | 75.0 | 71.8 |
| Teachers | 70.3 | 75.0 | 73.6 | 73.6 | 66.3 | 73.7 | 68.3 | 74.0 | 68.9 |
| Parent association | 5.3 | 3.5 | 4.1 | 5.7 | 6.1 | 3.3 | 4.9 | 5.3 | 8.3 |
| Establishing curriculum |  |  |  |  |  |  |  |  |  |
| State Department of Education | 65.8 | 52.7 | 62.3 | 65.7 | 70.0 | 59.4 | 64.2 | 68.1 | 71.8 |
| School district staff | 64.6 | 73.6 | 70.5 | 62.2 | 62.1 | 64.3 | 64.5 | 64.8 | 64.9 |
| School board | 39.3 | 41.4 | 44.4 | 35.2 | 39.2 | 28.7 | 40.3 | 38.2 | 45.0 |
| Principal | 52.2 | 66.2 | 54.5 | 48.8 | 50.5 | 63.1 | 52.0 | 49.0 | 52.8 |
| Teachers | 59.7 | 75.1 | 65.2 | 60.2 | 54.1 | 72.1 | 59.6 | 57.6 | 56.3 |
| Parent association | 10.0 | 14.7 | 12.0 | 7.6 | 9.9 | 9.0 | 9.0 | 11.7 | 10.8 |
| Deciding how the school budget will be spent |  |  |  |  |  |  |  |  |  |
| State Department of Education | 30.0 | 23.4 | 28.4 | 31.7 | 31.3 | 33.8 | 30.8 | 29.4 | 25.4 |
| School district staff | 48.9 | 42.5 | 46.2 | 51.7 | 49.7 | 34.4 | 47.3 | 52.3 | 58.6 |
| School board | 64.6 | 62.7 | 66.0 | 66.0 | 63.1 | 76.3 | 67.7 | 57.7 | 58.6 |
| Principal | 64.5 | 72.2 | 67.3 | 65.3 | 61.9 | 63.5 | 62.3 | 67.6 | 68.0 |
| Teachers | 41.9 | 44.2 | 42.9 | 43.1 | 40.5 | 36.1 | 39.3 | 47.1 | 45.2 |
| Parent association | 9.0 | 9.7 | 7.6 | 8.8 | 9.9 | 5.8 | 7.4 | 11.4 | 13.2 |

* Respondents were asked about influence and control on a scale of $0-5$, with 0 meaning "no influence" or "no control" and 5 meaning a "great deal of influence" or "complete control." Responses 4 and 5 were combined in this analysis.
NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table 41-3 Public secondary teachers' perceptions of the amount of influence or control teachers had over selected school and classroom decisions in their school, by percentage of students eligible for free or reduced-price lunch and school size: School year 1993-94

| School and classroom decisions | Total | Percentage of students eligible for free or reduced-price lunch |  |  |  | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Less than 150 | 150-499 | 500-749 | $\begin{array}{r} \hline 750 \text { and } \\ \text { more } \end{array}$ |
|  |  | 0-5 | 6-20 | 21-40 | 41-100 |  |  |  |  |
| Percentage of teachers who reported that teachers had a good deal* of influence in their school over: |  |  |  |  |  |  |  |  |  |
| Setting discipline policy | 27.5 | 28.4 | 26.7 | 28.7 | 26.7 | 44.0 | 33.1 | 29.6 | 23.8 |
| Determining the content of inservice programs | 28.5 | 31.5 | 29.3 | 28.4 | 26.4 | 36.0 | 30.2 | 28.9 | 27.4 |
| Establishing curriculum | 37.2 | 42.3 | 39.6 | 37.8 | 31.2 | 50.7 | 43.9 | 38.1 | 33.9 |

Percentage of teachers who reported a good deal* of control in their classroom over:
Selecting textbooks and other instruc-

|  | 62.4 | 66.1 | 64.8 | 62.2 | 57.4 | 82.3 | 73.4 | 64.3 | 56.7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\quad$tional materials <br> Selecting content, topics, and skills <br> $\quad$ to be taught | 67.4 | 68.8 | 68.5 | 67.8 | 64.6 | 84.5 | 76.1 | 69.0 | 62.9 |
| Selecting teaching techniques | 89.2 | 89.1 | 90.2 | 89.9 | 88.0 | 93.2 | 91.1 | 89.9 | 88.1 |
| Evaluating and grading students | 90.0 | 90.0 | 90.5 | 90.7 | 89.0 | 91.7 | 91.4 | 90.5 | 89.3 |
| Disciplining students | 64.2 | 70.0 | 65.0 | 64.6 | 59.1 | 73.1 | 68.2 | 66.6 | 61.4 |
| Determining the amount of homework <br> to be assigned | 89.9 | 90.0 | 89.9 | 90.5 | 89.4 | 90.8 | 91.6 | 89.1 | 89.6 |

[^33]Table 41-4 Public secondary principals' perceptions of the amount of influence groups had over selected school and classroom decisions, by percentage of students eligible for free or reduced-price lunch and school size: School year 1993-94

| School and classroom decisions | Total | Percentage of students eligible for free or reduced-price lunch |  |  |  | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0-5 | 6-20 | 21-40 | 41-100 | $\begin{array}{r} \hline \text { than } \\ 150 \end{array}$ | 150-499 | 500-749 | 750 and more |
| Percentage of principals who reported that a group had a good deal* of influence over: |  |  |  |  |  |  |  |  |  |
| Setting discipline policy |  |  |  |  |  |  |  |  |  |
| State Department of Education | 14.5 | 14.1 | 13.0 | 14.3 | 17.8 | 13.4 | 12.7 | 17.7 | 14.8 |
| School district staff | 50.1 | 44.8 | 48.1 | 51.3 | 56.3 | 47.1 | 48.6 | 49.9 | 52.7 |
| School board | 64.8 | 57.6 | 62.0 | 68.9 | 68.7 | 62.4 | 64.2 | 65.5 | 66.0 |
| Principal | 89.9 | 91.8 | 91.5 | 88.1 | 89.2 | 90.3 | 91.6 | 91.9 | 87.4 |
| Teachers | 72.5 | 76.8 | 75.8 | 67.6 | 70.9 | 70.3 | 75.2 | 77.4 | 68.7 |
| Parent association | 15.0 | 18.4 | 14.2 | 13.1 | 17.3 | 14.6 | 12.3 | 16.6 | 16.6 |
| Determining the content of in-service programs |  |  |  |  |  |  |  |  |  |
| State Department of Education | 20.1 | 11.3 | 14.8 | 23.7 | 28.0 | 22.6 | 20.6 | 18.6 | 19.3 |
| School district staff | 62.9 | 62.5 | 59.5 | 66.8 | 62.5 | 55.2 | 59.0 | 65.0 | 68.5 |
| School board | 18.8 | 14.1 | 14.5 | 21.9 | 23.5 | 18.6 | 18.4 | 19.0 | 19.1 |
| Principal | 72.0 | 74.7 | 71.3 | 72.2 | 72.6 | 73.4 | 73.9 | 70.8 | 70.4 |
| Teachers | 71.6 | 77.4 | 73.2 | 70.4 | 68.1 | 71.1 | 71.6 | 69.7 | 72.9 |
| Parent association | 4.7 | 6.4 | 3.4 | 5.5 | 5.2 | 7.7 | 4.7 | 4.4 | 3.5 |
| Establishing curriculum |  |  |  |  |  |  |  |  |  |
| State Department of Education | 62.4 | 52.1 | 60.4 | 66.8 | 67.2 | 54.3 | 63.2 | 65.0 | 63.9 |
| School district staff | 61.4 | 64.6 | 63.2 | 60.2 | 58.9 | 56.4 | 60.2 | 61.3 | 64.5 |
| School board | 39.8 | 39.0 | 38.8 | 38.9 | 42.5 | 36.0 | 38.4 | 41.9 | 41.5 |
| Principal | 58.3 | 59.1 | 61.0 | 57.3 | 54.7 | 61.8 | 62.6 | 58.4 | 53.1 |
| Teachers | 66.2 | 74.1 | 71.1 | 63.8 | 57.4 | 68.4 | 70.2 | 64.0 | 62.9 |
| Parent association | 7.9 | 11.4 | 6.3 | 7.9 | 7.9 | 6.5 | 8.1 | 8.6 | 7.9 |
| Deciding how the school budget will be spent |  |  |  |  |  |  |  |  |  |
| State Department of Education | 28.8 | 19.9 | 23.7 | 31.7 | 37.5 | 32.7 | 34.7 | 27.5 | 22.9 |
| School district staff | 45.6 | 45.1 | 43.9 | 48.8 | 45.7 | 29.6 | 43.2 | 48.5 | 52.9 |
| School board | 67.8 | 63.9 | 66.3 | 69.7 | 68.9 | 72.5 | 75.0 | 66.7 | 60.3 |
| Principal | 60.1 | 65.9 | 61.9 | 60.5 | 54.6 | 55.2 | 54.3 | 61.7 | 66.3 |
| Teachers | 38.6 | 48.1 | 38.8 | 39.4 | 32.0 | 38.5 | 33.1 | 39.8 | 42.5 |
| Parent association | 4.3 | 7.0 | 3.6 | 3.6 | 4.7 | 5.1 | 3.4 | 4.1 | 4.8 |

* Respondents were asked about influence on a scale of $0-5$, with 0 SOURCE: U.S. Department of Education, National Center for meaning "no influence" and 5 meaning a "great deal of influence." Responses 4 and 5 were combined in this analysis.
NOTE: Excludes a small number of principals whose schools did not respond to the questionnaire.

Education Statistics, Schools and Staffing Survey, 1993-94 (Administrator Questionnaire).

Table 41-5 Public elementary teachers' perceptions of the amount of influence or control teachers had over selected school and classroom decisions in their school, by percentage of students eligible for free or reduced-price lunch within urbanicity: School year 1993-94

| School and classroom decisions | Central city |  |  |  |  | Urban fringe |  |  |  |  | Rural |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 0-5 | 6-20 21-40 41-100 |  |  | Total | 0-5 | 6-20 21-40 41-100 |  |  | Total | 0-5 | 6-20 | 21-40 41-100 |  |
| Percentage of teachers who reported that teachers had a good deal* of influence in their school over: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Setting discipline policy | 38.1 | 38.0 | 43.9 | 44.8 | 35.1 | 42.6 | 49.9 | 42.6 | 45.9 | 36.4 | 43.8 | 46.0 | 41.9 | 46.9 | 42.6 |
| Determining the content of in-service programs | 33.1 | 40.5 | 43.8 | 36.0 | 30.1 | 33.7 | 37.0 | 33.4 | 36.0 | 30.8 | 31.4 | 35.5 | 29.6 | 33.9 | 30.1 |
| Establishing curriculum | 25.7 | 31.2 | 32.8 | 30.3 | 22.4 | 29.9 | 36.6 | 32.6 | 32.5 | 22.2 | 38.5 | 41.3 | 41.6 | 41.3 | 35.6 |


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| other instructional materials | 42.1 | 49.5 | 40.5 | 47.3 | 40.6 | 45.5 | 48.8 | 49.3 | 48.8 | 38.9 | 56.9 | 57.2 | 54.5 | 59.0 | 56.3 |
| Selecting content, topics, and skills to be taught | 50.8 | 47.6 | 47.3 | 51.5 | 51.0 | 48.9 | 45.9 | 50.3 | 52.2 | 47.7 | 60.5 | 54.9 | 53.2 | 64.2 | 61.9 |
| Selecting teaching techniques | 80.9 | 72.2 | 81.6 | 84.9 | 79.9 | 84.7 | 87.8 | 83.5 | 87.2 | 82.6 | 85.3 | 87.8 | 84.9 | 88.5 | 83.4 |
| Evaluating and grading students | 81.9 | 74.2 | 79.6 | 85.0 | 82.4 | 84.8 | 88.5 | 84.9 | 85.9 | 82.2 | 85.0 | 87.3 | 82.9 | 87.3 | 84.2 |
| Disciplining students | 69.6 | 51.3 | 69.9 | 74.4 | 69.5 | 76.7 | 78.9 | 82.5 | 77.4 | 69.6 | 73.7 | 83.1 | 73.6 | 75.5 | 71.2 |
| Determining the amount of homework to be assigned | 80.7 | 72.6 | 80.8 | 80.9 | 82.0 | 83.1 | 82.3 | 81.2 | 84.0 | 86.0 | 86.2 | 78.4 | 85.5 | 87.0 | 87.0 |

[^34]Table 41-6 Public elementary principals' perceptions of the amount of influence groups had over selected school and classroom decisions, by percentage of students eligible for free or reduced-price lunch within urbanicity: School year 1993-94

| School and classroom decisions | Central city |  |  |  |  | Urban fringe |  |  |  |  | Rural |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 0-5 | 6-20 21-40 |  | 41-100 | Total 0-5 |  | 6-20 21-40 |  | 1-100 | Total | 0-5 | 6-20 | 21-40 | 41-100 |
| Percentage of principals who reported that a group had a good deal* of influence over: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Setting discipline policy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| State Department of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Education | 21.2 | 14.8 | 14.5 | 12.4 | 24.7 | 18.7 | 12.6 | 18.8 | 18.1 | 22.0 | 16.6 | 6.5 | 12.0 | 14.6 | 21.2 |
| School district staff | 59.3 | 68.1 | 51.7 | 64.7 | 58.1 | 58.6 | 59.1 | 62.7 | 54.6 | 58.5 | 51.1 | 51.7 | 52.1 | 49.7 | 52.1 |
| School board | 63.4 | 63.3 | 54.5 | 61.6 | 65.0 | 61.3 | 53.9 | 66.1 | 66.3 | 57.9 | 60.7 | 60.0 | 57.5 | 62.6 | 61.2 |
| Principal | 82.8 | 86.5 | 84.6 | 87.0 | 81.3 | 86.0 | 88.4 | 86.1 | 92.6 | 79.7 | 86.8 | 97.0 | 88.2 | 86.8 | 85.4 |
| Teachers | 71.9 | 78.6 | 76.1 | 74.2 | 69.7 | 77.1 | 79.4 | 81.9 | 81.7 | 68.2 | 76.5 | 84.6 | 79.0 | 79.6 | 73.9 |
| Parent association | 22.7 | 27.7 | 22.6 | 25.0 | 22.0 | 23.0 | 24.6 | 26.2 | 25.7 | 19.7 | 15.2 | 24.6 | 12.8 | 16.7 | 14.5 |
| Determining the content of in-service programs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| State Department of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Education | 26.4 | 11.9 | 17.1 | 27.1 | 29.6 | 19.7 | 13.4 | 16.8 | 19.0 | 26.4 | 20.7 | 12.4 | 17.0 | 18.5 | 25.1 |
| School district staff | 67.9 | 68.8 | 63.6 | 69.1 | 67.4 | 70.7 | 68.0 | 72.4 | 74.9 | 69.2 | 65.8 | 58.0 | 65.1 | 65.8 | 66.4 |
| School board | 24.4 | 22.5 | 11.8 | 22.3 | 27.7 | 21.4 | 19.4 | 23.1 | 19.2 | 22.2 | 18.4 | 20.6 | 17.2 | 17.9 | 18.7 |
| Principal | 72.1 | 65.1 | 73.2 | 75.4 | 70.8 | 74.2 | 77.5 | 72.9 | 72.1 | 74.1 | 71.6 | 78.8 | 76.5 | 69.0 | 70.5 |
| Teachers | 67.5 | 58.8 | 76.1 | 72.2 | 64.3 | 72.8 | 75.4 | 73.9 | 73.8 | 69.2 | 70.4 | 82.4 | 72.1 | 73.9 | 66.7 |
| Parent association | 6.7 | 2.6 | 6.8 | 8.2 | 6.5 | 4.8 | 3.2 | 3.4 | 5.9 | 6.1 | 4.8 | 4.6 | 3.7 | 4.7 | 5.7 |
| Establishing curriculum |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| State Department of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Education | 66.8 | 60.2 | 65.0 | 63.7 | 68.9 | 66.4 | 54.3 | 64.9 | 72.3 | 72.3 | 64.8 | 45.3 | 58.5 | 63.5 | 69.8 |
| School district staff | 67.4 | 62.9 | 70.9 | 62.4 | 68.0 | 70.8 | 76.8 | 74.2 | 69.3 | 65.9 | 59.2 | 71.4 | 66.2 | 59.0 | 55.7 |
| School board | 46.2 | 37.4 | 46.7 | 41.8 | 48.2 | 43.0 | 40.9 | 43.0 | 42.0 | 43.7 | 33.1 | 44.4 | 45.0 | 30.0 | 30.2 |
| Principal | 47.9 | 51.1 | 42.2 | 43.5 | 49.7 | 52.8 | 68.1 | 51.5 | 48.4 | 48.9 | 54.2 | 69.4 | 63.0 | 50.7 | 51.9 |
| Teachers | 51.0 | 60.7 | 56.7 | 50.3 | 48.7 | 63.3 | 77.7 | 65.0 | 62.0 | 54.0 | 62.4 | 76.5 | 69.1 | 62.7 | 58.4 |
| Parent association | 12.1 | 13.5 | 14.8 | 9.4 | 12.0 | 11.3 | 17.8 | 13.2 | 11.1 | 7.7 | 7.9 | 8.3 | 9.5 | 5.4 | 9.2 |
| Deciding how the school budget will be spent |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| State Department of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Education | 30.0 | 22.8 | 20.5 | 32.0 | 31.5 | 26.5 | 21.8 | 29.5 | 27.9 | 26.0 | 32.3 | 27.6 | 30.6 | 33.3 | 33.3 |
| School district staff | 55.4 | 42.3 | 46.5 | 57.7 | 56.5 | 52.1 | 44.9 | 52.2 | 57.6 | 52.1 | 43.2 | 36.9 | 39.6 | 47.2 | 43.2 |
| School board | 55.7 | 55.6 | 54.9 | 59.0 | 54.3 | 62.0 | 61.7 | 61.6 | 63.9 | 59.9 | 71.3 | 68.7 | 75.6 | 69.3 | 71.4 |
| Principal | 61.1 | 50.8 | 64.1 | 70.0 | 58.8 | 67.7 | 71.8 | 67.4 | 68.9 | 64.0 | 64.4 | 84.2 | 68.7 | 62.1 | 63.4 |
| Teachers | 46.0 | 36.8 | 45.6 | 52.4 | 45.3 | 46.7 | 45.9 | 44.2 | 52.7 | 43.1 | 36.6 | 44.0 | 40.3 | 35.7 | 35.5 |
| Parent association | 15.6 | 11.2 | 15.0 | 18.0 | 15.5 | 8.7 | 11.5 | 6.6 | 9.4 | 9.8 | 5.5 | 4.9 | 5.5 | 5.4 | 5.6 |

[^35]Table 41-7 Public secondary teachers' perceptions of the amount of influence or control teachers had over selected school and classroom decisions in their school, by percentage of students eligible for free or reduced-price lunch within urbanicity: School year 1993-94

| School and classroom | Central city |  |  |  |  | Urban fringe |  |  |  |  | Rural |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| decisions | Total 0-5 6-20 21-40 41-100 |  |  |  |  | Total | 0-5 | 6-20 21-40 |  | 1-100 | Total | 0-5 | 6-20 | 21-40 | 41-100 |
| Percentage of teachers who reported that teachers had a good deal* of influence in their school over: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Setting discipline policy | 24.5 | 31.4 | 21.7 | 26.8 | 23.6 | 26.6 | 29.2 | 25.5 | 25.9 | 25.2 | 29.9 | 25.5 | 29.9 | 31.1 | 30.4 |
| Determining the content of in-service programs | 26.5 | 33.8 | 28.0 | 27.2 | 24.4 | 29.2 | 31.5 | 30.2 | 27.1 | 25.9 | 29.2 | 30.4 | 29.2 | 29.7 | 28.6 |
| Establishing curriculum | 30.7 | 39.9 | 32.7 | 34.5 | 26.4 | 37.6 | 40.5 | 40.1 | 36.3 | 28.9 | 41.0 | 47.3 | 42.3 | 40.2 | 37.0 |
| Percentage of teachers who reported a good deal* of control in their classroom over: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Selecting textbooks and other instructional materials | 50.9 | 60.8 | 54.5 | 50.9 | 47.6 | 60.0 | 63.5 | 60.1 | 59.0 | 55.1 | 71.1 | 74.0 | 73.2 | 69.5 | 68.4 |
| Selecting content, topics, and skills to be taught | 60.6 | 64.0 | 61.6 | 62.8 | 59.1 | 64.9 | 66.0 | 63.5 | 66.8 | 63.2 | 73.4 | 76.8 | 75.7 | 70.9 | 70.8 |
| Selecting teaching techniques | 87.2 | 87.6 | 88.5 | 88.0 | 86.6 | 88.8 | 88.2 | 89.7 | 90.2 | 87.4 | 90.7 | 91.4 | 91.4 | 90.6 | 89.6 |
| Evaluating and grading students | 89.2 | 88.8 | 90.8 | 89.2 | 88.2 | 89.7 | 89.8 | 90.0 | 90.6 | 89.5 | 90.8 | 90.9 | 90.7 | 91.5 | 89.7 |
| Disciplining students | 58.9 | 63.6 | 61.0 | 62.1 | 55.4 | 64.8 | 71.0 | 65.3 | 61.7 | 56.7 | 66.8 | 70.9 | 66.5 | 67.3 | 63.7 |
| Determining the amount of homework to be assigned | 88.7 | 85.8 | 89.8 | 89.2 | 88.8 | 89.0 | 90.3 | 88.2 | 90.4 | 86.6 | 91.4 | 91.2 | 91.4 | 91.2 | 91.2 |

[^36]Table 41-8 Public secondary principals' perceptions of the amount of influence groups had over selected school and classroom decisions, by percentage of students eligible for free or reduced-price lunch within urbanicity: School year 1993-94

| School and classroom decisions | Central city |  |  |  |  | Urban fringe |  |  |  |  | Rural |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total 0-5 6-20 21-40 41-100 |  |  |  |  | Total | 0-5 6-20 21-40 41-100 |  |  |  | Total | 0-5 | 6-20 | 1-40 4 | -100 |
| Percentage of principals who reported that a group had a good deal* of influence over: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Setting discipline policy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| State Department of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Education | 18.3 | 8.6 | 17.5 | 17.1 | 23.2 | 14.4 | 16.2 | 14.4 | 14.2 | 16.5 | 13.4 | 13.4 | 11.2 | 13.5 | 16.0 |
| School district staff | 56.2 | 50.6 | 50.0 | 59.7 | 60.4 | 49.4 | 36.2 | 50.4 | 59.6 | 66.5 | 48.5 | 53.5 | 46.5 | 45.9 | 53.3 |
| School board | 69.9 | 67.2 | 68.6 | 67.9 | 72.2 | 61.6 | 53.8 | 58.3 | 71.8 | 67.4 | 64.7 | 59.1 | 62.4 | 68.1 | 67.6 |
| Principal | 83.4 | 83.6 | 84.7 | 82.0 | 83.4 | 89.5 | 91.3 | 90.6 | 87.2 | 84.7 | 92.1 | 95.2 | 93.5 | 90.2 | 92.1 |
| Teachers | 67.1 | 64.4 | 72.7 | 64.1 | 66.2 | 73.4 | 80.4 | 74.6 | 65.6 | 72.4 | 73.7 | 76.8 | 77.1 | 69.3 | 72.4 |
| Parent association | 17.2 | 11.3 | 15.3 | 16.7 | 20.9 | 17.8 | 23.4 | 15.7 | 16.9 | 17.4 | 13.2 | 14.5 | 13.1 | 10.7 | 15.9 |
| Determining the content of in-service programs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| State Department of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Education | 23.5 | 11.7 | 16.1 | 26.6 | 29.6 | 14.8 | 8.0 | 15.4 | 16.9 | 27.5 | 21.2 | 15.3 | 14.2 | 25.3 | 27.4 |
| School district staff | 64.5 | 72.8 | 62.2 | 66.6 | 64.1 | 65.8 | 61.7 | 62.5 | 71.1 | 76.6 | 61.3 | 59.9 | 57.3 | 65.3 | 59.8 |
| School board | 24.4 | 16.4 | 17.0 | 25.9 | 29.3 | 17.2 | 12.3 | 13.9 | 22.4 | 29.8 | 17.8 | 15.5 | 14.2 | 20.6 | 20.4 |
| Principal | 70.4 | 73.0 | 70.6 | 64.8 | 76.0 | 71.7 | 76.2 | 67.8 | 72.5 | 78.1 | 72.6 | 73.4 | 73.2 | 74.3 | 70.4 |
| Teachers | 68.4 | 77.6 | 75.0 | 66.2 | 64.6 | 73.7 | 79.7 | 72.1 | 72.7 | 74.9 | 71.8 | 74.5 | 73.3 | 70.8 | 68.4 |
| Parent association | 5.2 | 4.9 | 4.8 | 4.9 | 6.6 | 5.6 | 9.1 | 3.8 | 6.8 | 3.4 | 4.1 | 3.7 | 2.9 | 5.2 | 4.9 |
| Establishing curriculum |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| State Department of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Education | 64.0 | 53.3 | 65.7 | 59.0 | 69.7 | 59.2 | 52.3 | 55.7 | 69.8 | 62.2 | 63.2 | 51.3 | 61.5 | 68.0 | 67.0 |
| School district staff | 64.6 | 61.8 | 62.9 | 67.1 | 67.1 | 64.4 | 61.2 | 64.2 | 64.5 | 72.7 | 59.2 | 69.8 | 62.8 | 56.6 | 53.7 |
| School board | 46.6 | 35.5 | 45.1 | 43.8 | 52.1 | 39.5 | 35.7 | 39.7 | 41.7 | 43.0 | 37.9 | 44.2 | 36.9 | 36.5 | 38.9 |
| Principal | 50.8 | 64.6 | 52.0 | 48.1 | 49.8 | 54.7 | 53.6 | 58.3 | 56.2 | 46.8 | 62.0 | 64.0 | 64.4 | 60.4 | 57.7 |
| Teachers | 58.7 | 68.6 | 66.3 | 57.7 | 53.5 | 64.1 | 71.1 | 66.6 | 58.4 | 53.6 | 69.2 | 79.7 | 74.4 | 67.6 | 59.5 |
| Parent association | 9.6 | 16.7 | 7.5 | 10.1 | 7.7 | 8.7 | 11.8 | 6.8 | 8.4 | 9.1 | 7.0 | 9.1 | 5.8 | 7.1 | 7.8 |
| Deciding how the school budget will be spent |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| State Department of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Education | 28.9 | 22.2 | 22.5 | 25.9 | 37.8 | 20.3 | 18.6 | 19.2 | 19.2 | 29.3 | 32.4 | 20.7 | 26.2 | 37.9 | 38.6 |
| School district staff | 56.2 | 38.7 | 47.6 | 65.2 | 62.8 | 49.1 | 48.0 | 49.8 | 46.7 | 53.2 | 41.0 | 43.7 | 40.2 | 44.8 | 38.2 |
| School board | 60.0 | 54.4 | 54.0 | 62.7 | 61.9 | 58.8 | 58.6 | 60.2 | 58.0 | 50.5 | 73.8 | 73.7 | 72.0 | 75.9 | 74.3 |
| Principal | 63.4 | 64.2 | 68.2 | 64.9 | 58.9 | 69.1 | 70.5 | 67.3 | 70.9 | 67.9 | 55.5 | 60.8 | 57.9 | 55.5 | 50.9 |
| Teachers | 41.5 | 45.2 | 46.6 | 44.7 | 33.8 | 46.3 | 51.7 | 41.4 | 48.7 | 50.1 | 34.5 | 44.7 | 35.8 | 34.5 | 28.6 |
| Parent association | 6.1 | 3.2 | 4.3 | 6.2 | 7.1 | 5.7 | 8.8 | 4.0 | 5.6 | 7.0 | 3.2 | 6.1 | 3.2 | 2.2 | 3.5 |

[^37]NOTE: Excludes a small number of principals whose schools did not respond to the questionnaire.

Table 41-9 Private school teachers' perceptions of the amount of influence or control teachers had over selected school and classroom decisions in their school, by urbanicity and school size: School year 1993-94

| School and classroom decisions | Urbanicity |  |  | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Central | Urban |  | Less than |  |  | 750 and |
|  | city | fringe | Rural | 150 | 150-499 | 500-749 | more |
| Percentage of teachers who reported that teachers had a good deal* of influence in their school over: |  |  |  |  |  |  |  |
| Setting discipline policy | 56.7 | 58.6 | 64.3 | 66.9 | 60.6 | 51.9 | 42.0 |
| Determining the content of inservice programs | 34.5 | 34.0 | 38.3 | 40.2 | 33.4 | 34.3 | 32.8 |
| Establishing curriculum | 53.5 | 55.3 | 59.5 | 58.5 | 54.5 | 54.2 | 54.0 |
| Percentage of teachers who reported a good deal* of control in their classroom over: |  |  |  |  |  |  |  |
| Selecting textbooks and other instructional materials | 67.9 | 67.8 | 68.0 | 66.4 | 66.0 | 71.0 | 76.3 |
| Selecting content, topics, and skills to be taught | 74.9 | 73.7 | 75.8 | 75.7 | 72.8 | 76.6 | 79.0 |
| Selecting teaching techniques | 91.9 | 90.9 | 92.3 | 89.6 | 91.3 | 93.7 | 95.3 |
| Evaluating and grading students | 92.4 | 90.6 | 92.0 | 91.5 | 91.7 | 92.2 | 90.8 |
| Disciplining students | 83.3 | 84.7 | 85.9 | 84.1 | 84.2 | 87.1 | 82.3 |
| Determining the amount of homework to be assigned | 87.6 | 85.8 | 89.9 | 86.1 | 87.1 | 88.5 | 90.3 |

* Respondents were asked about influence and control on a scale of $0-5$, with 0 meaning "no influence" or "no control" and 5 meaning a "great deal of influence" or "complete control." Responses 4 and 5 were combined in this analysis.
NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire.

Table 41-10 Private school principals' perceptions of the amount of influence groups had over selected school and classroom decisions, by urbanicity and school size: School year 1993-94

| School and classroom decisions | Urbanicity |  |  | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Central | Urban fringe | Rural | Less than 150 | 150-499 | 500-749 | 750 and more |
| Percentage of principals who reported that a group had a good deal* of influence over: |  |  |  |  |  |  |  |
| Setting discipline policy |  |  |  |  |  |  |  |
| Governing board | 38.7 | 38.3 | 45.8 | 42.6 | 39.5 | 33.4 | 21.2 |
| Principal | 95.5 | 97.5 | 93.9 | 93.7 | 97.7 | 97.3 | 98.6 |
| Teachers | 81.0 | 82.6 | 75.5 | 73.5 | 87.3 | 78.3 | 73.4 |
| Parent association | 16.3 | 14.7 | 15.5 | 16.9 | 15.1 | 9.1 | 9.9 |
| Determining the content of in-service programs |  |  |  |  |  |  |  |
| Governing board | 26.1 | 27.8 | 27.9 | 22.6 | 32.2 | 24.2 | 20.9 |
| Principal | 91.7 | 91.4 | 78.4 | 81.3 | 94.8 | 92.8 | 91.0 |
| Teachers | 71.8 | 65.0 | 62.4 | 58.8 | 74.5 | 72.7 | 71.8 |
| Parent association | 5.8 | 3.3 | 3.1 | 4.9 | 3.9 | 1.6 | 3.2 |
| Establishing curriculum |  |  |  |  |  |  |  |
| Governing board | 39.4 | 35.9 | 38.9 | 31.7 | 45.0 | 35.9 | 24.4 |
| Principal | 85.6 | 87.5 | 73.7 | 79.1 | 86.6 | 90.4 | 91.8 |
| Teachers | 73.0 | 76.7 | 73.4 | 70.5 | 78.2 | 75.2 | 76.1 |
| Parent association | 8.7 | 10.0 | 8.4 | 10.2 | 8.6 | 6.1 | 3.3 |
| Deciding how the school budget will be spent |  |  |  |  |  |  |  |
| Governing board | 53.8 | 50.1 | 54.4 | 53.9 | 51.9 | 46.6 | 54.5 |
| Principal | 87.4 | 89.9 | 79.2 | 81.5 | 90.8 | 88.8 | 89.2 |
| Teachers | 20.5 | 20.3 | 23.5 | 18.8 | 23.3 | 27.0 | 11.9 |
| Parent association | 7.1 | 5.8 | 11.7 | 7.2 | 8.2 | 10.1 | 4.1 |

* Respondents were asked about influence on a scale of 0-5, with 0 meaning "no influence" and 5 meaning a "great deal of influence." Responses 4 and 5 were combined in this analysis.
NOTE: Excludes a small number of principals whose schools did not respond to the questionnaire.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Administrator Questionnaire).

Table 41-11 Teachers' and principals' perceptions of the amount of influence teachers had over selected school and classroom decisions, by state: School year 1993-94

| State | Percentage of teachers reporting that teachers had a good deal* of influence in their school over: |  |  | Percentage of principals reporting that teachers had a good deal* of influence over: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Setting discipline policy | Determining the content of inservice programs | Establishing curriculum | Setting discipline policy | Determining the content of inservice programs | Establishing curriculum |
| Alabama | 32.6 | 30.2 | 26.4 | 63.2 | 59.5 | 38.3 |
| Alaska | 44.1 | 39.6 | 43.5 | 89.9 | 66.6 | 71.5 |
| Arizona | 42.0 | 30.9 | 35.7 | 79.1 | 73.4 | 61.4 |
| Arkansas | 28.8 | 27.7 | 28.8 | 68.9 | 66.5 | 49.3 |
| California | 47.0 | 35.2 | 40.4 | 84.0 | 75.2 | 68.8 |
| Colorado | 48.4 | 38.3 | 46.5 | 82.2 | 73.9 | 78.0 |
| Connecticut | 36.1 | 33.7 | 39.3 | 75.6 | 69.0 | 64.9 |
| Delaware | 27.6 | 22.0 | 35.4 | 61.4 | 51.9 | 57.6 |
| District of Columbia | 37.5 | 29.6 | 29.0 | 58.9 | 66.0 | 51.8 |
| Florida | 37.1 | 32.8 | 33.3 | 74.4 | 65.0 | 56.7 |
| Georgia | 33.7 | 35.3 | 28.0 | 68.7 | 64.5 | 44.8 |
| Hawaii | 48.1 | 40.5 | 52.5 | 77.3 | 91.0 | 77.0 |
| Idaho | 44.2 | 27.8 | 39.4 | 84.5 | 69.1 | 68.8 |
| Illinois | 38.7 | 30.3 | 39.7 | 69.1 | 75.3 | 74.4 |
| Indiana | 36.6 | 29.3 | 39.3 | 77.9 | 66.9 | 67.5 |
| lowa | 43.5 | 26.4 | 47.1 | 87.9 | 78.0 | 76.2 |
| Kansas | 43.4 | 29.9 | 43.1 | 81.0 | 72.0 | 73.0 |
| Kentucky | 40.8 | 41.5 | 41.5 | 77.1 | 72.2 | 66.4 |
| Lovisiana | 39.1 | 27.1 | 27.0 | 57.7 | 50.9 | 43.7 |
| Maine | 45.4 | 42.7 | 46.9 | 83.2 | 86.9 | 86.3 |
| Maryland | 30.7 | 26.1 | 23.7 | 59.2 | 54.9 | 38.6 |
| Massachusetts | 32.2 | 23.7 | 38.8 | 75.6 | 67.6 | 71.3 |
| Michigan | 45.0 | 35.7 | 45.4 | 77.0 | 69.7 | 63.3 |
| Minnesota | 50.7 | 37.2 | 53.5 | 89.1 | 84.5 | 86.2 |
| Mississippi | 34.4 | 33.6 | 27.7 | 68.9 | 72.8 | 60.6 |
| Missouri | 35.1 | 40.8 | 47.9 | 75.4 | 80.3 | 76.7 |
| Montana | 47.6 | 36.7 | 55.9 | 82.3 | 80.2 | 82.7 |
| Nebraska | 41.5 | 23.1 | 48.5 | 80.5 | 76.5 | 79.3 |
| Nevada | 37.4 | 25.9 | 29.1 | 68.9 | 61.3 | 55.7 |
| New Hampshire | 44.6 | 35.5 | 55.4 | 89.7 | 74.6 | 82.9 |
| New Jersey | 26.7 | 22.7 | 33.7 | 73.4 | 64.5 | 68.2 |
| New Mexico | 42.1 | 28.8 | 42.2 | 73.0 | 62.4 | 83.2 |
| New York | 33.9 | 26.5 | 33.0 | 82.7 | 59.4 | 65.3 |
| North Carolina | 33.4 | 33.8 | 24.1 | 65.1 | 69.1 | 35.3 |
| North Dakota | 46.1 | 28.5 | 44.9 | 78.3 | 68.3 | 71.1 |
| Ohio | 34.9 | 32.5 | 34.5 | 71.9 | 61.9 | 49.2 |
| Oklahoma | 32.5 | 43.6 | 33.6 | 71.0 | 71.0 | 59.3 |
| Oregon | 47.3 | 30.6 | 47.3 | 82.2 | 79.9 | 71.6 |
| Pennsylvania | 37.0 | 23.0 | 38.4 | 70.4 | 65.2 | 59.2 |
| Rhode Island | 32.3 | 29.2 | 37.0 | 80.1 | 37.7 | 73.0 |
| South Carolina | 29.8 | 28.1 | 35.1 | 67.3 | 70.2 | 65.1 |
| South Dakota | 47.4 | 36.8 | 47.7 | 86.6 | 78.3 | 75.3 |
| Tennessee | 38.4 | 28.2 | 26.2 | 66.1 | 56.8 | 33.4 |
| Texas | 30.1 | 27.3 | 32.5 | 68.1 | 74.4 | 53.3 |

## Supplemental Tables and Notes

Table 41-11 Teachers' and principals' perceptions of the amount of influence teachers had over selected school and classroom decisions, by state: School year 1993-94-Continued

| State | Percentage of teachers reporting that teachers had a good deal* of influence in their school over: |  |  | Percentage of principals reporting that teachers had a good deal* of influence over: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Setting discipline policy | Determining the content of in- <br> service programs | Establishing curriculum | Setting discipline policy | Determining the content of in- <br> service programs | Establishing curriculum |
| Utah | 49.3 | 29.3 | 36.6 | 85.7 | 72.9 | 68.1 |
| Vermont | 51.2 | 49.2 | 59.1 | 89.0 | 90.3 | 81.3 |
| Virginia | 33.1 | 25.2 | 30.6 | 68.2 | 69.5 | 56.2 |
| Washington | 52.7 | 46.2 | 49.4 | 87.8 | 84.5 | 78.9 |
| West Virginia | 41.0 | 33.4 | 33.7 | 70.1 | 56.4 | 43.7 |
| Wisconsin | 45.7 | 34.8 | 51.4 | 85.5 | 77.6 | 73.7 |
| Wyoming | 44.2 | 29.0 | 48.3 | 78.7 | 69.7 | 79.1 |

* Respondents were asked about influence on a scale of $0-5$, with 0 SOURCE: U.S. Department of Education, National Center for meaning "no influence" and 5 meaning a "great deal of influence." Responses 4 and 5 were combined in this analysis. Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher

NOTE: Excludes a small number of teachers and principals whose schools did not respond to the questionnaire.

Table 42-1 Average hours per week full-time public school teachers spent at school and in school-related activities, class size, and classes taught per day, by selected school characteristics: School year 1993-94

| School characteristics | Average hours spent before and after school and on weekends |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average hours worked per week | Average hours required at school | Total | Activities involving students | $\qquad$ | $\begin{array}{r} \text { Average } \\ \text { class } \\ \text { size } \\ \hline \end{array}$ | $\begin{aligned} & \text { Average num- } \\ & \text { ber of classes } \\ & \text { taught per day* } \end{aligned}$ |
| Total | 45.2 | 33.2 | 12.1 | 3.3 | 8.7 | 23.2 | 5.6 |
| Urbanicity |  |  |  |  |  |  |  |
| Central city | 44.2 | 32.6 | 11.6 | 3.0 | 8.6 | 24.1 | 5.5 |
| Urban fringe/large town | 45.3 | 32.9 | 12.4 | 3.1 | 9.4 | 24.1 | 5.5 |
| Rural/small town | 45.8 | 33.7 | 12.1 | 3.7 | 8.4 | 22.0 | 5.7 |
| Percentage of students eligible for free or reduced-price lunch |  |  |  |  |  |  |  |
| 0-5 | 45.8 | 32.6 | 13.3 | 3.8 | 9.5 | 23.4 | 5.5 |
| 6-20 | 46.1 | 33.1 | 12.9 | 3.7 | 9.2 | 23.2 | 5.5 |
| 21-40 | 45.9 | 33.7 | 12.1 | 3.5 | 8.7 | 23.2 | 5.6 |
| 41-100 | 44.0 | 33.0 | 11.0 | 2.7 | 8.3 | 23.1 | 5.7 |
| Percentage of students eligible for free or reduced-price lunch within urbanicity Central city |  |  |  |  |  |  |  |
| 0-5 | 45.1 | 33.1 | 12.1 | 2.9 | 9.2 | 23.6 | 5.6 |
| 6-20 | 45.0 | 32.7 | 12.3 | 3.3 | 9.0 | 24.7 | 5.3 |
| 21-40 | 45.6 | 33.2 | 12.4 | 3.4 | 9.1 | 24.4 | 5.4 |
| 41-100 | 43.2 | 32.4 | 10.9 | 2.6 | 8.2 | 23.7 | 5.7 |
| Urban fringe/large town |  |  |  |  |  |  |  |
| 0-5 | 45.5 | 32.1 | 13.3 | 3.8 | 9.5 | 24.0 | 5.4 |
| 6-20 | 46.0 | 33.0 | 13.0 | 3.4 | 9.6 | 23.9 | 5.5 |
| 21-40 | 45.5 | 33.3 | 12.2 | 2.9 | 9.3 | 24.2 | 5.6 |
| 41-100 | 44.3 | 32.9 | 11.5 | 2.3 | 9.2 | 25.1 | 5.5 |
| Rural/small town |  |  |  |  |  |  |  |
| 0-5 | 47.0 | 33.2 | 13.9 | 4.3 | 9.5 | 22.3 | 5.6 |
| 6-20 | 46.6 | 33.5 | 13.2 | 4.3 | 8.8 | 21.9 | 5.7 |
| 21-40 | 46.2 | 34.2 | 12.0 | 3.8 | 8.1 | 22.2 | 5.8 |
| 41-100 | 44.7 | 33.7 | 11.0 | 3.1 | 8.0 | 21.8 | 5.7 |
| School size |  |  |  |  |  |  |  |
| Less than 150 | 46.4 | 34.5 | 11.9 | 4.3 | 7.5 | 15.4 | 6.2 |
| 150-499 | 44.2 | 32.8 | 11.4 | 2.7 | 8.6 | 20.7 | 6.0 |
| 500-749 | 45.3 | 33.4 | 12.0 | 2.8 | 9.2 | 23.3 | 5.7 |
| 750 or more | 45.9 | 33.2 | 12.7 | 4.1 | 8.6 | 24.5 | 5.4 |
| Percentage of minority students |  |  |  |  |  |  |  |
| Less than 20 percent | 45.7 | 33.4 | 12.3 | 3.5 | 8.9 | 22.6 | 5.7 |
| 20 percent or more | 44.7 | 32.9 | 11.8 | 3.2 | 8.6 | 23.8 | 5.5 |

* Since elementary teachers do not tend to teach separate classes, SOURCE: U.S. Department of Education, National Center for
only 8 percent of the teachers who responded to this question were
Education Statistics, Schools and Staffing Survey, $1993-94$ (Teacher elementary teachers, while 92 percent were secondary teachers.
NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire. Details may not add to totals due to rounding.

Questionnaire).

Table 42-2 Average hours per week full-time private school teachers spent at school and in school-related activities, class size, and classes taught per day, by selected school characteristics: School year 1993-94

| School characteristics | Average hours worked per week | Average hours required at school | Average hours spent before and after school and on weekends |  |  | Average class size | Average number of classes taught per day* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | Activities involving students | Other related activities |  |  |
| Total | 47.1 | 34.2 | 12.9 | 3.6 | 9.3 | 19.6 | 6.0 |
| Urbanicity |  |  |  |  |  |  |  |
| Central city | 47.0 | 34.2 | 12.8 | 3.7 | 9.1 | 20.3 | 6.0 |
| Urban fringe/large town | 47.0 | 34.2 | 12.8 | 3.5 | 9.3 | 20.1 | 6.1 |
| Rural/small town | 47.6 | 34.3 | 13.3 | 3.6 | 9.7 | 16.6 | 6.0 |
| School size |  |  |  |  |  |  |  |
| Less than 150 | 45.5 | 34.2 | 11.3 | 2.2 | 9.0 | 11.6 | 6.3 |
| 150-499 | 47.1 | 34.3 | 12.9 | 3.5 | 9.3 | 19.1 | 6.3 |
| 500-749 | 47.3 | 34.0 | 13.3 | 4.1 | 9.3 | 21.4 | 5.7 |
| 750 or more | 50.1 | 34.4 | 15.7 | 6.2 | 9.5 | 22.9 | 5.7 |
| Percentage of minority students |  |  |  |  |  |  |  |
| Less than 20 percent | 47.1 | 34.3 | 12.8 | 3.5 | 9.3 | 19.3 | 6.1 |
| 20 percent or more | 47.2 | 34.0 | 13.1 | 4.0 | 9.2 | 20.1 | 5.8 |

* Since elementary teachers do not tend to teach separate classes, only 8 percent of the teachers who responded to this question were elementary teachers, while 92 percent were secondary teachers.

NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire. Details may not add to totals due to rounding.

Table 42-3 Percentage of full-time public and private school teachers who participated in school committees, by type of committee, selected school characteristics, and years of teaching experience: School year 1993-94

| School characteristics and years of experience | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Committee to integrate academic skills into vocational education | Other curriculum committee | Committee on selecting textbooks or materials | Committee to integrate academic skills into vocational education | Other curriculum committee | Committee on selecting textbooks or materials |
| Total | 16.4 | 41.0 | 30.0 | 8.6 | 28.7 | 35.9 |
| Urbanicity |  |  |  |  |  |  |
| Central city | 17.2 | 37.4 | 25.8 | 9.3 | 29.2 | 36.5 |
| Urban fringe/large town | 15.3 | 43.8 | 29.7 | 8.0 | 30.8 | 35.3 |
| Rural/small town | 16.8 | 41.3 | 33.1 | 8.0 | 23.6 | 35.7 |
| Percentage of students eligible for free or reduced-price lunch |  |  |  |  |  |  |
| 0-5 | 18.3 | 46.8 | 31.4 | - | - | - |
| 6-20 | 17.9 | 43.6 | 31.4 | - | - | - |
| 21-40 | 16.7 | 41.3 | 29.7 | - | - | - |
| 41-100 | 14.8 | 37.5 | 29.2 | - | - | - |
| Percentage of students eligible for free or reduced-price lunch within urbanicity |  |  |  |  |  |  |
| Central city |  |  |  |  |  |  |
| 0-5 | 18.1 | 43.5 | 27.6 | - | - | - |
| 6-20 | 18.8 | 41.9 | 25.7 | - | - | - |
| 21-40 | 18.0 | 38.9 | 25.1 | - | - | - |
| 41-100 | 15.9 | 34.7 | 26.2 | - | - | - |
| Urban fringe/large town |  |  |  |  |  |  |
| 0-5 | 18.2 | 48.1 | 30.4 | - | - | - |
| 6-20 | 16.3 | 45.6 | 30.7 | - | - | - |
| 21-40 | 15.2 | 42.6 | 31.0 | - | - | - |
| 41-100 | 12.4 | 38.3 | 26.4 | - | - | - |
| Rural/small town |  |  |  |  |  |  |
| 0-5 | 18.4 | 45.7 | 35.4 | - | - | - |
| 6-20 | 19.0 | 42.6 | 34.9 | - | - - | - |
| 21-40 | 16.9 | 41.8 | 31.2 | - | - | - |
| 41-100 | 14.9 | 40.1 | 33.5 | - | - | - |
| School size |  |  |  |  |  |  |
| Less than 150 | 19.2 | 38.5 | 34.1 | 7.5 | 19.2 | 27.8 |
| 150-499 | 15.2 | 43.6 | 33.2 | 9.3 | 30.2 | 38.7 |
| 500-749 | 14.6 | 41.7 | 29.2 | 8.8 | 33.1 | 37.5 |
| 750 or more | 18.7 | 38.4 | 27.6 | 7.2 | 35.0 | 37.2 |
| Percentage of minority students |  |  |  |  |  |  |
| Less than 20 percent | 16.1 | 44.4 | 32.6 | 7.8 | 28.6 | 36.7 |
| 20 percent or more | 16.8 | 37.4 | 27.3 | 10.5 | 29.0 | 33.9 |
| Years of teaching experience |  |  |  |  |  |  |
| Less than 4 years | 10.7 | 25.6 | 17.7 | 3.7 | 14.6 | 16.3 |
| 4 years or more | 16.9 | 42.3 | 31.1 | 9.4 | 31.0 | 39.1 |

- Not applicable.

NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table 42-4 Average hours per week full-time teachers spent at school and in school-related activities, class size, and classes taught per day, by state: School year 1993-94

| State | Average hours spent before and after school and on weekends |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average hours worked per week | Average hours required at school | Total | Activities involving students | Other related activities | Average class size | Average number of classes taught per day* |
| Alabama | 43.3 | 32.5 | 10.8 | 3.2 | 7.6 | 23.1 | 5.5 |
| Alaska | 47.9 | 34.2 | 13.7 | 4.0 | 9.7 | 21.1 | 5.9 |
| Arizona | 49.1 | 35.2 | 13.8 | 4.2 | 9.6 | 24.9 | 5.7 |
| Arkansas | 42.5 | 32.9 | 9.7 | 2.7 | 7.0 | 21.2 | 5.6 |
| California | 45.6 | 31.8 | 13.8 | 3.3 | 10.5 | 27.9 | 5.4 |
| Colorado | 49.8 | 35.8 | 14.0 | 3.9 | 10.2 | 24.0 | 5.5 |
| Connecticut | 43.9 | 31.1 | 12.8 | 2.7 | 10.1 | 18.0 | 5.9 |
| Delaware | 46.8 | 33.9 | 13.0 | 3.4 | 9.6 | 23.2 | 5.8 |
| District of Columbia | 44.4 | 32.3 | 12.1 | 3.4 | 8.7 | 20.5 | 5.2 |
| Florida | 44.4 | 33.7 | 10.7 | 2.7 | 7.9 | 25.4 | 5.5 |
| Georgia | 46.1 | 35.4 | 10.7 | 3.2 | 7.5 | 23.3 | 5.5 |
| Hawaii | 48.0 | 33.9 | 14.1 | 3.1 | 11.1 | 22.3 | 6.1 |
| Idaho | 47.4 | 34.6 | 12.9 | 3.8 | 9.1 | 23.3 | 5.6 |
| Illinois | 45.3 | 32.7 | 12.6 | 3.5 | 9.1 | 23.2 | 5.7 |
| Indiana | 45.9 | 33.3 | 12.6 | 3.7 | 8.9 | 22.8 | 5.6 |
| lowa | 48.2 | 36.1 | 12.1 | 3.9 | 8.2 | 21.5 | 6.2 |
| Kansas | 46.9 | 34.2 | 12.7 | 4.6 | 8.2 | 20.7 | 5.9 |
| Kentucky | 45.2 | 32.0 | 13.2 | 4.2 | 9.0 | 22.9 | 5.5 |
| Louisiana | 42.3 | 31.9 | 10.4 | 2.9 | 7.5 | 22.9 | 5.7 |
| Maine | 46.4 | 33.8 | 12.6 | 2.5 | 10.1 | 17.8 | 6.1 |
| Maryland | 47.8 | 34.5 | 13.4 | 2.9 | 10.5 | 23.6 | 5.5 |
| Massachusetts | 42.4 | 30.4 | 12.1 | 2.9 | 9.2 | 20.3 | 5.9 |
| Michigan | 44.7 | 32.0 | 12.7 | 2.9 | 9.9 | 24.5 | 5.6 |
| Minnesota | 47.8 | 35.7 | 12.1 | 3.4 | 8.7 | 24.6 | 5.6 |
| Mississippi | 43.7 | 33.7 | 10.0 | 3.2 | 6.8 | 22.5 | 5.3 |
| Missouri | 45.8 | 33.1 | 12.7 | 3.9 | 8.8 | 22.3 | 5.9 |
| Montana | 48.7 | 35.8 | 12.9 | 4.6 | 8.2 | 19.1 | 5.9 |
| Nebraska | 49.5 | 36.8 | 12.7 | 4.7 | 8.0 | 18.7 | 6.2 |
| Nevada | 43.1 | 31.1 | 12.0 | 2.8 | 9.3 | 25.6 | 5.6 |
| New Hampshire | 47.1 | 32.8 | 14.3 | 3.8 | 10.5 | 19.8 | 5.3 |
| New Jersey | 41.5 | 30.5 | 11.1 | 3.1 | 7.9 | 19.9 | 5.9 |
| New Mexico | 44.0 | 32.0 | 12.0 | 3.3 | 8.7 | 23.3 | 5.5 |
| New York | 43.6 | 32.3 | 11.3 | 3.1 | 8.3 | 22.4 | 5.9 |
| North Carolina | 47.5 | 34.8 | 12.7 | 4.0 | 8.7 | 22.0 | 5.2 |
| North Dakota | 48.2 | 34.9 | 13.3 | 4.6 | 8.6 | 20.8 | 5.9 |
| Ohio | 45.5 | 32.4 | 13.1 | 3.4 | 9.7 | 22.0 | 5.8 |
| Oklahoma | 45.4 | 33.2 | 12.2 | 4.6 | 7.6 | 20.3 | 5.6 |
| Oregon | 50.4 | 37.1 | 13.3 | 4.0 | 9.3 | 24.0 | 5.8 |
| Pennsylvania | 43.7 | 32.9 | 10.8 | 2.5 | 8.3 | 23.0 | 6.2 |
| Rhode Island | 39.9 | 28.6 | 11.3 | 2.8 | 8.6 | 20.3 | 5.9 |
| South Carolina | 44.3 | 33.5 | 10.8 | 2.7 | 8.1 | 22.1 | 5.2 |
| South Dakota | 47.4 | 35.0 | 12.4 | 3.8 | 8.6 | 20.2 | 5.8 |
| Tennessee | 43.5 | 32.6 | 10.8 | 3.2 | 7.7 | 23.7 | 5.2 |
| Texas | 47.0 | 35.0 | 12.1 | 3.8 | 8.3 | 21.7 | 5.4 |

Table 42-4 Average hours per week full-time teachers spent at school and in school-related activities, class size, and classes taught per day, by state: School year 1993-94Continued

| State | Average hours spent before and after school and on weekends |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average hours worked per week | Average hours required at school | Total | Activities involving students | Other related activities | Average class size | Average number of classes taught per day* |
| Utah | 46.8 | 34.8 | 12.0 | 3.7 | 8.3 | 28.3 | 5.9 |
| Vermont | 48.7 | 33.7 | 15.0 | 3.8 | 11.3 | 18.4 | 5.4 |
| Virginia | 45.3 | 32.4 | 12.9 | 2.9 | 10.0 | 20.4 | 5.2 |
| Washington | 47.1 | 33.9 | 13.2 | 3.7 | 9.5 | 24.7 | 5.5 |
| West Virginia | 44.3 | 33.8 | 10.5 | 2.9 | 7.7 | 21.9 | 5.8 |
| Wisconsin | 48.4 | 36.0 | 12.4 | 3.9 | 8.6 | 22.4 | 5.8 |
| Wyoming | 47.2 | 34.1 | 13.1 | 4.8 | 8.3 | 19.4 | 5.9 |

* Since elementary teachers do not tend to teach separate classes, only 8 percent of the teachers who responded to this question were elementary teachers, while 92 percent were secondary teachers.
NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire. Details may not add to totals due to rounding.

Table 43-1 Mean classroom hours per week, mean student contact hours per week, and average class size for full-time postsecondary faculty, by academic rank, type and control of institution, and academic discipline of class taught: Fall 1987 and fall 1992

| Characteristics | Mean classroom hours per week | Mean student contact hours per week | Average class size |
| :---: | :---: | :---: | :---: |
|  | Fall 1992 |  |  |
| Total* | 11.0 | 337.4 | 30.6 |
| Academic rank |  |  |  |
| Full professor | 9.6 | 323.7 | 33.6 |
| Associate professor | 10.1 | 324.9 | 31.5 |
| Assistant professor | 10.6 | 312.5 | 30.1 |
| Instructor | 15.9 | 434.0 | 26.3 |
| Lecturer | 9.0 | 301.8 | 34.8 |
| Type of institution |  |  |  |
| Research | 6.9 | 270.3 | 38.9 |
| Doctoral | 9.2 | 356.7 | 39.7 |
| Comprehensive | 10.8 | 318.5 | 29.1 |
| Liberal arts | 11.0 | 242.2 | 21.4 |
| 2-year | 16.2 | 451.9 | 27.3 |
| Control of institution |  |  |  |
| Public | 11.4 | 358.5 | 31.8 |
| Private | 10.0 | 286.2 | 27.8 |
| Academic discipline of class taught |  |  |  |
| Agriculture | 11.0 | 311.1 | 28.3 |
| Business | 11.0 | 317.9 | 29.2 |
| Education | 10.2 | 276.9 | 25.8 |
| Engineering | 9.6 | 243.9 | 25.3 |
| Fine arts | 12.4 | 269.3 | 21.5 |
| Humanities | 10.9 | 296.0 | 26.8 |
| Natural sciences | 10.2 | 376.4 | 36.4 |
| Social sciences | 9.5 | 357.9 | 36.0 |

Supplemental Tables and Notes
Table 43-1 Mean classroom hours per week, mean student contact hours per week, and average class size for full-time postsecondary faculty, by academic rank, type and control of institution, and academic discipline of class taught: Fall 1987 and fall 1992Continued

| Characteristics | Mean classroom hours per week | Mean student contact hours per week | Average class size |
| :---: | :---: | :---: | :---: |
|  | Fall 1987 |  |  |
| Total* | 9.8 | 300.4 | 30.0 |
| Academic rank |  |  |  |
| Full professor | 8.6 | 277.9 | 32.8 |
| Associate professor | 9.1 | 314.5 | 33.6 |
| Assistant professor | 9.3 | 262.2 | 28.0 |
| Instructor | 13.4 | 371.2 | 26.9 |
| Lecturer | 9.2 | 424.2 | 41.6 |
| Type of institution |  |  |  |
| Research | 6.5 | 252.5 | 38.5 |
| Doctoral | 8.4 | 279.0 | 33.8 |
| Comprehensive | 10.5 | 305.5 | 29.0 |
| Liberal arts | 10.6 | 235.7 | 21.4 |
| 2-year | 15.0 | 416.6 | 26.5 |
| Control of institution |  |  |  |
| Public | 10.2 | 324.1 | 31.5 |
| Private | 8.8 | 247.4 | 28.3 |
| Academic discipline of class taught |  |  |  |
| Agriculture | 8.8 | 247.0 | 29.6 |
| Business | 10.6 | 327.5 | 29.9 |
| Education | 9.8 | 259.7 | 24.5 |
| Engineering | 9.5 | 256.4 | 27.2 |
| Fine arts | 12.1 | 279.5 | 22.1 |
| Humanities | 10.1 | 276.9 | 26.6 |
| Natural sciences | 9.4 | 352.9 | 36.0 |
| Social sciences | 8.7 | 328.5 | 37.0 |

[^38]Table 43-2 Percentage of time full-time postsecondary faculty spent on various activities, by control of institution and academic discipline of class taught: Fall 1987 and fall 1992

| Control of institution and academic discipline | Total | Teaching ${ }^{1}$ | Research/ scholarship | Professional growth | Administration | Outside consulting/ freelance work | Service and other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fall 1992 |  |  |  |  |  |  |
| Total ${ }^{2}$ | 100.0 | 54.4 | 17.6 | 4.6 | 13.1 | 2.7 | 7.4 |
| Control of institution |  |  |  |  |  |  |  |
| Public | 100.0 | 55.1 | 17.6 | 4.7 | 12.5 | 2.6 | 7.4 |
| Private | 100.0 | 52.7 | 17.7 | 4.5 | 14.6 | 2.8 | 7.6 |
| Academic discipline of class taught |  |  |  |  |  |  |  |
| Agriculture | 100.0 | 45.3 | 27.0 | 4.4 | 13.0 | 2.5 | 7.9 |
| Business | 100.0 | 57.8 | 14.0 | 5.5 | 11.9 | 4.8 | 5.9 |
| Education | 100.0 | 54.6 | 11.4 | 5.4 | 16.5 | 2.8 | 9.1 |
| Engineering | 100.0 | 52.2 | 24.2 | 3.9 | 10.8 | 3.6 | 5.1 |
| Fine arts | 100.0 | 57.9 | 14.6 | 5.9 | 11.9 | 4.2 | 5.5 |
| Humanities | 100.0 | 63.1 | 14.6 | 4.1 | 12.4 | 1.5 | 4.1 |
| Natural sciences | 100.0 | 55.3 | 23.6 | 3.8 | 11.0 | 1.9 | 4.3 |
| Social sciences | 100.0 | 52.8 | 20.4 | 4.1 | 13.3 | 2.8 | 6.4 |
|  | Fall 1987 |  |  |  |  |  |  |
| Total ${ }^{2}$ | 100.0 | 57.1 | 17.3 | 4.6 | 13.2 | 2.5 | 5.4 |
| Control of institution |  |  |  |  |  |  |  |
| Public | 100.0 | 58.1 | 16.9 | 4.7 | 12.9 | 2.6 | 5.0 |
| Private | 100.0 | 55.1 | 18.2 | 4.2 | 13.8 | 2.3 | 6.5 |
| Academic discipline of class taught |  |  |  |  |  |  |  |
| Agriculture | 100.0 | 54.9 | 23.3 | 4.3 | 12.7 | 1.9 | 2.9 |
| Business | 100.0 | 64.5 | 12.4 | 4.2 | 11.5 | 4.9 | 2.5 |
| Education | 100.0 | 62.0 | 9.5 | 4.3 | 16.4 | 2.2 | 5.6 |
| Engineering | 100.0 | 60.6 | 18.5 | 3.6 | 11.5 | 4.2 | 1.7 |
| Fine arts | 100.0 | 57.0 | 18.1 | 7.4 | 11.3 | 3.5 | 2.6 |
| Humanities | 100.0 | 64.8 | 14.7 | 3.0 | 14.0 | 1.3 | 2.5 |
| Natural sciences | 100.0 | 58.6 | 21.9 | 3.7 | 11.7 | 2.0 | 2.1 |
| Social sciences | 100.0 | 56.6 | 19.6 | 3.3 | 13.4 | 2.5 | 4.6 |

${ }^{1}$ Includes other activities besides teaching in the classroom such as grading papers, preparing for class, developing new curricula, advising or supervising students, and working with student organizations or intramural athletics.
${ }^{2}$ Included in the total but not shown separately are other types of academic disciplines. Totals may not add to 100 due to rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1988 and 1993.

## Note to Indicator 43: Teaching workload and research production of full-time postsecondary faculty

The 1988 National Study of Postsecondary Faculty (NSOPF) was a survey of faculty who had at least some instructional duties (such as teaching one or more courses) in for-credit, higher education courses during the fall 1987 term.
Unlike NSOPF-88, which was limited to faculty whose regular assignments included instruction, the faculty universe for NSOPF-93 was expanded to include anyone who was designated as faculty, whether or not their responsibilities included instruction, as well as other (nonfaculty) personnel with instructional responsibilities.

The analyses for this indicator include all those who had any instructional duties in the fall of 1987 and 1992. Therefore, it includes those faculty whose principal activity that semester was research, technical, clinical, service, or administration, as long as the faculty member taught at least one class for credit. In fact, in fall 1992, 15 percent of all faculty who taught at least one class for credit had a principal activity other than teaching.
The analysis for the indicators using NSOPF categorizes institutions of higher education into five types, as shown below. Remaining institutions, such as religious or specialized institutions, were included in the totals but are not shown separately.

## Types of institutions

Research university: Institution among the 100 leading universities that receives federal research funds. Each of these universities awards substantial numbers of doctorates across many fields.

Doctoral university: Institution that offers a full range of baccalaureate programs and Ph.D. degrees in at least three disciplines, but tends to be less focused on research and receives fewer federal research dollars than the research universities.

Comprehensive institution: Institution that offers liberal arts and professional programs. The master's degree is the highest degree offered.

Liberal arts institution: Institution that is smaller and generally more selective than comprehensive colleges and universities. A liberal arts institution primarily offers bachelor's degrees, although some offer master's degrees.

2-year institution: Institution that offers certificate or degree programs through the Associate of Arts level. Two-year institutions, with few exceptions,
offer no bachelor's degrees, although some offer master's degrees.

## Time allocation

NSOPF survey respondents were asked to estimate the percentage of total working hours they spent on each of the activities below:

Teaching: Includes teaching; grading papers; preparing courses; developing new curricula; advising or supervising students; or working with student organizations or intramural sports.
Research/scholarship: Includes conducting research; reviewing or preparing articles or books; attending or preparing for professional meetings or conferences; reviewing proposals; seeking outside funding; giving performances or exhibitions in the fine or applied arts; or giving speeches.

Professional growth: Includes taking courses or pursuing an advanced degree or other professional development activities to remain current in their field of practice.

Administration: Performing administrative activities.

Outside consulting or freelance work: Conducting outside consulting or other employment.

Service/other: Includes providing legal or medical service or psychological counseling to clients or patients; providing paid or unpaid community or public service, or service to professional societies/ associations; or participating in other activities or work not listed above.

## Classroom and student contact hours

Classroom hours: The number of hours per week faculty members spent teaching.

Student contact hours: The sum of the number of hours per week faculty members spent teaching over all classes, multiplied by the number of students in each class.

Class size: The total number of student contact hours divided by the mean number of classroom hours faculty spent per week.

## Research Production

List below are the specific types of research produced by faculty and the corresponding categories used to discuss these activities in Indicator 59.

Articles/Creative works Articles published in refereed professional or trade journals
Articles published in nonrefereed professional or trade journals
Creative works published in juried media

Creative works published in nonjuried media or in-house newsletters

Chapters in edited volumes

Text books
Other books
Monographs
Presentations/exhibi- Presentations at tions conferences, workshops, etc.
Exhibitions or performances in the fine or applied arts

Other published reviews Research or technical of books, articles, or cre- reports disseminated ative works internally or to clients

Patents or copyrights
Computer software products

SOURCE: U.S. Department of Education, National Center for Education Statistics, Profiles of Faculty in Higher Education Institutions, 1988.

Table 44-1 Elementary and secondary school enrollment (in thousands), by control and level of school, with projections: Fall 1970-2007

|  |  | Public schools |  |  | Private schools ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grades | Grades | Grades | Grades | Grades | Grades |
| Fall of year | Total | K-12 ${ }^{2}$ | K-8 ${ }^{2}$ | 9-12 | K-12 ${ }^{2}$ | K-8 ${ }^{2}$ | 9-12 |
| 1970 | 51,257 | 45,894 | 32,558 | 13,336 | 5,363 | 4,052 | 1,311 |
| 1971 | 51,271 | 46,071 | 32,318 | 13,753 | 5,200 | 3,900 | 1,300 |
| 1972 | 50,726 | 45,726 | 31,879 | 13,848 | 5,000 | 3,700 | 1,300 |
| 1973 | 50,445 | 45,445 | 31,401 | 14,044 | 5,000 | 3,700 | 1,300 |
| 1974 | 50,073 | 45,073 | 30,971 | 14,103 | 5,000 | 3,700 | 1,300 |
| 1975 | 49,819 | 44,819 | 30,515 | 14,304 | 5,000 | 3,700 | 1,300 |
| 1976 | 49,478 | 44,311 | 29,997 | 14,314 | 5,167 | 3,825 | 1,342 |
| 1977 | 48,717 | 43,577 | 29,375 | 14,203 | 5,140 | 3,797 | 1,343 |
| 1978 | 47,637 | 42,551 | 28,463 | 14,088 | 5,086 | 3,732 | 1,353 |
| 1979 | 46,651 | 41,651 | 28,034 | 13,616 | 5,000 | 3,700 | 1,300 |
| 1980 | 46,208 | 40,877 | 27,647 | 13,231 | 5,331 | 3,992 | 1,339 |
| 1981 | 45,544 | 40,044 | 27,280 | 12,764 | 5,500 | 4,100 | 1,400 |
| 1982 | 45,166 | 39,566 | 27,161 | 12,405 | 5,600 | 4,200 | 1,400 |
| 1983 | 44,967 | 39,252 | 26,981 | 12,271 | 5,715 | 4,315 | 1,400 |
| 1984 | 44,908 | 39,208 | 26,905 | 12,304 | 5,700 | 4,300 | 1,400 |
| 1985 | 44,979 | 39,422 | 27,034 | 12,388 | 5,557 | 4,195 | 1,362 |
| 1986 | 45,205 | 39,753 | 27,420 | 12,333 | 5,452 | 4,116 | 1,336 |
| 1987 | 45,488 | 40,008 | 27,933 | 12,076 | 5,479 | 4,232 | 1,247 |
| 1988 | 45,430 | 40,189 | 28,501 | 11,687 | 5,241 | 4,036 | 1,206 |
| 1989 | 45,898 | 40,543 | 29,152 | 11,390 | 5,355 | 4,162 | 1,193 |
| 1990 | 46,448 | 41,217 | 29,878 | 11,338 | 5,232 | 4,095 | 1,137 |
| 1991 | 47,246 | 42,047 | 30,506 | 11,541 | 5,199 | 4,074 | 1,125 |
| $1992{ }^{3}$ | 48,198 | 42,823 | 31,088 | 11,735 | 5,375 | 4,212 | 1,163 |
| $1993{ }^{3}$ | 48,936 | 43,465 | 31,504 | 11,961 | 5,471 | 4,280 | 1,191 |
| $1994{ }^{3,4}$ | 49,705 | 44,109 | 31,894 | 12,214 | 5,596 | 4,360 | 1,236 |
| 1995 ${ }^{3,4}$ | 50,362 | 44,662 | 32,085 | 12,576 | 5,700 | 4,431 | 1,269 |
| $1996{ }^{4}$ | 51,484 | 45,700 | 32,826 | 12,874 | 5,784 | 4,490 | 1,293 |
| Projected |  |  |  |  |  |  |  |
| 1997 | 52,217 | 46,353 | 33,216 | 13,138 | 5,863 | 4,544 | 1,320 |
| 1998 | 52,725 | 46,806 | 33,512 | 13,294 | 5,920 | 4,584 | 1,335 |
| 1999 | 53,132 | 47,170 | 33,699 | 13,470 | 5,963 | 4,610 | 1,353 |
| 2000 | 53,465 | 47,467 | 33,858 | 13,609 | 5,998 | 4,631 | 1,367 |
| 2001 | 53,735 | 47,707 | 33,994 | 13,713 | 6,028 | 4,650 | 1,377 |
| 2002 | 53,962 | 47,911 | 34,078 | 13,832 | 6,051 | 4,662 | 1,389 |
| 2003 | 54,117 | 48,053 | 34,044 | 14,010 | 6,064 | 4,657 | 1,407 |
| 2004 | 54,250 | 48,180 | 33,861 | 14,319 | 6,070 | 4,632 | 1,438 |
| 2005 | 54,349 | 48,276 | 33,660 | 14,617 | 6,073 | 4,604 | 1,468 |
| 2006 | 54,388 | 48,318 | 33,488 | 14,830 | 6,070 | 4,581 | 1,490 |
| 2007 | 54,324 | 48,262 | 33,393 | 14,870 | 6,061 | 4,568 | 1,494 |

[^39]NOTE: The private school enrollment figures for years 1971-75, 1979, 1981-82, 1984, and 1986 are estimated. The 1987 private school enrollment numbers are taken from the Private School Survey (PSS). Private school enrollment figures for grades K-8 and 9-12 for the years 1988-93 are estimated from the K-12 totals. Projections are based on data through 1994. Enrollment figures may not add to totals due to rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 3 and Projections of Education Statistics to 2007, 1997, table 1.

Table 44-2 Percentage of total elementary and secondary school enrollment, by control and level of school, with projections: Fall 1970-2007

|  |  | Public schools |  |  | Private schools ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grades | Grades | Grades | Grades | Grades | Grades |
| Fall of year | Total | $\mathrm{K}-12^{2}$ | K-8 ${ }^{2}$ | 9-12 | K-12 ${ }^{2}$ | K-8 ${ }^{2}$ | 9-12 |
| 1970 | 100.0 | 89.5 | 63.5 | 26.0 | 10.5 | 7.9 | 2.6 |
| 1971 | 100.0 | 89.9 | 63.0 | 26.8 | 10.1 | 7.6 | 2.5 |
| 1972 | 100.0 | 90.1 | 62.8 | 27.3 | 9.9 | 7.3 | 2.6 |
| 1973 | 100.0 | 90.1 | 62.2 | 27.8 | 9.9 | 7.3 | 2.6 |
| 1974 | 100.0 | 90.0 | 61.9 | 28.2 | 10.0 | 7.4 | 2.6 |
| 1975 | 100.0 | 90.0 | 61.3 | 28.7 | 10.0 | 7.4 | 2.6 |
| 1976 | 100.0 | 89.6 | 60.6 | 28.9 | 10.4 | 7.7 | 2.7 |
| 1977 | 100.0 | 89.4 | 60.3 | 29.2 | 10.6 | 7.8 | 2.8 |
| 1978 | 100.0 | 89.3 | 59.7 | 29.6 | 10.7 | 7.8 | 2.8 |
| 1979 | 100.0 | 89.3 | 60.1 | 29.2 | 10.7 | 7.9 | 2.8 |
| 1980 | 100.0 | 88.5 | 59.8 | 28.6 | 11.5 | 8.6 | 2.9 |
| 1981 | 100.0 | 87.9 | 59.9 | 28.0 | 12.1 | 9.0 | 3.1 |
| 1982 | 100.0 | 87.6 | 60.1 | 27.5 | 12.4 | 9.3 | 3.1 |
| 1983 | 100.0 | 87.3 | 60.0 | 27.3 | 12.7 | 9.6 | 3.1 |
| 1984 | 100.0 | 87.3 | 59.9 | 27.4 | 12.7 | 9.6 | 3.1 |
| 1985 | 100.0 | 87.6 | 60.1 | 27.5 | 12.4 | 9.3 | 3.0 |
| 1986 | 100.0 | 87.9 | 60.7 | 27.3 | 12.1 | 9.1 | 3.0 |
| 1987 | 100.0 | 88.0 | 61.4 | 26.5 | 12.0 | 9.3 | 2.7 |
| 1988 | 100.0 | 88.5 | 62.7 | 25.7 | 11.5 | 8.9 | 2.7 |
| 1989 | 100.0 | 88.3 | 63.5 | 24.8 | 11.7 | 9.1 | 2.6 |
| 1990 | 100.0 | 88.7 | 64.3 | 24.4 | 11.3 | 8.8 | 2.4 |
| 1991 | 100.0 | 89.0 | 64.6 | 24.4 | 11.0 | 8.6 | 2.4 |
| $1992{ }^{3}$ | 100.0 | 88.8 | 64.5 | 24.3 | 11.2 | 8.7 | 2.4 |
| $1993{ }^{3}$ | 100.0 | 88.8 | 64.4 | 24.4 | 11.2 | 9.0 | 2.4 |
| $1994^{3,4}$ | 100.0 | 88.7 | 64.2 | 24.6 | 11.3 | 8.8 | 2.5 |
| $1995^{3,4}$ | 100.0 | 88.7 | 63.7 | 25.0 | 11.3 | 8.8 | 2.5 |
| $1996{ }^{4}$ | 100.0 | 88.8 | 63.8 | 25.0 | 11.2 | 8.7 | 2.5 |
| Projected |  |  |  |  |  |  |  |
| 1997 | 100.0 | 88.8 | 63.6 | 25.2 | 11.2 | 8.7 | 2.5 |
| 1998 | 100.0 | 88.8 | 63.6 | 25.2 | 11.2 | 8.7 | 2.5 |
| 1999 | 100.0 | 88.8 | 63.4 | 25.4 | 11.2 | 8.7 | 2.5 |
| 2000 | 100.0 | 88.8 | 63.3 | 25.5 | 11.2 | 8.7 | 2.6 |
| 2001 | 100.0 | 88.8 | 63.3 | 25.5 | 11.2 | 8.7 | 2.6 |
| 2002 | 100.0 | 88.8 | 63.2 | 25.6 | 11.2 | 8.6 | 2.6 |
| 2003 | 100.0 | 88.8 | 62.9 | 25.9 | 11.2 | 8.6 | 2.6 |
| 2004 | 100.0 | 88.8 | 62.4 | 24.6 | 11.2 | 8.5 | 2.7 |
| 2005 | 100.0 | 88.8 | 61.9 | 26.9 | 11.2 | 8.5 | 2.7 |
| 2006 | 100.0 | 88.8 | 61.6 | 27.3 | 11.2 | 8.4 | 2.7 |
| 2007 | 100.0 | 88.8 | 61.5 | 27.4 | 11.2 | 8.4 | 2.8 |

[^40]enrollment numbers are taken from the Private School Survey (PSS). Private school enrollment figures for grades K-8 private school enrollment numbers are also taken from the PSS. Private school enrollment figures for grades K-8 and 9-12 for the years 1988-93 are estimated from the K-12 totals. Projections are based on data through 1994. Enrollment figures may not add to totals due to rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 3 and Projections of Education Statistics to 2007, 1997, table 1.

Table 44-3 Public elementary and secondary school enrollment (in thousands), by region: Fall 1970-95

| Fall of year | United States | Northeast |  | Midwest |  | South |  | West |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| 1970 | 45,893 | 9,859 | 21.5 | 12,935 | 28.2 | 14,759 | 32.2 | 8,339 | 18.2 |
| 1971 | 46,071 | 9,971 | 21.6 | 12,969 | 28.2 | 14,777 | 32.1 | 8,352 | 18.1 |
| 1972 | 45,726 | 9,961 | 21.8 | 12,868 | 28.1 | 14,632 | 32.0 | 8,262 | 18.1 |
| 1973 | 45,444 | 9,848 | 21.7 | 12,666 | 27.9 | 14,677 | 32.3 | 8,252 | 18.2 |
| 1974 | 45,073 | 9,755 | 21.6 | 12,510 | 27.8 | 14,626 | 32.5 | 8,180 | 18.2 |
| 1975 | 44,819 | 9,679 | 21.6 | 12,294 | 27.4 | 14,654 | 32.7 | 8,190 | 18.3 |
| 1976 | 43,310 | 9,464 | 21.9 | 12,097 | 27.9 | 14,578 | 33.7 | 8,171 | 18.9 |
| 1977 | 43,577 | 9,156 | 21.0 | 11,763 | 27.0 | 14,560 | 33.4 | 8,096 | 18.6 |
| 1978 | 42,550 | 8,828 | 20.7 | 11,320 | 26.6 | 14,431 | 33.9 | 7,970 | 18.7 |
| 1979 | 41,650 | 8,479 | 20.4 | 11,031 | 26.5 | 14,258 | 34.2 | 7,881 | 18.9 |
| 1980 | 40,877 | 8,215 | 20.1 | 10,698 | 26.2 | 14,134 | 34.6 | 7,831 | 19.2 |
| 1981 | 40,044 | 7,891 | 19.7 | 10,372 | 25.9 | 13,990 | 34.9 | 7,791 | 19.5 |
| 1982 | ${ }^{1} 39,566$ | 7,674 | 19.4 | 10,139 | 25.6 | 13,945 | 35.2 | 7,807 | 19.7 |
| 1983 | 39,252 | 7,513 | 19.1 | 9,986 | 25.4 | 13,914 | 35.4 | 7,839 | 20.0 |
| 1984 | 39,208 | 7,395 | 18.9 | 9,889 | 25.2 | 13,963 | 35.6 | 7,961 | 20.3 |
| 1985 | ${ }^{1} 39,422$ | 7,318 | 18.6 | 9,862 | 25.0 | 14,117 | 35.8 | 8,124 | 20.6 |
| 1986 | 39,753 | 7,294 | 18.3 | 9,871 | 24.8 | 14,312 | 36.0 | 8,276 | 20.8 |
| 1987 | 40,008 | 7,252 | 18.1 | 9,870 | 24.7 | 14,419 | 36.0 | 8,468 | 21.2 |
| 1988 | ${ }^{1} 40,189$ | 7,208 | 17.9 | 9,846 | 24.5 | 14,491 | 36.1 | 8,644 | 21.5 |
| 1989 | ${ }^{1} 40,543$ | 7,200 | 17.8 | 9,849 | 24.3 | 14,605 | 36.0 | 8,889 | 21.9 |
| 1990 | 41,217 | 7,282 | 17.7 | 9,944 | 24.1 | 14,807 | 35.9 | 9,184 | 22.3 |
| 1991 | 42,047 | 7,407 | 17.6 | 10,080 | 24.0 | 15,021 | 35.7 | 9,479 | 22.5 |
| $1992{ }^{1}$ | 42,823 | 7,526 | 17.6 | 10,198 | 23.8 | 15,357 | 35.9 | 9,742 | 22.7 |
| $1993{ }^{1}$ | 43,465 | 7,654 | 17.6 | 10,289 | 23.7 | 15,591 | 35.9 | 9,931 | 22.8 |
| $1994{ }^{1}$ | 44,109 | 7,761 | 17.6 | 10,385 | 23.5 | 15,849 | 35.9 | 10,114 | 22.9 |
| $1995{ }^{2}$ | 44,662 | 7,919 | 17.7 | 10,487 | 23.5 | 16,018 | 35.9 | 10,238 | 22.9 |

'Revised from previously published figures.
${ }^{2}$ Data estimated by state education agencies.
NOTE: Enrollment figures and percentages may not add to totals due to rounding. Enrollment includes most kindergartners and a relatively small number of nursery school students. The regions of the United States for this analysis are those used by the Census Bureau in the Current Population Survey (CPS). The regions and their states follow: Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island,

Vermont. Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin. South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia. West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 39.

Table 45-1 Percentage of public schools that enrolled students with limited English proficiency, that provided bilingual or ESL programs, and that found it difficult or impossible to fill teacher vacancies in this field, by region and state: School years 1987-88, 1990-91, and 1993-94

| Region and state | Percentage <br> of schools <br> with LEP <br> students <br> $1993-94$ | Percentage of schools providing: |  |  |  |  |  | Percentage of schools with bilingual/ESL vacancies that found them difficult or impossible to fill* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bilingual programs |  | ESL programs |  | Either bilingual or ESL programs |  |  |  |
|  |  | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1990-91 | 1993-94 |
| Total | 46.3 | 20.0 | 17.8 | 34.4 | 42.7 | 39.6 | 44.3 | 38.2 | 27.2 |
| Region |  |  |  |  |  |  |  |  |  |
| Northeast | 52.2 | 20.1 | 14.1 | 46.4 | 53.2 | 49.8 | 54.0 | 39.7 | 12.8 |
| Midwest | 26.6 | 11.9 | 9.6 | 18.9 | 23.7 | 23.8 | 25.2 | 33.5 | 23.5 |
| South | 44.4 | 14.9 | 14.0 | 28.2 | 38.7 | 32.8 | 40.6 | 32.1 | 26.7 |
| West | 72.3 | 40.0 | 38.3 | 56.1 | 66.9 | 64.4 | 68.9 | 44.4 | 34.5 |
| State |  |  |  |  |  |  |  |  |  |
| Alabama | 14.5 | 8.1 | 1.6 | 7.5 | 10.8 | 12.0 | 11.1 | - | - |
| Alaska | 48.7 | 73.9 | 60.5 | 38.0 | 48.3 | 79.2 | 72.8 | - | - |
| Arizona | 87.5 | 42.9 | 37.0 | 63.9 | 78.5 | 73.5 | 80.2 | 41.3 | 32.0 |
| Arkansas | 28.4 | 3.9 | 6.2 | 7.7 | 21.3 | 10.2 | 22.3 | - | - |
| California | 90.3 | 52.6 | 53.4 | 73.4 | 84.0 | 80.4 | 84.6 | 51.1 | 41.6 |
| Colorado | 56.2 | 32.0 | 25.2 | 52.2 | 55.9 | 63.0 | 58.7 | - | - |
| Connecticut | 52.5 | 23.7 | 8.5 | 50.0 | 56.0 | 57.6 | 56.9 | - | - |
| Delaware | 62.5 | 24.2 | 14.8 | 22.8 | 50.5 | 33.6 | 50.5 | - | - |
| District of Columbia | 47.1 | 18.2 | 19.1 | 28.3 | 42.4 | 34.6 | 44.2 | - | - |
| Florida | 66.5 | 28.8 | 25.6 | 38.7 | 60.2 | 47.6 | 60.9 | 6.8 | 4.6 |
| Georgia | 34.4 | 8.9 | 8.7 | 19.3 | 32.0 | 24.1 | 33.0 | - | - |
| Hawaii | 96.3 | 56.9 | 39.8 | 88.1 | 90.7 | 95.7 | 93.7 | - | - |
| Idaho | 63.5 | 27.3 | 26.4 | 37.3 | 52.8 | 46.7 | 54.1 | - | - |
| Illinois | 33.0 | 18.9 | 16.5 | 27.7 | 30.0 | 34.7 | 30.7 | - | - |
| Indiana | 27.5 | 8.2 | 5.8 | 12.1 | 18.3 | 13.6 | 20.2 | - | - |
| lowa | 16.5 | 8.1 | 2.8 | 19.6 | 18.3 | 20.9 | 18.3 | - | - |
| Kansas | 15.8 | 7.4 | 9.8 | 16.5 | 19.2 | 21.1 | 20.5 | - | - |
| Kentucky | 14.4 | 5.6 | 3.2 | 8.6 | 12.8 | 10.2 | 14.6 | - | - |
| Lovisiana | 21.6 | 8.3 | 7.8 | 21.2 | 18.9 | 24.2 | 21.9 | - | - |
| Maine | 24.2 | 4.2 | 3.5 | 14.6 | 26.7 | 18.8 | 27.8 | - | - |
| Maryland | 49.7 | 8.5 | 4.5 | 43.8 | 48.4 | 43.8 | 49.5 | - | - |
| Massachusetts | 56.9 | 29.6 | 20.5 | 49.7 | 55.2 | 55.4 | 55.3 | - | 22.5 |
| Michigan | 43.5 | 26.1 | 20.0 | 18.8 | 34.6 | 33.8 | 38.4 | - | - |
| Minnesota | 32.4 | 12.3 | 5.8 | 38.8 | 33.3 | 40.8 | 34.1 | - | - |
| Mississippi | 14.9 | 10.6 | 4.6 | 8.4 | 11.8 | 14.9 | 12.8 | - | - |
| Missouri | 19.0 | 3.5 | 2.1 | 11.7 | 19.5 | 13.4 | 20.2 | - | - |
| Montana | 15.3 | 8.8 | 8.6 | 8.7 | 7.9 | 13.4 | 13.7 | - | - |
| Nebraska | 12.8 | 6.1 | 4.9 | 12.6 | 12.5 | 13.5 | 15.1 | - | - |

Table 45-1 Percentage of public schools that enrolled students with limited English proficiency, that provided bilingual or ESL programs, and that found it difficult or impossible to fill teacher vacancies in this field, by region and state: School years 1987-88, 1990-91, and 1993-94-Continued

| Region and state | $\begin{array}{r} \text { Percentage } \\ \text { of schools } \\ \text { with LEP } \\ \text { students } \end{array}$ | Percentage of schools providing: |  |  |  |  |  | Percentage of schools with bilingual/ESL vacancies that found them difficult or impossible to fill ${ }^{*}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bilingual programs |  | ESL programs |  | Either bilingual or ESL programs |  |  |  |
|  |  | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1990-91 | 1993-94 |
| Nevada | 71.2 | 16.8 | 23.1 | 50.9 | 66.9 | 57.2 | 67.4 | - | - |
| New Hampshire | 24.2 | 15.3 | 2.7 | 33.8 | 33.5 | 37.6 | 33.5 | - | - |
| New Jersey | 62.9 | 23.7 | 17.0 | 66.0 | 63.8 | 67.7 | 65.2 | - | - |
| New Mexico | 77.1 | 44.7 | 66.3 | 49.1 | 72.2 | 59.5 | 77.2 | 26.5 | 36.8 |
| New York | 69.1 | 25.7 | 21.3 | 56.3 | 65.9 | 59.7 | 66.3 | 33.6 | 9.5 |
| North Carolina | 48.1 | 7.2 | 13.3 | 13.1 | 36.5 | 17.9 | 38.0 | - | - |
| North Dakota | 16.8 | 7.9 | 6.2 | 13.4 | 15.1 | 17.3 | 17.2 | - | - |
| Ohio | 24.4 | 6.9 | 8.6 | 15.7 | 20.9 | 18.1 | 22.6 | - | - |
| Oklahoma | 38.6 | 16.2 | 16.2 | 15.5 | 26.0 | 23.2 | 31.8 | - | - |
| Oregon | 55.3 | 14.3 | 20.6 | 33.9 | 53.2 | 36.4 | 53.2 | - | - |
| Pennsylvania | 34.0 | 10.2 | 7.1 | 30.0 | 40.4 | 31.8 | 41.7 | - | - |
| Rhode Island | 58.0 | 26.4 | 6.3 | 58.0 | 50.8 | 63.7 | 51.7 | - | - |
| South Carolina | 32.7 | 6.7 | 2.2 | 11.9 | 28.2 | 11.9 | 28.2 | - | - |
| South Dakota | 8.8 | 12.7 | 2.6 | 9.5 | 7.1 | 16.0 | 7.5 | - | - |
| Tennessee | 19.6 | 6.5 | 0.8 | 13.1 | 13.9 | 15.8 | 14.2 | - | - |
| Texas | 77.6 | 34.0 | 32.1 | 65.9 | 71.0 | 73.4 | 74.5 | 45.8 | 40.1 |
| Utah | 61.2 | 24.1 | 20.9 | 20.9 | 52.7 | 32.1 | 53.9 | - | - |
| Vermont | 20.1 | 3.1 | 3.1 | 12.9 | 20.1 | 14.4 | 20.1 | - | - |
| Virginia | 45.6 | 4.1 | 5.2 | 26.2 | 42.5 | 26.2 | 43.8 | - | - |
| Washington | 62.1 | 27.2 | 17.8 | 47.0 | 58.4 | 53.2 | 59.3 | - | 19.2 |
| West Virginia | 7.3 | - | 0.0 | 3.4 | 3.0 | 4.6 | 3.0 | - | - |
| Wisconsin | 27.2 | 6.5 | 6.7 | 17.2 | 24.8 | 19.3 | 25.1 | - | - |
| Wyoming | 17.9 | 14.1 | 5.6 | 23.7 | 14.8 | 28.1 | 15.4 | - | - |

- Too few sample observations for a reliable estimate.
* Percentage of schools that had difficulty filling vacancies was not available for 1987-88.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88, 1990-91, and 1993-94 (School Questionnaire).

Table 45-2 Percentage of public schools that enrolled students with limited English proficiency, that provided bilingual or ESL programs, and that found it difficult or impossible to fill teacher vacancies in this field, by selected school characteristics: School years 1987-88, 1990-91, and 1993-94

| Selected School characteristics | Percentage <br> of schools <br> with LEP <br> students <br> $1993-94$ | Percentage of schools providing: |  |  |  |  |  | Percentage of schools with bilingual/ESL vacancies that found them difficult or impossible to fill* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bilingual programs |  | ESL programs |  | Either bilingual or ESL programs |  |  |  |
|  |  | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1990-91 | 1993-94 |
| Total | 46.3 | 20.0 | 17.8 | 34.4 | 42.7 | 39.6 | 44.3 | 38.2 | 27.2 |
| Level of school |  |  |  |  |  |  |  |  |  |
| Elementary | 48.9 | 21.0 | 18.9 | 35.4 | 45.0 | 40.9 | 46.6 | 39.9 | 25.8 |
| Secondary | 41.2 | 18.0 | 14.8 | 35.2 | 38.4 | 39.3 | 39.6 | 38.5 | 32.0 |
| Urbanicity |  |  |  |  |  |  |  |  |  |
| Central city | 61.4 | 32.2 | 29.2 | 47.0 | 54.0 | 54.0 | 56.0 | 40.5 | 33.1 |
| Urban fringe/large town | 60.7 | 22.0 | 16.9 | 49.5 | 57.6 | 54.5 | 58.9 | 40.4 | 16.9 |
| Rural/small town | 31.1 | 12.7 | 12.8 | 19.5 | 29.0 | 23.9 | 30.6 | 32.6 | 30.0 |
| School size |  |  |  |  |  |  |  |  |  |
| 1-149 | 15.8 | 13.0 | 7.9 | 12.7 | 13.3 | 17.9 | 15.6 | 23.8 | 24.0 |
| 150-499 | 39.3 | 15.4 | 14.9 | 28.8 | 36.2 | 33.8 | 37.9 | 34.0 | 21.6 |
| 500-749 | 58.2 | 24.6 | 21.0 | 41.9 | 54.3 | 47.5 | 56.0 | 41.6 | 28.9 |
| 750 or more | 68.1 | 32.0 | 27.5 | 54.5 | 62.6 | 60.0 | 63.3 | 39.8 | 31.4 |
| School size within level of school |  |  |  |  |  |  |  |  |  |
| Elementary |  |  |  |  |  |  |  |  |  |
| 1-349 | 29.2 | 13.0 | 11.1 | 22.2 | 26.9 | 26.8 | 28.7 | 45.8 | 19.1 |
| 350-549 | 51.4 | 20.5 | 18.0 | 38.7 | 47.2 | 44.8 | 48.9 | 37.6 | 21.0 |
| 550 or more | 67.8 | 33.0 | 28.2 | 49.8 | 62.3 | 56.2 | 63.7 | 39.7 | 31.2 |
| Secondary |  |  |  |  |  |  |  |  |  |
| 1-349 | 20.2 | 12.0 | 8.7 | 17.0 | 17.7 | 22.1 | 19.3 | - | 40.3 |
| 350-799 | 38.2 | 15.5 | 13.2 | 30.9 | 36.5 | 34.3 | 37.7 | 44.5 | 33.7 |
| 800 or more | 65.3 | 25.4 | 22.5 | 53.9 | 61.0 | 58.1 | 61.9 | 37.2 | 29.4 |
| School size within urbanicity |  |  |  |  |  |  |  |  |  |
| Central city |  |  |  |  |  |  |  |  |  |
| 1-449 | 44.4 | 24.6 | 21.8 | 35.6 | 37.3 | 43.2 | 39.9 | 47.2 | 30.7 |
| 450-649 | 67.3 | 30.6 | 31.2 | 43.2 | 59.1 | 51.6 | 61.2 | 44.9 | 27.4 |
| 650 or more | 73.6 | 42.2 | 35.0 | 62.7 | 66.9 | 68.3 | 68.1 | 36.5 | 38.0 |
| Urban fringe/large town |  |  |  |  |  |  |  |  |  |
| 1-449 | 47.1 | 15.6 | 10.7 | 41.5 | 45.1 | 45.8 | 46.5 | 30.4 | 2.6 |
| 450-649 | 65.7 | 24.6 | 17.1 | 52.7 | 60.8 | 58.7 | 62.3 | 52.4 | 27.0 |
| 650 or more | 71.4 | 28.6 | 23.7 | 57.9 | 68.7 | 62.8 | 69.7 | 37.8 | 17.1 |
| Rural/small town |  |  |  |  |  |  |  |  |  |
| 1-249 | 18.1 | 10.7 | 9.5 | 12.7 | 17.0 | 16.8 | 18.9 | 34.3 | 13.6 |
| 250-449 | 30.3 | 12.2 | 13.0 | 18.5 | 28.2 | 22.9 | 30.3 | 26.1 | 25.0 |
| 450 or more | 44.4 | 15.1 | 15.9 | 27.4 | 41.1 | 32.0 | 42.0 | 34.8 | 39.0 |

Table 45-2 Percentage of public schools that enrolled students with limited English proficiency, that provided bilingual or ESL programs, and that found it difficult or impossible to fill teacher vacancies in this field, by selected school characteristics: School years 1987-88, 1990-91, and 1993-94-Continued

| Selected School characteristics | Percentageof schoolswith LEPstudents | Percentage of schools providing: |  |  |  |  |  | Percentage of schools with bilingual/ESL vacancies that found them difficult or impossible to fill ${ }^{*}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bilingual programs |  | ESL programs |  | Either bilingual or ESL programs |  |  |  |
|  |  | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1990-91 | 1993-94 |
| Percentage of students receiving free or reduced-price lunch |  |  |  |  |  |  |  |  |  |
| 0-5 | 52.1 | 16.8 | 10.3 | 50.3 | 52.8 | 54.5 | 54.0 | 44.9 | 24.6 |
| 6-20 | 46.4 | 16.5 | 9.5 | 35.7 | 44.0 | 40.3 | 44.8 | 37.0 | 26.4 |
| 21-40 | 44.7 | 17.8 | 16.5 | 28.1 | 39.9 | 33.2 | 41.3 | 24.7 | 25.6 |
| 41 or more | 48.0 | 27.9 | 27.0 | 34.2 | 42.8 | 40.5 | 45.1 | 43.9 | 29.5 |
| Percentage of students receiving free or reduced-price lunch within urbanicity |  |  |  |  |  |  |  |  |  |
| Central city |  |  |  |  |  |  |  |  |  |
| Less than 20 percent | 55.4 | 24.5 | 13.6 | 46.8 | 48.8 | 53.8 | 49.5 | 39.1 | 42.5 |
| 20 percent or more | 63.8 | 36.5 | 33.7 | 47.9 | 56.1 | 55.1 | 58.2 | 40.9 | 33.8 |
| Urban fringe/large town |  |  |  |  |  |  |  |  |  |
| Less than 20 percent | 63.4 | 18.4 | 10.1 | 54.8 | 62.2 | 58.7 | 63.3 | 41.9 | 16.8 |
| 20 percent or more | 59.5 | 28.4 | 25.1 | 40.9 | 54.8 | 47.9 | 56.5 | 41.2 | 18.2 |
| Rural/small town |  |  |  |  |  |  |  |  |  |
| Less than 20 percent | 30.7 | 11.3 | 8.0 | 22.5 | 30.4 | 26.5 | 31.3 | 33.8 | 27.8 |
| 20 percent or more | 32.3 | 13.5 | 15.5 | 18.5 | 28.6 | 22.9 | 30.6 | 32.8 | 29.1 |

- Too few sample observations for a reliable estimate.
* Percentage of schools that had difficulty filling vacancies was not available for 1987-88.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88, 1990-91, and 1993-94 (School Questionnaire).

Table 46-1 Number of children who were served by federally supported programs for students with disabilities, by type of disability: School years ending 1977-95

| Type of disability | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number served (in thousands) |  |  |  |  |  |  |  |  |  |  |
| All disabilities | 3,692 | 3,751 | 3,889 | 4,005 | 4,142 | 4,198 | 4,255 | 4,298 | 4,315 | 4,317 |
| Specific learning disabilities | 796 | 964 | 1,130 | 1,276 | 1,462 | 1,622 | 1,741 | 1,806 | 1,832 | 1,862 |
| Speech or language impairments | 1,302 | 1,223 | 1,214 | 1,186 | 1,168 | 1,135 | 1,131 | 1,128 | 1,126 | 1,125 |
| Mental retardation | 959 | 933 | 901 | 869 | 829 | 786 | 757 | 727 | 694 | 660 |
| Serious emotional disturbance | 283 | 288 | 300 | 329 | 346 | 339 | 352 | 361 | 372 | 375 |
| Hearing impairments | 87 | 85 | 85 | 80 | 79 | 75 | 73 | 72 | 69 | 66 |
| Orthopedic impairments | 87 | 87 | 70 | 66 | 58 | 58 | 57 | 56 | 56 | 57 |
| Other health impairments | 141 | 135 | 105 | 106 | 98 | 79 | 50 | 53 | 68 | 57 |
| Visual impairments | 38 | 35 | 32 | 31 | 31 | 29 | 28 | 29 | 28 | 27 |
| Multiple disabilities | - | - | 50 | 60 | 68 | 71 | 63 | 65 | 69 | 86 |
| Deaf-blindness | - | - | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 |
| Preschool disabled ${ }^{1}$ | $\left(^{2}\right)$ | $\left(^{2}\right)$ | $\left.{ }^{2}\right)$ | $\left.1^{2}\right)$ | $\left(^{2}\right)$ | $\left.1^{2}\right)$ | $\left.1^{2}\right)$ | $\left.1^{2}\right)$ | $\left(^{2}\right)$ | (2) |


| Type of disability | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | $1994^{3}$ | $1995^{4}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | Number served (in thousands) |  |  |  |  |  |  |  |
| All disabilities | $\mathbf{4 , 3 7 4}$ | $\mathbf{4 , 4 4 7}$ | $\mathbf{4 , 5 4 4}$ | $\mathbf{4 , 6 4 1}$ | $\mathbf{4 , 7 6 2}$ | $\mathbf{4 , 9 4 9}$ | $\mathbf{5 , 1 2 5}$ | $\mathbf{5 , 3 1 8}$ | $\mathbf{5 , 4 4 0}$ |
| Specific learning disabilities | 1,914 | 1,928 | 1,987 | 2,050 | 2,130 | 2,234 | 2,354 | 2,424 | 2,508 |
| Speech or language impairments | 1,136 | 953 | 967 | 973 | 985 | 997 | 996 | 1,005 | 1,022 |
| Mental retardation | 643 | 582 | 564 | 548 | 534 | 538 | 519 | 536 | 570 |
| Serious emotional disturbance | 383 | 373 | 376 | 381 | 390 | 399 | 401 | 413 | 428 |
| Hearing impairments | 65 | 56 | 56 | 57 | 58 | 60 | 60 | 63 | 65 |
| Orthopedic impairments | 57 | 47 | 47 | 48 | 49 | 51 | 52 | 56 | 61 |
| Other health impairments | 52 | 45 | 43 | 52 | 55 | 58 | 65 | 82 | 106 |
| Visual impairments | 26 | 22 | 23 | 22 | 23 | 24 | 23 | 24 | 25 |
| Multiple disabilities | 97 | 77 | 85 | 86 | 96 | 97 | 102 | 108 | 89 |
| Deaf-blindness | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| Preschool disabled ${ }^{\prime}$ | $\left.\mathbf{c}^{2}\right)$ | 363 | 394 | 422 | 441 | 484 | 531 | 582 | 524 |

- Not available.
${ }^{1}$ Includes preschool children aged 3-5 who were served under Chapter 1 of the Education Consolidation and Improvement Act (ECIA) and those aged $0-5$ who were served under Part B of the Individuals with Disabilities Education Act (IDEA), respectively.
${ }^{2}$ Prior to the 1987-88 school year, preschool disabled students were included in the counts by disabling condition. Beginning in the 198788 school year, states were no longer required to report preschool students ( $0-5$ years) with disabilities by disabling condition.
${ }^{3}$ Revised from previously published figures.
${ }^{4}$ Data for 1995 are for children aged 3-21.

NOTE: This analysis includes students who were served under Chapter 1 of the ECIA and Part B of IDEA. Counts are based on reports from the 50 states and the District of Columbia only (i.e., figures from the U.S. territories are not included). Increases since 1987-88 are due in part to new legislation enacted in fall 1986, which mandates public school appropriate education services for all disabled children aged $3-5$. Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, Office of Special Education and Rehabilitative Services, Eighteenth Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, Tables 1.3, AA1, and AA2; and National Center for Education Statistics, Digest of Education Statistics, 1996, table 51.

Table 46-2 Participation in special education programs as a percentage of total public school enrollment, by selected types of disability, sex, and race/ethnicity of student: School years ending 1986, 1988, 1990, and 1992

| Type of disability | 1986 | 1988 | 1990 | 1992 |
| :---: | :---: | :---: | :---: | :---: |
|  | Total |  |  |  |
| All disabilities listed | 6.2 | 6.3 | 6.8 | 7.3 |
| Specific learning disabilities | 4.3 | 4.4 | 4.8 | 5.3 |
| Mental retardation* | 1.3 | 1.3 | 1.3 | 1.3 |
| Serious emotional disturbance | 0.6 | 0.6 | 0.7 | 0.7 |
|  | Male |  |  |  |
| All disabilities listed | 8.2 | 8.6 | 9.2 | 9.7 |
| Specific learning disabilities | 5.8 | 6.2 | 6.6 | 7.2 |
| Mental retardation* | 1.4 | 1.6 | 1.6 | 1.5 |
| Serious emotional disturbance | 0.9 | 0.9 | 1.0 | 1.1 |
|  | Female |  |  |  |
| All disabilities listed | 4.0 | 4.1 | 4.4 | 4.7 |
| Specific learning disabilities | 2.6 | 2.7 | 3.0 | 3.3 |
| Mental retardation* | 1.1 | 1.1 | 1.1 | 1.1 |
| Serious emotional disturbance | 0.3 | 0.2 | 0.3 | 0.3 |
|  | White |  |  |  |
| All disabilities listed | 5.9 | 6.1 | 6.7 | 7.2 |
| Specific learning disabilities | 4.3 | 4.5 | 5.0 | 5.3 |
| Mental retardation* | 1.1 | 1.0 | 1.1 | 1.1 |
| Serious emotional disturbance | 0.6 | 0.6 | 0.7 | 0.7 |
|  | Black |  |  |  |
| All disabilities listed | 8.2 | 8.3 | 8.7 | 9.3 |
| Specific learning disabilities | 4.4 | 4.5 | 5.0 | 5.8 |
| Mental retardation* | 2.7 | 3.0 | 2.8 | 2.5 |
| Serious emotional disturbance | 1.0 | 0.8 | 0.9 | 1.0 |
|  | Hispanic |  |  |  |
| All disabilities listed | 5.5 | 6.2 | 6.3 | 6.5 |
| Specific learning disabilities | 4.3 | 4.5 | 4.7 | 5.3 |
| Mental retardation* | 0.8 | 1.4 | 1.3 | 0.8 |
| Serious emotional disturbance | 0.5 | 0.3 | 0.3 | 0.4 |

* Includes all students classified with any level of mental retardation.

NOTE: The National Summaries from the Elementary and Secondary School Civil Rights Survey report includes data for the three disability categories shown. Therefore, the "All disabilities listed" category shown in this table includes only the following three categories: specific learning disabilities, mental retardation, and serious emotional disturbance. Prior to the 1987-88 school year, preschool
disabled students were included in the counts by disabling condition. Beginning in the 1987-88 school year, states were no longer required to report preschool students ( $0-5$ years) with disabilities by disabling condition.
SOURCE: U.S. Department of Education, Office for Civil Rights, National Summaries from the Elementary and Secondary School Civil Rights Survey, various years.

Table 46-3 Percentage of public school children with disabilities who were served in various school environments, by type of disability and classroom environment: School years ending 1986-94

| Type of disability | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Regular class/resource room combined in regular school building |  |  |  |  |  |  |  |  |
| All disabilities | 69.0 | 69.2 | 69.0 | 69.6 | 69.2 | 69.3 | 71.2 | 71.5 | 72.9 |
| Specific learning disabilities | 77.8 | 76.8 | 76.7 | 77.5 | 76.8 | 76.2 | 78.8 | 78.7 | 80.4 |
| Speech or language impairments | 94.7 | 93.9 | 94.6 | 94.6 | 94.6 | 92.8 | 94.6 | 92.5 | 95.1 |
| Mental retardation | 28.8 | 29.8 | 29.2 | 28.0 | 26.5 | 30.4 | 30.5 | 33.9 | 34.7 |
| Serious emotional disturbance | 44.1 | 46.0 | 45.5 | 44.2 | 43.5 | 45.9 | 43.6 | 46.3 | 46.2 |
| Hearing impairments | 43.8 | 46.9 | 45.4 | 48.2 | 45.3 | 46.6 | 47.6 | 49.2 | 50.5 |
| Orthopedic impairments | 48.0 | 47.5 | 45.7 | 47.8 | 48.6 | 51.7 | 53.4 | 55.1 | 58.1 |
| Other health impairments | 47.6 | 59.0 | 51.5 | 50.3 | 53.4 | 57.8 | 62.9 | 67.4 | 67.1 |
| Visual impairments | 62.6 | 62.3 | 63.1 | 65.0 | 62.8 | 65.3 | 60.8 | 66.6 | 66.4 |
| Multiple disabilities | 20.6 | 24.3 | 20.1 | 21.4 | 20.5 | 23.8 | 24.3 | 26.7 | 28.8 |
| Deaf-blindness | 26.0 | 26.1 | 15.2 | 17.0 | 24.6 | 16.9 | 12.1 | 22.0 | 15.7 |
|  | Separate class in regular school building |  |  |  |  |  |  |  |  |
| All disabilities | 24.4 | 24.8 | 24.7 | 24.2 | 24.9 | 25.1 | 23.5 | 23.5 | 22.7 |
| Specific learning disabilities | 20.8 | 21.2 | 21.8 | 21.0 | 21.7 | 22.4 | 20.1 | 20.1 | 18.8 |
| Speech or language impairments | 3.7 | 4.1 | 3.8 | 3.8 | 3.8 | 5.6 | 3.9 | 6.0 | 4.5 |
| Mental retardation | 57.3 | 58.4 | 58.0 | 58.3 | 61.1 | 58.3 | 59.2 | 56.8 | 57.0 |
| Serious emotional disturbance | 36.1 | 36.8 | 34.5 | 35.8 | 37.1 | 35.8 | 36.9 | 35.2 | 35.3 |
| Hearing impairments | 32.5 | 32.9 | 35.1 | 33.4 | 31.7 | 32.8 | 31.3 | 28.1 | 30.6 |
| Orthopedic impairments | 31.0 | 33.4 | 32.0 | 33.7 | 34.7 | 33.1 | 34.4 | 34.1 | 33.3 |
| Other health impairments | 24.8 | 19.9 | 18.8 | 19.6 | 24.6 | 26.3 | 21.5 | 20.6 | 21.3 |
| Visual impairments | 19.2 | 21.9 | 21.0 | 20.6 | 21.1 | 19.9 | 19.6 | 18.0 | 18.3 |
| Multiple disabilities | 44.5 | 48.2 | 46.6 | 46.8 | 43.7 | 42.8 | 47.1 | 44.6 | 44.1 |
| Deaf-blindness | 22.2 | 37.5 | 36.9 | 29.6 | 29.9 | 32.0 | 36.5 | 31.4 | 34.2 |

SOURCE: U.S. Department of Education, Office of Special Education and Rehabilitative Services, Eighteenth Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, table AB2.

Table 46-4 Percentage distribution of children who were served by federally supported programs for students with disabilities, by type of disability: School years ending 1977-95

| Type of disability | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All disabilities | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Specific learning disabilities | 21.6 | 25.7 | 29.1 | 31.9 | 35.3 | 38.6 | 40.9 | 42.0 | 42.5 | 43.1 |
| Speech or language impairments | 35.3 | 32.6 | 31.2 | 29.6 | 28.2 | 27.0 | 26.6 | 26.2 | 26.1 | 26.1 |
| Mental retardation | 26.0 | 24.9 | 23.2 | 21.7 | 20.0 | 18.7 | 17.8 | 16.9 | 16.1 | 15.3 |
| Serious emotional disturbance | 7.7 | 7.7 | 7.7 | 8.2 | 8.4 | 8.1 | 8.3 | 8.4 | 8.6 | 8.7 |
| Hearing impairments | 2.4 | 2.3 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 | 1.5 |
| Orthopedic impairments | 2.4 | 2.3 | 1.8 | 1.6 | 1.4 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 |
| Other health impairments | 3.8 | 3.6 | 2.7 | 2.6 | 2.4 | 1.9 | 1.2 | 1.2 | 1.6 | 1.3 |
| Visual impairments | 1.0 | 0.9 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 |
| Multiple disabilities | - | - | 1.3 | 1.5 | 1.6 | 1.7 | 1.5 | 1.5 | 1.6 | 2.0 |
| Deaf-blindness | - | - | 0.1 | ${ }^{1} 0.0$ | 0.1 | ${ }^{1} 0.0$ | ${ }^{1} 0.0$ | ${ }^{1} 0.0$ | ${ }^{1} 0.0$ | ${ }^{1} 0.0$ |
| Preschool disabled ${ }^{2}$ | (3) | $\left.{ }^{3}\right)$ | (3) | (3) | (3) | (3) | (3) | $\left.{ }^{3}\right)$ | (3) | (3) |
|  |  |  |  |  |  |  |  |  |  |  |
| Type of disability | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | $1994{ }^{4}$ | $1995^{5}$ |  |
| All disabilities | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |  |
| Specific learning disabilities | 43.8 | 43.4 | 43.7 | 44.2 | 44.7 | 45.1 | 45.9 | 45.6 | 46.1 |  |
| Speech or language impairments | 26.0 | 21.4 | 21.3 | 21.0 | 20.7 | 20.1 | 19.4 | 18.9 | 18.8 |  |
| Mental retardation | 14.7 | 13.1 | 12.4 | 11.8 | 11.2 | 10.9 | 10.1 | 10.1 | 10.5 |  |
| Serious emotional disturbance | 8.8 | 8.4 | 8.3 | 8.2 | 8.2 | 8.1 | 7.8 | 7.8 | 7.9 |  |
| Hearing impairments | 1.5 | 1.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |  |
| Orthopedic impairments | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 |  |
| Other health impairments | 1.2 | 1.0 | 0.9 | 1.1 | 1.2 | 1.2 | 1.3 | 1.5 | 1.9 |  |
| Visual impairments | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 |  |
| Multiple disabilities | 2.2 | 1.7 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 1.6 |  |
| Deaf-blindness | ${ }^{1} 0.0$ | ${ }^{1} 0.0$ | ${ }^{1} 0.0$ | ${ }^{1} 0.0$ | ${ }^{1} 0.0$ | ${ }^{1} 0.0$ | ${ }^{1} 0.0$ | ${ }^{1} 0.0$ | ${ }^{1} 0.0$ |  |
| Preschool disabled ${ }^{2}$ | (3) | 8.2 | 8.7 | 9.1 | 9.3 | 9.8 | 10.4 | 10.9 | 9.6 |  |

- Not available.
${ }^{1}$ Percents less than 0.05 are rounded to 0.0 .
${ }^{2}$ Includes preschool children aged 3-5 who were served under Chapter 1 of the Education Consolidation and Improvement Act (ECIA) and those who were served under Part B of the Individuals with Disabilities and Education Act (IDEA), respectively.
${ }^{3}$ Prior to the 1987-88 school year, preschool disabled students were included in the counts by type of disabling condition. Beginning in the 1987-88 school year, states were no longer required to report preschool students ( $0-5$ years) with disabilities by disabling condition.
${ }^{4}$ Revised from previously published figures.
${ }^{5}$ Data for 1995 are for children aged 3-21.
NOTE: This analysis includes students who were served under Chapter 1 of the ECIA and Part B of IDEA. Counts are based on reports from the 50 states and the District of Columbia only (i.e., figures from the U.S. territories are not included). Increases since 1987-88 are due in part to new legislation enacted in fall 1986, which mandates public school appropriate education services for all disabled children aged $3-5$. Details may not add to totals due to rounding.
SOURCE: U.S. Department of Education, Office of Special Education and Rehabilitative Services, Eighteenth Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, Tables AA1 and AA2; and National Center for Education Statistics, Digest of Education Statistics, 1996, table 51.

Table 46-5 Children who were served by federally supported programs for students with disabilities, as a percentage of public K-12 enrollment, ${ }^{1}$ by type of disability: School years ending 1977-95

| Type of disability | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All disabilities | 8.3 | 8.6 | 9.1 | 9.6 | 10.1 | 10.5 | 10.8 | 10.9 | 11.0 | 11.0 |
| Specific learning disabilities | 1.8 | 2.2 | 2.7 | 3.1 | 3.6 | 4.1 | 4.4 | 4.6 | 4.7 | 4.7 |
| Speech or language impairments | 2.9 | 2.8 | 2.9 | 2.8 | 2.9 | 2.8 | 2.9 | 2.9 | 2.9 | 2.9 |
| Mental retardation | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 1.9 | 1.9 | 1.8 | 1.7 |
| Serious emotional disturbance | 0.6 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 1.0 |
| Hearing impairments | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Orthopedic impairments | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Other health impairments | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 |
| Visual impairments | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Multiple disabilities | - | - | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Deaf-blindness | - | - | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ |
| Preschool disabled ${ }^{3}$ | $\left.{ }^{4}\right)$ | ( ${ }^{4}$ ) | ( ${ }^{4}$ ) | $\left.{ }^{4}\right)$ | ( ${ }^{4}$ | $\left.{ }^{4}\right)$ | ( ${ }^{4}$ | ( ${ }^{4}$ | ( ${ }^{4}$ | ( ${ }^{4}$ ) |
| Type of disability | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | $1994{ }^{5}$ | $1995{ }^{6}$ |  |
| All disabilities | 11.0 | 11.1 | 11.3 | 11.4 | 11.6 | 11.8 | 12.0 | 12.2 | 12.3 |  |
| Specific learning disabilities | 4.8 | 4.8 | 4.9 | 5.1 | 5.2 | 5.3 | 5.5 | 5.6 | 5.7 |  |
| Speech or language impairments | 2.9 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 |  |
| Mental retardation | 1.6 | 1.5 | 1.4 | 1.4 | 1.3 | 1.3 | 1.2 | 1.2 | 1.3 |  |
| Serious emotional disturbance | 1.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 |  |
| Hearing impairments | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |  |
| Orthopedic impairments | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |  |
| Other health impairments | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |  |
| Visual impairments | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |  |
| Multiple disabilities | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |  |
| Deaf-blindness | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ | ${ }^{2} 0.0$ |  |
| Preschool disabled ${ }^{3}$ | $\left.{ }^{4}\right)$ | 0.9 | 1.0 | 1.0 | 1.1 | 1.2 | 1.2 | 1.3 | 1.2 |  |

- Not available.
${ }^{1}$ Based on the kindergarten through grade 12 enrollment in public schools including a relatively small number of prekindergarten students.
${ }^{2}$ Percents less than 0.05 are rounded to 0.0.
${ }^{3}$ Includes preschool children aged 3-5 who were served under Chapter 1 of the Elementary Consolidation and Improvement Act (ECIA) and those aged 0-5 who were served under Part B of the Individuals with Disabilities Education Act (IDEA), respectively.
${ }^{4}$ Prior to the 1987-88 school year, preschool disabled students were included in the counts by disabling condition. Beginning in the 198788 school year, states were no longer required to report disabled preschool students (aged 0-5) by disabling condition.
${ }^{5}$ Revised from previously published figures.
${ }^{6}$ Data for 1995 are for children aged 3-21.
NOTE: This analysis includes students who were served under Chapter 1 of the ECIA and Part B of IDEA. Details may not add to totals due to rounding.
SOURCE: U.S. Department of Education, Office of Special Education and Rehabilitative Services, Eighteenth Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, Tables 1.3, AA 1, and AA2; and National Center for Education Statistics, Digest of Education Statistics, 1996, tables 3 and 51.

Table 46-6 Ratio of the number of students with disabilities per special education teacher serving them, by type of disability: Selected school years ending 1977-94

| Type of disability | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1990 | 1991 | 1992 | 1993 | 1994 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| All disabilities | $\mathbf{2 1}$ | $\mathbf{1 9}$ | $\mathbf{1 9}$ | $\mathbf{1 8}$ | $\mathbf{1 8}$ | $\mathbf{1 8}$ | $\mathbf{1 8}$ | $\mathbf{1 6}$ | $\mathbf{1 6}$ | $\mathbf{1 6}$ | $\mathbf{1 6}$ | $\mathbf{1 6}$ |
| Specific learning disabilities | 18 | 18 | 18 | 17 | 17 | 19 | 21 | 23 | 22 | 23 | 24 | 26 |
| Speech or language impairments | 71 | 62 | 64 | 49 | 48 | 56 | 58 | 25 | 25 | 23 | 24 | 25 |
| Mental retardation | 14 | 12 | 13 | 13 | 12 | 12 | 13 | 13 | 12 | 12 | 12 | 13 |
| Serious emotional disturbance | 13 | 14 | 13 | 12 | 13 | 14 | 13 | 14 | 13 | 14 | 14 | 14 |
| Hearing impairments | 10 | 10 | 9 | 9 | 10 | 9 | 9 | 9 | 9 | 9 | 9 | 10 |
| Orthopedic impairments | 16 | 18 | 12 | 14 | 13 | 12 | 13 | 15 | 15 | 14 | 15 | 18 |
| Other health impairments | 28 | 26 | 21 | 21 | 31 | 22 | 16 | 19 | 19 | 27 | 30 | 35 |
| Visual impairments | 11 | 10 | 8 | 9 | 9 | 10 | 9 | 8 | 8 | 8 | 8 | 9 |
| Multiple disabilities | - | - | - | 15 | 13 | 13 | 12 | 11 | 13 | 13 | 13 | 14 |
| Deaf-blindness | - | - | - | 3 | 8 | 5 | 2 | 14 | 4 | 7 | 6 | 8 |

- Not available.

SOURCE: U.S. Department of Education, Office of Special Education and Rehabilitative Services, Eighteenth Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, table 1.9.

Table 47-1 Percentage of high school seniors who reported using alcohol or drugs any time during the previous year, by type of drug: 1975-96

| Type of drug | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1985 |  |  |  |  |  |  |  |  |  |  |
| Alcohol | 84.8 | 85.7 | 87.0 | 87.7 | 88.1 | 87.9 | 87.0 | 86.8 | 87.3 | 86.0 |
| Marijuana | 40.0 | 44.5 | 47.6 | 50.2 | 50.8 | 48.8 | 46.1 | 44.3 | 42.3 | 40.0 |
| 40.6 |  |  |  |  |  |  |  |  |  |  |
| Any illicit drug other than marijuana | 26.2 | 25.4 | 26.0 | 27.1 | 28.2 | 30.4 | 34.0 | 30.1 | 28.4 | 28.0 |
| 27.4 |  |  |  |  |  |  |  |  |  |  |
| Stimulants | 16.2 | 15.8 | 16.3 | 17.1 | 18.3 | 20.8 | 26.0 | 20.3 | 17.9 | 17.7 |
| Inhalants | - | 3.0 | 3.7 | 4.1 | 5.4 | 4.6 | 4.1 | 4.5 | 4.3 | 5.1 |
| 5.7 |  |  |  |  |  |  |  |  |  |  |
| LSD | 7.2 | 6.4 | 5.5 | 6.3 | 6.6 | 6.5 | 6.5 | 6.1 | 5.4 | 4.7 |
| Cocaine | 5.6 | 6.0 | 7.2 | 9.0 | 12.0 | 12.3 | 12.4 | 11.5 | 11.4 | 11.6 |
| 13.1 |  |  |  |  |  |  |  |  |  |  |
| Sedatives | 11.7 | 10.7 | 10.8 | 9.9 | 9.9 | 10.3 | 10.5 | 9.1 | 7.9 | 6.6 |
| Tranquilizers | 10.6 | 10.3 | 10.8 | 9.9 | 9.6 | 8.7 | 8.0 | 7.0 | 6.9 | 6.1 |


| Type of drug | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alcohol | 84.5 | 85.7 | 85.3 | 82.7 | 80.6 | 77.7 | 76.8 | *72.7 | *73.0 | *73.7 | *72.5 |
| Marijuana | 38.8 | 36.3 | 33.1 | 29.6 | 27.0 | 23.9 | 21.9 | 26.0 | 30.7 | 34.7 | 35.8 |
| Any illicit drug other than marijuana | 25.9 | 24.1 | 21.1 | 20.0 | 17.9 | 16.2 | 14.9 | 17.1 | 18.0 | 19.4 | 19.8 |
| Stimulants | 13.4 | 12.2 | 10.9 | 10.8 | 9.1 | 8.2 | 7.1 | 8.4 | 9.4 | 9.3 | 9.5 |
| Inhalants | 6.1 | 6.9 | 6.5 | 5.9 | 6.9 | 6.6 | 6.2 | 7.0 | 7.7 | 8.0 | 7.6 |
| LSD | 4.5 | 5.2 | 4.8 | 4.9 | 5.4 | 5.2 | 5.6 | 6.8 | 6.9 | 8.4 | 8.8 |
| Cocaine | 12.7 | 10.3 | 7.9 | 6.5 | 5.3 | 3.5 | 3.1 | 3.3 | 3.6 | 4.0 | 4.9 |
| Sedatives | 5.2 | 4.1 | 3.7 | 3.7 | 3.6 | 3.6 | 2.9 | 3.4 | 4.2 | 4.9 | - |
| Tranquilizers | 5.8 | 5.5 | 4.8 | 3.8 | 3.5 | 3.6 | 2.8 | 3.5 | 3.7 | 4.4 | 4.6 |

- Not available.
* In 1993, the questions regarding alcohol consumption changed; therefore, data for alcohol use in 1993-96 may not be comparable to earlier years. For example, in 1993, the original wording produced an estimate of 76 percent for alcohol use.

NOTE: Only drug use not under a doctor's orders is included.
SOURCE: University of Michigan, Survey Research Center, Institute for Social Research, Monitoring the Future Study.
$\begin{array}{ll}\text { Table 47-2 } & \begin{array}{l}\text { Percentage of students who reported using alcohol or drugs any time during the } \\ \text { previous } 30 \text { days, by type of drug and grade: 1991-1996 }\end{array}\end{array}$

| Type of drug and grade | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alcohol |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 25.1 | 26.1 | *24.3 | *25.5 | *24.6 | *26.2 |
| $10^{\text {th }}$-graders | 42.8 | 39.9 | *38.2 | *39.2 | *38.8 | *40.4 |
| $12^{\text {th }}$-graders | 54.0 | 51.3 | *48.6 | *50.1 | *51.3 | *50.8 |
| Marijuana/hashish |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 3.2 | 3.7 | 5.1 | 7.8 | 9.1 | 11.3 |
| $10^{\text {th }}$-graders | 8.7 | 8.1 | 10.9 | 15.8 | 17.2 | 20.4 |
| $12^{\text {th }}$-graders | 13.8 | 11.9 | 15.5 | 19.0 | 21.2 | 21.9 |
| Any illicit drug other than marijuana |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 3.8 | 4.7 | 5.3 | 5.6 | 6.5 | 6.9 |
| $10^{\text {th }}$-graders | 5.5 | 5.7 | 6.5 | 7.1 | 8.9 | 8.9 |
| $12^{\text {th }}$-graders | 7.1 | 6.3 | 7.9 | 8.8 | 10.0 | 9.5 |
| Stimulants |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 2.6 | 3.3 | 3.6 | 3.6 | 4.2 | 4.6 |
| $10^{\text {th }}$-graders | 3.3 | 3.6 | 4.3 | 4.5 | 5.3 | 5.5 |
| $12^{\text {th }}$-graders | 3.2 | 2.8 | 3.7 | 4.0 | 4.0 | 4.1 |
| Inhalants |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 4.4 | 4.7 | 5.4 | 5.6 | 6.1 | 5.8 |
| $10^{\text {th }}$-graders | 2.7 | 2.7 | 3.3 | 3.6 | 3.5 | 3.3 |
| $12^{\text {th }}$-graders | 2.4 | 2.3 | 2.5 | 2.7 | 3.2 | 2.5 |
| LSD |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 0.6 | 0.9 | 1.0 | 1.1 | 1.4 | 1.5 |
| $10^{\text {th }}$-graders | 1.5 | 1.6 | 1.6 | 2.0 | 3.0 | 2.4 |
| $12^{\text {th }}$-graders | 1.9 | 2.0 | 2.4 | 2.6 | 4.0 | 2.5 |
| Cocaine |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 0.5 | 0.7 | 0.7 | 1.0 | 1.2 | 1.3 |
| $10^{\text {th }}$-graders | 0.7 | 0.7 | 0.9 | 1.2 | 1.7 | 1.7 |
| $12^{\text {th }}$-graders | 1.4 | 1.3 | 1.3 | 1.5 | 1.8 | 2.0 |
| Tranquilizers |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 0.8 | 0.8 | 0.9 | 1.1 | 1.2 | 1.5 |
| $10^{\text {th }}$-graders | 1.2 | 1.5 | 1.1 | 1.5 | 1.7 | 1.7 |
| $12^{\text {th }}$-graders | 1.4 | 1.0 | 1.2 | 1.4 | 1.8 | 2.0 |
| Cigarettes |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 14.3 | 15.5 | 16.7 | 18.6 | 19.1 | 21.0 |
| $10^{\text {th }}$-graders | 20.8 | 21.5 | 24.7 | 25.4 | 27.9 | 30.4 |
| $12^{\text {th }}$-graders | 28.3 | 27.8 | 29.9 | 31.2 | 33.5 | 34.0 |

* In 1993, the questions regarding alcohol consumption changed; therefore, data for alcohol use in 1993-96 may not be comparable to earlier years. For example, in 1993, the original wording produced an estimate of 26 percent for alcohol use of 8th-graders.

NOTE: Only drug use not under a doctor's orders is included.
SOURCE: University of Michigan, Survey Research Center, Institute for Social Research, Monitoring the Future Study.

Table 47-3 Percentage of students who reported using alcohol or drugs any time during the previous year, by type of drug, grade, and selected characteristics: 1995

|  | Alcohol |  |  | Marijuana |  |  | Cocaine |  |  | Inhalants |  |  | Stimulants |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Selected characteristics | $8^{\text {th }}$ | $10^{\text {th }}$ | $12^{\text {th }}$ | $8^{\text {th }}$ | $10^{\text {th }}$ | $12^{\text {th }}$ | $8^{\text {th }}$ | $10^{\text {th }}$ | $12^{\text {th }}$ | $8^{\text {th }}$ | $10^{\text {th }}$ | $12^{\text {th }}$ | $8^{\text {th }}$ | $10^{\text {th }}$ | $12^{\text {th }}$ |
| Total | 45.3 | 63.5 | 73.7 | 15.8 | 28.7 | 34.7 | 2.6 | 3.5 | 4.0 | 12.8 | 9.6 | 8.0 | 8.7 | 11.9 | 9.3 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 46.3 | 63.4 | 74.5 | 17.7 | 30.6 | 38.1 | 2.5 | 3.5 | 4.8 | 11.5 | 10.3 | 9.9 | 7.0 | 9.6 | 9.5 |
| Female | 44.3 | 63.6 | 72.7 | 13.7 | 26.5 | 30.6 | 2.6 | 3.3 | 3.1 | 14.0 | 8.9 | 6.2 | 10.3 | 14.1 | 8.9 |
| College plans |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than 4 years or none | 59.6 | 75.0 | 78.6 | 30.3 | 41.8 | 39.0 | 7.0 | 7.2 | 5.6 | 19.6 | 14.6 | 9.7 | 17.1 | 19.9 | 12.3 |
| Complete 4 years | 43.4 | 61.6 | 72.0 | 13.8 | 26.4 | 32.6 | 2.0 | 2.8 | 3.4 | 11.9 | 8.7 | 7.4 | 7.6 | 10.6 | 8.3 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Northeast | 47.3 | 65.1 | 79.0 | 13.0 | 28.8 | 37.7 | 2.2 | 2.5 | 3.8 | 13.1 | 10.4 | 10.3 | 7.3 | 9.8 | 9.6 |
| North Central | 46.2 | 64.3 | 77.5 | 17.5 | 26.6 | 36.9 | 2.6 | 2.9 | 3.4 | 13.8 | 10.4 | 8.6 | 10.6 | 13.3 | 9.5 |
| South | 45.7 | 63.3 | 72.6 | 14.7 | 28.4 | 31.8 | 2.4 | 3.5 | 3.6 | 12.1 | 9.4 | 7.0 | 8.6 | 12.8 | 9.2 |
| West | 41.4 | 61.1 | 64.8 | 18.4 | 32.2 | 33.8 | 3.3 | 5.3 | 5.8 | 12.4 | 8.1 | 6.7 | 7.9 | 10.6 | 8.9 |
| Population density |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Large metropolitanstatistical area |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other metropolitan statistical area | 46.5 | 64.6 | 73.2 | 17.2 | 31.2 | 34.9 | 2.8 | 3.5 | 3.9 | 13.7 | 9.7 | 7.8 | 8.9 | 12.8 | 8.5 |
| Non-metropolitan statistical area | 45.1 | 64.2 | 74.4 | 13.7 | 24.8 | 31.0 | 2.4 | 3.6 | 3.9 | 12.3 | 10.5 | 7.8 | 10.1 | 13.3 | 10.8 |
| Parents' education range* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Some high school or less | 52.0 | 65.4 | 70.8 | 23.0 | 32.0 | 30.9 | 4.9 | 5.3 | 4.8 | 13.0 | 9.4 | 7.5 | 11.8 | 14.3 | 9.9 |
| Some high school to completed high school | 50.5 | 67.4 | 74.7 | 17.9 | 31.8 | 33.8 | 2.4 | 4.3 | 3.9 | 13.9 | 11.0 | 8.0 | 10.6 | 14.2 | 9.9 |
| Completed high school to some college | 48.1 | 65.7 | 74.4 | 17.2 | 30.0 | 34.2 | 2.8 | 3.7 | 4.2 | 14.7 | 10.2 | 6.7 | 10.1 | 12.4 | 9.1 |
| Some college to completed college | 40.8 | 61.9 | 73.2 | 12.7 | 27.0 | 35.0 | 1.9 | 2.6 | 3.7 | 12.3 | 9.4 | 8.9 | 6.8 | 10.7 | 9.2 |
| Completed college to at least some graduate or professional school | 40.9 | 57.9 | 74.2 | 13.0 | 23.4 | 37.5 | 2.5 | 1.9 | 3.4 | 11.6 | 7.0 | 9.7 | 6.4 | 8.8 | 8.1 |

* Parents' education range is an average of the reported level of the student's mother and father.

SOURCE: Lloyd D. Johnston, Patrick O'Malley, and Jerald G. Bachman, National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995, Volume I, Secondary School Students, Table 7, Institute for Social Research, University of Michigan, 1996.

Table 47-4 Percentage of students who had someone offer to sell them drugs at school during the first half of the school year, by grade, number of offers, sex, race/ethnicity, and control of school: Spring 1988, 1990, and 1992

| Sex, race/ethnicity, and control of school | $8^{\text {th }}$-graders in 1988 |  |  | $10^{\text {th }}$-graders in 1990 |  |  | $12^{\text {th }}$-graders in 1992 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ever | Once or twice | More than twice | Ever | Once or twice | More than twice | Ever | Once or twice | More than twice |
| All students | 10.0 | 6.9 | 3.1 | 17.0 | 10.1 | 6.9 | 16.0 | 9.5 | 6.5 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 12.2 | 8.1 | 4.0 | 21.8 | 12.6 | 9.3 | 21.7 | 12.0 | 9.7 |
| Female | 7.9 | 5.7 | 2.2 | 12.1 | 7.6 | 4.4 | 10.3 | 6.9 | 3.4 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 9.9 | 6.9 | 3.1 | 17.9 | 10.6 | 7.3 | 16.6 | 9.7 | 6.9 |
| Black | 7.6 | 5.8 | 1.8 | 10.9 | 7.1 | 3.8 | 9.3 | 6.5 | 2.8 |
| Hispanic | 14.3 | 8.9 | 5.3 | 17.2 | 9.4 | 7.9 | 21.1 | 12.2 | 8.9 |
| Asian/Pacific Islander | 4.8 | 3.5 | 1.3 | 13.3 | 8.5 | 4.9 | 11.4 | 6.7 | 4.8 |
| American Indian/Alaskan Native | 16.4 | 11.3 | 5.1 | 24.6 | 16.5 | 8.1 | 21.1 | 10.8 | 10.3 |
| Control of school |  |  |  |  |  |  |  |  |  |
| Public | 11.0 | 7.6 | 3.4 | 17.7 | 10.5 | 7.2 | 16.7 | 9.8 | 6.9 |
| Catholic | 2.5 | 1.6 | 0.9 | 11.7 | 9.0 | 2.7 | 12.7 | 8.7 | 4.0 |
| Private, other religious affiliation | 2.6 | 1.7 | 0.9 | 2.5 | 1.2 | 1.4 | 3.3 | 2.6 | 0.7 |
| Private, no religious affiliation | 5.0 | 3.2 | 1.8 | 7.2 | 4.5 | 2.7 | 10.3 | 4.5 | 5.8 |

[^41]Table 47-5 Percentage of public school students who had someone offer to sell them drugs at school during the first half of the school year, by grade, number of offers, and selected school characteristics: Spring 1988, 1990, and 1992

|  | $8^{\text {th }}$-graders in 1988 |  |  | $10^{\text {th }}$-graders in 1990 |  |  | $12^{\text {th }}$-graders in 1992 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School characteristics | Ever | Once or twice | More than twice | Ever | Once or twice | More than twice | Ever | Once or twice | More than twice |
| All public schools | 11.0 | 7.6 | 3.4 | 17.7 | 10.5 | 7.2 | 16.7 | 9.8 | 6.9 |
| Minority enrollment |  |  |  |  |  |  |  |  |  |
| Less than 20 percent | 10.1 | 7.0 | 3.2 | 17.4 | 10.2 | 7.2 | - | - | - |
| 20 percent or more | 12.3 | 8.6 | 3.7 | 17.3 | 10.1 | 7.2 | - | - | - |
| School size |  |  |  |  |  |  |  |  |  |
| Less than 150 | 7.6 | 4.4 | 3.2 | 2.1 | 0.0 | 2.1 | 9.0 | 4.5 | 4.5 |
| 150-449 | 8.7 | 6.0 | 2.6 | 11.5 | 7.6 | 3.9 | 8.9 | 5.2 | 3.7 |
| 450-749 | 11.7 | 8.3 | 3.4 | 12.8 | 7.4 | 5.4 | 15.9 | 8.9 | 7.0 |
| 750 or more | 11.9 | 8.1 | 3.8 | 19.2 | 11.1 | 8.1 | 18.4 | 10.9 | 7.4 |
| Metropolitan status |  |  |  |  |  |  |  |  |  |
| Urban | 12.6 | 9.1 | 3.5 | 17.0 | 9.8 | 7.2 | 18.1 | 10.3 | 7.8 |
| Suburban | 11.3 | 7.6 | 3.7 | 19.3 | 11.1 | 8.1 | 19.3 | 11.0 | 8.4 |
| Rural | 9.6 | 6.6 | 2.9 | 15.4 | 9.3 | 6.1 | 12.3 | 8.0 | 4.3 |

Percentage of students who received free or reduced-price lunch

| Total |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-5 | 9.3 | 6.4 | 3.0 | 19.8 | 11.8 | 8.0 | 20.3 | 11.4 | 9.0 |
| 6-20 | 11.8 | 8.4 | 3.4 | 17.8 | 10.5 | 7.3 | 17.2 | 10.1 | 7.1 |
| 21-40 | 11.3 | 7.6 | 3.7 | 14.9 | 8.4 | 6.4 | 14.1 | 8.9 | 5.2 |
| 41 or more | 11.2 | 7.9 | 3.3 | 16.1 | 9.3 | 6.8 | 15.8 | 8.9 | 6.9 |
| Urban |  |  |  |  |  |  |  |  |  |
| 0-5 | 11.5 | 9.3 | 2.2 | 14.0 | 8.9 | 5.1 | 17.6 | 11.1 | 6.5 |
| 6-20 | 13.7 | 9.2 | 4.5 | 16.5 | 9.4 | 7.1 | 21.5 | 13.7 | 7.8 |
| 21-40 | 13.8 | 10.4 | 3.4 | 17.3 | 9.1 | 8.2 | 17.4 | 9.6 | 7.7 |
| 41 or more | 11.9 | 8.5 | 3.4 | 14.9 | 8.1 | 6.8 | 17.2 | 8.4 | 8.8 |
| Suburban |  |  |  |  |  |  |  |  |  |
| 0-5 | 9.5 | 6.0 | 3.5 | 21.4 | 12.9 | 8.5 | 22.4 | 11.9 | 10.4 |
| 6-20 | 11.8 | 8.5 | 3.3 | 19.4 | 11.3 | 8.1 | 19.3 | 10.9 | 8.3 |
| 21-40 | 13.5 | 8.8 | 4.7 | 15.9 | 7.7 | 8.2 | 14.6 | 9.6 | 5.0 |
| 41 or more | 11.7 | 8.0 | 3.7 | 14.3 | 8.0 | 6.3 | 17.7 | 8.9 | 8.9 |
| Rural |  |  |  |  |  |  |  |  |  |
| 0-5 | 7.7 | 6.1 | 1.6 | 15.6 | 8.0 | 7.6 | 13.4 | 8.9 | 4.5 |
| 6-20 | 10.6 | 7.6 | 3.0 | 16.8 | 10.2 | 6.6 | 11.4 | 6.7 | 4.7 |
| 21-40 | 9.1 | 5.8 | 3.3 | 13.2 | 8.3 | 4.9 | 12.2 | 8.2 | 4.0 |
| 41 or more | 10.1 | 7.3 | 2.8 | 18.1 | 11.1 | 7.0 | 13.6 | 9.4 | 4.3 |

Table 49-1 Teachers' perceptions and attitudes toward teaching, by control of school: School years 1987-88 and 1993-94

| Perceptions and attitudes | Public |  | Private |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1987-88 | 1993-94 | 1987-88 | 1993-94 |
| Percentage of teachers who strongly agree with the following: |  |  |  |  |
| Teachers in this school are evaluated fairly | 37.8 | 42.0 | 51.8 | 55.2 |
| The principal lets staff members know what is expected of them | 48.3 | 48.0 | 54.4 | 56.1 |
| The school administration's behavior toward the staff is supportive and encouraging | 40.5 | 41.2 | 59.8 | 60.7 |
| I am satisfied with my teaching salary | 7.6 | 12.3 | 11.5 | 13.6 |
| The level of student misbehavior (e.g., noise, horseplay, or fighting in the halls, cafeteria, or student lounge) in this school interferes with my teaching |  |  |  |  |
| Teachers participate in making most of the important educational decisions in this school |  |  |  |  |
| I receive a great deal of support from parents for the work I do | 16.0 | 12.5 | 40.1 | 41.8 |
| Necessary materials are available as needed by the staff | 37.4 | 32.6 | 52.7 | 52.9 |
| The principal does a poor job of getting resources for this school | 3.9 | 3.8 | 3.5 | 2.3 |
| Routine duties and paperwork interfere with my job of teaching | 29.6 | 26.6 | 9.4 | 7.9 |
| My principal enforces school rules for student conduct and backs me up when I need it |  |  |  |  |
| The principal talks with me frequently about my instructional practices | 12.4 | 10.4 | 18.2 | 17.4 |
| Rules for student behavior are consistently enforced by teachers in this school, even for students who are not in their classes | 23.8 | 22.3 | 38.3 | 39.5 |
| Most of my colleagues share my beliefs and values about what the central mission of the school should be | 35.5 | 33.2 | 58.8 | 62.8 |
| The principal knows what kind of school he/she wants and has communicated it to the staff |  |  |  |  |
| There is a great deal of cooperative effort among the staff members | 35.3 | 33.7 | 56.7 | 57.8 |
| In this school, staff members are recognized for a job well done | 25.5 | 25.0 | 38.8 | 41.8 |
| I have to follow rules in this school that conflict with my best professional judgment | 5.9 | 5.4 | 4.1 | 3.4 |
| I am satisfied with my class size | 35.8 | 32.0 | 57.8 | 58.9 |
| I make a conscious effort to coordinate the content of my courses with that of other teachers | 40.5 | 38.2 | 42.9 | 42.4 |
| Goals and priorities for the school are clear | 40.2 | 37.9 | 55.9 | 58.0 |
| The amount of student tardiness and class cutting in this school interferes with my teaching | 11.7 | 7.9 | 3.9 | 1.8 |
| I sometimes feel it is a waste of time to try to do my best as a teacher | 7.6 | 6.5 | 3.3 | 2.7 |
| I plan with the library media specialist/librarian for the integration of library/ media services into my teaching | - | 24.1 | - | 22.3 |
| Library/media materials are adequate to support my instructional objectives | - | 23.8 | - | 24.0 |
| If I could go back to college and start again I would most likely* become a teacher again | 66.0 | 69.5 | 76.2 | 80.5 |

- Not available.
* Includes those teachers who responded "certainly would become a teacher" and "probably would become a teacher."

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88 and 199394.

Table 49-2 Teachers' perceptions and attitudes toward teaching, by control and level of school: School year 1993-94

| Perceptions and attitudes | Public |  | Private |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Elementary Secondary |  | Elementary Secondary |  |
| Percentage of teachers who strongly agree with the following: |  |  |  |  |
| Teachers in this school are evaluated fairly | 46.8 | 36.8 | 58.0 | 51.2 |
| The principal lets staff members know what is expected of them | 51.5 | 44.1 | 58.4 | 53.0 |
| The school administration's behavior toward the staff is supportive and encouraging | 44.1 | 38.0 | 63.5 | 56.9 |
| I am satisfied with my teaching salary | 11.9 | 12.8 | 13.0 | 14.4 |
| The level of student misbehavior (e.g., noise, horseplay, or fighting in the halls, cafeteria, or student lounge) in this school interferes with my teaching | 12.1 | 15.5 | 4.3 | 4.9 |
| Teachers participate in making most of the important educational decisions in this school | 17.9 | 11.0 | 32.5 | 27.2 |
| I receive a great deal of support from parents for the work I do | 16.3 | 8.3 | 48.0 | 33.2 |
| Necessary materials are available as needed by the staff | 33.7 | 31.5 | 52.6 | 53.2 |
| The principal does a poor job of getting resources for this school | 3.7 | 4.0 | 2.4 | 2.2 |
| Routine duties and paperwork interfere with my job of teaching | 27.3 | 25.7 | 7.4 | 8.5 |
| My principal enforces school rules for student conduct and backs me up when I need it | 50.1 | 41.1 | 65.8 | 59.4 |
| The principal talks with me frequently about my instructional practices | 13.0 | 7.7 | 20.5 | 13.1 |
| Rules for student behavior are consistently enforced by teachers in this school, even for students who are not in their classes | 30.3 | 13.6 | 46.9 | 29.0 |
| Most of my colleagues share my beliefs and values about what the central mission of the school should be | 40.4 | 25.4 | 68.5 | 54.8 |
| The principal knows what kind of school he/she wants and has communicated it to the staff | 47.9 | 37.9 | 65.0 | 56.4 |
| There is a great deal of cooperative effort among the staff members | 40.1 | 26.7 | 61.4 | 52.7 |
| In this school, staff members are recognized for a job well done | 29.2 | 20.5 | 45.5 | 36.7 |
| I have to follow rules in this school that conflict with my best professional judgment | 5.2 | 5.6 | 2.9 | 4.1 |
| I am satisfied with my class size | 33.6 | 30.3 | 58.3 | 59.6 |
| I make a conscious effort to coordinate the content of my courses with that of other teachers | 44.6 | 31.3 | 47.9 | 34.8 |
| Goals and priorities for the school are clear | 43.9 | 31.5 | 61.2 | 53.5 |
| The amount of student tardiness and class cutting in this school interferes with my teaching | 3.5 | 12.7 | 1.5 | 2.4 |
| I sometimes feel it is a waste of time to try to do my best as a teacher | 5.1 | 8.0 | 2.4 | 3.3 |
| I plan with the library media specialist/librarian for the integration of library/ media services into my teaching | 24.5 | 23.6 | 23.0 | 21.3 |
| Library/media materials are adequate to support my instructional objectives | 23.4 | 24.2 | 22.9 | 25.6 |
| If I could go back to college and start again I would most likely* become a teacher again | 72.5 | 66.3 | 81.5 | 79.0 |

[^42]Table 49-3 Public school teachers' perceptions and attitudes toward teaching, by percentage of students eligible for free or reduced-price lunch: School year 1993-94

| Perceptions and attitudes | Total | Percentage of students eligible for free or reduced-price lunch |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0-5 | 6-20 | 21-40 | 41 or more |
| Percentage of teachers who strongly agree with the following: |  |  |  |  |  |
| Teachers in this school are evaluated fairly | 42.0 | 41.3 | 41.1 | 43.5 | 42.3 |
| The principal lets staff members know what is expected of them | 48.0 | 46.8 | 46.4 | 49.0 | 49.1 |
| The school administration's behavior toward the staff is supportive and encouraging | 41.2 | 39.7 | 40.1 | 43.0 | 41.9 |
| I am satisfied with my teaching salary | 12.3 | 21.1 | 13.6 | 11.5 | 8.8 |
| The level of student misbehavior (e.g., noise, horseplay, or fighting in the halls, cafeteria, or student lounge) in this school interferes with my teaching | 13.8 | 8.2 | 10.3 | 13.1 | 18.3 |
| Teachers participate in making most of the important educational decisions in this school |  |  |  |  |  |
| I receive a great deal of support from parents for the work I do | 12.5 | 18.5 | 14.1 | 11.5 | 10.2 |
| Necessary materials are available as needed by the staff | 32.6 | 38.8 | 34.4 | 33.6 | 29.6 |
| The principal does a poor job of getting resources for this school | 3.8 | 4.2 | 3.6 | 3.6 | 4.2 |
| Routine duties and paperwork interfere with my job of teaching | 26.6 | 23.1 | 26.8 | 25.8 | 28.3 |
| My principal enforces school rules for student conduct and backs me up when I need it | 45.8 | 43.0 | 44.3 | 48.8 | 46.4 |
| The principal talks with me frequently about my instructional practices | 10.4 | 9.7 | 8.4 | 9.8 | 12.7 |
| Rules for student behavior are consistently enforced by teachers in this school, even for students who are not in their classes | 22.3 | 20.3 | 20.0 | 21.0 | 25.7 |
| Most of my colleagues share my beliefs and values about what the central mission of the school should be | 33.2 | 31.8 | 31.0 | 33.9 | 35.1 |
| The principal knows what kind of school he/she wants and has communicated it to the staff | 43.1 | 44.2 | 40.2 | 43.8 | 44.9 |
| There is a great deal of cooperative effort among the staff members | 33.7 | 32.7 | 33.5 | 34.8 | 34.3 |
| In this school, staff members are recognized for a job well done | 25.0 | 24.7 | 23.2 | 25.6 | 26.8 |
| I have to follow rules in this school that conflict with my best professional judgment | 5.4 | 4.8 | 4.2 | 4.6 | 6.9 |
| I am satisfied with my class size | 32.0 | 31.9 | 30.7 | 32.6 | 33.2 |
| I make a conscious effort to coordinate the content of my courses with that of other teachers | 38.2 | 41.4 | 37.6 | 37.0 | 39.1 |
| Goals and priorities for the school are clear | 37.9 | 38.5 | 35.2 | 38.3 | 39.6 |
| The amount of student tardiness and class cutting in this school interfere with my teaching | 7.9 | 5.7 | 7.1 | 7.4 | 9.4 |
| I sometimes feel it is a waste of time to try to do my best as a teacher | 6.5 | 5.5 | 6.0 | 5.5 | 7.4 |
| I plan with the library media specialist/librarian for the integration of library/ media services into my teaching | 24.1 | 24.8 | 24.6 | 23.5 | 24.6 |
| Library/media materials are adequate to support my instructional objectives | 23.8 | 27.4 | 24.3 | 23.2 | 22.6 |
| If could go back to college and start again would most likely* become a teacher again | 69.5 | 72.1 | 68.2 | 69.9 | 69.5 |

* Includes those teachers who responded "certainly would become a teacher" and "probably would become a teacher."

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94.

Table 49-4 Public school teachers' perceptions and attitudes toward teaching, by urbanicity and percentage of minority enrollment: School year 1993-94

|  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: | ---: | ---: |

* Includes those teachers who responded "certainly would become a teacher" and "probably would become a teacher."

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94.

Table 49-5 Public school teachers' perceptions and attitudes toward teaching, by school size: School year 1993-94

| Perceptions and attitudes | Total | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Less |  |  | $\begin{aligned} & \hline 750 \text { or } \\ & \text { more } \end{aligned}$ |
| Percentage of teachers who strongly agree with the following: |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Teachers in this school are evaluated fairly | 42.0 | 52.0 | 47.0 | 45.0 | 37.7 |
| The principal lets staff members know what is expected of them | 48.0 | 52.3 | 50.3 | 50.3 | 45.8 |
| The school administration's behavior toward the staff is supportive and encouraging | 41.2 | 53.6 | 45.1 | 45.3 | 39.2 |
| I am satisfied with my teaching salary | 12.3 | 14.9 | 13.0 | 12.6 | 11.3 |
| The level of student misbehavior (e.g., noise, horseplay, or fighting in the halls, cafeteria, or student lounge) in this school interferes with my teaching | 13.8 | 6.9 | 9.9 | 12.9 | 16.3 |
| Teachers participate in making most of the important educational decisions |  |  |  |  |  |
| I receive a great deal of support from parents for the work I do | 12.5 | 29.9 | 18.7 | 16.7 | 10.5 |
| Necessary materials are available as needed by the staff | 32.6 | 43.9 | 37.4 | 34.9 | 31.9 |
| The principal does a poor job of getting resources for this school | 3.8 | 3.6 | 3.7 | 3.1 | 4.1 |
| Routine duties and paperwork interfere with my job of teaching | 26.6 | 13.0 | 22.2 | 24.1 | 28.6 |
| My principal enforces school rules for student conduct and backs me up |  |  |  |  |  |
| The principal talks with me frequently about my instructional practices | 10.4 | 19.3 | 13.4 | 11.4 | 7.4 |
| Rules for student behavior are consistently enforced by teachers in this school, even for students who are not in their classes | 22.3 | 41.1 | 29.4 | 26.6 | 14.6 |
| Most of my colleagues share my beliefs and values about what the central mission of the school should be | 33.2 | 56.1 | 42.5 | 37.2 | 27.2 |
| The principal knows what kind of school he/she wants and has communicated it to the staff | 43.1 | 51.8 | 47.5 | 47.2 | 40.2 |
| There is a great deal of cooperative effort among the staff members | 33.7 | 53.4 | 42.3 | 38.0 | 26.8 |
| In this school, staff members are recognized for a job well done | 25.0 | 35.8 | 29.5 | 28.1 | 22.6 |
| I have to follow rules in this school that conflict with my best professional judgment | 5.4 | 4.2 | 4.3 | 4.9 | 6.5 |
| I am satisfied with my class size | 32.0 | 61.7 | 42.0 | 31.2 | 27.4 |
| I make a conscious effort to coordinate the content of my courses with that of other teachers | 38.2 | 40.0 | 41.6 | 41.2 | 33.8 |
| Goals and priorities for the school are clear | 37.9 | 48.9 | 43.7 | 41.8 | 34.1 |
| The amount of student tardiness and class cutting in this school interferes with my teaching | 7.9 | 4.0 | 3.6 | 4.5 | 13.5 |
| I sometimes feel it is a waste of time to try to do my best as a teacher | 6.5 | 4.2 | 5.0 | 5.7 | 7.4 |
| I plan with the library media specialist/librarian for the integration of library/ media services into my teaching | 24.1 | 18.5 | 24.5 | 25.7 | 23.1 |
| Library/media materials are adequate to support my instructional objectives | 23.8 | 17.2 | 22.9 | 24.9 | 25.1 |
| If I could go back to college and start again I would most likely* become a teacher again | 69.5 | 76.4 | 73.4 | 70.1 | 68.1 |

[^43]Table 50-1 Percentage of college students aged 16-24 who were employed in October, by race/ ethnicity, hours worked per week, and enrollment status: 1970-95

|  | All students |  |  | White |  |  | Black |  |  | Hispanic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total ${ }^{1}$ | 20 or more hours | 35 or <br> more <br> hours | Total ${ }^{1}$ | 20 or <br> more <br> hours | 35 or <br> more <br> hours | Total ${ }^{1}$ | 20 or <br> more <br> hours | 35 or <br> more <br> hours | Total ${ }^{1}$ | 20 or <br> more <br> hours | 35 or <br> more <br> hours |
|  | Full-time college students |  |  |  |  |  |  |  |  |  |  |  |
| 1970 | 33.8 | 14.1 | 3.7 | 34.9 | 14.7 | 3.9 | 21.2 | 8.0 | 1.8 | - | - | - |
| 1971 | 34.1 | 14.8 | 3.7 | 35.8 | 15.6 | 3.8 | 16.9 | 6.1 | 2.5 | - | - | - |
| 1972 | 35.1 | 15.0 | 3.4 | 36.3 | 15.2 | 3.2 | 21.5 | 12.2 | 5.8 | 42.7 | 21.0 | 2.5 |
| 1973 | 36.4 | 16.8 | 4.4 | 37.6 | 17.4 | 4.3 | 27.7 | 14.2 | 5.8 | 34.8 | 13.8 | 3.3 |
| 1974 | 36.6 | 17.0 | 4.7 | 38.2 | 17.4 | 4.7 | 23.2 | 13.0 | 5.0 | 34.4 | 15.8 | 6.8 |
| 1975 | 35.2 | 16.6 | 4.6 | 36.3 | 17.0 | 4.6 | 23.8 | 13.0 | 4.7 | 39.0 | 17.5 | 4.5 |
| 1976 | 37.5 | 16.9 | 4.0 | 39.6 | 17.7 | 3.9 | 22.7 | 11.9 | 4.7 | 35.4 | 14.8 | 3.1 |
| 1977 | 38.8 | 18.1 | 4.2 | 40.9 | 18.9 | 4.0 | 20.8 | 10.5 | 5.3 | 42.9 | 23.5 | 4.6 |
| 1978 | 39.9 | 19.0 | 4.7 | 41.8 | 19.7 | 4.7 | 22.2 | 11.7 | 4.7 | 53.2 | 26.8 | 7.4 |
| 1979 | 38.1 | 18.0 | 4.0 | 40.0 | 18.4 | 3.9 | 24.8 | 13.9 | 5.4 | 35.6 | 20.4 | 5.2 |
| 1980 | 40.0 | 17.9 | 3.8 | 42.1 | 18.3 | 3.8 | 24.0 | 12.2 | 5.1 | 41.4 | 26.6 | 4.5 |
| 1981 | 39.3 | 18.7 | 4.2 | 41.6 | 19.5 | 4.1 | 23.8 | 11.7 | 3.8 | 39.2 | 21.9 | 5.9 |
| 1982 | 39.9 | 18.5 | 3.1 | 42.4 | 19.6 | 3.0 | 26.2 | 12.2 | 4.3 | 33.1 | 14.1 | 1.6 |
| 1983 | 40.4 | 18.8 | 3.8 | 42.7 | 19.3 | 4.0 | 28.5 | 16.0 | 2.2 | 33.7 | 20.2 | 5.6 |
| 1984 | 42.1 | 21.0 | 4.2 | 44.7 | 22.0 | 4.3 | 25.2 | 14.8 | 3.2 | 34.8 | 19.7 | 4.1 |
| 1985 | 44.2 | 21.5 | 4.3 | 47.4 | 22.6 | 4.4 | 24.1 | 16.0 | 4.9 | 43.5 | 23.2 | 3.5 |
| 1986 | 43.0 | 21.9 | 4.3 | 46.3 | 23.5 | 4.7 | 24.7 | 14.2 | 3.9 | 40.5 | 22.6 | 2.1 |
| 1987 | 44.2 | 22.3 | 4.3 | 45.7 | 22.8 | 4.0 | 31.7 | 15.8 | 4.3 | 52.1 | 31.8 | 7.6 |
| 1988 | 46.5 | 24.5 | 4.7 | 48.9 | 25.1 | 5.0 | 31.8 | 18.6 | 3.3 | 40.9 | 28.7 | 6.7 |
| 1989 | 46.5 | 25.2 | 5.4 | 48.8 | 25.6 | 5.6 | 29.3 | 18.5 | 4.3 | 49.6 | 33.8 | 6.0 |
| 1990 | 45.7 | 24.1 | 4.8 | 48.6 | 25.1 | 5.2 | 29.8 | 17.1 | 2.8 | 45.7 | 28.0 | 6.7 |
| 1991 | 47.2 | 25.4 | 5.6 | 49.6 | 26.5 | 6.0 | 31.7 | 19.1 | 3.4 | 54.2 | 30.6 | 4.3 |
| 1992 | 47.2 | 25.8 | 5.5 | 50.5 | 27.2 | 5.9 | 30.2 | 19.9 | 4.4 | 47.0 | 29.4 | 4.7 |
| 1993 | 46.3 | 24.6 | 5.1 | 50.1 | 26.5 | 5.5 | 28.9 | 18.0 | 3.8 | 46.7 | 25.1 | 6.3 |
| 1994 | 48.6 | 27.5 | 5.8 | 52.1 | 29.5 | 6.2 | 33.4 | 21.4 | 5.8 | 50.2 | 28.7 | 5.3 |
| 1995 | 47.2 | 26.8 | 6.5 | 50.6 | 28.1 | 6.6 | 35.2 | 23.7 | 4.1 | 37.4 | 24.8 | 8.6 |

Table 50-1 Percentage of college students aged 16-24 who were employed in October, by race/ ethnicity, hours worked per week, and enrollment status: 1970-95-Continued

|  | All students |  |  | White |  |  | Black |  |  | Hispanic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total ${ }^{1}$ | 20 or more hours | 35 or <br> more <br> hours | Total ${ }^{1}$ | 20 or more hours | 35 or <br> more <br> hours | Total ${ }^{1}$ | 20 or more hours | 35 or <br> more <br> hours | Total ${ }^{1}$ | 20 or more hours | 35 or <br> more <br> hours |
| Part-time college students |  |  |  |  |  |  |  |  |  |  |  |  |
| 1970 | 82.5 | 76.2 | 60.4 | 83.0 | 76.6 | 60.7 | $\left.1^{2}\right)$ | ${ }^{(2)}$ | $\left.{ }^{2}\right)$ | - | - | - |
| 1971 | 83.4 | 75.0 | 51.7 | 83.8 | 75.2 | 53.6 | 79.2 | 74.0 | 36.4 | - | - | - |
| 1972 | 83.1 | 76.1 | 53.1 | 84.4 | 77.1 | 54.3 | 73.1 | 69.2 | 41.3 | $\left.{ }^{2}\right)$ | $\left({ }^{2}\right)$ | $\left({ }^{2}\right)$ |
| 1973 | 85.3 | 76.8 | 52.5 | 86.6 | 77.9 | 53.5 | 70.7 | 66.7 | 42.7 | ${ }^{2}$ ) | $\left({ }^{2}\right)$ | $\left({ }^{2}\right)$ |
| 1974 | 84.4 | 77.2 | 61.0 | 85.7 | 77.8 | 60.4 | 74.2 | 70.8 | 64.0 | $\left.{ }^{2}\right)$ | $\left.{ }^{2}\right)$ | $\left({ }^{2}\right)$ |
| 1975 | 80.8 | 72.1 | 52.6 | 82.4 | 74.1 | 55.1 | 76.0 | 62.5 | 41.3 | ${ }^{2}$ ) | $\left({ }^{2}\right)$ | $\left({ }^{2}\right)$ |
| 1976 | 84.6 | 76.1 | 53.0 | 85.6 | 77.4 | 53.2 | 72.3 | 66.0 | 58.5 | $\left.{ }^{2}\right)$ | $\left.{ }^{2}\right)$ | $\left({ }^{2}\right)$ |
| 1977 | 83.4 | 75.3 | 53.1 | 86.0 | 77.4 | 54.7 | 65.9 | 61.1 | 44.4 | $\left.{ }^{2}\right)$ | $\left(^{2}\right)$ | $\left({ }^{2}\right)$ |
| 1978 | 86.1 | 76.6 | 53.9 | 88.0 | 78.3 | 55.7 | 65.2 | 51.7 | 29.2 | 82.3 | 75.9 | 63.3 |
| 1979 | 86.9 | 78.8 | 56.6 | 89.2 | 80.8 | 58.2 | 73.5 | 66.3 | 49.0 | $\left.1^{2}\right)$ | $\left.{ }^{2}\right)$ | $\left({ }^{2}\right)$ |
| 1980 | 85.2 | 75.7 | 53.0 | 87.3 | 77.6 | 55.0 | 72.5 | 58.8 | 36.3 | 76.5 | 71.6 | 50.6 |
| 1981 | 85.7 | 76.0 | 51.4 | 87.2 | 77.8 | 52.0 | 75.4 | 61.0 | 41.5 | $\left.1^{2}\right)$ | $\left(^{2}\right)$ | $\left({ }^{2}\right)$ |
| 1982 | 81.1 | 69.7 | 48.1 | 84.4 | 72.3 | 50.0 | 62.5 | 58.1 | 33.1 | 80.6 | 68.9 | 49.5 |
| 1983 | 81.7 | 74.8 | 48.1 | 86.6 | 79.2 | 51.9 | 49.2 | 47.5 | 23.8 | 74.0 | 68.0 | 45.0 |
| 1984 | 84.9 | 77.7 | 55.2 | 87.1 | 79.3 | 57.8 | 67.7 | 63.4 | 45.3 | 89.6 | 83.1 | 50.6 |
| 1985 | 85.9 | 79.0 | 52.2 | 87.9 | 81.7 | 56.2 | 71.8 | 66.4 | 42.0 | 85.2 | 70.4 | 28.4 |
| 1986 | 87.2 | 78.0 | 54.4 | 90.0 | 81.0 | 57.4 | 77.0 | 73.8 | 44.3 | 81.0 | 64.3 | 43.7 |
| 1987 | 85.4 | 77.4 | 49.5 | 87.2 | 79.2 | 51.4 | 70.9 | 65.8 | 37.3 | 86.5 | 77.4 | 54.1 |
| 1988 | 88.3 | 81.6 | 54.2 | 90.4 | 84.5 | 55.7 | 78.1 | 68.6 | 48.6 | 83.9 | 72.9 | 52.5 |
| 1989 | 87.2 | 80.8 | 55.4 | 89.8 | 83.2 | 58.3 | 73.2 | 67.5 | 43.1 | 85.1 | 79.3 | 55.4 |
| 1990 | 83.7 | 78.7 | 52.7 | 86.8 | 80.5 | 55.3 | 76.9 | 76.3 | 49.5 | 81.8 | 77.7 | 50.4 |
| 1991 | 85.8 | 76.3 | 50.9 | 89.0 | 79.1 | 55.3 | 66.1 | 63.4 | 38.4 | 80.2 | 71.0 | 37.4 |
| 1992 | 83.4 | 75.0 | 47.8 | 87.0 | 78.4 | 49.8 | 77.6 | 67.1 | 45.4 | 73.0 | 65.5 | 38.5 |
| 1993 | 84.6 | 75.1 | 43.7 | 88.6 | 78.5 | 46.5 | 65.1 | 58.9 | 36.4 | 76.6 | 65.6 | 31.2 |
| 1994 | 86.4 | 74.9 | 43.7 | 89.2 | 76.8 | 47.9 | 79.8 | 75.0 | 31.5 | 78.3 | 68.5 | 32.3 |
| 1995 | 83.0 | 72.7 | 42.3 | 86.3 | 74.3 | 45.4 | 69.7 | 62.2 | 36.2 | 78.5 | 75.6 | 33.5 |

- Not available.
${ }^{1}$ Includes those who were employed but not at work during the survey week.
${ }^{2}$ Too few sample observations for a reliable estimate.

NOTE: Included in the total but not shown separately are students from other racial/ethnic groups.
SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 50-2 Percentage of high school students aged 16-24 who were employed in October, by race/ethnicity and hours worked per week: 1970-95

| October | All students |  |  | White |  |  | Black |  |  | Hispanic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total* | 20 or <br> more <br> hours | 35 or <br> more <br> hours | Total* | 20 or <br> more hours | 35 or more hours | Total* | 20 or more hours | 35 or more hours | Total* | 20 or <br> more <br> hours | 35 or more hours |
| 1970 | 31.5 | 11.6 | 2.8 | 34.0 | 12.7 | 2.9 | 15.6 | 4.5 | 2.0 | - | - | - |
| 1971 | 30.4 | 11.2 | 2.2 | 33.5 | 12.3 | 2.2 | 13.9 | 5.7 | 2.1 | - | - | - |
| 1972 | 32.5 | 13.6 | 2.9 | 37.2 | 15.5 | 3.1 | 12.0 | 5.2 | 2.0 | 22.3 | 8.6 | 2.3 |
| 1973 | 36.1 | 15.4 | 3.3 | 41.0 | 17.5 | 3.5 | 13.8 | 5.7 | 1.6 | 25.7 | 10.0 | 3.7 |
| 1974 | 35.2 | 15.1 | 3.1 | 40.0 | 16.9 | 3.4 | 16.3 | 8.1 | 1.9 | 23.3 | 10.7 | 2.8 |
| 1975 | 32.9 | 13.0 | 2.7 | 37.9 | 15.0 | 3.0 | 12.9 | 4.7 | 1.0 | 21.2 | 10.1 | 3.2 |
| 1976 | 33.4 | 14.3 | 2.6 | 38.9 | 16.6 | 2.6 | 12.7 | 5.2 | 2.4 | 20.1 | 10.8 | 2.7 |
| 1977 | 35.8 | 15.7 | 3.2 | 41.7 | 18.1 | 3.6 | 12.5 | 5.7 | 1.6 | 24.8 | 14.1 | 4.6 |
| 1978 | 38.2 | 16.2 | 2.9 | 43.9 | 18.4 | 3.2 | 16.1 | 6.8 | 1.4 | 28.0 | 15.9 | 3.1 |
| 1979 | 38.0 | 16.2 | 2.7 | 44.4 | 19.0 | 2.9 | 14.1 | 5.0 | 1.3 | 22.0 | 11.1 | 3.4 |
| 1980 | 35.1 | 13.3 | 2.3 | 40.7 | 15.2 | 2.1 | 13.7 | 5.7 | 1.9 | 24.5 | 11.6 | 4.9 |
| 1981 | 32.5 | 12.0 | 2.1 | 38.8 | 13.9 | 2.4 | 11.0 | 4.8 | 1.1 | 23.0 | 11.3 | 2.1 |
| 1982 | 29.5 | 9.7 | 1.6 | 35.9 | 11.8 | 2.0 | 8.9 | 2.4 | 0.1 | 15.0 | 6.2 | 1.5 |
| 1983 | 28.7 | 9.8 | 1.5 | 35.1 | 11.7 | 1.6 | 6.8 | 2.4 | 0.2 | 20.4 | 11.2 | 3.2 |
| 1984 | 31.0 | 11.5 | 1.3 | 36.4 | 13.1 | 1.2 | 13.4 | 6.1 | 0.6 | 23.2 | 10.5 | 3.7 |
| 1985 | 31.3 | 11.9 | 1.2 | 37.7 | 14.2 | 1.6 | 14.5 | 5.2 | 0.4 | 16.9 | 7.8 | 0.4 |
| 1986 | 34.1 | 13.7 | 1.9 | 40.3 | 15.7 | 2.2 | 14.5 | 6.5 | 0.8 | 25.8 | 15.8 | 1.7 |
| 1987 | 34.6 | 13.4 | 1.6 | 40.9 | 15.4 | 1.6 | 17.6 | 8.3 | 1.2 | 22.4 | 10.5 | 2.6 |
| 1988 | 35.1 | 14.2 | 1.6 | 40.6 | 16.0 | 1.6 | 19.3 | 8.2 | 1.1 | 23.2 | 10.3 | 2.8 |
| 1989 | 37.6 | 14.8 | 1.9 | 43.3 | 16.4 | 1.6 | 21.1 | 8.0 | 1.2 | 27.9 | 16.9 | 5.3 |
| 1990 | 32.1 | 11.9 | 2.0 | 38.0 | 13.6 | 1.8 | 16.7 | 5.0 | 1.0 | 24.6 | 13.2 | 4.5 |
| 1991 | 31.1 | 11.0 | 1.2 | 38.5 | 13.2 | 1.5 | 13.1 | 4.7 | 0.2 | 18.7 | 9.4 | 1.5 |
| 1992 | 29.6 | 10.7 | 1.2 | 36.1 | 12.7 | 1.2 | 13.7 | 5.1 | 0.4 | 18.9 | 9.8 | 2.2 |
| 1993 | 30.5 | 11.4 | 1.4 | 37.7 | 13.1 | 1.7 | 13.0 | 5.9 | 0.8 | 20.6 | 10.5 | 1.3 |
| 1994 | 35.1 | 13.5 | 1.7 | 42.7 | 15.5 | 1.6 | 19.4 | 9.4 | 1.1 | 20.9 | 10.9 | 2.9 |
| 1995 | 33.4 | 13.6 | 1.9 | 40.4 | 16.2 | 1.8 | 17.9 | 8.1 | 1.1 | 21.5 | 9.3 | 2.9 |

- Not available.
* Includes those who were employed but not at work during the survey week.

NOTE: Included in the total but not shown separately are students from other racial/ethnic groups.
SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 50-3 Percentage of college students aged 16-24 who were employed in October, by family income, hours worked per week, and enrollment status: 1970-95

|  | All students |  |  | Low ${ }^{1}$ |  |  | Middle ${ }^{1}$ |  |  | High ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total ${ }^{2}$ | 20 or <br> more <br> hours | 35 or <br> more <br> hours | Total ${ }^{2}$ | 20 or more hours | 35 or <br> more <br> hours | Total ${ }^{2}$ | 20 or <br> more <br> hours | 35 or more hours | Total ${ }^{2}$ | 20 or more hours | 35 or <br> more hours |
|  | Full-time college students |  |  |  |  |  |  |  |  |  |  |  |
| 1970 | 33.8 | 14.1 | 3.7 | 44.0 | 18.1 | 5.3 | 35.1 | 14.4 | 4.2 | 29.6 | 12.7 | 2.7 |
| 1971 | 34.1 | 14.8 | 3.7 | 41.9 | 16.2 | 2.3 | 36.4 | 17.1 | 5.1 | 29.4 | 11.5 | 2.2 |
| 1972 | 35.1 | 15.0 | 3.4 | 36.7 | 19.3 | 4.0 | 37.4 | 16.2 | 4.3 | 31.7 | 12.5 | 2.1 |
| 1973 | 36.4 | 16.8 | 4.4 | 42.1 | 19.7 | 4.4 | 37.0 | 18.4 | 5.7 | 34.4 | 14.3 | 3.0 |
| 1974 | 36.6 | 17.0 | 4.7 | - | - | - | - | - | - | - | - | - |
| 1975 | 35.2 | 16.6 | 4.6 | 33.1 | 14.8 | 4.3 | 38.0 | 19.0 | 5.6 | 32.7 | 14.3 | 3.5 |
| 1976 | 37.5 | 16.9 | 4.0 | 43.9 | 20.2 | 4.4 | 38.1 | 17.9 | 4.8 | 34.9 | 14.9 | 3.1 |
| 1977 | 38.8 | 18.1 | 4.2 | 41.4 | 17.6 | 2.7 | 40.7 | 20.3 | 5.6 | 36.0 | 15.9 | 3.0 |
| 1978 | 39.9 | 19.0 | 4.7 | 39.0 | 16.9 | 4.2 | 41.5 | 19.6 | 6.0 | 38.5 | 18.9 | 3.2 |
| 1979 | 38.1 | 18.0 | 4.0 | 41.9 | 20.8 | 5.1 | 39.2 | 19.4 | 4.7 | 35.6 | 15.6 | 2.9 |
| 1980 | 40.0 | 17.9 | 3.8 | 39.3 | 18.8 | 5.3 | 41.6 | 19.8 | 5.1 | 38.7 | 15.7 | 2.2 |
| 1981 | 39.3 | 18.7 | 4.2 | 41.9 | 20.9 | 4.3 | 40.1 | 19.5 | 4.5 | 37.6 | 17.1 | 3.7 |
| 1982 | 39.9 | 18.5 | 3.1 | 38.7 | 18.2 | 2.9 | 40.1 | 19.3 | 4.2 | 40.1 | 17.8 | 2.0 |
| 1983 | 40.4 | 18.8 | 3.8 | 40.8 | 18.8 | 4.5 | 41.5 | 20.1 | 4.7 | 39.2 | 17.5 | 2.7 |
| 1984 | 42.1 | 21.0 | 4.2 | 41.9 | 22.4 | 6.4 | 42.1 | 21.2 | 4.9 | 42.1 | 20.2 | 2.8 |
| 1985 | 44.2 | 21.5 | 4.3 | 50.6 | 24.2 | 5.1 | 45.5 | 23.4 | 5.1 | 40.5 | 18.6 | 3.2 |
| 1986 | 43.0 | 21.9 | 4.3 | 42.9 | 20.5 | 4.7 | 45.2 | 23.8 | 5.2 | 40.6 | 20.2 | 3.2 |
| 1987 | 44.2 | 22.3 | 4.3 | 48.6 | 23.5 | 3.3 | 46.7 | 25.0 | 5.2 | 39.7 | 18.7 | 3.5 |
| 1988 | 46.5 | 24.5 | 4.7 | 48.3 | 25.2 | 4.0 | 49.9 | 26.8 | 5.9 | 42.0 | 21.5 | 3.4 |
| 1989 | 46.5 | 25.2 | 5.4 | 46.5 | 25.4 | 4.3 | 50.1 | 29.8 | 6.9 | 42.2 | 19.7 | 4.0 |
| 1990 | 45.7 | 24.1 | 4.8 | 46.4 | 27.0 | 3.8 | 47.8 | 26.4 | 6.3 | 42.7 | 19.9 | 3.3 |
| 1991 | 47.2 | 25.4 | 5.6 | 51.8 | 29.4 | 6.7 | 48.8 | 27.0 | 5.5 | 43.5 | 21.9 | 5.3 |
| 1992 | 47.2 | 25.8 | 5.5 | 49.7 | 27.5 | 6.1 | 49.7 | 27.9 | 5.6 | 42.9 | 22.4 | 5.0 |
| 1993 | 46.3 | 24.6 | 5.1 | 50.8 | 27.5 | 7.8 | 48.4 | 27.1 | 5.6 | 41.7 | 20.0 | 3.2 |
| 1994 | 48.6 | 27.5 | 5.8 | 53.1 | 30.5 | 5.9 | 48.6 | 29.0 | 6.9 | 46.6 | 24.3 | 4.4 |
| 1995 | 47.2 | 26.8 | 6.5 | 50.2 | 27.9 | 5.8 | 46.4 | 27.9 | 7.5 | 46.8 | 24.9 | 5.6 |

Table 50-3 Percentage of college students aged 16-24 who were employed in October, by family income, hours worked per week, and enrollment status: 1970-95-Continued

|  | All students |  |  | Low ${ }^{1}$ |  |  | Middle ${ }^{1}$ |  |  | High ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total ${ }^{2}$ | 20 or more hours | 35 or more hours | Total ${ }^{2}$ | $20 \text { or }$ <br> more hours | 35 or more hours | Total ${ }^{2}$ | 20 or more hours | 35 or <br> more <br> hours | Total ${ }^{2}$ | 20 or <br> more <br> hours | 35 or <br> more hours |
| Part-time college students |  |  |  |  |  |  |  |  |  |  |  |  |
| 1970 | 82.5 | 76.2 | 60.4 | $\left(^{3}\right)$ | $\left(^{3}\right)$ | $\left(^{3}\right)$ | 80.1 | 75.7 | 61.7 | 85.7 | 76.0 | 53.9 |
| 1971 | 83.4 | 75.0 | 51.7 | $\left.{ }^{3}\right)$ | (3) | (3) | 83.6 | 77.6 | 54.1 | 84.7 | 72.6 | 48.8 |
| 1972 | 83.1 | 76.1 | 53.1 | 72.2 | 62.9 | 38.1 | 83.7 | 78.2 | 55.5 | 86.4 | 77.0 | 53.7 |
| 1973 | 85.3 | 76.8 | 52.5 | 82.1 | 64.1 | 39.7 | 86.4 | 79.3 | 55.3 | 83.9 | 75.6 | 50.4 |
| 1974 | 84.4 | 77.2 | 61.0 | - | - | - | - | - | - | - | - | - |
| 1975 | 80.8 | 72.1 | 52.6 | 67.4 | 51.9 | 28.7 | 82.6 | 75.9 | 58.7 | 81.9 | 71.0 | 48.3 |
| 1976 | 84.6 | 76.1 | 53.0 | 85.1 | 77.6 | 47.0 | 86.1 | 77.0 | 57.5 | 81.7 | 74.3 | 46.7 |
| 1977 | 83.4 | 75.3 | 53.1 | 67.8 | 62.0 | 35.5 | 84.7 | 75.9 | 56.1 | 85.6 | 78.3 | 52.6 |
| 1978 | 86.1 | 76.6 | 53.9 | 74.2 | 65.2 | 42.4 | 87.2 | 78.0 | 54.8 | 87.6 | 77.9 | 56.6 |
| 1979 | 86.9 | 78.8 | 56.6 | 76.6 | 60.3 | 46.1 | 87.9 | 81.0 | 60.0 | 89.2 | 82.0 | 53.8 |
| 1980 | 85.2 | 75.7 | 53.0 | 69.2 | 57.7 | 32.7 | 86.2 | 78.3 | 54.3 | 87.4 | 75.3 | 55.9 |
| 1981 | 85.7 | 76.0 | 51.4 | 67.5 | 60.7 | 37.6 | 85.2 | 76.6 | 54.6 | 92.9 | 79.9 | 48.9 |
| 1982 | 81.1 | 69.7 | 48.1 | 65.7 | 58.3 | 34.3 | 80.7 | 70.3 | 50.2 | 85.5 | 71.3 | 47.6 |
| 1983 | 81.7 | 74.8 | 48.1 | 64.5 | 57.2 | 31.9 | 80.6 | 74.9 | 50.9 | 88.6 | 80.1 | 48.8 |
| 1984 | 84.9 | 77.7 | 55.2 | 69.5 | 60.3 | 41.8 | 85.4 | 80.3 | 57.1 | 89.4 | 79.2 | 56.5 |
| 1985 | 85.9 | 79.0 | 52.2 | 72.7 | 61.2 | 36.7 | 87.8 | 81.8 | 58.0 | 86.9 | 80.4 | 46.6 |
| 1986 | 87.2 | 78.0 | 54.4 | 70.4 | 57.0 | 35.9 | 88.5 | 78.6 | 54.8 | 91.0 | 85.1 | 60.8 |
| 1987 | 85.4 | 77.4 | 49.5 | 74.5 | 65.2 | 43.5 | 87.1 | 79.2 | 51.2 | 87.0 | 78.8 | 48.8 |
| 1988 | 88.3 | 81.6 | 54.2 | 73.0 | 66.4 | 34.3 | 87.4 | 80.7 | 57.9 | 94.7 | 88.0 | 54.0 |
| 1989 | 87.2 | 80.8 | 55.4 | 67.1 | 53.0 | 28.9 | 88.7 | 82.8 | 59.9 | 92.0 | 87.1 | 57.1 |
| 1990 | 83.7 | 78.7 | 52.7 | 81.8 | 71.6 | 36.6 | 81.8 | 77.6 | 54.1 | 89.9 | 85.5 | 58.0 |
| 1991 | 85.8 | 76.3 | 50.9 | 74.5 | 66.4 | 46.3 | 87.0 | 77.0 | 51.8 | 88.9 | 79.4 | 51.0 |
| 1992 | 83.4 | 75.0 | 47.8 | 77.4 | 67.4 | 37.4 | 84.7 | 75.8 | 50.8 | 83.9 | 76.8 | 46.9 |
| 1993 | 84.6 | 75.1 | 43.7 | 67.9 | 57.6 | 36.4 | 85.6 | 75.7 | 44.1 | 91.4 | 82.9 | 46.6 |
| 1994 | 86.4 | 74.9 | 43.7 | 83.6 | 72.3 | 41.0 | 86.6 | 74.9 | 43.8 | 86.7 | 75.9 | 45.1 |
| 1995 | 83.0 | 72.7 | 42.3 | 60.7 | 55.8 | 29.5 | 85.7 | 77.2 | 46.3 | 89.6 | 72.1 | 40.6 |

— Data regarding family income were not available in 1974.
${ }^{1}$ Low income is the bottom 20 percent of all family incomes; high income is the top 20 percent of all family incomes; and middle income is the 60 percent of incomes in-between.
${ }^{2}$ Includes those who were employed but not at work during the survey week.
${ }^{3}$ Too few sample observations for a reliable estimate.
SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 50-4 Percentage of college students aged 16-24 who were employed in October, by sex, hours worked per week, and enrollment status: 1970-95

|  | All students |  |  | Male |  |  | Female |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total* | 20 or <br> more <br> hours | 35 or <br> more <br> hours | Total* | 20 or <br> more <br> hours | 35 or <br> more <br> hours | Total* | 20 or <br> more <br> hours | 35 or <br> more <br> hours |
|  | Full-time college students |  |  |  |  |  |  |  |  |
| 1970 | 33.8 | 14.1 | 3.7 | 33.9 | 17.3 | 5.0 | 33.6 | 9.5 | 1.8 |
| 1971 | 34.1 | 14.8 | 3.7 | 36.5 | 18.5 | 5.4 | 30.8 | 9.6 | 1.2 |
| 1972 | 35.1 | 15.0 | 3.4 | 37.8 | 18.9 | 5.3 | 31.5 | 10.0 | 1.0 |
| 1973 | 36.4 | 16.8 | 4.4 | 39.2 | 21.0 | 6.1 | 32.9 | 11.5 | 2.3 |
| 1974 | 36.6 | 17.0 | 4.7 | 37.5 | 19.0 | 6.1 | 35.4 | 14.7 | 3.1 |
| 1975 | 35.2 | 16.6 | 4.6 | 34.7 | 18.2 | 5.9 | 35.8 | 14.7 | 3.1 |
| 1976 | 37.5 | 16.9 | 4.0 | 39.1 | 20.0 | 5.1 | 35.9 | 13.6 | 2.9 |
| 1977 | 38.8 | 18.1 | 4.2 | 38.7 | 19.3 | 5.9 | 39.0 | 16.9 | 2.3 |
| 1978 | 39.9 | 19.0 | 4.7 | 39.6 | 20.6 | 5.8 | 40.3 | 17.2 | 3.4 |
| 1979 | 38.1 | 18.0 | 4.0 | 36.7 | 19.3 | 4.6 | 39.5 | 16.6 | 3.4 |
| 1980 | 40.0 | 17.9 | 3.8 | 39.4 | 19.0 | 4.4 | 40.7 | 16.7 | 3.2 |
| 1981 | 39.3 | 18.7 | 4.2 | 38.3 | 19.7 | 4.4 | 40.4 | 17.7 | 3.9 |
| 1982 | 39.9 | 18.5 | 3.1 | 38.8 | 19.2 | 3.2 | 41.0 | 17.7 | 2.9 |
| 1983 | 40.4 | 18.8 | 3.8 | 40.0 | 20.6 | 4.7 | 40.8 | 17.0 | 2.9 |
| 1984 | 42.1 | 21.0 | 4.2 | 40.6 | 21.6 | 5.3 | 43.6 | 20.2 | 3.1 |
| 1985 | 44.2 | 21.5 | 4.3 | 42.4 | 22.1 | 4.9 | 46.0 | 20.9 | 3.7 |
| 1986 | 43.0 | 21.9 | 4.3 | 43.2 | 22.9 | 4.5 | 42.8 | 20.8 | 4.1 |
| 1987 | 44.2 | 22.3 | 4.3 | 43.6 | 22.7 | 4.8 | 44.9 | 21.8 | 3.6 |
| 1988 | 46.5 | 24.5 | 4.7 | 44.3 | 24.7 | 5.1 | 48.7 | 24.3 | 4.3 |
| 1989 | 46.5 | 25.2 | 5.4 | 44.3 | 25.4 | 5.8 | 48.6 | 24.9 | 4.9 |
| 1990 | 45.7 | 24.1 | 4.8 | 43.1 | 23.2 | 5.0 | 48.3 | 25.0 | 4.6 |
| 1991 | 47.2 | 25.4 | 5.6 | 45.2 | 26.5 | 6.5 | 49.1 | 24.4 | 4.7 |
| 1992 | 47.2 | 25.8 | 5.5 | 46.8 | 25.8 | 6.6 | 47.5 | 25.8 | 4.5 |
| 1993 | 46.3 | 24.6 | 5.1 | 44.9 | 24.6 | 5.1 | 47.6 | 24.6 | 5.1 |
| 1994 | 48.6 | 27.5 | 5.8 | 48.2 | 28.7 | 6.6 | 48.9 | 26.4 | 5.2 |
| 1995 | 47.2 | 26.8 | 6.5 | 44.9 | 27.4 | 7.8 | 49.4 | 26.2 | 5.2 |

Supplemental Tables and Notes
Table 50-4 Percentage of college students aged 16-24 who were employed in October, by sex, hours worked per week, and enrollment status: 1970-95-Continued

| October | All students |  |  | Male |  |  | Female |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total* | 20 or <br> more <br> hours | 35 or <br> more hours | Total* | 20 or <br> more <br> hours | 35 or <br> more hours | Total* | 20 or <br> more <br> hours | 35 or <br> more <br> hours |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Part-time college students |  |  |  |  |  |  |  |  |
| 1970 | 82.5 | 76.2 | 60.4 | 87.6 | 82.0 | 66.2 | 77.7 | 71.1 | 55.2 |
| 1971 | 83.4 | 75.0 | 51.7 | 87.7 | 80.4 | 60.9 | 78.2 | 68.7 | 40.7 |
| 1972 | 83.1 | 76.1 | 53.1 | 88.5 | 81.5 | 61.5 | 77.4 | 70.4 | 44.2 |
| 1973 | 85.3 | 76.8 | 52.5 | 86.3 | 78.9 | 57.5 | 84.4 | 74.8 | 47.3 |
| 1974 | 84.4 | 77.2 | 61.0 | 88.3 | 82.1 | 65.8 | 80.7 | 72.5 | 56.5 |
| 1975 | 80.8 | 72.1 | 52.6 | 82.5 | 74.1 | 55.3 | 79.1 | 70.0 | 49.9 |
| 1976 | 84.6 | 76.1 | 53.0 | 84.0 | 76.4 | 56.2 | 85.3 | 75.9 | 50.3 |
| 1977 | 83.4 | 75.3 | 53.1 | 86.3 | 78.4 | 57.0 | 80.6 | 72.3 | 49.5 |
| 1978 | 86.1 | 76.6 | 53.9 | 88.6 | 80.4 | 61.6 | 83.8 | 72.8 | 47.0 |
| 1979 | 86.9 | 78.8 | 56.6 | 90.4 | 82.3 | 60.4 | 83.9 | 76.2 | 53.6 |
| 1980 | 85.2 | 75.7 | 53.0 | 86.5 | 80.2 | 58.2 | 84.2 | 72.3 | 49.1 |
| 1981 | 85.7 | 76.0 | 51.4 | 88.5 | 78.0 | 57.2 | 83.3 | 74.3 | 46.4 |
| 1982 | 81.1 | 69.7 | 48.1 | 79.8 | 70.2 | 50.7 | 82.1 | 69.4 | 46.2 |
| 1983 | 81.7 | 74.8 | 48.1 | 84.0 | 78.3 | 52.5 | 79.5 | 71.3 | 43.8 |
| 1984 | 84.9 | 77.7 | 55.2 | 90.0 | 82.0 | 60.1 | 80.6 | 74.2 | 51.2 |
| 1985 | 85.9 | 79.0 | 52.2 | 85.9 | 80.0 | 53.6 | 85.7 | 78.3 | 51.2 |
| 1986 | 87.2 | 78.0 | 54.4 | 87.8 | 81.7 | 59.0 | 86.9 | 75.3 | 50.9 |
| 1987 | 85.4 | 77.4 | 49.5 | 86.9 | 78.8 | 50.4 | 84.3 | 76.2 | 48.8 |
| 1988 | 88.3 | 81.6 | 54.2 | 87.4 | 82.1 | 56.1 | 89.2 | 81.3 | 52.7 |
| 1989 | 87.2 | 80.8 | 55.4 | 88.1 | 82.6 | 60.1 | 86.7 | 79.4 | 52.0 |
| 1990 | 83.7 | 78.7 | 52.7 | 86.4 | 82.6 | 55.4 | 81.3 | 75.4 | 50.5 |
| 1991 | 85.8 | 76.3 | 50.9 | 87.2 | 79.3 | 50.2 | 84.7 | 73.9 | 51.7 |
| 1992 | 83.4 | 75.0 | 47.8 | 83.7 | 75.8 | 44.1 | 83.2 | 74.5 | 50.3 |
| 1993 | 84.6 | 75.1 | 43.7 | 86.9 | 79.6 | 47.4 | 82.8 | 71.4 | 40.7 |
| 1994 | 86.4 | 74.9 | 43.7 | 85.0 | 76.3 | 47.6 | 87.2 | 73.7 | 40.9 |
| 1995 | 83.0 | 72.7 | 42.3 | 87.3 | 76.3 | 48.9 | 79.6 | 69.8 | 37.1 |

[^44]Table 50-5 Percentage of high school students aged 16-24 who were employed in October, by sex and hours worked per week: 1970-95

|  | All students |  |  | Male |  |  | Female |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total* | 20 or <br> more <br> hours | 35 or <br> more <br> hours | Tota** | 20 or more hours | 35 or <br> more <br> hours | Tota** | 20 or <br> more <br> hours | 35 or <br> more <br> hours |
| 1970 | 31.5 | 11.6 | 2.8 | 34.6 | 15.0 | 4.0 | 28.1 | 7.8 | 1.5 |
| 1971 | 30.4 | 11.2 | 2.2 | 33.9 | 14.9 | 3.1 | 26.7 | 7.2 | 1.2 |
| 1972 | 32.5 | 13.6 | 2.9 | 36.0 | 16.9 | 4.2 | 28.6 | 9.9 | 1.5 |
| 1973 | 36.1 | 15.4 | 3.3 | 39.3 | 19.5 | 4.9 | 32.5 | 10.8 | 1.5 |
| 1974 | 35.2 | 15.1 | 3.1 | 38.1 | 18.5 | 4.3 | 32.0 | 11.4 | 1.7 |
| 1975 | 32.9 | 13.0 | 2.7 | 34.5 | 15.7 | 3.9 | 31.1 | 10.0 | 1.3 |
| 1976 | 33.4 | 14.3 | 2.6 | 35.3 | 17.3 | 3.7 | 31.3 | 10.9 | 1.3 |
| 1977 | 35.8 | 15.7 | 3.2 | 39.0 | 19.0 | 4.4 | 32.2 | 12.1 | 2.1 |
| 1978 | 38.2 | 16.2 | 2.9 | 39.8 | 19.2 | 3.9 | 36.5 | 12.9 | 1.8 |
| 1979 | 38.0 | 16.2 | 2.7 | 39.5 | 19.1 | 3.5 | 36.3 | 13.0 | 1.8 |
| 1980 | 35.1 | 13.3 | 2.3 | 36.0 | 14.7 | 3.0 | 34.0 | 11.9 | 1.4 |
| 1981 | 32.5 | 12.0 | 2.1 | 34.7 | 14.2 | 2.9 | 30.1 | 9.8 | 1.2 |
| 1982 | 29.5 | 9.7 | 1.6 | 29.3 | 10.6 | 2.1 | 29.8 | 8.6 | 0.9 |
| 1983 | 28.7 | 9.8 | 1.5 | 28.6 | 10.0 | 1.9 | 28.9 | 9.6 | 1.1 |
| 1984 | 31.0 | 11.5 | 1.3 | 31.3 | 12.6 | 2.0 | 30.6 | 10.3 | 0.4 |
| 1985 | 31.3 | 11.9 | 1.2 | 31.6 | 12.8 | 1.8 | 31.0 | 11.0 | 0.6 |
| 1986 | 34.1 | 13.7 | 1.9 | 33.2 | 14.0 | 2.6 | 35.2 | 13.4 | 1.2 |
| 1987 | 34.6 | 13.4 | 1.6 | 33.5 | 15.1 | 2.1 | 35.9 | 11.5 | 1.0 |
| 1988 | 35.1 | 14.2 | 1.6 | 34.7 | 16.7 | 2.3 | 35.5 | 11.3 | 0.9 |
| 1989 | 37.6 | 14.8 | 1.9 | 36.8 | 16.4 | 2.8 | 38.4 | 13.0 | 0.9 |
| 1990 | 32.1 | 11.9 | 2.0 | 32.7 | 13.2 | 2.4 | 31.4 | 10.4 | 1.6 |
| 1991 | 31.1 | 11.0 | 1.2 | 30.2 | 11.4 | 1.3 | 32.1 | 10.5 | 1.1 |
| 1992 | 29.6 | 10.7 | 1.2 | 31.1 | 11.9 | 1.5 | 27.9 | 9.4 | 0.8 |
| 1993 | 30.5 | 11.4 | 1.4 | 29.5 | 12.0 | 1.6 | 31.8 | 10.8 | 1.2 |
| 1994 | 35.1 | 13.5 | 1.7 | 35.6 | 14.7 | 2.0 | 34.5 | 12.3 | 1.3 |
| 1995 | 33.4 | 13.6 | 1.9 | 32.6 | 14.1 | 2.1 | 34.4 | 13.1 | 1.7 |

[^45] survey week. October Current Population Surveys.

Table 50-6 Percentage of high school students aged 16-24 who were employed in October, by family income and hours worked per week: October 1970-95

|  | All students |  |  | Low ${ }^{1}$ |  |  | Middle ${ }^{1}$ |  |  | High ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total ${ }^{2}$ | 20 or more hours | 35 or more hours | Total ${ }^{2}$ | 20 or more hours | 35 or more hours | Total ${ }^{2}$ | 20 or more hours | 35 or more hours | Total ${ }^{2}$ | 20 or more hours | 35 or <br> more hours |
| 1970 | 31.5 | 11.6 | 2.8 | 21.7 | 7.3 | 2.8 | 31.0 | 12.4 | 3.1 | 35.7 | 11.3 | 2.0 |
| 1971 | 30.4 | 11.2 | 2.2 | 22.4 | 8.8 | 3.1 | 30.1 | 11.6 | 2.3 | 33.6 | 11.1 | 1.6 |
| 1972 | 32.5 | 13.6 | 2.9 | 19.3 | 9.0 | 3.1 | 31.4 | 13.9 | 3.1 | 39.1 | 14.4 | 2.4 |
| 1973 | 36.1 | 15.4 | 3.3 | 18.9 | 9.6 | 3.6 | 35.6 | 15.2 | 3.4 | 42.0 | 17.4 | 2.9 |
| 1974 | 35.2 | 15.1 | 3.1 | - | - | - | - | - | - | - | - | - |
| 1975 | 32.9 | 13.0 | 2.7 | 18.5 | 7.4 | 2.4 | 31.3 | 13.2 | 3.2 | 40.4 | 14.4 | 1.9 |
| 1976 | 33.4 | 14.3 | 2.6 | 20.8 | 11.1 | 3.7 | 31.7 | 13.4 | 2.7 | 40.1 | 16.8 | 2.0 |
| 1977 | 35.8 | 15.7 | 3.2 | 17.1 | 9.8 | 4.3 | 33.5 | 14.6 | 2.9 | 45.2 | 19.5 | 3.5 |
| 1978 | 38.2 | 16.2 | 2.9 | 19.6 | 9.4 | 3.3 | 37.5 | 16.4 | 3.0 | 44.8 | 17.7 | 2.6 |
| 1979 | 38.0 | 16.2 | 2.7 | 21.0 | 10.8 | 2.9 | 36.6 | 15.9 | 3.1 | 46.2 | 18.5 | 1.9 |
| 1980 | 35.1 | 13.3 | 2.3 | 19.3 | 8.2 | 1.8 | 34.3 | 13.7 | 2.8 | 42.0 | 14.5 | 1.5 |
| 1981 | 32.5 | 12.0 | 2.1 | 15.8 | 5.9 | 1.1 | 31.3 | 12.1 | 2.4 | 41.7 | 14.5 | 2.1 |
| 1982 | 29.5 | 9.7 | 1.6 | 14.6 | 4.7 | 1.8 | 28.2 | 10.3 | 1.6 | 38.6 | 10.7 | 1.5 |
| 1983 | 28.7 | 9.8 | 1.5 | 11.2 | 4.1 | 1.2 | 26.7 | 10.1 | 1.7 | 40.9 | 12.0 | 1.3 |
| 1984 | 31.0 | 11.5 | 1.3 | 15.9 | 7.3 | 1.2 | 30.0 | 11.3 | 1.2 | 40.3 | 13.9 | 1.5 |
| 1985 | 31.3 | 11.9 | 1.2 | 13.6 | 5.5 | 1.5 | 30.6 | 11.9 | 1.2 | 41.0 | 15.2 | 1.2 |
| 1986 | 34.1 | 13.7 | 1.9 | 18.2 | 10.3 | 1.9 | 33.6 | 13.1 | 2.0 | 42.7 | 16.6 | 1.7 |
| 1987 | 34.6 | 13.4 | 1.6 | 20.2 | 10.1 | 2.2 | 35.0 | 14.0 | 2.0 | 40.8 | 13.9 | 0.8 |
| 1988 | 35.1 | 14.2 | 1.6 | 20.3 | 9.9 | 2.4 | 35.3 | 14.7 | 1.9 | 41.8 | 15.2 | 0.8 |
| 1989 | 37.6 | 14.8 | 1.9 | 22.6 | 10.0 | 2.0 | 38.5 | 15.8 | 2.3 | 43.5 | 15.3 | 1.1 |
| 1990 | 32.1 | 11.9 | 2.0 | 21.7 | 9.5 | 2.6 | 32.6 | 12.6 | 2.1 | 36.8 | 11.6 | 1.5 |
| 1991 | 31.1 | 11.0 | 1.2 | 15.9 | 8.6 | 1.6 | 33.1 | 12.1 | 1.3 | 35.2 | 10.0 | 0.7 |
| 1992 | 29.6 | 10.7 | 1.2 | 13.8 | 5.0 | 0.9 | 30.5 | 11.6 | 1.3 | 36.2 | 11.9 | 1.1 |
| 1993 | 30.5 | 11.4 | 1.4 | 15.2 | 7.0 | 2.3 | 31.5 | 12.4 | 1.3 | 36.8 | 11.8 | 1.3 |
| 1994 | 35.1 | 13.5 | 1.7 | 24.0 | 11.0 | 1.6 | 34.7 | 13.9 | 1.8 | 42.0 | 14.1 | 1.5 |
| 1995 | 33.4 | 13.6 | 1.9 | 16.9 | 8.5 | 3.1 | 33.9 | 14.6 | 2.0 | 42.1 | 14.4 | 1.0 |

- Data regarding family income were not available in 1974.
' Low income is the bottom 20 percent of all family incomes; high income is the top 20 percent of all family incomes; and middle income is the 60 percent in-between.
${ }^{2}$ Includes those who were employed but not at work during the survey week.
SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 50-7 Percentage of high school students aged 16-24 who were employed in October, by parents' highest education level and hours worked per week: 1995

|  |  | 20 or | 35 <br> or <br> more |
| :--- | ---: | ---: | ---: |
| Parents' highest education level ${ }^{\prime}$ | Total $^{2}$ | hours | hours |
| Total | $\mathbf{3 3 . 4}$ | $\mathbf{1 3 . 6}$ | $\mathbf{1 . 9}$ |
| Less than high school graduate | 19.6 | 9.3 | 3.0 |
| High school graduate | 31.8 | 16.0 | 2.3 |
| Some college | 38.1 | 14.9 | 1.3 |
| Bachelor's degree or higher | 37.1 | 10.3 | 0.5 |
| Not available $^{3}$ | 38.8 | 30.0 | 13.8 |

'Parents' highest education level is defined as 1) either the highest educational attainment of the two parents who reside with the student, or if only one parent is in the residence, the highest educational attainment of that parent; or 2) when neither parent resides with the student ( 7 percent of those enrolled in high school in 1995), the highest educational attainment of the head of the household and his or her spouse.
${ }^{2}$ Includes those who were employed but not at work during the survey week.
${ }^{3}$ Parents' highest education level is not available 1) for those who do not live with their parents and who are classified as the head of the household; and 2) for those whose parents' educational attainment was not reported. In 1995, 29 percent of all respondents aged 16-24 were in this category.
SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table 51-1 Percentage of undergraduate students enrolled in college part time, by age and race/ ethnicity: October 1972-95

| October | Aged 18-24 |  |  | Aged 25-34 |  |  | Aged 35 or older |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White | Black | Hispanic | White | Black | Hispanic | White | Black | Hispanic |
| 1976 | 15.0 | 10.5 | 19.5 | 63.4 | 52.8 | 63.9 | 82.3 | 64.9 | 75.9 |
| 1977 | 15.6 | 16.3 | 18.1 | 66.8 | 49.8 | 66.9 | - | - | - |
| 1978 | 16.3 | 12.3 | 28.6 | 65.2 | 57.9 | 57.9 | 85.2 | 72.3 | 82.5 |
| 1979 | 16.3 | 13.2 | 19.4 | 69.5 | 59.5 | 41.0 | 84.0 | 69.4 | 82.4 |
| 1980 | 15.4 | 13.9 | 24.5 | 70.1 | 65.9 | 59.9 | 84.3 | 74.5 | 78.3 |
| 1981 | 15.5 | 14.6 | 16.5 | 67.8 | 55.0 | 71.8 | 81.7 | 59.7 | 64.5 |
| 1982 | 15.8 | 17.9 | 30.7 | 64.5 | 58.6 | 57.0 | 81.8 | 70.9 | 97.9 |
| 1983 | 15.3 | 15.8 | 28.4 | 65.5 | 50.9 | 60.4 | 84.1 | 61.6 | 83.3 |
| 1984 | 14.6 | 18.3 | 20.7 | 65.2 | 53.1 | 56.7 | 80.3 | 77.8 | 83.9 |
| 1985 | 14.1 | 17.4 | 22.4 | 65.2 | 51.5 | 66.9 | 82.5 | 75.3 | 84.5 |
| 1986 | 15.7 | 13.9 | 28.3 | 67.8 | 50.8 | 65.6 | 79.2 | 71.4 | 75.9 |
| 1987 | 16.0 | 16.4 | 28.8 | 70.2 | 54.2 | 66.9 | 79.4 | 66.9 | 89.4 |
| 1988 | 15.7 | 13.4 | 24.8 | 64.3 | 59.7 | 70.8 | 77.8 | 77.7 | 90.2 |
| 1989 | 14.4 | 14.2 | 25.6 | 66.1 | 65.3 | 67.6 | 75.2 | 74.7 | 70.3 |
| 1990 | 14.5 | 19.5 | 26.4 | 61.9 | 49.2 | 73.7 | 76.0 | 65.7 | 77.2 |
| 1991 | 14.1 | 14.3 | 24.7 | 59.9 | 54.9 | 59.8 | 74.7 | 68.5 | 86.1 |
| 1992 | 14.5 | 17.0 | 27.6 | 60.2 | 50.7 | 74.3 | 71.5 | 70.2 | 72.1 |
| 1993 | 15.7 | 14.9 | 24.6 | 56.3 | 54.5 | 57.6 | 70.4 | 58.0 | 70.4 |
| 1994 | 15.6 | 16.2 | 35.1 | 56.9 | 60.0 | 55.6 | 69.2 | 67.6 | 64.7 |
| 1995 | 15.3 | 18.7 | 26.7 | 54.5 | 49.0 | 58.1 | 66.5 | 70.2 | 76.0 |

- Data for college students aged 35 or older were not available in 1977.

NOTE: Students who were enrolled in college but had not completed high school (less than 1 percent of the total enrolled) were not included in this analysis.

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Supplemental Tables and Notes
Table 51-2 Percentage of undergraduate students enrolled in college part time, by sex and age: October 1972-95

| October | Total |  | Aged 18-24 |  | Aged 25-34 |  | Aged 35 or older |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female | Male | Female |
| 1976 | 26.8 | 29.0 | 14.2 | 15.1 | 59.5 | 65.2 | 75.3 | 83.1 |
| 1977 | - | - | 15.4 | 16.0 | 59.2 | 68.8 | - | - |
| 1978 | 27.0 | 33.7 | 14.8 | 17.5 | 59.4 | 66.8 | 81.5 | 84.1 |
| 1979 | 27.1 | 35.1 | 14.9 | 17.3 | 59.2 | 72.0 | 82.7 | 82.0 |
| 1980 | 25.7 | 35.5 | 13.4 | 18.2 | 64.3 | 72.3 | 77.4 | 84.4 |
| 1981 | 27.2 | 34.0 | 14.3 | 16.9 | 63.2 | 68.7 | 80.9 | 76.9 |
| 1982 | 26.3 | 34.4 | 14.8 | 18.9 | 56.5 | 67.2 | 86.2 | 78.6 |
| 1983 | 27.3 | 34.4 | 15.7 | 16.3 | 56.1 | 66.9 | 79.3 | 82.5 |
| 1984 | 24.7 | 34.7 | 13.6 | 17.4 | 58.2 | 65.7 | 76.6 | 81.9 |
| 1985 | 26.3 | 34.7 | 13.1 | 16.9 | 62.3 | 63.3 | 81.6 | 82.0 |
| 1986 | 28.6 | 35.9 | 14.9 | 17.7 | 63.5 | 66.0 | 77.4 | 78.5 |
| 1987 | 28.6 | 36.4 | 15.6 | 18.2 | 65.7 | 68.4 | 74.8 | 79.6 |
| 1988 | 27.8 | 35.1 | 15.1 | 16.8 | 61.0 | 64.4 | 77.0 | 78.1 |
| 1989 | 27.4 | 35.0 | 13.4 | 16.7 | 64.6 | 66.3 | 76.1 | 73.3 |
| 1990 | 28.1 | 35.0 | 15.1 | 16.5 | 59.5 | 60.5 | 78.1 | 73.6 |
| 1991 | 27.4 | 34.1 | 14.2 | 15.1 | 56.4 | 60.9 | 72.5 | 75.0 |
| 1992 | 27.1 | 34.3 | 13.8 | 17.3 | 60.3 | 59.7 | 68.8 | 71.7 |
| 1993 | 26.8 | 34.0 | 15.2 | 16.7 | 51.8 | 58.6 | 66.2 | 68.6 |
| 1994 | 28.5 | 35.2 | 15.9 | 18.4 | 53.1 | 60.1 | 69.1 | 68.0 |
| 1995 | 28.1 | 32.5 | 15.9 | 17.5 | 53.9 | 52.8 | 70.5 | 66.4 |

[^46]$\begin{array}{ll}\text { Table 51-3 } & \begin{array}{l}\text { Percentage of undergraduate students enrolled in college part time, by type of } \\ \text { institution and age: October 1976-95 }\end{array}\end{array}$

| October | Total |  | Aged 18-24 |  | Aged 25-34 |  | Aged 35 or older |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2-year | 4 -year | 2-year | 4 -year | 2-year | 4-year | 2-year | 4 -year |
| 1976 | 48.2 | 17.6 | 30.8 | 8.8 | 68.3 | 53.7 | 81.7 | 78.1 |
| 1977 | - | - | 35.1 | 8.1 | 72.4 | 53.9 | - | - |
| 1978 | 53.3 | 18.0 | 35.4 | 8.8 | 75.5 | 50.1 | 87.9 | 75.8 |
| 1979 | 52.8 | 20.2 | 34.9 | 9.1 | 72.1 | 60.0 | 86.3 | 75.7 |
| 1980 | 50.4 | 18.9 | 32.2 | 8.8 | 77.0 | 58.4 | 85.0 | 76.1 |
| 1981 | 48.9 | 19.6 | 32.0 | 8.3 | 74.1 | 56.3 | 78.9 | 74.9 |
| 1982 | 48.5 | 18.9 | 33.0 | 9.2 | 69.2 | 52.7 | 83.0 | 76.5 |
| 1983 | 50.6 | 19.2 | 32.9 | 8.6 | 71.2 | 51.7 | 85.7 | 74.4 |
| 1984 | 49.1 | 19.4 | 33.1 | 8.3 | 69.6 | 54.7 | 81.0 | 78.7 |
| 1985 | 52.1 | 18.7 | 32.9 | 7.4 | 72.0 | 53.4 | 86.0 | 75.4 |
| 1986 | 53.9 | 20.2 | 35.5 | 8.5 | 75.0 | 54.5 | 81.7 | 72.4 |
| 1987 | 52.8 | 21.8 | 35.0 | 9.4 | 75.2 | 60.4 | 82.6 | 72.4 |
| 1988 | 50.7 | 21.3 | 32.4 | 8.8 | 74.3 | 52.9 | 81.3 | 74.0 |
| 1989 | 52.7 | 20.8 | 33.2 | 8.2 | 75.9 | 57.1 | 81.3 | 66.4 |
| 1990 | 51.1 | 21.3 | 33.4 | 8.7 | 67.7 | 53.3 | 79.9 | 69.0 |
| 1991 | 48.8 | 20.5 | 31.5 | 7.2 | 66.9 | 50.5 | 76.1 | 72.3 |
| 1992 | 48.6 | 21.3 | 30.7 | 9.0 | 69.0 | 51.9 | 77.1 | 64.3 |
| 1993 | 45.9 | 22.0 | 30.3 | 9.7 | 62.8 | 49.6 | 69.7 | 65.9 |
| 1994 | 48.8 | 23.7 | 32.0 | 11.5 | 66.4 | 49.6 | 71.6 | 65.3 |
| 1995 | 48.2 | 22.1 | 32.6 | 10.8 | 64.1 | 45.6 | 74.5 | 62.1 |

[^47]
## Supplemental Tables and Notes

Table 51-4 Percentage of undergraduate students enrolled in college part time, by age, race/ ethnicity, sex, and type of institution: October 1976-95

|  |  | Age |  |  | Race/ethnicity |  |  | Sex |  | Type of institution |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total | 18-24 | 25-34 | 35 or older | White | Black | Hispanic | Male | Female | 2-year | 4-year |
| 1976 | 27.9 | 14.6 | 61.7 | 80.2 | 28.1 | 24.0 | 33.4 | 26.8 | 29.0 | 48.2 | 17.6 |
| 1977 | - | 15.7 | 63.5 | - | - | - | - | - | - | - | - |
| 1978 | 30.3 | 16.1 | 62.9 | 83.3 | 30.5 | 28.2 | 39.9 | 27.0 | 33.7 | 53.3 | 18.0 |
| 1979 | 31.3 | 16.1 | 65.7 | 82.2 | 32.0 | 27.9 | 29.1 | 27.1 | 35.1 | 52.8 | 20.2 |
| 1980 | 30.9 | 15.8 | 68.7 | 82.3 | 30.6 | 31.4 | 35.8 | 25.7 | 35.5 | 50.4 | 18.9 |
| 1981 | 30.8 | 15.6 | 66.1 | 78.1 | 30.7 | 28.4 | 34.6 | 27.2 | 34.0 | 48.9 | 19.6 |
| 1982 | 30.5 | 16.9 | 62.1 | 80.9 | 30.0 | 31.3 | 41.5 | 26.3 | 34.4 | 48.5 | 18.9 |
| 1983 | 31.0 | 16.0 | 61.6 | 81.5 | 31.0 | 27.9 | 40.9 | 27.3 | 34.4 | 50.6 | 19.2 |
| 1984 | 29.9 | 15.4 | 62.2 | 80.5 | 29.6 | 31.1 | 31.9 | 24.7 | 34.7 | 49.1 | 19.4 |
| 1985 | 30.8 | 15.0 | 62.8 | 81.9 | 30.3 | 31.0 | 39.6 | 26.3 | 34.7 | 52.1 | 18.7 |
| 1986 | 32.5 | 16.3 | 64.8 | 78.1 | 32.3 | 29.3 | 41.8 | 28.6 | 35.9 | 53.9 | 20.2 |
| 1987 | 32.7 | 16.9 | 67.2 | 78.1 | 32.6 | 29.8 | 42.5 | 28.6 | 36.4 | 52.8 | 21.8 |
| 1988 | 31.8 | 15.9 | 62.9 | 77.8 | 31.6 | 33.1 | 40.9 | 27.8 | 35.1 | 50.7 | 21.3 |
| 1989 | 31.6 | 15.1 | 65.6 | 74.1 | 31.4 | 29.3 | 40.1 | 27.4 | 35.0 | 52.7 | 20.8 |
| 1990 | 31.9 | 15.8 | 60.1 | 74.9 | 31.7 | 29.8 | 42.8 | 28.1 | 35.0 | 51.1 | 21.3 |
| 1991 | 31.1 | 14.7 | 58.9 | 74.2 | 31.0 | 30.9 | 37.9 | 27.4 | 34.1 | 48.8 | 20.5 |
| 1992 | 31.2 | 15.6 | 59.9 | 70.8 | 30.9 | 29.9 | 42.4 | 27.1 | 34.3 | 48.6 | 21.3 |
| 1993 | 30.7 | 15.9 | 55.7 | 67.9 | 31.0 | 30.0 | 37.1 | 26.8 | 34.0 | 45.9 | 22.0 |
| 1994 | 32.2 | 17.2 | 57.0 | 68.4 | 31.1 | 33.6 | 44.4 | 28.5 | 35.2 | 48.8 | 23.7 |
| 1995 | 30.5 | 16.7 | 53.3 | 67.7 | 29.5 | 32.4 | 39.6 | 28.1 | 32.5 | 48.2 | 22.1 |

[^48]NOTE: Students who were enrolled in college but had not completed high school (less than 1 percent of the total enrolled) were not included in this analysis.

Table 51-5 Percentage of graduate students enrolled in college part time, by sex and age: October 1976-95

| October | Total | Total |  | Aged 18-24 |  | Aged 25-34 |  | Aged 35 or older |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Male | Female | Male | Female | Male | Female |
| 1976 | 59.6 | 52.5 | 68.8 | 20.4 | 50.0 | 60.3 | 72.6 | 83.6 | 84.8 |
| 1977 | - | - | - | 24.7 | 45.4 | 56.0 | 66.1 | - | - |
| 1978 | 60.2 | 55.1 | 65.7 | 25.4 | 34.7 | 62.6 | 67.3 | 81.8 | 90.0 |
| 1979 | 61.3 | 54.5 | 68.0 | 22.4 | 34.6 | 58.6 | 73.1 | 84.5 | 87.9 |
| 1980 | 58.7 | 52.5 | 65.1 | 23.6 | 30.7 | 56.7 | 71.6 | 86.7 | 85.9 |
| 1981 | 59.5 | 51.6 | 67.8 | 27.1 | 39.3 | 54.5 | 66.5 | 84.2 | 89.9 |
| 1982 | 56.3 | 48.5 | 64.3 | 24.0 | 33.0 | 49.5 | 66.9 | 77.4 | 82.6 |
| 1983 | 54.8 | 48.0 | 62.3 | 20.9 | 30.2 | 48.4 | 65.9 | 84.1 | 78.2 |
| 1984 | 54.3 | 48.3 | 61.1 | 22.1 | 31.4 | 49.0 | 60.4 | 83.6 | 84.3 |
| 1985 | 58.7 | 51.0 | 66.7 | 23.5 | 33.5 | 52.7 | 72.4 | 79.5 | 79.1 |
| 1986 | 54.6 | 49.7 | 59.5 | 18.7 | 24.3 | 50.5 | 64.0 | 79.7 | 77.7 |
| 1987 | 56.9 | 49.8 | 63.4 | 20.7 | 35.8 | 50.4 | 66.0 | 75.5 | 77.8 |
| 1988 | 61.9 | 56.0 | 67.1 | 29.8 | 36.3 | 52.4 | 63.2 | 79.1 | 85.3 |
| 1989 | 54.7 | 48.7 | 60.4 | 21.9 | 29.3 | 47.8 | 62.7 | 70.7 | 76.9 |
| 1990 | 56.3 | 51.2 | 60.6 | 19.1 | 27.2 | 48.7 | 57.4 | 78.1 | 80.9 |
| 1991 | 56.0 | 47.8 | 64.0 | 17.6 | 27.6 | 46.2 | 63.4 | 74.3 | 83.4 |
| 1992 | 52.9 | 45.0 | 59.6 | 15.4 | 29.7 | 46.0 | 62.0 | 69.1 | 73.7 |
| 1993 | 57.1 | 48.8 | 64.6 | 25.5 | 34.4 | 46.3 | 60.2 | 69.6 | 85.0 |
| 1994 | 57.0 | 50.0 | 63.3 | 19.7 | 40.8 | 48.6 | 56.0 | 75.6 | 83.8 |
| 1995 | 56.4 | 50.1 | 62.1 | 20.4 | 27.2 | 45.2 | 60.3 | 71.8 | 82.5 |

[^49]Table 52-1 Percentage distribution of public school expenditures, by function and selected district characteristics: School year 1992-93

| Selected district characteristics | Percentage distribution | Total | Instruction | Support services | Capital outlay | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Median household income |  |  |  |  |  |  |
| Less than \$20,000 | 18.1 | 100.0 | 57.2 | 32.6 | 8.3 | 1.9 |
| 20,000-24,999 | 27.4 | 100.0 | 57.4 | 31.4 | 8.6 | 2.6 |
| 25,000-29,999 | 20.8 | 100.0 | 58.0 | 30.5 | 8.3 | 3.2 |
| 30,000-34,999 | 12.9 | 100.0 | 56.3 | 31.6 | 9.5 | 2.6 |
| 35,000 or more | 20.8 | 100.0 | 56.1 | 31.6 | 9.5 | 2.9 |
| Percentage of school-age children in poverty |  |  |  |  |  |  |
| 0-5 | 15.8 | 100.0 | 56.1 | 31.6 | 9.0 | 3.3 |
| 6-20 | 53.7 | 100.0 | 56.4 | 31.0 | 9.9 | 2.7 |
| 21-40 | 25.2 | 100.0 | 58.3 | 31.5 | 7.5 | 2.7 |
| 41 or more | 5.3 | 100.0 | 56.0 | 34.1 | 8.0 | 1.9 |
| Percentage of limited English proficient school-age children |  |  |  |  |  |  |
| None | 41.1 | 100.0 | 56.4 | 30.4 | 8.3 | 4.9 |
| Less than 5 | 54.0 | 100.0 | 56.5 | 31.5 | 9.4 | 2.5 |
| 5 or more | 4.9 | 100.0 | 59.4 | 30.8 | 6.6 | 3.1 |
| Percentage of minority school-age children |  |  |  |  |  |  |
| Less than 20 percent | 82.6 | 100.0 | 56.7 | 30.6 | 9.7 | 3.0 |
| 20 percent or more | 17.4 | 100.0 | 57.3 | 32.2 | 8.0 | 2.5 |

NOTE: Details may not add to totals due to rounding. Median household income categories are in 1992-93 dollars. See glossary for definitions of specific functions. The number of pupils includes those who were enrolled on October 1.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Fiscal Data," 1992-93. U.S. Department of Commerce, Bureau of the Census, "1990 Census School District Special Tabulations."

Table 52-2 Public school expenditures per pupil (in 1996 constant dollars), by function and selected district characteristics: School year 1992-93

| Selected district characteristics | Total | Instruction | Support services | Capital outlay | Other |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Median household income |  |  |  |  |  |
| Less than \$20,000 | \$5,237 | \$2,993 | \$1,709 | \$434 | \$100 |
| 20,000-24,999 | 5,487 | 3,147 | 1,723 | 473 | 143 |
| 25,000-29,999 | 5,881 | 3,413 | 1,792 | 490 | 187 |
| 30,000-34,999 | 5,794 | 3,260 | 1,831 | 551 | 152 |
| 35,000 or more | 6,661 | 3,737 | 2,102 | 630 | 192 |
| Percentage of school-age children in poverty |  |  |  |  |  |
| 0-5 | 7,402 | 4,150 | 2,338 | 669 | 246 |
| 6-20 | 5,715 | 3,222 | 1,769 | 567 | 156 |
| 21-40 | 5,841 | 3,406 | 1,839 | 435 | 160 |
| 41 or more | 5,709 | 3,194 | 1,948 | 457 | 110 |
| Percentage of limited English proficient school-age children |  |  |  |  |  |
| None | 5,874 | 3,314 | 1,785 | 488 | 287 |
| Less than 5 | 5,917 | 3,345 | 1,866 | 558 | 148 |
| 5 or more | 6,162 | 3,660 | 1,899 | 409 | 194 |
| Percentage of minority school-age children |  |  |  |  |  |
| Less than 20 percent | 5,972 | 3,384 | 1,828 | 580 | 180 |
| 20 percent or more | 5,922 | 3,392 | 1,907 | 474 | 149 |

NOTE: Details may not add to totals due to rounding. Median household income categories are in 1992-93 dollars. See glossary for definitions of specific functions. The number of pupils includes those who were enrolled on October 1. The Consumer Price Index (CPI) was used to adjust expenditures into constant 1996 dollars. See table 53-1 for resources on alternative adjustment approaches.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Fiscal Data," 1992-93. U.S. Department of Commerce, Bureau of the Census, "1990 Census School District Special Tabulations."

Table 53-1 Percentage distribution of current fund revenues of institutions of higher education per full-time-equivalent (FTE) student, by revenue source and control and type of institution: Academic years ending 1977-94

| Academic year ending | Total | Tuition and fees ${ }^{1}$ | Federal appropriations | State and local appropriations | Federal grants and contracts | State and <br> local <br> grants and <br> contracts | Private gifts | Endowment | Sales and services of educational activities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private universities ${ }^{2}$ |  |  |  |  |  |  |  |  |
| 1977 | 100.0 | 40.3 | 2.2 | 1.8 | 27.7 | 2.5 | 12.9 | 8.0 | 4.6 |
| 1978 | 100.0 | 40.6 | 2.0 | 1.6 | 27.4 | 2.2 | 13.4 | 7.7 | 5.1 |
| 1979 | 100.0 | 40.8 | 2.0 | 1.5 | 27.4 | 2.2 | 12.9 | 8.2 | 4.9 |
| 1980 | 100.0 | 40.1 | 1.9 | 1.4 | 27.8 | ${ }^{3} 2.6$ | 12.4 | 8.3 | 5.4 |
| 1981 | 100.0 | 40.8 | 1.8 | 1.5 | 27.4 | ${ }^{3} 2.1$ | 12.8 | 8.4 | 5.2 |
| 1982 | 100.0 | 42.5 | 1.7 | 1.4 | 25.6 | 1.9 | 12.7 | 8.7 | 5.3 |
| 1983 | 100.0 | 45.0 | 1.8 | 1.4 | 23.2 | ${ }^{3} 2.2$ | 12.9 | 7.7 | 5.7 |
| 1984 | 100.0 | 44.2 | 1.6 | 1.3 | 22.8 | ${ }^{3} 2.2$ | 13.4 | 8.4 | 6.1 |
| 1985 | 100.0 | 44.4 | 1.5 | 1.2 | 22.8 | ${ }^{3} 2.1$ | 13.5 | 8.7 | 5.7 |
| 1986 | 100.0 | 44.2 | 1.4 | 1.2 | 23.2 | ${ }^{3} 2.2$ | 13.6 | 8.6 | 5.7 |
| 1987 | 100.0 | 43.8 | 1.1 | 1.1 | 23.9 | ${ }^{3} 2.8$ | 13.3 | 8.2 | 5.7 |
| 1988 | 100.0 | 44.0 | 1.1 | 1.0 | 22.3 | ${ }^{3} 3.6$ | 13.5 | 8.5 | 6.0 |
| 1989 | 100.0 | 44.0 | 1.1 | 0.9 | 21.9 | ${ }^{3} 3.7$ | 13.2 | 8.6 | 6.5 |
| 1990 | 100.0 | 43.9 | 1.1 | 0.9 | 21.9 | ${ }^{3} 3.7$ | 13.4 | 8.6 | 6.4 |
| 1991 | 100.0 | 45.0 | 0.9 | 0.8 | 21.2 | ${ }^{3} 3.2$ | 13.6 | 8.5 | 6.8 |
| 1992 | 100.0 | 45.1 | 0.9 | 0.5 | 21.1 | ${ }^{3} 3.4$ | 13.5 | 8.1 | 7.4 |
| 1993 | 100.0 | 44.8 | 0.8 | 0.4 | 21.1 | ${ }^{3} 3.4$ | 14.0 | 8.1 | 7.5 |
| 1994 | 100.0 | 45.0 | 0.8 | 0.4 | 21.6 | 2.6 | 14.1 | 7.9 | 7.7 |
|  | Public universities ${ }^{2}$ |  |  |  |  |  |  |  |  |
| 1977 | 100.0 | 16.4 | 2.9 | 52.4 | 17.0 | 2.1 | 4.7 | 0.7 | 3.7 |
| 1978 | 100.0 | 16.3 | 3.0 | 52.5 | 16.7 | 2.1 | 4.8 | 1.0 | 3.5 |
| 1979 | 100.0 | 15.9 | 3.0 | 52.1 | 16.9 | 2.3 | 4.7 | 1.0 | 4.0 |
| 1980 | 100.0 | 15.9 | 2.6 | 51.8 | 17.4 | 2.1 | 5.0 | 1.1 | 4.1 |
| 1981 | 100.0 | 16.4 | 2.3 | 51.3 | 17.3 | 2.3 | 5.0 | 1.1 | 4.3 |
| 1982 | 100.0 | 17.6 | 2.1 | 51.4 | 15.8 | 2.2 | 5.3 | 1.1 | 4.4 |
| 1983 | 100.0 | 19.0 | 2.0 | 50.3 | 15.0 | 2.1 | 5.9 | 1.2 | 4.5 |
| 1984 | 100.0 | 19.1 | 2.0 | 50.6 | 14.9 | 1.9 | 5.8 | 1.3 | 4.4 |
| 1985 | 100.0 | 18.3 | 2.1 | 51.2 | 14.8 | 2.0 | 5.9 | 1.3 | 4.4 |
| 1986 | 100.0 | 18.6 | 2.1 | 50.5 | 14.8 | 2.0 | 6.2 | 1.4 | 4.4 |
| 1987 | 100.0 | 19.5 | 1.9 | 49.3 | 15.0 | 2.4 | 6.4 | 1.0 | 4.5 |
| 1988 | 100.0 | 19.8 | 1.5 | 48.7 | 15.4 | 2.4 | 6.6 | 1.0 | 4.5 |
| 1989 | 100.0 | 20.0 | 1.5 | 47.7 | 15.6 | 2.6 | 7.0 | 1.0 | 4.6 |
| 1990 | 100.0 | 20.3 | 1.4 | 46.8 | 15.6 | 2.9 | 7.3 | 1.0 | 4.6 |
| 1991 | 100.0 | 21.1 | 1.4 | 45.6 | 16.0 | 3.0 | 7.2 | 1.1 | 4.8 |
| 1992 | 100.0 | 22.2 | 1.4 | 42.9 | 16.9 | 2.7 | 7.6 | 1.2 | 5.1 |
| 1993 | 100.0 | 23.0 | 1.4 | 41.8 | 17.0 | 2.7 | 7.7 | 1.3 | 5.1 |
| 1994 | 100.0 | 23.8 | 1.3 | 40.7 | 17.6 | 2.9 | 7.6 | 1.2 | 4.9 |

Table 53-1 Percentage distribution of current fund revenues of institutions of higher education per full-time-equivalent (FTE) student, by revenue source and control and type of institution: Academic years ending 1977-94-Continued

| Academic year ending | Total | Tuition and fees ${ }^{1}$ | Federal appropriations | State and local appropriations | Federal grants and contracts | State and local grants and contracts | Private gifts | Endowment | Sales and services of educational activities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private 4-year colleges |  |  |  |  |  |  |  |  |
| 1977 | 100.0 | 61.7 | 0.9 | 2.1 | 10.8 | 2.0 | 15.6 | 5.8 | 1.0 |
| 1978 | 100.0 | 62.5 | 1.0 | 2.0 | 10.5 | 2.0 | 15.2 | 5.8 | 1.0 |
| 1979 | 100.0 | 62.2 | 1.0 | 1.9 | 11.0 | 2.0 | 14.7 | 6.2 | 1.0 |
| 1980 | 100.0 | 61.0 | 1.0 | 1.9 | 11.5 | 2.3 | 14.5 | 6.6 | 1.1 |
| 1981 | 100.0 | 61.6 | 1.1 | 1.9 | 10.7 | 2.3 | 14.3 | 6.9 | 1.2 |
| 1982 | 100.0 | 63.0 | 0.8 | 1.7 | 9.2 | 2.3 | 14.2 | 7.6 | 1.0 |
| 1983 | 100.0 | 64.6 | 0.6 | 1.7 | 7.7 | 2.4 | 14.4 | 7.5 | 1.0 |
| 1984 | 100.0 | 65.0 | 0.5 | 1.7 | 7.7 | 2.4 | 14.2 | 7.4 | 1.1 |
| 1985 | 100.0 | 64.8 | 0.5 | 1.6 | 7.7 | 2.5 | 14.3 | 7.5 | 1.0 |
| 1986 | 100.0 | 64.9 | 0.5 | 1.6 | 7.8 | 2.6 | 14.1 | 7.4 | 1.1 |
| 1987 | 100.0 | 65.2 | 0.6 | 1.6 | 7.4 | 2.9 | 14.1 | 7.2 | 1.1 |
| 1988 | 100.0 | 65.5 | 0.5 | 1.6 | 7.4 | 3.1 | 13.4 | 7.3 | 1.1 |
| 1989 | 100.0 | 66.0 | 0.4 | 1.4 | 7.1 | 3.6 | 13.0 | 7.5 | 1.1 |
| 1990 | 100.0 | 66.8 | 0.4 | 1.2 | 7.1 | 3.8 | 12.4 | 7.3 | 1.0 |
| 1991 | 100.0 | 68.1 | 0.4 | 1.1 | 6.8 | 3.5 | 12.0 | 7.1 | 1.0 |
| 1992 | 100.0 | 68.9 | 0.4 | 0.8 | 7.0 | 4.1 | 11.5 | 6.5 | 1.0 |
| 1993 | 100.0 | 69.3 | 0.3 | 0.7 | 7.0 | 3.8 | 11.3 | 6.1 | 1.5 |
| 1994 | 100.0 | 69.6 | 0.2 | 0.7 | 7.0 | 4.0 | 11.1 | 5.8 | 1.5 |
| Public 4-year colleges |  |  |  |  |  |  |  |  |  |
| 1977 | 100.0 | 16.4 | 4.9 | 60.7 | 11.6 | 2.1 | 2.4 | 0.3 | 1.7 |
| 1978 | 100.0 | 16.0 | 4.9 | 61.4 | 10.9 | 2.2 | 2.5 | 0.2 | 1.8 |
| 1979 | 100.0 | 15.2 | 4.9 | 61.6 | 11.2 | 2.3 | 2.5 | 0.3 | 1.9 |
| 1980 | 100.0 | 14.9 | 5.0 | 61.5 | 11.3 | 2.2 | 2.6 | 0.3 | 2.1 |
| 1981 | 100.0 | 15.4 | 5.3 | 60.8 | 10.9 | 2.2 | 2.7 | 0.4 | 2.3 |
| 1982 | 100.0 | 16.1 | 4.7 | 61.5 | 9.7 | 2.1 | 2.9 | 0.4 | 2.5 |
| 1983 | 100.0 | 17.0 | 4.8 | 61.2 | 8.7 | 2.1 | 3.2 | 0.4 | 2.5 |
| 1984 | 100.0 | 18.2 | 4.7 | 59.8 | 8.5 | 2.3 | 3.3 | 0.4 | 2.7 |
| 1985 | 100.0 | 17.6 | 4.6 | 60.7 | 8.3 | 2.1 | 3.4 | 0.4 | 2.8 |
| 1986 | 100.0 | 17.7 | 4.3 | 60.0 | 8.4 | 2.6 | 3.6 | 0.4 | 3.0 |
| 1987 | 100.0 | 18.0 | 4.3 | 58.8 | 8.4 | 3.0 | 3.8 | 0.5 | 3.3 |
| 1988 | 100.0 | 18.4 | 4.3 | 58.4 | 8.3 | 2.9 | 3.7 | 0.5 | 3.5 |
| 1989 | 100.0 | 19.2 | 2.8 | 58.1 | 8.6 | 3.0 | 4.1 | 0.6 | 3.7 |
| 1990 | 100.0 | 19.7 | 4.2 | 55.6 | 8.6 | 3.2 | 4.3 | 0.6 | 3.8 |
| 1991 | 100.0 | 20.7 | 3.8 | 53.8 | 8.9 | 3.4 | 4.8 | 0.3 | 4.2 |
| 1992 | 100.0 | 22.4 | 3.6 | 51.3 | 9.4 | 3.7 | 4.9 | 0.6 | 4.1 |
| 1993 | 100.0 | 23.9 | 3.2 | 48.1 | 10.4 | 4.0 | 5.2 | 0.8 | 4.4 |
| 1994 | 100.0 | 24.4 | 3.4 | 46.8 | 10.8 | 4.2 | 5.3 | 0.6 | 4.5 |

Table 53-1 Percentage distribution of current fund revenues of institutions of higher education per full-time-equivalent (FTE) student, by revenue source and control and type of institution: Academic years ending 1977-94-Continued

| Academic year ending | Total | Tuition and fees ${ }^{1}$ | Federal appropriations | State and local appropriations | Federal grants and contracts | State and local grants and contracts | Private $\qquad$ gifts | Endowment | Sales and services of educational activities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Public 2-year colleges |  |  |  |  |  |  |  |  |
| 1977 | 100.0 | 16.8 | 2.0 | 72.5 | 5.8 | 2.0 | 0.5 | 0.1 | 0.4 |
| 1978 | 100.0 | 16.1 | 1.8 | 73.3 | 5.5 | 2.3 | 0.5 | 0.1 | 0.4 |
| 1979 | 100.0 | 15.8 | 1.9 | 72.7 | 6.0 | 2.5 | 0.5 | 0.1 | 0.5 |
| 1980 | 100.0 | 16.1 | 1.3 | 72.6 | 6.3 | 2.6 | 0.5 | 0.1 | 0.5 |
| 1981 | 100.0 | 16.8 | 1.2 | 71.7 | 6.3 | 2.8 | 0.5 | 0.1 | 0.6 |
| 1982 | 100.0 | 18.0 | 1.1 | 71.7 | 5.2 | 2.9 | 0.5 | 0.1 | 0.5 |
| 1983 | 100.0 | 19.3 | 0.8 | 71.4 | 4.3 | 2.9 | 0.6 | 0.1 | 0.5 |
| 1984 | 100.0 | 19.5 | 0.9 | 71.0 | 4.4 | 2.9 | 0.6 | 0.1 | 0.5 |
| 1985 | 100.0 | 19.1 | 0.7 | 70.9 | 4.6 | 3.4 | 0.6 | 0.1 | 0.5 |
| 1986 | 100.0 | 18.6 | 0.6 | 71.4 | 4.5 | 3.7 | 0.6 | 0.1 | 0.6 |
| 1987 | 100.0 | 18.5 | 0.7 | 70.4 | 4.1 | 4.8 | 0.6 | 0.1 | 0.6 |
| 1988 | 100.0 | 18.7 | 0.7 | 70.5 | 4.1 | 4.7 | 0.7 | 0.1 | 0.5 |
| 1989 | 100.0 | 19.1 | 0.7 | 68.7 | 4.2 | 6.0 | 0.8 | 0.1 | 0.5 |
| 1990 | 100.0 | 19.6 | 0.7 | 67.7 | 4.2 | 6.3 | 0.9 | 0.1 | 0.5 |
| 1991 | 100.0 | 20.5 | 0.7 | 67.4 | 4.2 | 5.7 | 0.9 | 0.1 | 0.5 |
| 1992 | 100.0 | 22.1 | 0.8 | 65.2 | 4.5 | 5.8 | 1.0 | 0.1 | 0.5 |
| 1993 | 100.0 | 26.2 | 0.6 | 61.0 | 5.0 | 5.6 | 1.0 | 0.1 | 0.7 |
| 1994 | 100.0 | 26.4 | 0.6 | 60.4 | 5.2 | 5.6 | 1.0 | 0.1 | 0.8 |

Federally supported student aid received through students (e.g. Pell grants) is included under tuition and fees.
${ }^{2}$ Includes doctoral-granting institutions with and without medical schools.
${ }^{3}$ Revised from previously published figures.
NOTE: The Higher Education Price Index (HEPI) was used to calculate constant dollars, and the Consumer Price Index (CPI) was used to forecast the HEPI to July 1996. Data for academic years 1976-77 through 1993-94 include only institutions that provided both enrollment and finance data. Details may not add to totals due to rounding. Alternative approaches to calculating adjusted costs and
expenditures can be found in the following publications: Kent Halstead, Inflation Measures for Schools, Colleges, and Libraries: 1995
Update (Washington, D.C.: Research Associates of Washington, September 1995), and Richard Rothstein with Karen Hawley Miles, Where's the Money Gone? (Washington, D.C.: Economic Policy Institute, 1995).
SOURCE: U.S. Department of Education, National Center for Education Statistics, Financial Statistics of Institutions of Higher Education Survey and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment," "Financial Statistics," and "Institutional Characteristics" surveys.

Supplemental Tables and Notes
Table 53-2 Current fund revenues of institutions of higher education per full-time-equivalent (FTE) student (in 1996 constant dollars), by revenue source and control and type of institution: Academic years ending 1977-94

| Academic year ending | Total | Tuition and fees ${ }^{1}$ | Federal appropriations | State and local appropriations | Federal grants and contracts | State and local grants and contracts | Private <br> gifts | Endowment | Sales and services of educational activities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private universities ${ }^{2}$ |  |  |  |  |  |  |  |  |
| 1977 | \$23,021 | \$9,269 | \$505 | \$406 | \$6,382 | \$570 | \$2,981 | \$1,848 | \$1,060 |
| 1978 | 22,750 | 9,239 | 452 | 363 | 6,235 | 512 | 3,039 | 1,742 | 1,169 |
| 1979 | 22,856 | 9,330 | 451 | 351 | 6,253 | 512 | 2,959 | 1,871 | 1,128 |
| 1980 | 23,365 | 9,366 | 455 | 330 | 6,505 | 618 | 2,900 | 1,934 | 1,258 |
| 1981 | 23,534 | 9,602 | 421 | 357 | 6,455 | 494 | 3,002 | 1,982 | 1,221 |
| 1982 | 23,451 | 9,970 | 398 | 337 | 6,011 | 457 | 2,982 | 2,042 | 1,253 |
| 1983 | 23,653 | 10,649 | 426 | 337 | 5,493 | 510 | 3,055 | 1,832 | 1,351 |
| 1984 | 25,633 | 11,338 | 413 | 328 | 5,851 | 554 | 3,447 | 2,144 | 1,557 |
| 1985 | 26,432 | 11,735 | 409 | 327 | 6,026 | 562 | 3,567 | 2,309 | 1,496 |
| 1986 | 27,462 | 12,138 | 376 | 334 | 6,363 | 594 | 3,728 | 2,355 | 1,574 |
| 1987 | 29,703 | 13,007 | 341 | 329 | 7,104 | 824 | 3,948 | 2,447 | 1,705 |
| 1988 | 30,316 | 13,349 | 336 | 305 | 6,760 | 1,102 | 4,080 | 2,567 | 1,816 |
| 1989 | 31,082 | 13,667 | 347 | 291 | 6,820 | 1,157 | 4,104 | 2,687 | 2,010 |
| 1990 | 31,365 | 13,783 | 355 | 286 | 6,877 | 1,151 | 4,213 | 2,686 | 2,014 |
| 1991 | 31,691 | 14,250 | 299 | 253 | 6,722 | 1,004 | 4,312 | 2,686 | 2,166 |
| 1992 | 32,430 | 14,617 | 288 | 175 | 6,847 | 1,103 | 4,388 | 2,614 | 2,397 |
| 1993 | 33,492 | 15,002 | 266 | 142 | 7,071 | 1,126 | 4,684 | 2,698 | 2,502 |
| 1994 | 34,487 | 15,508 | 267 | 145 | 7,455 | 888 | 4,872 | 2,712 | 2,640 |
| Public universities ${ }^{2}$ |  |  |  |  |  |  |  |  |  |
| 1977 | \$15,316 | \$2,513 | \$443 | \$8,032 | \$2,608 | \$326 | \$722 | \$109 | \$563 |
| 1978 | 15,574 | 2,541 | 468 | 8,181 | 2,595 | 334 | 755 | 153 | 546 |
| 1979 | 16,196 | 2,583 | 479 | 8,444 | 2,738 | 367 | 766 | 169 | 650 |
| 1980 | 16,067 | 2,552 | 410 | 8,328 | 2,790 | 345 | 798 | 181 | 663 |
| 1981 | 15,626 | 2,567 | 359 | 8,020 | 2,700 | 353 | 786 | 172 | 669 |
| 1982 | 15,302 | 2,687 | 325 | 7,872 | 2,416 | 331 | 819 | 175 | 678 |
| 1983 | 15,325 | 2,907 | 314 | 7,705 | 2,301 | 322 | 900 | 189 | 687 |
| 1984 | 15,828 | 3,028 | 314 | 8,013 | 2,351 | 300 | 913 | 210 | 700 |
| 1985 | 16,653 | 3,047 | 355 | 8,525 | 2,462 | 331 | 987 | 220 | 727 |
| 1986 | 17,296 | 3,223 | 355 | 8,728 | 2,559 | 349 | 1,074 | 245 | 762 |
| 1987 | 17,324 | 3,371 | 325 | 8,542 | 2,598 | 424 | 1,106 | 180 | 778 |
| 1988 | 17,798 | 3,532 | 266 | 8,676 | 2,744 | 435 | 1,177 | 177 | 793 |
| 1989 | 18,142 | 3,628 | 272 | 8,657 | 2,824 | 468 | 1,268 | 188 | 837 |
| 1990 | 18,245 | 3,712 | 255 | 8,544 | 2,840 | 523 | 1,340 | 191 | 841 |
| 1991 | 18,212 | 3,838 | 251 | 8,304 | 2,907 | 540 | 1,311 | 194 | 868 |
| 1992 | 18,027 | 4,001 | 244 | 7,730 | 3,044 | 492 | 1,364 | 225 | 927 |
| 1993 | 17,705 | 4,080 | 246 | 7,401 | 3,015 | 473 | 1,358 | 224 | 909 |
| 1994 | 17,602 | 4,187 | 232 | 7,161 | 3,092 | 514 | 1,342 | 216 | 858 |

Table 53-2 Current fund revenues of institutions of higher education per full-time-equivalent (FTE) student (in 1996 constant dollars), by revenue source and control and type of institution: Academic years ending 1977-94-Continued

| Academic year ending | Total | Tuition and fees ${ }^{1}$ | Federal appropriations | State and local appropriations | Federal grants and contracts | State <br> and local grants and contracts | Private gifts | Endowment | Sales and services of educational activities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private 4-year colleges |  |  |  |  |  |  |  |  |
| 1977 | \$11,378 | \$7,019 | \$106 | \$238 | \$1,231 | \$231 | \$1,777 | \$665 | \$111 |
| 1978 | 11,285 | 7,052 | 111 | 223 | 1,188 | 227 | 1,716 | 651 | 117 |
| 1979 | 11,413 | 7,096 | 116 | 215 | 1,256 | 227 | 1,679 | 704 | 120 |
| 1980 | 11,735 | 7,162 | 122 | 218 | 1,354 | 267 | 1,702 | 778 | 131 |
| 1981 | 11,693 | 7,205 | 126 | 219 | 1,250 | 266 | 1,677 | 812 | 138 |
| 1982 | 11,787 | 7,431 | 100 | 206 | 1,087 | 268 | 1,675 | 898 | 121 |
| 1983 | 11,994 | 7,754 | 73 | 207 | 924 | 282 | 1,732 | 898 | 123 |
| 1984 | 12,304 | 8,003 | 68 | 207 | 942 | 291 | 1,751 | 906 | 137 |
| 1985 | 12,745 | 8,265 | 69 | 203 | 975 | 319 | 1,822 | 959 | 133 |
| 1986 | 13,102 | 8,498 | 64 | 208 | 1,027 | 341 | 1,851 | 975 | 138 |
| 1987 | 13,894 | 9,057 | 77 | 225 | 1,022 | 404 | 1,954 | 1,006 | 149 |
| 1988 | 14,186 | 9,298 | 77 | 233 | 1,050 | 434 | 1,905 | 1,037 | 152 |
| 1989 | 14,389 | 9,497 | 61 | 195 | 1,025 | 521 | 1,865 | 1,073 | 152 |
| 1990 | 14,620 | 9,773 | 55 | 181 | 1,037 | 551 | 1,809 | 1,068 | 145 |
| 1991 | 14,810 | 10,081 | 55 | 169 | 1,005 | 521 | 1,781 | 1,056 | 141 |
| 1992 | 15,151 | 10,433 | 56 | 125 | 1,054 | 619 | 1,736 | 983 | 144 |
| 1993 | 15,369 | 10,644 | 41 | 109 | 1,083 | 583 | 1,737 | 942 | 230 |
| 1994 | 15,743 | 10,960 | 35 | 111 | 1,105 | 627 | 1,755 | 911 | 240 |
| Public 4-year colleges |  |  |  |  |  |  |  |  |  |
| 1977 | \$11,505 | \$1,885 | \$565 | \$6,981 | \$1,336 | \$239 | \$273 | \$36 | \$190 |
| 1978 | 11,619 | 1,858 | 566 | 7.137 | 1,270 | 257 | 291 | 28 | 212 |
| 1979 | 11,989 | 1,825 | 590 | 7,391 | 1,341 | 279 | 297 | 34 | 233 |
| 1980 | 12,117 | 1,804 | 611 | 7,451 | 1,367 | 269 | 314 | 42 | 259 |
| 1981 | 11,891 | 1,825 | 634 | 7,236 | 1,301 | 264 | 317 | 47 | 268 |
| 1982 | 11,850 | 1,912 | 552 | 7,289 | 1,149 | 253 | 347 | 51 | 296 |
| 1983 | 11,528 | 1,964 | 550 | 7,058 | 999 | 248 | 373 | 47 | 290 |
| 1984 | 11,682 | 2,126 | 548 | 6,984 | 997 | 268 | 389 | 49 | 319 |
| 1985 | 12,415 | 2,186 | 570 | 7,537 | 1,027 | 266 | 425 | 50 | 353 |
| 1986 | 12,848 | 2,268 | 548 | 7,715 | 1,084 | 330 | 464 | 54 | 384 |
| 1987 | 12,632 | 2,273 | 546 | 7,423 | 1,058 | 377 | 476 | 61 | 419 |
| 1988 | 12,829 | 2,363 | 545 | 7,497 | 1,068 | 367 | 472 | 63 | 454 |
| 1989 | 12,664 | 2,431 | 356 | 7,352 | 1,088 | 380 | 519 | 70 | 467 |
| 1990 | 12,563 | 2,471 | 532 | 6,988 | 1,080 | 396 | 543 | 70 | 484 |
| 1991 | 12,025 | 2,486 | 460 | 6,474 | 1,073 | 411 | 575 | 41 | 505 |
| 1992 | 12,548 | 2,808 | 447 | 6,434 | 1,177 | 470 | 620 | 78 | 516 |
| 1993 | 13,429 | 3,212 | 435 | 6,458 | 1,401 | 539 | 693 | 101 | 590 |
| 1994 | 13,876 | 3,381 | 474 | 6,497 | 1,497 | 583 | 731 | 89 | 624 |

Table 53-2 Current fund revenues of institutions of higher education per full-time-equivalent (FTE) student (in 1996 constant dollars), by revenue source and control and type of institution: Academic years ending 1977-94-Continued

| Academic year ending | Total | Tuition and fees ${ }^{1}$ | Federal appropriations | State and local appropriations | Federal grants and contracts | State and local grants and contracts | Private gifts | Endowment | Sales and services of educational activities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Public 2-year colleges |  |  |  |  |  |  |  |  |
| 1977 | \$6,122 | \$1,029 | \$118 | \$4,440 | \$352 | \$120 | \$31 | \$4 | \$24 |
| 1978 | 6,130 | 987 | 106 | 4,494 | 339 | 141 | 30 | 4 | 24 |
| 1979 | 6,256 | 990 | 118 | 4,548 | 376 | 156 | 29 | 4 | 31 |
| 1980 | 6,169 | 994 | 80 | 4,476 | 389 | 161 | 29 | 5 | 31 |
| 1981 | 5,877 | 989 | 70 | 4,216 | 367 | 164 | 29 | 6 | 31 |
| 1982 | 5,817 | 1,045 | 61 | 4,171 | 304 | 167 | 31 | 7 | 28 |
| 1983 | 5,443 | 1,050 | 43 | 3,888 | 235 | 158 | 31 | 8 | 28 |
| 1984 | 5,581 | 1,089 | 46 | 3,965 | 244 | 164 | 33 | 8 | 28 |
| 1985 | 6,082 | 1,160 | 44 | 4,313 | 282 | 206 | 37 | 8 | 29 |
| 1986 | 6,339 | 1,178 | 38 | 4,523 | 284 | 231 | 40 | 9 | 34 |
| 1987 | 6,440 | 1,191 | 46 | 4,537 | 267 | 310 | 41 | 9 | 36 |
| 1988 | 6,281 | 1,176 | 44 | 4,428 | 255 | 293 | 45 | 6 | 32 |
| 1989 | 6,472 | 1,235 | 41 | 4,448 | 272 | 386 | 51 | 6 | 31 |
| 1990 | 6,295 | 1,234 | 40 | 4,262 | 265 | 398 | 54 | 7 | 33 |
| 1991 | 6,285 | 1,287 | 42 | 4,237 | 263 | 359 | 56 | 6 | 32 |
| 1992 | 6,115 | 1,351 | 49 | 3,985 | 277 | 352 | 59 | 6 | 32 |
| 1993 | 6,478 | 1,695 | 36 | 3,949 | 322 | 361 | 62 | 6 | 45 |
| 1994 | 6,729 | 1,779 | 37 | 4,067 | 350 | 374 | 64 | 6 | 50 |

' Federally supported student aid received through students (e.g., Pell grants) is included under tuition and fees.
${ }^{2}$ Includes doctoral-granting institutions with and without medical schools.
NOTE: The Higher Education Price Index (HEPI) was used to calculate constant dollars, and the Consumer Price Index (CPI) was used to forecast the HEPI to July 1996. Data for academic years 1976-77 through 1993-94 include only institutions that provided both enrollment and finance data. Details may not add to totals due to rounding. Alternative approaches to calculating adjusted costs and
expenditures can be found in the following publications: Kent Halstead, Inflation Measures for Schools, Colleges, and Libraries: 1995 Update (Washington, D.C.: Research Associates of Washington, September 1995), and Richard Rothstein with Karen Hawley Miles, Where's the Money Gone? (Washington, D.C.: Economic Policy Institute, 1995).
SOURCE: U.S. Department of Education, National Center for Education Statistics, Financial Statistics of Institutions of Higher Education Survey and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment," "Financial Statistics," and "Institutional Characteristics" surveys.

Table 54-1 Percentage distribution of educational and general expenditures of institutions of higher education per full-time-equivalent (FTE) student, by expenditure categories, and control and type of institution: Academic years ending 1977-94

| Academic year ending | Total | Instruction | Administration | Student services | Research | Libraries | Public service | Operation and maintenance of plant | Scholarships and fellowships | Mandatory transfers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private universities ${ }^{2}$ |  |  |  |  |  |  |  |  |  |
| 1977 | 100.0 | 38.0 | 13.2 | 3.3 | 21.1 | 4.2 | 2.2 | 8.8 | 8.1 | 1.1 |
| 1978 | 100.0 | 37.9 | 13.4 | 3.4 | 20.8 | 4.2 | 2.1 | 8.7 | 8.4 | 1.1 |
| 1979 | 100.0 | 37.4 | 14.0 | 3.4 | 20.7 | 3.9 | 2.1 | 9.0 | 8.1 | 1.3 |
| 1980 | 100.0 | 37.9 | 14.2 | 3.4 | 20.5 | 3.7 | 2.3 | 8.9 | 7.9 | 1.3 |
| 1981 | 100.0 | 38.1 | 13.9 | 3.5 | 19.8 | 3.7 | 2.1 | 9.1 | 8.2 | 1.5 |
| 1982 | 100.0 | 39.1 | 13.8 | 3.6 | 18.9 | 3.7 | 2.0 | 9.5 | 8.2 | 1.2 |
| 1983 | 100.0 | 39.4 | 14.8 | 3.7 | 17.9 | 3.6 | 2.1 | 9.2 | 8.2 | 1.2 |
| 1984 | 100.0 | 38.6 | 15.2 | 3.7 | 17.7 | 3.8 | 2.0 | 9.1 | 8.8 | 1.2 |
| 1985 | 100.0 | 38.0 | 14.9 | 3.8 | 18.1 | 3.5 | 2.4 | 8.9 | 8.9 | 1.4 |
| 1986 | 100.0 | 37.8 | 15.0 | 3.8 | 18.5 | 3.5 | 2.4 | 8.6 | 9.1 | 1.3 |
| 1987 | 100.0 | 38.4 | 15.2 | 3.9 | 18.4 | 3.1 | 2.6 | 7.7 | 9.4 | 1.4 |
| 1988 | 100.0 | 37.5 | 15.2 | 3.8 | 18.7 | 3.5 | 2.5 | 7.7 | 9.6 | 1.5 |
| 1989 | 100.0 | 38.0 | 15.2 | 3.7 | 18.4 | 3.4 | 2.5 | 7.5 | 9.7 | 1.6 |
| 1990 | 100.0 | 37.8 | 14.7 | 3.7 | 18.6 | 3.4 | 2.5 | 7.5 | 9.9 | 1.8 |
| 1991 | 100.0 | 38.3 | 14.8 | 3.8 | 17.8 | 3.2 | 2.6 | 7.8 | 10.3 | 1.6 |
| 1992 | 100.0 | 38.2 | 14.8 | 3.7 | 17.4 | 3.2 | 2.5 | 7.5 | 11.1 | 1.6 |
| 1993 | 100.0 | 38.4 | 14.1 | 3.5 | 17.9 | 3.2 | 2.7 | 7.3 | 11.4 | 1.7 |
| 1994 | 100.0 | 38.5 | 13.9 | 3.6 | 17.7 | 3.2 | 2.8 | 7.3 | 11.4 | 1.8 |
| Public universities ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| 1977 | 100.0 | 39.0 | 13.0 | 3.7 | 18.4 | 3.5 | 8.1 | 9.1 | 4.0 | 1.2 |
| 1978 | 100.0 | 39.2 | 13.2 | 3.8 | 18.6 | 3.4 | 7.9 | 9.2 | 3.8 | 1.0 |
| 1979 | 100.0 | 39.1 | 13.1 | 3.7 | 18.9 | 3.2 | 8.2 | 9.3 | 3.5 | 1.0 |
| 1980 | 100.0 | 38.8 | 12.5 | 3.8 | 19.5 | 3.7 | 8.1 | 9.2 | 3.5 | 1.0 |
| 1981 | 100.0 | 38.5 | 12.9 | 3.8 | 19.7 | 3.2 | 8.3 | 9.1 | 3.5 | 1.0 |
| 1982 | 100.0 | 38.8 | 13.1 | 3.8 | 19.3 | 3.2 | 8.1 | 9.4 | 3.5 | 0.9 |
| 1983 | 100.0 | 38.8 | 13.1 | 3.8 | 19.2 | 3.3 | 8.1 | 9.4 | 3.5 | 0.9 |
| 1984 | 100.0 | 38.6 | 13.1 | 3.7 | 19.1 | 3.3 | 8.0 | 9.4 | 3.6 | 1.0 |
| 1985 | 100.0 | 38.3 | 13.7 | 3.7 | 19.4 | 3.2 | 8.0 | 9.2 | 3.6 | 0.9 |
| 1986 | 100.0 | 37.7 | 13.9 | 3.7 | 19.7 | 3.2 | 8.0 | 8.8 | 3.8 | 1.2 |
| 1987 | 100.0 | 38.0 | 14.0 | 3.7 | 20.0 | 3.1 | 7.8 | 8.3 | 3.8 | 1.2 |
| 1988 | 100.0 | 37.3 | 13.9 | 3.7 | 20.6 | 3.2 | 7.8 | 8.1 | 4.0 | 1.4 |
| 1989 | 100.0 | 36.8 | 13.9 | 3.7 | 21.0 | 3.1 | 8.0 | 7.9 | 4.2 | 1.3 |
| 1990 | 100.0 | 36.6 | 13.8 | 3.7 | 21.4 | 3.1 | 8.1 | 7.8 | 4.3 | 1.4 |
| 1991 | 100.0 | 36.3 | 13.7 | 3.6 | 21.7 | 3.0 | 8.2 | 7.6 | 4.5 | 1.4 |
| 1992 | 100.0 | 36.0 | 13.3 | 3.7 | 22.0 | 3.0 | 8.3 | 7.4 | 4.9 | 1.5 |
| 1993 | 100.0 | 35.7 | 13.1 | 3.7 | 22.3 | 2.9 | 8.3 | 7.2 | 5.3 | 1.5 |
| 1994 | 100.0 | 35.3 | 13.3 | 3.7 | 22.4 | 2.9 | 8.1 | 7.2 | 5.6 | 1.5 |

Table 54-1 Percentage distribution of educational and general expenditures of institutions of higher education per full-time-equivalent (FTE) student, by expenditure categories, and control and type of institution: Academic years ending 1977-94-Continued

| Academic year ending | Total | Instruction | Administration ${ }^{1}$ | Student services | Research | Libraries | Public service | Operation and maintenance of plant | Scholarships and fellowships | Mandatory transfers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private 4-year colleges |  |  |  |  |  |  |  |  |  |
| 1977 | 100.0 | 37.3 | 20.4 | 7.4 | 5.0 | 3.9 | 2.4 | 11.2 | 10.0 | 2.3 |
| 1978 | 100.0 | 37.5 | 20.6 | 7.6 | 4.8 | 3.9 | 2.2 | 11.3 | 9.8 | 2.3 |
| 1979 | 100.0 | 37.2 | 20.7 | 7.7 | 5.2 | 3.8 | 2.2 | 11.2 | 9.6 | 2.3 |
| 1980 | 100.0 | 36.7 | 20.8 | 7.8 | 5.3 | 3.7 | 2.2 | 11.4 | 9.8 | 2.4 |
| 1981 | 100.0 | 36.1 | 21.1 | 7.9 | 5.1 | 3.6 | 2.3 | 11.5 | 10.1 | 2.3 |
| 1982 | 100.0 | 36.1 | 21.4 | 8.0 | 4.6 | 3.6 | 2.5 | 11.4 | 10.1 | 2.2 |
| 1983 | 100.0 | 36.2 | 21.7 | 8.2 | 4.5 | 3.6 | 2.4 | 11.1 | 10.0 | 2.2 |
| 1984 | 100.0 | 36.0 | 21.6 | 8.2 | 4.4 | 3.6 | 2.4 | 10.9 | 10.6 | 2.2 |
| 1985 | 100.0 | 35.6 | 21.7 | 8.3 | 4.6 | 3.5 | 2.4 | 10.6 | 11.1 | 2.3 |
| 1986 | 100.0 | 35.1 | 21.7 | 8.3 | 4.8 | 3.5 | 2.6 | 10.2 | 11.5 | 2.3 |
| 1987 | 100.0 | 34.3 | 22.8 | 8.3 | 4.9 | 2.9 | 2.7 | 9.7 | 12.1 | 2.2 |
| 1988 | 100.0 | 34.1 | 22.1 | 8.4 | 5.0 | 3.2 | 3.0 | 9.5 | 12.8 | 2.0 |
| 1989 | 100.0 | 33.8 | 22.2 | 8.5 | 5.0 | 3.1 | 2.9 | 9.4 | 12.9 | 2.2 |
| 1990 | 100.0 | 33.5 | 21.9 | 8.5 | 4.9 | 3.1 | 3.1 | 9.1 | 13.6 | 2.2 |
| 1991 | 100.0 | 33.4 | 22.2 | 8.7 | 4.4 | 2.9 | 3.1 | 8.9 | 14.2 | 2.2 |
| 1992 | 100.0 | 33.1 | 21.4 | 8.7 | 4.3 | 3.0 | 3.2 | 8.6 | 15.7 | 2.1 |
| 1993 | 100.0 | 32.8 | 20.7 | 8.7 | 4.4 | 2.9 | 3.5 | 8.5 | 16.5 | 2.1 |
| 1994 | 100.0 | 32.3 | 20.6 | 8.7 | 4.4 | 2.9 | 3.5 | 8.4 | 17.1 | 2.1 |
| Public 4-year colleges |  |  |  |  |  |  |  |  |  |  |
| 1977 | 100.0 | 46.4 | 16.7 | 5.8 | 7.0 | 3.9 | 2.9 | 11.5 | 3.9 | 2.0 |
| 1978 | 100.0 | 46.2 | 16.7 | 6.0 | 7.1 | 3.9 | 2.9 | 11.7 | 3.5 | 2.1 |
| 1979 | 100.0 | 45.6 | 17.1 | 6.2 | 7.5 | 3.8 | 2.9 | 11.6 | 3.2 | 2.0 |
| 1980 | 100.0 | 44.9 | 17.3 | 6.2 | 8.0 | 3.8 | 3.1 | 11.7 | 3.3 | 1.8 |
| 1981 | 100.0 | 44.8 | 17.2 | 6.1 | 7.9 | 3.9 | 3.1 | 11.9 | 3.1 | 1.8 |
| 1982 | 100.0 | 45.7 | 17.6 | 5.8 | 7.6 | 3.7 | 3.1 | 12.1 | 2.8 | 1.6 |
| 1983 | 100.0 | 45.7 | 17.4 | 5.9 | 7.5 | 3.7 | 3.1 | 12.1 | 2.9 | 1.7 |
| 1984 | 100.0 | 45.1 | 18.2 | 6.3 | 7.5 | 3.8 | 3.1 | 11.3 | 2.9 | 1.7 |
| 1985 | 100.0 | 44.8 | 18.4 | 6.2 | 7.7 | 3.7 | 3.3 | 11.7 | 2.7 | 1.6 |
| 1986 | 100.0 | 45.0 | 18.4 | 6.2 | 8.2 | 3.6 | 3.3 | 10.7 | 2.9 | 1.8 |
| 1987 | 100.0 | 44.7 | 18.7 | 6.1 | 8.6 | 3.2 | 3.6 | 10.4 | 3.1 | 1.6 |
| 1988 | 100.0 | 44.6 | 18.4 | 6.2 | 8.9 | 3.3 | 3.7 | 10.1 | 3.1 | 1.6 |
| 1989 | 100.0 | 44.6 | 18.2 | 6.1 | 9.4 | 3.3 | 3.8 | 9.9 | 3.1 | 1.6 |
| 1990 | 100.0 | 44.4 | 18.7 | 6.1 | 9.3 | 3.3 | 4.0 | 9.6 | 3.2 | 1.6 |
| 1991 | 100.0 | 44.3 | 18.6 | 6.2 | 9.5 | 3.1 | 4.0 | 9.4 | 3.3 | 1.5 |
| 1992 | 100.0 | 43.2 | 18.9 | 6.1 | 9.7 | 3.1 | 4.3 | 9.1 | 4.1 | 1.6 |
| 1993 | 100.0 | 42.0 | 19.4 | 6.5 | 9.8 | 3.0 | 4.4 | 8.9 | 4.4 | 1.6 |
| 1994 | 100.0 | 42.1 | 18.8 | 6.2 | 10.1 | 3.0 | 4.4 | 8.9 | 4.9 | 1.6 |

Table 54-1 Percentage distribution of educational and general expenditures of institutions of higher education per full-time-equivalent (FTE) student, by expenditure categories, and control and type of institution: Academic years ending 1977-94-Continued

| Academic year ending | Total | Instruction | Administration | Student services | Research | Libraries | Public service | Operation and maintenance of plant | Scholarships and fellowships | Mandatory transfers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Public 2-year colleges |  |  |  |  |  |  |  |  |  |
| 1977 | 100.0 | 51.1 | 18.1 | 8.4 | 0.3 | 3.5 | 2.0 | 11.2 | 2.9 | 2.4 |
| 1978 | 100.0 | 50.6 | 19.4 | 8.2 | 0.2 | 3.5 | 2.1 | 11.3 | 2.2 | 2.4 |
| 1979 | 100.0 | 50.2 | 19.5 | 8.4 | 0.4 | 3.4 | 1.9 | 11.3 | 2.2 | 2.6 |
| 1980 | 100.0 | 50.3 | 19.0 | 8.6 | 0.4 | 3.2 | 2.2 | 11.7 | 2.3 | 2.2 |
| 1981 | 100.0 | 50.6 | 19.1 | 8.7 | 0.4 | 3.1 | 2.2 | 12.0 | 2.3 | 1.7 |
| 1982 | 100.0 | 50.9 | 19.0 | 8.8 | 0.2 | 3.4 | 1.9 | 12.3 | 2.1 | 1.5 |
| 1983 | 100.0 | 50.9 | 19.5 | 8.9 | 0.2 | 3.0 | 1.5 | 12.3 | 2.1 | 1.6 |
| 1984 | 100.0 | 50.8 | 19.8 | 8.8 | 0.2 | 3.0 | 1.7 | 12.2 | 2.0 | 1.5 |
| 1985 | 100.0 | 50.3 | 20.2 | 8.8 | 0.2 | 2.9 | 2.0 | 12.1 | 2.2 | 1.4 |
| 1986 | 100.0 | 49.9 | 20.7 | 9.0 | 0.1 | 2.9 | 2.0 | 11.9 | 2.2 | 1.4 |
| 1987 | 100.0 | 49.6 | 21.8 | 9.4 | 0.1 | 2.3 | 2.2 | 11.5 | 2.2 | 0.8 |
| 1988 | 100.0 | 49.2 | 21.3 | 9.9 | 0.1 | 2.7 | 2.3 | 11.4 | 2.4 | 0.8 |
| 1989 | 100.0 | 49.6 | 21.5 | 9.5 | 0.1 | 2.6 | 2.5 | 11.2 | 2.4 | 0.7 |
| 1990 | 100.0 | 49.8 | 21.5 | 9.7 | 0.1 | 2.5 | 2.4 | 11.0 | 2.3 | 0.7 |
| 1991 | 100.0 | 49.9 | 21.6 | 9.9 | 0.1 | 2.5 | 2.4 | 10.7 | 2.4 | 0.6 |
| 1992 | 100.0 | 50.3 | 20.9 | 10.2 | 0.2 | 2.4 | 2.2 | 10.4 | 2.8 | 0.6 |
| 1993 | 100.0 | 50.1 | 20.9 | 10.4 | 0.2 | 2.3 | 2.3 | 10.1 | 3.1 | 0.6 |
| 1994 | 100.0 | 49.4 | 21.0 | 10.4 | 0.2 | 2.3 | 2.4 | 10.3 | 3.4 | 0.7 |

${ }^{1}$ Includes institutional and academic support. Libraries were excluded.
${ }^{2}$ Includes doctoral-granting institutions with and without medical schools.
NOTE: The Higher Education Price Index (HEPI) was used to calculate constant dollars and the Consumer Price Index (CPI) was used to forecast the HEPI to July 1996. Data for academic years 1976-77 through 1993-94 include only institutions that provided both enrollment and finance data. Details may not add to totals due to rounding. Alternative approaches to calculating adjusted costs and
expenditures can be found in the following publications: Kent Halstead, Inflation Measures for Schools, Colleges, and Libraries: 1995 Update (Washington, D.C.: Research Associates of Washington, September 1995), and Richard Rothstein with Karen Hawley Miles, Where's the Money Gone? (Washington, D.C.: Economic Policy Institute, 1995).
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Educational Statistics, 1996, tables 338342 (based on the IPEDS/HEGIS "Fall Enrollment," "Financial Statistics," and "Institutional Characteristics" surveys).

Table 54-2 Educational and general expenditures of institutions of higher education per full-time-equivalent (FTE) student (in 1996 constant dollars), by expenditure categories, and control and type of institution: Academic years ending 1977-94

| Academic year ending | Total | Instruction | Administration ${ }^{1}$ | Student services | Research | Libraries | Public service | Operation and maintenance of plant | Scholarships and fellowships | Mandatory transfers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private universities ${ }^{2}$ |  |  |  |  |  |  |  |  |  |
| 1977 | \$23,644 | \$8,990 | \$3,131 | \$788 | \$4,979 | \$983 | \$529 | \$2,072 | \$1,918 | \$254 |
| 1978 | 23,365 | 8,867 | 3,121 | 786 | 4,855 | 981 | 494 | 2,043 | 1,953 | 265 |
| 1979 | 23,660 | 8,841 | 3,321 | 814 | 4,901 | 924 | 496 | 2,129 | 1,918 | 314 |
| 1980 | 24,003 | 9,088 | 3,403 | 808 | 4,927 | 885 | 554 | 2,130 | 1,900 | 307 |
| 1981 | 24,268 | 9,251 | 3,381 | 853 | 4,808 | 894 | 502 | 2,210 | 1,996 | 372 |
| 1982 | 24,201 | 9,452 | 3,348 | 881 | 4,581 | 896 | 488 | 2,291 | 1,979 | 284 |
| 1983 | 24,397 | 9,606 | 3,615 | 907 | 4,359 | 880 | 504 | 2,245 | 1,995 | 286 |
| 1984 | 26,185 | 10,098 | 3,989 | 966 | 4,643 | 994 | 518 | 2,370 | 2,298 | 310 |
| 1985 | 27,276 | 10,367 | 4,071 | 1,029 | 4,948 | 958 | 662 | 2,432 | 2,434 | 374 |
| 1986 | 28,306 | 10,690 | 4,246 | 1,088 | 5,232 | 987 | 673 | 2,434 | 2,582 | 372 |
| 1987 | 30,920 | 11,877 | 4,698 | 1,193 | 5,703 | 944 | 789 | 2,391 | 2,894 | 430 |
| 1988 | 31,288 | 11,745 | 4,751 | 1,193 | 5,856 | 1,094 | 768 | 2,421 | 2,996 | 463 |
| 1989 | 31,994 | 12,150 | 4,851 | 1,197 | 5,894 | 1,081 | 799 | 2,402 | 3,115 | 504 |
| 1990 | 32,324 | 12,224 | 4,763 | 1,200 | 6,022 | 1,098 | 820 | 2,432 | 3,190 | 575 |
| 1991 | 33,318 | 12,759 | 4,922 | 1,251 | 5,925 | 1,061 | 853 | 2,586 | 3,426 | 535 |
| 1992 | 34,328 | 13,100 | 5,072 | 1,264 | 5,983 | 1,110 | 862 | 2,584 | 3,809 | 544 |
| 1993 | 35,241 | 13,528 | 4,957 | 1,241 | 6,291 | 1,111 | 944 | 2,580 | 4,005 | 586 |
| 1994 | 36,280 | 13,955 | 5,031 | 1,291 | 6,405 | 1,159 | 1,009 | 2,639 | 4,149 | 641 |
| Public universities ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| 1977 | \$15,273 | \$5,955 | \$1,983 | \$563 | \$2,803 | \$538 | \$1,239 | \$1,392 | \$613 | \$187 |
| 1978 | 15,409 | 6,046 | 2,027 | 585 | 2,860 | 517 | 1,211 | 1,416 | 588 | 160 |
| 1979 | 15,969 | 6,238 | 2,092 | 593 | 3,023 | 515 | 1,303 | 1,481 | 561 | 162 |
| 1980 | 15,799 | 6,124 | 1,981 | 597 | 3,080 | 584 | 1,275 | 1,448 | 554 | 157 |
| 1981 | 15,536 | 5,985 | 2,000 | 586 | 3,055 | 503 | 1,290 | 1,415 | 548 | 155 |
| 1982 | 15,334 | 5,953 | 2,008 | 576 | 2,953 | 497 | 1,244 | 1,437 | 534 | 132 |
| 1983 | 15,300 | 5,941 | 2,005 | 575 | 2,935 | 503 | 1,237 | 1,439 | 535 | 131 |
| 1984 | 15,671 | 6,043 | 2,058 | 585 | 2,996 | 525 | 1,259 | 1,480 | 568 | 156 |
| 1985 | 16,423 | 6,286 | 2,251 | 608 | 3,190 | 528 | 1,316 | 1,512 | 587 | 146 |
| 1986 | 17,062 | 6,430 | 2,374 | 628 | 3,357 | 551 | 1,371 | 1,508 | 642 | 200 |
| 1987 | 17,374 | 6,601 | 2,436 | 647 | 3,471 | 534 | 1,361 | 1,444 | 668 | 211 |
| 1988 | 17,830 | 6,656 | 2,476 | 665 | 3,672 | 570 | 1,388 | 1,446 | 710 | 246 |
| 1989 | 18,180 | 6,694 | 2,531 | 679 | 3,809 | 566 | 1,458 | 1,440 | 763 | 242 |
| 1990 | 18,119 | 6,627 | 2,496 | 664 | 3,870 | 556 | 1,461 | 1,420 | 774 | 252 |
| 1991 | 18,444 | 6,688 | 2,525 | 670 | 4,008 | 551 | 1,506 | 1,400 | 831 | 265 |
| 1992 | 18,362 | 6,616 | 2,443 | 676 | 4,036 | 550 | 1,518 | 1,351 | 906 | 267 |
| 1993 | 18,786 | 6,699 | 2,470 | 693 | 4,194 | 549 | 1,553 | 1,354 | 992 | 282 |
| 1994 | 19,171 | 6,768 | 2,558 | 711 | 4,288 | 562 | 1,556 | 1,374 | 1,066 | 287 |

Table 54-2 Educational and general expenditures of institutions of higher education per full-time-equivalent (FTE) student (in 1996 constant dollars), by expenditure categories, and control and type of institution: Academic years ending 1977-94-Continued

| Academic year ending | Total | Instruction | Administration | Student services | Research | Libraries | Public service | Operation and maintenance of plant | Scholarships and fellowships | Mandatory transfers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private 4-year colleges |  |  |  |  |  |  |  |  |  |
| 1977 | \$11,656 | \$4,353 | \$2,376 | \$865 | \$589 | \$455 | \$281 | \$1,304 | \$1,161 | \$272 |
| 1978 | 11,604 | 4,351 | 2,388 | 881 | 559 | 457 | 254 | 1,314 | 1,133 | 268 |
| 1979 | 11,746 | 4,367 | 2,436 | 906 | 615 | 450 | 257 | 1,321 | 1,122 | 273 |
| 1980 | 11,947 | 4,380 | 2,480 | 930 | 633 | 440 | 259 | 1,366 | 1,175 | 283 |
| 1981 | 11,989 | 4,323 | 2,533 | 951 | 606 | 431 | 277 | 1,383 | 1,207 | 276 |
| 1982 | 12,156 | 4,388 | 2,601 | 976 | 562 | 433 | 306 | 1,390 | 1,226 | 273 |
| 1983 | 12,410 | 4,496 | 2,689 | 1,019 | 553 | 452 | 299 | 1,383 | 1,245 | 274 |
| 1984 | 12,828 | 4,613 | 2,777 | 1,054 | 568 | 459 | 307 | 1,401 | 1,360 | 288 |
| 1985 | 13,304 | 4,736 | 2,883 | 1,102 | 606 | 468 | 325 | 1,407 | 1,476 | 301 |
| 1986 | 13,762 | 4,825 | 2,987 | 1,143 | 667 | 478 | 352 | 1,410 | 1,586 | 312 |
| 1987 | 14,587 | 5,008 | 3,331 | 1,214 | 711 | 420 | 394 | 1,421 | 1,761 | 326 |
| 1988 | 14,937 | 5,089 | 3,300 | 1,254 | 752 | 471 | 442 | 1,418 | 1,906 | 304 |
| 1989 | 15,097 | 5,102 | 3,348 | 1,278 | 754 | 471 | 441 | 1,420 | 1,954 | 328 |
| 1990 | 15,339 | 5,143 | 3,358 | 1,311 | 746 | 474 | 477 | 1,403 | 2,088 | 340 |
| 1991 | 15,592 | 5,211 | 3,469 | 1,355 | 690 | 451 | 478 | 1,385 | 2,218 | 336 |
| 1992 | 16,001 | 5,295 | 3,417 | 1,389 | 682 | 477 | 517 | 1,372 | 2,516 | 337 |
| 1993 | 16,134 | 5,292 | 3,340 | 1,397 | 708 | 465 | 561 | 1,363 | 2,666 | 341 |
| 1994 | 16,524 | 5,344 | 3,401 | 1,443 | 723 | 480 | 584 | 1,382 | 2,823 | 345 |
| Public 4-year colleges |  |  |  |  |  |  |  |  |  |  |
| 1977 | \$11,137 | \$5,166 | \$1,854 | \$642 | \$779 | \$436 | \$321 | \$1,285 | \$434 | \$220 |
| 1978 | 11,233 | 5,193 | 1,876 | 672 | 795 | 434 | 322 | 1,313 | 391 | 238 |
| 1979 | 11,592 | 5,289 | 1,984 | 722 | 872 | 438 | 334 | 1,347 | 374 | 231 |
| 1980 | 11,721 | 5,259 | 2,024 | 732 | 936 | 447 | 359 | 1,372 | 382 | 211 |
| 1981 | 11,591 | 5,196 | 1,993 | 712 | 921 | 451 | 360 | 1,379 | 364 | 214 |
| 1982 | 11,546 | 5,271 | 2,030 | 673 | 876 | 432 | 355 | 1,401 | 325 | 183 |
| 1983 | 11,267 | 5,145 | 1,961 | 667 | 848 | 412 | 346 | 1,369 | 332 | 187 |
| 1984 | 11,384 | 5,138 | 2,075 | 717 | 858 | 429 | 354 | 1,290 | 326 | 199 |
| 1985 | 12,029 | 5,388 | 2,212 | 748 | 932 | 439 | 396 | 1,402 | 321 | 191 |
| 1986 | 12,424 | 5,596 | 2,289 | 773 | 1,013 | 445 | 405 | 1,325 | 356 | 222 |
| 1987 | 12,429 | 5,557 | 2,325 | 763 | 1,068 | 402 | 444 | 1,288 | 382 | 200 |
| 1988 | 12,671 | 5,650 | 2,335 | 786 | 1,125 | 424 | 474 | 1,282 | 390 | 205 |
| 1989 | 12,485 | 5,569 | 2,278 | 763 | 1,168 | 412 | 477 | 1,231 | 382 | 204 |
| 1990 | 12,588 | 5,588 | 2,349 | 763 | 1,168 | 411 | 503 | 1,206 | 403 | 197 |
| 1991 | 12,239 | 5,428 | 2,276 | 762 | 1,163 | 376 | 485 | 1,156 | 408 | 185 |
| 1992 | 12,409 | 5,360 | 2,345 | 755 | 1,206 | 382 | 529 | 1,124 | 504 | 203 |
| 1993 | 12,849 | 5,395 | 2,489 | 840 | 1,260 | 380 | 562 | 1,148 | 566 | 209 |
| 1994 | 13,007 | 5,477 | 2,444 | 806 | 1,311 | 384 | 575 | 1,164 | 636 | 210 |

Table 54-2 Educational and general expenditures of institutions of higher education per full-time-equivalent (FTE) student (in 1996 constant dollars), by expenditure categories, and control and type of institution: Academic years ending 1977-94-Continued

| Academic year ending | Total | Instruction | Administration | Student services | Research | Libraries | Public service | Operation and maintenance of plant | Scholarships and fellowships | Mandatory transfers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Public 2-year colleges |  |  |  |  |  |  |  |  |  |
| 1977 | \$6,003 | \$3,066 | \$1,087 | \$504 | \$19 | \$211 | \$120 | \$674 | \$176 | \$146 |
| 1978 | 6,034 | 3,054 | 1,171 | 494 | 11 | 213 | 128 | 685 | 133 | 146 |
| 1979 | 6,240 | 3,131 | 1,219 | 525 | 23 | 211 | 121 | 708 | 139 | 164 |
| 1980 | 6,136 | 3,086 | 1,166 | 530 | 25 | 196 | 137 | 720 | 143 | 132 |
| 1981 | 5,873 | 2,973 | 1,120 | 512 | 22 | 185 | 127 | 702 | 133 | 99 |
| 1982 | 5,874 | 2,989 | 1,116 | 518 | 12 | 199 | 112 | 721 | 121 | 86 |
| 1983 | 5,557 | 2,827 | 1,086 | 497 | 12 | 167 | 83 | 681 | 117 | 87 |
| 1984 | 5,636 | 2,864 | 1,117 | 495 | 12 | 168 | 96 | 688 | 114 | 82 |
| 1985 | 6,182 | 3,108 | 1,248 | 544 | 10 | 180 | 125 | 748 | 134 | 85 |
| 1986 | 6,364 | 3,176 | 1,317 | 571 | 6 | 184 | 126 | 758 | 140 | 86 |
| 1987 | 6,473 | 3,212 | 1,410 | 609 | 7 | 147 | 140 | 747 | 145 | 54 |
| 1988 | 6,381 | 3,140 | 1,356 | 633 | 6 | 173 | 145 | 726 | 153 | 48 |
| 1989 | 6,457 | 3,201 | 1,390 | 611 | 8 | 168 | 160 | 721 | 153 | 46 |
| 1990 | 6,277 | 3,125 | 1,347 | 608 | 9 | 160 | 152 | 690 | 142 | 42 |
| 1991 | 6,347 | 3,164 | 1,370 | 627 | 8 | 156 | 153 | 681 | 150 | 37 |
| 1992 | 6,064 | 3,050 | 1,270 | 619 | 9 | 147 | 136 | 628 | 168 | 36 |
| 1993 | 6,147 | 3,080 | 1,282 | 640 | 10 | 139 | 143 | 624 | 191 | 39 |
| 1994 | 6,462 | 3,189 | 1,359 | 672 | 10 | 150 | 152 | 665 | 221 | 43 |

Includes institutional and academic support. Libraries were excluded.
${ }^{2}$ Includes doctoral-granting institutions with and without medical schools.
NOTE: The Higher Education Price Index (HEPI) was used to calculate constant dollars and the Consumer Price Index (CPI) was used to forecast the HEPI to July 1996. Data for academic years 1976-77 through 1993-94 include only institutions that provided both enrollment and finance data. Details may not add to totals due to rounding. Alternative approaches to calculating adjusted costs and
expenditures can be found in the following publications: Kent Halstead, Inflation Measures for Schools, Colleges, and Libraries: 1995 Update (Washington, D.C.: Research Associates of Washington, September 1995), and Richard Rothstein with Karen Hawley Miles, Where's the Money Gone? (Washington, D.C.: Economic Policy Institute, 1995).
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Educational Statistics, 1996, tables 338342 (based on the IPEDS/HEGIS "Fall Enrollment," "Financial Statistics," and "Institutional Characteristics" surveys).

Table 55-1 Education expenditures as a percentage of Gross Domestic Product (GDP) for primary and secondary education, by source of funds: 1993

| Country | Direct public expenditures for education institutions | Total public subsidies to households and other private entities, excluding public subsidies for student living costs | Private payments to education institutions, excluding public subsidies to households and other private entities | Total <br> expenditures from both public and private sources for education institutions | Total expenditures from public, private, and international sources for education institutions, plus public subsidies to households | Private payments other than to education institutions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 3.65 | 0.03 | 0.43 | 4.10 | 4.45 | 0.34 |
| Austria | 3.54 | 0.01 | 0.02 | 3.58 | 3.59 | 0.02 |
| Belgium | 3.70 | 0.00 | - | - | - | - |
| Canada | 4.26 | $\left.1^{1}\right)$ | 0.26 | 4.52 | 4.52 | (1) |
| Czech Republic | 3.35 | 0.00 | - | - | - | - |
| Denmark | 4.45 | 0.00 | 0.09 | 4.54 | 5.11 | 0.57 |
| Finland | 4.70 | - | 0.02 | 4.72 | 4.87 | 0.15 |
| France | 4.02 | 0.00 | 0.33 | 4.35 | 4.41 | 0.14 |
| Germany | 3.00 | 0.00 | 0.94 | 3.94 | 4.06 | - |
| Greece | 2.56 | 0.00 | - | - | - | - |
| Hungary | 4.11 | 0.00 | 0.42 | 4.53 | 4.54 | 0.00 |
| Iceland | 3.53 | 0.00 | $\left.1^{1}\right)$ | 3.53 | 3.65 | 0.12 |
| Ireland | 3.67 | 0.00 | 0.17 | 3.84 | 3.95 | 0.12 |
| Italy | 3.49 | 0.06 | 0.00 | 3.49 | 3.49 | - |
| Japan | 2.97 | - | 0.27 | 3.24 | 3.24 | - |
| Korea | 3.03 | 0.00 | 0.81 | 3.85 | 3.85 | 0.00 |
| Mexico | 2.99 | - | - | - | - | - |
| Netherlands | 3.03 | 0.11 | 0.06 | 3.20 | 3.39 | 0.28 |
| New Zealand | 4.40 | 0.10 | - | - | - | - |
| Norway | 4.45 | 0.00 | - | - | - | - |
| Portugal | 3.79 | 0.00 | 0.07 | 3.85 | 3.92 | 0.07 |
| Spain | 3.36 | 0.00 | 0.47 | 3.83 | 3.89 | 0.31 |
| Sweden | 4.69 | 0.00 | 0.01 | 4.70 | 5.14 | 0.43 |
| Switzerland | 4.16 | 0.05 | - | - | - | - |
| Turkey | 2.44 | $\left.1^{2}\right)$ | $\left.1^{2}\right)$ | 2.44 | 2.48 | 0.04 |
| United Kingdom | 3.91 | 0.04 | - | - | - | 0.03 |
| United States | 3.78 | (1) | 0.37 | 4.15 | 4.15 | 0.02 |

- Not available.
${ }^{1}$ Data were included in another category of the item or in another item of the survey.
${ }^{2}$ Data were not applicable because the question survey item does not apply.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see Education at a Glance (1996), pp. 349-352.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http:/ /www.oecd.org/els/stats/eag/ind_list.htm, table F1.12.

Table 55-2 Education expenditures as a percentage of Gross Domestic Product (GDP) for higher education, by source of funds: 1993

| Country | Direct public expenditures for education institutions | Total public subsidies to households and other private entities, excluding public subsidies for student living costs | Private payments to education institutions, excluding public subsidies to households and other private entities | Total <br> expenditures from both public and private sources for education institutions | Total <br> expenditures from public, private, and international sources for education institutions, plus public subsidies to households | Private payments other than to education institutions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 1.14 | 0.09 | 0.42 | 1.73 | 1.92 | 0.19 |
| Austria | 1.05 | 0.00 | 0.01 | 1.06 | 1.13 | 0.07 |
| Belgium | 0.97 | 0.00 | - | - | - | - |
| Canada | 1.73 | 0.46 | 0.40 | 2.59 | 2.84 | 0.38 |
| Czech Republic | 0.78 | 0.00 | - | - | - | - |
| Denmark | 1.34 | 0.00 | 0.00 | 1.35 | 2.16 | 0.81 |
| Finland | 1.75 | - | 0.01 | 1.76 | 2.24 | 0.48 |
| France | 0.89 | 0.00 | 0.17 | 1.06 | 1.14 | 0.08 |
| Germany | 0.94 | 0.01 | 0.10 | 1.05 | 1.16 | - |
| Greece | 0.84 | 0.00 | - | - | - | - |
| Hungary | 0.91 | 0.00 | 0.19 | 1.09 | 1.26 | 0.16 |
| Iceland | 0.67 | 0.00 | 0.05 | 0.72 | 1.23 | 0.51 |
| Ireland | 1.00 | 0.07 | 0.27 | 1.39 | 1.58 | 0.15 |
| Italy | 0.79 | 0.02 | 0.09 | 0.91 | 1.07 | - |
| Japan | 0.37 | - | 0.57 | 0.94 | 0.94 | - |
| Korea | 0.25 | 0.01 | 1.09 | 1.35 | 1.37 | 0.01 |
| Mexico | 0.72 | - | - | - | - | - |
| Netherlands | 1.25 | 0.14 | 0.04 | 1.44 | 1.76 | 0.38 |
| New Zealand | 1.20 | 0.32 | - | - | - | - |
| Norway | 1.50 | 0.00 | - | - | - | - |
| Portugal | 0.81 | 0.00 | 0.08 | 0.89 | 0.97 | 0.08 |
| Spain | 0.77 | 0.00 | 0.18 | 0.95 | 1.01 | 0.10 |
| Sweden | 1.46 | 0.00 | 0.14 | 1.60 | 2.30 | 0.69 |
| Switzerland | 1.16 | 0.01 | - | - | - | - |
| Turkey | 0.80 | (*) | (*) | 0.81 | 0.86 | 0.12 |
| United Kingdom | 0.68 | 0.25 | 0.00 | 0.93 | 1.18 | 0.21 |
| United States | 1.18 | 0.08 | 1.17 | 2.43 | 2.51 | 0.13 |

- Not available.
* Data were not applicable because the survey item does not apply.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see Education at a Glance (1996), pp. 349-352.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http:/ /www.oecd.org/els/stats/eag/ind_list.htm, table F1.3.

Table 55-3 Education expenditures as a percentage of Gross Domestic Product (GDP) for all levels of education combined, by source of funds: 1993

| Country | Direct public expenditures for education institutions | Total public subsidies to households and other private entities, excluding public subsidies for student living costs | Private payments to education institutions, excluding public subsidies to households and other private entities | Total <br> expenditures from both public and private sources for education institutions | Total <br> expenditures from public, private, and international sources for education institutions, plus public subsidies to households | Private payments other than to education institutions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 4.92 | 0.21 | 0.84 | 5.96 | 6.49 | 0.53 |
| Austria | 5.31 | 0.01 | 0.12 | 5.44 | 5.57 | 0.13 |
| Belgium | 5.65 | 0.00 | - | - | - | - |
| Canada | 6.22 | 0.46 | 0.67 | 7.35 | 7.60 | 0.25 |
| Czech Republic | 5.02 | 0.00 | - | - | - | - |
| Denmark | 6.71 | 0.00 | 0.53 | 7.24 | 8.80 | 1.56 |
| Finland | 7.28 | - | 0.03 | 7.31 | 7.94 | 0.64 |
| France | 5.60 | 0.00 | 0.53 | 6.13 | 6.27 | 0.24 |
| Germany | 4.55 | 0.01 | 1.35 | 5.92 | 6.14 | - |
| Greece | 3.40 | 0.00 | - | - | - | - |
| Hungary | 5.89 | 0.00 | 0.72 | 6.61 | 6.79 | 0.18 |
| Iceland | 4.64 | 0.00 | 0.61 | 5.25 | 5.87 | 0.23 |
| Ireland | 5.24 | 0.11 | 0.46 | 5.81 | 6.15 | 0.30 |
| Italy | 4.96 | 0.08 | 0.03 | 5.08 | 5.25 | - |
| Japan | 3.66 | - | 1.20 | 4.86 | 4.86 | - |
| Korea | 3.72 | 0.05 | 1.95 | 5.72 | 5.75 | 0.01 |
| Mexico | 4.09 | - | - | - | - | - |
| Netherlands | 4.63 | 0.26 | 0.10 | 5.00 | 5.51 | 0.66 |
| New Zealand | 6.01 | 0.40 | - | - | - | - |
| Norway | 7.58 | 0.00 | - | - | - | - |
| Portugal | 5.28 | 0.00 | 0.15 | 5.43 | 5.58 | 0.15 |
| Spain | 4.54 | 0.00 | 0.76 | 5.30 | 5.42 | 0.55 |
| Sweden | 6.72 | 0.00 | 0.15 | 6.86 | 8.00 | 1.12 |
| Switzerland | 5.63 | 0.07 | - | - | - | - |
| Turkey | 3.28 | (*) | (*) | 3.29 | 3.38 | 0.12 |
| United Kingdom | 4.67 | 0.28 | - | - | - | - |
| United States | 5.15 | 0.08 | 1.61 | 6.84 | 6.92 | 0.16 |

- Not available.
* Data were not applicable because the survey item does not apply.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see Education at a Glance (1996), pp. 349-352.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http:/ /www.oecd.org/els/stats/eag/ind_list.htm, table F1.4.

Supplemental Tables and Notes
Table 55-4 Expenditures per student for early childhood education: 1993

| Country | Type of institution | Full-timeequivalent enrollment | Expenditures per student, in 1993 constant U.S. dollars | Expenditures per student, as a percentage of GDP per capita |
| :---: | :---: | :---: | :---: | :---: |
| Australia | Public and private | - | - | - |
| Austria | Public | 151,911 | \$4,712 | 24.6 |
| Belgium | Public and government-dependent | 413,888 | 2,152 | 11.1 |
| Canada | Public and private | 252,398 | 5,270 | 27.3 |
| Czech Republic | Public | 332,828 | 1,676 | 19.8 |
| Denmark | Public and private | 209,541 | 4,584 | 23.9 |
| Finland | Public and government-dependent | 90,514 | 5,891 | 37.7 |
| France | Public and private | 2,549,255 | 2,678 | 14.3 |
| Germany | Public | 1,206,973 | 3,611 | 19.5 |
| Greece | Public | - | - | - |
| Hungary | Public and private | 396,215 | 1,376 | 22.9 |
| Iceland | Public and private | - | - | - |
| Ireland | Public and private | 121,894 | 1,866 | 13.5 |
| Italy | Public | 1,578,420 | 3,299 | 18.6 |
| Japan | Public and private | 1,950,887 | 2,294 | 11.3 |
| Korea | Public and private | - | 935 | 9.5 |
| Mexico | Public | 2,650,339 | 817 | 12.0 |
| Netherlands | Public and private | 371,726 | 2,635 | 14.8 |
| New Zealand | Public and private | 56,171 | 2,180 | 14.6 |
| Norway | Public | 100,215 | 6,451 | 33.9 |
| Portugal | Public | 77,737 | 1,794 | 15.2 |
| Spain | Public and private | 1,066,172 | 2,210 | 16.6 |
| Sweden | Public and private | 283,860 | 2,942 | 17.5 |
| Switzerland | Public | 139,125 | 2,335 | 10.1 |
| Turkey | Public and private | 138,504 | 871 | 15.7 |
| United Kingdom | Public and government-dependent | 237,806 | 3,508 | 20.7 |
| United States | Public and private | 4,434,598 | 3,551 | 14.6 |

- Not available.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see Education at a Glance (1996), pp. 353-354.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http://www.oecd.org/els/stats/eag/ind_list.htm, table F3.1.

Table 55-5 Expenditures per student for primary education: 1993

| Country | Type of institution | Full-timeequivalent enrollment | Expenditures per student, in 1993 constant U.S. dollars | Expenditures per student, as a percentage of GDP per capita |
| :---: | :---: | :---: | :---: | :---: |
| Australia | Public and private | 1,816,066 | \$2,985 | 17.2 |
| Austria | Public | 365,428 | 4,291 | 22.4 |
| Belgium | Public and government-dependent | 738,330 | 2,953 | 15.3 |
| Canada | Public and private | - | - | - |
| Czech Republic | Public | 542,035 | 1,506 | 17.8 |
| Denmark | Public and private | 325,070 | 4,745 | 24.8 |
| Finland | Public and government-dependent | 391,994 | 4,095 | 26.2 |
| France | Public and private | 4,129,698 | 3,154 | 16.9 |
| Germany | Public | 3,614,112 | 2,815 | 15.2 |
| Greece | Public | - | - | - |
| Hungary | Public and private | 510,451 | 1,607 | 26.7 |
| Iceland | Public and private | 28,960 | 2,645 | 14.1 |
| Ireland | Public and private | 398,851 | 1,882 | 13.6 |
| Italy | Public | 2,863,279 | 4,107 | 23.2 |
| Japan | Public and private | 8,976,699 | 3,960 | 19.5 |
| Korea | Public and private | - | 1,715 | 17.4 |
| Mexico | Public | 13,517,525 | 741 | 10.9 |
| Netherlands | Public and private | 1,165,481 | 2,793 | 15.7 |
| New Zealand | Public and private | 326,916 | 2,659 | 17.8 |
| Norway | Public | - | - | - |
| Portugal | Public | 856,570 | 2,581 | 21.9 |
| Spain | Public and private | 2,545,628 | 2,293 | 17.2 |
| Sweden | Public and private | 610,596 | 4,917 | 29.2 |
| Switzerland | Public | 430,282 | 5,835 | 25.2 |
| Turkey | Public and private | 6,647,873 | 832 | 15.0 |
| United Kingdom | Public and government-dependent | 4,793,441 | 3,295 | 19.4 |
| United States | Public and private | 22,976,240 | 5,492 | 22.6 |

- Not available.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see Education at a Glance (1996), pp. 353-354.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http:/ /www.oecd.org/els/stats/eag/ind_list.htm, table F3.2.

Supplemental Tables and Notes
Table 55-6 Expenditures per student for secondary education: 1993

| Country | Type of institution | Full-timeequivalent enrollment | Expenditures per student, in 1993 constant U.S. dollars | Expenditures per student, as a percentage of GDP per capita |
| :---: | :---: | :---: | :---: | :---: |
| Australia | Public and private | 1,510,401 | \$4,871 | 28.1 |
| Austria | Public | 606,671 | 6,721 | 35.1 |
| Belgium | Public and government-dependent | 936,099 | 5,373 | 27.8 |
| Canada | Public and private | - | - | - |
| Czech Republic | Public | 1,166,512 | 1,903 | 22.4 |
| Denmark | Public and private | 480,568 | 6,175 | 32.2 |
| Finland | Public and government-dependent | 447,616 | 4,769 | 30.5 |
| France | Public and private | 5,959,223 | 5,685 | 30.4 |
| Germany | Public | 7,513,222 | 6,481 | 35.1 |
| Greece | Public | 786,938 | 1,578 | 18.0 |
| Hungary | Public and private | 1,177,664 | 1,685 | 28.0 |
| Iceland | Public and private | 30,163 | 3,258 | 17.4 |
| Ireland | Public and private | 374,528 | 3,031 | 22.0 |
| Italy | Public | 4,938,465 | 5,235 | 29.6 |
| Japan | Public and private | 10,662,691 | 4,356 | 21.5 |
| Korea | Public and private | - | 2,026 | 20.6 |
| Mexico | Public | 5,761,010 | 1,477 | 21.7 |
| Netherlands | Public and private | 1,364,550 | 3,979 | 22.4 |
| New Zealand | Public and private | 355,707 | 3,951 | 26.4 |
| Norway | Public | - | - | - |
| Portugal | Public | 843,333 | 2,491 | 21.1 |
| Spain | Public and private | 4,613,880 | 3,033 | 22.8 |
| Sweden | Public and private | 688,234 | 5,651 | 33.6 |
| Switzerland | Public | 513,022 | 7,024 | 30.3 |
| Turkey | Public and private | 4,357,981 | 587 | 10.5 |
| United Kingdom | Public and government-dependent | 5,127,519 | 4,494 | 26.5 |
| United States | Public and private | 20,516,146 | 6,541 | 27.0 |

- Not available.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see Education at a Glance (1996), pp. 353-354.

Table 55-7 Expenditures per student for higher education: 1993

| Country | Type of institution | Full-timeequivalent enrollment | Expenditures per student, in 1993 constant U.S. dollars | Expenditures per student, as a percentage of GDP per capita |
| :---: | :---: | :---: | :---: | :---: |
| Australia | Public and private | 593,783 | \$9,036 | 52.0 |
| Austria | Public | 218,407 | 8,642 | 45.1 |
| Belgium | Public and government-dependent | 296,047 | 6,380 | 33.0 |
| Canada | Public and private | 1,300,582 | 11,132 | 57.6 |
| Czech Republic | Public | 147,951 | 4,788 | 56.5 |
| Denmark | Public and private | 166,555 | 8,045 | 42.0 |
| Finland | Public and government-dependent | 191,200 | 7,295 | 46.6 |
| France | Public and private | 1,887,452 | 6,033 | 32.3 |
| Germany | Public | 1,993,459 | 7,902 | 42.8 |
| Greece | Public | 303,966 | 2,502 | 28.5 |
| Hungary | Public and private | 130,609 | 5,189 | 86.4 |
| Iceland | Public and private | 7,059 | 5,059 | 27.1 |
| Ireland | Public and private | 99,188 | 7,076 | 51.3 |
| Italy | Public | 1,800,493 | 5,169 | 29.2 |
| Japan | Public and private | 3,145,390 | 7,556 | 37.3 |
| Korea | Public and private | - | 2,589 | 26.3 |
| Mexico | Public | 1,044,647 | 4,264 | 62.8 |
| Netherlands | Public and private | 451,366 | 8,665 | 48.8 |
| New Zealand | Public and private | 109,353 | 7,337 | 49.0 |
| Norway | Public | 140,249 | 8,343 | 43.8 |
| Portugal | Public | 182,251 | 5,667 | 48.0 |
| Spain | Public and private | 1,317,963 | 3,835 | 28.8 |
| Sweden | Public and private | 185,725 | 12,693 | 75.4 |
| Switzerland | Public | 114,604 | 15,731 | 67.9 |
| Turkey | Public and private | 996,109 | 2,696 | 48.5 |
| United Kingdom | Public and government-dependent | 1,127,737 | 8,241 | 48.6 |
| United States | Public and private | 10,417,787 | 14,607 | 60.2 |

- Not available.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see Education at a Glance (1996), pp. 353-354.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http:/ /www.oecd.org/els/stats/eag/ind_list.htm, table F3.4.

Supplemental Tables and Notes

Table 55-8 Expenditures per student for all levels of education combined: 1993

| Country | Type of institution | Full-timeequivalent enrollment | Expenditures per student, in 1993 constant U.S. dollars | Expenditures per student, as a percentage of GDP per capita |
| :---: | :---: | :---: | :---: | :---: |
| Australia | Public and private | 3,920,250 | \$4,628 | 26.7 |
| Austria | Public | 1,342,418 | 6,565 | 34.3 |
| Belgium | Public and government-dependent | 2,384,363 | 4,616 | 23.9 |
| Canada | Public and private | 6,353,735 | 6,466 | 33.5 |
| Czech Republic | Public | 2,189,326 | 2,081 | 24.5 |
| Denmark | Public and private | 1,181,735 | 5,902 | 30.8 |
| Finland | Public and government-dependent | 1,121,324 | 5,167 | 33.0 |
| France | Public and private | 14,525,628 | 4,548 | 24.3 |
| Germany | Public | 16,284,370 | 5,450 | 29.5 |
| Greece | Public | 1,914,147 | 1,616 | 18.4 |
| Hungary | Public and private | 2,214,939 | 1,849 | 30.8 |
| Iceland | Public and private | 66,182 | 3,932 | 21.0 |
| Ireland | Public and private | 998,379 | 2,881 | 20.9 |
| Italy | Public | 11,180,657 | 5,021 | 28.4 |
| Japan | Public and private | 25,987,377 | 4,727 | 23.3 |
| Korea | Public and private | - | 2,132 | 21.6 |
| Mexico | Public | 22,973,521 | 1,102 | 16.2 |
| Netherlands | Public and private | 3,353,123 | 4,048 | 22.8 |
| New Zealand | Public and private | 848,146 | 3,681 | 24.6 |
| Norway | Public | 933,671 | 6,010 | 31.5 |
| Portugal | Public | 1,959,891 | 3,131 | 26.5 |
| Spain | Public and private | 9,543,643 | 2,916 | 21.9 |
| Sweden | Public and private | 1,768,415 | 5,702 | 33.9 |
| Switzerland | Public | 1,197,033 | 7,011 | 30.2 |
| Turkey | Public and private | 12,140,467 | 897 | 16.1 |
| United Kingdom | Public and government-dependent | 11,286,502 | 4,339 | 25.6 |
| United States | Public and private | 58,344,770 | 7,341 | 30.3 |

- Not available.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see Education at a Glance (1996), pp. 353-354.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http:/ /www.oecd.org/els/stats/eag/ind_list.htm, table F3.5.

Table 55-9 Basic reference statistics: 1993

| Country | Gross Domestic Product (GDP) ${ }^{1,2}$ | Purchasing Power Parity (PPP) Index | Adjustment factor ${ }^{3}$ | GDP, <br> in U.S. dollars ${ }^{1,4}$ | Total population | $\begin{array}{r} \text { GDP } \\ \text { per capita } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 414,680 | 1.3592 | 1.006166 | \$306,972.42 | 17,573,000 | \$17,468.41 |
| Austria | 2,124,072 | 13.865 | 1 | 153,196.68 | 7,993,000 | 19,166.36 |
| Belgium | 7,268,607 | 37.303 | 1 | 194,853.15 | 10,084,000 | 19,323.00 |
| Canada | 705,987 | 1.263 | 1.00788 | 563,380.98 | 28,941,000 | 19,466.53 |
| Czech Republic | 910,600 | 10.4 | 1 | 87,557.69 | 10,325,700 | 8,479.59 |
| Denmark | 873,237 | 8.7859 | 1 | 99,390.73 | 5,189,000 | 19,154.12 |
| Finland | 482,397 | 6.0862 | 1 | 79,260.79 | 5,066,000 | 15,645.63 |
| France | 7,082,790 | 6.5728 | 1 | 1,077,590.98 | 57,655,000 | 18,690.33 |
| Germany | 3,154,900 | 2.1029 | 1 | 1,500,261.54 | 81,179,000 | 18,480.91 |
| Greece | 16,760,352 | 184.34 | 1 | 90,920.86 | 10,368,000 | 8,769.37 |
| Hungary | 3,537,800 | 57.1 | 1 | 61,957.97 | 10,310,200 | 6,009.39 |
| Iceland | 410,860 | 82.926 | 1 | 4,954.54 | 265,000 | 18,696.37 |
| Ireland | 32,173 | 0.65477 | 1 | 49,136.34 | 3,563,000 | 13,790.72 |
| Italy | 1,550,150,000 | 1533.8 | 1 | 1,010,659.80 | 57,070,000 | 17,709.13 |
| Japan | 465,972,000 | 184.31 | 1.004823 | 2,540,390.55 | 124,670,000 | 20,376.92 |
| Korea | 267,145,900 | 620.9 | 1 | 430,255.92 | 43,663,405 | 9,853.93 |
| Mexico | 1,127,584 | 1.82 | 1 | 619,551.65 | 91,210,000 | 6,792.58 |
| Netherlands | 579,040 | 2.1344 | 1 | 271,289.36 | 15,290,000 | 17,742.93 |
| New Zealand | 78,804 | 1.5158 | 1.013804 | 52,706.04 | 3,470,750 | 15,185.78 |
| Norway | 733,665 | 8.9309 | 1 | 82,149.06 | 4,312,000 | 19,051.27 |
| Portugal | 13,625,623 | 116.96 | 1 | 116,498.14 | 9,876,000 | 11,796.09 |
| Spain | 60,905,100 | 116.96 | 1 | 520,734.44 | 39,086,000 | 13,322.79 |
| Sweden | 1,442,181 | 9.8332 | 1.013233 | 148,605.27 | 8,718,000 | 17,045.80 |
| Switzerland | 342,850 | 2.1316 | 1 | 160,841.62 | 6,938,000 | 23,182.71 |
| Turkey | 1,981,866,000 | 5989.8 | 1 | 330,873.48 | 59,489,000 | 5,561.93 |
| United Kingdom | 628,384 | 0.63735 | 1.024528 | 1,010,115.33 | 58,191,000 | 17,358.62 |
| United States | 6,259,900 | 1 | 1.010901 | 6,328,139.17 | 258,120,000 | 24,516.27 |

${ }^{1}$ In millions.
${ }^{2}$ This column represents GDP in each country's domestic currency.
${ }^{3}$ The adjustment factor was used to shift the reference period for expenditure data from the national financial year to the calendar year 1993.
${ }^{4}$ GDP in U.S. dollars, as used for the expenditure data in this analysis was calculated by dividing each country's GDP by the Purchasing Power Parity (PPP) index, and multiplying this figure by the adjustment factor.

NOTE: See the supplemental note to this indicator for a definition of GDP and an explanation of how PPP indices and adjustment factors were used to calculate expenditure data.
SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, Education at a Glance, OECD Indicators, 1996, table A2.

## Note to Indicator 55: International comparisons of education expenditures

The purpose of this analysis is to compare expenditures for education in public and private institutions, relative to the Gross Domestic Product (GDP) and school enrollment, across the developed countries for which data are available.

## Definitions

Public education expenditures include funds provided to both public and private schools by federal, state, and local governments either directly or through students. This includes expenditures at public schools funded by public sources and subsidies to students at private schools from government agencies.

Private education expenditures are expenditures financed by private sources-households, private nonprofit institutions, businesses, and corporations. For example, this includes expenditures supported by public and private school tuition and fees, and expenses for books and materials that must be purchased by the students themselves.

Gross Domestic Product (GDP) is an aggregate measure of the value of goods and services produced in a country. GDP is Gross National Product (GNP) less net property income from abroad.

Thus, this analysis focuses on education expenditures at both public and private schools funded by both public and private sources.

## Expenditures in the United States

## Primary and secondary education

For the United States, public expenditures for primary and secondary education include expenditures in local public school districts; private schools; and schools administered by religious organizations, funded by state and local taxes; federal programs administered by the U.S. Department of Education (ED); and federal programs operated outside of ED that are not administered by state or local education agencies (e.g., Head Start, Department of Defense Schools, and schools operated by the Bureau of Indian Affairs).

Also included are federal expenditures to operate ED and other activities, such as research, statistics, assessment, and school improvement, and state expenditures to operate state departments of education and other direct state expenditures, including state schools for the deaf and blind and reform schools.

Some expenditures, such as those for federal or state agency administration and those for non-graded special education programs, cannot be assigned to particular grade levels by any obviously universally superior method. These expenditures defy strict grade-level categorizations. Like some other countries, the United States has chosen to prorate these expenditures over the grade levels based on the relative size of enrollments, staffing, and salaries. Other countries, however, have chosen not to allocate such expenditures, classifying them, instead, as "undistributed."

## Higher education

Public expenditures for higher education in the United States include expenditures at both public and private colleges and universities funded by federal, state, and local governments. The Integrated Postsecondary Education Data System (IPEDS), the core postsecondary education data collection program for NCES, gathers institutional reports for revenue received by both public and private institutions from both public and private sources. Expenditures by public and private, nonprofit institutions are separated into public and private expenditures based on the share of current fund revenues from federal, state, and local sources.

Most federal aid goes to students who then spend it on education (e.g., tuition) and non-education (room and board) services. It was assumed that 60 percent of federally administered Pell grants were spent on education by students.
With the exception of Pell grant money, public expenditures for less-than-2-year public and private institutions, including "proprietary" schools, were not available; therefore, public expenditures for higher education in the United States are biased downward. However, since the students participating in these institutions are also excluded from higher education enrollments, the estimate of public expenditures per student would be biased upward if the per student public expenditures in less-than-2-year institutions were less than those in other higher education institutions.

## Per student expenditures

Per student expenditures are calculated as total expenditures, funded by both public and private sources, divided by enrollment in both public and private schools. This is a measure of the average investment per student in the education system.

The data for per student expenditures in higher education come directly from tables in Education At A Glance (EAG), published by the Organization for Economic Co-operation and Development in 1996. However, the EAG tables include per student expenditures broken down by early childhood, primary, secondary, and tertiary education.
For this indicator, the primary and secondary figures were recalculated to generate one expenditure figure for the primary and secondary levels combined. This was done by, first, adding the full-time-equivalent enrollment (FTE) numbers for primary and secondary education to determine total FTE. Second, total expenditures were calculated by multiplying the FTE numbers by expenditures per student, for primary and secondary education, respectively, and then adding these two figures together to determine total expenditures for primary-secondary education. Finally, total expenditures on primary and secondary education were divided by total enrollment in the primary and secondary levels to determine per student expenditures for primary-secondary education.

## How students are classified

The International Standard Classification of Education (ISCED) was designed as an instrument for presenting statistics of education internationally. Many countries report education statistics to UNESCO and the Organization for Economic Cooperation and Development (OECD) using the ISCED. In this classification system, education is divided into several levels.

The following are summary definitions used in this analsysis:

- Education preceding the first level (preprimary education), where it is provided, usually begins at age 3,4 , or 5 (sometimes earlier) and lasts from 1-3 years. For the United States, this would be mostly nursery schools and kindergarten classes.
- Education at the first level (primary education) usually begins at age 5,6 , or 7 and lasts for about 5 or 6 years. For the United States, the first level starts with grade 1 and ends with grade 6.
- Education at the second level (lower secondary education) begins at about age 11 or 12 and lasts for about 3 years. For the United States, the second level starts with grade 7 and ends with grade 9 .
- Education at the third level (upper secondary education) begins at about age 14 or 15 and lasts for
about 3 years. For the United States, the third level starts with grade 10 and ends with grade 12.
- Education at the fifth level (non-university higher education) is provided at community colleges, vocational-technical colleges, and other degreegranting institutes whose programs typically take 2 years or more, but less than 4 years, to complete.
- Education at the sixth level (university higher education) is provided in undergraduate programs at 4-year colleges and universities in the United States and, generally, at universities in other countries. Completion of education at the third level (upper secondary education) is usually required as a minimum condition of admission, and admission is, in many cases, competitive.
- Education at the seventh level (graduate and professional higher education) is provided in graduate and professional schools that generally require a university diploma as a minimum condition for admission.
- Education at the ninth level (undistributed) is a classification reserved for enrollments, expenditures, or programs that cannot be unambiguously assigned to one of the aforementioned levels. Some countries, for example, assign nongraded special education or recreational nondegree adult education programs to this level. Other countries assign nothing to this level, preferring instead to allocate enrollments, expenditures, and programs to levels as best they can.


## How expenditures are compared across countries

To compare expenditures per student in the United States to expenditures per student in other countries, expenditures must be denominated in a common currency. Conversion of other countries' expenditures to U.S. dollars facilitates comparison with expenditures in the United States. There are at least two methods of conversion: 1) market exchange rates, and 2) Purchasing Power Parity (PPP) indices.

The market exchange rate is the rate at which an individual can exchange the currencies of two countries. It is determined by relative confidence in the governments, their monetary systems, and the economies of the two countries and by the relative demand for the goods and services that the two
countries trade. Market exchange rates can be highly volatile. ${ }^{1}$

PPP indices are calculated by comparing the cost of a fixed market basket of goods in each country. Changes over time in a PPP index are determined by the rates of inflation in each country. Since PPP indices are not volatile, they were used here to adjust expenditures and GDP figures. ${ }^{2}$ Because the fiscal year has a different starting month in different countries, within-country GDP consumer price deflators from the OECD National Accounts database were used to adjust education expenditures where the national financial year does not coincide with the calendar year 1993.

## Problems in comparing education expenditures across countries

Comparing national expenditures on education can be difficult because the data are dependent on numerous factors, including the size of the economy, the population, and enrollment rates. In addition, the coverage and character of the education expenditure data that countries submit to the OECD vary somewhat. Sometimes an individual expenditure item may be included in the expenditure data from one country, but may not be included in those from another. Below, is a discussion of some of the problems that exist in comparing education expenditures across countries.
Size of the economy: Because GDP levels are the measure against which education expenditures are compared in this indicator, a country's wealth has a significant effect on the amount of resources that can be devoted to education.

Size of the population: The youth population, constituting those between the ages of 5 and 29, is the population that demands the investment of resources in education and training. The greater this population is, the more a country has to spend on education; the smaller this population is, the less a country has to spend on education.
Enrollment rates: Enrollment rates also affect the amount of resources a country needs to invest in education. The proportion of persons between the ages of 5 and 29 who are enrolled either full time or part time in preprimary, primary, secondary, or tertiary education varies widely across countries. For example, this proportion ranges from less than 55 percent in the Czech Republic, Greece, Mexico, and Turkey to more then 67 percent in Australia, Belgium, Canada, and New Zealand. ${ }^{3}$

Discrepancies in expenditure data arise because one country may collect certain kinds of data that another country either does not collect, or does not collect in its "education" data collections. Or, one country may define what constitutes an "education" expenditure differently than another country does. Discrepancies between which expenditure items are included in one country's expenditure figures and not in another's tend to arise in four general domains:

Noninstructional (ancillary) services: Some countries provide fewer ancillary services in their schools and, thus, include fewer expenditures for such services in their education expenditure figures. Examples of ancillary services are school cafeterias; dormitories; intramural school sports programs; school health clinics or visiting school nurse services; attendance (i.e., truancy) services; and speech or psychological therapy services. U.S. schools tend to subsidize relatively more ancillary services through their education budgets than do schools in most other countries. In some countries (e.g., Germany), none of the aforementioned services are provided at the primary and lower secondary levels by many schools.
Private expenditures: Some countries' education systems receive large private contributions. The most common forms of private contributions to education are student tuition or fees; organizational subsidies, such as those provided by religious denominations to their own schools; and corporate in-kind contributions, such as those provided by German and Austrian firms to fund vocational courses on the shop floor for participating youth apprentices. Most national education statistics collections attempt to include estimates for such expenditures. However, other private expenditures can seem more ephemeral to education data gatherers. Students' or parents' own spending on school supplies, or community organizations' charitable grants and loans to individual students, for example, can only be estimated with the help of household expenditure surveys and diligent perusal of statistical collections outside the domain of traditional educational institutions.

The boundaries of education: Fewer (though, still some) inconsistencies arise when comparing just the instructional expenditures for primary and secondary public education in the academic track. But, the "borderlands" of education, in particular, tend to cause comparability problems. These borderlands include preprimary education and day care, special education, adult education, vocational/technical
education, and proprietary education. Some countries, for example, simply do not collect expenditure data for private "center-based" day care because they do not define this as "education." Indeed, in some countries, even public day care is not managed by education authorities; rather, it is the responsibility of human services departments.

The exact location of each "boundary" also varies from country to country and even within each country. In Canada, for example, vocational/ technical students in Québec choose to enter vocational/technical college in the $12^{\text {th }}$ grade, while in the other Canadian provinces with vocational/technical colleges, they enter in the $13^{\text {th }}$ or $14^{\text {th }}$ grade. Thus, vocational/technical students in the other provinces spend another year or two at the upper secondary level. The more time the average student spends in a level of education, the greater will be the expenditures at that level.

University research: Because university spending includes substantial expenditures on research, comparing expenditures on higher education can often be misleading. The proportion of total university spending that is invested in research varies widely, specifically because of variations in the proportion of total national research and development (R \& D) that is performed within the domain of higher education institutions.

In addition to variations among countries regarding the production of $R \& D$, countries have not reported their research spending to the same extent when submitting data that were used for this analysis. For example, some countries exclude separately funded or budgeted research, while others include nearly all research outlays by institutions of higher education, when reporting higher education expenditure figures.

Even these four domains do not include all the possible comparability problems. There remain, for
example, inconsistencies in how different countries treat public contributions to teacher retirement and fringe benefits, student financial aid, and hospitals.

The National Center for Education Statistics (NCES) has sponsored a study designed to examine the comparability of national figures on education expenditures. The two-volumestudy, entitled International Expenditure Comparability Study, involves 10 countries and examines in detail the content of the education expenditures data they reported to the OECD.

Thus far, participating education ministries have been receptive to the idea of improving comparability in the OECD data collection. Indeed, some countries had already modified their data submissions to the OECD for the 1991-92 school year, thus improving the comparability of education expenditures across countries for the data used for The Condition of Education, 1996. Further improvements were made to the data submissions to the OECD for the 1993-94 school year, the data used for this report. These changes were motivated in part by findings from the NCES expenditure comparability studies. ${ }^{4}$

[^50]Table 56-1 Average annual salaries (in 1996 constant dollars) of public elementary and secondary teachers: Selected school years ending 1960-96

| School year ending | All <br> teachers | Elementary teachers | Secondary teachers | Beginning teachers ${ }^{1}$ | Bachelor's degree or higher ${ }^{1,2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1960 | \$26,718 | \$25,755 | \$28,222 | - | - |
| 1962 | 28,837 | 27,922 | 30,197 | - | - |
| 1964 | 30,550 | 29,581 | 31,931 | - | - |
| 1966 | 31,944 | 30,928 | 33,302 | - | - |
| 1968 | 34,306 | 33,312 | 35,549 | - | \$46,900 |
| 1970 | 35,890 | 34,999 | 36,993 | - | 47,430 |
| 1971 | 36,668 | 35,691 | 37,855 | - | 47,529 |
| 1972 | 37,067 | 35,995 | 38,313 | \$26,163 | 48,691 |
| 1973 | 37,353 | 36,322 | 38,576 | - | 48,080 |
| 1974 | 36,304 | 35,418 | 37,340 | 23,958 | 46,295 |
| 1975 | 35,326 | 34,394 | 36,415 | - | 44,502 |
| 1976 | 35,708 | 34,801 | 36,664 | 23,745 | 44,803 |
| 1977 | 35,760 | 34,783 | 36,890 | - | 45,356 |
| 1978 | 35,628 | 34,742 | 36,641 | 22,897 | 43,926 |
| 1979 | 34,490 | 33,684 | 35,449 | - | 41,821 |
| 1980 | 32,332 | 31,520 | 33,322 | 20,292 | 39,819 |
| 1981 | 32,013 | 31,261 | 32,917 | - | 38,949 |
| 1982 | 32,189 | 31,487 | 33,076 | 20,478 | 39,310 |
| 1983 | 33,139 | 32,389 | 34,094 | - | 39,906 |
| 1984 | 33,871 | 33,180 | 34,827 | 21,561 | 41,067 |
| 1985 | 35,069 | 34,475 | 35,942 | - | 42,741 |
| 1986 | 36,396 | 35,701 | 37,330 | 23,896 | 44,474 |
| 1987 | 37,541 | 36,818 | 38,495 | - | 44,328 |
| 1988 | 38,035 | 37,336 | 39,072 | 24,745 | 44,521 |
| 1989 | 38,340 | 37,638 | 39,188 | - | 46,196 |
| 1990 | 38,826 | 38,164 | 39,670 | 24,771 | 44,338 |
| 1991 | 38,830 | 38,132 | 39,783 | - | 43,504 |
| 1992 | 38,737 | 38,072 | 39,602 | 25,397 | 43,816 |
| 1993 | 38,628 | 37,865 | 39,566 | 25,303 | 46,649 |
| 1994 | 38,502 | 37,942 | 39,418 | 25,349 | 47,187 |
| 1995 | 38,456 | 37,906 | 39,312 | 25,185 | 45,773 |
| 1996 | 38,434 | 37,916 | 39,162 | 25,167 | - |

## - Not available.

' Salaries of beginning teachers and persons with a bachelor's degree or higher are for the calendar year.
${ }^{2}$ Includes salaries of individuals aged 25 or older who earned income and had a bachelor's degree or higher.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 76. U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-60. American Federation of Teachers, Survey and Analysis of Salary Trends 1996, December 1996, table III-2.

Table 56-2 Average compensation (in 1996 constant dollars) received by full-time public school teachers, by selected school characteristics: Summer 1993 and school year 1993-94

| School characteristics | School earnings* |  |  |  | Non-school compensation |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total school earnings | $\begin{array}{r} \text { Base } \\ \text { salary } \\ \hline \end{array}$ | Summer supplemental earnings | Other school compensation |  |
| Total | \$38,055 | \$36,648 | \$2,250 | \$2,328 | \$5,487 |
| Central city | 38,470 | 36,965 | 2,527 | 2,376 | 5,896 |
| Percentage of students eligible for free or reduced-price lunch |  |  |  |  |  |
| 0-5 | 39,802 | 38,535 | 2,237 | 2,072 | 6,711 |
| 6-20 | 38,156 | 36,551 | 2,398 | 2,482 | 5,389 |
| 21-40 | 38,011 | 36,553 | 2,203 | 2,354 | 5,935 |
| 41 or more | 38,497 | 37,038 | 2,673 | 2,303 | 5,923 |
| School level |  |  |  |  |  |
| Elementary | 37,380 | 36,243 | 2,295 | 1,999 | 5,341 |
| Secondary | 40,358 | 38,235 | 2,687 | 2,807 | 6,363 |
| Combined | 40,441 | 38,092 | 3,918 | 2,563 | 7,530 |
| Minority enrollment |  |  |  |  |  |
| Less than 20 percent | 37,115 | 35,873 | 1,910 | 2,161 | 5,242 |
| 20 percent or more | 38,779 | 37,232 | 2,628 | 2,399 | 6,035 |
| School size |  |  |  |  |  |
| Less than 150 | 34,710 | 32,946 | 3,492 | 2,692 | 6,964 |
| 150-499 | 37,729 | 36,635 | 2,566 | 1,811 | 6,552 |
| 500-749 | 37,433 | 36,248 | 2,156 | 2,091 | 4,855 |
| 750 or more | 39,435 | 37,596 | 2,625 | 2,650 | 5,995 |
| Urban fringe/large town | 42,527 | 41,091 | 2,258 | 2,431 | 5,449 |
| Percentage of students eligible for free or reduced-price lunch |  |  |  |  |  |
| 0-5 | 48,329 | 46,558 | 2,210 | 2,814 | 6,684 |
| 6-20 | 42,670 | 41,108 | 2,247 | 2,520 | 5,478 |
| 21-40 | 40,578 | 39,209 | 2,093 | 2,184 | 5,219 |
| 41 or more | 37,756 | 36,742 | 2,392 | 1,907 | 4,252 |
| School level |  |  |  |  |  |
| Elementary | 41,059 | 40,092 | 1,977 | 1,977 | 4,553 |
| Secondary | 45,103 | 42,852 | 2,473 | 2,916 | 6,318 |
| Combined | 39,910 | 38,419 | 2,671 | 2,328 | 5,026 |
| Minority enrollment |  |  |  |  |  |
| Less than 20 percent | 43,249 | 41,850 | 1,993 | 2,482 | 4,975 |
| 20 percent or more | 41,578 | 40,104 | 2,442 | 2,374 | 5,778 |
| School size |  |  |  |  |  |
| Less than 150 | 36,127 | 34,601 | 2,753 | 2,158 | 6,583 |
| 150-499 | 42,099 | 41,177 | 2,174 | 1,862 | 4,306 |
| 500-749 | 41,940 | 40,798 | 1,934 | 2,209 | 4,105 |
| 750 or more | 43,197 | 41,303 | 2,354 | 2,748 | 6,455 |

Table 56-2 Average compensation (in 1996 constant dollars) received by full-time public school teachers, by selected school characteristics: Summer 1993 and school year 1993-94Continued

| School characteristics | School earnings* |  |  |  | Non-school compensation |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total school earnings | $\begin{array}{r} \text { Base } \\ \text { salary } \end{array}$ | $\begin{array}{r} \text { Summer } \\ \text { supplemental } \\ \text { earnings } \\ \hline \end{array}$ | Other school compensation |  |
| Rural/small town | 34,365 | 33,050 | 1,976 | 2,225 | 5,247 |
| Percentage of students eligible for free or reduced-price lunch |  |  |  |  |  |
| 0-5 | 42,433 | 40,770 | 1,776 | 2,629 | 5,758 |
| 6-20 | 36,758 | 35,213 | 1,982 | 2,326 | 5,422 |
| 21-40 | 33,881 | 32,521 | 2,053 | 2,299 | 4,827 |
| 41 or more | 31,401 | 30,331 | 1,949 | 2,013 | 5,413 |
| School level |  |  |  |  |  |
| Elementary | 33,711 | 32,814 | 1,699 | 1,851 | 4,770 |
| Secondary | 35,516 | 33,494 | 2,262 | 2,625 | 5,722 |
| Combined | 32,982 | 31,486 | 2,208 | 2,473 | 5,559 |
| Minority enrollment |  |  |  |  |  |
| Less than 20 percent | 35,274 | 33,921 | 1,915 | 2,257 | 5,391 |
| 20 percent or more | 32,353 | 31,078 | 2,101 | 2,226 | 4,944 |
| School size |  |  |  |  |  |
| Less than 150 | 29,764 | 28,237 | 2,357 | 2,206 | 5,533 |
| 150-499 | 33,044 | 31,858 | 1,768 | 2,118 | 5,218 |
| 500-749 | 35,366 | 34,103 | 1,947 | 2,155 | 5,179 |
| 750 or more | 36,462 | 34,853 | 2,247 | 2,557 | 5,317 |
| Percentage of students eligible for free or reduced-price lunch |  |  |  |  |  |
| 0-5 | 45,547 | 43,874 | 2,107 | 2,691 | 6,419 |
| 6-20 | 39,399 | 37,835 | 2,175 | 2,430 | 5,436 |
| 21-40 | 36,648 | 35,262 | 2,107 | 2,282 | 5,183 |
| 41 or more | 35,496 | 34,279 | 2,393 | 2,113 | 5,406 |

* Detailed school earnings were computed using data only from teachers who reported those earnings; therefore, details do not add to total. Included in "total" and "other school compensation" are other sources of income reported after excluding outside income. Summer compensation was received in 1993. Data were calculated from the Schools and Staffing Survey Teacher Questionnaire.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table 56-3 Ratio of the average annual salaries of public elementary and secondary teachers and individuals with a bachelor's degree or higher to per capita Gross Domestic Product: Selected school years ending 1960-95

| School year ending | teachers | Elementary teachers | Secondary teachers | Beginning teachers' | Bachelor's degree or higher ${ }^{1,2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1960 | 1.71 | 1.65 | 1.81 | - | - |
| 1962 | 1.76 | 1.70 | 1.84 | - | - |
| 1964 | 1.74 | 1.68 | 1.81 | - | - |
| 1966 | 1.62 | 1.57 | 1.69 | - | - |
| 1968 | 1.64 | 1.59 | 1.70 | - | 2.29 |
| 1970 | 1.71 | 1.67 | 1.76 | - | 2.32 |
| 1971 | 1.71 | 1.66 | 1.77 | - | 2.26 |
| 1972 | 1.65 | 1.60 | 1.70 | 1.18 | 2.20 |
| 1973 | 1.56 | 1.52 | 1.61 | - | 2.09 |
| 1974 | 1.54 | 1.50 | 1.58 | 1.08 | 2.08 |
| 1975 | 1.54 | 1.50 | 1.59 | - | 2.02 |
| 1976 | 1.51 | 1.47 | 1.55 | 1.03 | 1.95 |
| 1977 | 1.45 | 1.41 | 1.50 | - | 1.90 |
| 1978 | 1.38 | 1.35 | 1.42 | 0.92 | 1.77 |
| 1979 | 1.32 | 1.29 | 1.36 | - | 1.70 |
| 1980 | 1.31 | 1.27 | 1.35 | 0.87 | 1.71 |
| 1981 | 1.30 | 1.27 | 1.34 | - | 1.67 |
| 1982 | 1.38 | 1.35 | 1.42 | 0.90 | 1.73 |
| 1983 | 1.38 | 1.35 | 1.42 | - | 1.69 |
| 1984 | 1.33 | 1.30 | 1.37 | 0.86 | 1.65 |
| 1985 | 1.35 | 1.32 | 1.38 | - | 1.67 |
| 1986 | 1.37 | 1.35 | 1.41 | 0.91 | 1.69 |
| 1987 | 1.37 | 1.35 | 1.41 | - | 1.66 |
| 1988 | 1.36 | 1.34 | 1.40 | 0.91 | 1.63 |
| 1989 | 1.34 | 1.32 | 1.37 | - | 1.66 |
| 1990 | 1.37 | 1.34 | 1.39 | 0.90 | 1.61 |
| 1991 | 1.41 | 1.39 | 1.45 | - | 1.61 |
| 1992 | 1.39 | 1.37 | 1.42 | 0.93 | 1.60 |
| 1993 | 1.38 | 1.35 | 1.41 | 0.92 | 1.69 |
| 1994 | 1.35 | 1.33 | 1.38 | 0.90 | 1.68 |
| 1995 | 1.34 | 1.32 | 1.37 | 0.89 | 1.61 |

- Not available.
' Salaries of beginning teachers and persons with a bachelor's degree or higher are for the calendar year.
${ }^{2}$ Includes salaries of individuals aged 25 or older who earned income and had a bachelor's degree or higher.

NOTE: Data are revised from previously published figures.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 76. American Federation of Teachers, Survey and Analysis of Salary Trends 1996, December 1996, table III-2.

Table 56-4 Average annual salaries (in 1996 constant dollars) of all teachers: School years ending 1981 and 1996, percentage change in salaries between 1981 and 1996, and 1995 per capita personal income, by region and state

| Region and state | All teachers 1980-81 | $\begin{array}{r} \hline \text { All teachers } \\ 1995-96 \\ \hline \end{array}$ | Percentage change 1981-96 | Per capita personal income (1995) |
| :---: | :---: | :---: | :---: | :---: |
| 50 states and D.C. | \$31,958 | \$38,434 | 20.3 | \$23,678 |
| New England | 29,077 | 43,727 | 50.4 | 27,371 |
| Connecticut | *31,523 | 51,183 | 62.4 | 31,198 |
| Maine | 25,347 | 33,380 | 31.7 | 21,133 |
| Massachusetts | *33,876 | *44,436 | 31.2 | 27,791 |
| New Hampshire | 24,293 | 36,348 | 49.6 | 25,894 |
| Rhode Island | 35,868 | *42,815 | 19.4 | 23,998 |
| Vermont | 23,557 | 36,859 | 56.5 | 21,545 |
| Mideast | 35,484 | 47,637 | 34.2 | 26,937 |
| Delaware | 32,974 | 41,163 | 24.8 | 24,836 |
| District of Columbia | 41,445 | *44,379 | 7.1 | 33,227 |
| Maryland | 34,410 | 41,855 | 21.6 | 26,693 |
| New Jersey | 33,046 | 48,654 | 47.2 | 29,710 |
| New York | 38,627 | 48,862 | 26.5 | 27,573 |
| Pennsylvania | 32,403 | 47,645 | 47.0 | 23,966 |
| Southeast | 27,239 | 32,574 | 19.6 | 21,257 |
| Alabama | 27,540 | 31,793 | 15.4 | 19,336 |
| Arkansas | 24,041 | 29,777 | 23.9 | 17,944 |
| Florida | 27,904 | 33,838 | 21.3 | 23,593 |
| Georgia | 27,975 | 34,840 | 24.5 | 21,906 |
| Kentucky | 28,527 | *33,622 | 17.9 | 19,162 |
| Lovisiana | 29,989 | 27,216 | -9.2 | 19,383 |
| Mississippi | 23,577 | 28,119 | 19.3 | 17,019 |
| North Carolina | 28,723 | 31,039 | 8.1 | 21,212 |
| South Carolina | 25,997 | 32,058 | 23.3 | 19,343 |
| Tennessee | 27,383 | 33,971 | 24.1 | 20,978 |
| Virginia | 28,138 | 35,226 | 25.2 | 24,294 |
| West Virginia | 27,075 | 32,654 | 20.6 | 18,444 |
| Great Lakes | 33,473 | 41,523 | 24.0 | 23,660 |
| Illinois | 35,184 | 41,645 | 18.4 | 25,494 |
| Indiana | *31,253 | 38,392 | 22.8 | 21,901 |
| Michigan | *38,422 | *49,932 | 30.0 | 24,246 |
| Ohio | 30,617 | 38,423 | 25.5 | 22,671 |
| Wisconsin | 31,891 | *39,170 | 22.8 | 22,484 |
| Plains | 27,686 | 34,165 | 23.4 | 22,394 |
| lowa | 29,217 | 32,879 | 12.5 | 21,632 |
| Kansas | 27,622 | 36,070 | 30.6 | 22,469 |
| Minnesota | 32,199 | *37,511 | 16.5 | 23,801 |
| Missouri | 27.931 | 33,859 | 21.2 | 22,266 |
| Nebraska | 26,955 | 31,985 | 18.7 | 22,344 |
| North Dakota | 25,111 | 27,388 | 9.1 | 19,214 |
| South Dakota | 24,767 | 26,755 | 8.0 | 20,082 |
| Southwest | 29,086 | 32,038 | 10.2 | 20,760 |
| Arizona | 31,155 | *32,989 | 5.9 | 21,024 |
| New Mexico | 30,451 | 29,805 | -2.1 | 18,588 |
| Oklahoma | 26,249 | *29,358 | 11.8 | 18,688 |
| Texas | 28,487 | 32,497 | 14.1 | 21,264 |

Table 56-4 Average annual salaries (in 1996 constant dollars) of all teachers: School years ending 1981 and 1996, percentage change in salaries between 1981 and 1996, and 1995 per capita personal income, by region and state-Continued

| Region and state | All teachers <br> $1980-81$ | All teachers <br> $1995-96$ | Percentage <br> change 1981-96 | Per capita personal <br> income (1995) |
| :--- | ---: | ---: | ---: | ---: |
| Rocky Mountains | 30,633 | 33,019 | 7.8 | 21,591 |
| Colorado | 32,452 | 35,913 | 10.7 | 24,141 |
| Idaho | 27,366 | 31,371 | 14.6 | 19,833 |
| Montana | $* 28,897$ | 29,820 | 3.2 | 19,028 |
| Utah | 30,545 | 30,925 | 1.2 | 18,761 |
| Wyoming | 33,903 | 32,061 | -5.4 | 21,951 |
| Far West | 38,622 | 41,967 | 8.7 | 24,331 |
| Alaska | $* 52,613$ | $* 50,391$ | -4.2 | 24,896 |
| California | $* 37,546$ | $* 43,176$ | 15.0 | 24,399 |
| Hawaii | 38,303 | 36,363 | -5.1 | 25,468 |
| Nevada | 32,059 | 36,729 | 14.6 | 25,752 |
| Oregon | $* 32,688$ | 40,266 | 23.2 | 22,378 |
| Washington | 38,522 | 38,616 | 0.2 | 24,337 |

[^51]SOURCE: National Education Association, Estimates of School Statistics (Copyright © 1996 by NEA. All rights reserved.). U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States: 1996, tables 27, 698, and 699.

Table 56-5 Average compensation (in 1996 constant dollars) received by full-time private school teachers, by selected school characteristics: Summer 1993 and school year 1993-94

| School characteristics | School earnings* |  |  |  | Non-school compensation |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total school earnings | $\begin{array}{r} \text { Base } \\ \text { salary } \\ \hline \end{array}$ | Summer supplemental earnings | Other school compensation |  |
| Total | \$24,603 | \$23,574 | \$2,308 | \$2,045 | \$4,528 |
| Central city | 25,471 | 24,367 | 2,259 | 2,023 | 4,490 |
| School level |  |  |  |  |  |
| Elementary | 21,970 | 21,328 | 1,825 | 1,622 | 4,862 |
| Secondary | 30,163 | 28,581 | 2,203 | 2,138 | 4,711 |
| Combined | 26,448 | 25,092 | 2,590 | 2,376 | 4,451 |
| Minority enrollment |  |  |  |  |  |
| Less than 20 percent | 25,137 | 24,168 | 2,061 | 2,083 | 5,065 |
| 20 percent or more | 24,714 | 23,560 | 2,287 | 1,984 | 4,167 |
| School size |  |  |  |  |  |
| Less than 150 | 20,249 | 19,296 | 2,181 | 1,561 | 2,967 |
| 150-499 | 23,358 | 22,548 | 2,105 | 1,728 | 5,031 |
| 500-749 | 26,440 | 25,257 | 1,893 | 2,221 | 5,161 |
| 750 or more | 33,020 | 31,279 | 2,621 | 2,669 | 4,756 |
| Urban fringe/large town | 25,661 | 24,568 | 2,481 | 2,179 | 5,016 |
| School level |  |  |  |  |  |
| Elementary | 22,988 | 22,277 | 2,126 | 1,836 | 4,376 |
| Secondary | 30,524 | 28,832 | 2,492 | 2,433 | 6,411 |
| Combined | 27,681 | 26,325 | 2,763 | 2,399 | 5,431 |
| Minority enrollment |  |  |  |  |  |
| Less than 20 percent | 25,480 | 24,516 | 2,209 | 2,162 | 5,038 |
| 20 percent or more | 26,241 | 24,871 | 2,794 | 2,299 | 5,225 |
| School size |  |  |  |  |  |
| Less than 150 | 21,904 | 20,771 | 2,757 | 2,472 | 3,988 |
| 150-499 | 24,957 | 24,057 | 2,189 | 1,937 | 4,976 |
| 500-749 | 28,700 | 27,619 | 2,066 | 2,691 | 5,126 |
| 750 or more | 32,105 | 30,297 | 3,114 | 2,379 | 7,428 |
| Rural/small town | 20,621 | 19,881 | 2,021 | 1,816 | 3,767 |
| School level |  |  |  |  |  |
| Elementary | 19,142 | 18,720 | 2,247 | 1,125 | 3,432 |
| Secondary | 28,563 | 26,579 | 2,379 | 3,264 | 3,962 |
| Combined | 18,933 | 18,345 | 1,648 | 1,376 | 4,024 |
| Minority enrollment |  |  |  |  |  |
| Less than 20 percent | 19,940 | 19,240 | 1,973 | 1,868 | 3,872 |
| 20 percent or more | 25,142 | 24,214 | 2,380 | 1,791 | 2,927 |
| School size |  |  |  |  |  |
| Less than 150 | 17,365 | 16,665 | 2,245 | 1,885 | 4,120 |
| 150-499 | 21,727 | 21,102 | 1,904 | 1,592 | 3,631 |
| 500-749 | 26,166 | 25,275 | - | 1,863 | - |
| 750 or more | 28,759 | 27,185 | - | - | 二 |

- Too few sample observations for a reliable estimate.
* Detailed school earnings were computed using data only from teachers who reported those earnings; therefore, details do not add to total. Included in "total" and "other school compensation" are other sources of income reported after excluding outside income.

Summer compensation was received in 1993. Data were calculated from the Schools and Staffing Survey Teacher Questionnaire.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table 56-6 Percentage of public school districts and private schools with salary schedules, average scheduled salaries (in 1996 constant dollars) of full-time teachers, percentage of schools without salary schedules, and average lowest and highest salaries, selected district characteristics: School year 1993-94

| District characteristics | Districts/schools with salary schedules |  |  |  |  | Districts/schools without salary schedules |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage with | Bachelor's, no experience | Master's,Master's, no20 years <br> experience experience |  | Highest step on schedule | Percentage without | Salary range |  |
|  | salary schedules |  |  |  | salary schedules | Average lowest | Average highest |
| Public school districts | 93.9 | \$23,525 | \$25,706 | \$39,932 |  | \$43,478 | 6.1 | \$21,653 | \$31,655 |
| Region |  |  |  |  |  |  |  |  |
| Northeast | 91.9 | 27,451 | 29,753 | 49,998 | 55,016 | 8.1 | 25,929 | 48,669 |
| Midwest | 91.4 | 22,404 | 24,694 | 38,327 | 41,221 | 8.6 | 19,481 | 24,353 |
| South | 99.5 | 21,898 | 23,300 | 33,217 | 36,321 | 0.5 | - | - |
| West | 94.5 | 23,514 | 26,296 | 40,562 | 44,337 | 5.5 | - | - |
| District size |  |  |  |  |  |  |  |  |
| Less than 1,000 | 89.6 | 22,338 | 24,441 | 36,870 | 39,157 | 10.4 | 25,929 | 48,669 |
| 1,000-4,999 | 98.2 | 24,489 | 26,719 | 42,587 | 46,984 | 1.8 | 19,481 | 24,353 |
| 5,000-9,999 | 98.8 | 25,350 | 27,745 | 44,370 | 49,865 | 1.2 | - | - |
| 10,000 or more | 99.2 | 24,908 | 27,177 | 42,554 | 48,908 | 0.8 | - | - |
| Minority enrollment |  |  |  |  |  |  |  |  |
| Less than 20 percent | 92.6 | 23,290 | 25,523 | 39,837 | 43,134 | 7.4 | 20,978 | 30,401 |
| 20 percent or more | 97.2 | 24,071 | 26,136 | 40,137 | 44,267 | 2.8 | 25,946 | 39,451 |
| Minority teachers |  |  |  |  |  |  |  |  |
| Less than 10 percent | 93.0 | 23,457 | 25,659 | 40,121 | 43,544 | 7.0 | 21,541 | 31,280 |
| 10 percent or more | 98.7 | 23,841 | 25,931 | 39,038 | 43,165 | 1.3 | - | - |
| Private schools | 63.4 | 17,425 | 18,908 | 27,030 | 29,267 | 36.6 | 14,218 | 23,426 |
| Region |  |  |  |  |  |  |  |  |
| Northeast | 63.8 | 17,668 | 18,987 | 28,031 | 30,436 | 36.2 | 13,580 | 26,387 |
| Midwest | 68.1 | 17,007 | 18,444 | 27,142 | 29,236 | 31.9 | 14,662 | 21,879 |
| South | 57.7 | 16,174 | 17,504 | 23,770 | 26,047 | 42.3 | 14,186 | 21,967 |
| West | 63.7 | 19,582 | 21,577 | 30,043 | 32,250 | 36.3 | 14,549 | 23,651 |
| School size |  |  |  |  |  |  |  |  |
| Less than 150 | 47.9 | 16,454 | 17,903 | 24,612 | 26,350 | 52.1 | 13,274 | 20,768 |
| 150-499 | 81.9 | 17,795 | 19,279 | 28,121 | 30,540 | 18.1 | 16,708 | 29,353 |
| 500-749 | 80.0 | 19,288 | 20,757 | 30,699 | 33,524 | 20.0 | 18,475 | 39,193 |
| 750 or more | 80.3 | 20,843 | 22,800 | 34,618 | 39,471 | 19.7 | 18,313 | 44,026 |
| Minority enrollment |  |  |  |  |  |  |  |  |
| Less than 20 percent | 63.3 | 17,094 | 18,543 | 26,733 | 28,962 | 36.7 | 13,102 | 22,471 |
| 20 percent or more | 63.6 | 18,162 | 19,721 | 27,689 | 29,943 | 36.4 | 16,637 | 25,496 |
| Minority teachers |  |  |  |  |  |  |  |  |
| Less than 10 percent | 63.2 | 17,126 | 18,569 | 26,788 | 29,012 | 36.8 | 13,727 | 23,380 |
| 10 percent or more | 63.9 | 18,514 | 20,140 | 27,908 | 30,191 | 36.1 | 16,064 | 23,599 |

- Too few sample observations for a reliable estimate.

NOTE: Data for this analysis were calculated from the Schools and Staffing Survey, Private School and Teacher Demand and Shortage
Questionnaires. Excludes a small number of teachers whose schools did not respond to the questionnaire.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Private School and Teacher Demand and Shortage Questionnaires).

Table 57-1 Percentage of public school secondary mathematics and science students taught by teachers with selected qualifications, by percentage of students eligible for free or reduced-price lunch and class subject: School year 1993-94

| Class subject | Percentage of students eligible for free or reduced-price lunch |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 0-5 | 6-20 | 21-40 | 41-100 |
|  | Majored in class subject |  |  |  |
| Mathematics | 73.3 | 71.6 | 65.3 | 60.1 |
| Science* | 83.7 | 82.0 | 82.0 | 73.8 |
| Biology | 74.8 | 66.0 | 70.2 | 57.4 |
| Chemistry | 57.5 | 52.7 | 50.2 | 54.6 |
| Physics | 36.3 | 33.0 | 26.2 | 26.7 |
|  | Majored or minored in class subject |  |  |  |
| Mathematics | 83.3 | 79.7 | 76.1 | 74.1 |
| Science* | 92.0 | 90.1 | 91.5 | 86.5 |
| Biology | 80.9 | 73.5 | 75.7 | 72.7 |
| Chemistry | 77.2 | 64.8 | 72.1 | 62.9 |
| Physics | 42.8 | 50.5 | 39.3 | 29.3 |
|  | Certified in class subject |  |  |  |
| Mathematics | 89.3 | 87.6 | 86.0 | 78.8 |
| Science* | 93.1 | 94.3 | 88.8 | 86.6 |
| Biology | 93.2 | 92.2 | 83.3 | 74.8 |
| Chemistry | 92.2 | 90.9 | 85.6 | 80.2 |
| Physics | 88.4 | 88.0 | 68.1 | 65.0 |

* It is easier to have majored, minored, or to have become certified in "science" than in a specific discipline, such as biology, because a teacher from any scientific field may qualify in "science," whereas qualifying in a specific discipline requires a match in class subject matter. See the supplemental note to this indicator for further discussion.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table 57-2 Percentage of secondary mathematics and science students taught by teachers with selected qualifications, by control of school, school size, and class subject: School year 1993-94

| Class subject | Public |  |  |  | Private |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than |  |  | $750 \text { or }$ | Less than |  |  | 750 or |
|  | 150 | 150-499 | 500-749 | more | 150 | 150-499 | 500-749 | more |
|  | Majored in class subject |  |  |  |  |  |  |  |
| Mathematics | 57.7 | 66.3 | 62.0 | 70.5 | 60.8 | 61.8 | 68.0 | 63.4 |
| Science* | 77.1 | 74.6 | 83.5 | 82.0 | 83.4 | 88.4 | 72.7 | 90.0 |
| Biology | 57.0 | 63.5 | 64.1 | 69.2 | - | 80.1 | - | - |
| Chemistry | 19.9 | 35.2 | 55.6 | 57.9 | - | 27.9 | - | - |
| Physics | - | 21.3 | 26.3 | 34.7 | - | 33.1 | - | - |
|  | Majored or minored in class subject |  |  |  |  |  |  |  |
| Mathematics | 66.0 | 75.1 | 75.1 | 80.0 | 66.3 | 72.9 | 73.7 | 69.3 |
| Science* | 86.3 | 89.4 | 92.8 | 90.0 | 90.5 | 93.0 | 87.5 | 93.4 |
| Biology | 64.7 | 73.4 | 71.2 | 77.3 | - | 80.8 | - | - |
| Chemistry | 40.1 | 48.6 | 65.4 | 73.7 | - | 45.9 | - | - |
| Physics | - | 26.9 | 35.4 | 48.4 | - | 42.4 | - | - |
|  | Certified in class subject |  |  |  |  |  |  |  |
| Mathematics | 81.3 | 83.6 | 85.2 | 86.4 | 42.4 | 58.3 | 47.2 | 54.6 |
| Science* | 92.5 | 91.1 | 91.1 | 91.1 | 25.9 | 74.5 | 75.2 | 70.6 |
| Biology | 69.5 | 85.2 | 88.5 | 87.4 | - | 77.5 | - | - |
| Chemistry | 44.5 | 79.3 | 81.4 | 90.0 | - | 61.4 | - | - |
| Physics | 25.3 | 55.7 | 60.0 | 88.1 | - | 23.0 | - | - |

- Too few sample observations for a reliable estimate.
* It is easier to have majored, minored, or to have become certified in "science" than in a specific discipline, such as biology, because a teacher from any scientific field may qualify in "science," whereas qualifying in a specific discipline requires a match in class subject matter. See the supplemental note to this indicator for further discussion.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table 57-3 Percentage of secondary mathematics and science students taught by teachers with selected qualifications, by control of school, urbanicity, and class subject: School year 1993-94

| Class subject | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Central $\qquad$ | Urban fringe/ large town | Rural/ small town | Central $\qquad$ city | Urban fringe/ large town | Rural/ small town |
|  | Majored in class subject |  |  |  |  |  |
| Mathematics | 62.8 | 69.6 | 71.3 | 64.0 | 61.9 | 69.0 |
| Science* | 80.8 | 79.5 | 82.4 | 81.2 | 88.4 | 91.5 |
| Biology | 65.6 | 67.8 | 68.4 | 62.4 | 76.3 | - |
| Chemistry | 57.7 | 60.8 | 47.7 | 56.2 | 39.4 | - |
| Physics | 41.7 | 34.0 | 17.1 | - | - | - |
|  | Majored or minored in class subject |  |  |  |  |  |
| Mathematics | 74.3 | 78.8 | 80.9 | 74.0 | 68.4 | 70.6 |
| Science* | 91.9 | 88.3 | 90.7 | 90.5 | 92.6 | 94.3 |
| Biology | 74.3 | 77.9 | 74.9 | 72.7 | 83.2 | - |
| Chemistry | 67.7 | 77.3 | 65.0 | 87.9 | 52.9 | - |
| Physics | 53.5 | 49.5 | 24.4 | - | - | - |
|  | Certified in class subject |  |  |  |  |  |
| Mathematics | 83.8 | 87.8 | 85.5 | 55.7 | 53.8 | 43.7 |
| Science* | 89.6 | 91.4 | 91.9 | 59.1 | 83.2 | 70.3 |
| Biology | 83.1 | 90.2 | 86.9 | 71.6 | 85.3 | - |
| Chemistry | 85.2 | 89.7 | 87.2 | 38.0 | 79.9 | - |
| Physics | 81.7 | 87.9 | 66.9 | - | - | 二 |

- Too few sample observations for a reliable estimate.
* It is easier to have majored, minored, or to have become certified in "science" than in a specific discipline, such as biology, because a teacher from any scientific field may qualify in "science," whereas qualifying in a specific discipline requires a match in class subject matter. See the supplemental note to this indicator for further discussion.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table 57-4 Percentage of public school secondary mathematics and science students taught by teachers with selected qualifications, by urbanicity, percentage of students eligible for free or reduced-price lunch, and class subject: School year 1993-94

| Class subject | Central city |  |  |  | Urban fringe/large town |  |  |  | Rural/small town |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-5 | 6-20 | 21-40 | 41-100 | 0-5 | 6-20 | 21-40 | 1-100 | 0-5 | 6-20 | 21-40 | 41-100 |
|  | Majored in class subject |  |  |  |  |  |  |  |  |  |  |  |
| Mathematics | 61.6 | 67.7 | 65.0 | 55.9 | 71.1 | 74.6 | 63.9 | 53.4 | 82.8 | 71.2 | 66.4 | 68.4 |
| Science* | 72.4 | 86.9 | 82.3 | 73.9 | 85.2 | 74.6 | 80.8 | 74.1 | 85.8 | 85.0 | 82.5 | 73.5 |
| Biology | - | 69.5 | 71.0 | 53.4 | 81.6 | 59.5 | 64.7 | 62.3 | 70.7 | 68.9 | 72.6 | 59.8 |
| Chemistry | - | 56.1 | - | 60.9 | 67.8 | 58.3 | - | - | 44.8 | 45.7 | 43.7 | 51.8 |
| Physics | - | - | - | - | - | 24.7 | - | - | - | 34.9 | 11.5 | - |
|  | Majored or minored in class subject |  |  |  |  |  |  |  |  |  |  |  |
| Mathematics | 71.8 | 79.2 | 72.3 | 71.8 | 83.4 | 80.7 | 76.0 | 63.8 | 88.1 | 79.2 | 79.0 | 81.3 |
| Science* | 99.7 | 93.5 | 90.8 | 88.7 | 91.0 | 85.4 | 91.0 | 81.7 | 90.3 | 92.0 | 92.3 | 85.5 |
| Biology | - | 72.1 | 75.7 | 70.8 | 87.6 | 72.3 | 74.6 | 78.6 | 73.8 | 74.9 | 76.3 | 73.1 |
| Chemistry | - | 71.7 | - | 66.8 | 88.2 | 66.6 | - | - | 67.1 | 60.6 | 67.0 | 65.1 |
| Physics | - | - | - | - | - | 53.5 | - | - | - | 39.5 | 18.2 | 4.5 |
|  | Certified in class subject |  |  |  |  |  |  |  |  |  |  |  |
| Mathematics | 89.1 | 87.8 | 86.1 | 77.7 | 86.0 | 90.8 | 86.3 | 75.3 | 95.7 | 84.7 | 85.7 | 81.6 |
| Science* | 92.8 | 97.1 | 90.1 | 80.7 | 94.4 | 91.6 | 89.3 | 83.0 | 90.9 | 94.8 | 87.5 | 93.8 |
| Biology | - | 91.8 | 87.6 | 62.4 | 96.1 | 89.5 | 88.3 | 70.1 | 86.5 | 94.3 | 76.6 | 86.1 |
| Chemistry | - | 95.4 | - | 81.3 | 93.0 | 86.9 | - | - | 93.4 | 90.5 | 85.1 | 80.5 |
| Physics | - | - | - | - | - | 90.1 | - | - | - | 75.0 | 58.6 | 72.9 |

- Too few sample observations for a reliable estimate.
* It is easier to have majored, minored, or to have become certified in "science" than in a specific discipline, such as biology, because a teacher from any scientific field may qualify in "science," whereas qualifying in a specific discipline requires a match in class subject matter. See the supplemental note to this indicator for further discussion.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

## Note to Indicator 57: Definition of student percentages and major/minor and certification in class subject

## Definition of student percentages

Indicator 57 reports the percentages of students who were taught by full-time teachers with different qualifications. These values were calculated from Schools and Staffing Survey (SASS) information on the number of classes taught, the number of students in each class, the subject matter taught in each class, and the teachers' education and certification levels. The data collected from the teachers were weighted to properly represent national levels.

The following procedure was used to calculate the percentage of mathematics students taught by certified mathematics teachers: First, for each full-time teacher who reported teaching a mathematics class, the sum of the weighted number of students in each mathematics class taught by that teacher was used to estimate the total number of mathematics students. Next, for each full-time teacher certified to teach mathematics, the sum of the weighted number of students in each mathematics class taught by that teacher was used to estimate the number of mathematics students taught by certified teachers. Finally, the estimate of the number of mathematics students taught by certified teachers was divided by the estimate of the total number of mathematics students in order to obtain the estimated percentage of mathematics students taught by a full-time teacher certified in mathematics. The percentages reported in each of the tables in this analysis were calculated by limiting the selection to specific class subjects and school and teacher characteristics.

## Classes excluded from the text table and tables 57-1 through 57-4

Computer science was excluded from the tables in this analysis because the computer science major has existed only for a limited number of years.

## Matching class subject to major/minor and certification field

There are many ways to match a major/minor field of study or certification in a teaching assignment field to a class subject. One method is to include both the general or specific field and the education major/minor parallel field as a match for a specific class subject. For example, a teacher who majored or minored or who was certified in mathematics or mathematics education could be defined as having majored or minored or having become certified in the subject of mathematics. A stricter definition
would exclude the mathematics teachers who majored or minored or who were certified in mathematics education. The more general definition was used for mathematics and science in all the tables in this analysis. The stricter definition was used for the specific science disciplines (biology, chemistry, and physics) in all tables.

For alternative classifications of fields see Out-ofField Teaching and Education Equality (NCES 96-040).

## Majored or minored in class subject

Teachers were classified as having majored or minored in a class subject if they had majored or minored in a field (shown in the right-hand column) that corresponds to the class subject listed in the left-hand column. Both undergraduate- and gradu-ate-level degrees were considered in identifying major/minor matches to class subjects.

## Class subject(s) <br> Mathematics

| Natural sciences | Geology/earth science, <br> science education, other <br> natural sciences and majors <br> listed below |
| :--- | :--- |
| Biology/life science | Biology/life science |
| Chemistry | Chemistry <br> Physics |
| Physics |  |

## Certification in class subject

Certification refers to a teacher's advanced, standard, or probationary certification by a state or full certification by an accrediting body other than a state. Teachers with a temporary or emergency certification were not included as certified teachers in this analysis.

The table below shows teacher certifications classified by class subject. Teachers were classified as being certified in a class subject if they were certified in a teaching assignment field (shown in the right-hand column) that corresponds to the subject matter listed in the left-hand column. Only certifi
cations as defined above were considered when matching subject matter.

| Class subject(s) | Certification in assignment <br> field(s) |
| :--- | :--- |
| Mathematics | Mathematics |
| Natural sciences | Geology/earth science, <br> space science education, <br> physical science, general <br> science and all other <br> sciences |
| Biology/life science | Biology/life science <br> Chemistry |
| Chysics | Chemistry |
|  | Physics |

Supplemental Tables and Notes
Table 58-1 Change in teaching status of full-time teachers between the 1993-94 and 1994-95 school years, by control of school and age of teachers

| Age of teacher | Public |  |  |  | Private |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage distribution | Teaching at same school | Moved to another school | Left <br> teaching | Percentage distribution | Teaching at same school | Moved to another school | Left teaching |
| Total | 100.0 | 87.2 | 6.7 | 6.1 | 100.0 | 83.8 | 6.0 | 10.2 |
| Younger than 25 | 1.5 | 83.2 | 14.4 | 2.4 | 4.1 | 69.7 | 13.2 | 17.1 |
| 25-29 | 9.9 | 76.6 | 13.5 | 9.9 | 14.8 | 77.5 | 10.5 | 12.0 |
| 30-39 | 23.7 | 85.7 | 8.0 | 6.3 | 24.8 | 77.5 | 8.1 | 14.5 |
| 40-49 | 39.9 | 91.1 | 5.4 | 3.5 | 34.8 | 88.2 | 4.1 | 7.7 |
| 50-59 | 21.6 | 90.1 | 4.5 | 5.4 | 16.7 | 93.1 | 2.4 | 4.5 |
| 60-64 | 2.6 | 67.4 | 1.6 | 31.0 | 3.4 | 87.6 | - | 10.4 |
| 65 and older | 0.7 | 64.8 | - | 32.4 | 1.4 | 73.6 | - | 24.0 |

- Too few sample observations for a reliable estimate.

NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94, and the Teacher Follow-up Survey, 1994-95.

Table 58-2 Change in teaching status of full-time teachers between the 1993-94 and 1994-95 school years, destination of leavers, and reasons for leaving, by control and level of school

| Teaching status, destination, and reasons for leaving | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Elementary | Secondary | Total | Elementary | Secondary |
|  | Teaching status |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Left teaching | 6.1 | 5.8 | 6.4 | 10.2 | 10.3 | 10.1 |
| Moved to another school | 6.7 | 7.1 | 6.2 | 6.0 | 6.2 | 5.7 |
| Teaching at same school | 87.2 | 87.1 | 87.4 | 83.8 | 83.5 | 84.2 |
|  | Destination of leavers |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Working in education | 14.0 | 16.1 | 11.9 | 9.7 | 5.7 | 15.7 |
| Working outside education | 21.0 | 12.5 | 29.0 | 33.4 | 32.1 | 35.3 |
| Attending college | 2.5 | 2.1 | 2.9 | 9.1 | 12.0 | 4.8 |
| Homemaking/child rearing | 17.3 | 18.2 | 16.5 | 20.3 | 18.5 | 23.2 |
| Retired | 30.8 | 34.6 | 27.2 | 8.9 | 10.6 | 6.2 |
| Disabled | 1.9 | 0.6 | 3.2 | 0.9 | - | - |
| Other | 12.4 | 15.9 | 9.2 | 17.7 | 20.8 | 13.0 |
|  | Reasons for leaving |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Family or personal move | 11.4 | 13.2 | 9.8 | 18.9 | 18.1 | 20.1 |
| Pregnancy/child rearing | 15.6 | 18.5 | 12.9 | 12.1 | 16.4 | 5.6 |
| Health | 5.3 | 5.4 | 5.1 | 2.3 | 2.7 | 1.8 |
| Retirement | 31.0 | 33.4 | 28.7 | 5.7 | 5.9 | 5.3 |
| To pursue another career | 7.3 | 8.4 | 6.2 | 15.5 | 14.1 | 17.7 |
| For better salary or benefits | 6.1 | 4.4 | 7.8 | 7.1 | 7.6 | 6.2 |
| To take courses to improve career opportunitie in the field of education | 3.6 | 3.1 | 4.0 | 6.6 | 7.2 | 5.8 |
| To take courses to improve career |  |  |  |  |  |  |
| School staffing action | 2.9 | 1.1 | 4.7 | 6.4 | 2.3 | 12.5 |
| To take a sabbatical or other break from teaching | 3.7 | 1.4 | 5.8 | 6.8 | 9.2 | 3.2 |
| Dissatisfied with teaching as a career | 5.3 | 3.0 | 7.4 | 6.4 | 5.7 | 7.5 |
| Other family or personal reason | 7.2 | 7.8 | 6.7 | 11.9 | 10.8 | 13.5 |

- Too few sample observations for a reliable estimate.

NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94, and the Teacher Follow-up Survey, 1994-95.

Table 58-3 Percentage distribution of the change in teaching status of full-time teachers between the 1993-94 and 1994-95 school years, by level and control of school, and age and race/ ethnicity of teacher

| Age and race/ethnicity of teacher | Elementary |  |  | Secondary |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stayers | Movers | Leavers | Stayers | Movers | Leavers |
|  | All teachers |  |  |  |  |  |
| Total | 86.6 | 7.0 | 6.4 | 87.1 | 6.2 | 6.8 |
| Age (in years) |  |  |  |  |  |  |
| Younger than 25 | 81.3 | 13.3 | 5.4 | 77.1 | 15.2 | 7.7 |
| 25-29 | 79.3 | 11.0 | 9.7 | 73.4 | 15.6 | 11.0 |
| 30-39 | 82.1 | 9.8 | 8.0 | 87.4 | 6.1 | 6.5 |
| 40-49 | 91.3 | 5.4 | 3.2 | 90.2 | 5.1 | 4.6 |
| 50-59 | 91.2 | 4.5 | 4.4 | 89.7 | 4.2 | 6.2 |
| 60-64 | 65.1 | 0.7 | 34.2 | 74.7 | 2.5 | 22.8 |
| 65 and older | 61.7 | - | 34.4 | 72.8 | - | 26.0 |
| Race/ethnicity |  |  |  |  |  |  |
| White | 87.2 | 6.6 | 6.2 | 87.3 | 6.0 | 6.8 |
| Black | 84.1 | 8.4 | 7.5 | 86.2 | 8.1 | 5.7 |
| Hispanic | 81.6 | 10.2 | 8.2 | 80.5 | 9.0 | 10.5 |
| Asian/Pacific Islander | 85.4 | 9.0 | 5.6 | 92.3 | 5.5 | 2.2 |
| American Indian/Alaskan Native | 84.6 | 7.8 | 7.6 | 92.7 | 3.9 | 3.4 |
|  | Public school teachers |  |  |  |  |  |
| Total | 87.1 | 7.1 | 5.8 | 87.4 | 6.2 | 6.4 |
| Age (in years) |  |  |  |  |  |  |
| Younger than 25 | 84.5 | 14.1 | 1.4 | 81.4 | 14.8 | 3.8 |
| 25-29 | 79.8 | 11.3 | 8.9 | 72.6 | 16.2 | 11.2 |
| 30-39 | 83.0 | 9.9 | 7.1 | 88.4 | 6.1 | 5.5 |
| 40-49 | 91.7 | 5.7 | 2.6 | 90.4 | 5.2 | 4.4 |
| 50-59 | 91.0 | 4.7 | 4.4 | 89.3 | 4.4 | 6.3 |
| 60-64 | 60.7 | - | 39.3 | 72.8 | 2.9 | 24.3 |
| 65 and older | 59.1 | - | 35.9 | 71.8 | - | 28.1 |
| Race/ethnicity |  |  |  |  |  |  |
| White | 87.7 | 6.7 | 5.6 | 87.6 | 6.0 | 6.4 |
| Black | 84.4 | 8.4 | 7.2 | 85.7 | 8.4 | 5.9 |
| Hispanic | 82.1 | 10.3 | 7.5 | 80.7 | 8.8 | 10.5 |
| Asian/Pacific Islander | 88.2 | 9.3 | 2.5 | - | - | - |
| American Indian/Alaskan Native | 85.2 | 7.9 | 6.9 | 93.4 | 3.6 | 2.9 |

Table 58-3 Percentage distribution of the change in teaching status of full-time teachers between the 1993-94 and 1994-95 school years, by level and control of school, and age and race/ ethnicity of teacher-Continued

| Age and race/ethnicity of teacher | Elementary |  |  | Secondary |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stayers | Movers | Leavers | Stayers | Movers | Leavers |
|  | Private school teachers |  |  |  |  |  |
| Total | 83.5 | 6.2 | 10.3 | 84.2 | 5.7 | 10.1 |
| Age (in years) |  |  |  |  |  |  |
| Younger than 25 | 73.6 | 11.4 | 15.0 | 62.4 | 16.6 | 21.0 |
| 25-29 | 76.8 | 9.9 | 13.3 | 78.5 | 11.6 | 9.9 |
| 30-39 | 76.8 | 9.2 | 13.9 | 78.4 | 6.3 | 15.3 |
| 40-49 | 88.2 | 3.9 | 7.9 | 88.3 | 4.3 | 7.4 |
| 50-59 | 92.9 | 2.8 | 4.3 | 93.4 | 1.9 | 4.7 |
| 60-64 | - | - | - | - | - | - |
| 65 and older | - | - | - | - | - | - |
| Race/ethnicity |  |  |  |  |  |  |
| White | 84.2 | 6.1 | 9.7 | 84.0 | 5.6 | 10.4 |
| Black | 81.0 | 8.5 | 10.5 | - | - | - |
| Hispanic | - | - | - | - | - | - |
| Asian/Pacific Islander | - | - | - | - | - | - |
| American Indian/Alaskan Native | - | - | - | - | - | 二 |

- Too few sample observations for a reliable estimate.

NOTE: Stayers are teachers who taught in the 1993-94 school year and continued to teach at the same school during the 1994-95 school year; movers are teachers who taught in the 1993-94 school year, but who moved to a different school to teach in the 1994-95 school year; and leavers are teachers who taught in the 1993-94
school year who left the teaching profession prior to the 1994-95 school year.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94, and the Teacher Follow-up Survey, 1994-95.

Table 58-4 Change in teaching status of full-time public secondary teachers between the 1993-94 and 1994-95 school years, by main assignment field in the 1993-94 school year

|  | Academic: <br> Science/ <br> mathematics | Academic: Non- <br> Science/ <br> mathematics | Vocational | Special groups | Other fields |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Teaching status | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ |
| Total | 6.9 | 6.2 | 5.2 | 7.0 | 8.8 |
| Left teaching | 9.8 | 4.3 | 5.3 | 8.0 | 5.5 |
| Moved to another school | 83.3 | 89.5 | 89.5 | 85.1 | 85.7 |
| Teaching at same school |  |  |  |  |  |

NOTE: The subjects in the main assignment fields were 1) Academic: Science/mathematics (biology, chemistry, computer science, geology, mathematics, physics, and general and other sciences); 2) Academic: Non-science/mathematics (English and reading, art, foreign languages, music, religion, philosophy, and social studies); 3) Vocational (accounting, agriculture, business, health, industrial arts, trade, technical, and other vocational); 4) Special groups (special education, remedial education, bilingual education, English as a second language, and education of the gifted); and 5) Other fields (physical education, general education, and other). Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94, and the Teacher Follow-up Survey, 1994-95 (physical education, general education, and other). Details may not add to totals due to rounding.

Table 58-5 Full-time teachers' reasons for leaving teaching between the 1987-88 and 1988-89, 1990-91 and 1991-92, and 1993-94 and 1994-95 school years, by control of school

|  | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Between | Between | Between | Between | Between | Between |
|  | 1987-88 | 1990-91 | 1993-94 | 1987-88 | 1990-91 | 1993-94 |
| Reasons for leaving | and 1988-89 | and 1991-92 | and 1994-95 | and 1988-89 | and 1991-92 | and 1994-95 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Family or personal move | 9.1 | 9.9 | 11.4 | 20.8 | 15.8 | 18.9 |
| Pregnancy/child rearing | 20.0 | 10.4 | 15.6 | 21.9 | 11.9 | 12.1 |
| Health | 2.4 | 3.7 | 5.3 | 1.8 | 4.1 | 2.3 |
| Retirement | 24.4 | 31.8 | 31.0 | 4.9 | 8.8 | 5.7 |
| To pursue another career | 10.5 | 6.6 | 7.3 | 10.2 | 16.3 | 15.5 |
| For better salary or benefits | 4.4 | 3.5 | 6.1 | 9.0 | 5.2 | 7.1 |
| To take courses to improve career opportunities in the field of education | 3.2 | 6.5 | 3.6 | 4.6 | 4.9 | 6.6 |
| To take courses to improve career opportunities outside the field of education | 1.3 | 1.3 | 0.6 | 0.8 | 5.8 | - |
| School staffing action | 4.6 | 10.0 | 2.9 | 6.4 | 12.6 | 6.4 |
| To take a sabbatical or other break from teaching | 5.9 | 2.2 | 3.7 | 5.6 | 2.6 | 6.8 |
| Dissatisfied with teaching as a career | 8.9 | 8.9 | 5.3 | 7.2 | 5.4 | 6.4 |
| Other family or personal reason | 5.1 | 5.2 | 7.2 | 6.9 | 6.7 | 11.9 |

- Too few sample observations for a reliable estimate.

NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88, 1990-91, and 1993-94, and the Teacher Follow-up Survey, 1988-89, 1991-92, and 1994-95.

Table 58-6 Change in teaching status of teachers between the 1993-94 and 1994-95 school years, destination of leavers, and reasons for leaving, by control of school and work status

| Teaching status, destination, and reasons for leaving | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Full-time | Part-time | Total | Full-time | Part-time |
|  | Teaching status |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Left teaching | 6.6 | 6.1 | 11.1 | 11.9 | 10.2 | 18.8 |
| Moved to another school | 7.2 | 6.7 | 12.1 | 5.8 | 6.0 | 4.8 |
| Teaching at same school | 86.3 | 87.2 | 76.8 | 82.3 | 83.8 | 76.4 |
|  | Destination of leavers |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Working in education | 21.1 | 14.0 | 60.0 | 11.9 | 9.7 | 16.8 |
| Working outside education | 20.3 | 21.0 | 16.7 | 34.1 | 33.4 | 35.5 |
| Attending college | 2.4 | 2.5 | 1.6 | 8.6 | 9.1 | 7.4 |
| Homemaking/child rearing | 16.2 | 17.3 | 9.9 | 17.1 | 20.3 | 10.2 |
| Retired | 27.0 | 30.8 | 6.6 | 10.8 | 8.9 | 14.9 |
| Disabled | 1.7 | 1.9 | - | 1.8 | 0.9 | - |
| Other | 11.3 | 12.4 | 5.1 | 15.7 | 17.7 | 11.6 |
|  | Reasons for leaving |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Family or personal move | 10.1 | 11.4 | 2.6 | 16.2 | 18.9 | 10.5 |
| Pregnancy/child rearing | 14.3 | 15.6 | 7.3 | 10.2 | 12.1 | 6.1 |
| Health | 4.7 | 5.3 | 1.4 | 4.0 | 2.3 | 7.6 |
| Retirement | 27.3 | 31.0 | 7.4 | 9.3 | 5.7 | 17.1 |
| To pursue another career | 12.1 | 7.3 | 38.1 | 16.3 | 15.5 | 18.0 |
| For better salary or benefits | 6.5 | 6.1 | 8.4 | 7.7 | 7.1 | 9.0 |
| To take courses to improve <br> career opportunities in the <br> field of education |  |  |  |  |  |  |
| To take courses to improve <br> career opportunities outside <br> the field of education |  |  |  |  |  |  |
| School staffing action | 3.2 | 2.9 | 4.3 | 8.2 | 6.4 | 12.2 |
| To take a sabbatical or other break from teaching$6.8$$0.9$ |  |  |  |  |  |  |
| Dissatisfied with teaching |  |  |  |  |  |  |
| Other family or personal reason | 6.6 | 7.2 | 3.5 | 11.1 | 11.9 | 9.6 |

- Too few sample observations for a reliable estimate.

NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94, and the Teacher Follow-up Survey, 1994-95.

Table 58-7 Change in teaching status of teachers between the 1993-94 and 1994-95 school years, destination of leavers, and selected reasons for leaving, by control and level of school and work status

| Teaching status, destination, and reasons for leaving | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Full-time | Part-time | Total | Full-time | Part-time |
|  |  |  |  |  |  |  |
| Teaching status |  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Left teaching | 6.4 | 5.8 | 11.0 | 11.5 | 10.3 | 16.8 |
| Moved to another school | 7.6 | 7.1 | 11.6 | 6.1 | 6.2 | 5.7 |
| Teaching at same school | 86.0 | 87.1 | 77.5 | 82.4 | 83.5 | 77.5 |
| Destination of leavers |  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Working in education | 25.7 | 16.1 | 64.2 | 8.9 | 5.7 | 17.4 |
| Working outside education | 12.8 | 12.5 | 14.2 | 30.3 | 32.1 | 25.6 |
| Attending college | 2.0 | 2.1 | 1.4 | 10.2 | 12.0 | 5.4 |
| Homemaking/child rearing | 16.8 | 18.2 | 11.1 | 16.2 | 18.5 | 10.2 |
| Retired | 28.4 | 34.6 | 3.3 | 14.3 | 10.6 | 23.9 |
| Disabled | 0.5 | 0.6 | - | 2.3 | - | - |
| Other | 13.9 | 15.9 | 5.9 | 17.8 | 20.8 | 10.2 |
| Reasons for leaving |  |  |  |  |  |  |
| Retirement | 27.4 | 33.4 | 3.2 | 10.6 | 5.9 | 22.7 |
| Family or personal move | 11.2 | 13.2 | 3.2 | 15.0 | 18.1 | 7.0 |
| To pursue another career | 14.9 | 8.4 | 40.9 | 16.3 | 14.1 | 22.0 |
| Pregnancy/child rearing | 16.3 | 18.5 | 7.6 | 13.7 | 16.4 | 6.7 |
| Dissatisfied with teaching as a career | 2.8 | 3.0 | 2.1 | 4.2 | 5.7 | - |
|  | Secondary |  |  |  |  |  |
| Teaching status |  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Teaching at same school | 86.6 | 87.4 | 75.5 | 82.2 | 84.2 | 75.0 |
| Moved to another school | 6.7 | 6.2 | 13.1 | 5.2 | 5.7 | 3.7 |
| Left teaching | 6.7 | 6.4 | 11.4 | 12.6 | 10.1 | 21.3 |
| Destination of leavers |  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Working in education | 16.4 | 11.9 | 52.0 | 15.9 | 15.7 | 16.2 |
| Working outside education | 28.2 | 29.0 | 21.5 | 38.9 | 35.3 | 45.0 |
| Attending college | 2.8 | 2.9 | 1.8 | 6.5 | 4.8 | 9.4 |
| Homemaking/child rearing | 15.6 | 16.5 | 7.8 | 18.3 | 23.2 | 10.3 |
| Retired | 25.6 | 27.2 | 12.9 | 6.2 | 6.2 | 6.2 |
| Disabled | 2.9 | 3.2 | - | - | - | - |
| Other | 8.6 | 9.2 | 3.6 | 13.0 | 13.0 | 13.0 |
| Reasons for leaving |  |  |  |  |  |  |
| Retirement | 27.3 | 28.7 | 15.5 | 7.7 | 5.3 | 11.7 |
| Family or personal move | 8.9 | 9.8 | 1.6 | 17.7 | 20.1 | 13.9 |
| To pursue another career | 9.1 | 6.2 | 32.8 | 16.4 | 17.7 | 14.1 |
| Pregnancy/child rearing | 12.2 | 12.9 | 6.8 | 5.6 | 5.6 | 5.6 |
| Dissatisfied with teaching as a career | 7.9 | 7.4 | 11.9 | 6.0 | 7.5 | 3.5 |

- Too few sample observations for a reliable estimate.

NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94, and the Teacher Follow-up Survey, 1994-95.

Table 59-1 Average research production of full-time postsecondary faculty during the previous 2 years, by tenure status, academic rank, and control of institution: Fall 1987 and fall 1992

| Tenure status, academic rank, and control of institution | Fall 1987 |  |  |  | Fall 1992 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Articles/ creative works | Books/ monographs | Presentations/ exhibits | Other | Articles/ creative works | Books/ monographs | Presentations/ exhibits | Other |
| Total | 3.2 | 0.6 | 4.3 | 1.7 | 2.9 | 0.6 | 4.4 | 1.4 |
| Tenure status |  |  |  |  |  |  |  |  |
| Tenured | 3.6 | 0.7 | 4.3 | 2.0 | 3.3 | 0.7 | 4.6 | 1.7 |
| Not tenured | 2.7 | 0.5 | 4.3 | 1.3 | 2.3 | 0.4 | 4.1 | 1.1 |
| Academic rank |  |  |  |  |  |  |  |  |
| Full professor | 4.3 | 0.9 | 4.6 | 2.4 | 4.2 | 0.9 | 5.3 | 1.9 |
| Associate professor | 3.8 | 0.8 | 4.7 | 1.8 | 3.0 | 0.7 | 4.9 | 1.5 |
| Assistant professor | 2.9 | 0.5 | 4.8 | 1.4 | 2.8 | 0.5 | 4.4 | 1.3 |
| Instructor/lecturer | 1.2 | 0.2 | 2.8 | 1.1 | 0.9 | 0.2 | 2.2 | 0.6 |
| Other/not applicable | 1.2 | 0.1 | 3.4 | 0.7 | 1.2 | 0.2 | 3.4 | 1.0 |
| Control of institution |  |  |  |  |  |  |  |  |
| Public | 3.2 | 0.6 | 4.4 | 1.8 | 2.9 | 0.6 | 4.4 | 1.4 |
| Private | 3.2 | 0.7 | 4.3 | 1.4 | 2.9 | 0.7 | 4.4 | 1.4 |

NOTE: See the supplemental note to Indicator 43 for a description of research production measures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1988 and 1993.

Table 59-2 Average research production of full-time postsecondary faculty over their careers, by academic discipline and type of institution: Fall 1987 and fall 1992

| Academic discipline and type of institution | Fall 1987 |  |  |  | Fall 1992 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Articles/ creative works | Books/ monographs | Presentations/ exhibits | Other | Articles/ creative works | Books/ monographs | Presentations/ exhibits | Other |
| Total | 18.2 | 2.4 | 24.8 | 8.4 | 19.1 | 2.4 | 30.8 | 8.8 |
| Academic discipline |  |  |  |  |  |  |  |  |
| Agriculture/home economics | 33.0 | 2.8 | 29.0 | 8.6 | 50.8 | 2.8 | 41.8 | 17.3 |
| Business | 8.0 | 1.2 | 8.5 | 6.7 | 10.9 | 1.7 | 15.5 | 8.5 |
| Education | 14.3 | 2.0 | 26.5 | 6.1 | 12.9 | 2.3 | 32.2 | 7.0 |
| Engineering | 18.7 | 1.9 | 16.0 | 17.0 | 27.7 | 1.9 | 23.7 | 21.8 |
| Fine arts | 8.8 | 0.9 | 80.7 | 6.4 | 11.8 | 1.0 | 162.5 | 6.5 |
| Humanities | 13.5 | 3.1 | 14.2 | 9.7 | 13.6 | 2.7 | 17.2 | 8.6 |
| Natural sciences | 21.3 | 1.8 | 14.8 | 9.3 | 26.4 | 2.0 | 20.7 | 8.1 |
| Social sciences | 20.4 | 4.2 | 21.1 | 10.9 | 16.9 | 3.9 | 24.6 | 12.4 |
| All other fields | 15.6 | 2.0 | 17.9 | 8.1 | 14.5 | 2.1 | 18.0 | 7.9 |
| Type of institution |  |  |  |  |  |  |  |  |
| Research | 32.2 | 4.6 | 31.6 | 11.2 | 38.1 | 4.7 | 42.8 | 13.8 |
| Doctoral | 26.6 | 3.0 | 31.5 | 8.3 | 24.0 | 3.1 | 36.5 | 8.8 |
| Comprehensive | 12.9 | 1.4 | 25.0 | 9.3 | 12.8 | 1.7 | 31.7 | 8.1 |
| Liberal arts | 8.5 | 1.4 | 21.0 | 5.8 | 9.9 | 1.3 | 27.4 | 7.3 |
| 2-year | 4.5 | 0.8 | 11.4 | 4.7 | 4.1 | 0.5 | 11.6 | 4.0 |
| Other | 8.2 | 1.7 | 20.7 | 5.9 | 10.9 | 1.4 | 29.3 | 7.4 |

[^52]Table 59-3 Average research production of full-time postsecondary faculty over their careers, by tenure status, academic rank, and control of institution: Fall 1987 and fall 1992

| Tenure status, academic rank, and control of institution | Fall 1987 |  |  |  | Fall 1992 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Articles/ creative works | Books/ monographs | Present- <br> ations/ <br> exhibits | Other | Articles/ creative works | Books/ monographs | Presentations/ exhibits | Other |
| Total | 18.2 | 2.4 | 24.8 | 8.4 | 19.1 | 2.4 | 30.8 | 8.8 |
| Tenure status |  |  |  |  |  |  |  |  |
| Tenured | 24.5 | 3.2 | 30.3 | 10.7 | 26.8 | 3.5 | 38.7 | 11.7 |
| Not tenured | 9.7 | 1.4 | 17.3 | 5.3 | 9.7 | 1.1 | 21.2 | 5.2 |
| Academic rank |  |  |  |  |  |  |  |  |
| Full professor | 34.6 | 4.7 | 37.9 | 14.0 | 38.2 | 4.9 | 48.5 | 15.4 |
| Associate professor | 18.9 | 2.5 | 25.8 | 8.2 | 16.2 | 2.2 | 30.8 | 8.0 |
| Assistant professor | 8.4 | 0.9 | 17.9 | 5.3 | 9.6 | 1.1 | 21.6 | 5.3 |
| Instructor/lecturer | 3.2 | 0.5 | 11.1 | 3.5 | 4.6 | 0.5 | 13.1 | 3.1 |
| Other/not applicable | 5.9 | 0.9 | 13.6 | 4.2 | 8.2 | 0.9 | 23.5 | 6.8 |
| Control of institution |  |  |  |  |  |  |  |  |
| Public | 18.3 | 2.4 | 24.4 | 8.5 | 19.3 | 2.4 | 30.8 | 9.0 |
| Private | 18.2 | 2.6 | 25.8 | 8.3 | 18.5 | 2.5 | 30.8 | 8.3 |

NOTE: See the supplemental note to Indicator 43 for a description SOURCE: U.S. Department of Education, National Center for of research production measures.

Education Statistics, National Study of Postsecondary Faculty, 1988 and 1993.

Table 60-1 Percentage distribution of faculty's tenure status, by selected institutional and faculty characteristics: Fall 1992

| Institutional and faculty characteristics | All institutions |  |  | Institutions with tenure systems |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | No tenure |  |  |
|  | Tenuretrack | Nontenuretrack | system at institution | Tenuretrack | Nontenuretrack |
| Total | 47.6 | 45.3 | 7.1 | 51.3 | 48.7 |
| Level of institution |  |  |  |  |  |
| 4 -year institutions | 57.5 | 38.5 | 4.0 | 59.9 | 40.1 |
| 2-year institutions | 28.5 | 58.4 | 13.0 | 32.8 | 67.2 |
| Public institutions |  |  |  |  |  |
| 4 -year | 65.6 | 33.6 | 0.8 | 66.2 | 33.8 |
| 2-year | 29.2 | 58.7 | 12.1 | 33.3 | 66.7 |
| Private institutions |  |  |  |  |  |
| 4 -year | 46.1 | 45.4 | 8.5 | 50.4 | 49.6 |
| 2-year | 14.8 | 53.7 | 31.5 | 21.6 | 78.4 |
| Type of institution |  |  |  |  |  |
| 4 -year institution | 57.5 | 38.5 | 4.0 | 59.9 | 40.1 |
| University | 58.6 | 38.0 | 3.4 | 60.6 | 39.4 |
| Research university | 70.6 | 28.9 | 0.5 | 70.9 | 29.1 |
| Doctoral university | 60.2 | 39.1 | 0.7 | 60.6 | 39.4 |
| Comprehensive university | 53.6 | 44.3 | 2.1 | 54.8 | 45.2 |
| Liberal arts | 48.1 | 42.7 | 9.1 | 53.0 | 47.0 |
| 2-year | 28.5 | 58.4 | 13.0 | 32.8 | 67.2 |
| Other | 40.8 | 35.4 | 23.9 | 53.6 | 46.4 |
| Carnegie classification |  |  |  |  |  |
| Research university I | 69.3 | 30.1 | 0.6 | 69.7 | 30.3 |
| Research university II | 74.0 | 25.8 | 0.2 | 74.2 | 25.8 |
| Doctoral university I | 62.4 | 37.1 | 0.5 | 62.7 | 37.3 |
| Doctoral university II | 57.3 | 41.7 | 1.0 | 57.9 | 42.1 |
| Comprehensive university I | 54.5 | 43.7 | 1.8 | 55.5 | 44.5 |
| Comprehensive university II | 47.7 | 48.3 | 4.0 | 49.7 | 50.3 |
| Liberal arts I | 61.1 | 35.8 | 3.0 | 63.0 | 37.0 |
| Liberal arts II | 38.9 | 47.6 | 13.5 | 45.0 | 55.0 |
| 2-year | 28.5 | 58.4 | 13.0 | 32.8 | 67.2 |
| Other | 40.8 | 35.4 | 23.9 | 53.6 | 46.4 |
| Academic discipline |  |  |  |  |  |
| Agriculture/home economics | 71.9 | 24.0 | 4.1 | 75.0 | 25.0 |
| Business | 42.9 | 48.7 | 8.4 | 46.8 | 53.2 |
| Education | 45.8 | 49.8 | 4.4 | 47.9 | 52.1 |
| Engineering | 60.7 | 32.5 | 6.8 | 65.1 | 34.9 |
| Fine arts | 40.6 | 49.2 | 10.1 | 45.2 | 54.8 |
| Health sciences | 52.8 | 39.6 | 7.6 | 57.1 | 42.9 |
| Humanities | 43.2 | 49.5 | 7.3 | 46.6 | 53.4 |
| Natural sciences | 53.3 | 40.5 | 6.2 | 56.8 | 43.2 |
| Social sciences | 54.7 | 39.7 | 5.6 | 57.9 | 42.1 |
| All other fields | 39.0 | 53.0 | 8.1 | 42.4 | 57.6 |

Table 60-1 Percentage distribution of faculty's tenure status, by selected institutional and faculty characteristics: Fall 1992-Continued

| Institutional and faculty characteristics | All institutions |  |  | Institutions with tenure systems |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | No tenure |  |  |
|  | Tenuretrack | Nontenuretrack | system at institution | Tenuretrack | Nontenuretrack |
| Academic discipline by level of institution |  |  |  |  |  |
| Agriculture/home economics, 4-year | 80.1 | 19.0 | 0.9 | 80.8 | 19.2 |
| Agriculture/home economics, 2-year | 47.2 | 38.9 | 13.9 | 54.8 | 45.2 |
| Business, 4-year | 53.6 | 41.5 | 4.9 | 56.4 | 43.6 |
| Business, 2-year | 26.2 | 60.0 | 13.8 | 30.4 | 69.6 |
| Education, 4-year | 50.3 | 47.1 | 2.6 | 51.6 | 48.4 |
| Education, 2-year | 31.4 | 58.5 | 10.0 | 34.9 | 65.1 |
| Engineering, 4-year | 70.4 | 25.6 | 3.9 | 73.3 | 26.7 |
| Engineering, 2-year | 33.0 | 51.8 | 15.2 | 38.9 | 61.1 |
| Fine arts, 4 -year | 47.6 | 42.4 | 10.0 | 52.9 | 47.1 |
| Fine arts, 2-year | 22.4 | 67.2 | 10.5 | 25.0 | 75.0 |
| Health sciences, 4-year | 61.0 | 36.3 | 2.7 | 62.7 | 37.3 |
| Health sciences, 2-year | 34.0 | 47.3 | 18.7 | 41.8 | 58.2 |
| Humanities, 4-year | 52.1 | 44.3 | 3.6 | 54.0 | 46.0 |
| Humanities, 2-year | 28.9 | 57.9 | 13.2 | 33.3 | 66.7 |
| Natural sciences, 4-year | 68.7 | 27.8 | 3.5 | 71.2 | 28.8 |
| Natural sciences, 2-year | 29.0 | 60.6 | 10.4 | 32.4 | 67.6 |
| Social sciences, 4-year | 63.6 | 33.3 | 3.1 | 65.7 | 34.3 |
| Social sciences, 2-year | 29.6 | 57.6 | 12.8 | 33.9 | 66.1 |
| All other fields, 4-year | 47.5 | 48.7 | 3.8 | 49.4 | 50.6 |
| All other fields, 2-year | 25.7 | 59.6 | 14.7 | 30.1 | 69.9 |
| Employment status |  |  |  |  |  |
| Part-time | 4.2 | 90.6 | 5.2 | 4.5 | 95.5 |
| Full-time | 78.9 | 12.7 | 8.4 | 86.2 | 13.8 |
| Sex |  |  |  |  |  |
| Male | 54.1 | 39.6 | 6.3 | 57.7 | 42.3 |
| Female | 36.7 | 55.0 | 8.4 | 40.0 | 60.0 |
| Employment status by sex |  |  |  |  |  |
| Part-time |  |  |  |  |  |
| Male | 5.1 | 89.8 | 5.2 | 5.3 | 94.7 |
| Female | 3.2 | 91.7 | 5.2 | 3.3 | 96.7 |
| Full-time |  |  |  |  |  |
| Male | 83.3 | 9.7 | 7.0 | 89.5 | 10.5 |
| Female | 69.6 | 18.9 | 11.5 | 78.7 | 21.3 |
| Age by sex |  |  |  |  |  |
| Younger than 40 years | 24.9 | 68.1 | 7.1 | 26.8 | 73.2 |
| Male | 29.2 | 62.7 | 8.1 | 31.8 | 68.2 |
| Female | 20.2 | 73.9 | 5.9 | 21.5 | 78.5 |
| 40-49 years | 40.9 | 52.1 | 6.9 | 44.0 | 56.0 |
| Male | 46.1 | 47.5 | 6.3 | 49.2 | 50.8 |
| Female | 34.0 | 58.3 | 7.7 | 36.8 | 63.2 |
| 50-59 years | 51.3 | 41.0 | 7.7 | 55.5 | 44.5 |
| Male | 56.8 | 36.2 | 7.0 | 61.1 | 38.9 |
| Female | 42.1 | 49.1 | 8.8 | 46.2 | 53.8 |
| 60 years or older | 57.7 | 35.9 | 6.5 | 61.6 | 38.4 |
| Male | 63.7 | 31.2 | 5.1 | 67.1 | 32.9 |
| Female | 41.2 | 48.6 | 10.2 | 45.8 | 54.2 |

Table 60-1 Percentage distribution of faculty's tenure status, by selected institutional and faculty characteristics: Fall 1992-Continued

| Institutional and faculty characteristics | All institutions |  |  | Institutions with tenure systems |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | No tenure |  |  |
|  | Tenuretrack | Nontenuretrack | system at institution | Tenuretrack | Nontenuretrack |
| Academic rank |  |  |  |  |  |
| Professor | 81.0 | 14.3 | 4.7 | 85.0 | 15.0 |
| Associate professor | 81.4 | 14.0 | 4.6 | 85.3 | 14.7 |
| Assistant professor | 70.1 | 24.6 | 5.2 | 74.0 | 26.0 |
| Instructor | 12.8 | 78.0 | 9.2 | 14.1 | 85.9 |
| Lecturer | 3.2 | 95.1 | 1.6 | 3.3 | 96.7 |
| Other | 11.4 | 78.6 | 10.0 | 12.7 | 87.3 |
| Faculty status |  |  |  |  |  |
| Has | 54.1 | 38.7 | 7.2 | 58.3 | 41.7 |
| Does not have | 3.3 | 90.4 | 6.3 | 3.5 | 96.5 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaskan Native | 38.1 | 51.6 | 10.2 | 42.5 | 57.5 |
| Asian/Pacific Islander | 60.2 | 36.5 | 3.3 | 62.2 | 37.8 |
| Black | 47.5 | 47.8 | 4.6 | 49.8 | 50.2 |
| Hispanic | 46.3 | 49.0 | 4.8 | 48.6 | 51.4 |
| White | 47.2 | 45.4 | 7.4 | 50.9 | 49.1 |

NOTE: Included here are faculty and staff who taught at least one
course for credit in fall 1992 (a small percentage did not have faculty
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993. status). Faculty with clinical appointments were excluded.

Table 60-2 Percentage of all courses at 4-year institutions taught by nontenure-track faculty, by selected institutional characteristics and academic discipline: Fall 1992

| Institutional characteristics and academic discipline | Graduate | Undergraduate courses |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | courses | Total | Lower division | Upper division |
| Total | 26.3 | 33.7 | 40.4 | 30.1 |
| Public institutions |  |  |  |  |
| 4-year | 17.3 | 31.3 | 39.9 | 26.1 |
| University | 17.3 | 31.1 | 39.6 | 26.0 |
| College | 0.0 | 50.0 | 56.6 | 43.0 |
| Private institutions |  |  |  |  |
| 4 -year | 40.6 | 37.6 | 41.2 | 37.1 |
| University | 40.6 | 40.1 | 44.7 | 38.9 |
| College | *50.2 | 34.1 | 36.8 | 34.1 |
| Type of institution |  |  |  |  |
| Research university | 20.8 | 29.0 | 36.6 | 26.4 |
| Doctoral university | 23.0 | 34.9 | 42.1 | 31.7 |
| Comprehensive university | 31.9 | 33.9 | 41.1 | 29.0 |
| Liberal arts | 50.2 | 34.8 | 37.9 | 34.5 |
| Carnegie classification |  |  |  |  |
| Research university I | 21.7 | 31.1 | 35.7 | 30.2 |
| Research university II | 17.7 | 25.0 | 38.1 | 18.6 |
| Doctoral university I | 23.4 | 32.7 | 40.9 | 28.9 |
| Doctoral university II | 22.3 | 37.5 | 43.4 | 35.0 |
| Comprehensive university I | 28.6 | 34.2 | 41.4 | 29.4 |
| Comprehensive university II | 72.1 | 32.1 | 39.1 | 26.5 |
| Liberal arts I | 47.5 | 26.6 | 28.3 | 27.3 |
| Liberal arts II | 53.2 | 40.7 | 44.5 | 39.7 |
| Other | 33.3 | 42.5 | 47.3 | 41.1 |
| Academic discipline |  |  |  |  |
| Agriculture/home economics | 4.6 | 18.4 | 24.7 | 15.4 |
| Business | 39.0 | 35.7 | 47.1 | 33.1 |
| Education | 32.9 | 36.9 | 41.2 | 36.7 |
| Engineering | 12.4 | 27.7 | 32.3 | 25.9 |
| Fine arts | 32.9 | 33.8 | 40.1 | 34.4 |
| Health sciences | 23.5 | 38.4 | 43.7 | 38.3 |
| Humanities | 16.8 | 40.4 | 50.1 | 28.6 |
| Natural sciences | 12.4 | 27.2 | 33.5 | 18.8 |
| Social sciences | 24.3 | 26.6 | 27.8 | 26.7 |
| All other fields | 35.3 | 38.4 | 45.4 | 36.4 |

* Institutions classified as colleges award primarily bachelor's degrees but may also award graduate degrees in a limited number of fields.
NOTE: The first column of the row for 4 -year public institutions indicates that 17.3 percent of graduate-level courses offered by these schools were taught by nontenure-track faculty or staff. This table is limited to courses taught at 4-year institutions that had tenure
systems. Included here are faculty and staff who taught at least one course for credit in fall 1992 (a small percentage did not have faculty status). Faculty with clinical appointments were excluded.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993.


## Note to Indicator 60: Nontenure-track faculty

Faculty and instructional staff were included in these tables only if they taught at least one course for credit in fall 1992. A small number of instructional staff who lacked faculty status at sampled institutions were also included, but "faculty" is used for ease of reading. Faculty who reported having a clinical appointment were also excluded, because their tenure status is different from others' and their teaching experience is likely to differ in other fundamental ways from that of faculty as a whole. Table 60-2, which uses courses rather than faculty as the unit of analysis, excludes all courses at 2-year institutions as well as all courses at institutions lacking tenure systems.

## Academic discipline

In the 10-category academic discipline typology, Health sciences includes public health and health services administration; Humanities includes history, philosophy/religion, and English as a second language; Natural science includes mathematics, statistics, and computer science; and All other fields includes a range of vocational/technical fields, professional fields (e.g., architecture and law), theology, military studies, multi/interdisciplinary studies, public affairs, and science technologies.

## Carnegie classification

Definitions of the Carnegie classifications are as follows:

| Research I | Offer a full range of <br> bachelor's through doc- <br> toral programs, give high <br> priority to research, and <br> receive \$40 million or <br> more in federal support. |
| :--- | :--- |
| Research II | Offer a full range of <br> bachelor's through doc- <br> toral programs, give high <br> priority to research, and <br> receive between $\$ 15.5$ and <br> $\$ 40$ million in federal <br> support. |
| Doctoral I | Offer a full range of <br> bachelor's through doc- <br> toral programs and award <br> at least 40 doctoral de- <br> grees annually in five or <br> more disciplines. |
|  |  |


| Doctoral II | Offer a full range of bachelor's through doctoral programs and award at least 10 doctoral degrees in three or more disciplines, or 20 or more doctoral degrees in one or more disciplines. |
| :---: | :---: |
| Comprehensive I | Offer a full range of bachelor's through master's degree programs and award 40 or more master's degrees annually in one or more disciplines. |
| Comprehensive II | Offer a full range of bachelor's through master's degree programs and award 20 or more master's degrees annually in one or more disciplines. |
| Liberal Arts I | Offer primarily undergraduate degrees, award 40 percent or more of their bachelor's degrees in liberal arts fields, and are restrictive in admission. |
| Liberal Arts II | Offer primarily undergraduate degrees, award less than 40 percent of their bachelor's degrees in liberal arts fields, and are restrictive in admission. |
| 2-year | Offer primarily associate of arts certificate or degree programs, and, with few exceptions, do not offer bachelor's degrees (this group includes community, junior, and technical colleges). |
| Other | Offer degrees ranging from bachelor's to doctoral, with at least 50 percent of the degrees awarded in a single discipline (including medical schools and other specialized institutions). |

## SECTION 2

Standard Error Tables

## General information about standard errors

The information presented in this report was obtained from many sources, including federal and state agencies, private research organizations, and professional associations. The data were collected using many research methods, including surveys of a universe (such as all school districts) or of a sample, compilations of administrative records, and statistical projections. Users of The Condition of Education should take particular care when comparing data from different sources. Differences in procedures, timing, phrasing of questions, interviewer training, and so forth mean that the results are not strictly comparable. Following the general discussion of data accuracy below, descriptions of the information sources and data collection methods are presented, grouped by sponsoring organization. More extensive documentation of procedures used in one survey as compared to another does not imply more problems with the data, only that more information is available.
Unless otherwise noted, all statements cited in the text were tested for statistical significance and are statistically significant at the .05 level. Several test procedures were used. Which procedure was used depended upon the type of data being interpreted and the nature of the statement being tested. The most commonly used test procedures were: 1) $t$ tests, 2) multiple $t$-tests with a Bonferroni adjustment to the significance level, 3) linear trend tests, and 4) sign tests. When a simple comparison between two sample estimates was made, for example, between the first and last years in a time series or between males and females, a $t$-test was used. When multiple comparisons between more than two groups were made, and even if only one comparison is cited in the text, a Bonferroni adjustment to the significance level was made to ensure the significance level for the tests as a group was at the .05 level. This procedure commonly arises when making comparisons between racial/ ethnic groups and between the United States and other countries. A linear trend test was used when a statement describing a trend, such as the growth of enrollment rates over time, was made or when a statement describing a relationship, such as the relationship between a parent's educational attainment and a student's reading proficiency, was made. A sign test was used when a statement describing a consistent pattern of differences over the years was made.

The accuracy of any statistic is determined by the joint effects of "sampling" and "nonsampling" errors. Estimates based on a sample will differ somewhat from the figures that would have been obtained if a complete census had been taken using the same survey instruments, instructions, and procedures. In addition to such sampling errors, all surveys, both universe and sample, are subject to design, reporting, and processing errors and errors due to nonresponse. To the extent possible, these nonsampling errors are kept to a minimum by methods built into the survey procedures; however, the effects of nonsampling errors are more difficult to gauge than those produced by sampling variability.
The estimated standard error of a statistic is a measure of the variation due to sampling and can be used to examine the precision obtained in a particular sample. The sample estimate and an estimate of its standard error permit the construction of interval estimates with prescribed confidence that the interval includes the average result of all possible samples. If all possible samples were selected, and each were surveyed under the same conditions, and an estimate and its standard error were calculated from each sample, then approximately 90 percent of the intervals from 1.6 standard errors below the estimate to 1.6 standard errors above the estimate would include the actual value; 95 percent of the intervals from two standard errors below the estimate to two standard errors above the estimate would include the actual value; and 99 percent of all intervals from 2.5 standard errors below the estimate to 2.5 standard errors above the estimate would include the actual value. These intervals are called 90 percent, 95 percent, and 99 percent confidence intervals, respectively.
To illustrate this further, consider the text table for Indicator 1 and the standard error table S 1 for estimates of standard errors from the National Household Education Survey (NHES). For the 1995 estimate of the percentage of 3 -year-olds enrolled in center-based programs and kindergarten (37.4 percent), table S1 shows a standard error of 1.5. Therefore, we can construct a 95 percent confidence interval from 34.4 to 40.4 ( $37.4 \pm 2 \times 1.5$ ). If this procedure were followed for every possible sample, about 95 percent of the intervals would include the
actual percentage of 3-year-olds enrolled in centerbased programs and kindergarten.

The estimated standard errors for two sample statistics can be used to estimate the precision of the difference between the two statistics and to avoid concluding that there is an actual difference when the difference in sample estimates may be due only to sampling error. The need to be aware of the precision of differences arises, for example, when comparing mean proficiency scores between groups or years in the National Assessment of Educational Progress (NAEP) or when comparing percentages between groups or years in the Current Population Survey (CPS). The standard error (se) of the difference between sample estimate A and sample estimate B (when A and B don't overlap) is:

$$
s e_{A-B}=\sqrt{s e_{A}^{2}+s e_{B}^{2}}
$$

When the ratio (called a $t$-statistic) of the difference between the two sample statistics and the standard error of the difference as calculated above is less than 2 , one cannot be sure the difference is not due only to sampling error and caution should be taken in drawing any conclusions. In this report, for example, using the rationale above, we would not conclude that there is a difference between the two sample statistics. Some analysts, however, use the less restrictive criterion of 1.64 , which corresponds to a 10 percent significance level.
To illustrate this further, consider the data on reading proficiency of 9 -year-olds in the 2nd text table for Indicator 15 and the associated standard error table S15(b). The estimated average reading proficiency score for the sample of black 9 -year-olds in 1971 was 170. For the (new) sample in 1994, the estimated average was 185. Is there enough evidence to conclude that the actual average score for all black 9 -year-olds increased 15 points between 1971 and 1994? The standard errors for these two estimates are 1.7 and 2.3 , respectively. Using the above formula, the standard error of the difference is calculated as 2.9. The ratio of the estimated difference of 15 to the standard error of the difference of 2.9 is 5.2 . Using the table below, we see that there is less than a 5 percent chance that the 15 point difference is due only to sampling error and one may conclude that the proficiency scores of black 9 -year-olds grew between 1971 and 1994.

Percent chance that a difference is due only to sampling error:

| $t$-statistic | 1.00 | 1.64 | 1.96 |
| :--- | :--- | :--- | :--- |
| Percent chance | 32 | 10 | 5 |

It should be noted that most of the standard errors presented in this report and in the original documents are approximations. That is, to derive estimates of standard errors that would be applicable to a wide variety of items and that could be prepared at a moderate cost, a number of approximations were required. As a result, most of the standard errors presented provide a general order of magnitude rather than the exact standard error for any specific item.
The preceding discussion on sampling variability was directed toward a situation concerning one or two estimates. Determining the accuracy of statistical projections is more difficult. In general, the further away the projection date is from the date of the actual data being used for the projection, the greater the possible error in the projection. If, for instance, annual data from 1980 to 1995 are used to project enrollment in elementary and secondary education, the further beyond 1995 one projects, the more variability in the projection. The enrollment projection for the year 2002 will be less certain than the projection for 1997. A detailed discussion of the projections methodology is contained in Projections of Education Statistics to 2006 (National Center for Education Statistics 1996).
Both universe and sample surveys are subject to nonsampling errors. Nonsampling errors can arise in various ways including: 1) from respondents or interviewers interpreting questions differently; 2) from respondents estimating the values that they provide; 3) from partial to total nonresponse; 4) from imputation or reweighting to adjust for nonresponse; 5) from inability or unwillingness on the part of respondents to provide correct information; 6) from recording and keying errors; or 7) from overcoverage or undercoverage of the target universe.
Sampling and nonsampling error combine to yield total survey error. Since estimating the magnitude of nonsampling errors would require special experiments or access to independent data, these magnitudes are seldom available. In almost all situations, the sampling error represents an underestimate of the total survey error, and thus overestimate of the precision of the survey estimates.

To compensate for suspected nonrandom errors, adjustments of the sample estimates are often made. For example, adjustments are frequently made for nonresponse, both partial and total. An adjustment made for either type of nonresponse is often referred to as an imputation-substitution of the "average" questionnaire response for the nonresponse. Imputations are usually made separately within various groups of sample members, which have similar survey characteristics. Imputation for item nonresponse is usually made by substituting for a missing item the response to that item of a respondent having characteristics that are similar to those of the nonrespondent.In editions prior to the 1992 edition of The Condition of Education, when reporting racespecific data from the CPS, Hispanics were usually included among whites and blacks (i.e., "Hispanics may be of any race"). Beginning with the 1992 edition of the report, racial/ethnic data from the CPS excludes Hispanics from whites and blacks (e.g., whites are non-Hispanic whites and blacks are nonHispanic blacks).

Unless otherwise noted, all dollar values in this volume are expressed in 1996 constant dollars. The Consumer Price Index (CPI) is used to convert current dollars for earlier years to 1996 dollars. The CPI index for calendar year 1996 is 156.9. See table 37 in the Digest of Education Statistics, 1996 (National Center for Education Statistics, 1996) for CPI adjustments.

## How to obtain standard errors for the supplemental tables

To obtain estimates of standard errors for the statistics in the supplemental tables, please complete the request card located in this edition of The Condition of Education.

Table S1-1 Standard errors for table 1-1

| Student characteristics | 3-year-olds |  |  | 4-year-olds |  |  | 5-year-olds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Centerbased programs | Kindergarten | Total | Centerbased programs | Kindergarten |  |  | Kindergarten |
| Total | 1.5 | 1.5 | 0.2 | 1.5 | 1.5 | 0.3 | 0.8 | 1.0 | 1.3 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 2.3 | 2.3 | 0.2 | 1.6 | 1.6 | 0.5 | 1.2 | 1.4 | 1.8 |
| Female | 1.9 | 2.0 | 0.3 | 2.3 | 2.2 | 0.4 | 1.1 | 1.4 | 1.5 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 2.3 | 2.3 | 0.2 | 2.0 | 2.0 | 0.3 | 1.0 | 1.3 | 1.6 |
| Black | 4.2 | 4.2 | 0.7 | 4.3 | 4.1 | 0.9 | 2.4 | 2.5 | 3.5 |
| Hispanic | 2.5 | 2.6 | 0.8 | 2.9 | 3.1 | 1.5 | 1.7 | 2.3 | 2.5 |
| Household income |  |  |  |  |  |  |  |  |  |
| \$10,000 or less | 3.8 | 3.7 | 0.4 | 4.0 | 4.0 | 0.4 | 2.8 | 2.4 | 3.5 |
| 10,001-20,000 | 3.7 | 3.7 | 0.0 | 4.1 | 4.1 | 0.8 | 2.6 | 2.3 | 3.4 |
| 20,001-35,000 | 2.8 | 2.8 | 0.3 | 2.8 | 2.8 | 0.6 | 1.5 | 2.0 | 2.3 |
| 35,001-50,000 | 3.4 | 3.4 | 0.8 | 3.0 | 2.9 | 0.9 | 2.1 | 2.3 | 2.7 |
| 50,001 or more | 3.0 | 3.0 | 0.1 | 2.3 | 2.1 | 0.6 | 1.6 | 1.9 | 2.2 |
| Parents' highest education level |  |  |  |  |  |  |  |  |  |
| Less than high school diploma | 3.7 | 3.3 | 1.3 | 5.9 | 5.7 | 0.6 | 2.5 | 3.5 | 4.3 |
| High school diploma or GED | 2.5 | 2.5 | 0.4 | 2.7 | 2.6 | 0.5 | 1.6 | 1.6 | 2.1 |
| Some college/vocational/technical | 2.6 | 2.6 | 0.3 | 2.8 | 3.0 | 0.6 | 1.7 | 2.2 | 2.5 |
| Bachelor's degree | 3.6 | 3.6 | 0.2 | 3.6 | 3.9 | 0.9 | 1.6 | 2.4 | 2.8 |
| Graduate/professional school | 5.0 | 4.5 | 0.4 | 3.1 | 3.3 | 0.9 | 2.9 | 3.1 | 3.6 |
| Family structure |  |  |  |  |  |  |  |  |  |
| Two biological or adoptive parents | 1.8 | 1.8 | 0.3 | 1.7 | 1.6 | 0.4 | 1.0 | 1.2 | 1.4 |
| One biological or adoptive parent | 3.2 | 3.2 | 0.0 | 3.3 | 3.2 | 0.5 | 1.3 | 1.8 | 2.1 |
| One biological and one step parent | 8.8 | 7.8 | 2.7 | 6.6 | 6.6 | 1.8 | 4.7 | 3.4 | 4.7 |
| Other relatives | 7.3 | 7.3 | 0.0 | 10.2 | 10.2 | 0.0 | 7.8 | 8.5 | 10.1 |
| Mother's first language |  |  |  |  |  |  |  |  |  |
| English | 1.8 | 1.8 | 0.2 | 1.7 | 1.7 | 0.3 | 1.0 | 1.2 | 1.5 |
| Spanish | 2.3 | 2.2 | 0.5 | 4.0 | 4.4 | 2.3 | 2.0 | 2.8 | 3.3 |
| Other | 6.6 | 6.6 | 3.1 | 7.4 | 8.0 | 2.8 | 3.9 | 5.6 | 5.9 |
| Poverty status |  |  |  |  |  |  |  |  |  |
| Poor | 3.1 | 3.1 | 0.3 | 3.6 | 3.6 | 0.4 | 2.3 | 2.1 | 3.1 |
| Non-poor | 1.7 | 1.7 | 0.2 | 1.6 | 0.4 | 0.4 | 0.9 | 1.1 | 1.3 |
| Mother's employment status |  |  |  |  |  |  |  |  |  |
| 35 hours or more per week | 2.4 | 2.4 | 0.4 | 2.2 | 2.2 | 0.6 | 1.3 | 1.8 | 2.1 |
| Less than 35 hours per week | 3.4 | 3.4 | 0.0 | 2.5 | 2.8 | 0.6 | 1.9 | 2.8 | 3.0 |
| Looking for work | 7.2 | 7.0 | 1.4 | 6.6 | 6.6 | 0.7 | 5.0 | 5.1 | 7.8 |
| Not in labor force | 2.7 | 2.6 | 0.3 | 2.4 | 2.3 | 0.4 | 1.2 | 1.6 | 2.0 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, National Household Education Survey (NHES),
1995 (Early Childhood Program Participation File).

Standard Error Tables
Table S1-2 Standard errors for table 1-2

| Student characteristics | 3-year-olds |  |  | 4-year-olds |  |  | 5-year-olds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Centerbased programs | Kindergarten | Total | Centerbased programs | inderarten | Total | Centerbased programs | Kindergarten |
| Total | 1.2 | 1.2 | 0.2 | 1.1 | 1.1 | 0.4 | 0.8 | 0.8 | 1.0 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 1.7 | 1.7 | 0.3 | 1.8 | 1.8 | 0.4 | 1.1 | 1.3 | 1.4 |
| Female | 1.9 | 1.9 | 0.3 | 1.5 | 1.4 | 0.7 | 1.4 | 1.1 | 1.5 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 1.3 | 1.3 | 0.0 | 1.3 | 1.3 | 0.4 | 1.1 | 1.1 | 1.4 |
| Black | 3.4 | 3.5 | 1.3 | 3.5 | 3.7 | 1.5 | 1.8 | 2.5 | 3.2 |
| Hispanic | 3.2 | 3.2 | 0.0 | 3.3 | 3.2 | 0.8 | 2.2 | 1.7 | 2.7 |
| Household income |  |  |  |  |  |  |  |  |  |
| \$10,000 or less | 3.9 | 3.8 | 0.8 | 2.8 | 3.1 | 1.3 | 2.6 | 2.1 | 3.4 |
| 10,001-20,000 | 3.4 | 3.3 | 1.0 | 2.9 | 2.9 | 0.8 | 2.3 | 1.7 | 2.7 |
| 20,001-35,000 | 2.0 | 2.0 | 0.0 | 2.3 | 2.4 | 0.6 | 1.6 | 2.3 | 2.3 |
| 35,001-50,000 | 2.7 | 2.7 | 0.0 | 2.9 | 2.8 | 0.7 | 1.7 | 1.9 | 2.3 |
| 50,001 or more | 2.1 | 2.2 | 0.1 | 2.0 | 2.2 | 0.8 | 1.1 | 2.0 | 2.4 |
| Parents' highest education level |  |  |  |  |  |  |  |  |  |
| Less than high school diploma | 4.0 | 4.0 | 0.0 | 4.5 | 4.7 | 1.3 | 4.0 | 3.7 | 4.5 |
| High school diploma or GED | 2.1 | 2.1 | 0.6 | 2.1 | 2.1 | 0.5 | 1.5 | 1.7 | 2.0 |
| Some college/vocational/technical | 2.1 | 2.1 | 0.1 | 2.0 | 1.9 | 0.9 | 1.8 | 1.6 | 2.1 |
| Bachelor's degree | 3.3 | 3.3 | 0.0 | 2.9 | 2.9 | 1.1 | 1.8 | 2.4 | 3.0 |
| Graduate/professional school | 3.2 | 3.2 | 0.0 | 3.1 | 3.0 | 1.2 | 1.3 | 3.1 | 3.4 |
| Family structure |  |  |  |  |  |  |  |  |  |
| Two biological or adoptive parents | 1.4 | 1.4 | *0.0 | 1.5 | 1.5 | 0.4 | 0.9 | 1.2 | 1.5 |
| One biological or adoptive parent | 3.0 | 2.9 | 0.6 | 2.4 | 2.6 | 1.0 | 1.7 | 1.5 | 2.0 |
| One biological and one step parent | 7.0 | 7.0 | 0.0 | 6.2 | 6.2 | 0.7 | 3.9 | 2.7 | 4.4 |
| Other relatives | 9.5 | 8.3 | 6.2 | 10.9 | 11.2 | 1.1 | 6.5 | 8.1 | 8.8 |
| Mother's first language |  |  |  |  |  |  |  |  |  |
| English | 1.3 | 1.3 | 0.2 | 1.1 | 1.1 | 0.4 | 0.8 | 1.0 | 1.1 |
| Spanish | 4.4 | 4.4 | 0.0 | 4.3 | 4.3 | 1.4 | 3.0 | 2.6 | 3.5 |
| Other | 6.1 | 6.1 | 0.0 | 5.9 | 6.1 | 1.6 | 4.6 | 1.7 | 5.8 |
| Poverty status |  |  |  |  |  |  |  |  |  |
| Poor | 3.4 | 3.3 | 0.9 | 2.7 | 2.9 | 1.0 | 2.0 | 1.7 | 2.5 |
| Non-poor | 1.3 | 1.3 | 0.1 | 1.3 | 1.3 | 0.4 | 0.8 | 1.0 | 1.1 |
| Mother's employment status |  |  |  |  |  |  |  |  |  |
| 35 hours or more per week | 2.0 | 1.9 | 0.6 | 2.2 | 2.2 | 0.8 | 1.1 | 1.4 | 1.7 |
| Less than 35 hours per week | 2.9 | 2.9 | 0.0 | 2.6 | 2.7 | 0.7 | 1.7 | 2.2 | 2.4 |
| Looking for work | 5.0 | 5.0 | 0.0 | 4.0 | 4.7 | 2.1 | 3.9 | 4.1 | 5.7 |
| Not in labor force | 2.1 | 2.1 | 0.1 | 2.1 | 2.1 | 0.7 | 1.7 | 1.7 | 2.1 |

* Standard error less than 0.05 is rounded to 0.0 .

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), 1993 (School Readiness File).

Table S1-3 Standard errors for table 1-3

| Student characteristics | 3 -year-olds |  |  | 4-year-olds |  |  | 5-year-olds |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Centerbased programs | Kindergarten | Total | Centerbased programs | Kindergarten | Total | Centerbased programs | Kindergarten |
| Total | 1.2 | 1.3 | 0.1 | 1.2 | 1.2 | 0.4 | 0.7 | 0.7 | 1.1 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 1.5 | 1.5 | 0.2 | 1.5 | 1.5 | 0.5 | 1.1 | 1.1 | 1.6 |
| Female | 1.7 | 1.6 | 0.2 | 1.6 | 1.6 | 0.5 | 1.0 | 1.3 | 1.7 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 1.3 | 1.3 | 0.2 | 1.3 | 1.3 | 0.5 | 0.9 | 0.8 | 1.2 |
| Black | 3.7 | 3.7 | 0.3 | 3.8 | 3.5 | 1.6 | 1.6 | 3.2 | 3.6 |
| Hispanic | 2.6 | 2.6 | 0.1 | 3.7 | 3.8 | 0.9 | 2.4 | 2.8 | 3.2 |
| Household income |  |  |  |  |  |  |  |  |  |
| \$10,000 or less | 3.3 | 3.3 | 0.0 | 3.9 | 2.9 | 1.1 | 2.2 | 3.8 | 3.9 |
| 10,001-20,000 | 2.6 | 2.6 | 0.4 | 2.8 | 2.7 | 0.9 | 1.9 | 1.8 | 2.4 |
| 20,001-30,000 | 1.8 | 1.8 | 0.3 | 2.5 | 2.6 | 1.0 | 1.9 | 1.5 | 2.2 |
| 30,001-50,000 | 1.9 | 1.9 | 0.3 | 1.9 | 2.0 | 0.6 | 1.3 | 1.2 | 1.6 |
| 50,001 or more | 2.4 | 2.5 | 0.4 | 2.2 | 2.3 | 0.7 | 1.4 | 1.5 | 2.0 |
| Parents' highest education level |  |  |  |  |  |  |  |  |  |
| Less than high school diploma | 2.9 | 2.9 | 0.3 | 3.9 | 3.9 | 1.2 | 2.5 | 2.4 | 3.5 |
| High school diploma or GED | 1.8 | 1.9 | 0.4 | 2.1 | 2.1 | 0.7 | 1.4 | 1.4 | 2.0 |
| Some college/vocational/technical | 2.2 | 2.2 | 0.1 | 2.1 | 2.0 | 0.6 | 1.5 | 1.5 | 1.8 |
| Bachelor's degree | 3.1 | 3.1 | 0.2 | 2.4 | 2.6 | 1.0 | 2.0 | 2.1 | 2.6 |
| Graduate/professional school | 3.4 | 3.3 | 0.4 | 3.5 | 3.4 | 0.7 | 2.3 | 2.5 | 2.8 |
| Mother's first language |  |  |  |  |  |  |  |  |  |
| English | 1.3 | 1.3 | 0.1 | 1.3 | 1.2 | 0.4 | 0.8 | 0.8 | 1.2 |
| Spanish | 3.1 | 3.1 | 0.0 | 4.1 | 4.2 | 1.0 | 2.8 | 3.1 | 4.0 |
| Other | 6.6 | 6.6 | 1.1 | 5.7 | 5.3 | 1.9 | 3.5 | 3.9 | 5.9 |
| Mother's employment status |  |  |  |  |  |  |  |  |  |
| 35 hours or more per week | 2.1 | 2.1 | 0.2 | 2.2 | 2.2 | 0.7 | 1.1 | 1.3 | 1.6 |
| Less than 35 hours per week | 2.4 | 2.4 | 0.2 | 3.0 | 3.0 | 0.7 | 1.5 | 1.8 | 2.0 |
| Looking for work | 5.2 | 5.1 | 0.0 | 5.1 | 4.8 | 2.1 | 4.9 | 2.5 | 5.1 |
| Not in labor force | 1.8 | 1.8 | 0.2 | 2.1 | 2.2 | 0.6 | 1.5 | 1.5 | 2.1 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, National Household Education Survey (NHES),
1991 (Early Childhood Education File).

Standard Error Tables
Table S2-1 Standard errors table for 2-1

| Selected characteristics | Read to three or more times in the past week |  | Told a story at least once in the past week |  | Visited a library in the past month |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1995 | 1991 | 1995 | 1991 | 1995 |
| Total | 0.7 | 0.6 | 1.3 | 0.7 | 0.7 | 0.9 |
| Child's age |  |  |  |  |  |  |
| Age 3 | 0.9 | 1.0 | 1.3 | 1.2 | 1.3 | 1.4 |
| Age 4 | 1.1 | 1.1 | 1.0 | 1.1 | 1.1 | 1.5 |
| Age 5 | 1.3 | 1.0 | 1.3 | 1.2 | 1.2 | 1.5 |
| Enrollment status and level |  |  |  |  |  |  |
| Not enrolled | 1.0 | 1.0 | 1.0 | 1.2 | 0.9 | 1.3 |
| Center-based programs | 1.3 | 1.0 | 1.2 | 1.1 | 1.2 | 1.1 |
| Kindergarten | 1.3 | 1.1 | 1.3 | 1.3 | 1.4 | 1.5 |
| Race/ethnicity |  |  |  |  |  |  |
| White | 0.7 | 0.6 | 0.8 | 0.8 | 0.9 | 1.1 |
| Black | 2.0 | 1.9 | 2.1 | 2.5 | 1.8 | 2.3 |
| Hispanic | 2.8 | 2.0 | 2.1 | 1.7 | 1.8 | 1.7 |
| Urbanicity |  |  |  |  |  |  |
| Urbanized area | - | 0.8 | - | 0.8 | - | 1.1 |
| Not an urbanized area | - | 2.1 | - | 1.9 | - | 2.4 |
| Rural | - | 1.4 | - | 1.7 | - | 1.7 |
| Household income |  |  |  |  |  |  |
| \$10,000 or less | - | 1.9 | - | 2.1 | - | 2.3 |
| 10,001-20,000 | - | 1.9 | - | 1.7 | - | 2.2 |
| 20,001-30,000 | - | 1.7 | - | 1.8 | - | 1.6 |
| 30,001-40,000 | - | 1.7 | - | 2.0 | - | 2.5 |
| 40,001-50,000 | - | 1.9 | - | 2.2 | - | 2.7 |
| 50,001 or more | - | 1.1 | - | 1.3 | - | 1.8 |
| Parents' highest education level |  |  |  |  |  |  |
| Less than high school diploma | 2.4 | 3.0 | 2.4 | 2.8 | 2.0 | 2.2 |
| High school diploma or GED | 1.4 | 1.3 | 1.5 | 1.3 | 1.2 | 1.7 |
| Some college/vocational/technical | 1.2 | 1.2 | 1.3 | 1.2 | 0.8 | 1.9 |
| Bachelor's degree | 1.4 | 1.3 | 1.9 | 1.7 | 1.9 | 2.1 |
| Graduate/professional school | 1.1 | 1.2 | 1.6 | 1.5 | 2.3 | 2.2 |
| Family structure |  |  |  |  |  |  |
| Two biological or adoptive parents | - | 0.7 | - | 0.7 | - | 1.1 |
| One biological or adoptive parent | - | 1.4 | - | 1.7 | - | 2.0 |
| One biological and one step parent | - | 3.2 | - | 3.2 | - | 3.9 |
| Other relatives | - | 3.6 | - | 5.5 | - | 3.7 |

- Not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), 1991 (Early Childhood Education File) and 1995 (Early Childhood Program Participation File).

Table S3-1 Standard errors for table 3-1

| Selected characteristics | Behavioral problems |  | Problems with school work |  | Academically below the middle of the class |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1995 | 1991 | 1995 | 1991 | 1995 |
| Total | 0.7 | 0.8 | 0.6 | 1.0 | - | 0.6 |
| Student's age |  |  |  |  |  |  |
| Age 6 | 1.4 | 1.2 | 1.2 | 1.2 | - | 0.8 |
| Age 7 | 1.0 | 1.1 | 1.0 | 1.3 | - | 0.7 |
| Age 8 | 1.4 | 2.3 | 1.4 | 1.7 | - | 1.5 |
| Grade level |  |  |  |  |  |  |
| First grade | 1.1 | 1.1 | 1.0 | 1.0 | - | 0.7 |
| Second grade | 1.0 | 1.2 | 1.0 | 1.2 | - | 0.8 |
| Race/ethnicity |  |  |  |  |  |  |
| White | 0.9 | 0.8 | 1.3 | 1.2 | - | 0.5 |
| Black | 2.2 | 2.7 | 2.3 | 2.4 | - | 2.4 |
| Hispanic | 2.0 | 1.6 | 2.3 | 2.2 | - | 1.3 |
| Urbanicity |  |  |  |  |  |  |
| Urbanized area | - | 1.0 | - | 0.9 | - | 0.7 |
| Not an urbanized area | - | 2.1 | - | 1.9 | - | 1.5 |
| Rural | - | 1.6 | - | 1.9 | - | 1.1 |
| Household income |  |  |  |  |  |  |
| \$10,000 or less | - | 2.5 | - | 2.9 | - | 2.3 |
| 10,001-20,000 | - | 2.2 | - | 2.6 | - | 1.6 |
| 20,001-30,000 | - | 1.8 | - | 2.0 | - | 1.1 |
| 30,001-40,000 | - | 2.0 | - | 1.6 | - | 1.1 |
| 40,001-50,000 | - | 2.1 | - | 2.1 | - | 1.1 |
| 50,001 or more | - | 1.1 | - | 1.2 | - | 0.8 |
| Parents' highest education level |  |  |  |  |  |  |
| Less than high school diploma | 2.5 | 3.1 | 2.7 | 3.5 | - | 2.6 |
| High school diploma or GED | 1.4 | 1.6 | 1.2 | 1.5 | - | 1.2 |
| Some college/vocational/technical | 1.0 | 1.6 | 1.2 | 1.8 | - | 1.0 |
| Bachelor's degree | 1.7 | 1.6 | 1.7 | 2.1 | - | 0.9 |
| Graduate/professional school | 1.7 | 1.3 | 1.6 | 1.4 | - | 0.6 |
| Family structure |  |  |  |  |  |  |
| Two biological or adoptive parents | - | 0.7 | - | 1.0 | - | 0.6 |
| One biological or adoptive parent | - | 1.9 | - | 2.2 | - | 1.5 |
| One biological and one step parent | - | 3.3 | - | 3.3 | - | 2.1 |
| Other relatives | - | 6.4 | - | 6.7 | - | 5.4 |

[^53]SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), 1991 (Early Childhood Education File) and 1995 (Early Childhood Program Participation File).

Table S4-1 Standard errors for table 4-1

| English language usage and proficiency, and disability status | 16- to 24-year-olds |  | 16- to 24-year-old dropouts |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1992 | 1995 | 1992 | 1995 |
| Total 16- to 24-year-olds | - | - | 0.3 | 0.3 |
| Spoke English at home | 0.9 | 0.9 | 1.1 | 1.0 |
| Spoke a language other than English at home | 0.9 | 0.9 | 1.1 | 1.0 |
| Spanish | 0.7 | 0.8 | 1.4 | 1.3 |
| Other European | 0.3 | 0.3 | 2.2 | 2.2 |
| Asian | 0.4 | 0.3 | 1.7 | 1.8 |
| Other | 0.3 | 0.3 | 1.8 | 2.1 |
| 16- to 24-year-olds who spoke a language other than English at home and: |  |  |  |  |
| Had difficulty speaking English | 0.6 | 0.6 | 2.1 | 2.1 |
| Did not have difficulty speaking English | 0.7 | 0.7 | 1.0 | 1.0 |
| Had taken an ESL course | (1) | 0.5 | (1) | 1.9 |
| Had not taken an ESL course | (1) | 0.3 | (1) | 1.2 |
| Disability status |  |  |  |  |
| No disabling condition | 0.7 | 0.6 | 0.3 | 0.3 |
| Had a disabling condition | 0.7 | 0.6 | 1.2 | 1.3 |
| Blindness | 0.2 | ${ }^{2} 0.0$ | 4.3 | 9.9 |
| Deafness | 0.2 | ${ }^{2} 0.0$ | 3.4 | 7.7 |
| Other hearing impairment | 0.3 | 0.2 | 3.1 | $\left.1^{1}\right)$ |
| Emotional disturbance | 0.3 | 0.2 | 3.4 | 5.8 |
| Learning disability | 0.5 | 0.4 | 2.0 | 2.4 |
| Orthopedic impairment | 0.3 | 0.2 | 2.7 | 4.1 |
| Mental retardation | 0.3 | 0.2 | 3.6 | 6.2 |
| Speech impediment | 0.3 | 0.2 | 2.6 | 5.4 |

[^54]SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys, 1992 and 1995.

Table S4-2 Standard errors for table 4-2

| English language usage and proficiency, and disability status | 1992 |  |  | 1995 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Had repeated at least one grade | Never repeated a grade | Total | Had repeated at least one grade | Never repeated a grade |
| Total 16- to 24-year-olds | 0.3 | 1.2 | 0.3 | 0.3 | 1.1 | 0.3 |
| Spoke English at home | 1.1 | 1.3 | 0.3 | 1.0 | 1.2 | 0.3 |
| Spoke a language other than English at home | 1.1 | 3.5 | 1.1 | 1.0 | 2.9 | 1.1 |
| Disability status |  |  |  |  |  |  |
| No disabling condition | 0.3 | 1.4 | 0.3 | 0.3 | 1.2 | 0.3 |
| Had a disabling condition | 1.2 | 2.5 | 1.4 | 1.3 | 2.8 | 1.4 |
| Learning disability | 2.0 | 3.2 | 2.5 | 2.4 | 3.5 | 3.3 |

SOURCE: U.S. Department of Commerce, Bureau of the Census,
October Current Population Surveys, 1992 and 1995.

Table S4-3 Standard errors for table 4-3

| Type of disability | All children |  | Repeated at least one grade |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1992 | 1995 | 1992 | 1995 |
| Total 5- to 17-year olds | - | - | 0.2 | 0.2 |
| Disability status |  |  |  |  |
| No disabling condition | 0.2 | 0.2 | 0.2 | 0.2 |
| Had a disabling condition | 0.2 | 0.2 | 1.2 | 1.2 |
| Blindness | ${ }^{1} 0.0$ | ${ }^{1} 0.0$ | 5.9 | $\left.1^{2}\right)$ |
| Deafness | ${ }^{1} 0.0$ | ${ }^{1} 0.0$ | 5.1 | 8.8 |
| Other hearing impairment | 0.1 | 0.1 | 3.1 | 4.3 |
| Emotional disturbance | 0.1 | 0.1 | 4.0 | 4.8 |
| Learning disability | 0.2 | 0.1 | 1.9 | 2.1 |
| Orthopedic impairment | 0.1 | ${ }^{1} 0.0$ | 3.1 | 4.7 |
| Mental retardation | 0.1 | ${ }^{1} 0.0$ | 4.1 | 5.2 |
| Speech impediment | 0.1 | 0.1 | 2.2 | 2.9 |
| - Not applicable. |  |  |  |  |
| ${ }^{1}$ Standard errors less than 0.05 are rounded to 0.0. | SOURC <br> Octob | partm popula | SOURCE: U.S. Department of Commerce, Bureau of the Census, |  |

Table S5-1 Standard errors for table 5-1

| Current education level and family income | 1984 |  |  | 1989 |  |  | 1993 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Used a computer at school | Used a computer at home | Used a computer at home or school | Used a computer at school | Used a computer at home | Used a computer at home or school | Used a computer at school | Used a computer at home | Used a computer at home or school |
|  | Grades 1-6 |  |  |  |  |  |  |  |  |
| Total | 0.5 | 0.4 | 0.6 | 0.6 | 0.4 | 0.6 | 0.5 | 0.5 | 0.5 |
| Low income | 1.1 | 0.4 | 1.1 | 1.4 | 0.5 | 1.4 | 1.4 | 0.5 | 1.3 |
| Middle income | 0.7 | 0.4 | 0.7 | 0.8 | 0.5 | 0.8 | 0.7 | 0.6 | 0.7 |
| High income | 1.2 | 1.1 | 1.2 | 1.2 | 1.2 | 1.1 | 1.0 | 1.2 | 0.8 |
|  | Grades 7-12 |  |  |  |  |  |  |  |  |
| Total | 0.5 | 0.4 | 0.5 | 0.6 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 |
| Low income | 1.2 | 0.6 | 1.3 | 1.6 | 0.8 | 1.6 | 1.5 | 0.7 | 1.5 |
| Middle income | 0.7 | 0.4 | 0.7 | 0.8 | 0.6 | 0.8 | 0.7 | 0.6 | 0.7 |
| High income | 1.0 | 0.9 | 1.0 | 1.2 | 1.2 | 1.1 | 1.0 | 1.1 | 0.8 |

SOURCE: U.S. Department of Commerce, Bureau of the Census,
October Current Population Surveys.

Table S5-2 Standard errors for table 5-2

| Year | At home |  |  | At school |  |  | At the library |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grade 4 | Grade 8 | Grade 11 | Grade 4 | Grade 8 | Grade 11 | Grade 4 | Grade 8 | Grade 11 |
| 1984 | 3.7 | 4.6 | 2.9 | 3.5 | 4.2 | 2.9 | 3.8 | 3.9 | 2.9 |
| 1988 | 2.4 | 2.2 | 2.4 | 4.2 | 3.1 | 2.4 | 4.6 | 3.1 | 2.9 |
| 1990 | 2.3 | 1.8 | 1.7 | 2.3 | 2.6 | 2.2 | 2.6 | 2.2 | 2.5 |
| 1992 | 2.2 | 2.3 | 2.1 | 1.6 | 2.7 | 2.4 | 3.3 | 2.5 | 2.5 |
| 1994 | 2.0 | 1.9 | 2.0 | 2.0 | 2.7 | 2.4 | 3.0 | 3.3 | 2.6 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Almanac: Writing, 1984 to 1994, 1996.

## Table S5-3 Standard errors for table 5-3

| Access to a computer | Age 13 |  |  |  |  |  | Age 17 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| and reason for use | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 |
| Have access to computer in school | 1.8 | 2.9 | 3.0 | 2.2 | 2.5 | 2.0 | 2.7 | 3.1 | 2.4 | 2.1 | 1.9 | 2.2 |
| Study mathematics through computer instruction | 0.9 | 2.3 | 2.5 | 1.8 | 2.4 | 1.8 | 1.1 | 1.5 | 1.5 | 2.1 | 2.0 | 1.7 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, National Assessment of Educational Progress,
Almanac: Mathematics, 1978 to 1994, 1996.

## Table S5-4 Standard errors for table 5-4

|  | Ever used a computer |  | Family owns a computer |  |
| :--- | ---: | ---: | ---: | ---: |
| Year | Age 9 | Age 13 | Age 9 | Age 13 |
| 1986 | 1.2 | 1.2 | 1.3 | 1.5 |
| 1990 | 0.7 | 0.5 | 1.1 | 1.0 |
| 1992 | 0.8 | 0.3 | 1.0 | 1.1 |
| 1994 | 0.9 | 0.4 | 1.2 | 1.3 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, National Assessment of Educational Progress, Almanac: Science, 1986 to 1994, 1996.

Table S6-1 Standard errors for table 6-1

| Selected services and equipment | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Elementary Secondary |  |  | Total Elementary |  | Secondary |
| Percentage of schools' library media centers offering the following equipment: |  |  |  |  |  |  |
| Telephone | 1.3 | 1.8 | 1.6 | 1.3 | 1.6 | 2.5 |
| Fax machine | 0.5 | 0.6 | 0.8 | 0.5 | 0.6 | 1.1 |
| Computer with modem | 1.0 | 1.2 | 1.5 | 1.0 | 1.5 | 1.9 |
| Automated catalog | 0.9 | 1.1 | 1.1 | 0.7 | 0.5 | 1.9 |
| Automated circulation system | 1.1 | 1.6 | 1.3 | 0.7 | 0.6 | 1.8 |
| Database searching with CD-ROM | 0.8 | 1.2 | 1.3 | 0.8 | 0.8 | 1.6 |
| On-line database searching | 0.5 | 0.5 | 0.9 | 0.5 | 0.3 | 1.2 |
| Compact disc for periodical indices, etc. | 1.1 | 1.5 | 1.3 | 1.0 | 1.1 | 2.2 |
| Video laser disc | 1.0 | 1.3 | 1.3 | 0.6 | 0.7 | 1.2 |
| Connection to Internet | 0.6 | 0.8 | 0.8 | 0.5 | 0.8 | 1.1 |
| Cable television | 0.8 | 1.1 | 0.9 | 1.3 | 2.0 | 2.8 |
| Broadcast television | 1.0 | 1.4 | 1.3 | 1.6 | 1.9 | 2.5 |
| Closed circuit television | 0.7 | 1.0 | 1.0 | 0.7 | 1.0 | 1.6 |
| Satellite dish | 0.6 | 0.7 | 1.1 | 0.9 | 0.9 | 1.2 |
| Total students using library per 100 students each week | *0 | 1 | 1 | 1 | 1 | 2 |
| Books checked out per 100 students each week | 2 | 3 | 4 | 18 | 28 | 8 |
| Percentage of schools offering the following services: |  |  |  |  |  |  |
| Microcomputers | 0.7 | 1.0 | 1.0 | 1.6 | 2.1 | 2.9 |
| Long distance learning | 0.8 | 1.1 | 1.0 | 0.9 | 0.9 | 1.6 |
| Average number of items held per 100 students at the end of the 1992-93 school year: |  |  |  |  |  |  |
| Books (number of volumes) | 57 | 81 | 101 | 252 | 349 | 726 |
| Current serial subscriptions (print and microfilm) | *0 | *0 | 1 | 1 | 1 | 1 |
| Video materials (tape and disc) | 2 | 2 | 2 | 5 | 5 | 6 |
| Other audio-visual materials | 4 | 6 | 7 | 6 | 5 | 16 |
| Microcomputer software | 1 | 1 | 1 | 4 | 5 | 4 |
| CD-ROM titles | *0 | *0 | *0 | *0 | *0 | 1 |
| Expenditures per student for the 1992-93 school year on the following: |  |  |  |  |  |  |
| Books | \$0.23 | \$0.25 | \$0.42 | \$0.45 | \$0.52 | \$1.26 |
| Current serial subscriptions (print and microfilm) | 0.05 | 0.06 | 0.14 | 0.09 | 0.10 | 0.36 |
| Video materials (tape and disc) | 0.04 | 0.05 | 0.10 | 0.09 | 0.08 | 0.15 |
| Other audio-visual materials | 0.04 | 0.06 | 0.07 | 0.05 | 0.06 | 0.10 |
| Microcomputer software | 0.09 | 0.07 | 0.35 | 0.19 | 0.20 | 0.59 |
| CD-ROM titles | 0.05 | 0.06 | 0.09 | 0.17 | 0.25 | 0.18 |

[^55]SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Library Media Center Questionnaire), 1993-94.

Table S6-2 Standard errors for table 6-2

| Selected services and equipment | Percentage of minority enrollment |  | Percentage of students eligible for free or reduced-price lunch |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than 20 percent | 20 percent or more | 0-5 | 6-20 | 21-40 | 41 or more |
| Percentage of schools' library media centers offering the following equipment: |  |  |  |  |  |  |
| Telephone | 1.6 | 2.1 | 3.2 | 2.4 | 2.1 | 2.1 |
| Fax machine | 0.7 | 0.6 | 2.4 | 0.9 | 0.9 | 0.6 |
| Computer with modem | 1.4 | 1.4 | 4.3 | 2.1 | 1.9 | 1.7 |
| Automated catalog | 1.0 | 1.2 | 3.4 | 2.0 | 1.9 | 1.2 |
| Automated circulation system | 1.6 | 1.7 | 3.2 | 2.6 | 2.1 | 1.7 |
| Database searching with CD-ROM | 1.2 | 1.1 | 3.6 | 2.3 | 1.9 | 1.3 |
| On-line database searching | 0.7 | 0.6 | 2.6 | 1.1 | 0.9 | 0.7 |
| Compact disc for periodical indices, etc. | 1.6 | 1.4 | 3.8 | 2.4 | 2.3 | 1.5 |
| Video laser disc | 1.2 | 1.6 | 3.7 | 2.3 | 2.0 | 1.3 |
| Connection to Internet | 0.8 | 1.0 | 3.0 | 1.5 | 1.1 | 0.9 |
| Cable television | 1.1 | 1.6 | 3.5 | 1.7 | 1.6 | 1.7 |
| Broadcast television | 1.5 | 1.9 | 4.2 | 2.5 | 2.0 | 1.8 |
| Closed circuit television | 1.0 | 1.4 | 2.9 | 1.9 | 1.6 | 1.2 |
| Satellite dish | 0.9 | 0.9 | 2.3 | 1.5 | 1.4 | 1.4 |
| Total students using library per 100 <br> students each week |  |  |  |  |  |  |
| Books checked out per 100 students each week | 3 | 3 | 7 | 6 | 4 | 4 |
| Percentage of schools offering the following services: |  |  |  |  |  |  |
| Microcomputers | 0.9 | 1.2 | 1.1 | 1.4 | 1.7 | 1.3 |
| Long distance learning | 1.0 | 1.5 | 1.8 | 1.5 | 1.2 | 1.6 |
| Average number of items held per 100 students at the end of the 1992-93 school year: |  |  |  |  |  |  |
| Books (number of volumes) | 85 | 74 | 112 | 86 | 116 | 124 |
| Current serial subscriptions (print and microfilm) | *0 | *0 | *0 | *0 | 1 | *0 |
| Video materials (tape and disc) | 3 | 2 | 7 | 6 | 3 | 2 |
| Other audio-visual materials | 7 | 5 | 20 | 9 | 11 | 8 |
| Microcomputer software | 2 | 1 | 2 | 3 | 1 | 1 |
| CD-ROM titles | *0 | *0 | *0 | *0 | *0 | *0 |
| Expenditures per student for the 1992-93 school year on the following: |  |  |  |  |  |  |
| Books | \$0.33 | \$0.37 | \$0.95 | \$0.42 | \$0.31 | \$0.38 |
| Current serial subscriptions (print and microfilm) | 0.09 | 0.07 | 0.17 | 0.11 | 0.14 | 0.10 |
| Video materials (tape and disc) | 0.06 | 0.07 | 0.19 | 0.09 | 0.09 | 0.07 |
| Other audio-visual materials | 0.06 | 0.07 | 0.18 | 0.06 | 0.08 | 0.07 |
| Microcomputer software | 0.15 | 0.10 | 0.12 | 0.14 | 0.32 | 0.09 |
| CD-ROM titles | 0.40 | 0.10 | 0.09 | 0.05 | 0.14 | 0.05 |

[^56]SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Library Media Center Questionnaire), 1993-94.

Table S6-3 Standard errors for table 6-3

| Selected services and equipment | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Less than 150 | 150-499 | 500-749 | 750 or more |
| Percentage of schools' library media centers offering the following equipment: |  |  |  |  |
| Telephone | 3.4 | 1.8 | 2.3 | 2.0 |
| Fax machine | 1.6 | 0.6 | 1.2 | 0.9 |
| Computer with modem | 3.2 | 1.5 | 2.1 | 1.9 |
| Automated catalog | 2.2 | 1.1 | 1.7 | 1.4 |
| Automated circulation system | 2.4 | 1.5 | 2.3 | 2.0 |
| Database searching with CD-ROM | 2.4 | 1.3 | 2.2 | 1.7 |
| On-line database searching | 1.3 | 0.7 | 1.2 | 1.0 |
| Compact disc for periodical indices, etc. | 2.6 | 1.8 | 2.2 | 1.9 |
| Video laser disc | 3.1 | 1.4 | 1.8 | 1.8 |
| Connection to Internet | 1.1 | 1.2 | 1.5 | 1.0 |
| Cable television | 3.3 | 1.3 | 1.8 | 1.5 |
| Broadcast television | 3.3 | 1.4 | 2.2 | 2.1 |
| Closed circuit television | 1.9 | 1.2 | 1.8 | 1.7 |
| Satellite dish | 2.6 | 1.1 | 1.4 | 1.6 |
| Total students using library per 100 |  |  |  |  |
| Books checked out per 100 students |  |  |  |  |
| Percentage of schools offering the following services: |  |  |  |  |
| Microcomputers | 2.4 | 1.3 | 1.6 | 1.2 |
| Long distance learning | 2.0 | 1.2 | 1.4 | 1.4 |
| Average number of items held per 100 students at the end of the 1992-93 school year: |  |  |  |  |
| Books (number of volumes) | 359 | 101 | 34 | 22 |
| Current serial subscriptions (print and microfilm) | 2 | *0 | *0 | *0 |
| Video materials (tape and disc) | 9 | 4 | 2 | 1 |
| Other audio-visual materials | 27 | 7 | 7 | 4 |
| Microcomputer software | 8 | 1 | 1 | 1 |
| CD-ROM titles | 1 | *0 | *0 | *0 |
| Expenditures per student for the 1992-93 school year on the following: |  |  |  |  |
| Books | \$1.40 | \$0.27 | \$0.33 | \$0.17 |
| Current serial subscriptions (print and microfilm) | 0.43 | 0.08 | 0.05 | 0.05 |
| Video materials (tape and disc) | 0.34 | 0.05 | 0.06 | 0.04 |
| Other audio-visual materials | 0.33 | 0.05 | 0.05 | 0.04 |
| Microcomputer software | 0.96 | 0.08 | 0.11 | 0.03 |
| CD-ROM titles | 0.27 | 0.03 | 0.13 | 0.03 |

[^57]SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Library Media Center Questionnaire), 1993-94.

Standard Error Tables
Table S6-4 Standard errors for table 6-4

| State | Computer with modem | Automated catalog | Database searching with CD-ROM | On-line database searching | Compact disc for periodical indices, etc. | Connection to the Internet |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 1.0 | 0.9 | 0.8 | 0.5 | 1.1 | 0.6 |
| Alabama | 4.2 | 5.9 | 4.0 | 2.0 | 4.6 | 1.5 |
| Alaska | 3.6 | 4.0 | 4.7 | 1.9 | 4.5 | 2.3 |
| Arizona | 3.5 | 5.3 | 4.0 | 2.2 | 4.4 | 1.9 |
| Arkansas | 4.0 | 4.0 | 4.1 | 2.4 | 4.6 | 2.5 |
| California | 4.3 | 3.4 | 3.7 | 1.0 | 5.7 | 2.3 |
| Colorado | 4.7 | 5.7 | 5.5 | 4.7 | 5.5 | 3.5 |
| Connecticut | 6.5 | 2.7 | 5.3 | 3.8 | 6.0 | 2.6 |
| Delaware | 3.6 | 3.0 | 3.5 | 2.5 | 3.5 | 2.0 |
| District of Columbia | 4.0 | 2.2 | 2.8 | 3.3 | 3.2 | 1.1 |
| Florida | 3.8 | 3.3 | 3.6 | 2.8 | 4.0 | 3.4 |
| Georgia | 4.7 | 4.4 | 4.6 | 2.6 | 4.7 | 2.7 |
| Hawaii | 5.3 | 4.4 | 5.7 | 4.9 | 4.9 | 5.0 |
| Idaho | 4.2 | 4.0 | 4.4 | 2.3 | 5.1 | 3.1 |
| Illinois | 3.5 | 3.8 | 3.4 | 1.7 | 4.2 | 2.2 |
| Indiana | 6.7 | 4.9 | 5.9 | 0.7 | 6.3 | 1.2 |
| lowa | 6.4 | 5.0 | 5.7 | 3.6 | 5.7 | 3.1 |
| Kansas | 3.0 | 4.9 | 3.1 | 2.0 | 4.5 | 2.5 |
| Kentucky | 6.2 | 7.0 | 5.5 | 2.2 | 6.3 | 2.4 |
| Louisiana | 3.9 | 3.5 | 3.4 | 0.8 | 3.8 | 2.4 |
| Maine | 5.4 | 4.4 | 3.8 | 2.0 | 6.7 | 1.6 |
| Maryland | 3.9 | 3.4 | 4.5 | 3.1 | 4.7 | 3.5 |
| Massachusetts | 4.9 | 1.6 | 4.8 | 1.6 | 4.8 | 3.8 |
| Michigan | 7.6 | 3.9 | 6.3 | 3.8 | 6.1 | 5.3 |
| Minnesota | 4.8 | 6.1 | 6.1 | 3.0 | 5.6 | 3.6 |
| Mississippi | 2.0 | 2.1 | 3.9 | 1.4 | 3.6 | 1.3 |
| Missouri | 4.3 | 6.7 | 5.0 | 3.9 | 5.9 | 4.2 |
| Montana | 4.3 | 3.1 | 4.1 | 3.3 | 3.6 | 2.0 |
| Nebraska | 5.0 | 4.9 | 5.7 | 2.5 | 6.0 | 3.0 |
| Nevada | 4.0 | 5.5 | 4.5 | 1.3 | 4.2 | 2.9 |
| New Hampshire | 6.6 | 4.8 | 6.6 | 2.6 | 5.9 | 4.4 |
| New Jersey | 6.8 | 6.5 | 6.4 | 1.4 | 7.2 | 1.3 |
| New Mexico | 6.1 | 5.3 | 4.3 | 1.5 | 5.5 | 2.4 |
| New York | 5.2 | 3.9 | 3.4 | 2.4 | 5.1 | 3.6 |
| North Carolina | 4.6 | 4.0 | 4.3 | 1.7 | 4.1 | 2.3 |
| North Dakota | 5.3 | 3.6 | 5.1 | 5.7 | 6.5 | 5.5 |
| Ohio | 7.1 | 5.0 | 3.9 | 1.1 | 6.7 | 2.3 |
| Oklahoma | 2.7 | 3.8 | 3.5 | 1.7 | 4.2 | 1.7 |
| Oregon | 5.8 | 5.2 | 6.7 | 4.7 | 6.5 | 4.2 |
| Pennsylvania | 6.9 | 4.0 | 5.5 | 1.1 | 6.4 | 3.1 |
| Rhode Island | 4.9 | 3.2 | 3.5 | 0.6 | 4.8 | 4.2 |
| South Carolina | 5.4 | 5.0 | 5.7 | 1.7 | 7.1 | 4.1 |
| South Dakota | 6.8 | 3.4 | 6.2 | 4.2 | 5.5 | 2.7 |
| Tennessee | 4.3 | 5.1 | 4.5 | 2.3 | 6.5 | 1.9 |
| Texas | 4.6 | 4.2 | 3.1 | 2.8 | 3.8 | 4.2 |
| Utah | 3.6 | 4.1 | 3.6 | 2.3 | 3.6 | 1.9 |
| Vermont | 4.9 | 5.6 | 4.2 | 3.3 | 4.8 | 3.4 |
| Virginia | 8.3 | 6.1 | 5.8 | 2.9 | 7.0 | 5.6 |
| Washington | 5.2 | 5.6 | 3.6 | 2.9 | 4.9 | 2.6 |
| West Virginia | 6.0 | 4.2 | 4.0 | 3.5 | 5.5 | 3.2 |
| Wisconsin | 6.5 | 4.7 | 5.0 | 3.8 | 6.1 | 2.6 |
| Wyoming | 3.4 | 4.2 | 5.7 | 2.5 | 4.5 | 2.3 |

[^58]Table S7-1 Standard errors for table 7-1

| Parents' highest education level | 1990 | 1991 | 1992 | $\mathbf{1 9 9 3}$ | $\mathbf{1 9 9 4}$ | $\mathbf{1 9 9 5}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Total | $\mathbf{0 . 3}$ | $\mathbf{0 . 3}$ | $\mathbf{0 . 4}$ | $\mathbf{0 . 4}$ | $\mathbf{0 . 4}$ | $\mathbf{0 . 4}$ |
| Less than high school graduate | 1.3 | 1.2 | 1.7 | 1.6 | 1.5 | 1.6 |
| High school graduate | 0.5 | 0.6 | 0.7 | 0.6 | 0.8 | 0.8 |
| Some college | 0.5 | 0.6 | 0.5 | 0.6 | 0.5 | 0.6 |
| Bachelor's degree or higher | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 |
| Not available | 3.2 | 3.1 | 3.8 | 3.1 | 3.3 | 3.5 |

SOURCE: U.S. Department of Commerce, Bureau of the Census,
October Current Population Surveys.

Table S7-2 Standard errors for table 7-2

|  |  | Sex |  | Race/ethnicity |  |  | Family income |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total | Male | Female | White | Black | Hispanic | Low | Middle | High |
| 1972 | 0.2 | 0.3 | 0.3 | 0.2 | 0.9 | 1.5 | 1.1 | 0.3 | 0.3 |
| 1973 | 0.2 | 0.4 | 0.3 | 0.2 | 1.0 | 1.5 | 1.2 | 0.3 | 0.2 |
| 1974 | 0.2 | 0.4 | 0.3 | 0.3 | 1.0 | 1.4 | - | - | - |
| 1975 | 0.2 | 0.3 | 0.3 | 0.2 | 0.9 | 1.4 | 1.1 | 0.3 | 0.3 |
| 1976 | 0.2 | 0.3 | 0.3 | 0.3 | 0.8 | 1.1 | 1.1 | 0.3 | 0.2 |
| 1977 | 0.2 | 0.4 | 0.3 | 0.3 | 0.9 | 1.2 | 1.1 | 0.4 | 0.3 |
| 1978 | 0.3 | 0.4 | 0.3 | 0.3 | 1.0 | 1.5 | 1.2 | 0.4 | 0.3 |
| 1979 | 0.3 | 0.4 | 0.4 | 0.3 | 1.0 | 1.4 | 1.2 | 0.3 | 0.3 |
| 1980 | 0.2 | 0.4 | 0.3 | 0.3 | 0.9 | 1.4 | 1.1 | 0.3 | 0.3 |
| 1981 | 0.2 | 0.3 | 0.3 | 0.3 | 1.0 | 1.3 | 1.1 | 0.3 | 0.3 |
| 1982 | 0.3 | 0.4 | 0.4 | 0.3 | 1.0 | 1.6 | 1.3 | 0.4 | 0.3 |
| 1983 | 0.3 | 0.4 | 0.4 | 0.3 | 1.0 | 1.6 | 1.1 | 0.4 | 0.3 |
| 1984 | 0.3 | 0.4 | 0.4 | 0.3 | 0.9 | 1.7 | 1.2 | 0.4 | 0.3 |
| 1985 | 0.3 | 0.4 | 0.4 | 0.3 | 1.1 | 2.3 | 1.3 | 0.4 | 0.3 |
| 1986 | 0.3 | 0.4 | 0.4 | 0.3 | 0.9 | 2.4 | 1.1 | 0.4 | 0.3 |
| 1987 | 0.3 | 0.4 | 0.4 | 0.3 | 1.0 | 1.7 | 1.1 | 0.4 | 0.2 |
| 1988 | 0.4 | 0.6 | 0.6 | 0.4 | 1.3 | 4.6 | 1.8 | 0.5 | 0.4 |
| 1989 | 0.4 | 0.6 | 0.6 | 0.4 | 1.6 | 3.9 | 1.6 | 0.6 | 0.4 |
| 1990 | 0.3 | 0.5 | 0.5 | 0.4 | 1.1 | 2.3 | 1.4 | 0.4 | 0.3 |
| 1991 | 0.3 | 0.5 | 0.5 | 0.4 | 1.2 | 2.2 | 1.4 | 0.4 | 0.3 |
| 1992 | 0.4 | 0.5 | 0.5 | 0.4 | 1.1 | 2.2 | 1.4 | 0.5 | 0.4 |
| 1993 | 0.4 | 0.5 | 0.5 | 0.4 | 1.2 | 2.0 | 1.6 | 0.5 | 0.4 |
| 1994 | 0.4 | 0.5 | 0.5 | 0.4 | 1.2 | 2.2 | 1.6 | 0.5 | 0.4 |
| 1995 | 0.4 | 0.5 | 0.5 | 0.4 | 1.2 | 2.4 | 1.5 | 0.5 | 0.4 |

[^59]SOURCE: U.S. Department of Education, National Center for Education Statistics, Dropout Rates in the United States, 1995 (based on the October Current Population Surveys).

Table S8-1 Standard errors for table 8-1

| Parents' highest education level | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | $\mathbf{1 . 6}$ | $\mathbf{1 . 6}$ | $\mathbf{1 . 6}$ | $\mathbf{1 . 6}$ | $\mathbf{1 . 5}$ | $\mathbf{1 . 5}$ |
| Less than high school graduate | 5.1 | 5.4 | 5.1 | 5.4 | 5.4 | 4.8 |
| High school graduate | 5.4 | 5.4 | 5.4 | 5.4 | 3.2 | 3.2 |
| Some college | 5.2 | 5.1 | 5.1 | 5.3 | 3.0 | 2.7 |
| Bachelor's degree or higher | 4.1 | 3.6 | 4.2 | 3.5 | 2.2 | 1.9 |
| Not available | 5.4 | 5.4 | 5.3 | 5.4 | 4.6 | 4.5 |

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table S8-2 Standard errors for table 8-2

| October | Male |  |  | Female |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 2-year | 4-year | Total | 2-year | 4-year |
| 1972 | 1.9 | - | - | 1.8 | - | - |
| 1973 | 1.9 | 1.3 | 1.8 | 1.8 | 1.3 | 1.6 |
| 1974 | 1.8 | 1.4 | 1.7 | 1.8 | 1.2 | 1.7 |
| 1975 | 1.8 | 1.4 | 1.7 | 1.7 | 1.3 | 1.6 |
| 1976 | 1.9 | 1.3 | 1.8 | 1.8 | 1.3 | 1.7 |
| 1977 | 1.9 | 1.4 | 1.8 | 1.8 | 1.4 | 1.6 |
| 1978 | 1.9 | 1.4 | 1.8 | 1.8 | 1.4 | 1.6 |
| 1979 | 1.9 | 1.4 | 1.8 | 1.8 | 1.3 | 1.6 |
| 1980 | 1.9 | 1.4 | 1.7 | 1.8 | 1.5 | 1.7 |
| 1981 | 1.9 | 1.5 | 1.8 | 1.8 | 1.5 | 1.7 |
| 1982 | 2.0 | 1.5 | 1.8 | 1.9 | 1.5 | 1.8 |
| 1983 | 2.0 | 1.6 | 1.9 | 1.9 | 1.5 | 1.8 |
| 1984 | 2.0 | 1.5 | 2.0 | 1.9 | 1.6 | 1.8 |
| 1985 | 2.1 | 1.7 | 2.1 | 2.0 | 1.6 | 2.0 |
| 1986 | 2.1 | 1.7 | 2.0 | 2.0 | 1.5 | 1.9 |
| 1987 | 2.1 | 1.6 | 2.1 | 2.0 | 1.6 | 2.0 |
| 1988 | 2.3 | 1.9 | 2.2 | 2.2 | 1.9 | 2.2 |
| 1989 | 2.4 | 1.9 | 2.4 | 2.3 | 2.0 | 2.3 |
| 1990 | 2.3 | 1.8 | 2.3 | 2.2 | 1.9 | 2.3 |
| 1991 | 2.3 | 2.0 | 2.2 | 2.2 | 2.1 | 2.3 |
| 1992 | 2.2 | 1.9 | 2.2 | 2.2 | 2.0 | 2.3 |
| 1993 | 2.3 | 2.0 | 2.3 | 2.2 | 1.9 | 2.2 |
| 1994 | 2.2 | 1.9 | 2.2 | 2.2 | 1.8 | 2.2 |
| 1995 | 2.2 | 2.0 | 2.2 | 2.1 | 1.7 | 2.1 |
| - Not ava |  |  | $\begin{aligned} & \text { sout } \\ & \text { Oct } \end{aligned}$ | ment of lation | e, Bure | Census, |

Table S8-3 Standard errors for table 8-3

| October | White |  |  | Black |  |  | Hispanic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 2-year | 4 -year | Total | 2-year | 4 -year | Total | 2-year | 4-year |
| 1972 | 1.4 | - | - | 4.6 | - | - | 9.8 | - | - |
| 1973 | 1.4 | 1.0 | 1.3 | 4.3 | 2.9 | 3.8 | 9.0 | 8.3 | 7.7 |
| 1974 | 1.4 | 1.0 | 1.3 | 4.6 | 3.4 | 4.2 | 9.0 | 8.2 | 6.7 |
| 1975 | 1.4 | 1.1 | 1.3 | 4.7 | 3.2 | 4.3 | 8.5 | 7.9 | 7.7 |
| 1976 | 1.4 | 1.0 | 1.3 | 4.8 | 3.1 | 4.6 | 8.0 | 7.7 | 5.9 |
| 1977 | 1.4 | 1.0 | 1.3 | 4.7 | 3.5 | 4.4 | 8.0 | 7.5 | 6.2 |
| 1978 | 1.4 | 1.0 | 1.3 | 4.5 | 3.4 | 4.1 | 8.5 | 6.9 | 7.1 |
| 1979 | 1.4 | 1.0 | 1.3 | 4.7 | 3.8 | 4.1 | 7.9 | 6.5 | 6.8 |
| 1980 | 1.4 | 1.1 | 1.3 | 4.4 | 3.5 | 3.8 | 8.7 | 8.1 | 7.2 |
| 1981 | 1.4 | 1.2 | 1.4 | 4.4 | 3.2 | 4.0 | 8.2 | 7.5 | 6.9 |
| 1982 | 1.5 | 1.2 | 1.4 | 4.4 | 3.0 | 3.8 | 8.0 | 6.8 | 6.4 |
| 1983 | 1.6 | 1.2 | 1.5 | 4.4 | 3.3 | 3.8 | 9.0 | 6.8 | 8.7 |
| 1984 | 1.6 | 1.2 | 1.5 | 4.2 | 3.4 | 3.4 | 7.7 | 6.6 | 6.2 |
| 1985 | 1.6 | 1.3 | 1.6 | 4.8 | 3.3 | 4.4 | 9.8 | 8.7 | 8.4 |
| 1986 | 1.6 | 1.3 | 1.6 | 4.4 | 3.0 | 3.9 | 8.9 | 8.1 | 6.5 |
| 1987 | 1.7 | 1.3 | 1.6 | 4.8 | 3.5 | 4.7 | 8.3 | 6.0 | 7.0 |
| 1988 | 1.8 | 1.6 | 1.8 | 5.0 | 3.7 | 4.5 | 10.2 | 9.0 | 9.5 |
| 1989 | 1.9 | 1.5 | 1.9 | 5.3 | 4.3 | 5.0 | 10.5 | 10.2 | 8.1 |
| 1990 | 1.8 | 1.5 | 1.8 | 5.1 | 4.1 | 4.5 | 10.8 | 9.7 | 8.0 |
| 1991 | 1.8 | 1.7 | 1.9 | 5.3 | 4.1 | 4.7 | 9.6 | 8.4 | 9.0 |
| 1992 | 1.8 | 1.6 | 1.9 | 4.9 | 3.7 | 4.6 | 8.5 | 7.8 | 7.5 |
| 1993 | 1.9 | 1.6 | 1.9 | 5.3 | 4.2 | 5.1 | 8.2 | 8.2 | 7.3 |
| 1994 | 1.7 | 1.5 | 1.8 | 5.2 | 4.2 | 4.8 | 9.5 | 8.4 | 8.1 |
| 1995 | 1.8 | 1.5 | 1.8 | 5.0 | 4.1 | 4.5 | 7.5 | 6.3 | 7.0 |

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Standard Error Tables
Table S8-4 Standard errors for table 8-4

| October | Total | Type of institution |  | Family income |  |  | Race/ethnicity |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2-year | 4-year | Low | Middle | High | White | Black | Hispanic |
| 1972 | 1.3 | - | - | 3.4 | 1.7 | 2.2 | 1.4 | 4.6 | 9.8 |
| 1973 | 1.3 | 0.9 | 1.2 | 3.2 | 1.7 | 2.1 | 1.4 | 4.3 | 9.0 |
| 1974 | 1.3 | 0.9 | 1.2 | - | - | - | 1.4 | 4.6 | 9.0 |
| 1975 | 1.3 | 1.0 | 1.2 | 3.6 | 1.7 | 2.1 | 1.4 | 4.7 | 8.5 |
| 1976 | 1.3 | 0.9 | 1.2 | 4.2 | 1.8 | 2.0 | 1.4 | 4.8 | 8.0 |
| 1977 | 1.3 | 1.0 | 1.2 | 3.5 | 1.8 | 2.0 | 1.4 | 4.7 | 8.0 |
| 1978 | 1.3 | 1.0 | 1.2 | 3.7 | 1.7 | 2.0 | 1.4 | 4.5 | 8.5 |
| 1979 | 1.3 | 1.0 | 1.2 | 3.8 | 1.7 | 2.0 | 1.4 | 4.7 | 7.9 |
| 1980 | 1.3 | 1.0 | 1.2 | 3.5 | 1.8 | 2.1 | 1.4 | 4.4 | 8.7 |
| 1981 | 1.3 | 1.1 | 1.2 | 3.9 | 1.7 | 2.1 | 1.4 | 4.4 | 8.2 |
| 1982 | 1.4 | 1.1 | 1.3 | 3.8 | 1.8 | 2.1 | 1.5 | 4.4 | 8.0 |
| 1983 | 1.4 | 1.1 | 1.3 | 4.0 | 1.9 | 2.2 | 1.6 | 4.4 | 9.0 |
| 1984 | 1.4 | 1.1 | 1.3 | 3.6 | 1.9 | 2.1 | 1.6 | 4.2 | 7.7 |
| 1985 | 1.5 | 1.2 | 1.4 | 4.1 | 2.0 | 2.2 | 1.6 | 4.8 | 9.8 |
| 1986 | 1.4 | 1.1 | 1.4 | 3.6 | 2.0 | 2.3 | 1.6 | 4.4 | 8.9 |
| 1987 | 1.5 | 1.2 | 1.4 | 3.9 | 2.1 | 2.2 | 1.7 | 4.8 | 8.3 |
| 1988 | 1.6 | 1.3 | 1.6 | 4.5 | 2.2 | 2.6 | 1.8 | 5.0 | 10.2 |
| 1989 | 1.7 | 1.4 | 1.7 | 4.6 | 2.3 | 2.7 | 1.9 | 5.3 | 10.5 |
| 1990 | 1.6 | 1.3 | 1.6 | 4.8 | 2.1 | 2.5 | 1.8 | 5.1 | 10.8 |
| 1991 | 1.6 | 1.4 | 1.6 | 4.5 | 2.2 | 2.4 | 1.8 | 5.3 | 9.6 |
| 1992 | 1.6 | 1.4 | 1.6 | 4.4 | 2.2 | 2.3 | 1.8 | 4.9 | 8.5 |
| 1993 | 1.6 | 1.4 | 1.6 | 4.6 | 2.1 | 2.5 | 1.9 | 5.3 | 8.2 |
| 1994 | 1.5 | 1.3 | 1.6 | 4.3 | 2.1 | 2.4 | 1.7 | 5.2 | 9.5 |
| 1995 | 1.5 | 1.3 | 1.5 | 3.9 | 2.2 | 2.0 | 1.8 | 5.0 | 7.5 |

[^60]SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table S9-1 Standard errors for table 9-1

| Selected characteristics | Total |  |  | 4 -year |  |  | 2-year |  |  | Vocational, technical, or trade school |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1974 | 1982 | 1994 | 1974 | 1982 | 1994 | 1974 | 1982 | 1994 | 1974 | 1982 | 1994 |
| Total | 0.6 | 0.8 | 0.7 | 0.6 | 0.9 | 0.9 | 0.4 | 0.7 | 0.7 | 0.3 | 0.3 | 0.4 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 0.8 | 1.2 | 0.9 | 0.8 | 1.3 | 1.1 | 0.6 | 0.9 | 0.9 | 0.4 | 0.3 | 0.5 |
| Female | 0.8 | 1.1 | 0.8 | 0.8 | 1.1 | 1.1 | 0.5 | 0.9 | 0.9 | 0.4 | 0.5 | 0.6 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 0.7 | 1.0 | 0.8 | 0.7 | 1.1 | 1.0 | 0.5 | 0.8 | 0.8 | 0.3 | 0.3 | 0.4 |
| Black | 1.5 | 1.3 | 2.2 | 1.3 | 1.2 | 2.1 | 0.9 | 1.0 | 1.8 | 0.8 | 0.5 | 1.0 |
| Hispanic | 2.3 | 1.8 | 1.9 | 1.9 | 1.6 | 1.6 | 2.1 | 1.4 | 1.9 | 1.6 | 0.5 | 1.6 |
| Asian/ |  |  |  |  |  |  |  |  |  |  |  |  |
| Pacific Islander | 3.5 | 2.3 | 1.8 | 4.6 | 3.8 | 2.9 | 3.5 | 3.3 | 2.3 | 1.1 | 0.8 | 1.7 |
| Native American Other | 4.4 | 5.0 | 5.1 | 3.6 | 4.3 | 4.3 | 3.4 | 4.1 | 5.5 | 2.6 | 1.0 | 1.5 |
| Control of high school |  |  |  |  |  |  |  |  |  |  |  |  |
| Public | 0.6 | 0.9 | 0.7 | 0.6 | 0.9 | 0.9 | 0.5 | 0.7 | 0.7 | 0.3 | 0.3 | 0.4 |
| Catholic | 2.2 | 2.5 | 1.3 | 2.9 | 3.3 | 2.9 | 1.6 | 2.6 | 2.3 | 1.0 | 1.4 | 1.1 |
| Private, other | 4.5 | 4.7 | 1.6 | 13.2 | 7.5 | 4.4 | 4.9 | 2.3 | 3.9 | 5.3 | 2.2 | 2.4 |
| Urbanicity of high school |  |  |  |  |  |  |  |  |  |  |  |  |
| Central city | 1.0 | 1.6 | 1.3 | 1.1 | 1.8 | 1.7 | 0.8 | 1.3 | 1.2 | 0.5 | 0.5 | 0.9 |
| Urban fringe/ large town | 1.2 | 1.2 | 1.0 | 1.3 | 1.4 | 1.3 | 0.8 | 1.0 | 1.1 | 0.5 | 0.4 | 0.6 |
| Rural/small town | 0.8 | 1.5 | 1.0 | 0.8 | 1.6 | 1.3 | 0.6 | 1.2 | 1.1 | 0.5 | 0.5 | 0.4 |
| Achievement test quartile in high school |  |  |  |  |  |  |  |  |  |  |  |  |
| First (low) | 1.0 | 1.5 | 1.7 | 0.6 | 1.1 | 0.9 | 0.7 | 1.2 | 1.7 | 0.6 | 0.6 | 0.9 |
| Second | 1.0 | 1.7 | 1.3 | 0.9 | 1.4 | 1.2 | 0.9 | 1.4 | 1.3 | 0.7 | 0.6 | 1.0 |
| Third | 0.9 | 1.5 | 1.0 | 1.0 | 1.6 | 1.4 | 0.7 | 1.3 | 1.4 | 0.6 | 0.6 | 0.6 |
| Fourth (high) | 0.7 | 1.0 | 0.7 | 1.0 | 1.5 | 1.2 | 0.6 | 1.1 | 1.0 | 0.4 | 0.5 | 0.4 |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |  |  |  |
| Low quartile | 0.9 | 1.3 | 1.5 | 0.7 | 1.1 | 1.0 | 0.6 | 1.0 | 1.3 | 0.6 | 0.4 | 0.7 |
| Middle quartiles | 0.7 | 1.1 | 0.8 | 0.7 | 1.2 | 0.9 | 0.6 | 1.0 | 0.9 | 0.4 | 0.4 | 0.5 |
| High quartile | 0.7 | 1.1 | 0.7 | 1.0 | 1.7 | 1.4 | 0.8 | 1.3 | 1.1 | 0.4 | 0.4 | 0.7 |

[^61]Standard Error Tables
Table S9-2 Standard errors for table 9-2

| Race/ethnicity and type of institution | Senior in 1972 |  |  | Senior in 1980 |  |  | Senior in 1992 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Socioeconomic status |  |  | Socioeconomic status |  |  | Socioeconomic status |  |  |
|  | Low quartile | Middle quartiles | $\begin{array}{r} \text { High } \\ \text { quartile } \end{array}$ | Low quartile | Middle quartiles | $\begin{array}{r} \text { High } \\ \text { quartile } \end{array}$ |  | Middle quartiles | $\begin{array}{r} \text { High } \\ \text { quartile } \end{array}$ |
| Total | 0.9 | 0.7 | 0.7 | 1.3 | 1.1 | 1.1 | 1.5 | 0.8 | 0.7 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 1.2 | 0.8 | 0.8 | 1.9 | 1.3 | 1.2 | 1.7 | 0.9 | 0.8 |
| Black | 1.6 | 2.2 | 3.3 | 1.5 | 2.1 | 3.0 | 3.2 | 3.2 | 2.9 |
| Hispanic | 2.7 | 4.1 | 7.8 | 2.3 | 2.5 | 3.3 | 3.3 | 2.4 | 2.1 |
| Asian/Pacific Islander | 7.7 | 5.2 | 0.0 | 6.5 | 3.5 | 1.6 | 4.3 | 3.2 | 1.6 |
| Native American/Other | 5.2 | 6.6 | - | 8.5 | 7.0 | - | 9.2 | 6.1 | - |
| 4-year | 0.7 | 0.7 | 1.0 | 1.1 | 1.2 | 1.7 | 1.0 | 0.9 | 1.4 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 0.9 | 0.7 | 1.0 | 1.5 | 1.3 | 1.8 | 1.2 | 1.0 | 1.5 |
| Black | 1.6 | 2.6 | 6.2 | 1.6 | 2.0 | 4.3 | 2.4 | 3.0 | 5.0 |
| Hispanic | 2.0 | 3.6 | 7.5 | 1.9 | 2.5 | 4.6 | 1.8 | 2.5 | 5.1 |
| Asian/Pacific Islander | 8.9 | 6.8 | 6.0 | 8.5 | 4.8 | 4.8 | 7.0 | 4.7 | 3.4 |
| Native American/Other | 3.5 | 5.8 | - | 5.8 | 6.5 | - | 6.3 | 6.1 | - |
| 2-year | 0.6 | 0.6 | 0.8 | 1.0 | 1.0 | 1.3 | 1.3 | 0.9 | 1.1 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 0.7 | 0.6 | 0.8 | 1.5 | 1.1 | 1.4 | 1.3 | 1.0 | 1.3 |
| Black | 1.0 | 1.7 | 5.9 | 1.3 | 1.5 | 3.4 | 3.8 | 2.0 | 4.0 |
| Hispanic | 2.6 | 3.2 | 7.2 | 1.7 | 2.3 | 4.0 | 2.9 | 2.9 | 3.8 |
| Asian/Pacific Islander | 5.9 | 5.9 | 6.1 | 6.5 | 4.9 | 4.7 | 4.7 | 3.7 | 3.2 |
| Native American/Other | 3.6 | 5.0 | - | 6.5 | 5.7 | - | 8.0 | 5.8 | - |
| Vocational, technical, or trade school | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.7 | 0.5 | 0.7 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 0.7 | 0.5 | 0.4 | 0.6 | 0.5 | 0.5 | 0.7 | 0.5 | 0.7 |
| Black | 1.0 | 1.5 | 2.8 | 0.6 | 0.8 | 1.8 | 1.6 | 1.5 | 3.9 |
| Hispanic | 2.0 | 2.4 | 4.6 | 0.7 | 0.6 | 1.6 | 1.8 | 2.2 | 4.7 |
| Asian/Pacific Islander | 2.9 | 1.4 | 1.8 | 0.2 | 1.8 | 0.0 | 5.7 | 2.5 | 1.6 |
| Native American/Other | 3.2 | 4.6 | - | 2.2 | 0.0 | - | 2.7 | 2.4 | - |

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond
(HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

Table S9-3 Standard errors for table 9-3

| Race/ethnicity and type of institution | Senior in 1972 |  |  |  | Senior in 1980 |  |  |  | Senior in 1992 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Achievement test quartile |  |  |  | Achievement test quartile |  |  |  | Achievement test quartile |  |  |  |
|  | $\begin{array}{r} \text { First } \\ \text { (low) } \\ \hline \end{array}$ | Second | Third | Fourth (high) | $\begin{array}{r} \text { First } \\ \text { (low) } \\ \hline \end{array}$ | Second | Third | Fourth (high) | $\begin{array}{r} \text { First } \\ \text { (low) } \\ \hline \end{array}$ | Second | Third | Fourth <br> (high) |
| Total | 1.0 | 1.0 | 0.9 | 0.7 | 1.5 | 1.7 | 1.5 | 1.0 | 1.7 | 1.3 | 1.0 | 0.7 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 1.2 | 1.1 | 1.0 | 0.7 | 2.4 | 2.0 | 1.6 | 1.1 | 2.4 | 1.5 | 1.1 | 0.8 |
| Black | 1.9 | 2.8 | 3.6 | 2.3 | 1.6 | 2.4 | 2.1 | 1.9 | 3.6 | 3.4 | 3.6 | 2.0 |
| Hispanic | 3.5 | 4.0 | 5.0 | 6.8 | 2.4 | 3.3 | 3.0 | 3.3 | 3.7 | 3.9 | 2.9 | 3.3 |
| Asian/Pacific Islander | - | 9.9 | 6.0 | 5.6 | 9.0 | 5.7 | 4.7 | 2.0 | 6.4 | 2.4 | 3.8 | 1.2 |
| Native American/Other | 5.6 | 8.2 | - | - | 7.5 | 8.1 | - | - | 10.1 | 7.8 | - | - |
| 4-year | 0.6 | 0.9 | 1.0 | 1.0 | 1.1 | 1.4 | 1.6 | 1.5 | 0.9 | 1.2 | 1.4 | 1.2 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 0.6 | 0.9 | 1.0 | 1.0 | 1.7 | 1.7 | 1.8 | 1.6 | 1.1 | 1.4 | 1.6 | 1.3 |
| Black | 1.5 | 2.7 | 4.2 | 4.1 | 1.5 | 2.6 | 3.0 | 5.2 | 2.3 | 3.4 | 4.5 | 4.5 |
| Hispanic | 1.7 | 3.6 | 5.8 | 9.1 | 1.6 | 2.6 | 3.7 | 4.7 | 2.3 | 2.6 | 4.2 | 5.2 |
| Asian/Pacific Islander | - | 7.9 | 7.2 | 7.2 | 11.9 | 6.9 | 6.3 | 4.0 | 1.0 | 6.1 | 6.7 | 3.9 |
| Native American/Other | 3.0 | 5.9 | - | - |  | 7.2 | - | - | 5.3 | 7.5 | - | - |
| 2-year | 0.7 | 0.9 | 0.7 | 0.6 | 1.2 | 1.4 | 1.3 | 1.1 | 1.7 | 1.3 | 1.4 | 1.0 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 0.9 | 0.9 | 0.8 | 0.6 | 1.9 | 1.6 | 1.4 | 1.1 | 2.5 | 1.6 | 1.5 | 1.1 |
| Black | 1.2 | 2.2 | 2.4 | 3.3 | 1.2 | 2.0 | 2.2 | 5.0 | 2.8 | 3.2 | 3.7 | 4.1 |
| Hispanic | 3.1 | 4.0 | 5.2 | 8.7 | 1.9 | 3.0 | 4.1 | 3.9 | 3.6 | 3.4 | 4.5 | 3.3 |
| Asian/Pacific Islander | - | 7.9 | 5.3 | 5.9 | 10.3 | 7.0 | 5.3 | 3.5 | 4.9 | 6.3 | 5.8 | 3.7 |
| Native American/Other | 4.0 | 7.1 | - | - | 5.8 | 6.9 | - | - | 11.8 | 8.1 | - | - |
| Vocational, technical, or trade school | 0.6 | 0.7 | 0.6 | 0.4 | 0.6 | 0.6 | 0.6 | 0.5 | 0.9 | 1.0 | 0.6 | 0.4 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 0.9 | 0.7 | 0.6 | 0.4 | 0.9 | 0.8 | 0.7 | 0.6 | 1.3 | 1.1 | 0.6 | 0.4 |
| Black | 1.1 | 1.7 | 1.8 | 1.5 | 0.6 | 1.1 | 1.5 | 1.4 | 1.6 | 2.5 | 2.5 | 0.6 |
| Hispanic | 2.4 | 2.2 | 3.1 | 3.9 | 0.8 | 1.1 | 0.9 | 1.5 | 2.4 | 3.0 | 1.4 | 1.1 |
| Asian/Pacific Islander | - | 8.5 | 1.4 | 0.0 | 3.1 | 0.0 | 3.1 | 0.0 | 5.3 | 6.4 | 3.0 | 1.6 |
| Native American/Other | 3.9 | 5.0 | - | - | 1.8 | 2.5 | - | - | 2.3 | 3.9 | - | - |

## - Not available.

SOURCE: U.S. Department of Education, National Center for
Education Statistics, National Longitudinal Study of the High School
Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond
(HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

Table S9-4 Standard errors for table 9-4

| Selected student characteristics | Senior in 1972 |  |  | Senior in 1980 |  |  | Senior in 1992 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Total | 0.6 | 0.8 | 0.8 | 0.8 | 1.2 | 1.1 | 0.7 | 0.9 | 0.8 |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |
| Low quartile | 0.9 | 1.3 | 1.2 | 1.3 | 2.0 | 1.7 | 1.5 | 2.0 | 1.9 |
| Middle quartiles | 0.7 | 1.0 | 0.9 | 1.1 | 1.7 | 1.5 | 0.8 | 1.2 | 1.0 |
| High quartile | 0.7 | 1.0 | 1.0 | 1.1 | 1.7 | 1.3 | 0.7 | 1.0 | 0.8 |
| Achievement test quartile in high school |  |  |  |  |  |  |  |  |  |
| First (low) | 1.0 | 1.4 | 1.2 | 1.5 | 2.2 | 2.1 | 1.7 | 2.6 | 2.1 |
| Second | 1.0 | 1.4 | 1.3 | 1.7 | 2.6 | 2.2 | 1.3 | 1.9 | 1.6 |
| Third | 0.9 | 1.2 | 1.3 | 1.5 | 2.3 | 1.9 | 1.0 | 1.5 | 1.3 |
| Fourth (high) | 0.7 | 1.0 | 1.0 | 1.0 | 1.4 | 1.4 | 0.7 | 1.2 | 0.7 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 0.7 | 0.9 | 0.9 | 1.0 | 1.4 | 1.2 | 0.8 | 1.0 | 0.9 |
| Black | 1.5 | 2.2 | 1.6 | 1.3 | 2.0 | 1.6 | 2.2 | 3.0 | 2.9 |
| Hispanic | 2.3 | 2.5 | 3.8 | 1.8 | 2.3 | 2.3 | 1.9 | 2.8 | 2.7 |
| Asian/Pacific Islander | 3.5 | 4.2 | 5.5 | 2.3 | 3.2 | 2.8 | 1.8 | 2.4 | 2.4 |
| Native American/Other | 4.4 | 6.1 | 6.2 | 5.0 | 6.5 | 7.2 | 5.1 | 8.7 | 6.5 |

SOURCE: U.S. Department of Education, National Center for (HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and Education Statistics, National Longitudinal Study of the High School Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond

National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

Table S9-5 Standard errors for table 9-5

| Achievement test quartile and type of of institution | Senior in 1972 |  |  |  | Senior in 1980 |  |  |  | Senior in 1992 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Socioeconomic status |  |  |  | Socioeconomic status |  |  |  | Socioeconomic status |  |  |  |
|  | Total | Low quartile | $\begin{array}{r} \text { Middle } \\ \text { quartiles } \end{array}$ | $\begin{array}{r} \text { High } \\ \text { quartile } \end{array}$ | Total | Low quartile | Middle quartiles | High quartile | Total | Low quartile | $\begin{array}{r} \text { Middle } \\ \text { quartiles } \end{array}$ | High quartile |
| Total | 0.6 | 0.9 | 0.7 | 0.8 | 0.9 | 1.2 | 1.2 | 1.3 | 0.6 | 1.3 | 0.7 | 1.0 |
| Achievement test quartile in high school |  |  |  |  |  |  |  |  |  |  |  |  |
| First (low) | 0.9 | 1.1 | 1.3 | 3.3 | 1.3 | 1.5 | 2.1 | 5.6 | 1.3 | 1.8 | 1.8 | 3.9 |
| Second | 1.0 | 1.6 | 1.3 | 2.4 | 1.6 | 2.5 | 2.3 | 4.1 | 1.2 | 2.6 | 1.5 | 3.1 |
| Third | 0.9 | 1.9 | 1.2 | 1.6 | 1.6 | 3.2 | 2.2 | 3.0 | 0.9 | 2.8 | 1.2 | 1.7 |
| Fourth (high) | 0.8 | 3.1 | 1.3 | 0.1 | 1.3 | 3.1 | 1.9 | 1.6 | 1.2 | 3.7 | 1.5 | 1.9 |
| 4-year | 0.6 | 0.7 | 0.6 | 1.1 | 0.8 | 0.9 | 1.1 | 1.7 | 0.7 | 0.8 | 0.7 | 1.3 |
| Achievement test quartile in high school |  |  |  |  |  |  |  |  |  |  |  |  |
| First (low) | 0.5 | 0.7 | 0.7 | 2.0 | 0.8 | 0.9 | 1.4 | 4.8 | 0.8 | 1.1 | 1.0 | 4.8 |
| Second | 0.7 | 1.1 | 0.9 | 2.0 | 1.3 | 1.8 | 1.7 | 4.0 | 1.0 | 1.3 | 1.2 | 2.9 |
| Third | 1.0 | 1.5 | 1.1 | 1.8 | 1.5 | 2.6 | 2.1 | 3.3 | 1.1 | 2.4 | 1.4 | 2.0 |
| Fourth (high) | 1.1 | 2.8 | 1.4 | 1.3 | 1.6 | 3.0 | 2.4 | 2.3 | 1.2 | 3.6 | 1.6 | 1.8 |
| 2-year | 0.5 | 0.6 | 0.6 | 0.9 | 0.7 | 0.9 | 1.0 | 1.3 | 0.5 | 1.1 | 0.7 | 0.9 |
| Achievement test quartile in high school |  |  |  |  |  |  |  |  |  |  |  |  |
| First (low) | 0.6 | 0.7 | 0.9 | 2.6 | 1.1 | 1.2 | 1.6 | 5.0 | 1.4 | 1.5 | 1.6 | 5.9 |
| Second | 0.8 | 1.0 | 1.1 | 2.4 | 1.3 | 2.0 | 1.9 | 3.8 | 1.1 | 2.0 | 1.4 | 3.4 |
| Third | 0.8 | 1.2 | 1.1 | 1.5 | 1.3 | 2.6 | 1.8 | 2.7 | 1.0 | 1.9 | 1.4 | 1.5 |
| Fourth (high) | 0.8 | 2.0 | 1.1 | 1.0 | 1.2 | 2.2 | 1.9 | 1.7 | 0.7 | 2.0 | 1.1 | 0.8 |

[^62]Table S9-6 Standard errors for table 9-6

| Selected characteristics | Total |  |  | 4 -year |  |  | 2-year |  |  | Vocational, technical or trade school |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1972 | 1980 | 1992 | 1972 | 1980 | 1992 | 1972 | 1980 | 1992 | 1972 | 1980 | 1992 |
| Total | 0.6 | 0.9 | 0.6 | 0.6 | 0.8 | 0.7 | 0.5 | 0.7 | 0.5 | 0.3 | 0.3 | 0.3 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 0.8 | 1.2 | 0.8 | 0.8 | 1.2 | 0.9 | 0.6 | 0.9 | 0.7 | 0.3 | 0.4 | 0.3 |
| Female | 0.8 | 1.1 | 0.8 | 0.8 | 1.1 | 0.9 | 0.5 | 0.9 | 0.7 | 0.4 | 0.5 | 0.4 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 0.7 | 1.0 | 0.7 | 0.7 | 1.0 | 0.8 | 0.6 | 0.8 | 0.6 | 0.3 | 0.4 | 0.3 |
| Black | 1.5 | 1.3 | 1.8 | 1.4 | 1.2 | 1.7 | 0.8 | 0.9 | 1.5 | 0.8 | 0.5 | 0.8 |
| Hispanic | 2.3 | 1.8 | 2.0 | 1.7 | 1.4 | 1.4 | 2.0 | 1.4 | 1.5 | 1.2 | 0.5 | 1.0 |
| Asian/ |  |  |  |  |  |  |  |  |  |  |  |  |
| Pacific Islander | 4.1 | 2.5 | 1.9 | 4.6 | 3.9 | 2.6 | 4.1 | 3.9 | 1.8 | 1.2 | 1.0 | 1.4 |
| Native American/ Other | 4.2 | 4.4 | 4.9 | 3.5 | 3.3 | 3.6 | 3.2 | 3.4 | 5.2 | 2.1 | 1.3 | 1.2 |
| Control of high school |  |  |  |  |  |  |  |  |  |  |  |  |
| Public | 0.6 | 0.9 | 0.7 | 0.6 | 0.8 | 0.7 | 0.5 | 0.7 | 0.6 | 0.3 | 0.3 | 0.3 |
| Catholic | 2.4 | 2.9 | 1.9 | 3.1 | 3.2 | 2.4 | 1.8 | 3.0 | 1.7 | 0.8 | 1.6 | 0.6 |
| Private, other | 6.6 | 5.6 | 2.3 | 15.8 | 6.0 | 3.3 | 7.6 | 2.5 | 3.1 | 4.6 | 1.7 | 1.8 |
| Urbanicity of high school |  |  |  |  |  |  |  |  |  |  |  |  |
| Central city | 1.1 | 1.7 | 1.1 | 1.0 | 1.7 | 1.3 | 0.8 | 1.3 | 1.0 | 0.5 | 0.5 | 0.6 |
| Urban fringe/ large town | 1.2 | 1.2 | 1.0 | 1.3 | 1.3 | 1.1 | 0.9 | 1.0 | 0.8 | 0.5 | 0.4 | 0.4 |
| Rural/small town | 0.8 | 1.5 | 1.0 | 0.7 | 1.4 | 1.1 | 0.6 | 1.2 | 1.0 | 0.4 | 0.5 | 0.3 |
| Achievement test quartile in high school |  |  |  |  |  |  |  |  |  |  |  |  |
| First (low) | 0.9 | 1.3 | 1.3 | 0.5 | 0.8 | 0.8 | 0.6 | 1.1 | 1.4 | 0.6 | 0.5 | 0.7 |
| Second | 1.0 | 1.6 | 1.2 | 0.7 | 1.3 | 1.0 | 0.8 | 1.3 | 1.1 | 0.6 | 0.7 | 0.6 |
| Third | 0.9 | 1.6 | 0.9 | 1.0 | 1.5 | 1.1 | 0.8 | 1.3 | 1.0 | 0.5 | 0.7 | 0.4 |
| Fourth (high) | 0.8 | 1.3 | 1.2 | 1.1 | 1.6 | 1.2 | 0.8 | 1.2 | 0.7 | 0.4 | 0.6 | 0.3 |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |  |  |  |
| Low quartile | 0.9 | 1.2 | 1.3 | 0.7 | 0.9 | 0.8 | 0.6 | 0.9 | 1.1 | 0.5 | 0.4 | 0.6 |
| Middle quartiles | 0.7 | 1.2 | 0.7 | 0.6 | 1.1 | 0.7 | 0.6 | 1.0 | 0.7 | 0.4 | 0.4 | 0.3 |
| High quartile | 0.8 | 1.3 | 1.0 | 1.1 | 1.7 | 1.3 | 0.9 | 1.3 | 0.9 | 0.4 | 0.6 | 0.5 |

[^63]Standard Error Tables
Table S9-7 Standard errors for table 9-7

| Race/ethnicity and type of institution | Senior in 1972 |  |  | Senior in 1980 |  |  | Senior in 1992 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Socioeconomic status |  |  | Socioeconomic status |  |  | Socioeconomic status |  |  |
|  | $\begin{array}{r} \text { Low } \\ \text { quartile } \\ \hline \end{array}$ | Middle quartiles | High quartile | Low quartile | Middle quartiles | High quartile | Low quartile | Middle quartiles | High quartile |
| Total | 0.9 | 0.7 | 0.8 | 1.2 | 1.2 | 1.3 | 1.3 | 0.7 | 1.0 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 1.2 | 0.8 | 0.9 | 1.8 | 1.4 | 1.5 | 1.4 | 0.8 | 1.1 |
| Black | 1.5 | 2.4 | 4.5 | 1.5 | 2.1 | 4.3 | 3.3 | 2.4 | 3.7 |
| Hispanic | 2.4 | 4.5 | 7.9 | 2.2 | 2.8 | 3.8 | 3.1 | 2.5 | 3.4 |
| Asian/Pacific Islander | 10.2 | 5.2 | 4.3 | 8.1 | 3.9 | 2.1 | 6.3 | 2.9 | 2.6 |
| Native American/Other | 5.1 | 6.8 | - | 6.6 | 6.5 | - | 7.9 | 5.7 | - |
| 4-year | 0.7 | 0.6 | 1.1 | 0.9 | 1.1 | 1.7 | 0.8 | 0.7 | 1.3 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 0.8 | 0.6 | 1.1 | 1.3 | 1.3 | 1.8 | 1.0 | 0.8 | 1.4 |
| Black | 1.6 | 2.4 | 6.3 | 1.4 | 2.0 | 4.8 | 2.2 | 2.2 | 5.1 |
| Hispanic | 1.9 | 3.1 | 6.5 | 1.6 | 2.5 | 4.6 | 1.6 | 2.3 | 4.3 |
| Asian/Pacific Islander | 9.0 | 6.7 | 6.9 | 6.4 | 5.9 | 5.4 | 6.1 | 4.0 | 3.0 |
| Native American/Other | 3.1 | 5.5 | - | 5.4 | 4.4 | - | 5.5 | 4.9 | - |
| 2-year | 0.6 | 0.6 | 0.9 | 0.9 | 1.0 | 1.3 | 1.1 | 0.7 | 0.9 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 0.7 | 0.7 | 0.9 | 1.4 | 1.1 | 1.4 | 1.0 | 0.8 | 1.0 |
| Black | 0.9 | 1.5 | 4.5 | 1.1 | 1.4 | 3.5 | 3.5 | 1.7 | 3.4 |
| Hispanic | 2.3 | 3.4 | 8.2 | 1.6 | 2.4 | 3.9 | 2.2 | 2.4 | 3.0 |
| Asian/Pacific Islander | 4.7 | 6.6 | 6.3 | 6.2 | 6.6 | 5.5 | 3.9 | 3.0 | 2.5 |
| Native American/Other | 3.9 | 5.2 | - | 4.6 | 5.5 | - | 7.7 | 5.2 | - |
| Vocational, technical, or trade school | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.3 | 0.5 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 0.6 | 0.4 | 0.4 | 0.6 | 0.5 | 0.7 | 0.6 | 0.4 | 0.5 |
| Black | 1.0 | 1.4 | 2.8 | 0.6 | 0.8 | 1.1 | 1.3 | 0.9 | 2.9 |
| Hispanic | 1.5 | 1.9 | 4.3 | 0.7 | 0.6 | 2.6 | 1.7 | 1.2 | 4.0 |
| Asian/Pacific Islander | 4.1 | 1.3 | 1.8 | 0.4 | 1.6 | 2.3 | 5.1 | 2.2 | 1.2 |
| Native American/Other | 2.1 | 3.9 | - | 2.3 | 0.0 | - | 2.3 | 1.8 | - |

- Not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond
(HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

Table S9-8 Standard errors for table 9-8

| Race/ethnicity and type of institution | Senior in 1972 |  |  |  | Senior in 1980 |  |  |  | Senior in 1992 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Achievement test quartile |  |  |  | Achievement test quartile |  |  |  | Achievement test quartile |  |  |  |
|  | $\begin{array}{r} \text { First } \\ \text { (low) } \\ \hline \end{array}$ | Second | Third | Fourth (high) | $\begin{array}{r} \text { First } \\ \text { (low) } \\ \hline \end{array}$ | Second | Third | Fourth (high) | $\begin{array}{r} \text { First } \\ \text { (low) } \\ \hline \end{array}$ | Second | Third | Fourth (high) |
| Total | 0.9 | 1.0 | 0.9 | 0.8 | 1.3 | 1.6 | 1.6 | 1.3 | 1.3 | 1.2 | 0.9 | 1.2 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 1.2 | 1.1 | 1.0 | 0.9 | 2.1 | 2.0 | 1.8 | 1.3 | 1.8 | 1.4 | 1.0 | 1.3 |
| Black | 1.8 | 3.0 | 3.8 | 4.8 | 1.6 | 2.5 | 3.0 | 3.6 | 2.9 | 3.3 | 3.4 | 4.7 |
| Hispanic | 3.3 | 4.1 | 5.9 | 8.6 | 2.2 | 3.3 | 3.6 | 4.1 | 2.9 | 3.9 | 3.6 | 4.0 |
| Asian/Pacific Islander | - | 9.0 | 6.6 | 5.8 | 10.2 | 6.4 | 5.1 | 2.0 | 5.4 | 6.1 | 4.4 | 2.4 |
| Native American/Other | 5.2 | 8.2 | - | - | 7.1 | 7.8 | - | - | 12.1 | 7.2 | - | - |
| 4-year | 0.5 | 0.7 | 1.0 | 1.1 | 0.8 | 1.3 | 1.5 | 1.6 | 0.8 | 1.0 | 1.1 | 1.2 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 0.6 | 0.8 | 1.0 | 1.1 | 1.3 | 1.6 | 1.7 | 1.7 | 1.0 | 1.2 | 1.3 | 1.3 |
| Black | 1.5 | 2.9 | 4.5 | 5.8 | 1.4 | 2.4 | 3.4 | 5.4 | 2.1 | 2.7 | 3.5 | 4.9 |
| Hispanic | 1.5 | 3.2 | 6.2 | 9.1 | 1.4 | 2.4 | 3.7 | 5.2 | 1.9 | 2.2 | 4.1 | 4.9 |
| Asian/Pacific Islander | - | 7.5 | 8.1 | 7.4 | 7.1 | 7.2 | 6.4 | 6.1 | 0.9 | 4.7 | 5.3 | 3.4 |
| Native American/Other | 2.8 | 5.5 | - | - | 4.7 | 6.3 | - | - | 5.2 | 6.0 | - | - |
| 2-year | 0.6 | 0.8 | 0.8 | 0.8 | 1.1 | 1.3 | 1.3 | 1.2 | 1.4 | 1.1 | 1.0 | 0.7 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 0.8 | 1.0 | 0.9 | 0.8 | 1.7 | 1.6 | 1.5 | 1.2 | 2.0 | 1.4 | 1.2 | 0.7 |
| Black | 1.0 | 2.3 | 2.5 | 3.5 | 1.2 | 1.7 | 2.0 | 3.5 | 2.3 | 2.9 | 2.0 | 1.3 |
| Hispanic | 2.8 | 4.0 | 5.4 | 8.3 | 1.7 | 2.7 | 4.2 | 4.3 | 2.6 | 3.0 | 2.8 | 2.7 |
| Asian/Pacific Islander | - | 8.2 | 8.0 | 6.2 | 9.9 | 7.9 | 6.2 | 5.6 | 4.5 | 5.4 | 4.0 | 3.1 |
| Native American/Other | 3.1 | 7.5 | - | - | 5.3 | 7.7 | - | - | 13.1 | 9.2 | - | - |
| Vocational, technical, or trade school | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 0.6 | 0.7 | 0.6 | 0.4 | 0.3 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 0.8 | 0.6 | 0.5 | 0.4 | 0.8 | 0.8 | 0.8 | 0.6 | 1.1 | 0.6 | 0.4 | 0.3 |
| Black | 1.1 | 1.5 | 1.5 | 1.5 | 0.6 | 1.1 | 1.2 | 1.7 | 1.1 | 1.1 | 1.9 | 0.6 |
| Hispanic | 1.9 | 2.1 | 2.6 | 3.1 | 0.8 | 0.8 | 1.3 | 2.9 | 2.2 | 2.7 | 1.1 | 0.8 |
| Asian/Pacific Islander | - | 9.0 | 1.4 | 0.0 | 3.1 | 0.0 | 2.2 | 2.2 | 2.5 | 5.7 | 2.4 | 1.4 |
| Native American/Other | 3.7 | 0.0 | - | - | 1.8 | 2.6 | - | - | 0.0 | 3.6 | - | - |

## - Not available

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond
(HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

Standard Error Tables
Table S9-9 Standard errors for table 9-9

| Selected student characteristics | Senior in 1972 |  |  | Senior in 1980 |  |  | Senior in 1992 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Total | 0.6 | 0.8 | 0.8 | 0.9 | 1.2 | 1.1 | 0.6 | 0.8 | 0.8 |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |
| Low quartile | 0.9 | 1.2 | 1.2 | 1.2 | 1.9 | 1.6 | 1.3 | 1.7 | 1.8 |
| Middle quartiles | 0.7 | 1.0 | 1.0 | 1.2 | 1.8 | 1.5 | 0.7 | 1.1 | 1.0 |
| High quartile | 0.8 | 1.2 | 1.2 | 1.3 | 2.0 | 1.7 | 1.0 | 1.4 | 1.6 |
| Achievement test quartile in high school |  |  |  |  |  |  |  |  |  |
| First (low) | 0.9 | 1.2 | 1.2 | 1.3 | 2.0 | 1.9 | 1.3 | 1.9 | 1.9 |
| Second | 1.0 | 1.5 | 1.3 | 1.6 | 2.4 | 2.2 | 1.2 | 1.8 | 1.6 |
| Third | 0.9 | 1.2 | 1.4 | 1.6 | 2.5 | 2.0 | 0.9 | 1.4 | 1.3 |
| Fourth (high) | 0.8 | 1.1 | 1.2 | 1.3 | 1.8 | 1.7 | 1.2 | 1.5 | 1.9 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 0.7 | 0.9 | 0.9 | 1.0 | 1.4 | 1.3 | 0.7 | 0.9 | 0.9 |
| Black | 1.5 | 2.0 | 1.8 | 1.3 | 2.1 | 1.7 | 1.8 | 2.2 | 2.7 |
| Hispanic | 2.3 | 2.8 | 3.6 | 1.8 | 2.4 | 2.4 | 2.0 | 3.0 | 2.3 |
| Asian/Pacific Islander | 4.1 | 4.5 | 6.7 | 2.5 | 3.8 | 3.0 | 1.9 | 2.9 | 3.0 |
| Native American/Other | 4.2 | 6.1 | 5.8 | 4.4 | 6.0 | 6.6 | 4.9 | 6.8 | 6.7 |

[^64]Table S10-1 Standard errors for table 10-1

| October | Aged 18-24 |  |  |  | Aged 25-34 |  |  |  | Aged 35 or older |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | anic | Total | White | Black | anic | Total | White | Black | anic |
|  | 2-year institutions |  |  |  |  |  |  |  |  |  |  |  |
| 1973 | 0.2 | 0.3 | 0.8 | 2.2 | 0.1 | 0.1 | 0.6 | 1.5 | - | - | - | - |
| 1974 | 0.3 | 0.3 | 0.9 | 2.4 | 0.1 | 0.1 | 0.7 | 1.3 | - | - | - | - |
| 1975 | 0.3 | 0.3 | 1.1 | 2.3 | 0.2 | 0.2 | 0.8 | 1.5 | - | - | - | - |
| 1976 | 0.3 | 0.3 | 1.0 | 2.4 | 0.2 | 0.2 | 0.7 | 1.6 | 0.1 | 0.1 | 0.4 | 0.9 |
| 1977 | 0.3 | 0.3 | 1.0 | 2.3 | 0.2 | 0.2 | 0.8 | 1.3 | - | - | - | - |
| 1978 | 0.3 | 0.3 | 0.9 | 2.1 | 0.1 | 0.1 | 0.6 | 1.3 | 0.1 | 0.1 | 0.4 | 0.8 |
| 1979 | 0.3 | 0.3 | 1.0 | 2.2 | 0.1 | 0.1 | 0.6 | 1.2 | 0.1 | 0.1 | 0.3 | 0.7 |
| 1980 | 0.3 | 0.3 | 1.0 | 2.0 | 0.1 | 0.1 | 0.6 | 1.1 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1981 | 0.3 | 0.3 | 0.9 | 2.1 | 0.1 | 0.1 | 0.5 | 1.1 | 0.1 | 0.1 | 0.3 | 0.8 |
| 1982 | 0.3 | 0.3 | 0.9 | 2.2 | 0.1 | 0.1 | 0.6 | 1.1 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1983 | 0.3 | 0.3 | 0.9 | 2.1 | 0.1 | 0.1 | 0.5 | 1.2 | 0.1 | 0.1 | 0.2 | 0.5 |
| 1984 | 0.3 | 0.3 | 1.0 | 1.9 | 0.1 | 0.1 | 0.5 | 1.0 | 0.1 | 0.1 | 0.3 | 0.4 |
| 1985 | 0.3 | 0.3 | 0.9 | 1.9 | 0.1 | 0.1 | 0.5 | 1.0 | 0.1 | 0.1 | 0.3 | 0.5 |
| 1986 | 0.3 | 0.3 | 0.9 | 2.0 | 0.1 | 0.1 | 0.4 | 1.0 | 0.1 | 0.1 | 0.3 | 0.4 |
| 1987 | 0.3 | 0.3 | 1.0 | 1.9 | 0.1 | 0.1 | 0.4 | 0.9 | 0.1 | 0.1 | 0.2 | 0.4 |
| 1988 | 0.4 | 0.4 | 1.0 | 2.4 | 0.1 | 0.1 | 0.5 | 1.0 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1989 | 0.3 | 0.4 | 1.1 | 2.3 | 0.1 | 0.2 | 0.5 | 1.0 | 0.1 | 0.1 | 0.2 | 0.7 |
| 1990 | 0.3 | 0.4 | 1.1 | 2.1 | 0.1 | 0.2 | 0.5 | 0.9 | 0.1 | 0.1 | 0.2 | 0.6 |
| 1991 | 0.4 | 0.4 | 1.2 | 2.2 | 0.1 | 0.2 | 0.5 | 1.0 | 0.1 | 0.1 | 0.2 | 0.5 |
| 1992 | 0.4 | 0.4 | 1.1 | 2.3 | 0.1 | 0.2 | 0.4 | 0.9 | 0.0 | 0.1 | 0.2 | 0.5 |
| 1993 | 0.4 | 0.4 | 1.1 | 2.2 | 0.1 | 0.1 | 0.5 | 0.9 | 0.1 | 0.1 | 0.2 | 0.5 |
| 1994 | 0.3 | 0.4 | 1.1 | 1.9 | 0.1 | 0.2 | 0.5 | 0.9 | 0.1 | 0.1 | 0.2 | 0.5 |
| 1995 | 0.4 | 0.4 | 1.1 | 1.9 | 0.1 | 0.2 | 0.5 | 0.8 | 0.0 | 0.0 | 0.2 | 0.5 |
|  | 4-year institutions |  |  |  |  |  |  |  |  |  |  |  |
| 1973 | 0.4 | 0.4 | 1.2 | 2.5 | 0.1 | 0.1 | 0.6 | 1.2 | - | - | - | - |
| 1974 | 0.4 | 0.4 | 1.3 | 2.2 | 0.1 | 0.1 | 0.6 | 1.0 | - | - | - | - |
| 1975 | 0.4 | 0.4 | 1.3 | 2.5 | 0.1 | 0.1 | 0.6 | 1.0 | - | - | - | - |
| 1976 | 0.4 | 0.5 | 1.5 | 2.7 | 0.2 | 0.2 | 0.9 | 1.2 | 0.1 | 0.1 | 0.5 | 0.8 |
| 1977 | 0.4 | 0.4 | 1.4 | 2.5 | 0.2 | 0.2 | 0.9 | 1.6 | - | - | - | - |
| 1978 | 0.4 | 0.4 | 1.4 | 2.3 | 0.2 | 0.2 | 0.8 | 1.4 | 0.1 | 0.1 | 0.4 | 0.9 |
| 1979 | 0.4 | 0.4 | 1.4 | 2.3 | 0.2 | 0.2 | 0.7 | 1.5 | 0.1 | 0.1 | 0.4 | 0.6 |
| 1980 | 0.4 | 0.4 | 1.3 | 2.3 | 0.2 | 0.2 | 0.7 | 1.2 | 0.1 | 0.1 | 0.4 | 0.7 |
| 1981 | 0.4 | 0.4 | 1.3 | 2.1 | 0.2 | 0.2 | 0.7 | 1.2 | 0.1 | 0.1 | 0.4 | 0.6 |
| 1982 | 0.4 | 0.5 | 1.4 | 2.1 | 0.2 | 0.2 | 0.7 | 1.1 | 0.1 | 0.1 | 0.4 | 0.7 |
| 1983 | 0.4 | 0.5 | 1.3 | 2.4 | 0.2 | 0.2 | 0.6 | 1.1 | 0.1 | 0.1 | 0.4 | 0.7 |
| 1984 | 0.4 | 0.5 | 1.2 | 2.3 | 0.2 | 0.2 | 0.6 | 1.3 | 0.1 | 0.1 | 0.3 | 0.4 |
| 1985 | 0.4 | 0.5 | 1.2 | 2.2 | 0.2 | 0.2 | 0.6 | 1.2 | 0.1 | 0.1 | 0.3 | 0.7 |
| 1986 | 0.4 | 0.5 | 1.4 | 2.2 | 0.2 | 0.2 | 0.6 | 1.2 | 0.1 | 0.1 | 0.3 | 0.7 |
| 1987 | 0.5 | 0.5 | 1.4 | 2.1 | 0.2 | 0.2 | 0.6 | 1.1 | 0.1 | 0.1 | 0.3 | 0.5 |
| 1988 | 0.5 | 0.6 | 1.5 | 2.7 | 0.2 | 0.2 | 0.6 | 1.2 | 0.1 | 0.1 | 0.3 | 0.7 |
| 1989 | 0.5 | 0.6 | 1.5 | 2.5 | 0.2 | 0.2 | 0.6 | 1.1 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1990 | 0.5 | 0.6 | 1.5 | 2.2 | 0.2 | 0.2 | 0.5 | 0.9 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1991 | 0.5 | 0.6 | 1.4 | 2.4 | 0.2 | 0.2 | 0.6 | 1.1 | 0.1 | 0.1 | 0.3 | 0.5 |
| 1992 | 0.5 | 0.6 | 1.5 | 2.4 | 0.2 | 0.2 | 0.6 | 1.0 | 0.1 | 0.1 | 0.3 | 0.5 |
| 1993 | 0.5 | 0.6 | 1.5 | 2.3 | 0.2 | 0.2 | 0.6 | 1.0 | 0.1 | 0.1 | 0.3 | 0.5 |
| 1994 | 0.5 | 0.6 | 1.5 | 2.3 | 0.2 | 0.2 | 0.7 | 1.1 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1995 | 0.5 | 0.6 | 1.5 | 2.3 | 0.2 | 0.2 | 0.6 | 1.0 | 0.1 | 0.1 | 0.3 | 0.5 |

Standard Error Tables
Table S10-2 Standard errors for table 10-2

|  | Aged 18-24 |  |  |  | Aged 25-34 |  |  |  | Aged 35 or older |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total | White | Black | anic | Total | White | Black | anic | Total | White | Black | anic |
|  | Full-time |  |  |  |  |  |  |  |  |  |  |  |
| 1972 | 0.5 | 0.5 | 1.5 | 3.0 | 0.2 | 0.2 | 0.7 | 1.3 | - | - | - | - |
| 1973 | 0.4 | 0.5 | 1.5 | 3.2 | 0.2 | 0.2 | 0.8 | 1.4 | - | - | - | - |
| 1974 | 0.4 | 0.5 | 1.5 | 3.0 | 0.2 | 0.2 | 0.7 | 1.4 | - | - | - | - |
| 1975 | 0.4 | 0.5 | 1.6 | 3.1 | 0.2 | 0.2 | 0.9 | 1.4 | - | - | - | - |
| 1976 | 0.4 | 0.5 | 1.6 | 3.0 | 0.2 | 0.2 | 0.8 | 1.3 | *0.0 | *0.0 | 0.3 | 0.6 |
| 1977 | 0.4 | 0.5 | 1.5 | 2.9 | 0.2 | 0.2 | 0.9 | 1.3 | - | - | - | - |
| 1978 | 0.4 | 0.5 | 1.5 | 2.5 | 0.2 | 0.2 | 0.7 | 1.2 | *0.0 | *0.0 | 0.3 | 0.4 |
| 1979 | 0.4 | 0.5 | 1.5 | 2.7 | 0.1 | 0.2 | 0.6 | 1.4 | *0.0 | *0.0 | 0.3 | 0.5 |
| 1980 | 0.4 | 0.5 | 1.4 | 2.6 | 0.1 | 0.1 | 0.6 | 1.1 | *0.0 | *0.0 | 0.2 | 0.5 |
| 1981 | 0.4 | 0.5 | 1.4 | 2.5 | 0.1 | 0.1 | 0.6 | 1.0 | *0.0 | *0.0 | 0.3 | 0.6 |
| 1982 | 0.4 | 0.5 | 1.4 | 2.5 | 0.2 | 0.2 | 0.6 | 1.1 | *0.0 | *0.0 | 0.3 | 0.1 |
| 1983 | 0.4 | 0.5 | 1.4 | 2.7 | 0.2 | 0.2 | 0.6 | 1.1 | *0.0 | *0.0 | 0.2 | 0.3 |
| 1984 | 0.5 | 0.5 | 1.4 | 2.6 | 0.2 | 0.2 | 0.5 | 1.1 | *0.0 | *0.0 | 0.2 | 0.3 |
| 1985 | 0.5 | 0.5 | 1.4 | 2.5 | 0.1 | 0.2 | 0.5 | 1.0 | *0.0 | *0.0 | 0.2 | 0.4 |
| 1986 | 0.5 | 0.5 | 1.4 | 2.4 | 0.1 | 0.1 | 0.5 | 1.0 | *0.0 | *0.0 | 0.2 | 0.5 |
| 1987 | 0.5 | 0.6 | 1.5 | 2.3 | 0.1 | 0.1 | 0.5 | 0.9 | *0.0 | *0.0 | 0.2 | 0.3 |
| 1988 | 0.5 | 0.6 | 1.6 | 3.0 | 0.2 | 0.2 | 0.5 | 0.9 | *0.0 | *0.0 | 0.2 | 0.4 |
| 1989 | 0.5 | 0.6 | 1.7 | 2.8 | 0.2 | 0.2 | 0.4 | 0.9 | *0.0 | *0.0 | 0.2 | 0.5 |
| 1990 | 0.5 | 0.6 | 1.6 | 2.5 | 0.2 | 0.2 | 0.5 | 0.7 | *0.0 | *0.0 | 0.2 | 0.4 |
| 1991 | 0.5 | 0.6 | 1.6 | 2.7 | 0.2 | 0.2 | 0.5 | 1.0 | *0.0 | *0.0 | 0.2 | 0.3 |
| 1992 | 0.5 | 0.6 | 1.6 | 2.7 | 0.2 | 0.2 | 0.5 | 0.7 | *0.0 | *0.0 | 0.2 | 0.4 |
| 1993 | 0.5 | 0.6 | 1.6 | 2.6 | 0.2 | 0.2 | 0.5 | 0.9 | *0.0 | *0.0 | 0.2 | 0.3 |
| 1994 | 0.5 | 0.6 | 1.6 | 2.3 | 0.2 | 0.2 | 0.5 | 0.9 | *0.0 | *0.0 | 0.2 | 0.4 |
| 1995 | 0.5 | 0.6 | 1.6 | 2.4 | 0.2 | 0.2 | 0.6 | 0.8 | *0.0 | *0.0 | 0.2 | 0.3 |
|  | Part-time |  |  |  |  |  |  |  |  |  |  |  |
| 1972 | 0.2 | 0.2 | 0.8 | 1.7 | 0.2 | 0.2 | 0.9 | 1.6 | - | - | - | - |
| 1973 | 0.2 | 0.2 | 0.7 | 1.7 | 0.2 | 0.2 | 0.7 | 2.2 | - | - | - | - |
| 1974 | 0.2 | 0.2 | 0.7 | 1.8 | 0.2 | 0.2 | 0.9 | 1.8 | - | - | - | - |
| 1975 | 0.2 | 0.2 | 0.8 | 1.8 | 0.2 | 0.2 | 0.8 | 1.6 | - | - | - | - |
| 1976 | 0.2 | 0.2 | 0.7 | 1.7 | 0.2 | 0.2 | 0.8 | 1.6 | 0.1 | 0.1 | 0.5 | 1.1 |
| 1977 | 0.2 | 0.2 | 0.8 | 1.5 | 0.2 | 0.2 | 0.9 | 1.6 | - | - | - | - |
| 1978 | 0.2 | 0.2 | 0.7 | 1.8 | 0.2 | 0.2 | 0.8 | 1.5 | 0.1 | 0.1 | 0.5 | 1.1 |
| 1979 | 0.2 | 0.2 | 0.7 | 1.5 | 0.2 | 0.2 | 0.7 | 1.4 | 0.1 | 0.1 | 0.4 | 0.8 |
| 1980 | 0.2 | 0.2 | 0.7 | 1.6 | 0.2 | 0.2 | 0.7 | 1.2 | 0.1 | 0.1 | 0.4 | 0.8 |
| 1981 | 0.2 | 0.2 | 0.7 | 1.3 | 0.2 | 0.2 | 0.7 | 1.3 | 0.1 | 0.1 | 0.4 | 0.8 |
| 1982 | 0.2 | 0.3 | 0.7 | 1.8 | 0.2 | 0.2 | 0.7 | 1.2 | 0.1 | 0.1 | 0.4 | 0.9 |
| 1983 | 0.2 | 0.3 | 0.7 | 1.8 | 0.2 | 0.2 | 0.6 | 1.2 | 0.1 | 0.1 | 0.4 | 0.8 |
| 1984 | 0.2 | 0.3 | 0.8 | 1.5 | 0.2 | 0.2 | 0.6 | 1.2 | 0.1 | 0.1 | 0.4 | 0.6 |
| 1985 | 0.2 | 0.3 | 0.7 | 1.4 | 0.2 | 0.2 | 0.5 | 1.3 | 0.1 | 0.1 | 0.4 | 0.8 |
| 1986 | 0.2 | 0.3 | 0.7 | 1.6 | 0.2 | 0.2 | 0.5 | 1.2 | 0.1 | 0.1 | 0.4 | 0.7 |
| 1987 | 0.3 | 0.3 | 0.8 | 1.6 | 0.2 | 0.2 | 0.6 | 1.1 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1988 | 0.3 | 0.3 | 0.7 | 2.0 | 0.2 | 0.2 | 0.6 | 1.3 | 0.1 | 0.1 | 0.4 | 0.9 |
| 1989 | 0.3 | 0.3 | 0.8 | 1.8 | 0.2 | 0.2 | 0.6 | 1.2 | 0.1 | 0.1 | 0.3 | 0.8 |
| 1990 | 0.3 | 0.3 | 0.9 | 1.6 | 0.2 | 0.2 | 0.5 | 1.1 | 0.1 | 0.1 | 0.3 | 0.7 |
| 1991 | 0.3 | 0.3 | 0.7 | 1.7 | 0.2 | 0.2 | 0.6 | 1.1 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1992 | 0.3 | 0.3 | 0.8 | 1.8 | 0.2 | 0.2 | 0.5 | 1.1 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1993 | 0.3 | 0.3 | 0.8 | 1.6 | 0.2 | 0.2 | 0.6 | 1.0 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1994 | 0.3 | 0.3 | 0.8 | 1.8 | 0.2 | 0.2 | 0.7 | 1.1 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1995 | 0.3 | 0.3 | 0.9 | 1.6 | 0.2 | 0.2 | 0.6 | 1.0 | 0.1 | 0.1 | 0.3 | 0.6 |

- Not available.
* Standard errors less than 0.05 are rounded to 0.0.

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table S10-3 Standard errors for table 10-3

|  | Aged 18-24 |  |  |  | Aged 25-34 |  |  |  | Aged 35 or older |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total | White | Black | anic | Total | White | Black | anic | Total | White | Black Hispanic |  |
|  |  |  |  |  | Undergraduates |  |  |  |  |  |  |  |
| 1972 | 0.5 | 0.5 | 1.6 | 3.2 | 0.2 | 0.2 | 0.9 | 1.9 | - | - | - | - |
| 1973 | 0.4 | 0.5 | 1.5 | 3.3 | 0.2 | 0.2 | 0.9 | 1.9 | - | - | - | - |
| 1974 | 0.4 | 0.5 | 1.5 | 3.1 | 0.2 | 0.2 | 1.0 | 1.8 | - | - | - | - |
| 1975 | 0.4 | 0.5 | 1.7 | 3.2 | 0.2 | 0.2 | 1.0 | 2.0 | - | - | - | - |
| 1976 | 0.4 | 0.5 | 1.6 | 3.2 | 0.2 | 0.2 | 1.0 | 1.8 | 0.1 | 0.1 | 0.5 | 1.1 |
| 1977 | 0.4 | 0.5 | 1.6 | 3.1 | 0.2 | 0.2 | 1.0 | 1.8 | - | - | - | - |
| 1978 | 0.4 | 0.5 | 1.6 | 2.8 | 0.2 | 0.2 | 0.9 | 1.6 | 0.1 | 0.1 | 0.5 | 0.9 |
| 1979 | 0.4 | 0.5 | 1.6 | 2.9 | 0.2 | 0.2 | 0.8 | 1.7 | 0.1 | 0.1 | 0.4 | 0.8 |
| 1980 | 0.4 | 0.5 | 1.5 | 2.8 | 0.2 | 0.2 | 0.8 | 1.4 | 0.1 | 0.1 | 0.4 | 0.8 |
| 1981 | 0.4 | 0.5 | 1.4 | 2.6 | 0.2 | 0.2 | 0.7 | 1.4 | 0.1 | 0.1 | 0.4 | 0.9 |
| 1982 | 0.5 | 0.5 | 1.5 | 2.8 | 0.2 | 0.2 | 0.8 | 1.4 | 0.1 | 0.1 | 0.4 | 0.8 |
| 1983 | 0.5 | 0.5 | 1.5 | 2.9 | 0.2 | 0.2 | 0.7 | 1.4 | 0.1 | 0.1 | 0.4 | 0.8 |
| 1984 | 0.5 | 0.5 | 1.4 | 2.7 | 0.2 | 0.2 | 0.7 | 1.4 | 0.1 | 0.1 | 0.3 | 0.4 |
| 1985 | 0.5 | 0.5 | 1.5 | 2.7 | 0.2 | 0.2 | 0.7 | 1.3 | 0.1 | 0.1 | 0.3 | 0.7 |
| 1986 | 0.5 | 0.5 | 1.5 | 2.7 | 0.2 | 0.2 | 0.7 | 1.3 | 0.1 | 0.1 | 0.4 | 0.7 |
| 1987 | 0.5 | 0.6 | 1.5 | 2.6 | 0.2 | 0.2 | 0.7 | 1.2 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1988 | 0.6 | 0.6 | 1.7 | 3.3 | 0.2 | 0.2 | 0.7 | 1.3 | 0.1 | 0.1 | 0.4 | 0.8 |
| 1989 | 0.6 | 0.6 | 1.7 | 3.1 | 0.2 | 0.2 | 0.6 | 1.3 | 0.1 | 0.1 | 0.3 | 0.8 |
| 1990 | 0.5 | 0.6 | 1.6 | 2.8 | 0.2 | 0.2 | 0.6 | 1.1 | 0.1 | 0.1 | 0.3 | 0.7 |
| 1991 | 0.5 | 0.6 | 1.7 | 2.9 | 0.2 | 0.2 | 0.7 | 1.3 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1992 | 0.5 | 0.6 | 1.7 | 2.9 | 0.2 | 0.2 | 0.6 | 1.3 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1993 | 0.6 | 0.6 | 1.7 | 2.8 | 0.2 | 0.2 | 0.7 | 1.2 | 0.1 | 0.1 | 0.3 | 0.6 |
| 1994 | 0.5 | 0.6 | 1.7 | 2.7 | 0.2 | 0.2 | 0.7 | 1.2 | 0.1 | 0.1 | 0.3 | 0.7 |
| 1995 | 0.6 | 0.7 | 1.7 | 2.6 | 0.2 | 0.2 | 0.7 | 1.1 | 0.1 | 0.1 | 0.3 | 0.6 |
| Graduates |  |  |  |  |  |  |  |  |  |  |  |  |
| 1972 | 0.2 | 0.2 | 0.5 | 0.9 | 0.2 | 0.2 | 0.7 | 0.9 | - | - | - | - |
| 1973 | 0.2 | 0.2 | 0.4 | 1.0 | 0.2 | 0.2 | 0.5 | 1.6 | - | - | - | - |
| 1974 | 0.2 | 0.2 | 0.4 | 0.8 | 0.2 | 0.2 | 0.6 | 1.4 | - | - | - | - |
| 1975 | 0.2 | 0.2 | 0.4 | 1.0 | 0.2 | 0.2 | 0.5 | 0.8 | - | - | - | - |
| 1976 | 0.2 | 0.2 | 0.5 | 1.0 | 0.2 | 0.2 | 0.6 | 0.9 | 0.1 | 0.1 | 0.3 | 0.4 |
| 1977 | 0.2 | 0.2 | 0.4 | 0.8 | 0.2 | 0.2 | 0.6 | 1.2 | - | - | - | - |
| 1978 | 0.2 | 0.2 | 0.4 | 0.9 | 0.2 | 0.2 | 0.5 | 1.0 | 0.1 | 0.1 | 0.3 | 0.7 |
| 1979 | 0.1 | 0.2 | 0.4 | 0.6 | 0.2 | 0.2 | 0.5 | 1.0 | 0.1 | 0.1 | 0.3 | 0.4 |
| 1980 | 0.2 | 0.2 | 0.4 | 0.6 | 0.2 | 0.2 | 0.5 | 0.9 | 0.1 | 0.1 | 0.3 | 0.4 |
| 1981 | 0.1 | 0.2 | 0.4 | 0.8 | 0.1 | 0.2 | 0.5 | 0.9 | 0.1 | 0.1 | 0.3 | 0.3 |
| 1982 | 0.2 | 0.2 | 0.4 | 0.6 | 0.2 | 0.2 | 0.5 | 0.9 | 0.1 | 0.1 | 0.3 | 0.5 |
| 1983 | 0.2 | 0.2 | 0.4 | 0.8 | 0.2 | 0.2 | 0.4 | 0.8 | 0.1 | 0.1 | 0.3 | 0.4 |
| 1984 | 0.2 | 0.2 | 0.4 | 0.8 | 0.1 | 0.2 | 0.4 | 0.8 | 0.1 | 0.1 | 0.2 | 0.5 |
| 1985 | 0.2 | 0.2 | 0.3 | 0.8 | 0.1 | 0.2 | 0.4 | 0.9 | 0.1 | 0.1 | 0.2 | 0.5 |
| 1986 | 0.2 | 0.2 | 0.4 | 0.6 | 0.1 | 0.2 | 0.3 | 0.8 | 0.1 | 0.1 | 0.2 | 0.5 |
| 1987 | 0.2 | 0.2 | 0.5 | 0.6 | 0.1 | 0.2 | 0.4 | 0.7 | 0.1 | 0.1 | 0.2 | 0.4 |
| 1988 | 0.2 | 0.2 | 0.5 | 0.6 | 0.1 | 0.2 | 0.4 | 0.8 | 0.1 | 0.1 | 0.2 | 0.6 |
| 1989 | 0.2 | 0.2 | 0.5 | 0.7 | 0.2 | 0.2 | 0.3 | 0.6 | 0.1 | 0.1 | 0.2 | 0.5 |
| 1990 | 0.2 | 0.2 | 0.5 | 0.4 | 0.1 | 0.2 | 0.3 | 0.7 | 0.1 | 0.1 | 0.2 | 0.4 |
| 1991 | 0.2 | 0.2 | 0.4 | 0.6 | 0.1 | 0.2 | 0.4 | 0.7 | 0.1 | 0.1 | 0.2 | 0.4 |
| 1992 | 0.2 | 0.2 | 0.4 | 0.6 | 0.1 | 0.2 | 0.3 | 0.5 | *0.0 | 0.1 | 0.2 | 0.3 |
| 1993 | 0.2 | 0.2 | 0.3 | 0.5 | 0.1 | 0.2 | 0.4 | 0.7 | *0.0 | 0.1 | 0.2 | 0.3 |
| 1994 | 0.2 | 0.2 | 0.4 | 0.6 | 0.1 | 0.2 | 0.4 | 0.7 | *0.0 | 0.1 | 0.2 | 0.4 |
| 1995 | 0.2 | 0.2 | 0.5 | 0.7 | 0.2 | 0.2 | 0.4 | 0.5 | 0.1 | 0.1 | 0.2 | 0.3 |

* Standard errors less than 0.05 are rounded to 0.0 .
- Not available.

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Standard Error Tables
Table S10-4 Standard errors for table 10-4

| October | Aged 18-24 |  |  |  | Aged 25-34 |  |  |  | Aged 35 or older |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
| 1972 | 0.5 | 0.5 | 1.7 | 3.3 | 0.3 | 0.3 | 1.1 | 2.0 | - | - | - | - |
| 1973 | 0.5 | 0.5 | 1.6 | 3.4 | 0.3 | 0.3 | 1.0 | 2.4 | - | - | - | - |
| 1974 | 0.5 | 0.5 | 1.6 | 3.2 | 0.3 | 0.3 | 1.1 | 2.2 | - | - | - | - |
| 1975 | 0.5 | 0.5 | 1.7 | 3.3 | 0.3 | 0.3 | 1.1 | 2.1 | - | - | - | - |
| 1976 | 0.5 | 0.5 | 1.7 | 3.2 | 0.3 | 0.3 | 1.1 | 2.0 | 0.1 | 0.1 | 0.6 | 1.2 |
| 1977 | 0.5 | 0.5 | 1.6 | 3.1 | 0.3 | 0.3 | 1.2 | 2.1 | - | - | - | - |
| 1978 | 0.4 | 0.5 | 1.6 | 2.9 | 0.2 | 0.3 | 1.0 | 1.8 | 0.1 | 0.1 | 0.6 | 1.2 |
| 1979 | 0.4 | 0.5 | 1.6 | 2.9 | 0.2 | 0.3 | 0.9 | 1.9 | 0.1 | 0.1 | 0.5 | 0.9 |
| 1980 | 0.4 | 0.5 | 1.5 | 2.8 | 0.2 | 0.3 | 0.9 | 1.6 | 0.1 | 0.1 | 0.5 | 0.9 |
| 1981 | 0.4 | 0.5 | 1.5 | 2.7 | 0.2 | 0.2 | 0.9 | 1.6 | 0.1 | 0.1 | 0.5 | 1.0 |
| 1982 | 0.5 | 0.5 | 1.5 | 2.8 | 0.2 | 0.3 | 0.9 | 1.6 | 0.1 | 0.1 | 0.5 | 0.9 |
| 1983 | 0.5 | 0.5 | 1.5 | 2.9 | 0.2 | 0.3 | 0.8 | 1.6 | 0.1 | 0.1 | 0.4 | 0.9 |
| 1984 | 0.5 | 0.5 | 1.5 | 2.8 | 0.2 | 0.3 | 0.8 | 1.6 | 0.1 | 0.1 | 0.4 | 0.6 |
| 1985 | 0.5 | 0.5 | 1.5 | 2.8 | 0.2 | 0.3 | 0.7 | 1.6 | 0.1 | 0.1 | 0.4 | 0.9 |
| 1986 | 0.5 | 0.6 | 1.5 | 2.7 | 0.2 | 0.2 | 0.8 | 1.5 | 0.1 | 0.1 | 0.4 | 0.8 |
| 1987 | 0.5 | 0.6 | 1.5 | 2.6 | 0.2 | 0.2 | 0.7 | 1.4 | 0.1 | 0.1 | 0.4 | 0.7 |
| 1988 | 0.6 | 0.6 | 1.7 | 3.3 | 0.2 | 0.3 | 0.8 | 1.5 | 0.1 | 0.1 | 0.4 | 0.9 |
| 1989 | 0.6 | 0.7 | 1.7 | 3.1 | 0.2 | 0.3 | 0.7 | 1.5 | 0.1 | 0.1 | 0.3 | 0.9 |
| 1990 | 0.5 | 0.6 | 1.7 | 2.8 | 0.2 | 0.3 | 0.7 | 1.3 | 0.1 | 0.1 | 0.4 | 0.8 |
| 1991 | 0.6 | 0.6 | 1.7 | 2.9 | 0.2 | 0.3 | 0.8 | 1.4 | 0.1 | 0.1 | 0.4 | 0.7 |
| 1992 | 0.6 | 0.6 | 1.7 | 2.9 | 0.2 | 0.3 | 0.7 | 1.4 | 0.1 | 0.1 | 0.3 | 0.7 |
| 1993 | 0.6 | 0.6 | 1.7 | 2.8 | 0.2 | 0.3 | 0.8 | 1.4 | 0.1 | 0.1 | 0.4 | 0.7 |
| 1994 | 0.6 | 0.6 | 1.7 | 2.7 | 0.2 | 0.3 | 0.8 | 1.4 | 0.1 | 0.1 | 0.4 | 0.8 |
| 1995 | 0.6 | 0.7 | 1.7 | 2.6 | 0.2 | 0.3 | 0.8 | 1.2 | 0.1 | 0.1 | 0.4 | 0.7 |

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table S11-1 Standard errors for table 11-1

| Selected characteristics | Completed a degree |  |  |  | Did not complete a degree |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Highest degree completed |  |  |  |  | Number of months enrolled |  |  |  | Average months enrolled |
|  | Bachelor's | Associate's | Certificate |  |  | Less than 9 months | $\begin{array}{r} 9-18 \\ \text { months } \end{array}$ | $\begin{gathered} \text { 19-27 } \\ \text { months } \end{gathered}$ | 28 months or more |  |
| Total | 1.3 | 1.8 | 1.6 | 2.5 | 2.5 | 1.7 | 2.2 | 1.4 | 1.9 | 0.9 |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 1.8 | 2.5 | 2.6 | 3.5 | 3.5 | 2.5 | 2.8 | 2.3 | 3.1 | 1.5 |
| Female | 1.8 | 2.9 | 2.0 | 3.4 | 3.4 | 2.2 | 2.9 | 1.8 | 2.1 | 1.1 |
| Age as of 12/31/89 |  |  |  |  |  |  |  |  |  |  |
| 18 years or younger | 2.6 | 3.1 | 2.0 | 3.6 | 3.6 | 1.9 | 2.4 | 2.0 | 2.7 | 1.7 |
| 19 years | 1.2 | 4.9 | 3.9 | 5.3 | 5.3 | 4.2 | 3.9 | 2.8 | 4.3 | 2.2 |
| 20 years or older | 0.9 | 2.4 | 3.0 | 3.7 | 3.7 | 3.4 | 4.2 | 2.8 | 3.0 | 1.4 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |
| American Indian/Alaskan Native | - | - | - | - | - | - | - | - | - | - |
| Asian/Pacific Islander | - | - | - | - | - | - | - | - | - | - |
| Black | 3.3 | 5.2 | 5.8 | 6.9 | 6.9 | 6.8 | 6.7 | 4.6 | 4.6 | 3.0 |
| Hispanic | 4.5 | 7.3 | 5.7 | 9.0 | 9.0 | 1.9 | 7.5 | 7.1 | 8.2 | - |
| White | 1.3 | 2.1 | 1.8 | 2.8 | 2.8 | 2.0 | 2.3 | 1.5 | 2.1 | 1.0 |
| Marital status in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Never married | 1.7 | 2.1 | 1.8 | 2.7 | 2.7 | 1.8 | 2.0 | 1.6 | 2.3 | 1.1 |
| Married | 1.9 | 4.3 | 4.1 | 5.8 | 5.8 | 4.5 | 6.3 | 3.5 | 4.1 | 2.0 |
| Divorced/separated/widowed | 0.0 | 1.7 | 9.1 | 9.0 | 9.0 | 10.0 | 8.3 | 7.8 | 5.7 | - |
| Number of children in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| None | 1.6 | 2.1 | 1.7 | 2.7 | 2.7 | 1.8 | 2.3 | 1.6 | 2.2 | 1.1 |
| One | 0.5 | 5.8 | 8.1 | 8.5 | 8.5 | 7.0 | 9.2 | 2.9 | 5.1 | - |
| Two | 1.2 | 5.8 | 7.0 | 8.7 | 8.7 | 5.1 | 11.0 | 6.7 | 6.9 | - |
| Three or more | - | - | - | - | - | - | - | - | - | - |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |  |
| Lowest quartile | 1.5 | 4.0 | 4.2 | 5.9 | 5.9 | 4.6 | 5.8 | 2.6 | 4.2 | 2.1 |
| Middle two quartiles | 1.5 | 2.4 | 2.2 | 3.5 | 3.5 | 2.2 | 2.5 | 2.2 | 2.8 | 1.3 |
| Highest quartile | 3.2 | 3.7 | 2.9 | 4.2 | 4.2 | 3.0 | 3.5 | 2.5 | 3.3 | 1.9 |
| Income |  |  |  |  |  |  |  |  |  |  |
| Dependent |  |  |  |  |  |  |  |  |  |  |
| Less than \$20,000 | 3.1 | 4.3 | 3.6 | 5.6 | 5.6 | 4.3 | 5.0 | 2.7 | 4.3 | 2.4 |
| 20,000-39,999 | 2.9 | 4.1 | 3.5 | 5.3 | 5.3 | 3.9 | 3.2 | 3.4 | 3.6 | 2.2 |
| 40,000-59,999 | 3.8 | 5.6 | 3.9 | 5.8 | 5.8 | 3.3 | 4.4 | 2.8 | 5.4 | 2.6 |
| 60,000 or more | 4.3 | 6.3 | 2.7 | 7.2 | 7.2 | 3.0 | 6.5 | 5.9 | 7.2 | 3.5 |
| Independent | 0.9 | 2.7 | 3.1 | 4.0 | 4.0 | 3.5 | 4.2 | 2.6 | 3.8 | 1.6 |
| Parental educational attainment |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 1.6 | 4.7 | 5.2 | 6.6 | 6.6 | 5.3 | 7.3 | 4.9 | 5.5 | 2.5 |
| High school graduate | 2.0 | 2.8 | 2.6 | 3.7 | 3.7 | 2.9 | 3.0 | 2.5 | 2.8 | 1.5 |
| Some postsecondary | 3.0 | 4.1 | 2.8 | 5.3 | 5.3 | 3.5 | 5.0 | 3.4 | 4.4 | 2.0 |
| Bachelor's degree | 2.7 | 6.6 | 6.1 | 7.0 | 7.0 | 4.3 | 4.9 | 2.1 | 4.7 | 3.1 |
| Advanced degree | 5.0 | 6.5 | 2.1 | 6.6 | 6.6 | 3.3 | 6.0 | 3.3 | 6.4 | 3.6 |

Table S11-1 Standard errors for table 11-1 - Continued

| Selected characteristics | Completed a degree |  |  |  | Did not complete a degree |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Highest degree completed |  |  | Total any degree | Total no degree | Number of months enrolled |  |  |  | Average months enrolled |
|  | Bachelor's | Associate's | Certificate |  |  | Less than 9 months | $\begin{array}{r} 9-18 \\ \text { months } \end{array}$ | $19-27$ <br> months | 28 months or more |  |
| High school diploma or equivalency status |  |  |  |  |  |  |  |  |  |  |
| High school diploma | 1.4 | 1.9 | 1.7 | 2.5 | 2.5 | 1.8 | 2.0 | 1.5 | 2.1 | 1.0 |
| GED/Equivalency certificate | 1.6 | 4.6 | 5.9 | 7.2 | 7.2 | 5.5 | 9.0 | 3.5 | 3.5 | 1.8 |
| None | - | - | - | - | - | - | - | - | - | - |
| Diploma/delayed entry status |  |  |  |  |  |  |  |  |  |  |
| Diploma, did not delay | 2.1 | 2.5 | 2.0 | 3.1 | 3.1 | 1.8 | 2.3 | 1.7 | 2.6 | 1.6 |
| Diploma, delayed entry | 0.8 | 2.6 | 2.9 | 3.7 | 3.7 | 3.7 | 3.9 | 3.0 | 3.5 | 1.4 |
| No diploma | 1.6 | 4.6 | 5.9 | 7.2 | 7.2 | 5.5 | 9.0 | 3.5 | 3.5 | 1.8 |
| Expected educational attainment |  |  |  |  |  |  |  |  |  |  |
| Less than 2 years of postsecondary education | 1.2 | 6.7 | 6.2 | 8.4 | 8.4 | 8.4 | 9.7 | 2.1 | 9.0 | 5.4 |
| 2 to 3 years of |  |  |  |  |  |  |  |  |  |  |
| postsecondary education | 1.5 | 3.9 | 4.0 | 5.2 | 5.2 | 3.2 | 4.0 | 3.0 | 5.0 | 1.8 |
| Bachelor's degree or higher | 1.8 | 2.3 | 2.0 | 3.0 | 3.0 | 2.0 | 2.7 | 1.9 | 2.2 | 1.2 |
| Enrollment status, first term |  |  |  |  |  |  |  |  |  |  |
| Full-time | 2.1 | 2.7 | 1.9 | 3.2 | 3.2 | 1.6 | 2.2 | 2.1 | 2.2 | 1.2 |
| Less than full-time | 1.3 | 3.1 | 2.8 | 3.7 | 3.7 | 3.5 | 3.7 | 2.1 | 3.2 | 1.4 |
| Enrollment status in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Exclusively part-time | 1.1 | 3.7 | 3.5 | 5.1 | 5.1 | 4.0 | 4.6 | 3.3 | 4.4 | 1.7 |
| Mixed | 3.5 | 7.0 | 4.9 | 7.7 | 7.7 | 0.0 | 6.9 | 3.5 | 6.0 | - |
| Exclusively full-time | 2.2 | 2.7 | 2.2 | 3.4 | 3.4 | 1.8 | 2.2 | 2.0 | 2.7 | 1.4 |
| Field of study in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Humanities and social sciences | 3.5 | 5.4 | 3.4 | 6.1 | 6.1 | 3.6 | 4.6 | 3.4 | 5.1 | 3.3 |
| Physical and life sciences | - | - | - | - | - | - | - | - | - | - |
| Engineering, math, and computers | 2.3 | 5.1 | 5.3 | 6.9 | 6.9 | 5.4 | 6.1 | 2.2 | 6.1 | 2.9 |
| Education | 8.8 | 10.7 | 4.3 | 10.6 | 10.6 | 5.4 | 2.4 | 9.4 | 4.3 | - |
| Business and management | 2.4 | 3.5 | 2.8 | 4.1 | 4.1 | 2.4 | 3.9 | 3.3 | 3.6 | 1.6 |
| Health | 3.3 | 7.7 | 8.4 | 9.4 | 9.4 | 0.0 | 6.7 | 6.4 | 6.5 | - |
| Vocational/technical | 2.8 | 5.0 | 4.3 | 6.7 | 6.7 | 4.6 | 4.8 | 4.5 | 6.3 | 2.1 |
| Employed while enrolled |  |  |  |  |  |  |  |  |  |  |
| None | 2.2 | 6.8 | 7.1 | 8.9 | 8.9 | 8.4 | 6.1 | 6.1 | 3.4 | 1.9 |
| 1-50 percent | 2.9 | 4.6 | 5.0 | 5.0 | 5.0 | 2.0 | 3.6 | 2.3 | 3.8 | 2.5 |
| More than 50 percent | 1.6 | 2.1 | 1.7 | 2.9 | 2.9 | 2.1 | 2.7 | 1.7 | 2.4 | 1.1 |
| Hours worked per week while enrolled |  |  |  |  |  |  |  |  |  |  |
| None | 2.3 | 4.1 | 5.1 | 5.9 | 5.9 | 4.0 | 3.4 | 4.3 | 3.6 | 1.6 |
| 1-20 hours | 3.4 | 4.4 | 4.0 | 5.6 | 5.6 | 2.3 | 4.0 | 2.5 | 4.5 | 2.6 |
| More than 20 hours | 1.5 | 2.5 | 1.9 | 3.0 | 3.0 | 2.3 | 3.1 | 1.7 | 2.4 | 1.1 |

Table S11-1 Standard errors for table 11-1 - Continued

| Selected characteristics | Completed a degree |  |  |  | Did not complete a degree |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Highest degree completed |  |  | Total any degree | $\begin{array}{r} \text { Total } \\ \text { no } \\ \text { degree } \\ \hline \end{array}$ | Number of months enrolled |  |  |  | Average months enrolled |
|  | Bach- <br> elor's | Associate's | Certificate |  |  | Less than 9 months | $9-18$ <br> months | 19-27 <br> months | 28 months or more |  |
| Received financial aid in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| No | 1.5 | 2.4 | 2.3 | 3.3 | 3.3 | 2.4 | 3.0 | 1.9 | 2.3 | 1.1 |
| Yes | 1.9 | 3.0 | 2.4 | 3.4 | 3.4 | 2.0 | 2.8 | 1.9 | 3.1 | 1.6 |
| Received grant in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| No | 1.4 | 2.2 | 2.1 | 3.1 | 3.1 | 2.3 | 2.9 | 1.8 | 2.2 | 1.0 |
| Yes | 2.1 | 3.2 | 2.6 | 3.6 | 3.6 | 1.8 | 3.1 | 2.0 | 3.5 | 1.8 |
| Received loan in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| No | 1.4 | 2.0 | 1.8 | 2.8 | 2.8 | 1.9 | 2.4 | 1.6 | 2.1 | 1.0 |
| Yes | 2.4 | 4.5 | 2.9 | 5.0 | 5.0 | 2.5 | 5.4 | 2.0 | 3.9 | 1.4 |
| Grade point average in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Below 2.75 | 1.8 | 2.7 | 2.6 | 3.8 | 3.8 | 2.6 | 2.6 | 2.5 | 3.1 | 1.4 |
| 2.75 to 3.24 | 3.4 | 5.0 | 2.7 | 5.6 | 5.6 | 4.3 | 5.2 | 3.5 | 4.5 | 2.4 |
| 3.25 or higher | 3.4 | 5.1 | 4.2 | 5.6 | 5.6 | 3.2 | 4.4 | 2.5 | 4.1 | 2.3 |
| Academic integration in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Low | 1.6 | 4.2 | 4.0 | 5.8 | 5.8 | 7.4 | 6.5 | 0.5 | 6.7 | 2.8 |
| Moderate | 2.3 | 3.0 | 2.6 | 4.1 | 4.1 | 2.7 | 3.5 | 2.5 | 2.4 | 1.4 |
| High | 1.8 | 2.9 | 2.4 | 3.6 | 3.6 | 2.1 | 2.8 | 2.2 | 3.0 | 1.5 |
| Social integration in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Low | 1.7 | 3.2 | 3.2 | 4.3 | 4.3 | 4.7 | 4.6 | 3.3 | 4.1 | 1.8 |
| Moderate | 1.7 | 2.8 | 2.1 | 2.9 | 2.9 | 1.9 | 2.5 | 2.1 | 2.4 | 1.2 |
| High | 3.3 | 4.3 | 3.2 | 5.8 | 5.8 | 2.8 | 4.1 | 2.4 | 4.4 | 2.5 |
| Self rating of academic ability |  |  |  |  |  |  |  |  |  |  |
| Above average | 3.3 | 4.0 | 3.4 | 4.2 | 4.2 | 3.1 | 2.9 | 2.1 | 3.6 | 2.4 |
| Average or below | 1.3 | 2.0 | 1.8 | 2.8 | 2.8 | 2.2 | 2.7 | 1.7 | 2.1 | 1.0 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:90/94).

Standard Error Tables
Table S11-2 Standard errors for table 11-2

| Selected characteristics | Completed a degree |  |  |  | Did not complete a degree |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Highest degree completed |  |  | Total any degree | Totalnodegree | Number of months enrolled |  |  |  | Average months enrolled |
|  | $\begin{array}{r} \text { Bach- } \\ \text { elor's } \end{array}$ | Associate's | Certi- <br> ficate d |  |  | Less than 9 months | 9-18 <br> months | 19-27 <br> months | 28 months or more |  |
| Total | 0.2 | 1.1 | 2.9 | 2.8 | 2.8 | 2.3 | 2.2 | 1.3 | 0.9 | 0.8 |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 0.2 | 1.3 | 4.4 | 4.4 | 4.4 | 4.3 | 2.8 | 2.1 | 1.0 | 0.9 |
| Female | 0.3 | 1.6 | 3.7 | 3.6 | 3.6 | 2.5 | 3.3 | 1.7 | 1.3 | 1.2 |
| Age as of 12/31/89 |  |  |  |  |  |  |  |  |  |  |
| 18 years or younger | 0.5 | 3.3 | 5.5 | 5.6 | 5.6 | 4.3 | 4.3 | 3.5 | 2.2 | 1.9 |
| 19 years | 0.3 | 1.7 | 6.7 | 6.4 | 6.4 | 4.4 | 4.8 | 2.5 | 1.1 | 1.5 |
| 20 years or older | 0.2 | 0.9 | 3.5 | 3.5 | 3.5 | 3.2 | 2.6 | 1.3 | 1.1 | 1.0 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |
| American Indian/Alaskan Native | - | - | - | - | - | - | - | - | - | - |
| Asian/Pacific Islander | - | - | - | - | - | - | - | - | - | - |
| Black | 0.6 | 0.9 | 6.4 | 6.5 | 6.5 | 4.7 | 6.6 | 2.2 | 3.2 | 2.3 |
| Hispanic | 1.3 | 0.8 | 9.5 | 9.6 | 9.6 | 5.3 | 1.7 | 9.5 | 1.2 | 3.3 |
| White | 0.2 | 1.5 | 3.5 | 3.3 | 3.3 | 2.9 | 2.7 | 1.3 | 0.8 | 0.7 |
| Marital status in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Never married | 0.3 | 1.7 | 3.8 | 3.7 | 3.7 | 2.9 | 2.8 | 2.0 | 1.1 | 1.1 |
| Married | 0.3 | 0.7 | 5.7 | 5.7 | 5.7 | 5.2 | 4.5 | 1.3 | 2.5 | 2.1 |
| Divorced/separated/widowed | 0.0 | 1.9 | 6.2 | 6.3 | 6.3 | 5.7 | 5.5 | 1.5 | 0.3 | 1.2 |
| Number of children in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| None | 0.2 | 1.8 | 3.9 | 3.9 | 3.9 | 3.1 | 3.2 | 2.0 | 1.1 | 1.1 |
| One | 0.5 | 1.3 | 6.3 | 6.3 | 6.3 | 5.0 | 4.1 | 2.7 | 3.3 | 2.8 |
| Two | 0.0 | 1.0 | 6.8 | 6.9 | 6.9 | 6.9 | 4.7 | 2.5 | 0.9 | 1.1 |
| Three or more | 1.4 | 1.7 | 9.1 | 9.0 | 9.0 | 6.7 | 8.9 | 0.7 | 5.1 | - |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |  |
| Lowest quartile | 0.3 | 0.5 | 4.1 | 4.2 | 4.2 | 4.2 | 3.3 | 2.3 | 1.8 | 1.5 |
| Middle two quartiles | 0.2 | 1.7 | 4.0 | 3.7 | 3.7 | 3.0 | 2.6 | 1.7 | 1.2 | 1.2 |
| Highest quartile | 0.6 | 4.7 | 7.5 | 7.6 | 7.6 | 4.8 | 7.2 | 4.2 | 0.8 | 1.4 |

Income
Dependent

| Less than \$20,000 | 0.0 | 4.7 | 6.9 | 6.7 | 6.7 | 5.7 | 4.7 | 0.8 | 0.9 | 1.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20,000-39,999 | 0.7 | 2.0 | 7.0 | 7.2 | 7.2 | 6.6 | 4.5 | 6.2 | 3.2 | 2.9 |
| 40,000-59,999 | 0.7 | 5.7 | 10.4 | 10.2 | 10.2 | 1.8 | 9.9 | 1.1 | 5.5 | - |
| 60,000 or more | 0.0 | 7.6 | 13.0 | 13.3 | 13.3 | 1.2 | 13.3 | 7.9 | 0.0 | - |
| Independent | 0.3 | 1.0 | 3.4 | 3.4 | 3.4 | 3.1 | 2.5 | 1.4 | 1.1 | 1.0 |
| Parental educational attainment |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 0.5 | 0.7 | 6.0 | 6.0 | 6.0 | 6.2 | 3.1 | 2.3 | 3.0 | 2.4 |
| High school graduate | 0.3 | 0.7 | 4.6 | 4.5 | 4.5 | 3.5 | 3.3 | 2.7 | 1.3 | 1.6 |
| Some postsecondary | 0.2 | 4.1 | 6.6 | 6.0 | 6.0 | 4.3 | 5.5 | 0.8 | 2.1 | 1.4 |
| Bachelor's degree | 1.3 | 3.1 | 7.6 | 8.5 | 8.5 | 9.3 | 9.0 | 4.6 | 2.0 |  |
| Advanced degree | 1.2 | 14.1 | 13.5 | 11.7 | 11.7 | 4.1 | 2.6 | 11.1 | 0.7 |  |

Table S11-2 Standard errors for table 11-2 - Continued

| Selected characteristics | Completed a degree |  |  |  | Did not complete a degree |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Highest degree completed |  |  | Total any egree | $\begin{array}{r} \text { Total } \\ \text { no } \\ \text { degree } \\ \hline \end{array}$ | Number of months enrolled |  |  |  | Average months enrolled |
|  | Bachelor's | Associate's | $\begin{aligned} & \text { Certi- } \\ & \text { ficate } \end{aligned}$ |  |  | Less than 9 months | $9-18$ <br> months | $\begin{array}{r} 19-27 \\ \text { months } \end{array}$ | $\begin{array}{r} \hline 28 \text { months } \\ \text { or more } \\ \hline \end{array}$ |  |
| High school diploma or equivalency status |  |  |  |  |  |  |  |  |  |  |
| High school diploma | 0.2 | 1.3 | 3.2 | 3.1 | 3.1 | 2.6 | 2.2 | 1.5 | 1.1 | 1.0 |
| GED/Equivalency certificate | 0.6 | 1.5 | 6.0 | 6.2 | 6.2 | 5.2 | 5.4 | 2.6 | 0.7 | 0.8 |
| None | - | - | - | - | - | - | - | - | - | - |
| Diploma/delayed entry status |  |  |  |  |  |  |  |  |  |  |
| Diploma, did not delay | 0.4 | 3.0 | 5.3 | 5.2 | 5.2 | 3.7 | 3.9 | 3.1 | 2.0 | 1.9 |
| Diploma, delayed entry | 0.2 | 1.1 | 4.0 | 3.9 | 3.9 | 3.4 | 2.8 | 1.4 | 1.2 | 1.2 |
| No diploma | 0.6 | 1.1 | 5.9 | 6.0 | 6.0 | 5.1 | 5.3 | 2.5 | 0.7 | 0.8 |
| Expected educational attainment |  |  |  |  |  |  |  |  |  |  |
| Less than 2 years of postsecondary education | 0.3 | 0.5 | 4.0 | 4.0 | 4.0 | 3.5 | 2.6 | 2.7 | 0.4 | 1.1 |
| 2 to 3 years of |  |  |  |  |  |  |  |  |  |  |
| postsecondary education | 0.2 | 2.1 | 6.1 | 6.5 | 6.5 | 5.6 | 4.3 | 2.3 | 2.9 | 2.4 |
| Bachelor's degree or higher | 0.5 | 3.0 | 4.5 | 4.9 | 4.9 | 3.6 | 4.6 | 1.7 | 2.1 | 1.4 |
| Level of first institution |  |  |  |  |  |  |  |  |  |  |
| 2-year | 0.1 | 2.1 | 4.9 | 4.8 | 4.8 | 4.2 | 4.1 | 2.4 | 1.9 | 1.4 |
| Less-than-2-year | 0.3 | 1.0 | 3.1 | 3.0 | 3.0 | 2.2 | 1.8 | 1.1 | 0.5 | 0.6 |
| Enrollment status, first term |  |  |  |  |  |  |  |  |  |  |
| Full-time | 0.3 | 1.2 | 3.0 | 3.0 | 3.0 | 2.5 | 1.9 | 0.8 | 0.8 | 0.7 |
| Less than full-time | 0.0 | 2.3 | 6.2 | 6.1 | 6.1 | 5.2 | 5.6 | 3.3 | 2.3 | 1.7 |
| Enrollment status in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Exclusively part-time | 0.3 | 0.2 | 6.3 | 6.3 | 6.3 | 5.6 | 4.5 | 4.1 | 2.3 | 1.7 |
| Mixed | - | - | - | - | - | - | - | - | - | - |
| Exclusively full-time | 0.3 | 1.8 | 3.7 | 3.3 | 3.3 | 2.7 | 2.3 | 1.1 | 1.2 | 1.1 |
| Field of study in 1989-90 |  |  |  |  |  |  |  |  |  |  |
| Humanities and social sciences | - | - | - | - | - | - | - | - | - | - |
| Physical and life sciences | - | - | - | - | - | - | - | - | - | - |
| Engineering, math, and computers | 0.0 | 6.0 | 9.9 | 9.9 | 9.9 | 6.1 | 9.6 | 0.0 | 0.9 | - |
| Education | - | - | - | - | - | - | - | - | - | - |
| Business and management | 0.5 | 1.8 | 5.8 | 5.7 | 5.7 | 3.4 | 4.4 | 3.8 | 2.6 | 2.6 |
| Health | 9.3 | 4.5 | 9.5 | 10.0 | 10.0 | 6.0 | 9.5 | 3.2 | 6.2 | - |
| Vocational/technical | 0.0 | 0.8 | 4.4 | 4.3 | 4.3 | 3.6 | 2.7 | 1.4 | 0.4 | 1.1 |
| Employed while enrolled |  |  |  |  |  |  |  |  |  |  |
| None | 0.0 | 0.6 | 5.3 | 5.3 | 5.3 | 4.5 | 4.0 | 0.8 | 0.4 | 0.6 |
| 1-50 percent | 0.6 | 1.4 | 5.3 | 5.2 | 5.2 | 3.0 | 3.1 | 3.4 | 0.8 | 1.4 |
| More than 50 percent | 0.2 | 1.9 | 3.7 | 3.8 | 3.8 | 3.4 | 3.3 | 1.9 | 1.5 | 1.2 |
| Hours worked per week while enrolled |  |  |  |  |  |  |  |  |  |  |
| None | 0.4 | 0.5 | 4.3 | 4.3 | 4.3 | 3.4 | 2.9 | 0.6 | 1.5 | 1.6 |
| 1-20 hours | 0.6 | 1.2 | 6.3 | 6.4 | 6.4 | 3.7 | 5.7 | 0.5 | 0.7 | 1.2 |
| More than 20 hours | 0.2 | 1.9 | 3.6 | 3.7 | 3.7 | 3.5 | 3.2 | 2.2 | 1.3 | 1.1 |

## Standard Error Tables

Table S11-2 Standard errors for table 11-2 - Continued

| Selected characteristics | Completed a degree |  |  | Did not complete a degree |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Highest degree completed |  |  | Total no degree | Number of months enrolled |  |  |  | Average months enrolled |
|  | Bachelor's | Associate's | Certi- any ficate degree |  | Less than 9 months | $9-18$ <br> months | $19-27$ <br> months | 28 months or more |  |
| Received financial aid in 1989-90 |  |  |  |  |  |  |  |  |  |
| No | 0.2 | 2.2 | $4.9 \quad 4.9$ | 4.9 | 4.6 | 4.1 | 2.6 | 1.4 | 1.2 |
| Yes | 0.3 | 0.9 | $2.8 \quad 2.8$ | 2.8 | 2.1 | 2.1 | 0.9 | 1.2 | 1.2 |
| Received grant in 1989-90 |  |  |  |  |  |  |  |  |  |
| No | 0.2 | 1.9 | $4.0 \quad 4.1$ | 4.1 | 3.6 | 3.3 | 2.1 | 1.1 | 1.0 |
| Yes | 0.3 | 0.7 | 3.3 3.3 | 3.3 | 2.3 | 2.6 | 1.1 | 1.5 | 1.4 |
| Received loan in 1989-90 |  |  |  |  |  |  |  |  |  |
| No | 0.2 | 1.5 | $3.8 \quad 3.8$ | 3.8 | 3.1 | 3.0 | 1.8 | 1.3 | 1.1 |
| Yes | 0.3 | 0.8 | $2.9 \quad 2.8$ | 2.8 | 2.0 | 2.3 | 0.5 | 0.5 | 0.5 |
| Grade point average in 1989-90 |  |  |  |  |  |  |  |  |  |
| Below 2.75 | 0.2 | 2.2 | $6.5 \quad 6.5$ | 6.5 | 4.3 | 5.5 | 4.9 | 0.7 | 1.4 |
| 2.75 to 3.24 | 1.3 | 7.6 | $7.0 \quad 8.5$ | 8.5 | 7.6 | 8.5 | 4.7 | 1.9 | 1.7 |
| 3.25 or higher | 0.4 | 1.4 | $5.5 \quad 5.3$ | 5.3 | 4.9 | 2.7 | 0.2 | 2.9 | 3.1 |
| Academic integration in 1989-90 |  |  |  |  |  |  |  |  |  |
| Low | 0.4 | 3.6 | $5.9 \quad 6.3$ | 6.3 | 6.7 | 5.7 | 2.2 | 4.4 | 2.4 |
| Moderate | 0.3 | 0.7 | 4.1 4.2 | 4.2 | 4.0 | 3.5 | 3.1 | 1.4 | 1.5 |
| High | 0.3 | 2.0 | $4.0 \quad 3.4$ | 3.4 | 2.7 | 2.8 | 0.8 | 0.6 | 0.7 |
| Social integration in 1989-90 |  |  |  |  |  |  |  |  |  |
| Low | 0.3 | 0.5 | $4.7 \quad 4.7$ | 4.7 | 5.0 | 4.1 | 2.2 | 2.5 | 1.6 |
| Moderate | 0.3 | 2.0 | 4.3 4.0 | 4.0 | 3.0 | 2.9 | 2.1 | 1.2 | 1.2 |
| High | 0.5 | 1.2 | 5.25 .2 | 5.2 | 4.0 | 4.0 | 1.0 | 0.9 | 1.1 |
| Self rating of academic ability |  |  |  |  |  |  |  |  |  |
| Above average | 0.0 | 1.1 | $5.7 \quad 5.8$ | 5.8 | 4.4 | 4.7 | 4.2 | 0.6 | 1.5 |
| Average or below | 0.2 | 1.4 | 3.13 .0 | 3.0 | 2.6 | 2.4 | 1.2 | 1.2 | 1.0 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:90/94).

Table S11-3 Standard errors for table 11-3

| Selected characteristics | Degree attempted |  |
| :---: | :---: | :---: |
|  | Associate's degree | Certificate |
| Total | 1.5 | 1.1 |
| Sex |  |  |
| Male | 2.5 | 2.9 |
| Female | 2.5 | 2.9 |
| Age as of 12/31/89 |  |  |
| 18 years or younger | 2.4 | 2.6 |
| 19 years | 2.1 | 1.8 |
| 20 years or older | 2.5 | 2.7 |
| Race/ethnicity |  |  |
| American Indian/Alaskan Native | 0.4 | 0.5 |
| Asian/Pacific Islander | 0.5 | 1.0 |
| Black | 1.6 | 2.3 |
| Hispanic | 1.7 | 1.7 |
| White | 2.4 | 2.8 |
| Marital status in 1989-90 |  |  |
| Never married | 2.3 | 2.7 |
| Married | 1.8 | 2.4 |
| Divorced/separated/widowed | 1.5 | 1.6 |
| Number of children in 1989-90 |  |  |
| None | 1.7 | 2.7 |
| One | 1.3 | 2.0 |
| Two | 1.3 | 1.7 |
| Three or more | 0.9 | 1.2 |
| Socioeconomic status |  |  |
| Lowest quartile | 1.9 | 2.5 |
| Middle two quartiles | 2.6 | 2.4 |
| Highest quartile | 2.3 | 1.8 |
| Income |  |  |
| Dependent |  |  |
| Less than \$20,000 | 1.8 | 2.0 |
| 20,000-39,999 | 2.2 | 1.9 |
| 40,000-59,999 | 1.9 | 1.4 |
| 60,000 or more | 1.5 | 1.4 |
| Independent | 2.4 | 2.7 |
| Parental educational attainment |  |  |
| Less than high school | 1.6 | 2.4 |
| High school graduate | 2.6 | 2.6 |
| Some postsecondary | 2.0 | 2.4 |
| Bachelor's degree | 1.8 | 1.6 |
| Advanced degree | 1.8 | 1.0 |

## Table S11-3 Standard errors for table 11-3 - Continued

| Selected characteristics | Degree attempted |  |
| :---: | :---: | :---: |
|  | Associate's degree | Certificate |
| High school diploma or equivalency status |  |  |
| High school diploma | 1.4 | 1.8 |
| GED/Equivalency certificate | 1.4 | 1.8 |
| None | 0.0 | 0.2 |
| Diploma/delayed entry status |  |  |
| Diploma, did not delay | 2.4 | 2.7 |
| Diploma, delayed entry | 2.4 | 2.7 |
| No diploma | 1.4 | 1.8 |
| Expected educational attainment |  |  |
| Less than 2 years of postsecondary education | 0.9 | 2.8 |
| 2 to 3 years of |  |  |
| postsecondary education | 2.2 | 2.4 |
| Bachelor's degree or higher | 2.3 | 2.5 |
| Level of first institution |  |  |
| 2-year | 0.0 | 3.5 |
| Less-than-2-year | - | 3.5 |
| Enrollment status, first term |  |  |
| Full-time | 3.1 | 3.4 |
| Less than full-time | 3.1 | 3.4 |
| Field of study in 1989-90 |  |  |
| Humanities and social sciences | 2.2 | 1.7 |
| Physical and life sciences | 0.9 | 0.0 |
| Engineering, math, and computers | 1.9 | 1.9 |
| Education | 1.2 | 1.5 |
| Business and management | 2.4 | 3.4 |
| Health | 1.8 | 1.9 |
| Vocational/technical | 2.2 | 3.7 |
| Employed while enrolled |  |  |
| None | 1.2 | 2.2 |
| 1-50 percent | 1.9 | 1.9 |
| More than 50 percent | 2.1 | 2.6 |
| Hours worked per week while enrolled |  |  |
| None | 1.8 | 2.4 |
| 1-20 hours | 1.8 | 1.4 |
| More than 20 hours | 2.3 | 2.6 |

Table S11-3 Standard errors for table 11-3 - Continued

| Selected characteristics | Degree attempted |  |
| :---: | :---: | :---: |
|  | Associate's degree | Certificate |
| Received financial aid in 1989-90 |  |  |
| No | 2.4 | 3.1 |
| Yes | 2.4 | 3.1 |
| Received grant in 1989-90 |  |  |
| No | 2.2 | 2.7 |
| Yes | 2.2 | 2.7 |
| Received loan in 1989-90 |  |  |
| No | 1.3 | 2.8 |
| Yes | 1.3 | 2.8 |
| Grade point average in 1989-90 |  |  |
| Below 2.75 | 2.4 | 3.7 |
| 2.75 to 3.24 | 2.3 | 3.2 |
| 3.25 or higher | 2.1 | 4.1 |
| Academic integration in 1989-90 |  |  |
| Low | 1.6 | 2.1 |
| Moderate | 2.2 | 2.5 |
| High | 2.1 | 2.7 |
| Social integration in 1989-90 |  |  |
| Low | 2.4 | 2.5 |
| Moderate | 2.7 | 2.7 |
| High | 2.2 | 1.8 |
| Self rating of academic ability |  |  |
| Above average | 2.2 | 2.2 |
| Average or below | 2.2 | 2.2 |

[^65]SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:90/94).

Standard Error Tables
Table S13-1 Standard errors for table 13-1

| Selected characteristics | Did not work | Average hours worked per week while enrolled |  |  | Attendance status |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Less than 15 hours | $\begin{aligned} & 15-33 \\ & \text { hours } \end{aligned}$ | 34 or more hours | Exclusively part time | More than part time |
| Total | 0.7 | 1.0 | 1.0 | 0.8 | 1.0 | 1.0 |
| Sex |  |  |  |  |  |  |
| Male | 0.8 | 1.4 | 1.5 | 1.2 | 1.5 | 1.5 |
| Female | 1.0 | 1.3 | 1.3 | 1.1 | 1.2 | 1.2 |
| Age as of 12/31/89 |  |  |  |  |  |  |
| 18 years or younger | 0.5 | 1.4 | 1.5 | 0.9 | 0.8 | 0.8 |
| 19 years | 1.6 | 2.1 | 2.3 | 1.9 | 2.3 | 2.3 |
| 20 years or older | 1.7 | 1.5 | 2.1 | 2.1 | 2.2 | 2.2 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaskan Native | 3.1 | 10.3 | 12.3 | 6.7 | 13.2 | 13.2 |
| Asian/Pacific Islander | 4.1 | 5.1 | 4.7 | 4.2 | 3.8 | 3.8 |
| Black | 2.6 | 3.0 | 3.2 | 2.1 | 2.8 | 2.8 |
| Hispanic | 2.5 | 3.1 | 4.5 | 3.6 | 3.6 | 3.6 |
| White | 0.7 | 1.2 | 1.1 | 1.0 | 1.2 | 1.2 |
| Marital status in 1989-90 |  |  |  |  |  |  |
| Never married | 0.6 | 1.1 | 1.1 | 0.8 | 1.0 | 1.0 |
| Married | 2.8 | 2.3 | 2.9 | 3.1 | 3.5 | 3.5 |
| Divorced-widowed-separated | 4.6 | 4.8 | 5.1 | 4.1 | 5.4 | 5.4 |
| Number of children in 1989-90 |  |  |  |  |  |  |
| None | 0.6 | 1.1 | 1.1 | 0.8 | 0.9 | 0.9 |
| One | 3.6 | 3.4 | 4.6 | 4.7 | 4.6 | 4.6 |
| Two | 4.5 | 3.9 | 4.8 | 4.8 | 5.0 | 5.0 |
| Three or more | 5.7 | 4.0 | 5.9 | 5.2 | 5.8 | 5.8 |
| Dependency status |  |  |  |  |  |  |
| Dependent | 0.6 | 1.1 | 1.2 | 0.8 | 0.9 | 0.9 |
| Independent | 1.8 | 1.5 | 2.0 | 2.1 | 2.2 | 2.2 |
| Income |  |  |  |  |  |  |
| Dependent |  |  |  |  |  |  |
| Less than \$20,000 | 1.8 | 2.0 | 2.4 | 1.6 | 1.9 | 1.9 |
| 20,000-39,999 | 0.8 | 1.8 | 2.1 | 1.6 | 1.7 | 1.7 |
| 40,000-59,999 | 0.9 | 2.1 | 2.2 | 1.6 | 1.4 | 1.4 |
| 60,000 or more | 1.2 | 2.6 | 2.3 | 1.4 | 1.1 | 1.1 |
| Independent | 1.8 | 1.5 | 2.0 | 2.1 | 2.2 | 2.2 |
| Socioeconomic status |  |  |  |  |  |  |
| Lowest quartile | 2.1 | 2.0 | 2.9 | 2.8 | 2.7 | 2.7 |
| Middle two quartiles | 1.0 | 1.3 | 1.5 | 1.2 | 1.5 | 1.5 |
| Highest quartile | 0.7 | 1.7 | 1.6 | 1.0 | 0.9 | 0.9 |
| Parents' educational attainment |  |  |  |  |  |  |
| Less than high school | 2.6 | 2.4 | 3.9 | 4.2 | 3.8 | 3.8 |
| High school graduate | 1.2 | 1.7 | 1.7 | 1.4 | 1.8 | 1.8 |
| Some postsecondary | 1.4 | 1.8 | 2.2 | 1.5 | 1.8 | 1.8 |
| Bachelor's degree | 1.0 | 2.3 | 2.1 | 1.5 | 1.5 | 1.5 |
| Advanced degree | 1.2 | 2.6 | 2.4 | 1.4 | 1.4 | 1.4 |

Table S13-1 Standard errors for table 13-1 - Continued

| Selected characteristics | Did not work | Average hours worked per week while enrolled |  |  | Attendance status |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Less than 15 hours | $\begin{aligned} & 15-33 \\ & \text { hours } \end{aligned}$ | 34 or more hours | Exclusively part time | More than part time |
| High school diploma or equivalency status |  |  |  |  |  |  |
| High school diploma | 0.6 | 1.1 | 1.0 | 0.9 | 1.0 | 1.0 |
| GED Equivalency certificate | 3.8 | 3.8 | 4.5 | 4.2 | 5.0 | 5.0 |
| Neither | - | - | - | - | - | - |
| Expected educational attainment 1989-90 |  |  |  |  |  |  |
| Less than 2 years of postsecondary education | 2.7 | 1.8 | 3.0 | 3.2 | 3.2 | 3.2 |
| 2 to 3 years of postsecondary education | 2.3 | 2.8 | 3.0 | 2.8 | 3.2 | 3.2 |
| Bachelor's degree or higher | 0.6 | 1.1 | 1.1 | 0.9 | 1.0 | 1.0 |
| Diploma/delayed entry status |  |  |  |  |  |  |
| Diploma, did not delay | 0.6 | 1.2 | 1.3 | 0.8 | 0.8 | 0.8 |
| Diploma, delayed entry | 1.6 | 1.5 | 2.2 | 2.1 | 2.2 | 2.2 |
| No diploma | 3.8 | 3.8 | 4.4 | 4.2 | 4.9 | 4.9 |
| Degree working toward 1989-90 |  |  |  |  |  |  |
| Certificate | 2.4 | 1.7 | 2.1 | 2.5 | 2.8 | 2.8 |
| Associate's degree | 1.2 | 2.0 | 2.0 | 1.6 | 1.9 | 1.9 |
| Bachelor's degree | 0.5 | 1.3 | 1.2 | 0.8 | 0.8 | 0.8 |
| Control and type of first institution |  |  |  |  |  |  |
| Public 4-year | 0.6 | 1.4 | 1.4 | 0.8 | 0.8 | 0.8 |
| Private, not-for-profit 4-year | 0.5 | 1.6 | 1.5 | 0.6 | 0.7 | 0.7 |
| Public 2-year | 1.2 | 1.8 | 1.9 | 1.7 | 1.9 | 1.9 |
| Private, for-profit | 2.7 | 1.7 | 2.0 | 1.5 | 2.5 | 2.5 |
| Field of study 1989-90 |  |  |  |  |  |  |
| Humanities and social sciences | 1.3 | 2.1 | 2.5 | 1.6 | 1.9 | 1.9 |
| Physical and life sciences | 1.0 | 3.9 | 4.0 | 2.1 | 1.8 | 1.8 |
| Engineering, math, |  |  |  |  |  |  |
| Education | 1.9 | 4.0 | 3.8 | 2.0 | 1.8 | 1.8 |
| Business and management | 1.5 | 2.0 | 2.1 | 1.8 | 1.9 | 1.9 |
| Health | 2.6 | 4.0 | 4.2 | 1.8 | 2.5 | 2.5 |
| Vocational / technical | 1.7 | 2.0 | 2.6 | 2.2 | 2.7 | 2.7 |
| Enrollment status in 1989-90 |  |  |  |  |  |  |
| Exclusively part time | 1.8 | 2.1 | 3.3 | 3.0 | 2.8 | 2.8 |
| Mixed | 1.3 | 2.7 | 2.9 | 2.0 | 0.0 | 0.0 |
| Exclusively full time | 0.8 | 1.2 | 1.3 | 0.7 | 0.0 | 0.0 |
| Attendance status |  |  |  |  |  |  |
| Exclusively part time | 2.1 | 1.1 | 2.7 | 3.0 | 0.0 | 0.0 |
| At least some full time | 0.7 | 1.1 | 1.1 | 0.6 | 0.0 | 0.0 |

Standard Error Tables
Table S13-1 Standard errors for table 13-1 - Continued

| Selected characteristics | Did not work | Average hours worked per week while enrolled |  |  | Attendance status |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Less than 15 hours | $\begin{aligned} & \text { 15-33 } \\ & \text { hours } \end{aligned}$ | 34 or more hours | Exclusively part time | More than part time |
| Received financial aid in 1989-90 |  |  |  |  |  |  |
| No | 0.8 | 1.5 | 1.6 | 1.3 | 1.5 | 1.5 |
| Yes | 1.0 | 1.2 | 1.2 | 0.8 | 1.1 | 1.1 |
| Received grant in 1989-90 |  |  |  |  |  |  |
| No | 0.8 | 1.4 | 1.4 | 1.2 | 1.4 | 1.4 |
| Yes | 1.1 | 1.3 | 1.3 | 0.9 | 1.1 | 1.1 |
| Received loan in 1989-90 |  |  |  |  |  |  |
| No | 0.8 | 1.2 | 1.2 | 1.0 | 1.2 | 1.2 |
| Yes | 1.2 | 1.5 | 1.5 | 1.0 | 1.0 | 1.0 |
| Grade point average in 1989-90 |  |  |  |  |  |  |
| Below 2.75 | 0.9 | 1.5 | 1.7 | 1.2 | 1.4 | 1.4 |
| 2.75 to 3.24 | 1.2 | 2.5 | 2.7 | 2.4 | 2.5 | 2.5 |
| 3.25 or higher | 1.5 | 2.0 | 2.1 | 1.6 | 2.1 | 2.1 |
| Self rating of academic ability |  |  |  |  |  |  |
| Above average | 1.1 | 1.6 | 1.6 | 1.0 | 1.3 | 1.3 |
| Average or below | 0.8 | 1.2 | 1.2 | 1.1 | 1.3 | 1.3 |
| Academic integration in 1989-90 |  |  |  |  |  |  |
| Low | 2.3 | 2.9 | 3.5 | 3.6 | 3.7 | 3.7 |
| Moderate | 1.1 | 1.7 | 1.8 | 1.6 | 1.8 | 1.8 |
| High | 0.8 | 1.2 | 1.3 | 0.9 | 0.9 | 0.9 |
| Social integration in 1989-90 |  |  |  |  |  |  |
| Low | 2.1 | 1.9 | 2.8 | 3.1 | 2.8 | 2.8 |
| Moderate | 1.0 | 1.4 | 1.4 | 1.2 | 1.4 | 1.4 |
| High | 0.7 | 1.5 | 1.5 | 0.9 | 0.9 | 0.9 |
| Average hours worked per week while enrolled |  |  |  |  |  |  |
| Did not work | 0.0 | 0.0 | 0.0 | 0.0 | 3.1 | 3.1 |
| Less than 15 hours | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.7 |
| 15-33 hours | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 1.4 |
| 34 or more hours | 0.0 | 0.0 | 0.0 | 0.0 | 3.3 | 3.3 |
| - Not available. |  |  | SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:90/94). |  |  |  |

Table S13-2 Standard errors for table 13-2

|  |  | Control and type of first institution |  |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:90/94).

Standard Error Tables
Table S14-1 Standard errors for table 14-1

| Worker characteristics | All workers |  | Full-time |  | Part-time |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1995 | 1991 | 1995 | 1991 | 1995 |
| Total | 1.0 | 0.5 | 1.2 | 0.5 | 1.4 | 0.8 |
| Sex |  |  |  |  |  |  |
| Male | 1.4 | 0.8 | 1.6 | 0.8 | 1.1 | 1.5 |
| Female | 1.2 | 0.6 | 1.7 | 0.6 | 1.7 | 1.0 |
| Race/ethnicity |  |  |  |  |  |  |
| White | 1.1 | 0.6 | 1.3 | 0.6 | 1.7 | 1.0 |
| Black | 2.4 | 1.5 | 2.9 | 1.7 | 2.6 | 2.3 |
| Hispanic | 2.9 | 1.2 | 3.5 | 1.3 | 3.8 | 2.5 |
| Asian/Pacific Islander | 4.3 | 2.9 | 5.7 | 3.6 | 7.3 | 3.2 |
| Age |  |  |  |  |  |  |
| 16-19 | 2.2 | 1.8 | 4.8 | 3.2 | 1.5 | 1.5 |
| 20-24 | 2.3 | 1.4 | 3.4 | 1.9 | 1.7 | 2.0 |
| 25-34 | 1.7 | 1.1 | 1.9 | 1.2 | 4.6 | 2.3 |
| 35-44 | 2.2 | 0.8 | 2.5 | 1.0 | 3.3 | 2.1 |
| 45-54 | 2.5 | 1.1 | 3.3 | 1.2 | 4.1 | 2.5 |
| 55-64 | 3.3 | 1.4 | 4.2 | 1.5 | 5.9 | 3.4 |
| 65 and older | 4.8 | 2.0 | 8.9 | 3.1 | 3.2 | 2.3 |
| Educational attainment |  |  |  |  |  |  |
| Less than high school graduate | 1.2 | 1.4 | 1.7 | 1.8 | 1.1 | 1.4 |
| High school graduate | 1.3 | 0.9 | 1.6 | 1.0 | 3.1 | 1.6 |
| Vocational/trade school | 5.9 | 2.6 | 6.8 | 2.8 | 5.7 | 5.7 |
| Some college | 1.8 | 0.9 | 2.6 | 0.9 | 2.2 | 1.7 |
| Bachelor's degree | 2.8 | 1.2 | 2.8 | 1.3 | 6.4 | 2.2 |
| Advanced degree | 3.3 | 1.5 | 3.8 | 1.5 | 6.0 | 3.6 |
| Occupation |  |  |  |  |  |  |
| Executive, professional, technical | 2.0 | 0.9 | 2.1 | 1.0 | 2.5 | 2.5 |
| Executive, administrative, managerial | 3.3 | 1.7 | 3.3 | 1.8 | 8.9 | 4.4 |
| Professional | 2.8 | 1.3 | 3.1 | 1.5 | 3.2 | 3.1 |
| Technical | 5.2 | 2.1 | 6.0 | 2.2 | 6.3 | 5.6 |
| Sales and administrative support | 1.2 | 0.7 | 1.4 | 0.8 | 1.7 | 1.4 |
| Sales | 2.1 | 1.2 | 2.5 | 1.3 | 2.1 | 2.2 |
| Administrative support | 1.7 | 1.0 | 2.0 | 1.1 | 2.6 | 2.1 |
| Service | 2.2 | 1.3 | 3.0 | 1.7 | 4.4 | 1.5 |
| Farming | 2.8 | 2.5 | 3.1 | 3.0 | 3.7 | 4.4 |
| Precision production, craft, and repair | 2.6 | 1.5 | 2.8 | 1.6 | 4.8 | 1.2 |

Table S14-1 Standard errors for table 14-1 - Continued

| Worker characteristics | All workers |  | Full-time |  | Part-time |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1995 | 1991 | 1995 | 1991 | 1995 |
| Operators, fabricators, laborers | 2.3 | 1.1 | 2.7 | 1.2 | 3.1 | 3.2 |
| Machine operators, assemblers, inspectors | 3.2 | 1.3 | 3.5 | 1.4 | 2.0 | 1.4 |
| Transportation and material movers | 6.1 | 2.4 | 8.0 | 2.4 | 3.7 | 6.6 |
| Handlers, equipment cleaners, laborers | 6.4 | 2.6 | 8.6 | 2.9 | 9.5 | 4.3 |
| Industry |  |  |  |  |  |  |
| Agriculture, forestry, and fisheries | 3.3 | 2.1 | 3.8 | 2.2 | 5.3 | 4.0 |
| Mining | 14.6 | 9.8 | 14.6 | 9.9 | - | - |
| Construction | 3.7 | 1.9 | 3.9 | 2.2 | 1.4 | 3.7 |
| Manufacturing | 2.4 | 1.3 | 2.5 | 1.3 | 3.6 | 6.4 |
| Transportation, communications, public utilities | 5.2 | 1.8 | 6.0 | 1.9 | 6.3 | 5.3 |
| Trade | 1.9 | 1.0 | 2.1 | 1.1 | 3.1 | 1.4 |
| Finance, insurance, and real estate | 4.2 | 2.1 | 4.6 | 2.4 | 9.4 | 4.4 |
| Services | 1.7 | 0.6 | 2.2 | 0.8 | 2.5 | 1.3 |
| Public administration | 4.1 | 1.9 | 4.5 | 2.0 | 8.3 | 7.2 |

- Not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey, 1991 and 1995 (Adult Education Component).

Table S15-1 Standard errors for table 15-2

|  |  | Year |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Proficiency level | Age | 1971 | 1975 | 1980 | 1984 | 1988 | 1990 | 1992 | 1994 |
| Level 350: | 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| Learn from specialized | 13 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 |
| reading materials | 17 | 0.4 | 0.3 | 0.4 | 0.3 | 0.6 | 0.5 | 0.6 | 0.7 |
| Level 300: | 9 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.3 |
| $\quad$ Understand complicated | 13 | 0.5 | 0.5 | 0.5 | 0.4 | 0.8 | 0.6 | 0.9 | 0.8 |
| information | 17 | 1.0 | 0.8 | 1.1 | 0.8 | 1.5 | 1.0 | 1.1 | 1.2 |
| Level 250: | 9 | 0.6 | 0.6 | 0.8 | 0.6 | 1.1 | 1.0 | 0.8 | 1.2 |
| Interrelate ideas and | 13 | 1.1 | 1.0 | 1.1 | 0.6 | 1.3 | 1.0 | 1.4 | 1.2 |
| make generalizations | 17 | 0.9 | 0.7 | 0.9 | 0.5 | 0.8 | 1.0 | 0.8 | 1.0 |
| Level 200: | 9 | 1.0 | 0.8 | 1.0 | 0.7 | 1.3 | 1.3 | 1.1 | 1.4 |
| Partial skills and | 13 | 0.5 | 0.4 | 0.4 | 0.3 | 0.6 | 0.6 | 0.7 | 0.6 |
| understanding | 17 | 0.3 | 0.3 | 0.3 | 0.1 | 0.3 | 0.3 | 0.4 | 0.5 |
| Level 150: | 9 | 0.5 | 0.4 | 0.4 | 0.3 | 0.7 | 0.9 | 0.4 | 0.7 |
| Simple, discrete | 13 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.3 | 0.2 |
| reading tasks | 17 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |

SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to
Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.
Trends in Academic Progress: Achievement of U.S. Students in

Table S15-2 Standard errors for table 15-3

|  | Age 9 |  |  |  |  |  | Age 13 |  |  |  |  |  | Age 17 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentile | 1980 | 1984 | 1988 | 1990 | 1992 | 1994 | 1980 | 1984 | 1988 | 1990 | 1992 | 1994 | 1980 | 1984 | 1988 | 1990 | 1992 | 1994 |
|  | All students |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 1.6 | 1.2 | 3.6 | 3.2 | 1.6 | 2.6 | 1.9 | 1.1 | 1.7 | 1.9 | 2.8 | 4.9 | 3.0 | 1.3 | 1.3 | 2.3 | 2.9 | 3.6 |
| 10 | 1.4 | 1.2 | 2.1 | 1.9 | 1.5 | 2.5 | 1.5 | 0.9 | 1.2 | 1.8 | 1.9 | 1.7 | 1.7 | 0.9 | 2.2 | 3.1 | 2.7 | 3.1 |
| 25 | 1.2 | 1.2 | 1.8 | 1.8 | 1.5 | 1.9 | 1.1 | 0.8 | 1.2 | 1.0 | 1.8 | 1.2 | 1.1 | 1.1 | 1.8 | 1.3 | 1.1 | 1.8 |
| 50 | 0.9 | 1.0 | 1.4 | 1.5 | 0.9 | 1.1 | 0.8 | 0.8 | 1.1 | 0.9 | 1.6 | 1.1 | 0.7 | 0.9 | 1.9 | 1.3 | 1.2 | 1.8 |
| 75 | 1.0 | 0.9 | 1.3 | 1.8 | 1.2 | 1.5 | 0.8 | 0.6 | 1.4 | 0.8 | 1.4 | 1.1 | 0.7 | 0.9 | 1.4 | 1.5 | 1.4 | 1.8 |
| 90 | 1.1 | 0.9 | 1.7 | 1.8 | 1.2 | 1.6 | 0.8 | 0.8 | 1.0 | 1.0 | 1.8 | 1.4 | 0.9 | 0.7 | 2.1 | 2.1 | 1.8 | 1.8 |
| 95 | 1.6 | 1.4 | 2.0 | 1.3 | 1.2 | 1.5 | 0.8 | 1.0 | 1.3 | 1.3 | 2.6 | 1.4 | 0.7 | 1.0 | 1.8 | 1.7 | 1.9 | 1.7 |
| White |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 1.5 | 1.3 | 3.4 | 3.2 | 1.6 | 2.0 | 1.2 | 0.9 | 1.4 | 2.2 | 2.7 | 2.4 | 1.2 | 1.4 | 1.1 | 2.5 | 3.2 | 3.9 |
| 10 | 1.0 | 1.0 | 3.9 | 1.5 | 1.8 | 2.6 | 1.2 | 0.8 | 2.1 | 1.7 | 2.2 | 3.0 | 0.9 | 0.9 | 3.7 | 2.5 | 2.8 | 3.8 |
| 25 | 0.9 | 1.0 | 2.4 | 2.8 | 1.3 | 1.8 | 0.8 | 0.8 | 1.0 | 1.7 | 1.4 | 1.0 | 0.9 | 1.1 | 1.7 | 1.4 | 1.9 | 3.0 |
| 50 | 0.8 | 1.0 | 1.2 | 2.1 | 1.3 | 1.4 | 0.6 | 0.7 | 1.1 | 1.4 | 2.0 | 1.2 | 0.8 | 1.1 | 1.6 | 1.2 | 1.9 | 1.5 |
| 75 | 0.9 | 0.9 | 1.8 | 2.3 | 1.2 | 1.5 | 0.7 | 0.7 | 0.9 | 1.2 | 1.1 | 1.4 | 0.7 | 0.8 | 1.9 | 1.9 | 1.2 | 1.5 |
| 90 | 1.1 | 1.3 | 2.2 | 2.1 | 1.0 | 1.5 | 0.8 | 0.8 | 1.5 | 2.4 | 1.9 | 1.2 | 0.7 | 0.8 | 1.6 | 1.6 | 2.5 | 2.5 |
| 95 | 1.2 | 1.3 | 2.6 | 2.5 | 3.1 | 1.8 | 0.8 | 1.3 | 1.1 | 2.7 | 2.0 | 1.3 | 1.2 | 0.9 | 3.0 | 1.7 | 2.5 | 2.7 |
| Black |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 4.1 | 2.2 | 6.3 | 4.7 | 6.1 | 3.7 | 2.4 | 2.0 | 3.4 | 5.3 | 10.1 | 3.7 | 2.4 | 4.1 | 9.6 | 7.9 | 3.3 | 8.7 |
| 10 | 4.0 | 2.8 | 3.4 | 3.9 | 3.6 | 4.7 | 3.3 | 1.9 | 3.3 | 7.3 | 3.3 | 6.6 | 3.6 | 2.0 | 4.3 | 4.0 | 6.7 | 7.7 |
| 25 | 1.9 | 1.8 | 3.0 | 3.2 | 4.4 | 4.1 | 1.8 | 2.6 | 2.4 | 3.2 | 3.0 | 2.3 | 2.7 | 1.4 | 2.5 | 3.9 | 4.1 | 4.8 |
| 50 | 2.1 | 1.5 | 4.0 | 3.1 | 2.5 | 4.7 | 1.3 | 1.3 | 2.7 | 4.0 | 2.3 | 3.0 | 2.6 | 1.2 | 3.6 | 1.9 | 1.6 | 2.9 |
| 75 | 1.9 | 1.6 | 2.9 | 2.4 | 2.6 | 5.1 | 1.9 | 1.1 | 4.5 | 2.5 | 2.8 | 4.7 | 2.0 | 1.6 | 3.1 | 2.7 | 1.9 | 5.6 |
| 90 | 1.9 | 2.5 | 3.8 | 2.7 | 2.9 | 2.6 | 1.7 | 1.9 | 4.7 | 4.9 | 3.1 | 2.8 | 1.7 | 1.9 | 4.0 | 4.8 | 4.2 | 7.0 |
| 95 | 1.8 | 2.0 | 4.6 | 6.9 | 2.5 | 4.7 | 1.5 | 1.6 | 2.2 | 3.0 | 4.9 | 5.4 | 2.4 | 3.4 | 4.9 | 11.0 | 5.4 | 4.0 |
| Hispanic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 3.1 | 5.1 | 11.3 | 8.9 | 6.2 | 5.5 | 4.8 | 2.9 | 6.9 | 9.6 | 13.0 | 5.7 | 3.7 | 2.4 | 11.7 | 11.1 | 7.2 | 18.5 |
| 10 | 4.1 | 7.2 | 7.7 | 4.3 | 5.6 | 13.5 | 4.5 | 3.3 | 3.8 | 4.9 | 8.0 | 6.4 | 4.9 | 2.9 | 7.4 | 12.0 | 9.7 | 7.9 |
| 25 | 3.9 | 2.4 | 5.1 | 1.9 | 6.0 | 4.4 | 3.0 | 2.5 | 6.1 | 4.1 | 5.7 | 4.9 | 5.9 | 2.6 | 5.9 | 8.3 | 8.7 | 6.4 |
| 50 | 3.3 | 2.3 | 3.4 | 3.5 | 4.6 | 6.9 | 2.4 | 2.5 | 4.1 | 4.1 | 10.6 | 4.2 | 3.7 | 3.1 | 5.1 | 3.2 | 4.7 | 6.0 |
| 75 | 3.0 | 2.3 | 6.0 | 4.0 | 2.3 | 5.3 | 1.9 | 2.3 | 5.4 | 3.1 | 7.7 | 3.7 | 3.0 | 3.9 | 7.1 | 4.9 | 6.5 | 8.2 |
| 90 | 2.7 | 2.2 | 8.0 | 5.7 | 5.6 | 2.8 | 2.9 | 2.2 | 8.7 | 6.0 | 8.0 | 8.4 | 6.1 | 6.1 | 18.1 | 3.2 | 4.2 | 5.9 |
| 95 | 4.3 | 2.1 | 11.4 | 6.7 | 10.4 | 6.9 | 1.5 | 3.1 | 10.1 | 4.5 | 7.7 | 15.6 | 6.8 | 7.7 | 8.6 | 11.2 | 4.6 | 5.9 |

[^66] Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.
Trends in Academic Progress: Achievement of U.S. Students in

Table S15-3 Standard errors for table 15-4

| Parents' highest education level | Year | Age 9 |  | Age 13 |  | Age 17 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percentage of students | Average proficiency | Percentage of students | Average proficiency | Percentage of students | Average proficiency |
| Less than a high school graduate | 1971 | 0.4 | 1.5 | 0.6 | 1.3 | 0.8 | 1.5 |
|  | 1975 | 0.4 | 1.3 | 0.6 | 1.2 | 0.6 | 1.3 |
|  | 1980 | 0.5 | 1.6 | 0.6 | 1.1 | 0.7 | 1.5 |
|  | 1984 | 0.2 | 1.4 | 0.4 | 0.9 | 0.6 | 1.1 |
|  | 1988 | 0.6 | 4.9 | 0.6 | 2.1 | 0.8 | 2.0 |
|  | 1990 | 0.5 | 3.2 | 0.6 | 1.8 | 0.6 | 2.8 |
|  | 1992 | 0.4 | 4.5 | 0.5 | 2.6 | 0.8 | 3.9 |
|  | 1994 | 0.4 | 4.0 | 0.6 | 2.4 | 0.5 | 2.7 |
| Graduated from | 1971 | 0.5 | 1.2 | 0.7 | 0.8 | 0.8 | 1.2 |
| high school | 1975 | 0.4 | 0.9 | 0.6 | 0.7 | 0.5 | 1.1 |
|  | 1980 | 0.8 | 1.3 | 0.7 | 0.9 | 0.9 | 1.0 |
|  | 1984 | 0.6 | 1.0 | 1.0 | 0.7 | 1.1 | 0.7 |
|  | 1988 | 0.6 | 2.2 | 1.0 | 1.2 | 1.2 | 1.3 |
|  | 1990 | 0.8 | 1.8 | 1.2 | 0.9 | 1.0 | 1.4 |
|  | 1992 | 0.8 | 1.5 | 1.2 | 1.7 | 0.9 | 1.6 |
|  | 1994 | 0.8 | 2.6 | 1.2 | 1.4 | 1.1 | 1.9 |
| Some education | 1971 | 0.9 | 1.1 | 1.1 | 0.8 | 1.3 | 1.0 |
| after high school | 1975 | 0.7 | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 |
|  | 1980 | 1.5 | 1.1 | 1.3 | 0.8 | 1.3 | 1.0 |
|  | 1984 | 1.0 | 0.9 | 1.1 | 0.7 | 1.2 | 0.7 |
|  | 1988 | 1.4 | 1.7 | 1.5 | 1.4 | 1.6 | 1.3 |
|  | 1990 | 1.3 | 2.0 | 1.5 | 1.0 | 1.3 | 1.1 |
|  | 1992 | 0.9 | 1.4 | 1.6 | 1.4 | 1.4 | 1.4 |
|  | 1994 | 1.2 | 1.3 | 1.5 | 1.2 | 1.4 | 1.4 |

SOURCE: U.S. Department of Education, National Center for Science, 1960 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.

## Standard Error Tables

Table S15-4 Standard errors for table 15-5


- Not available.
* Standard error less than 0.05 is rounded to 0.0 .

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Table S15-5 Standard errors for table 15-6

| Number of types of material in the home | Year | Age 9 |  | Age 13 |  | Age 17 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percentage of students | Average proficiency | Percentage of students | Average proficiency | Percentage of students | Average proficiency |
| 0-2 | 1971 | 0.8 | 1.0 | 0.6 | 1.3 | 0.6 | 1.8 |
|  | 1994 | 1.1 | 1.5 | 0.9 | 1.8 | 0.9 | 2.0 |
| 3 | 1971 | 0.4 | 1.0 | 0.5 | 0.9 | 0.5 | 1.4 |
|  | 1994 | 0.8 | 1.5 | 0.9 | 1.7 | 0.8 | 1.8 |
|  | 1971 | 0.9 | 0.9 | 1.0 | 0.7 | 0.9 | 1.0 |
| 4 | 1994 | 1.2 | 1.4 | 1.3 | 0.9 | 1.0 | 1.5 |

SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996. Trends in Academic Progress: Achievement of U.S. Students in

Table S16-1 Standard errors for table 16-2

|  |  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Proficiency levels | Grade | 1984 | 1988 | 1990 | 1992 | 1994 |
| Level 350: | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Effective, coherent | 8 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 |
| writing | 11 | 0.7 | 0.4 | 0.7 | 0.4 | 0.3 |
| Level 300: | 4 | 0.4 | 0.2 | 0.1 | 0.2 | 0.2 |
| Complete, sufficient | 8 | 1.8 | 0.8 | 0.8 | 1.5 | 1.2 |
| writing | 11 | 2.4 | 1.7 | 1.1 | 1.9 | 1.5 |
| Level 250: | 4 | 1.0 | 1.1 | 0.9 | 1.1 | 0.8 |
| Beginning, focused, | 8 | 2.6 | 1.7 | 1.5 | 1.4 | 1.3 |
| clear writing | 11 | 1.0 | 1.5 | 1.3 | 1.3 | 1.2 |
| Level 200: | 4 | 2.0 | 2.0 | 1.7 | 1.9 | 2.0 |
| Incomplete, vague | 8 | 0.9 | 0.6 | 0.6 | 0.4 | 0.6 |
| writing | 11 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 |
| Level 150: | 4 | 1.3 | 0.8 | 1.1 | 0.5 | 0.9 |
| Disjointed, unclear | 8 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 |
| writing | 11 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |

SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.
Trends in Academic Progress: Achievement of U.S. Students in

## Standard Error Tables

Table S16-2 Standard errors for table 16-3

|  | Grade 4 |  |  |  |  | Grade 8 |  |  |  |  | Grade 11 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentile | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 |
|  | All students |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 3.3 | 3.3 | 1.8 | 1.9 | 2.6 | 4.3 | 2.9 | 2.3 | 2.0 | 3.4 | 2.3 | 4.5 | 2.7 | 3.3 | 2.0 |
| 10 | 2.7 | 1.9 | 2.3 | 1.3 | 3.3 | 3.7 | 2.6 | 1.9 | 2.9 | 2.5 | 1.7 | 2.4 | 2.4 | 2.1 | 2.1 |
| 25 | 2.1 | 1.6 | 2.1 | 1.4 | 2.3 | 3.1 | 1.9 | 1.4 | 1.5 | 2.0 | 1.7 | 1.9 | 1.8 | 1.7 | 1.7 |
| 50 | 2.9 | 2.5 | 1.7 | 2.2 | 1.3 | 2.6 | 1.4 | 1.6 | 1.6 | 1.3 | 1.9 | 1.3 | 1.3 | 1.2 | 1.7 |
| 75 | 1.5 | 1.8 | 2.3 | 1.6 | 1.4 | 2.1 | 1.2 | 1.7 | 1.7 | 1.5 | 1.7 | 1.2 | 1.4 | 1.7 | 1.5 |
| 90 | 2.2 | 2.1 | 2.1 | 1.8 | 1.3 | 1.8 | 1.4 | 1.3 | 1.7 | 1.8 | 2.6 | 1.4 | 1.8 | 1.5 | 1.4 |
| 95 | 2.7 | 2.6 | 2.7 | 2.9 | 2.7 | 2.0 | 1.8 | 1.8 | 1.6 | 1.5 | 2.9 | 1.6 | 2.7 | 2.3 | 1.3 |
|  | White |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 3.6 | 4.3 | 3.0 | 2.3 | 4.7 | 5.7 | 2.3 | 2.3 | 3.4 | 3.1 | 3.8 | 3.7 | 3.4 | 1.2 | 2.5 |
| 10 | 3.3 | 3.1 | 3.5 | 1.7 | 2.9 | 3.2 | 1.4 | 2.9 | 2.6 | 2.1 | 2.2 | 2.8 | 2.7 | 2.0 | 1.3 |
| 25 | 1.5 | 1.8 | 2.9 | 1.9 | 2.2 | 2.3 | 1.8 | 1.9 | 1.7 | 1.7 | 1.4 | 1.7 | 1.6 | 1.1 | 1.5 |
| 50 | 2.2 | 1.8 | 1.9 | 2.3 | 1.0 | 2.7 | 1.5 | 1.6 | 1.7 | 2.0 | 2.0 | 1.2 | 1.1 | 1.3 | 2.2 |
| 75 | 1.4 | 2.1 | 2.2 | 1.6 | 2.1 | 2.3 | 1.3 | 1.8 | 1.9 | 1.5 | 2.6 | 1.3 | 1.3 | 1.8 | 1.6 |
| 90 | 4.5 | 2.6 | 1.6 | 2.2 | 1.4 | 2.0 | 1.7 | 1.8 | 2.4 | 2.0 | 2.6 | 1.3 | 2.2 | 1.4 | 1.9 |
| 95 | 3.5 | 3.3 | 2.4 | 2.8 | 2.7 | 2.5 | 1.3 | 1.8 | 2.5 | 2.3 | 4.0 | 2.8 | 2.8 | 2.5 | 2.1 |
|  | Black |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 6.5 | 7.6 | 5.2 | 5.7 | 9.2 | 7.2 | 5.2 | 5.7 | 8.1 | 6.2 | 8.5 | 6.2 | 5.4 | 5.0 | 7.0 |
| 10 | 4.5 | 5.9 | 6.8 | 4.2 | 4.8 | 6.8 | 6.1 | 4.0 | 7.4 | 4.4 | 6.8 | 2.9 | 3.0 | 3.2 | 5.1 |
| 25 | 4.9 | 5.5 | 4.9 | 4.5 | 4.9 | 6.9 | 3.4 | 4.4 | 4.7 | 6.1 | 5.5 | 3.3 | 2.3 | 5.8 | 3.4 |
| 50 | 5.5 | 4.6 | 6.0 | 4.2 | 3.8 | 6.7 | 4.3 | 2.4 | 3.6 | 3.8 | 3.3 | 3.0 | 3.2 | 3.9 | 2.6 |
| 75 | 13.6 | 4.6 | 7.0 | 3.3 | 4.0 | 3.7 | 3.3 | 2.7 | 4.6 | 4.2 | 4.6 | 3.0 | 4.0 | 4.3 | 2.4 |
| 90 | 10.2 | 6.0 | 6.5 | 3.6 | 6.4 | 5.4 | 5.7 | 1.6 | 3.3 | 7.1 | 7.8 | 4.9 | 2.3 | 4.1 | 2.1 |
| 95 | 12.0 | 5.8 | 23.2 | 6.4 | 6.4 | 3.6 | 4.4 | 3.1 | 4.7 | 3.7 | 5.0 | 3.8 | 4.4 | 5.1 | 3.2 |
|  | Hispanic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 13.1 | 6.0 | 7.5 | 5.1 | 4.9 | 13.9 | 5.9 | 5.4 | 6.4 | 4.9 | 10.8 | 6.2 | 9.7 | 10.6 | 7.9 |
| 10 | 12.3 | 6.1 | 7.6 | 5.1 | 5.2 | 11.7 | 7.1 | 3.7 | 5.1 | 3.9 | 6.5 | 8.4 | 4.1 | 2.7 | 8.3 |
| 25 | 8.7 | 5.1 | 7.1 | 3.4 | 4.7 | 7.6 | 5.3 | 3.6 | 5.0 | 5.1 | 7.5 | 6.2 | 4.0 | 6.0 | 6.6 |
| 50 | 6.4 | 5.1 | 5.4 | 4.3 | 4.6 | 7.0 | 2.9 | 4.7 | 2.1 | 3.2 | 8.2 | 3.9 | 3.2 | 4.6 | 4.9 |
| 75 | 8.0 | 4.5 | 3.8 | 5.1 | 4.0 | 4.2 | 2.4 | 5.0 | 4.3 | 3.9 | 7.1 | 8.7 | 6.0 | 4.9 | 4.0 |
| 90 | 6.5 | 4.3 | 4.8 | 5.5 | 5.0 | 5.8 | 2.4 | 3.3 | 3.3 | 6.2 | 9.8 | 5.6 | 3.9 | 3.5 | 3.0 |
| 95 | 7.5 | 4.8 | 5.8 | 3.5 | 5.1 | 7.7 | 5.4 | 3.3 | 3.5 | 5.7 | 16.8 | 5.4 | 15.8 | 3.1 | 6.8 |

SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to
Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.
Trends in Academic Progress: Achievement of U.S. Students in

Table S16-3 Standard errors for table 16-4

| Parents' highest education level | Year | Grade 4 |  | Grade 8 |  | Grade 11 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percentage of students | Average proficiency | Percentage of students | Average proficiency | Percentage of students | Average proficiency |
| Less than a high school | 1984 | 0.6 | 4.6 | 0.8 | 4.8 | 1.2 | 5.2 |
| graduate | 1988 | 0.7 | 5.4 | 0.7 | 3.9 | 0.8 | 3.5 |
| Graduated high school | 1990 | 0.5 | 3.9 | 0.6 | 3.7 | 0.5 | 4.0 |
|  | 1992 | 0.4 | 3.2 | 0.8 | 5.3 | 0.8 | 3.7 |
|  | 1994 | 0.4 | 7.8 | 0.4 | 4.1 | 0.7 | 4.7 |
|  | 1984 | 1.1 | 3.4 | 1.4 | 1.6 | 2.0 | 3.0 |
|  | 1988 | 1.1 | 3.0 | 1.2 | 2.1 | 1.2 | 2.2 |
|  | 1990 | 0.9 | 3.0 | 1.1 | 1.4 | 1.1 | 2.2 |
|  | 1992 | 0.7 | 3.2 | 1.1 | 1.6 | 0.9 | 2.2 |
|  | 1994 | 0.9 | 2.3 | 1.4 | 2.2 | 1.1 | 1.7 |
| Some education | 1984 | 0.4 | 6.5 | 0.8 | 3.9 | 0.9 | 2.5 |
| after high school | 1988 | 0.5 | 6.3 | 0.6 | 3.3 | 0.8 | 2.6 |
|  | 1990 | 0.4 | 4.0 | 0.7 | 3.0 | 0.6 | 2.7 |
|  | 1992 | 0.4 | 4.5 | 0.7 | 2.2 | 0.8 | 2.0 |
|  | 1994 | 0.5 | 4.0 | 0.7 | 3.1 | 1.0 | 1.7 |
| Graduated college | 1984 | 1.4 | 3.0 | 1.5 | 1.8 | 1.6 | 2.4 |
|  | 1988 | 1.5 | 2.2 | 1.5 | 1.8 | 1.8 | 2.0 |
|  | 1990 | 1.6 | 1.6 | 1.5 | 1.8 | 1.4 | 2.0 |
|  | 1992 | 1.0 | 1.4 | 1.8 | 1.9 | 1.4 | 1.4 |
|  | 1994 | 1.4 | 2.1 | 1.6 | 1.3 | 1.9 | 1.5 |

SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.
Trends in Academic Progress: Achievement of U.S. Students in

Table S16-4 Standard errors for table 16-5

| Year | Above modal age |  | At modal age |  | Below modal age |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage | Proficiency | Percentage | Proficiency | Percentage | Proficiency |
|  | Grade 4 |  |  |  |  |  |
| 1984 | 1.0 | 4.5 | 1.0 | 2.5 | 0.3 | 21.1 |
| 1988 | 0.6 | 2.0 | 0.5 | 2.5 | 0.2 | 12.8 |
| 1990 | 1.1 | 1.7 | 1.1 | 2.7 | 0.1 | 21.8 |
| 1992 | 1.1 | 1.9 | 1.1 | 1.5 | 0.1 | 10.6 |
| 1994 | 1.0 | 3.0 | 1.0 | 1.6 | 0.2 | 19.2 |
|  | Grade 8 |  |  |  |  |  |
| 1984 | 1.4 | 3.2 | 1.4 | 1.8 | 0.3 | 11.5 |
| 1988 | 0.3 | 1.9 | 0.2 | 1.2 | 0.2 | 17.4 |
| 1990 | 0.3 | 1.7 | 0.3 | 1.5 | 0.2 | 11.4 |
| 1992 | 1.2 | 1.8 | 1.2 | 1.3 | 0.2 | 11.4 |
| 1994 | 1.0 | 2.4 | 1.0 | 1.2 | 0.2 | 9.1 |
|  | Grade 11 |  |  |  |  |  |
| 1984 | 1.5 | 3.1 | 1.2 | 1.4 | 1.3 | 3.8 |
| 1988 | 0.7 | 4.5 | 0.2 | 1.2 | 0.8 | 2.1 |
| 1990 | 0.7 | 2.0 | 0.2 | 1.1 | 0.7 | 4.3 |
| 1992 | 0.9 | 2.0 | 0.2 | 1.7 | 0.8 | 4.0 |
| 1994 | 0.9 | 3.4 | 0.3 | 0.9 | 0.9 | 3.2 |

[^67]Table S17-1 Standard errors for table 17-1

|  | Age 9 |  |  |  |  | Age 13 |  |  |  |  | Age 17 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 |
| Almost every day | 1.1 | 1.9 | 2.3 | 1.6 | 2.3 | 1.4 | 3.1 | 2.9 | 2.5 | 3.2 | 1.5 | 4.0 | 2.9 | 3.7 | 4.2 |
| 1-2 times a week | 1.7 | 2.8 | 3.0 | 2.2 | 3.1 | 1.4 | 3.5 | 3.6 | 3.8 | 3.1 | 1.7 | 3.5 | 3.7 | 3.7 | 4.1 |
| 1-2 times a month | 3.3 | 7.1 | 5.5 | 7.8 | 5.8 | 2.1 | 2.9 | 4.3 | 3.2 | 5.7 | 1.8 | 3.6 | 4.2 | 4.7 | 4.5 |
| Few times a year | 4.2 | 8.3 | 7.2 | 5.5 | 7.9 | 3.6 | 4.3 | 4.3 | 8.2 | 5.4 | 2.7 | 5.4 | 5.6 | 5.2 | 8.2 |
| Never/hardly ever | 2.7 | 3.1 | 3.5 | 3.7 | 3.9 | 2.5 | 4.8 | 5.0 | 6.4 | 5.1 | 2.4 | 7.2 | 6.8 | 5.5 | 5.2 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progess, Almanac: Reading, 1984 to 1994, 1996.

Table S17-2 Standard errors for table 17-2

| English class assignment | Grade 4 |  |  |  |  | Grade 8 |  |  |  |  | Grade 11 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 |
| Story | 2.1 | 2.0 | 1.8 | 1.8 | 1.7 | 1.6 | 2.3 | 1.9 | 2.2 | 1.6 | 1.6 | 1.5 | 1.1 | 1.1 | 1.2 |
| Essay | 1.7 | 1.9 | 1.3 | 1.0 | 1.1 | 1.9 | 2.2 | 1.7 | 1.5 | 1.7 | 1.3 | 1.4 | 1.5 | 1.6 | 1.4 |
| Poem | 1.7 | 2.2 | 1.4 | 1.4 | 1.9 | 1.3 | 1.3 | 1.1 | 1.5 | 1.6 | 0.9 | 1.2 | 1.1 | 1.2 | 1.4 |
| Play | 1.5 | 1.8 | 1.1 | 0.8 | 1.1 | 1.0 | 1.2 | 0.8 | 1.2 | 0.9 | 0.9 | 0.9 | 0.8 | 0.6 | 1.0 |
| Letter | 1.6 | 2.2 | 1.7 | 1.3 | 1.9 | 1.3 | 2.3 | 1.2 | 1.3 | 1.2 | 1.1 | 1.6 | 0.9 | 1.0 | 1.2 |
| Book report | 1.5 | 1.5 | 1.8 | 1.7 | 1.5 | 1.7 | 2.8 | 1.8 | 1.8 | 2.1 | 1.6 | 1.7 | 1.5 | 1.4 | 1.1 |
| Other reports | 1.8 | 1.5 | 1.2 | 1.1 | 1.1 | 1.5 | 1.5 | 1.2 | 1.3 | 1.2 | 1.0 | 1.4 | 1.4 | 1.3 | 1.0 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, National Assessment of Educational Progess,
Almanac: Writing, 1984 to 1994, 1996.
Table S17-3 Standard errors for table 17-3

| Type of material | Age 9 |  |  |  |  | Age 13 |  |  |  |  | Age 17 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 |
|  | At school |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.6 |
| Play | 0.1 | 0.5 | 0.4 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | 0.9 | 0.5 | 0.4 | 0.5 |
| Poem | 0.2 | 0.4 | 0.4 | 0.4 | 0.4 | 0.1 | 0.3 | 0.2 | 0.4 | 0.2 | 0.3 | 0.5 | 0.4 | 0.4 | 0.7 |
| Story/novel | 0.8 | 1.1 | 1.0 | 1.0 | 1.6 | 1.1 | 1.5 | 1.1 | 1.3 | 1.2 | 1.1 | 1.6 | 1.2 | 1.4 | 1.0 |
| Science book | 0.9 | 1.5 | 1.0 | 0.8 | 1.2 | 0.8 | 1.4 | 1.2 | 0.8 | 1.3 | 0.5 | 0.9 | 0.7 | 0.6 | 0.7 |
| Social studies book | 0.9 | 1.4 | 1.2 | 1.0 | 0.7 | 0.9 | 1.2 | 1.0 | 0.9 | 0.9 | 0.7 | 0.9 | 0.6 | 0.7 | 0.7 |
| Mathematics book | 0.7 | 1.2 | 0.8 | 0.8 | 0.9 | 0.5 | 0.8 | 0.8 | 1.0 | 0.7 | 0.4 | 0.7 | 0.6 | 0.5 | 0.6 |
| Workbook | 0.5 | 0.6 | 1.1 | 0.8 | 1.2 | 0.3 | 0.6 | 0.5 | 0.5 | 0.5 | 0.2 | 0.4 | 0.4 | 0.3 | 0.4 |
| At home |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Newspaper | 0.4 | 0.6 | 0.4 | 0.3 | 0.5 | 0.6 | 0.8 | 0.6 | 0.7 | 0.5 | 0.6 | 0.9 | 0.9 | 0.9 | 0.9 |
| Magazine | 0.5 | 0.7 | 0.7 | 0.6 | 0.9 | 0.8 | 0.8 | 1.0 | 1.0 | 1.2 | 0.6 | 1.3 | 0.8 | 1.3 | 1.2 |
| Play | 0.2 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 |
| Poem | 0.3 | 0.4 | 0.4 | 0.5 | 0.4 | 0.1 | 0.3 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 |
| Story/novel | 0.9 | 1.1 | 1.0 | 1.1 | 1.2 | 0.8 | 0.9 | 1.0 | 1.4 | 1.1 | 0.6 | 0.9 | 0.8 | 1.1 | 1.0 |
| Science book | 0.2 | 0.5 | 0.4 | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 |
| Social studies book | 0.3 | 0.4 | 0.4 | 0.2 | 0.3 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Mathematics book | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Workbook | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 |
| Something else | 0.4 | 0.7 | 0.7 | 0.5 | 0.6 | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 0.2 | 0.4 | 0.4 | 0.3 | 0.4 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, National Assessment of Educational Progess,
Almanac: Reading, 1984 to 1994, 1996.

Table S17-4 Standard errors for table 17-4

| Pages | Age 9 |  |  |  |  | Age 13 |  |  |  |  | Age 17 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| read | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 |
| More than 20 | 0.4 | 1.1 | 0.8 | 1.0 | 1.0 | 0.4 | 0.9 | 0.6 | 1.1 | 0.8 | 1.0 | 1.1 | 1.0 | 1.2 | 1.5 |
| 16-20 | 0.5 | 0.7 | 0.6 | 0.5 | 0.9 | 0.2 | 0.7 | 0.5 | 0.6 | 0.5 | 0.4 | 0.8 | 0.5 | 0.5 | 0.6 |
| 11-15 | 0.5 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.7 | 0.6 | 0.6 | 0.6 | 0.3 | 0.6 | 0.5 | 0.6 | 0.6 |
| 6-10 | 0.5 | 1.2 | 0.8 | 0.7 | 0.6 | 0.5 | 0.8 | 0.9 | 0.8 | 0.9 | 0.6 | 0.9 | 0.8 | 0.8 | 0.9 |
| 5 or fewer | 1.0 | 1.7 | 1.2 | 1.0 | 1.4 | 0.6 | 1.2 | 1.0 | 0.9 | 0.9 | 0.8 | 1.1 | 0.8 | 1.0 | 1.2 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, National Assessment of Educational Progess,
Almanac: Reading, 1984 to 1994, 1996.
Table S17-5 Standard errors for table 17-5

|  | Grade 4 |  |  |  |  | Grade 8 |  |  |  |  | Grade 11 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Writing habit | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 |
| Keep a diary or journal | - | - | - | - | - | 1.8 | 1.6 | 1.6 | 1.5 | 1.4 | 1.4 | 1.6 | 1.1 | 1.1 | 1.2 |
| Do crossword puzzle | - | - | - | - | - | 2.6 | 1.2 | 1.1 | 1.8 | 1.7 | 1.9 | 1.3 | 1.2 | 1.5 | 1.4 |
| Write for school newspaper | - | - | - | - | - | 1.1 | 1.0 | 1.0 | 1.3 | 0.9 | 0.8 | 0.8 | 0.8 | 0.7 | 1.2 |
| Help others with writing | - | - | - | - | - | 1.9 | 1.4 | 1.3 | 1.4 | 1.5 | 2.2 | 1.2 | 1.3 | 1.0 | 1.6 |
| Write letters to relatives | 2.1 | 1.4 | 1.5 | 1.5 | 1.1 | 2.0 | 1.4 | 1.6 | 1.7 | 1.9 | 1.8 | 2.0 | 1.6 | 1.4 | 2.0 |
| Write notes or messages | 2.4 | 1.9 | 1.8 | 1.5 | 1.7 | 2.0 | 1.3 | 1.4 | 1.6 | 1.3 | 1.9 | 1.6 | 1.1 | 1.1 | 1.4 |
| Write stories | 1.8 | 1.7 | 1.4 | 1.4 | 1.2 | 1.0 | 1.3 | 0.9 | 1.1 | 0.9 | 1.1 | 1.3 | 1.2 | 1.3 | 1.3 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progess, Almanac: Writing, 1984 to 1994, 1996.

## Table S17-6 Standard errors for table 17-6

| Writing habit and frequency | Grade 4 |  |  |  |  | Grade 8 |  |  |  |  | Grade 11 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 | 1984 | 1988 | 1990 | 1992 | 1994 |
| Write stories |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| At least once a week | 4.5 | 2.1 | 2.8 | 3.0 | 2.7 | 5.7 | 3.0 | 3.9 | 3.6 | 2.8 | 3.8 | 3.0 | 3.2 | 3.8 | 3.2 |
| Once or twice a month | 5.1 | 5.0 | 2.6 | 2.1 | 2.7 | 3.8 | 2.8 | 3.2 | 3.3 | 3.0 | 3.6 | 2.2 | 3.5 | 2.1 | 4.1 |
| Never or hardly ever | 2.6 | 2.2 | 2.1 | 2.1 | 2.6 | 2.6 | 1.7 | 1.7 | 1.8 | 1.9 | 2.0 | 2.4 | 1.6 | 1.4 | 1.5 |
| Keep a diary or journal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| At least once a week | - | - | - | - | - | 3.0 | 2.2 | 2.2 | 2.3 | 3.6 | 4.3 | 1.9 | 2.6 | 2.0 | 2.6 |
| Once or twice a month | - | - | - | - | - | 3.7 | 2.7 | 5.1 | 3.5 | 3.5 | 3.9 | 3.5 | 3.9 | 4.8 | 2.8 |
| Never or hardly ever | - | - | - | - | - | 2.8 | 2.2 | 2.1 | 2.2 | 2.1 | 2.4 | 1.7 | 1.6 | 2.1 | 1.7 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progess, Almanac: Writing, 1984 to 1994, 1996.

Standard Error Tables
Table S17-7 Standard errors for table 17-7

| Frequency | Age 9 |  | Age 13 |  | Age 17 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Takes books out of library | Spends own money on books | Takes books out of library | Spends own money on books | Takes books out of library | Spends own money on books |
| Almost every day |  |  |  |  |  |  |
| 1984 | 0.7 | 0.6 | 0.7 | 0.3 | 0.3 | 0.3 |
| 1988 | 1.5 | 0.8 | 0.7 | 0.7 | 0.4 | 0.6 |
| 1990 | 1.3 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 |
| 1992 | 1.2 | 0.7 | 0.6 | 1.1 | 0.4 | 0.5 |
| 1994 | 1.1 | 1.1 | 1.0 | 0.9 | 0.5 | 0.6 |
| 1-2 times a week |  |  |  |  |  |  |
| 1984 | 1.2 | 0.6 | 1.2 | 0.6 | 0.7 | 0.6 |
| 1988 | 1.9 | 0.9 | 2.2 | 1.3 | 1.9 | 1.1 |
| 1990 | 1.9 | 1.0 | 2.1 | 1.4 | 1.4 | 1.4 |
| 1992 | 1.4 | 0.8 | 2.3 | 1.3 | 1.3 | 0.9 |
| 1994 | 1.4 | 0.8 | 2.3 | 1.3 | 1.6 | 1.2 |
| 1-2 times a month |  |  |  |  |  |  |
| 1984 | 0.8 | 0.6 | 1.0 | 0.9 | 1.2 | 1.0 |
| 1988 | 1.1 | 1.0 | 2.0 | 1.6 | 2.3 | 1.8 |
| 1990 | 1.0 | 1.2 | 1.9 | 1.7 | 1.9 | 2.0 |
| 1992 | 0.9 | 1.2 | 2.5 | 2.2 | 1.7 | 1.9 |
| 1994 | 0.9 | 1.2 | 2.3 | 2.0 | 2.3 | 1.8 |
| Few times a year |  |  |  |  |  |  |
| 1984 | 0.4 | 0.6 | 0.8 | 0.8 | 1.0 | 0.8 |
| 1988 | 0.7 | 1.3 | 1.5 | 2.0 | 2.2 | 1.8 |
| 1990 | 0.6 | 1.0 | 1.4 | 1.5 | 1.7 | 2.0 |
| 1992 | 0.5 | 1.0 | 1.6 | 2.1 | 2.0 | 2.1 |
| 1994 | 0.7 | 1.3 | 1.6 | 1.5 | 2.2 | 2.0 |
| Never/hardly ever |  |  |  |  |  |  |
| 1984 | 0.6 | 1.2 | 0.8 | 1.2 | 1.0 | 1.0 |
| 1988 | 1.2 | 1.8 | 1.5 | 2.0 | 2.5 | 3.5 |
| 1990 | 1.1 | 1.4 | 1.3 | 2.2 | 1.9 | 2.0 |
| 1992 | 0.7 | 1.7 | 1.4 | 2.4 | 1.7 | 2.3 |
| 1994 | 0.9 | 1.3 | 1.4 | 1.9 | 2.2 | 2.2 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progess, Almanac: Reading, 1984 to 1994, 1996.

Table S18-1 Standard errors for table 18-2

| Grade | 1990 | 1992 | 1996 |
| :--- | :---: | :---: | :---: |
| $4^{\text {th }}$ | 0.9 | 0.7 | 0.9 |
| $8^{\text {th }}$ | 1.3 | 0.9 | 1.1 |
| $12^{\text {th }}$ | 1.1 | 0.9 | 1.0 |

[^68]Table S18-2 Standard errors for table 18-3

| State or jurisdiction | Grade 4 |  | Grade 8 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average scale score | Change from 1992 average scale score | Average scale score | Change from 1992 average scale score | Change from 1990 average scale score |
| Nation | 1.0 | 1.3 | 1.2 | 1.6 | 1.8 |
| Alabama | 1.2 | 2.0 | 2.1 | 2.7 | 2.4 |
| Alaska | 1.3 | - | 1.8 | - | - |
| Arizona | 1.7 | 2.0 | 1.6 | 2.0 | 2.1 |
| Arkansas | 1.5 | 1.7 | 1.5 | 1.9 | 1.8 |
| California | 1.8 | 2.4 | 1.9 | 2.5 | 2.3 |
| Colorado | 1.0 | 1.4 | 1.1 | 1.5 | 1.4 |
| Connecticut | 1.1 | 1.6 | 1.1 | 1.6 | 1.5 |
| Delaware | 0.6 | 1.0 | 0.9 | 1.4 | 1.3 |
| District of Columbia | 1.1 | 1.2 | 1.3 | 1.6 | 1.6 |
| Florida | 1.2 | 1.9 | 1.8 | 2.3 | 2.2 |
| Georgia | 1.5 | 1.9 | 1.6 | 2.0 | 2.1 |
| Hawaii | 1.5 | 2.0 | 1.0 | 1.3 | 1.3 |
| Indiana | 1.0 | 1.5 | 1.4 | 1.8 | 1.8 |
| Iowa | 1.1 | 1.5 | 1.3 | 1.7 | 1.7 |
| Kentucky | 1.1 | 1.5 | 1.1 | 1.5 | 1.6 |
| Lousiana | 1.1 | 1.8 | 1.6 | 2.3 | 2.0 |
| Maine | 1.0 | 1.4 | 1.3 | 1.6 | - |
| Maryland | 1.6 | 2.0 | 2.1 | 2.5 | 2.6 |
| Massachusetts | 1.4 | 1.8 | 1.7 | 2.0 | - |
| Michigan | 1.3 | 2.1 | 1.8 | 2.3 | 2.2 |
| Minnesota | 1.1 | 1.4 | 1.3 | 1.7 | 1.6 |
| Mississippi | 1.2 | 1.6 | 1.2 | 1.7 | - |
| Missouri | 1.1 | 1.6 | 1.4 | 1.8 | - |
| Montana | 1.2 | - | 1.3 | - | 1.6 |
| Nebraska | 1.2 | 1.7 | 1.0 | 1.5 | 1.5 |
| Nevada | 1.3 | - | - | - | 1.4 |
| New Jersey | 1.5 | 2.1 | - | - | 2.2 |
| New Mexico | 1.8 | 2.3 | 1.2 | 1.5 | 1.5 |
| New York | 1.2 | 1.8 | 1.7 | 2.7 | 2.7 |
| North Carolina | 1.2 | 1.6 | 1.4 | 1.8 | 1.8 |
| North Dakota | 1.2 | 1.4 | 0.9 | 1.5 | 1.5 |
| Oregon | 1.4 | - | 1.5 | - | 1.8 |
| Pennsylvania | 1.2 | 1.8 | - | - | - |
| Rhode Island | 1.4 | 2.1 | 0.9 | 1.2 | 1.1 |
| South Carolina | 1.3 | 1.7 | 1.5 | 1.8 | - |
| Tennessee | 1.4 | 1.9 | 1.4 | 2.0 | - |
| Texas | 1.4 | 1.8 | 1.4 | 1.9 | 2.0 |
| Utah | 1.2 | 1.5 | 1.0 | 1.3 | - |
| Vermont | 1.2 | - | 1.0 | - | - |
| Virginia | 1.4 | 1.9 | 1.6 | 1.9 | 2.2 |
| Washington | 1.2 | - | 1.3 | - | - |
| West Virginia | 1.0 | 1.5 | 1.0 | 1.4 | 1.4 |
| Wisconsin | 1.0 | 1.4 | 1.5 | 2.1 | 2.0 |
| Wyoming | 1.4 | 1.7 | 0.9 | 1.2 | 1.1 |

[^69]SOURCE: U.S. Department of Education, National Center for Education Statistics, NAEP 1996 Mathematics Report Card for the Nation and the States: Findings from the National Assessment of Educational Progress, 1997.

Standard Error Tables
Table S18-3 Standard errors for table 18-4

|  |  | Year |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Proficiency levels | Age | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 |
| Level 350: | 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Multi-step problem | 13 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 |
| solving and algebra | 17 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.8 |
| Level 300: | 9 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.4 |
| Moderately complex | 13 | 0.7 | 0.9 | 1.0 | 1.0 | 1.0 | 1.4 |
| procedures and reasoning | 17 | 1.1 | 1.3 | 1.4 | 1.4 | 1.3 | 1.4 |
| Level 250: | 9 | 0.7 | 1.0 | 0.9 | 0.9 | 0.9 | 1.1 |
| Numerical operations and | 13 | 1.2 | 1.2 | 1.6 | 1.0 | 1.1 | 1.1 |
| beginning problem solving | 17 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Level 200: | 9 | 0.9 | 1.2 | 1.2 | 1.0 | 0.8 | 0.7 |
| Beginning skills and | 13 | 0.5 | 0.4 | 0.2 | 0.2 | 0.3 | 0.3 |
| understandings | 17 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 |
| Level 150: | 0 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 |
| Simple arithmetic | 13 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| facts | 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.
Trends in Academic Progress: Achievement of U.S. Students in

Table S18-4 Standard errors for table 18-5

| Parents' highest education level | Year | Age 9 |  | Age 13 |  | Age 17 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percentage of students | Average proficiency | Percentage of students | Average proficiency | Percentage of students | Average proficiency |
| Less than high school graduate | 1978 | 0.4 | 1.5 | 0.6 | 1.2 | 0.6 | 1.2 |
|  | 1982 | 0.7 | 1.7 | 0.6 | 1.4 | 0.9 | 1.0 |
|  | 1986 | 0.4 | 2.5 | 1.0 | 2.3 | 0.4 | 2.3 |
|  | 1990 | 0.4 | 2.3 | 0.5 | 1.8 | 0.6 | 2.2 |
|  | 1992 | 0.3 | 2.2 | 0.5 | 1.0 | 0.6 | 2.3 |
|  | 1994 | 0.4 | 3.0 | 0.4 | 2.1 | 0.5 | 2.4 |
| Graduated from | 1978 | 0.8 | 1.1 | 0.8 | 1.0 | 0.7 | 0.8 |
| high school | 1982 | 0.8 | 1.1 | 0.8 | 0.8 | 0.8 | 0.8 |
|  | 1986 | 0.7 | 1.6 | 1.2 | 1.2 | 1.1 | 1.0 |
|  | 1990 | 0.7 | 1.2 | 0.8 | 1.2 | 1.1 | 0.9 |
|  | 1992 | 0.7 | 1.5 | 0.9 | 1.2 | 0.9 | 1.7 |
|  | 1994 | 0.6 | 1.3 | 0.9 | 1.1 | 0.8 | 1.1 |
| Some education | 1978 | 0.4 | 1.7 | 0.4 | 1.2 | 0.4 | 0.9 |
| after high school | 1982 | 0.4 | 2.1 | 0.4 | 0.9 | 0.5 | 0.9 |
|  | 1986 | 0.6 | 2.1 | 0.6 | 0.8 | 1.0 | 1.2 |
|  | 1990 | 0.4 | 2.0 | 0.6 | 1.0 | 0.9 | 1.0 |
|  | 1992 | 0.4 | 1.9 | 0.7 | 1.0 | 0.9 | 1.1 |
|  | 1994 | 0.4 | 2.1 | 0.6 | 1.6 | 1.1 | 1.3 |
| Graduated from college | 1978 | 1.1 | 1.1 | 1.2 | 1.2 | 1.1 | 1.0 |
|  | 1982 | 1.5 | 1.5 | 1.3 | 1.5 | 1.3 | 1.0 |
|  | 1986 | 1.1 | 1.1 | 2.0 | 1.4 | 1.2 | 1.4 |
|  | 1990 | 1.1 | 1.3 | 1.2 | 1.0 | 1.4 | 1.3 |
|  | 1992 | 1.2 | 1.0 | 1.3 | 1.0 | 1.4 | 1.0 |
|  | 1994 | 0.8 | 0.8 | 1.3 | 1.2 | 1.5 | 1.4 |

SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.
Trends in Academic Progress: Achievement of U.S. Students in

Table S18-5 Standard errors for table 18-6

|  | Age 9 |  |  |  |  |  | Age 13 |  |  |  |  |  | Age 17 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentile | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 |
|  | All students |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 1.0 | 1.8 | 1.3 | 2.6 | 1.6 | 1.4 | 1.6 | 2.7 | 1.8 | 2.2 | 2.0 | 2.0 | 1.3 | 1.1 | 1.2 | 1.0 | 2.1 | 1.9 |
| 10 | 1.2 | 1.8 | 1.5 | 2.2 | 1.2 | 1.4 | 1.5 | 1.6 | 1.4 | 1.4 | 1.2 | 1.4 | 1.1 | 1.0 | 1.0 | 1.1 | 1.6 | 1.0 |
| 25 | 1.0 | 1.1 | 1.6 | 1.3 | 1.2 | 0.9 | 1.3 | 1.2 | 1.8 | 0.9 | 1.1 | 1.3 | 1.2 | 1.3 | 0.6 | 1.0 | 1.2 | 1.0 |
| 50 | 1.0 | 1.2 | 1.1 | 0.9 | 0.8 | 1.1 | 1.1 | 1.0 | 1.3 | 1.0 | 0.7 | 0.9 | 1.1 | 1.0 | 1.3 | 1.1 | 1.0 | 1.2 |
| 75 | 0.9 | 1.4 | 1.2 | 0.7 | 0.8 | 0.8 | 1.1 | 1.1 | 1.3 | 1.0 | 1.0 | 1.2 | 1.0 | 0.8 | 1.9 | 1.2 | 1.0 | 1.2 |
| 90 | 1.2 | 1.0 | 1.3 | 1.0 | 1.3 | 1.0 | 1.2 | 1.2 | 1.5 | 1.0 | 1.6 | 1.2 | 0.8 | 0.9 | 1.3 | 1.3 | 1.1 | 1.5 |
| 95 | 1.2 | 1.3 | 1.2 | 1.3 | 1.2 | 1.1 | 1.3 | 1.2 | 2.2 | 1.6 | 1.2 | 1.5 | 0.9 | 1.1 | 1.1 | 2.2 | 1.0 | 1.7 |
|  | White |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 1.5 | 1.4 | 2.4 | 2.4 | 1.5 | 2.4 | 1.4 | 1.6 | 1.5 | 1.5 | 1.6 | 1.0 | 0.6 | 1.1 | 1.6 | 1.3 | 2.0 | 1.7 |
| 10 | 1.5 | 1.7 | 1.7 | 1.6 | 1.5 | 1.1 | 1.4 | 1.2 | 1.3 | 1.0 | 1.4 | 1.1 | 1.3 | 1.1 | 1.3 | 1.5 | 1.4 | 1.7 |
| 25 | 1.1 | 1.3 | 1.1 | 0.9 | 0.9 | 1.3 | 0.9 | 1.1 | 1.4 | 1.1 | 0.8 | 1.1 | 1.0 | 1.1 | 1.2 | 1.5 | 1.1 | 1.5 |
| 50 | 1.0 | 1.4 | 1.1 | 1.0 | 1.1 | 1.1 | 1.0 | 0.9 | 1.0 | 1.0 | 1.0 | 1.2 | 1.0 | 1.2 | 1.3 | 1.3 | 1.0 | 1.3 |
| 75 | 0.8 | 0.9 | 0.8 | 0.6 | 1.0 | 1.1 | 0.7 | 1.0 | 1.3 | 1.1 | 1.1 | 1.3 | 0.8 | 0.9 | 1.7 | 1.2 | 1.0 | 1.2 |
| 90 | 1.1 | 1.0 | 1.2 | 0.8 | 1.3 | 1.1 | 1.2 | 1.4 | 2.2 | 1.3 | 1.3 | 1.5 | 0.7 | 1.1 | 1.3 | 1.0 | 1.0 | 1.6 |
| 95 | 1.7 | 1.3 | 1.8 | 2.1 | 1.6 | 1.2 | 1.3 | 1.4 | 1.8 | 1.6 | 1.4 | 1.7 | 0.7 | 1.5 | 1.4 | 1.3 | 1.2 | 1.8 |
|  | Black |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 1.9 | 2.5 | 3.2 | 1.7 | 3.4 | 3.8 | 1.9 | 4.3 | 4.5 | 5.4 | 4.5 | 7.7 | 2.0 | 1.4 | 3.9 | 4.4 | 4.3 | 5.7 |
| 10 | 1.7 | 2.3 | 4.9 | 3.7 | 2.9 | 3.0 | 2.6 | 3.7 | 2.3 | 2.2 | 5.1 | 3.8 | 1.7 | 1.7 | 4.2 | 3.5 | 6.9 | 1.9 |
| 25 | 1.9 | 2.0 | 4.1 | 4.1 | 2.4 | 1.7 | 1.9 | 1.8 | 2.2 | 3.0 | 3.0 | 3.6 | 1.2 | 1.6 | 1.6 | 1.8 | 3.8 | 2.5 |
| 50 | 1.1 | 2.0 | 1.6 | 3.1 | 2.1 | 1.7 | 2.2 | 1.9 | 2.3 | 2.0 | 1.9 | 3.8 | 1.6 | 1.4 | 3.9 | 2.5 | 1.9 | 2.1 |
| 75 | 1.6 | 2.0 | 2.0 | 2.1 | 2.0 | 1.0 | 2.2 | 1.4 | 1.5 | 2.9 | 1.8 | 4.8 | 2.2 | 1.7 | 2.5 | 5.3 | 3.9 | 2.0 |
| 90 | 1.6 | 2.5 | 1.7 | 2.9 | 2.1 | 5.2 | 2.4 | 2.2 | 3.7 | 2.8 | 2.1 | 3.5 | 2.1 | 1.7 | 7.4 | 5.8 | 2.3 | 4.1 |
| 95 | 1.4 | 2.8 | 1.3 | 4.3 | 3.4 | 2.2 | 3.9 | 1.7 | 4.3 | 4.1 | 3.5 | 8.3 | 2.5 | 2.2 | 4.1 | 4.2 | 3.0 | 6.5 |
|  | Hispanic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 5.4 | 2.8 | 3.7 | 3.4 | 4.4 | 3.3 | 1.8 | 2.2 | 3.6 | 3.7 | 3.5 | 2.8 | 4.4 | 1.7 | 5.3 | 5.4 | 4.3 | 5.1 |
| 10 | 3.7 | 3.2 | 1.8 | 1.4 | 3.5 | 4.1 | 2.2 | 2.6 | 3.8 | 3.1 | 2.4 | 3.0 | 2.9 | 3.2 | 4.5 | 8.1 | 3.5 | 5.8 |
| 25 | 3.2 | 2.3 | 3.2 | 3.6 | 2.2 | 3.0 | 1.8 | 1.9 | 2.7 | 2.2 | 3.2 | 2.3 | 1.8 | 2.4 | 2.8 | 6.8 | 4.5 | 3.8 |
| 50 | 3.0 | 1.6 | 2.4 | 4.1 | 3.5 | 2.5 | 2.0 | 1.4 | 3.4 | 1.9 | 2.3 | 1.6 | 3.6 | 3.2 | 2.5 | 2.4 | 3.4 | 5.4 |
| 75 | 2.5 | 2.0 | 3.8 | 3.3 | 3.4 | 3.8 | 3.2 | 1.4 | 2.4 | 3.5 | 2.9 | 2.2 | 3.9 | 2.6 | 4.2 | 4.4 | 3.7 | 5.5 |
| 90 | 4.0 | 3.4 | 3.8 | 3.4 | 3.8 | 4.4 | 3.4 | 2.4 | 3.1 | 2.9 | 1.6 | 2.3 | 3.9 | 2.6 | 2.3 | 3.6 | 4.8 | 3.6 |
| 95 | 4.6 | 2.9 | 4.6 | 3.5 | 6.8 | 7.3 | 3.1 | 2.9 | 1.9 | 3.3 | 3.2 | 9.7 | 0.9 | 4.4 | 7.3 | 8.6 | 2.7 | 2.9 |

SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to
Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.
Trends in Academic Progress: Achievement of U.S. Students in

Table S18-6 Standard errors for table 18-7

| Year | Below modal grade |  | At modal grade |  | Above modal grade |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage | Proficiency | Percentage | Proficiency | Percentage | Proficiency |
|  | Age 9 |  |  |  |  |  |
| 1978 | 0.9 | 1.1 | 0.9 | 0.9 | 0.2 | 7.1 |
| 1982 | 1.5 | 1.4 | 1.5 | 1.0 | 0.1 | 9.3 |
| 1986 | 1.7 | 1.0 | 1.7 | 1.0 | 0.1 | - |
| 1990 | 1.4 | 1.2 | 1.4 | 1.0 | 0.1 | - |
| 1992 | 1.2 | 1.2 | 1.2 | 0.7 | 0.1 | - |
| 1994 | 1.3 | 1.1 | 1.3 | 1.0 | - | - |
|  | Age 13 |  |  |  |  |  |
| 1978 | 1.1 | 1.4 | 1.1 | 1.1 | 0.7 | 9.1 |
| 1982 | 1.4 | 1.4 | 1.4 | 0.9 | 1.4 | 6.3 |
| 1986 | 2.1 | 1.1 | 2.1 | 1.0 | 0.5 | 7.7 |
| 1990 | 1.3 | 1.0 | 1.4 | 0.9 | 0.5 | 16.5 |
| 1992 | 1.1 | 1.3 | 1.0 | 0.9 | 0.2 | - |
| 1994 | 1.3 | 1.2 | 1.3 | 1.0 | - | - |
|  | Age 17 |  |  |  |  |  |
| 1978 | 0.6 | 1.1 | 0.7 | 1.0 | 0.5 | 1.0 |
| 1982 | 1.0 | 1.6 | 1.0 | 0.9 | 0.7 | 1.4 |
| 1986 | 0.9 | 1.6 | 1.2 | 0.9 | 0.7 | 3.0 |
| 1990 | 1.0 | 1.7 | 1.0 | 0.8 | 0.6 | 1.8 |
| 1992 | 1.1 | 1.4 | 1.0 | 0.8 | 0.5 | 2.4 |
| 1994 | 1.6 | 1.6 | 1.7 | 0.9 | 0.6 | 3.1 |

- Not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

Table S19-1 Standard errors for table 19-2

|  |  | Year |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Proficiency level | Age | 1977 | 1982 | 1986 | 1990 | 1992 | 1994 |
| Level 350: | 9 | 0.1 | 0.1 | 0.1 | $* 0.0$ | 0.1 | $* 0.0$ |
| Integrates specialized | 13 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| scientific information | 17 | 0.4 | 0.4 | 0.7 | 0.5 | 0.7 | 0.8 |
| Level 300: | 9 | 0.3 | 0.7 | 0.5 | 0.3 | 0.3 | 0.4 |
| Analyzes scientific | 13 | 0.5 | 0.7 | 0.9 | 0.6 | 0.8 | 0.9 |
| procedures and data | 17 | 0.9 | 0.9 | 1.4 | 1.3 | 1.5 | 1.3 |
| Level 250: | 9 | 0.7 | 1.8 | 1.4 | 0.8 | 1.0 | 1.2 |
| Applies general | 13 | 1.1 | 1.6 | 1.6 | 1.0 | 1.1 | 1.1 |
| scientific information | 9 | 0.7 | 1.0 | 1.3 | 0.9 | 1.2 | 1.2 |
| Level 200: | 13 | 1.1 | 1.9 | 1.1 | 0.9 | 1.2 | 1.0 |
| Understands simple | 17 | 0.7 | 0.8 | 1.0 | 0.7 | 0.5 | 0.6 |
| scientific principles | 9 | 0.2 | 0.5 | 0.5 | 0.3 | 0.5 | 0.7 |
| Level 150: | 0.6 | 0.7 | 0.3 | 0.3 | 0.3 | 0.4 |  |
| Knows everyday | 13 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| science facts | 17 |  | 0.0 | 0.1 | 0.1 | 0.2 | $* 0.0$ |

[^70]SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to 1994; Writing, 1984 to 1994, 1996.

## Standard Error Tables

Table S19-2 Standard errors for table 19-3

|  | Age 9 |  |  |  |  |  | Age 13 |  |  |  |  |  | Age 17 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentile | 1977 | 1982 | 1986 | 1990 | 1992 | 1994 | 1977 | 1982 | 1986 | 1990 | 1992 | 1994 | 1977 | 1982 | 1986 | 1990 | 1992 | 1994 |
|  | All students |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 2.3 | 4.9 | 1.3 | 1.3 | 2.0 | 1.7 | 1.7 | 2.2 | 2.2 | 2.0 | 1.5 | 1.7 | 1.3 | 2.2 | 2.4 | 2.3 | 2.1 | 4.3 |
| 10 | 2.1 | 2.6 | 1.8 | 1.1 | 1.8 | 1.7 | 1.4 | 1.8 | 2.0 | 1.7 | 1.3 | 1.4 | 1.4 | 1.9 | 2.4 | 2.0 | 2.5 | 4.3 |
| 25 | 1.6 | 2.2 | 1.3 | 1.4 | 1.6 | 1.6 | 1.4 | 1.1 | 1.3 | 1.5 | 1.3 | 1.3 | 1.4 | 2.1 | 1.9 | 1.9 | 2.3 | 2.0 |
| 50 | 1.1 | 2.4 | 1.7 | 0.9 | 0.9 | 1.9 | 1.2 | 1.3 | 1.8 | 1.2 | 1.0 | 0.9 | 1.0 | 1.0 | 1.9 | 1.3 | 1.5 | 1.2 |
| 75 | 1.1 | 2.0 | 1.7 | 0.8 | 1.0 | 1.1 | 0.9 | 1.5 | 1.5 | 0.9 | 1.0 | 1.1 | 0.9 | 1.6 | 1.3 | 1.4 | 1.3 | 1.1 |
| 90 | 1.2 | 3.9 | 2.0 | 1.3 | 1.6 | 0.9 | 0.9 | 1.6 | 2.0 | 1.1 | 1.2 | 1.7 | 1.1 | 1.1 | 1.9 | 1.2 | 1.9 | 1.5 |
| 95 | 1.2 | 3.7 | 1.9 | 1.4 | 1.4 | 1.4 | 1.5 | 1.3 | 1.6 | 1.9 | 1.4 | 1.9 | 1.3 | 1.4 | 2.0 | 1.5 | 1.2 | 1.8 |
|  | White |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 1.3 | 3.0 | 2.3 | 1.4 | 2.0 | 2.3 | 0.9 | 1.7 | 2.7 | 1.6 | 2.2 | 1.6 | 0.9 | 1.7 | 2.9 | 2.3 | 3.9 | 4.4 |
| 10 | 1.1 | 3.1 | 1.5 | 1.3 | 1.5 | 1.8 | 1.2 | 1.7 | 1.5 | 1.2 | 1.6 | 1.2 | 0.7 | 1.5 | 3.1 | 2.0 | 2.5 | 3.1 |
| 25 | 1.1 | 2.6 | 1.5 | 0.8 | 1.3 | 1.2 | 1.3 | 1.2 | 1.9 | 0.9 | 1.1 | 1.1 | 0.8 | 1.5 | 2.0 | 1.5 | 2.2 | 1.7 |
| 50 | 0.9 | 2.4 | 1.6 | 1.0 | 1.1 | 1.4 | 0.8 | 1.3 | 2.0 | 1.1 | 1.1 | 1.3 | 0.7 | 1.0 | 1.7 | 1.2 | 1.5 | 1.6 |
| 75 | 0.8 | 2.0 | 1.4 | 1.0 | 1.3 | 1.5 | 0.7 | 1.1 | 1.9 | 1.7 | 1.2 | 1.5 | 0.9 | 1.6 | 1.3 | 1.6 | 1.7 | 1.4 |
| 90 | 1.1 | 2.8 | 1.7 | 1.4 | 1.6 | 1.0 | 0.9 | 1.6 | 1.9 | 1.4 | 1.6 | 1.8 | 1.0 | 1.3 | 3.0 | 1.3 | 1.5 | 2.0 |
| 95 | 1.9 | 4.0 | 2.5 | 1.3 | 0.8 | 2.6 | 1.1 | 1.7 | 2.1 | 1.3 | 1.4 | 2.7 | 1.4 | 1.3 | 2.8 | 2.0 | 0.9 | 4.8 |
|  | Black |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 3.5 | 11.0 | 3.2 | 4.2 | 4.2 | 2.7 | 3.2 | 3.1 | 1.7 | 5.5 | 3.7 | 5.9 | 1.5 | 3.1 | 4.8 | 10.1 | 4.0 | 5.0 |
| 10 | 3.4 | 8.3 | 3.5 | 3.8 | 4.0 | 3.2 | 2.4 | 3.1 | 2.2 | 6.1 | 3.8 | 5.5 | 1.9 | 3.5 | 4.9 | 3.1 | 4.1 | 3.5 |
| 25 | 2.4 | 4.9 | 2.6 | 2.6 | 3.5 | 2.8 | 2.2 | 2.4 | 3.0 | 3.7 | 3.6 | 3.6 | 1.4 | 3.2 | 4.2 | 4.3 | 1.7 | 5.5 |
| 50 | 2.5 | 5.0 | 2.2 | 2.5 | 3.0 | 2.3 | 2.5 | 1.3 | 2.8 | 3.0 | 2.4 | 5.3 | 1.8 | 3.0 | 5.9 | 3.0 | 3.2 | 3.1 |
| 75 | 1.8 | 3.8 | 1.5 | 1.7 | 3.4 | 3.3 | 2.6 | 2.2 | 3.6 | 2.6 | 3.6 | 4.2 | 2.0 | 2.2 | 3.4 | 6.0 | 5.9 | 5.1 |
| 90 | 2.9 | 4.7 | 3.7 | 2.4 | 3.0 | 2.4 | 3.4 | 3.5 | 4.9 | 4.2 | 2.7 | 7.0 | 2.6 | 3.9 | 4.2 | 11.3 | 10.3 | 3.8 |
| 95 | 2.9 | 3.3 | 3.5 | 5.4 | 4.6 | 1.6 | 2.7 | 1.9 | 2.5 | 3.7 | 7.6 | 13.3 | 2.6 | 1.6 | 5.8 | 10.2 | 8.7 | 4.5 |
|  | Hispanic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 7.0 | 9.6 | 10.1 | 5.5 | 3.0 | 9.1 | 3.5 | 4.9 | 5.6 | 4.7 | 3.7 | 3.1 | 5.2 | 6.1 | 9.3 | 6.2 | 10.5 | 6.9 |
| 10 | 3.3 | 16.8 | 5.2 | 4.3 | 3.9 | 4.1 | 3.0 | 4.1 | 4.5 | 4.5 | 6.4 | 1.8 | 4.0 | 7.2 | 3.8 | 11.1 | 14.6 | 5.7 |
| 25 | 4.3 | 7.4 | 3.4 | 3.7 | 3.5 | 3.4 | 3.5 | 3.6 | 5.5 | 4.1 | 3.8 | 3.3 | 3.9 | 3.3 | 5.6 | 3.6 | 8.6 | 7.7 |
| 50 | 3.6 | 4.8 | 6.7 | 3.7 | 4.1 | 2.2 | 2.5 | 4.4 | 3.8 | 3.3 | 4.5 | 2.7 | 2.4 | 2.5 | 5.8 | 5.7 | 11.0 | 12.0 |
| 75 | 3.2 | 3.4 | 4.1 | 4.1 | 2.3 | 4.8 | 3.5 | 5.1 | 3.4 | 5.1 | 3.4 | 5.0 | 5.1 | 3.4 | 3.6 | 10.6 | 2.8 | 5.7 |
| 90 | 4.9 | 5.6 | 5.4 | 4.4 | 5.5 | 6.5 | 2.0 | 5.1 | 3.5 | 5.9 | 2.5 | 7.1 | 4.4 | 3.4 | 7.6 | 5.1 | 6.7 | 5.8 |
| 95 | 6.4 | 7.6 | 6.7 | 6.9 | 3.5 | 4.3 | 4.4 | 6.1 | 3.8 | 2.8 | 4.2 | 6.8 | 4.4 | 11.0 | 6.3 | 9.1 | 6.0 | 4.8 |

SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to
Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.
Trends in Academic Progress: Achievement of U.S. Students in

Table S19-3 Standard errors for table 19-4

| Parents' highest education level | Year | Age 9 |  | Age 13 |  | Age 17 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percentage of students | Average proficiency | Percentage of students | Average proficiency | Percentage of students | Average proficiency |
| Less than high school graduate | 1977 | 0.4 | 2.2 | 0.7 | 1.3 | 0.9 | 1.3 |
|  | 1982 | 0.9 | 6.0 | 0.6 | 1.9 | 0.7 | 2.4 |
|  | 1986 | 0.4 | 2.9 | 1.0 | 2.7 | 0.4 | 3.1 |
|  | 1990 | 0.4 | 2.7 | 0.5 | 2.1 | 0.6 | 2.8 |
|  | 1992 | 0.3 | 2.6 | 0.5 | 2.9 | 0.6 | 3.8 |
|  | 1994 | 0.4 | 3.4 | 0.4 | 2.5 | 0.5 | 4.2 |
| Graduated from | 1977 | 0.5 | 1.4 | 0.6 | 1.1 | 0.6 | 0.8 |
| high school | 1982 | 1.1 | 3.3 | 1.1 | 1.3 | 0.9 | 1.6 |
|  | 1986 | 0.7 | 1.5 | 1.2 | 1.4 | 1.1 | 2.0 |
|  | 1990 | 0.7 | 1.7 | 0.8 | 1.3 | 1.1 | 1.4 |
|  | 1992 | 0.7 | 1.9 | 0.9 | 1.4 | 0.9 | 2.4 |
|  | 1994 | 0.6 | 1.4 | 0.9 | 1.2 | 0.8 | 1.7 |
| Some education | 1977 | 0.3 | 1.5 | 0.5 | 1.3 | 0.4 | 1.1 |
| after high school | 1982 | 0.6 | 3.2 | 0.6 | 1.5 | 0.6 | 1.7 |
|  | 1986 | 0.6 | 2.6 | 0.6 | 1.4 | 1.0 | 2.5 |
|  | 1990 | 0.4 | 2.1 | 0.6 | 1.2 | 0.9 | 1.6 |
|  | 1992 | 0.4 | 2.4 | 0.7 | 1.1 | 0.9 | 1.7 |
|  | 1994 | 0.4 | 2.8 | 0.6 | 2.0 | 1.1 | 1.9 |
| Graduated from | 1977 | 0.7 | 1.4 | 1.0 | 1.0 | 1.2 | 1.0 |
| college | 1982 | 2.3 | 2.3 | 1.5 | 1.5 | 1.4 | 1.7 |
|  | 1986 | 1.1 | 1.4 | 2.2 | 1.9 | 1.2 | 2.1 |
|  | 1990 | 1.1 | 1.3 | 1.2 | 1.1 | 1.3 | 1.7 |
|  | 1992 | 1.2 | 1.2 | 1.3 | 1.0 | 1.4 | 1.3 |
|  | 1994 | 0.8 | 1.4 | 1.3 | 1.3 | 1.5 | 1.6 |

SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996. Trends in Academic Progress: Achievement of U.S. Students in

Standard Error Tables
Table S19-4 Standard errors for table 19-5

| Year | Below modal grade |  | At modal grade |  | Above modal grade |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage | Proficiency | Percentage | Proficiency | Percentage | Proficiency |
|  | Age 9 |  |  |  |  |  |
| 1977 | 1.0 | 1.6 | 1.0 | 1.2 | 0.1 | 6.2 |
| 1982 | 1.9 | 2.9 | 1.9 | 2.2 | 0.2 | 13.1 |
| 1986 | 1.7 | 1.6 | 1.7 | 1.2 | 0.1 | 10.7 |
| 1990 | 1.4 | 1.5 | 1.4 | 1.0 | 0.1 | 9.6 |
| 1992 | 1.2 | 1.4 | 1.2 | 1.0 | 0.1 | 16.2 |
| 1994 | 1.3 | 1.7 | 1.3 | 1.3 | 0.1 | 14.6 |
|  | Age 13 |  |  |  |  |  |
| 1977 | 0.9 | 1.6 | 0.7 | 1.0 | 0.4 | 3.9 |
| 1982 | 1.3 | 1.6 | 1.3 | 1.3 | 0.1 | 8.2 |
| 1986 | 2.1 | 1.9 | 2.1 | 1.3 | 0.1 | 6.3 |
| 1990 | 1.3 | 1.6 | 1.4 | 1.0 | 0.2 | 17.5 |
| 1992 | 1.1 | 1.4 | 1.0 | 1.0 | 0.1 | 14.9 |
| 1994 | 1.3 | 1.5 | 1.3 | 1.1 | 0.7 | 24.7 |
|  | Age 17 |  |  |  |  |  |
| 1977 | 0.6 | 1.4 | 0.6 | 0.9 | 0.5 | 1.5 |
| 1982 | 1.0 | 2.2 | 1.0 | 1.1 | 0.7 | 2.6 |
| 1986 | 0.9 | 2.7 | 1.2 | 1.6 | 0.7 | 4.3 |
| 1990 | 1.0 | 2.0 | 1.0 | 1.0 | 0.6 | 2.5 |
| 1992 | 1.1 | 2.6 | 1.0 | 1.2 | 0.5 | 4.1 |
| 1994 | 1.6 | 3.4 | 1.7 | 1.3 | 0.6 | 4.2 |

SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996.
Trends in Academic Progress: Achievement of U.S. Students in

Table S20-1 Standard errors for table 20-1

| Country | Average score |  |  | Percentile distribution |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Boys | Girls | $5^{\text {th }}$ | $25^{\text {th }}$ | $50^{\text {th }}$ | $75^{\text {th }}$ | $95^{\text {th }}$ |
| Singapore | 4.9 | 6.3 | 5.4 | 5.8 | 8.9 | 7.2 | 4.5 | 7.5 |
| Korea | 2.4 | 3.2 | 3.4 | 4.0 | 5.0 | 3.9 | 2.7 | 7.1 |
| Japan | 1.9 | 2.6 | 2.1 | 2.1 | 6.8 | 2.5 | 1.4 | 4.8 |
| Hong Kong | 6.5 | 7.7 | 7.7 | 14.2 | 6.8 | 5.9 | 4.9 | 5.4 |
| Belgium (FI) | 5.7 | 8.8 | 7.4 | 7.7 | 8.7 | 8.7 | 5.7 | 3.5 |
| Czech Republic | 4.9 | 4.5 | 6.3 | 3.5 | 2.6 | 7.5 | 8.5 | 12.6 |
| Slovak Republic | 3.3 | 3.7 | 3.6 | 1.6 | 0.6 | 4.4 | 3.9 | 2.7 |
| Switzerland | 2.8 | 3.5 | 3.1 | 6.3 | 2.1 | 6.1 | 2.9 | 2.8 |
| Netherlands | 6.7 | 7.8 | 6.4 | 10.6 | 9.1 | 9.2 | 7.4 | 6.9 |
| Slovenia | 3.1 | 3.8 | 3.3 | 2.5 | 3.6 | 6.7 | 4.0 | 4.3 |
| Bulgaria | 6.3 | - | - | 11.4 | 4.2 | 10.6 | 13.8 | 0.4 |
| Austria | 3.0 | 3.2 | 4.5 | 5.1 | 4.1 | 5.8 | 2.6 | 6.4 |
| France | 2.9 | 3.1 | 3.8 | 5.2 | 1.4 | 3.0 | 2.5 | 3.4 |
| Hungary | 3.2 | 3.6 | 3.6 | 2.3 | 2.1 | 2.6 | 2.7 | 9.2 |
| Russian Federation | 5.3 | 6.3 | 5.0 | 4.5 | 5.6 | 11.3 | 8.2 | 2.9 |
| Australia | 4.0 | 5.1 | 4.6 | 4.1 | 1.5 | 7.0 | 7.2 | 5.4 |
| Canada | 2.4 | 3.2 | 2.7 | 3.3 | 2.0 | 2.7 | 2.4 | 3.7 |
| Ireland | 5.1 | 7.2 | 6.0 | 6.5 | 4.9 | 8.2 | 9.6 | 3.3 |
| Belgium (Fr) | 3.4 | 4.7 | 3.7 | 13.8 | 1.1 | 5.5 | 3.7 | 6.2 |
| Israel | 6.2 | 6.6 | 6.9 | 6.3 | 7.5 | 9.3 | 4.9 | 7.2 |
| Thailand | 5.7 | 5.6 | 7.0 | 3.7 | 4.4 | 5.9 | 6.8 | 12.0 |
| Sweden | 3.0 | 3.6 | 3.1 | 2.9 | 6.0 | 3.7 | 3.4 | 4.7 |
| Germany | 4.5 | 5.1 | 5.0 | 8.2 | 9.4 | 6.3 | 7.5 | 10.9 |
| New Zealand | 4.5 | 5.9 | 5.3 | 3.1 | 4.0 | 5.0 | 5.5 | 9.1 |
| England | 2.6 | 5.1 | 3.5 | 8.8 | 4.8 | 3.5 | 2.7 | 4.1 |
| Norway | 2.2 | 2.8 | 2.7 | 5.5 | 2.0 | 2.8 | 3.1 | 5.9 |
| Denmark | 2.8 | 3.2 | 3.4 | 9.8 | 2.9 | 4.9 | 2.2 | 5.9 |
| United States | 4.6 | 5.2 | 4.5 | 3.3 | 3.4 | 6.4 | 8.2 | 3.7 |
| Scotland | 5.5 | 6.6 | 5.2 | 2.1 | 3.2 | 7.2 | 7.1 | 15.3 |
| Latvia (LSS) | 3.1 | 3.8 | 3.5 | 5.2 | 2.6 | 3.3 | 4.3 | 8.1 |
| Iceland | 4.5 | 5.5 | 5.6 | 4.3 | 3.3 | 6.2 | 4.8 | 21.0 |
| Spain | 2.0 | 2.5 | 2.6 | 2.0 | 2.5 | 1.8 | 3.5 | 3.9 |
| Greece | 3.1 | 3.7 | 3.1 | 2.8 | 1.9 | 3.8 | 3.6 | 6.6 |
| Romania | 4.0 | 4.8 | 4.0 | 3.1 | 3.0 | 5.5 | 5.2 | 9.7 |
| Lithuania | 3.5 | 4.0 | 4.1 | 5.0 | 3.1 | 5.3 | 4.3 | 8.5 |
| Cyprus | 1.9 | 2.8 | 2.5 | 3.3 | 1.2 | 1.6 | 3.2 | 7.3 |
| Portugal | 2.5 | 2.8 | 2.7 | 3.0 | 1.0 | 2.2 | 6.7 | 7.1 |
| Iran, Islamic Rep. | 2.2 | 2.9 | 3.3 | 4.4 | 2.2 | 2.9 | 5.8 | 9.8 |
| Kuwait | 2.5 | - | - | 4.7 | 3.5 | 5.0 | 3.2 | 6.1 |
| Colombia | 3.4 | 6.9 | 3.6 | 5.8 | 4.4 | 3.6 | 6.1 | 7.5 |
| South Africa | 4.4 | 6.3 | 4.1 | 3.7 | 2.2 | 2.0 | 4.9 | 10.4 |

- Not available.

SOURCE: International Association for the Evaluation of Educational Achievement, TIMSS International Study Center, Mathematics Achievement in the Middle School Years, IEA's Third International Mathematics and Science Study, 1996, tables 1.1, 1.6, and E.1.

Standard Error Tables
Table S20-2 Standard errors for table 20-2

| Country | Average score |  |  | Percentile distribution |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Boys | Girls | $5^{\text {th }}$ | $25^{\text {th }}$ | $50^{\text {th }}$ | $75^{\text {th }}$ | $95^{\text {th }}$ |
| Singapore | 5.5 | 6.7 | 7.0 | 5.2 | 7.4 | 7.4 | 6.5 | 6.1 |
| Czech Republic | 4.3 | 4.2 | 5.8 | 4.9 | 2.9 | 5.3 | 5.1 | 4.5 |
| Japan | 1.6 | 2.4 | 2.0 | 0.5 | 4.3 | 1.5 | 1.8 | 1.7 |
| Bulgaria | 5.3 | - | - | 5.2 | 2.0 | 7.3 | 4.3 | 6.9 |
| Korea | 1.9 | 2.7 | 2.3 | 1.2 | 1.8 | 2.4 | 4.1 | 1.4 |
| Netherlands | 5.0 | 6.4 | 4.9 | 11.7 | 9.3 | 6.0 | 5.0 | 8.8 |
| Slovenia | 2.5 | 3.2 | 3.2 | 2.9 | 4.7 | 4.2 | 3.6 | 4.6 |
| Austria | 3.7 | 4.0 | 4.6 | 6.0 | 4.1 | 3.7 | 6.0 | 2.6 |
| Hungary | 2.8 | 3.1 | 3.4 | 6.1 | 5.2 | 4.2 | 4.2 | 2.5 |
| England | 3.3 | 5.6 | 4.2 | 2.0 | 5.2 | 5.9 | 4.7 | 6.7 |
| Belgium (FI) | 4.2 | 6.0 | 5.8 | 5.3 | 6.6 | 4.9 | 4.5 | 1.4 |
| Australia | 3.9 | 5.2 | 4.1 | 6.6 | 4.6 | 6.5 | 3.9 | 1.4 |
| Slovak Republic | 3.2 | 3.5 | 3.9 | 7.1 | 8.8 | 5.6 | 4.3 | 2.3 |
| Ireland | 4.5 | 6.6 | 5.2 | 2.6 | 10.1 | 5.0 | 4.9 | 1.9 |
| Russian Federation | 4.0 | 4.9 | 3.7 | 8.5 | 8.1 | 5.3 | 3.6 | 8.0 |
| Sweden | 3.0 | 3.4 | 3.4 | 5.5 | 6.2 | 5.2 | 4.1 | 1.7 |
| United States | 4.7 | 4.9 | 5.2 | 6.3 | 7.7 | 6.5 | 5.4 | 8.6 |
| Canada | 2.6 | 3.1 | 3.7 | 3.7 | 4.2 | 4.0 | 3.0 | 3.8 |
| Germany | 4.8 | 5.9 | 4.9 | 9.3 | 6.6 | 8.5 | 4.2 | 5.5 |
| Norway | 1.9 | 3.2 | 2.0 | 3.8 | 1.9 | 3.0 | 1.9 | 4.7 |
| New Zealand | 4.4 | 5.4 | 5.2 | 6.9 | 6.3 | 5.5 | 3.6 | 3.7 |
| Thailand | 3.7 | 3.9 | 4.3 | 2.3 | 4.5 | 5.6 | 4.8 | 4.2 |
| Israel | 5.7 | 6.4 | 6.1 | 14.7 | 9.1 | 10.4 | 5.3 | 11.1 |
| Hong Kong | 4.7 | 5.5 | 5.1 | 10.6 | 7.1 | 7.2 | 4.1 | 1.4 |
| Switzerland | 2.5 | 3.2 | 3.0 | 3.9 | 5.2 | 4.9 | 4.6 | 0.9 |
| Scotland | 5.1 | 6.4 | 4.7 | 7.7 | 4.3 | 6.7 | 6.3 | 6.2 |
| Spain | 1.7 | 2.1 | 2.3 | 4.0 | 1.7 | 2.9 | 3.1 | 3.3 |
| France | 2.5 | 2.7 | 3.3 | 3.9 | 4.6 | 3.9 | 3.1 | 4.6 |
| Greece | 2.2 | 2.6 | 3.1 | 3.8 | 2.3 | 2.2 | 3.0 | 1.4 |
| Iceland | 4.0 | 5.1 | 4.6 | 0.6 | 5.3 | 3.8 | 6.9 | 14.7 |
| Romania | 4.7 | 5.3 | 5.0 | 3.8 | 8.5 | 5.2 | 6.7 | 6.6 |
| Latvia (LSS) | 2.7 | 3.3 | 3.2 | 4.4 | 5.4 | 2.4 | 3.0 | 6.5 |
| Portugal | 2.3 | 2.8 | 2.7 | 4.4 | 1.1 | 1.4 | 2.1 | 5.3 |
| Denmark | 3.1 | 3.6 | 3.9 | 5.4 | 3.8 | 3.6 | 3.2 | 3.0 |
| Lithuania | 3.4 | 3.8 | 4.0 | 2.7 | 8.5 | 5.8 | 3.1 | 5.3 |
| Belgium (Fr) | 2.8 | 4.8 | 2.9 | 5.4 | 3.9 | 5.3 | 4.5 | 5.7 |
| Iran, Islamic Rep. | 2.4 | 3.8 | 3.2 | 4.3 | 2.5 | 2.8 | 2.3 | 6.8 |
| Cyprus | 1.9 | 2.2 | 2.7 | 1.4 | 2.8 | 3.0 | 2.9 | 4.2 |
| Kuwait | 3.7 | - | - | 7.1 | 5.4 | 3.4 | 4.9 | 2.7 |
| Colombia | 4.1 | 7.3 | 4.6 | 8.3 | 6.4 | 5.8 | 8.8 | 2.6 |
| South Africa | 6.6 | 9.5 | 6.0 | 2.8 | 4.7 | 3.6 | 9.2 | 15.3 |

[^71]SOURCE: International Association for the Evaluation of Educational Achievement, TIMSS International Study Center, Science Achievement in the Middle School Years, IEA's Third International Mathematics and Science Study, 1996, tables 1.1, 1.6, and E.1.

Table S22-1 Standard errors for table 22-1

|  | All |  |  | White |  |  | Black |  |  | Hispanic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| March | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 1971 | 0.5 | 0.7 | 0.7 | 0.5 | 0.7 | 0.7 | 2.2 | 3.2 | 2.9 | 2.9 | 4.3 | 3.9 |
| 1972 | 0.5 | 0.7 | 0.7 | 0.5 | 0.7 | 0.7 | 2.1 | 3.2 | 2.8 | 2.9 | 4.3 | 4.0 |
| 1973 | 0.5 | 0.6 | 0.6 | 0.5 | 0.7 | 0.7 | 2.0 | 3.0 | 2.7 | 2.6 | 3.8 | 3.5 |
| 1974 | 0.4 | 0.6 | 0.6 | 0.4 | 0.6 | 0.6 | 1.9 | 2.8 | 2.6 | 2.5 | 3.6 | 3.4 |
| 1975 | 0.4 | 0.6 | 0.6 | 0.4 | 0.6 | 0.6 | 1.8 | 2.7 | 2.5 | 2.5 | 3.5 | 3.4 |
| 1976 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 1.7 | 2.7 | 2.3 | 2.5 | 3.6 | 3.4 |
| 1977 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 1.7 | 2.4 | 2.3 | 2.5 | 3.6 | 3.4 |
| 1978 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 1.6 | 2.4 | 2.2 | 2.3 | 3.3 | 3.2 |
| 1979 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 1.6 | 2.5 | 2.2 | 2.3 | 3.4 | 3.2 |
| 1980 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 1.5 | 2.3 | 2.0 | 2.2 | 3.1 | 3.0 |
| 1981 | 0.4 | 0.5 | 0.5 | 0.3 | 0.5 | 0.5 | 1.5 | 2.1 | 2.0 | 2.1 | 3.0 | 2.9 |
| 1982 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 1.4 | 2.1 | 1.9 | 2.1 | 3.1 | 2.9 |
| 1983 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 1.4 | 2.1 | 1.9 | 2.2 | 3.1 | 3.0 |
| 1984 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 1.4 | 2.2 | 1.8 | 2.1 | 3.0 | 2.9 |
| 1985 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 1.4 | 2.0 | 1.9 | 2.1 | 3.1 | 2.9 |
| 1986 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 1.3 | 1.7 | 1.8 | 2.0 | 2.9 | 2.9 |
| 1987 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 1.3 | 1.8 | 1.8 | 2.0 | 2.8 | 2.8 |
| 1988 | 0.4 | 0.6 | 0.5 | 0.4 | 0.6 | 0.5 | 1.5 | 2.2 | 2.0 | 2.3 | 3.2 | 3.2 |
| 1989 | 0.4 | 0.6 | 0.5 | 0.4 | 0.6 | 0.5 | 1.4 | 2.2 | 1.9 | 2.2 | 3.1 | 3.2 |
| 1990 | 0.4 | 0.6 | 0.5 | 0.4 | 0.6 | 0.5 | 1.4 | 2.1 | 1.9 | 2.0 | 2.7 | 2.8 |
| 1991 | 0.4 | 0.6 | 0.5 | 0.4 | 0.6 | 0.5 | 1.4 | 1.9 | 2.0 | 2.0 | 2.8 | 2.9 |
| High school diploma or equivalency certificate |  |  |  |  |  |  |  |  |  |  |  |  |
| 1992 | 0.4 | 0.5 | 0.5 | 0.4 | 0.6 | 0.5 | 1.4 | 2.0 | 2.0 | 2.0 | 2.7 | 2.9 |
| 1993 | 0.4 | 0.6 | 0.5 | 0.4 | 0.6 | 0.5 | 1.4 | 1.9 | 2.0 | 1.9 | 2.7 | 2.8 |
| 1994 | 0.4 | 0.6 | 0.5 | 0.4 | 0.6 | 0.5 | 1.3 | 2.1 | 1.8 | 1.8 | 2.4 | 2.6 |
| 1995 | 0.4 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 1.2 | 1.7 | 1.8 | 1.8 | 2.5 | 2.6 |
| 1996 | 0.4 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 1.3 | 1.8 | 1.8 | 1.8 | 2.4 | 2.7 |

[^72]Standard Error Tables
Table S22-2 Standard errors for table 22-2

|  | All |  |  | White |  |  | Black |  |  | Hispanic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| March | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 1971 | 0.7 | 1.0 | 0.9 | 0.7 | 1.0 | 1.0 | 2.6 | 3.9 | 3.6 | 3.8 | 5.8 | 4.9 |
| 1972 | 0.7 | 0.9 | 0.9 | 0.7 | 1.0 | 1.0 | 2.6 | 3.9 | 3.4 | 3.9 | 6.0 | 5.2 |
| 1973 | 0.6 | 0.9 | 0.9 | 0.7 | 1.0 | 1.0 | 2.5 | 3.7 | 3.3 | 3.3 | 5.0 | 4.2 |
| 1974 | 0.6 | 0.9 | 0.9 | 0.7 | 0.9 | 1.0 | 2.4 | 3.5 | 3.3 | 3.3 | 4.8 | 4.5 |
| 1975 | 0.6 | 0.9 | 0.9 | 0.7 | 0.9 | 0.9 | 2.3 | 3.5 | 3.1 | 3.3 | 4.9 | 4.4 |
| 1976 | 0.6 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 2.2 | 3.4 | 2.9 | 3.2 | 4.8 | 4.2 |
| 1977 | 0.6 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 2.2 | 3.2 | 3.0 | 3.3 | 4.6 | 4.6 |
| 1978 | 0.6 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 2.2 | 3.2 | 2.9 | 3.1 | 4.4 | 4.3 |
| 1979 | 0.6 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 2.1 | 3.2 | 2.9 | 3.1 | 4.6 | 4.1 |
| 1980 | 0.6 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 2.0 | 3.0 | 2.7 | 2.8 | 4.1 | 3.8 |
| 1981 | 0.6 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 2.0 | 2.9 | 2.7 | 2.7 | 3.9 | 3.6 |
| 1982 | 0.6 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 2.0 | 3.0 | 2.7 | 2.7 | 4.0 | 3.8 |
| 1983 | 0.6 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 2.0 | 2.9 | 2.7 | 2.8 | 4.1 | 4.0 |
| 1984 | 0.6 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 1.9 | 2.9 | 2.6 | 2.8 | 4.1 | 3.8 |
| 1985 | 0.6 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 1.9 | 2.8 | 2.6 | 2.8 | 4.1 | 3.8 |
| 1986 | 0.6 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 1.9 | 2.7 | 2.6 | 2.7 | 3.8 | 3.7 |
| 1987 | 0.6 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 1.9 | 2.7 | 2.6 | 2.6 | 3.7 | 3.7 |
| 1988 | 0.6 | 0.9 | 0.9 | 0.7 | 1.0 | 1.0 | 2.0 | 3.0 | 2.8 | 3.0 | 4.2 | 4.2 |
| 1989 | 0.6 | 0.9 | 0.9 | 0.7 | 1.0 | 1.0 | 2.0 | 3.0 | 2.7 | 2.9 | 4.0 | 4.2 |
| 1990 | 0.6 | 0.8 | 0.8 | 0.7 | 1.0 | 0.9 | 2.0 | 2.9 | 2.7 | 2.6 | 3.6 | 3.7 |
| 1991 | 0.6 | 0.8 | 0.8 | 0.7 | 1.0 | 1.0 | 2.0 | 2.8 | 2.7 | 2.6 | 3.6 | 3.8 |
| Some college |  |  |  |  |  |  |  |  |  |  |  |  |
| 1992 | 0.6 | 0.8 | 0.8 | 0.7 | 1.0 | 1.0 | 2.0 | 2.9 | 2.8 | 2.6 | 3.5 | 3.8 |
| 1993 | 0.6 | 0.9 | 0.8 | 0.7 | 1.0 | 1.0 | 2.0 | 2.9 | 2.8 | 2.5 | 3.5 | 3.7 |
| 1994 | 0.6 | 0.9 | 0.8 | 0.7 | 1.0 | 1.0 | 2.0 | 3.0 | 2.7 | 2.4 | 3.2 | 3.4 |
| 1995 | 0.6 | 0.9 | 0.8 | 0.7 | 1.0 | 1.0 | 2.0 | 2.9 | 2.7 | 2.4 | 3.4 | 3.4 |
| 1996 | 0.6 | 0.8 | 0.8 | 0.7 | 1.0 | 0.9 | 2.0 | 2.9 | 2.7 | 2.3 | 3.1 | 3.5 |

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Table S22-3 Standard errors for table 22-3

|  | All |  |  | White |  |  | Black |  |  | Hispanic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| March | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 1971 | 0.6 | 0.9 | 0.7 | 0.6 | 0.9 | 0.8 | 1.8 | 2.8 | 2.4 | 2.5 | 4.3 | 2.7 |
| 1972 | 0.6 | 0.8 | 0.7 | 0.6 | 0.9 | 0.8 | 1.8 | 2.7 | 2.5 | 2.3 | 3.6 | 2.8 |
| 1973 | 0.5 | 0.8 | 0.7 | 0.6 | 0.9 | 0.8 | 1.8 | 2.5 | 2.4 | 2.2 | 3.4 | 2.9 |
| 1974 | 0.5 | 0.8 | 0.7 | 0.6 | 0.9 | 0.8 | 1.6 | 2.4 | 2.1 | 2.0 | 2.7 | 3.0 |
| 1975 | 0.5 | 0.8 | 0.7 | 0.6 | 0.9 | 0.8 | 1.7 | 2.6 | 2.3 | 2.5 | 3.9 | 3.2 |
| 1976 | 0.5 | 0.8 | 0.7 | 0.6 | 0.8 | 0.8 | 1.8 | 2.6 | 2.4 | 2.2 | 3.7 | 2.5 |
| 1977 | 0.5 | 0.8 | 0.7 | 0.6 | 0.9 | 0.8 | 1.7 | 2.4 | 2.3 | 2.1 | 3.0 | 3.0 |
| 1978 | 0.5 | 0.8 | 0.7 | 0.6 | 0.8 | 0.8 | 1.6 | 2.2 | 2.2 | 2.3 | 3.3 | 3.4 |
| 1979 | 0.5 | 0.8 | 0.7 | 0.6 | 0.8 | 0.8 | 1.6 | 2.5 | 2.1 | 2.1 | 3.2 | 2.7 |
| 1980 | 0.5 | 0.7 | 0.7 | 0.6 | 0.8 | 0.8 | 1.5 | 2.1 | 2.0 | 1.9 | 2.9 | 2.6 |
| 1981 | 0.5 | 0.7 | 0.7 | 0.5 | 0.8 | 0.7 | 1.4 | 2.1 | 1.9 | 1.8 | 2.8 | 2.3 |
| 1982 | 0.5 | 0.7 | 0.7 | 0.6 | 0.8 | 0.8 | 1.5 | 2.1 | 2.0 | 2.0 | 3.1 | 2.7 |
| 1983 | 0.5 | 0.7 | 0.7 | 0.6 | 0.8 | 0.8 | 1.5 | 2.2 | 2.0 | 2.2 | 3.1 | 3.1 |
| 1984 | 0.5 | 0.7 | 0.7 | 0.6 | 0.8 | 0.8 | 1.4 | 2.2 | 1.8 | 2.1 | 3.1 | 3.0 |
| 1985 | 0.5 | 0.7 | 0.7 | 0.6 | 0.8 | 0.8 | 1.4 | 1.9 | 1.9 | 2.1 | 3.2 | 2.9 |
| 1986 | 0.5 | 0.7 | 0.7 | 0.6 | 0.8 | 0.8 | 1.3 | 1.8 | 1.9 | 1.9 | 2.8 | 2.7 |
| 1987 | 0.5 | 0.7 | 0.7 | 0.6 | 0.8 | 0.8 | 1.3 | 1.9 | 1.8 | 1.9 | 2.7 | 2.5 |
| 1988 | 0.5 | 0.8 | 0.7 | 0.6 | 0.9 | 0.9 | 1.5 | 2.2 | 2.0 | 2.3 | 3.4 | 3.1 |
| 1989 | 0.5 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 1.5 | 2.2 | 2.0 | 2.2 | 2.9 | 3.2 |
| 1990 | 0.5 | 0.8 | 0.7 | 0.6 | 0.9 | 0.8 | 1.5 | 2.3 | 1.9 | 1.8 | 2.5 | 2.7 |
| 1991 | 0.5 | 0.8 | 0.7 | 0.6 | 0.9 | 0.9 | 1.3 | 2.0 | 1.8 | 2.0 | 2.6 | 3.0 |
| Bachelor's degree or higher |  |  |  |  |  |  |  |  |  |  |  |  |
| 1992 | 0.5 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 1.4 | 2.0 | 1.9 | 1.9 | 2.5 | 2.8 |
| 1993 | 0.5 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 1.5 | 2.1 | 2.1 | 1.7 | 2.3 | 2.6 |
| 1994 | 0.5 | 0.8 | 0.8 | 0.7 | 0.9 | 0.9 | 1.5 | 2.1 | 2.1 | 1.6 | 2.0 | 2.5 |
| 1995 | 0.6 | 0.8 | 0.8 | 0.7 | 0.9 | 0.9 | 1.5 | 2.3 | 2.0 | 1.8 | 2.4 | 2.6 |
| 1996 | 0.6 | 0.8 | 0.8 | 0.7 | 1.0 | 1.0 | 1.5 | 2.0 | 2.2 | 1.7 | 2.4 | 2.5 |

SOURCE: U.S. Department of Commerce, Bureau of the Census,
March Current Population Surveys.

Standard Error Tables
Table S24-1 Standard errors for table 24-1

| Mathematics and science courses (credits) | 1982 |  |  |  |  | 1987 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White | Black | $\begin{array}{r} \text { His- } \\ \text { panic } \end{array}$ |  | American Indian/ Alaskan Native | White | Black | $\begin{array}{r} \mathrm{His} \\ \text { panic } \end{array}$ | Asian/ Pacific Islander |  |
| Mathematics |  |  |  |  |  |  |  |  |  |  |
| Any mathematics (1.00) | 0.2 | 0.3 | 0.5 | *0.0 | 0.4 | 0.1 | 0.3 | 0.2 | 0.1 | 0.8 |
| Algebra I (1.00) | 1.0 | 1.8 | 1.6 | 5.4 | 6.5 | 1.3 | 1.3 | 1.8 | 2.4 | 2.1 |
| Geometry (1.00) | 0.9 | 1.8 | 1.4 | 4.7 | 7.0 | 1.2 | 2.0 | 1.7 | 2.6 | 4.0 |
| Algebra II (0.50) | 1.1 | 1.8 | 1.2 | 5.9 | 3.4 | 1.4 | 1.4 | 2.1 | 5.0 | 3.4 |
| Trigonometry (0.50) | 0.7 | 0.8 | 0.8 | 3.1 | 1.4 | 1.7 | 1.1 | 0.9 | 5.4 | 1.4 |
| Analysis/pre-calculus (0.50) | 0.5 | 0.4 | 0.5 | 3.2 | 1.7 | 1.0 | 0.8 | 1.0 | 6.0 | 1.1 |
| Statistics/probability (0.50) | 0.2 | 0.2 | 0.1 | 0.7 | *0.0 | 0.4 | 0.1 | 0.1 | 0.7 | *0.0 |
| Calculus (1.00) | 0.4 | 0.4 | 0.3 | 2.7 | 2.2 | 0.4 | 0.3 | 0.7 | 4.1 | 0.4 |
| AP calculus (1.00) | 0.3 | 0.1 | 0.1 | 1.6 | 0.1 | 0.3 | 0.3 | 0.6 | 4.7 | 0.4 |
| Science |  |  |  |  |  |  |  |  |  |  |
| Any science (1.00) | 0.3 | 0.4 | 1.0 | 1.2 | 5.0 | 0.2 | 0.4 | 0.4 | 0.3 | 0.6 |
| Biology (1.00) | 0.9 | 2.0 | 2.0 | 2.2 | 6.8 | 1.1 | 1.8 | 1.5 | 1.4 | 1.9 |
| AP/honors biology (1.00) | 0.6 | 1.2 | 0.6 | 2.5 | 0.6 | 0.4 | 0.4 | 0.5 | 1.2 | 0.1 |
| Chemistry (1.00) | 0.9 | 1.4 | 1.0 | 4.4 | 6.8 | 1.2 | 1.7 | 1.5 | 3.8 | 2.0 |
| AP/honors chemistry (1.00) | 0.4 | 0.6 | 0.4 | 1.3 | 0.9 | 0.4 | 0.2 | 0.6 | 2.5 | 0.3 |
| Physics (1.00) | 0.6 | 0.7 | 0.6 | 3.4 | 3.1 | 1.0 | 1.0 | 1.0 | 4.2 | 2.4 |
| AP/honors physics (1.00) | 0.2 | 0.4 | 0.1 | 1.0 | *0.0 | 0.3 | 0.1 | 0.3 | 1.5 | 0.5 |
| Engineering (1.00) | 0.1 | 0.1 | 0.1 | *0.0 | *0.0 | *0.0 | 0.4 | 0.1 | 0.2 | *0.0 |
| Astronomy (0.50) | 0.2 | 0.2 | 0.2 | *0.0 | *0.0 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 |
| Geology/earth science (0.50) | 0.8 | 1.7 | 1.1 | 2.1 | 6.1 | 2.2 | 2.7 | 1.8 | 3.3 | 2.4 |
| Biology and chemistry (2.00) | 0.9 | 1.4 | 1.0 | 4.0 | 7.2 | 1.2 | 1.8 | 1.4 | 4.0 | 2.2 |
| Biology, chemistry, and physics (3.00) | 0.6 | 0.7 | 0.5 | 3.9 | 3.1 | 0.8 | 1.0 | 0.8 | 4.2 | 2.2 |

Table S24-1 Standard errors for table 24-1 - Continued

| Mathematics and science courses (credits) | 1990 |  |  |  |  | 1994 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White | Black | $\begin{array}{r} \text { His- } \\ \text { panic } \end{array}$ | Asian/ <br> Pacific <br> Islander | American Indian/ Alaskan Native | White | Black | $\begin{array}{r} \text { His- } \\ \text { panic } \\ \hline \end{array}$ |  | American <br> Indian <br> Alaskan Native |
| Mathematics |  |  |  |  |  |  |  |  |  |  |
| Any mathematics (1.00) | 0.1 | 0.1 | 0.1 | 0.2 | *0.0 | 0.1 | 0.2 | 0.2 | *0.0 | 0.7 |
| Algebral (1.00) | 2.0 | 2.4 | 2.7 | 3.1 | 8.4 | 1.6 | 2.9 | 1.4 | 2.4 | 4.9 |
| Geometry (1.00) | 1.4 | 2.6 | 2.8 | 2.8 | 2.8 | 1.6 | 3.1 | 1.8 | 3.9 | 4.4 |
| Algebra II (0.50) | 1.1 | 2.8 | 2.7 | 4.9 | 4.8 | 1.4 | 2.6 | 1.8 | 5.0 | 6.4 |
| Trigonometry (0.50) | 1.4 | 1.9 | 1.5 | 3.8 | 4.5 | 1.6 | 1.1 | 1.0 | 2.8 | 1.8 |
| Analysis/pre-calculus (0.50) | 1.0 | 1.0 | 0.6 | 6.6 | 3.1 | 1.1 | 1.2 | 1.3 | 5.4 | 2.2 |
| Statistics/probability (0.50) | 0.2 | 0.4 | 0.5 | 0.5 | 0.3 | 0.4 | 1.0 | 0.3 | 0.3 | 0.8 |
| Calculus (1.00) | 0.5 | 0.5 | 0.7 | 3.3 | 2.8 | 0.6 | 0.6 | 0.5 | 3.3 | 1.2 |
| AP calculus (1.00) | 0.5 | 0.3 | 0.6 | 2.8 | 2.6 | 0.6 | 0.4 | 0.4 | 2.9 | 1.4 |
| Science |  |  |  |  |  |  |  |  |  |  |
| Any science (1.00) | 0.2 | 0.2 | 0.2 | 0.2 | *0.0 | 0.1 | 0.2 | 0.2 | 0.4 | 0.3 |
| Biology (1.00) | 1.0 | 2.2 | 1.4 | 2.8 | 4.4 | 1.2 | 2.1 | 0.7 | 1.3 | 2.3 |
| AP/honors biology (1.00) | 0.7 | 1.7 | 0.7 | 2.2 | 1.2 | 0.6 | 0.8 | 0.9 | 1.8 | 1.3 |
| Chemistry (1.00) | 1.4 | 2.2 | 2.9 | 4.0 | 4.5 | 1.1 | 2.7 | 2.8 | 5.0 | 5.4 |
| AP/honors chemistry (1.00) | 0.6 | 1.0 | 0.4 | 1.9 | 2.6 | 0.6 | 0.7 | 0.6 | 1.5 | 0.6 |
| Physics (1.00) | 0.7 | 1.6 | 1.3 | 3.5 | 3.8 | 1.1 | 1.2 | 1.4 | 4.8 | 2.8 |
| AP/honors physics (1.00) | 0.4 | 0.3 | 0.4 | 2.6 | 0.5 | 0.4 | 0.4 | 0.5 | 1.4 | 0.3 |
| Astronomy (0.50) | 0.4 | 0.2 | 0.5 | 0.3 | 1.3 | 0.6 | 0.2 | 0.2 | 0.4 | 1.2 |
| Geology/earth science (0.50) | 3.0 | 2.5 | 3.1 | 1.8 | 9.7 | 2.8 | 5.0 | 3.0 | 2.2 | 8.7 |
| Biology and chemistry (2.00) | 1.4 | 2.2 | 2.7 | 3.4 | 4.5 | 1.4 | 2.8 | 2.6 | 4.6 | 5.4 |
| Biology, chemistry, and physics (3.00) | 0.8 | 1.2 | 1.2 | 2.6 | 3.1 | 1.0 | 1.2 | 1.1 | 4.2 | 2.4 |

[^73]SOURCE: U.S. Department of Education, National Center for Education Statistics, The 1994 High School Transcript Study Tabulations: Comparative Data on Credits Earned and Demographics for 1994, 1990, 1987, and 1982 High School Graduates, 1996.

Standard Error Tables
Table S24-2 Standard errors for table 24-2

| Mathematics and science courses (credits) | 1982 |  |  | 1987 |  |  | 1990 |  |  | 1994 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male Female |  | Total | Male Female |  | Total | Male Female |  | Total | Male Female |  |
| Mathematics |  |  |  |  |  |  |  |  |  |  |  |  |
| Any mathematics (1.00) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Algebra I (1.00) | 0.9 | 1.0 | 1.2 | 1.0 | 1.2 | 1.1 | 1.6 | 1.7 | 1.8 | 1.4 | 1.4 | 1.4 |
| Geometry (1.00) | 0.8 | 0.8 | 1.2 | 1.0 | 1.2 | 1.0 | 1.3 | 1.6 | 1.3 | 1.4 | 1.5 | 1.4 |
| Algebra II (0.50) | 0.9 | 1.1 | 1.0 | 1.2 | 1.4 | 1.2 | 1.1 | 1.3 | 1.3 | 1.3 | 1.3 | 1.4 |
| Trigonometry (0.50) | 0.6 | 1.0 | 0.5 | 1.5 | 1.8 | 1.4 | 1.3 | 1.4 | 1.3 | 1.3 | 1.4 | 1.4 |
| Analysis/pre-calculus (0.50) | 0.5 | 0.5 | 0.6 | 0.9 | 1.0 | 0.8 | 1.0 | 1.1 | 0.9 | 0.8 | 0.8 | 0.9 |
| Statistics/probability (0.50) | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.4 |
| Calculus (1.00) | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 0.6 |
| AP calculus (1.00) | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | 0.6 | 0.4 | 0.5 | 0.6 | 0.5 |
| Science |  |  |  |  |  |  |  |  |  |  |  |  |
| Any science (1.00) | 0.3 | 0.3 | 0.4 | 0.2 | 0.3 | 0.1 | 0.1 | 0.3 | 1.0 | 0.1 | 0.2 | 0.1 |
| Biology (1.00) | 0.8 | 1.0 | 1.1 | 1.0 | 1.2 | 0.8 | 1.0 | 1.1 | 0.9 | 1.0 | 1.1 | 0.9 |
| AP/honors biology (1.00) | 0.5 | 0.5 | 0.6 | 0.4 | 0.5 | 0.4 | 0.8 | 0.6 | 0.9 | 0.6 | 0.6 | 0.6 |
| Chemistry (1.00) | 0.8 | 1.1 | 0.7 | 1.1 | 1.3 | 1.2 | 1.2 | 1.4 | 1.3 | 1.0 | 1.0 | 1.2 |
| AP/honors chemistry (1.00) | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 |
| Physics (1.00) | 0.5 | 1.0 | 0.4 | 0.9 | 1.0 | 0.9 | 0.8 | 0.9 | 0.8 | 0.8 | 1.0 | 0.9 |
| AP/honors physics (1.00) | 0.1 | 0.2 | 0.1 | 0.3 | 0.4 | 0.2 | 0.4 | 0.5 | 0.3 | 0.3 | 0.4 | 0.3 |
| Engineering (1.00) | 0.1 | 0.1 | *0.0 | 0.1 | 0.1 | 0.1 | *0.0 | 0.1 | *0.0 | 0.1 | 0.1 | 0.1 |
| Astronomy (0.50) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.5 | 0.6 | 0.4 |
| Geology/earth science (0.50) | 0.6 | 0.7 | 0.8 | 1.9 | 1.8 | 2.0 | 2.4 | 2.4 | 2.5 | 2.4 | 2.4 | 2.5 |
| Biology and chemistry (2.00) | 0.8 | 1.2 | 0.6 | 1.1 | 1.3 | 1.2 | 1.3 | 1.4 | 1.3 | 1.2 | 1.2 | 1.4 |
| Biology, chemistry, and physics (3.00) | 0.5 | 0.8 | 0.4 | 0.7 | 0.8 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 |

* Standard errors less than 0.05 are rounded to 0.0.

SOURCE: U.S. Department of Education, National Center for Education Statistics, The 1994 High School Transcript Study Tabulations: Comparative Data on Credits Earned and Demographics for 1994, 1990, 1987, and 1982 High School Graduates, 1996.

Table S24-3 Standard errors for table 24-3

| Mathematics and science courses (credits) | 1982 |  | 1987 |  | 1990 |  | 1994 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Public | Private | Public | Private | Public | Private | Public | Private |
| Mathematics |  |  |  |  |  |  |  |  |
| Any mathematics (1.00) | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 |
| Algebra I (1.00) | 0.9 | 2.7 | 1.1 | 3.0 | 1.8 | 2.2 | 1.5 | 3.9 |
| Geometry (1.00) | 0.9 | 2.7 | 1.0 | 2.1 | 1.4 | 2.2 | 1.4 | 2.3 |
| Algebra II (0.50) | 0.8 | 2.6 | 1.1 | 3.0 | 1.2 | 2.7 | 1.3 | 2.9 |
| Trigonometry (0.50) | 0.6 | 2.2 | 1.5 | 3.9 | 1.4 | 3.9 | 1.3 | 5.9 |
| Analysis/pre-calculus (0.50) | 0.4 | 2.3 | 0.9 | 3.1 | 1.1 | 3.4 | 0.9 | 3.5 |
| Statistics/probability (0.50) | 0.2 | 0.6 | 0.3 | 1.2 | 0.2 | 1.0 | 0.4 | 0.9 |
| Calculus (1.00) | 0.3 | 1.9 | 0.4 | 2.3 | 0.5 | 1.3 | 0.5 | 2.1 |
| AP calculus (1.00) | 0.3 | 1.0 | 0.4 | 1.3 | 0.4 | 1.4 | 0.5 | 2.1 |
| Science |  |  |  |  |  |  |  |  |
| Any science (1.00) | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | *0.0 | 0.3 | 0.2 |
| Biology (1.00) | 0.9 | 1.5 | 1.0 | 1.2 | 1.1 | 0.5 | 1.1 | 0.8 |
| AP/honors biology (1.00) | 0.5 | 2.0 | 0.3 | 1.9 | 0.8 | 0.9 | 0.5 | 3.8 |
| Chemistry (1.00) | 0.8 | 2.4 | 1.0 | 3.4 | 1.4 | 2.7 | 1.0 | 3.4 |
| AP/honors chemistry (1.00) | 0.4 | 1.6 | 0.3 | 1.2 | 0.5 | 0.5 | 0.5 | 1.6 |
| Physics (1.00) | 0.5 | 1.9 | 1.0 | 2.1 | 0.8 | 2.3 | 0.9 | 3.6 |
| AP/honors physics (1.00) | 0.2 | 0.6 | 0.2 | 1.7 | 0.4 | 0.8 | 0.4 | 1.3 |
| Engineering (1.00) | 0.1 | 0.1 | 0.1 | *0.0 | *0.0 | 0.1 | 0.1 | *0.0 |
| Astronomy (0.50) | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 0.2 |
| Geology/earth science (0.50) | 0.6 | 2.3 | 2.2 | 3.9 | 2.6 | 4.1 | 2.5 | 10.1 |
| Biology and chemistry (2.00) | 0.9 | 2.6 | 1.0 | 3.4 | 1.4 | 2.7 | 1.1 | 3.4 |
| Biology, chemistry, and physics (3.00) | 0.5 | 1.6 | 0.8 | 2.2 | 0.7 | 2.0 | 0.8 | 3.2 |

[^74]SOURCE: U.S. Department of Education, National Center for Education Statistics, The 1994 High School Transcript Study Tabulations: Comparative Data on Credits Earned and Demographics for 1994, 1990, 1987, and 1982 High School Graduates, 1996.

Standard Error Tables
Table S24-4 Standard errors for table 24-4

| Mathematics and science courses (credits) | 1987 |  |  |  | 1994 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Big city Urban fringe Medium city Small place |  |  |  | Big city Urban fringe Medium city Small place |  |  |  |
| Mathematics |  |  |  |  |  |  |  |  |
| Any mathematics (1.00) | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 |
| Algebra I (1.00) | 3.2 | 2.4 | 3.5 | 2.1 | 2.6 | 3.2 | 3.5 | 2.1 |
| Geometry (1.00) | 3.0 | 2.1 | 4.4 | 2.0 | 3.1 | 2.6 | 2.9 | 1.6 |
| Algebra II (0.50) | 2.9 | 2.1 | 2.6 | 1.8 | 3.3 | 2.2 | 2.5 | 1.9 |
| Trigonometry (0.50) | 3.3 | 2.8 | 3.2 | 2.4 | 3.0 | 3.0 | 3.2 | 1.7 |
| Analysis/pre-calculus (0.50) | 2.8 | 1.9 | 2.5 | 1.3 | 2.2 | 2.4 | 1.9 | 1.4 |
| Statistics/probability (0.50) | 0.6 | 0.4 | 0.0 | 0.5 | 0.9 | 0.8 | 0.6 | 0.4 |
| Calculus (1.00) | 1.5 | 0.9 | 0.7 | 0.5 | 1.0 | 1.2 | 0.8 | 0.8 |
| AP calculus (1.00) | 1.6 | 0.8 | 0.9 | 0.5 | 0.9 | 1.2 | 0.9 | 0.8 |
| Science |  |  |  |  |  |  |  |  |
| Any science (1.00) | 0.1 | 0.3 | 0.1 | 0.2 | 0.1 | 0.3 | 0.1 | 0.2 |
| Biology (1.00) | 1.4 | 1.7 | 1.7 | 1.6 | 4.2 | 1.3 | 2.4 | 1.0 |
| AP/honors biology (1.00) | 2.3 | 0.9 | 0.8 | 0.4 | 1.8 | 1.6 | 1.4 | 0.6 |
| Chemistry (1.00) | 3.0 | 2.4 | 3.1 | 1.8 | 3.0 | 2.0 | 2.4 | 1.3 |
| AP/honors chemistry (1.00) | 0.8 | 1.2 | 0.9 | 0.5 | 0.7 | 1.4 | 0.8 | 0.8 |
| Physics (1.00) | 2.0 | 1.4 | 3.0 | 1.5 | 2.0 | 2.7 | 2.1 | 1.1 |
| AP/honors physics (1.00) | 1.6 | 0.5 | 0.7 | 0.3 | 0.7 | 1.0 | 1.0 | 0.2 |
| Engineering (1.00) | 0.1 | *0.0 | *0.0 | *0.0 | 0.2 | 0.4 | 0.2 | *0.0 |
| Astronomy (0.50) | 1.3 | 0.5 | 0.9 | 0.2 | 0.4 | 1.1 | 1.2 | 0.6 |
| Geology/earth science (0.50) | 3.5 | 3.5 | 3.5 | 3.5 | 6.8 | 4.8 | 6.1 | 3.4 |
| Biology and chemistry (2.00) | 3.0 | 2.5 | 3.1 | 1.9 | 4.3 | 1.9 | 2.3 | 1.3 |
| Biology, chemistry, and physics (3.00) | 1.9 | 1.3 | 2.2 | 1.0 | 2.4 | 2.3 | 1.8 | 1.9 |

[^75]SOURCE: U.S. Department of Education, National Center for Education Statistics, The 1994 High School Transcript Study Tabulations: Comparative Data on Credits Earned and Demographics for 1994, 1990, 1987, and 1982 High School Graduates, 1996.

Table S24-5 Standard errors for table 24-5

| Mathematics and science courses (credits) | 1982 |  |  |  | 1994 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Northeast | South | Midwest | West | Northeast | South | Midwest | West |
| Mathematics |  |  |  |  |  |  |  |  |
| Any mathematics (1.00) | 0.4 | 0.2 | 0.4 | 0.6 | 0.2 | 0.1 | 0.2 | 0.2 |
| Algebra I (1.00) | 2.0 | 1.5 | 1.5 | 2.1 | 3.6 | 1.8 | 3.2 | 3.6 |
| Geometry (1.00) | 2.2 | 1.1 | 1.3 | 1.7 | 4.9 | 1.6 | 2.6 | 2.5 |
| Algebra II (0.50) | 2.0 | 1.4 | 1.0 | 1.7 | 2.7 | 1.6 | 2.6 | 3.6 |
| Trigonometry (0.50) | 2.0 | 0.8 | 1.2 | 1.2 | 4.6 | 1.4 | 3.0 | 2.1 |
| Analysis/pre-calculus (0.50) | 1.2 | 0.9 | 0.6 | 0.8 | 2.6 | 1.0 | 1.8 | 1.7 |
| Statistics/probability (0.50) | 0.4 | 0.2 | 0.2 | 0.2 | 0.6 | 0.4 | 0.9 | 0.6 |
| Calculus (1.00) | 1.0 | 0.4 | 0.4 | 0.7 | 1.9 | 0.6 | 1.1 | 1.2 |
| AP calculus (1.00) | 0.9 | 0.3 | 0.2 | 0.6 | 1.4 | 0.6 | 1.2 | 1.0 |
| Science |  |  |  |  |  |  |  |  |
| Any science (1.00) | 0.6 | 0.3 | 0.8 | 0.9 | 0.2 | 0.1 | 0.3 | 0.2 |
| Biology (1.00) | 1.4 | 1.6 | 1.4 | 2.0 | 0.6 | 0.7 | 2.9 | 3.0 |
| AP/honors biology (1.00) | 1.1 | 0.7 | 0.8 | 0.6 | 1.1 | 1.0 | 1.1 | 1.3 |
| Chemistry (1.00) | 1.6 | 1.2 | 1.1 | 1.5 | 2.0 | 1.7 | 1.9 | 2.9 |
| AP/honors chemistry (1.00) | 1.1 | 0.4 | 0.5 | 0.7 | 1.4 | 0.9 | 1.2 | 0.6 |
| Physics (1.00) | 1.2 | 0.7 | 1.0 | 1.6 | 2.8 | 1.2 | 1.4 | 2.4 |
| AP/honors physics (1.00) | 0.5 | 0.2 | 0.2 | 0.4 | 1.3 | 0.4 | 0.6 | 0.8 |
| Engineering (1.00) | 0.2 | *0.0 | 0.1 | 0.1 | 0.3 | 0.2 | *0.0 | 0.1 |
| Astronomy (0.50) | 0.4 | 0.3 | 0.3 | 0.2 | 0.4 | 0.3 | 1.7 | 0.3 |
| Geology/earth science (0.50) | 2.5 | 1.8 | 1.5 | 2.0 | 7.5 | 4.2 | 4.0 | 4.3 |
| Biology and chemistry (2.00) | 1.5 | 1.0 | 1.1 | 1.8 | 1.9 | 1.7 | 3.0 | 2.5 |
| Biology, chemistry, and physics (3.00) | 1.0 | 0.7 | 0.8 | 1.2 | 2.3 | 1.1 | 1.6 | 2.1 |

[^76]SOURCE: U.S. Department of Education, National Center for Education Statistics, The 1994 High School Transcript Study Tabulations: Comparative Data on Credits Earned and Demographics for 1994, 1990, 1987, and 1982 High School Graduates, 1996.

Standard Error Tables
Table S24-6 Standard errors for table 24-6

| Mathematics and science courses (credits) | 1982 |  |  |  | 1994 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Academic | Vocational | Both | Neither | Academic | Vocational | Both | Neither |
| Mathematics |  |  |  |  |  |  |  |  |
| Any mathematics (1.00) | 0.1 | 0.4 | 0.1 | 0.4 | *0.0 | 0.5 | *0.0 | 0.7 |
| Algebral (1.00) | 1.3 | 1.4 | 1.6 | 1.4 | 1.5 | 2.6 | 1.6 | 2.4 |
| Geometry (1.00) | 1.5 | 1.2 | 1.5 | 1.8 | 1.2 | 2.1 | 2.0 | 3.0 |
| Algebra II (0.50) | 1.3 | 0.7 | 1.7 | 1.6 | 1.5 | 1.4 | 1.8 | 2.2 |
| Trigonometry (0.50) | 1.2 | 0.2 | 1.2 | 0.6 | 1.8 | 0.4 | 1.2 | 1.2 |
| Analysis/pre-calculus (0.50) | 1.2 | 0.1 | 0.6 | 0.5 | 1.2 | 0.3 | 0.9 | 0.7 |
| Statistics/probability (0.50) | 0.4 | 0.1 | 0.5 | 0.1 | 0.4 | 0.2 | 0.4 | 0.2 |
| Calculus (1.00) | 0.8 | *0.0 | 0.8 | 0.2 | 0.7 | 0.1 | 0.5 | 0.5 |
| AP calculus (1.00) | 0.5 | *0.0 | 0.7 | 0.1 | 0.7 | 0.1 | 0.4 | 0.3 |
| Science |  |  |  |  |  |  |  |  |
| Any science (1.00) | 0.1 | 0.7 | 0.2 | 0.7 | *0.0 | 1.0 | *0.0 | 0.6 |
| Biology (1.00) | 0.8 | 1.7 | 1.2 | 1.5 | 1.1 | 2.5 | 0.8 | 2.7 |
| AP/honors biology (1.00) | 1.0 | 0.2 | 0.9 | 0.6 | 0.8 | 0.1 | 0.5 | 0.2 |
| Chemistry (1.00) | 1.2 | 0.6 | 1.1 | 1.0 | 1.1 | 0.9 | 1.6 | 2.3 |
| AP/honors chemistry (1.00) | 0.8 | 0.1 | 0.9 | 0.2 | 0.8 | *0.0 | 0.5 | 0.1 |
| Physics (1.00) | 1.0 | 0.3 | 1.3 | 0.3 | 1.1 | 0.4 | 0.9 | 0.8 |
| AP/honors physics (1.00) | 0.3 | 0.1 | 0.4 | *0.0 | 0.5 | *0.0 | 0.2 | 0.2 |
| Engineering (1.00) | 0.1 | 0.1 | *0.0 | 0.1 | 0.1 | *0.0 | 0.1 | 0.1 |
| Astronomy (0.50) | 0.3 | 0.4 | 0.3 | 0.2 | 0.6 | 0.2 | 0.4 | 0.9 |
| Geology/earth science (0.50) | 1.3 | 0.6 | 1.8 | 1.4 | 2.5 | 3.4 | 3.6 | 2.6 |
| Biology and chemistry (2.00) | 1.3 | 0.3 | 1.1 | 0.9 | 1.5 | 0.8 | 1.5 | 2.0 |
| Biology, chemistry, and physics (3.00) | 1.1 | 0.1 | 0.9 | 0.2 | 1.1 | *0.0 | 0.8 | 0.4 |

[^77]SOURCE: U.S. Department of Education, National Center for Education Statistics, The 1994 High School Transcript Study Tabulations: Comparative Data on Credits Earned and Demographics for 1994, 1990, 1987, and 1982 High School Graduates, 1996.

Table S29-1 Standard errors for table 29-1

| October | Recent high school graduates not enrolled in college |  |  | Recent school dropouts |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female |
| 1960 | 2.7 | 4.0 | 3.6 | 4.7 | 6.6 | 6.4 |
| 1961 | 2.7 | 4.3 | 3.5 | 4.6 | 6.3 | 6.4 |
| 1962 | 2.6 | 3.6 | 3.6 | 5.0 | 7.5 | 5.8 |
| 1963 | 2.7 | 4.0 | 3.5 | 5.2 | 7.2 | 6.5 |
| 1964 | 2.5 | 3.4 | 3.3 | 3.5 | 5.1 | 4.1 |
| 1965 | 2.2 | 2.7 | 3.0 | 3.3 | 4.3 | 4.3 |
| 1966 | 2.3 | 3.1 | 3.0 | 3.6 | 4.7 | 4.8 |
| 1967 | 1.9 | 2.6 | 2.6 | 2.8 | 3.7 | 3.9 |
| 1968 | 1.9 | 2.7 | 2.5 | 2.8 | 3.8 | 3.8 |
| 1969 | 1.8 | 2.3 | 2.4 | 2.7 | 3.5 | 3.6 |
| 1970 | 1.9 | 2.4 | 2.6 | 2.6 | 3.6 | 3.5 |
| 1971 | 1.8 | 2.4 | 2.5 | 2.7 | 3.7 | 3.7 |
| 1972 | 1.7 | 2.2 | 2.4 | 2.7 | 3.6 | 3.4 |
| 1973 | 1.6 | 2.0 | 2.3 | 2.6 | 3.3 | 3.8 |
| 1974 | 1.6 | 2.2 | 2.3 | 2.6 | 3.3 | 3.5 |
| 1975 | 1.7 | 2.3 | 2.4 | 2.6 | 3.8 | 3.4 |
| 1976 | 1.7 | 2.2 | 2.5 | 2.6 | 3.5 | 3.5 |
| 1977 | 1.6 | 2.2 | 2.3 | 2.6 | 3.4 | 3.7 |
| 1978 | 1.6 | 2.0 | 2.3 | 2.6 | 3.3 | 3.7 |
| 1979 | 1.6 | 2.1 | 2.3 | 2.6 | 3.5 | 3.5 |
| 1980 | 1.7 | 2.2 | 2.4 | 2.7 | 3.5 | 3.9 |
| 1981 | 1.8 | 2.5 | 2.5 | 2.7 | 3.8 | 3.6 |
| 1982 | 1.9 | 2.6 | 2.7 | 2.9 | 4.1 | 4.1 |
| 1983 | 1.9 | 2.8 | 2.7 | 3.2 | 4.3 | 4.5 |
| 1984 | 2.0 | 2.8 | 2.7 | 3.1 | 4.3 | 4.4 |
| 1985 | 2.2 | 3.1 | 3.0 | 3.1 | 4.3 | 4.3 |
| 1986 | 2.0 | 2.8 | 2.8 | 3.2 | 4.4 | 4.6 |
| 1987 | 2.0 | 2.7 | 2.9 | 3.3 | 4.5 | 4.8 |
| 1988 | 2.2 | 3.0 | 3.3 | 3.5 | 4.7 | 4.9 |
| 1989 | 2.4 | 3.1 | 3.6 | 3.9 | 5.3 | 5.7 |
| 1990 | 2.4 | 3.1 | 3.6 | 3.9 | 5.3 | 5.5 |
| 1991 | 2.6 | 3.5 | 4.0 | 3.9 | 5.7 | 4.9 |
| 1992 | 2.5 | 3.3 | 3.8 | 3.8 | 5.7 | 4.8 |
| 1993 | 2.5 | 3.5 | 3.7 | 3.9 | 5.2 | 5.3 |
| 1994 | 2.4 | 3.2 | 3.6 | 3.5 | 4.8 | 4.4 |
| 1995 | 2.4 | 3.5 | 3.3 | 3.2 | 4.3 | 4.8 |

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Labor Force Statistics Derived from the Current Population Survey: 194087. U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Standard Error Tables
Table S29-2 Standard errors for table 29-2

|  | Recent high school graduates <br> not enrolled in college |  |  |  |  |  |  | Righ | Recent school dropouts |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: |

- Not available.

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table S29-3 Standard errors for table 29-3

| Parents' highest education level | Recent high school graduates <br> not enrolled in college | Recent school dropouts |
| :--- | ---: | ---: |

SOURCE: U.S. Department of Commerce, Bureau of the Census,
October Current Population Surveys.

Table S29-4 Standard errors for table 29-4

| October | Recent high school graduates not enrolled in college |  |  |  | Recent school dropouts |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
| 1972 | 1.7 | 1.7 | 5.4 | - | 2.7 | 3.2 | 6.1 | - |
| 1973 | 1.6 | 1.7 | 4.9 | - | 2.6 | 3.0 | 5.7 | - |
| 1974 | 1.6 | 1.7 | 5.5 | - | 2.6 | 3.1 | 5.4 | - |
| 1975 | 1.7 | 1.8 | 5.2 | - | 2.6 | 3.2 | 5.2 | 7.4 |
| 1976 | 1.7 | 1.7 | 5.5 | - | 2.6 | 3.1 | 5.2 | - |
| 1977 | 1.6 | 1.7 | 5.6 | 7.3 | 2.6 | 3.0 | 5.8 | - |
| 1978 | 1.6 | 1.6 | 5.3 | 7.0 | 2.6 | 3.1 | 4.8 | - |
| 1979 | 1.6 | 1.7 | 5.5 | 6.7 | 2.6 | 3.1 | 5.4 | - |
| 1980 | 1.7 | 1.7 | 4.9 | - | 2.7 | 3.3 | 5.2 | 7.2 |
| 1981 | 1.8 | 1.9 | 4.8 | - | 2.7 | 3.5 | 3.7 | 7.4 |
| 1982 | 1.9 | 2.0 | 4.5 | 7.1 | 2.9 | 3.7 | 5.1 | - |
| 1983 | 1.9 | 2.1 | 4.7 | - | 3.2 | 4.1 | 6.3 | - |
| 1984 | 2.0 | 2.2 | 4.7 | 7.0 | 3.1 | 3.9 | 6.6 | 7.5 |
| 1985 | 2.2 | 2.3 | 5.3 | - | 3.1 | 4.1 | 6.3 | 7.9 |
| 1986 | 2.0 | 2.2 | 4.9 | 7.7 | 3.2 | 4.3 | 8.1 | 7.0 |
| 1987 | 2.0 | 2.2 | 6.1 | 7.2 | 3.3 | 4.2 | 6.4 | - |
| 1988 | 2.2 | 2.4 | 5.8 | 10.4 | 3.5 | 4.4 | 6.5 | 9.2 |
| 1989 | 2.4 | 2.5 | 6.8 | 10.6 | 3.9 | 5.1 | 7.0 | - |
| 1990 | 2.4 | 2.6 | 6.0 | - | 3.9 | 5.0 | 8.2 | - |
| 1991 | 2.6 | 3.0 | 5.8 | - | 3.9 | 5.2 | 7.2 | - |
| 1992 | 2.5 | 2.8 | 5.7 | 8.6 | 3.8 | 5.0 | - | 8.1 |
| 1993 | 2.5 | 2.8 | 6.8 | 9.2 | 3.9 | 5.0 | 8.1 | - |
| 1994 | 2.4 | 2.7 | 6.3 | 9.0 | 3.5 | 4.7 | 7.7 | 7.5 |
| 1995 | 2.4 | 2.8 | 6.2 | 7.3 | 3.2 | 4.4 | 7.5 | 6.5 |

[^78]SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Standard Error Tables
Table S30-1 Standard errors for table 30-1

| Student characteristics | Average months employed | Average months unemployed | Average months not in labor force | Average earnings | Average hours worked per week | Average number of jobs | Percentage continuously employed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1982 Graduates |  |  |  |  |  |  |
| Total | 0.1 | 0.1 | 0.1 | \$287 | 0.3 | *0.0 | 1.2 |
| Academic achievement test quartile |  |  |  |  |  |  |  |
| Lowest | 0.2 | 0.1 | 0.2 | 499 | 0.6 | *0.0 | 2.1 |
| Lower middle | 0.2 | 0.1 | 0.2 | 608 | 0.6 | *0.0 | 2.3 |
| Upper middle | 0.2 | 0.1 | 0.2 | 385 | 0.6 | *0.0 | 2.5 |
| Highest | 0.4 | 0.1 | 0.4 | 952 | 1.0 | 0.1 | 3.8 |
| High school mathematics credits |  |  |  |  |  |  |  |
| 1 credit or less | 0.3 | 0.1 | 0.2 | 661 | 0.7 | *0.0 | 2.5 |
| More than 1 to 2 credits | 0.2 | 0.1 | 0.2 | 397 | 0.5 | *0.0 | 1.8 |
| More than 2 to 3 credits | 0.3 | 0.1 | 0.2 | 615 | 0.7 | 0.1 | 2.6 |
| More than 3 to 4 credits | 0.5 | 0.1 | 0.5 | 985 | 1.8 | 0.1 | 4.4 |
| More than 4 credits | 0.9 | 0.4 | 0.8 | 1,236 | 2.6 | 0.2 | 9.5 |
| High school academic credits |  |  |  |  |  |  |  |
| 12 credits or less | 0.2 | 0.1 | 0.2 | 449 | 0.5 | *0.0 | 1.7 |
| More than 12 to less than 17 credits | 0.2 | 0.1 | 0.2 | 424 | 0.5 | *0.0 | 2.0 |
| 17 to less than 20 credits | 0.4 | 0.2 | 0.4 | 720 | 1.7 | 0.1 | 4.5 |
| 20 or more credits | 1.3 | 0.1 | 1.2 | 2,006 | 3.6 | 0.2 | 10.9 |
| High school vocational credits |  |  |  |  |  |  |  |
| Less than 2 credits | 0.4 | 0.2 | 0.4 | 747 | 1.5 | 0.1 | 4.3 |
| 2 to less than 4 credits | 0.3 | 0.1 | 0.3 | 630 | 0.8 | 0.1 | 2.6 |
| 4 to less than 6 credits | 0.3 | 0.1 | 0.2 | 614 | 0.7 | *0.0 | 2.5 |
| 6 to less than 8 credits | 0.3 | 0.1 | 0.2 | 479 | 0.6 | *0.0 | 2.5 |
| 8 or more credits | 0.2 | 0.1 | 0.2 | 709 | 0.7 | *0.0 | 2.3 |
| Type of high school program |  |  |  |  |  |  |  |
| Academic | 0.2 | 0.1 | 0.2 | 450 | 0.6 | *0.0 | 1.9 |
| Vocational | 0.2 | 0.1 | 0.2 | 601 | 0.6 | *0.0 | 2.2 |
| Both | 0.3 | 0.2 | 0.2 | 485 | 0.7 | 0.1 | 3.2 |
| Other | 0.3 | 0.2 | 0.3 | 844 | 0.8 | 0.1 | 3.1 |
| Control of high school |  |  |  |  |  |  |  |
| Public | 0.1 | 0.1 | 0.1 | 299 | 0.4 | *0.0 | 1.3 |
| Catholic | 0.3 | 0.1 | 0.3 | 913 | 1.0 | 0.1 | 4.2 |
| Private | 1.1 | 0.3 | 1.2 | - | - | 0.2 | 10.5 |

Table S30-1 Standard errors for table 30-1 - Continued

| Student characteristics | Average months employed | Average months unemployed | Average months not in labor force | Average earnings | Average hours worked per week | Average number of jobs | Percentage continuously employed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SES quartile |  |  |  |  |  |  |  |
| Lowest | 0.2 | 0.1 | 0.2 | 605 | 0.6 | *0.0 | 1.9 |
| Lower middle | 0.2 | 0.1 | 0.2 | 422 | 0.6 | *0.0 | 2.2 |
| Upper middle | 0.3 | 0.1 | 0.2 | 581 | 0.8 | 0.1 | 2.7 |
| Highest | 0.4 | 0.2 | 0.3 | 800 | 1.2 | 0.1 | 4.1 |
| Sex |  |  |  |  |  |  |  |
| Male | 0.2 | 0.1 | 0.1 | 347 | 0.5 | *0.0 | 1.7 |
| Female | 0.2 | 0.1 | 0.2 | 486 | 0.4 | *0.0 | 1.7 |
| Race/ethnicity |  |  |  |  |  |  |  |
| White | 0.1 | 0.1 | 0.1 | 322 | 0.4 | *0.0 | 1.4 |
| Black | 0.3 | 0.2 | 0.3 | 858 | 0.9 | *0.0 | 2.8 |
| Hispanic | 0.4 | 0.1 | 0.4 | 1,589 | 1.0 | 0.1 | 3.3 |
| Asian/Pacific Islander | 0.7 | 0.3 | 0.7 | 855 | 1.5 | 0.2 | 7.1 |
| American Indian/Alaskan Native | 1.3 | 0.9 | 0.8 | 1,595 | 2.0 | 0.2 | 12.2 |
| 1992 Graduates |  |  |  |  |  |  |  |
| Total | 0.2 | 0.1 | 0.1 | \$284 | 0.5 | *0.0 | 2.0 |
| Academic achievement test quartile |  |  |  |  |  |  |  |
| Lowest | 0.2 | 0.2 | 0.2 | 644 | 1.0 | 0.1 | 3.0 |
| Lower middle | 0.2 | 0.2 | 0.2 | 449 | 0.7 | 0.1 | 3.2 |
| Upper middle | 0.2 | 0.1 | 0.2 | 418 | 0.9 | 0.1 | 4.0 |
| Highest | 0.4 | 0.2 | 0.4 | 902 | 2.0 | 0.1 | 7.6 |
| High school mathematics credits |  |  |  |  |  |  |  |
| 1 credit or less | 0.8 | 0.6 | 0.7 | 1,541 | 2.6 | 0.1 | 8.2 |
| More than 1 to 2 credits | 0.4 | 0.3 | 0.3 | 537 | 0.9 | 0.1 | 4.5 |
| More than 2 to 3 credits | 0.2 | 0.1 | 0.2 | 471 | 0.8 | *0.0 | 3.0 |
| More than 3 to 4 credits | 0.2 | 0.1 | 0.2 | 450 | 0.9 | 0.1 | 2.9 |
| More than 4 credits | 0.5 | 0.3 | 0.3 | 817 | 2.8 | 0.1 | 5.5 |
| High school academic credits |  |  |  |  |  |  |  |
| 12 credits or less | 0.5 | 0.4 | 0.4 | 928 | 1.2 | 0.1 | 5.5 |
| More than 12 to less than 17 credits | 0.2 | 0.1 | 0.1 | 328 | 0.7 | 0.1 | 2.4 |
| 17 to less than 20 credits | 0.3 | 0.2 | 0.3 | 553 | 0.6 | 0.1 | 4.2 |
| 20 or more credits | 0.5 | 0.3 | 0.4 | 569 | 2.8 | 0.1 | 5.5 |

Standard Error Tables
Table S30-1 Standard errors for table 30-1 - Continued

| Student characteristics | Average months employed | Average months unemployed | Average months not in labor force | Average earnings | Average hours worked per week | Average number of jobs $\qquad$ | Percentage continuously employed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| High school vocational credits |  |  |  |  |  |  |  |
| Less than 2 credits | 0.5 | 0.2 | 0.5 | 652 | 1.7 | 0.1 | 4.6 |
| 2 to less than 4 credits | 0.2 | 0.1 | 0.2 | 593 | 1.5 | 0.1 | 3.0 |
| 4 to less than 6 credits | 0.4 | 0.3 | 0.2 | 554 | 0.8 | 0.1 | 4.6 |
| 6 to less than 8 credits | 0.3 | 0.2 | 0.2 | 676 | 0.9 | 0.1 | 3.9 |
| 8 or more credits | 0.4 | 0.2 | 0.4 | 557 | 0.6 | 0.1 | 4.4 |
| Type of high school program |  |  |  |  |  |  |  |
| Academic | 0.2 | 0.1 | 0.1 | 372 | 0.7 | 0.1 | 2.5 |
| Vocational | 0.4 | 0.4 | 0.2 | 1,055 | 1.5 | 0.1 | 5.9 |
| Both | 0.2 | 0.1 | 0.2 | 483 | 0.7 | 0.1 | 3.2 |
| Other | 1.5 | 1.6 | 1.4 | 1,617 | 4.8 | 0.2 | 12.1 |
| Control of high school |  |  |  |  |  |  |  |
| Public | 0.2 | 0.1 | 0.1 | 289 | 0.5 | *0.0 | 2.0 |
| Catholic | 0.4 | 0.1 | 0.3 | 1,193 | 1.5 | 0.1 | 5.3 |
| Private | 0.6 | 0.4 | 0.4 | - | - | 0.1 | 7.6 |
| SES quartile |  |  |  |  |  |  |  |
| Lowest | 0.2 | 0.1 | 0.1 | 439 | 0.6 | *0.0 | 2.7 |
| Lower middle | 0.2 | 0.1 | 0.2 | 422 | 0.7 | 0.1 | 3.8 |
| Upper middle | 0.2 | 0.1 | 0.1 | 618 | 1.2 | 0.1 | 3.1 |
| Highest | 0.4 | 0.2 | 0.3 | 798 | 2.2 | 0.1 | 4.2 |
| Sex |  |  |  |  |  |  |  |
| Male | 0.2 | 0.2 | 0.1 | 384 | 0.8 | *0.0 | 2.4 |
| Female | 0.2 | 0.1 | 0.2 | 286 | 0.5 | 0.1 | 2.8 |
| Race/ethnicity |  |  |  |  |  |  |  |
| White | 0.2 | 0.1 | 0.1 | 344 | 0.5 | *0.0 | 2.1 |
| Black | 0.6 | 0.5 | 0.3 | 832 | 1.9 | 0.1 | 6.1 |
| Hispanic | 0.5 | 0.3 | 0.4 | 594 | 2.3 | 0.1 | 5.6 |
| Asian/Pacific Islander | 0.7 | 0.3 | 0.5 | 804 | 1.5 | 0.1 | 8.6 |
| American Indian/Alaskan Native | 0.9 | 0.8 | 0.6 | - | - | - | 9.9 |

- Not available.
* Standard errors less than 0.05 are rounded to 0.0.

SOURCE: U.S. Department of Education, National Center for
Education Statistics, High School and Beyond (HS\&B) study,
Sophomore Cohort, Fourth Follow-up Survey, and National Education
Longitudinal Study of 1988, First, Second, and Third Follow-up Surveys.

Table S31-1 Standard errors for table 31-1

| Field of study | Percentage in administrative or clerical support occupations |  | Percentage unemployed |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female |
| Total | 0.8 | 0.8 | 0.4 | 0.4 |
| Business and management | 0.5 | 0.5 | 0.8 | 0.9 |
| Education | 0.2 | 0.3 | 1.1 | 0.6 |
| Engineering | 0.1 | *0.0 | 1.3 | 4.0 |
| Health professions | 0.1 | 0.2 | 1.3 | 1.4 |
| Public affairs/social services | 0.1 | 0.2 | 2.8 | 1.5 |
| Biological sciences | 0.1 | 0.1 | 1.9 | 3.3 |
| Mathematics and science | 0.2 | 0.2 | 1.3 | 1.3 |
| Social sciences | 0.3 | 0.3 | 1.2 | 1.2 |
| History | 0.1 | 0.1 | 4.0 | 2.1 |
| Humanities | 0.2 | 0.3 | 2.0 | 0.8 |
| Psychology | 0.1 | 0.2 | 2.1 | 1.4 |
| Other | 0.2 | 0.3 | 1.0 | 1.0 |

* Standard errors less than 0.05 are rounded to 0.0 .

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, First Follow-up (B\&B:93/94).

Table S32-1 Standard errors for table 32-1

| March | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grades 9-11 | High school diploma | Some college | Bachelor's degree or higher | Grades 9-11 | High school diploma | Some college | Bachelor's degree or higher |
| 1971 | 1.1 | 0.5 | 1.0 | 0.8 | 1.4 | 0.9 | 1.6 | 1.7 |
| 1972 | 1.1 | 0.5 | 0.9 | 0.7 | 1.4 | 0.9 | 1.6 | 1.6 |
| 1973 | 1.1 | 0.5 | 0.9 | 0.7 | 1.5 | 0.8 | 1.6 | 1.5 |
| 1974 | 1.0 | 0.5 | 0.8 | 0.6 | 1.5 | 0.8 | 1.4 | 1.3 |
| 1975 | 1.5 | 0.6 | 0.9 | 0.6 | 1.4 | 0.8 | 1.4 | 1.3 |
| 1976 | 1.4 | 0.6 | 0.8 | 0.6 | 1.5 | 0.8 | 1.3 | 1.2 |
| 1977 | 1.4 | 0.6 | 0.8 | 0.5 | 1.5 | 0.8 | 1.3 | 1.1 |
| 1978 | 1.4 | 0.6 | 0.7 | 0.5 | 1.6 | 0.8 | 1.2 | 1.1 |
| 1979 | 1.5 | 0.5 | 0.7 | 0.5 | 1.6 | 0.8 | 1.1 | 1.1 |
| 1980 | 1.5 | 0.6 | 0.7 | 0.5 | 1.6 | 0.8 | 1.1 | 1.0 |
| 1981 | 1.5 | 0.6 | 0.7 | 0.5 | 1.6 | 0.8 | 1.0 | 1.0 |
| 1982 | 1.6 | 0.7 | 0.8 | 0.6 | 1.7 | 0.8 | 1.1 | 1.0 |
| 1983 | 1.7 | 0.7 | 0.9 | 0.6 | 1.6 | 0.8 | 1.1 | 0.9 |
| 1984 | 1.6 | 0.6 | 0.8 | 0.6 | 1.7 | 0.8 | 1.0 | 0.9 |
| 1985 | 1.5 | 0.6 | 0.7 | 0.6 | 1.7 | 0.8 | 1.0 | 0.9 |
| 1986 | 1.5 | 0.6 | 0.7 | 0.5 | 1.7 | 0.8 | 1.0 | 0.9 |
| 1987 | 1.4 | 0.6 | 0.7 | 0.6 | 1.7 | 0.7 | 1.0 | 0.8 |
| 1988 | 1.5 | 0.6 | 0.8 | 0.5 | 1.9 | 0.8 | 1.0 | 0.9 |
| 1989 | 1.5 | 0.6 | 0.7 | 0.5 | 1.9 | 0.8 | 1.0 | 0.9 |
| 1990 | 1.4 | 0.5 | 0.7 | 0.6 | 1.8 | 0.8 | 1.0 | 0.8 |
| 1991 | 1.6 | 0.6 | 0.8 | 0.6 | 1.7 | 0.8 | 1.0 | 0.8 |
| 1992 | 1.6 | 0.6 | 0.8 | 0.6 | 1.7 | 0.8 | 0.9 | 0.8 |
| 1993 | 1.6 | 0.7 | 0.7 | 0.6 | 1.8 | 0.9 | 0.9 | 0.9 |
| 1994 | 1.6 | 0.7 | 0.7 | 0.6 | 1.8 | 0.9 | 0.9 | 0.9 |
| 1995 | 1.6 | 0.6 | 0.7 | 0.6 | 1.9 | 0.9 | 0.9 | 0.8 |
| 1996 | 1.5 | 0.7 | 0.7 | 0.6 | 1.9 | 0.9 | 0.9 | 0.8 |

SOURCE: U.S. Department of Commerce, Bureau of the Census,
March Current Population Surveys.

Standard Error Tables
Table S32-2 Standard errors for table 32-2

| March | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grades 9-11 | High school diploma | Some college | Bachelor's degree or higher | Grades 9-11 | High school diploma | Some college | Bachelor's degree or higher |
| 1971 | 0.9 | 0.4 | 0.7 | 0.5 | 1.0 | 0.4 | 0.8 | 0.7 |
| 1972 | 0.9 | 0.4 | 0.6 | 0.4 | 1.0 | 0.4 | 0.7 | 0.5 |
| 1973 | 0.9 | 0.4 | 0.5 | 0.4 | 0.8 | 0.4 | 0.6 | 0.5 |
| 1974 | 0.9 | 0.4 | 0.5 | 0.4 | 0.9 | 0.4 | 0.6 | 0.5 |
| 1975 | 1.3 | 0.6 | 0.7 | 0.4 | 1.1 | 0.5 | 0.7 | 0.5 |
| 1976 | 1.2 | 0.5 | 0.6 | 0.4 | 1.1 | 0.5 | 0.7 | 0.5 |
| 1977 | 1.2 | 0.5 | 0.6 | 0.4 | 1.1 | 0.5 | 0.7 | 0.5 |
| 1978 | 1.1 | 0.5 | 0.5 | 0.3 | 1.1 | 0.4 | 0.5 | 0.4 |
| 1979 | 1.2 | 0.4 | 0.5 | 0.3 | 1.1 | 0.4 | 0.5 | 0.4 |
| 1980 | 1.2 | 0.5 | 0.5 | 0.3 | 1.1 | 0.4 | 0.5 | 0.4 |
| 1981 | 1.3 | 0.5 | 0.5 | 0.3 | 1.2 | 0.4 | 0.5 | 0.4 |
| 1982 | 1.5 | 0.6 | 0.7 | 0.4 | 1.3 | 0.5 | 0.6 | 0.4 |
| 1983 | 1.6 | 0.7 | 0.7 | 0.4 | 1.5 | 0.5 | 0.6 | 0.4 |
| 1984 | 1.4 | 0.5 | 0.6 | 0.4 | 1.4 | 0.5 | 0.6 | 0.4 |
| 1985 | 1.3 | 0.5 | 0.5 | 0.3 | 1.3 | 0.4 | 0.5 | 0.4 |
| 1986 | 1.3 | 0.5 | 0.5 | 0.3 | 1.4 | 0.4 | 0.5 | 0.3 |
| 1987 | 1.2 | 0.5 | 0.5 | 0.4 | 1.3 | 0.4 | 0.5 | 0.3 |
| 1988 | 1.2 | 0.5 | 0.5 | 0.3 | 1.4 | 0.4 | 0.5 | 0.4 |
| 1989 | 1.2 | 0.4 | 0.5 | 0.3 | 1.3 | 0.4 | 0.5 | 0.3 |
| 1990 | 1.2 | 0.4 | 0.5 | 0.3 | 1.3 | 0.4 | 0.5 | 0.3 |
| 1991 | 1.4 | 0.5 | 0.6 | 0.4 | 1.3 | 0.4 | 0.5 | 0.4 |
| 1992 | 1.4 | 0.5 | 0.6 | 0.4 | 1.4 | 0.5 | 0.5 | 0.3 |
| 1993 | 1.4 | 0.6 | 0.6 | 0.4 | 1.4 | 0.5 | 0.5 | 0.4 |
| 1994 | 1.3 | 0.5 | 0.5 | 0.3 | 1.4 | 0.5 | 0.5 | 0.4 |
| 1995 | 1.3 | 0.5 | 0.5 | 0.4 | 1.3 | 0.5 | 0.5 | 0.3 |
| 1996 | 1.2 | 0.5 | 0.5 | 0.4 | 1.4 | 0.5 | 0.4 | 0.3 |

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Table S33-1 Standard errors for table 33-1

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | All wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$713 | \$785 | - | - | \$781 | \$1,272 | \$2,058 | - |
| 1971 | 663 | 773 | \$2,338 | - | 495 | 1,100 | 1,508 | - |
| 1972 | 619 | 722 | 3,772 | - | 573 | 955 | 1,472 | - |
| 1973 | 597 | 707 | 2,572 | - | 591 | 746 | 3,043 | - |
| 1974 | 553 | 684 | 3,166 | - | 575 | 724 | 1,362 | - |
| 1975 | 594 | 746 | 2,899 | - | 473 | 584 | 960 | - |
| 1976 | 549 | 624 | 3,185 | - | 506 | 662 | 2,363 | - |
| 1977 | 581 | 669 | 2,656 | - | 511 | 654 | 1,946 | - |
| 1978 | 480 | 573 | 2,967 | \$5,198 | 515 | 617 | 1,648 | - |
| 1979 | 454 | 520 | 2,868 | 3,594 | 341 | 413 | 1,189 | - |
| 1980 | 531 | 609 | 1,993 | 3,582 | 365 | 444 | 1,482 | - |
| 1981 | 451 | 526 | 2,737 | 4,099 | 484 | 595 | 1,897 | \$2,638 |
| 1982 | 403 | 495 | 2,257 | 2,845 | 450 | 554 | 1,125 | 2,583 |
| 1983 | 455 | 568 | 2,383 | 3,356 | 343 | 443 | 944 | 2,834 |
| 1984 | 716 | 818 | 1,657 | 2,788 | 341 | 414 | 1,453 | 2,541 |
| 1985 | 383 | 473 | 2,692 | 3,433 | 436 | 543 | 1,174 | 2,724 |
| 1986 | 445 | 519 | 2,294 | 3,423 | 458 | 578 | 1,368 | 2,053 |
| 1987 | 551 | 781 | 2,400 | 3,468 | 400 | 531 | 905 | 1,528 |
| 1988 | 833 | 938 | 985 | 2,862 | 343 | 441 | 888 | 2,671 |
| 1989 | 634 | 605 | 1,416 | 5,181 | 319 | 384 | 1,173 | 2,530 |
| 1990 | 607 | 563 | 1,241 | 2,872 | 486 | 594 | 1,652 | 2,262 |
| 1991 | 369 | 388 | 2,001 | 2,755 | 467 | 512 | 1,040 | 2,391 |
| 1992 | 362 | 880 | 3,472 | 2,728 | 386 | 384 | 1,587 | 2,042 |
| 1993 | 397 | 850 | 1,003 | 2,348 | 387 | 431 | 1,565 | 1,924 |
| 1994 | 489 | 902 | 1,465 | 2,170 | 316 | 351 | 1,741 | 1,820 |
| 1995 | 602 | 836 | 1,548 | 2,255 | 313 | 348 | 1,543 | 1,706 |

Standard Error Tables
Table S33-1 Standard errors for table 33-1 - Continued

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | Year-round, full-time wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$674 | \$754 | - | - | \$660 | \$785 | - | - |
| 1971 | 650 | 754 | - | - | 608 | 726 | \$1,810 | - |
| 1972 | 593 | 687 | \$3,885 | - | 584 | 701 | 1,837 | - |
| 1973 | 815 | 947 | 2,268 | - | 561 | 644 | 2,786 | - |
| 1974 | 657 | 756 | 2,869 | - | 475 | 546 | 1,520 | - |
| 1975 | 661 | 769 | 2,927 | - | 505 | 619 | 1,070 | - |
| 1976 | 524 | 613 | 3,753 | - | 431 | 510 | 1,985 | - |
| 1977 | 470 | 683 | 2,599 | - | 430 | 549 | 950 | - |
| 1978 | 474 | 563 | 2,201 | - | 382 | 450 | 1,702 | - |
| 1979 | 515 | 615 | 3,033 | - | 549 | 641 | 1,603 | - |
| 1980 | 486 | 558 | 1,419 | \$3,690 | 457 | 549 | 1,688 | - |
| 1981 | 471 | 578 | 2,452 | 5,352 | 375 | 453 | 1,456 | - |
| 1982 | 651 | 762 | 2,120 | 2,678 | 342 | 483 | 744 | - |
| 1983 | 584 | 629 | 1,993 | 1,822 | 427 | 506 | 925 | \$1,675 |
| 1984 | 433 | 491 | 1,616 | 5,072 | 518 | 647 | 1,934 | 2,444 |
| 1985 | 590 | 969 | 1,379 | 2,862 | 344 | 451 | 1,519 | 2,677 |
| 1986 | 756 | 798 | 2,328 | 3,079 | 357 | 444 | 1,374 | 1,866 |
| 1987 | 410 | 484 | 2,242 | 1,963 | 324 | 636 | 725 | 1,840 |
| 1988 | 438 | 504 | 2,634 | 2,778 | 565 | 692 | 816 | 2,553 |
| 1989 | 503 | 827 | 1,576 | 4,508 | 415 | 519 | 1,161 | 2,805 |
| 1990 | 388 | 588 | 1,237 | 2,864 | 372 | 467 | 880 | 2,262 |
| 1991 | 645 | 586 | 2,313 | 3,285 | 398 | 540 | 1,472 | 1,818 |
| 1992 | 394 | 424 | 2,249 | 1,529 | 510 | 601 | 1,132 | 1,665 |
| 1993 | 443 | 510 | 1,638 | 3,174 | 523 | 471 | 1,362 | 1,409 |
| 1994 | 392 | 422 | 1,369 | 3,076 | 551 | 460 | 896 | 1,911 |
| 1995 | 453 | 767 | 1,095 | 2,661 | 477 | 426 | 1,187 | 1,958 |

[^79]SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Table S33-2 Standard errors for table 33-2

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | All wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$640 | \$693 | \$1,179 | \$1,493 | \$769 | \$820 | \$1,011 | - |
| 1971 | 528 | 657 | 1,520 | 2,366 | 569 | 839 | 1,760 | - |
| 1972 | 737 | 824 | 1,971 | 2,124 | 517 | 862 | 1,213 | - |
| 1973 | 713 | 953 | 1,482 | 2,469 | 419 | 939 | 1,049 | - |
| 1974 | 668 | 825 | 2,422 | 1,900 | 627 | 821 | 1,006 | \$3,124 |
| 1975 | 739 | 950 | 1,735 | 2,518 | 411 | 743 | 955 | - |
| 1976 | 640 | 975 | 1,730 | 2,267 | 626 | 860 | 1,177 | 1,798 |
| 1977 | 784 | 961 | 1,588 | 2,277 | 711 | 854 | 1,502 | 1,914 |
| 1978 | 769 | 958 | 1,103 | 3,208 | 330 | 665 | 1,244 | 1,969 |
| 1979 | 684 | 962 | 1,804 | 1,529 | 608 | 967 | 1,059 | 1,764 |
| 1980 | 574 | 888 | 693 | 1,482 | 634 | 860 | 1,527 | 1,628 |
| 1981 | 542 | 772 | 1,332 | 2,480 | 450 | 683 | 880 | 1,854 |
| 1982 | 540 | 690 | 1,456 | 2,009 | 568 | 708 | 1,242 | 1,719 |
| 1983 | 529 | 847 | 1,513 | 2,140 | 557 | 754 | 708 | 1,993 |
| 1984 | 486 | 695 | 719 | 1,849 | 560 | 728 | 1,907 | 1,676 |
| 1985 | 407 | 986 | 868 | 1,330 | 534 | 832 | 781 | 1,569 |
| 1986 | 473 | 1,108 | 873 | 1,688 | 533 | 612 | 925 | 2,286 |
| 1987 | 595 | 804 | 1,192 | 857 | 537 | 685 | 901 | 1,321 |
| 1988 | 623 | 811 | 1,033 | 885 | 468 | 740 | 987 | 1,599 |
| 1989 | 618 | 724 | 1,343 | 1,315 | 673 | 848 | 1,280 | 1,405 |
| 1990 | 595 | 694 | 885 | 1,709 | 566 | 786 | 1,099 | 1,312 |
| 1991 | 667 | 878 | 865 | 1,233 | 649 | 807 | 1,928 | 1,135 |
| 1992 | 626 | 661 | 1,158 | 673 | 485 | 615 | 1,833 | 1,192 |
| 1993 | 643 | 554 | 1,405 | 412 | 415 | 695 | 1,990 | 1,068 |
| 1994 | 568 | 640 | 1,608 | 628 | 600 | 809 | 2,035 | 1,220 |
| 1995 | 428 | 653 | 850 | 1,085 | 366 | 801 | 1,052 | 635 |

Standard Error Tables
Table S33-2 Standard errors for table 33-2 - Continued

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | Year-round, full-time wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$618 | \$796 | \$1,198 | \$1,781 | \$656 | \$903 | \$1,364 | - |
| 1971 | 521 | 788 | 2,514 | 2,440 | 645 | 847 | 1,476 | - |
| 1972 | 757 | 876 | 1,184 | 3,043 | 808 | 1,142 | 1,355 | - |
| 1973 | 878 | 1,000 | 1,536 | - | 754 | 914 | 1,974 | - |
| 1974 | 678 | 1,049 | 1,988 | - | 670 | 948 | 1,757 | - |
| 1975 | 768 | 952 | 2,268 | - | 895 | 1,005 | 2,556 | - |
| 1976 | 763 | 1,025 | 1,781 | 2,387 | 934 | 1,179 | 681 | - |
| 1977 | 752 | 845 | 2,014 | - | 630 | 892 | 2,270 | - |
| 1978 | 693 | 1,122 | 2,498 | 3,239 | 731 | 1,137 | 1,496 | - |
| 1979 | 1,067 | 1,243 | 1,216 | 2,130 | 710 | 1,099 | 1,907 | - |
| 1980 | 961 | 1,183 | 1,536 | 2,334 | 740 | 1,091 | 2,225 | - |
| 1981 | 901 | 981 | 1,560 | 2,108 | 711 | 831 | - | - |
| 1982 | 1,104 | 1,071 | 2,599 | 2,021 | 679 | 1,240 | 1,249 | - |
| 1983 | 857 | 901 | 2,428 | 2,504 | 843 | 1,261 | - | - |
| 1984 | 877 | 1,021 | 976 | 2,053 | 860 | 1,107 | 790 | - |
| 1985 | 630 | 900 | 1,343 | 2,203 | 660 | 941 | - | - |
| 1986 | 568 | 794 | 920 | 1,461 | 485 | 828 | 827 | - |
| 1987 | 612 | 898 | 1,292 | 1,589 | 540 | 721 | - | - |
| 1988 | 597 | 960 | 1,944 | 1,621 | 581 | 682 | 2,518 | - |
| 1989 | 596 | 798 | 1,000 | 1,061 | 558 | 1,043 | - | \$1,134 |
| 1990 | 581 | 1,041 | 1,151 | 1,023 | 692 | 1,089 | - | 1,197 |
| 1991 | 633 | 696 | 1,170 | 905 | 437 | 769 | 1,215 | - |
| 1992 | 724 | 767 | 1,400 | 825 | 832 | 966 | 1,727 | - |
| 1993 | 737 | 734 | 2,444 | 1,014 | 811 | 948 | - | 1,458 |
| 1994 | 749 | 845 | 2,000 | 954 | 652 | 867 | - | 768 |
| 1995 | 708 | 837 | 1,801 | 999 | 630 | 681 | 1,290 | 469 |

- Not available.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Table S33-3 Standard errors for table 33-3

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | All wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$346 | \$392 | \$1,105 | \$1,548 | \$435 | \$560 | \$1,182 | \$3,073 |
| 1971 | 390 | 434 | 1,103 | 1,789 | 443 | 557 | 1,461 | 2,058 |
| 1972 | 346 | 402 | 787 | 1,487 | 407 | 585 | 1,210 | 1,962 |
| 1973 | 364 | 431 | 1,370 | 2,174 | 376 | 543 | 962 | 1,268 |
| 1974 | 341 | 409 | 1,426 | 3,875 | 353 | 432 | 1,145 | 2,284 |
| 1975 | 355 | 423 | 1,201 | 2,121 | 374 | 516 | 1,104 | 1,194 |
| 1976 | 342 | 403 | 1,349 | 1,974 | 358 | 470 | 977 | 1,524 |
| 1977 | 379 | 536 | 1,427 | 1,975 | 347 | 451 | 851 | 1,459 |
| 1978 | 555 | 651 | 1,536 | 2,269 | 296 | 401 | 704 | 1,294 |
| 1979 | 446 | 445 | 1,004 | 1,309 | 324 | 433 | 787 | 1,326 |
| 1980 | 317 | 369 | 839 | 1,581 | 291 | 383 | 708 | 1,447 |
| 1981 | 327 | 405 | 1,079 | 1,772 | 269 | 352 | 830 | 877 |
| 1982 | 320 | 390 | 754 | 1,807 | 291 | 399 | 753 | 1,062 |
| 1983 | 323 | 391 | 656 | 1,614 | 286 | 357 | 689 | 1,133 |
| 1984 | 773 | 507 | 695 | 1,252 | 253 | 327 | 681 | 1,060 |
| 1985 | 311 | 482 | 725 | 1,224 | 231 | 296 | 727 | 1,113 |
| 1986 | 336 | 464 | 607 | 1,481 | 215 | 272 | 828 | 1,114 |
| 1987 | 392 | 426 | 930 | 1,267 | 219 | 285 | 582 | 945 |
| 1988 | 349 | 360 | 621 | 1,051 | 220 | 290 | 525 | 1,016 |
| 1989 | 251 | 296 | 764 | 869 | 219 | 287 | 649 | 739 |
| 1990 | 307 | 329 | 491 | 947 | 201 | 286 | 522 | 751 |
| 1991 | 287 | 312 | 734 | 928 | 221 | 360 | 569 | 1,212 |
| 1992 | 333 | 321 | 830 | 895 | 309 | 475 | 637 | 965 |
| 1993 | 251 | 293 | 457 | 673 | 327 | 427 | 732 | 779 |
| 1994 | 260 | 294 | 727 | 1,016 | 320 | 422 | 549 | 808 |
| 1995 | 265 | 465 | 733 | 929 | 380 | 420 | 301 | 620 |

Standard Error Tables
Table S33-3 Standard errors for table 33-3-Continued

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | Year-round, full-time wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$350 | \$428 | \$1,065 | \$1,619 | \$382 | \$451 | \$1,447 | - |
| 1971 | 355 | 407 | 1,382 | 2,822 | 312 | 377 | 1,107 | - |
| 1972 | 338 | 463 | 895 | 1,697 | 395 | 501 | 1,297 | \$2,073 |
| 1973 | 356 | 424 | 1,710 | 1,761 | 365 | 483 | 795 | 2,522 |
| 1974 | 342 | 411 | 1,433 | 1,711 | 339 | 412 | 1,315 | 1,262 |
| 1975 | 356 | 427 | 1,430 | 1,992 | 290 | 368 | 845 | 1,381 |
| 1976 | 382 | 551 | 1,563 | 1,934 | 329 | 412 | 859 | 1,668 |
| 1977 | 468 | 379 | 1,270 | 1,769 | 331 | 327 | 751 | 1,226 |
| 1978 | 439 | 476 | 1,924 | 2,857 | 338 | 443 | 859 | 1,595 |
| 1979 | 369 | 443 | 1,348 | 2,914 | 261 | 340 | 740 | 1,474 |
| 1980 | 320 | 387 | 1,491 | 2,037 | 228 | 277 | 812 | 1,138 |
| 1981 | 429 | 485 | 1,012 | 1,875 | 223 | 274 | 763 | 1,054 |
| 1982 | 435 | 521 | 1,160 | 1,292 | 234 | 301 | 697 | 1,613 |
| 1983 | 424 | 469 | 1,096 | 1,453 | 337 | 423 | 627 | 1,352 |
| 1984 | 325 | 390 | 1,006 | 2,237 | 325 | 420 | 568 | 1,307 |
| 1985 | 355 | 408 | 752 | 1,285 | 329 | 402 | 682 | 2,162 |
| 1986 | 315 | 386 | 1,290 | 1,249 | 326 | 390 | 876 | 964 |
| 1987 | 294 | 368 | 1,063 | 1,485 | 241 | 298 | 897 | 1,367 |
| 1988 | 292 | 464 | 617 | 1,560 | 247 | 326 | 896 | 1,152 |
| 1989 | 252 | 507 | 797 | 1,360 | 225 | 273 | 1,070 | 1,419 |
| 1990 | 262 | 550 | 477 | 897 | 230 | 276 | 970 | 1,133 |
| 1991 | 367 | 456 | 744 | 1,456 | 274 | 347 | 762 | 1,018 |
| 1992 | 388 | 441 | 662 | 1,224 | 375 | 468 | 674 | 1,408 |
| 1993 | 322 | 456 | 1,352 | 935 | 354 | 392 | 828 | 756 |
| 1994 | 341 | 359 | 993 | 973 | 392 | 430 | 899 | 1137 |
| 1995 | 405 | 369 | 779 | 781 | 382 | 415 | 649 | 672 |

[^80]SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Table S33-4 Standard errors for table 33-4

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | All wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$625 | \$754 | \$2,574 | - | \$933 | \$1,543 | \$2,168 | - |
| 1971 | 668 | 795 | 2,875 | - | 704 | 1,332 | 2,366 | - |
| 1972 | 613 | 787 | 2,448 | \$3,803 | 809 | 1,098 | 1,888 | - |
| 1973 | 567 | 679 | 1,925 | 3,083 | 695 | 978 | 1,724 | - |
| 1974 | 479 | 571 | 2,061 | 2,889 | 599 | 712 | 1,467 | - |
| 1975 | 510 | 614 | 2,083 | 2,870 | 545 | 673 | 2,004 | - |
| 1976 | 556 | 666 | 1,808 | 3,242 | 549 | 732 | 1,276 | \$2,405 |
| 1977 | 583 | 726 | 1,674 | 2,346 | 481 | 644 | 1,145 | 3,343 |
| 1978 | 620 | 759 | 2,022 | 2,000 | 520 | 606 | 1,340 | 2,854 |
| 1979 | 457 | 543 | 1,503 | 3,752 | 427 | 511 | 1,378 | 2,609 |
| 1980 | 428 | 514 | 1,377 | 2,407 | 423 | 495 | 1,065 | 2,689 |
| 1981 | 425 | 587 | 1,448 | 3,159 | 331 | 419 | 941 | 1,811 |
| 1982 | 476 | 588 | 1,491 | 2,597 | 319 | 403 | 927 | 1,521 |
| 1983 | 521 | 638 | 1,313 | 2,174 | 366 | 476 | 979 | 1,711 |
| 1984 | 517 | 514 | 1,904 | 2,536 | 323 | 399 | 918 | 1,694 |
| 1985 | 391 | 457 | 1,228 | 2,851 | 337 | 559 | 812 | 1,531 |
| 1986 | 448 | 563 | 1,611 | 2,370 | 480 | 685 | 1,005 | 1,905 |
| 1987 | 407 | 480 | 944 | 2,314 | 437 | 538 | 1,480 | 1,616 |
| 1988 | 430 | 731 | 1,355 | 2,076 | 451 | 483 | 1,431 | 1,906 |
| 1989 | 477 | 528 | 1,250 | 1,772 | 368 | 484 | 992 | 1,847 |
| 1990 | 551 | 819 | 1,269 | 1,299 | 321 | 415 | 1,355 | 1,083 |
| 1991 | 551 | 573 | 1,166 | 1,208 | 342 | 397 | 961 | 1,320 |
| 1992 | 473 | 662 | 1,502 | 1,197 | 323 | 377 | 1,100 | 1,527 |
| 1993 | 421 | 484 | 1,001 | 1,644 | 297 | 366 | 990 | 881 |
| 1994 | 495 | 399 | 816 | 1,141 | 322 | 364 | 871 | 1,534 |
| 1995 | 488 | 371 | 958 | 1,140 | 315 | 404 | 915 | 1,118 |

Standard Error Tables
Table S33-4 Standard errors for table 33-4 - Continued

| Year | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | Hispanic | Total | White | Black | Hispanic |
|  | Year-round, full-time wage and salary workers |  |  |  |  |  |  |  |
| 1970 | \$607 | \$775 | \$2,095 | - | \$630 | \$794 | \$1,843 | - |
| 1971 | 671 | 792 | 2,372 | - | 755 | 926 | - | - |
| 1972 | 632 | 739 | 2,005 | - | 645 | 756 | - | - |
| 1973 | 530 | 641 | 2,119 | \$2,960 | 497 | 641 | 1,323 | - |
| 1974 | 465 | 563 | 1,904 | 2,046 | 626 | 769 | 2,066 | - |
| 1975 | 628 | 746 | 1,641 | 3,208 | 464 | 630 | 1,001 | - |
| 1976 | 563 | 657 | 2,409 | 3,670 | 448 | 605 | 973 | - |
| 1977 | 597 | 662 | 1,457 | 2,848 | 455 | 559 | 889 | - |
| 1978 | 458 | 556 | 1,752 | 3,063 | 458 | 572 | 1,357 | - |
| 1979 | 457 | 543 | 1,474 | 2,878 | 399 | 492 | 1,223 | - |
| 1980 | 527 | 630 | 1,438 | 2,393 | 289 | 354 | 869 | \$2,689 |
| 1981 | 566 | 612 | 1,420 | 3,443 | 417 | 554 | 907 | 2,360 |
| 1982 | 431 | 518 | 1,636 | 2,542 | 425 | 553 | 1,312 | 1,798 |
| 1983 | 427 | 503 | 1,403 | 1,974 | 411 | 528 | 1,414 | 2,158 |
| 1984 | 395 | 771 | 2,067 | 2,443 | 356 | 438 | 720 | 1,270 |
| 1985 | 591 | 771 | 1,174 | 2,838 | 342 | 433 | 953 | 1,676 |
| 1986 | 657 | 797 | 1,175 | 2,060 | 335 | 426 | 916 | 1,139 |
| 1987 | 638 | 795 | 1,834 | 2,240 | 410 | 548 | 992 | 1,359 |
| 1988 | 590 | 675 | 1,561 | 1,646 | 562 | 718 | 1,259 | 3,278 |
| 1989 | 426 | 570 | 1,317 | 2,933 | 444 | 628 | 816 | 2,364 |
| 1990 | 385 | 491 | 1,358 | 2,128 | 353 | 419 | 1,107 | 1,579 |
| 1991 | 352 | 372 | 1,124 | 1,592 | 297 | 336 | 831 | 1,120 |
| 1992 | 353 | 388 | 1,541 | 1,809 | 306 | 347 | 993 | 1,561 |
| 1993 | 329 | 363 | 1,426 | 1,557 | 278 | 324 | 734 | 1,197 |
| 1994 | 308 | 464 | 1,662 | 1,206 | 312 | 379 | 673 | 1,177 |
| 1995 | 326 | 477 | 958 | 1,201 | 245 | 296 | 590 | 1,176 |

[^81]SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Table S33-5 Standard errors for table 33-5

| Year | Grades 9-11 |  | Some college |  | Bachelor's degree or higher |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female |
| 1970 | 0.02 | 0.05 | 0.02 | 0.06 | 0.02 | 0.06 |
| 1971 | 0.02 | 0.04 | 0.02 | 0.05 | 0.02 | 0.05 |
| 1972 | 0.02 | 0.03 | 0.02 | 0.05 | 0.02 | 0.05 |
| 1973 | 0.02 | 0.03 | 0.02 | 0.05 | 0.02 | 0.05 |
| 1974 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 | 0.06 |
| 1975 | 0.03 | 0.03 | 0.02 | 0.05 | 0.02 | 0.06 |
| 1976 | 0.02 | 0.04 | 0.02 | 0.05 | 0.02 | 0.05 |
| 1977 | 0.03 | 0.05 | 0.02 | 0.04 | 0.02 | 0.05 |
| 1978 | 0.03 | 0.02 | 0.03 | 0.04 | 0.03 | 0.05 |
| 1979 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 |
| 1980 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 |
| 1981 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 | 0.04 |
| 1982 | 0.02 | 0.04 | 0.02 | 0.03 | 0.02 | 0.05 |
| 1983 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 |
| 1984 | 0.03 | 0.04 | 0.04 | 0.03 | 0.05 | 0.04 |
| 1985 | 0.02 | 0.04 | 0.02 | 0.03 | 0.02 | 0.04 |
| 1986 | 0.02 | 0.04 | 0.02 | 0.04 | 0.03 | 0.04 |
| 1987 | 0.03 | 0.04 | 0.02 | 0.03 | 0.03 | 0.04 |
| 1988 | 0.03 | 0.03 | 0.02 | 0.04 | 0.04 | 0.03 |
| 1989 | 0.03 | 0.05 | 0.02 | 0.03 | 0.03 | 0.04 |
| 1990 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.04 |
| 1991 | 0.03 | 0.05 | 0.03 | 0.03 | 0.02 | 0.04 |
| 1992 | 0.03 | 0.04 | 0.03 | 0.04 | 0.03 | 0.05 |
| 1993 | 0.03 | 0.03 | 0.02 | 0.04 | 0.03 | 0.05 |
| 1994 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.05 |
| 1995 | 0.02 | 0.03 | 0.03 | 0.04 | 0.03 | 0.06 |

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Standard Error Tables
Table S34-1 Standard errors for table 34-1

| Major field of study, sex, and race/ethnicity | 1977 | 1980 | 1984 | 1986 | 1990 | 1993 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All graduates | \$316 | \$267 | \$224 | \$149 | \$171 | \$244 |
| Major field of study |  |  |  |  |  |  |
| Humanities and social and behavioral sciences | 416 | 297 | 390 | 294 | 331 | 290 |
| Humanities | 864 | 408 | 608 | 388 | 602 | 488 |
| Social and behavioral sciences | 425 | 369 | 568 | 485 | 394 | 342 |
| Natural and computer sciences and engineering | 926 | 915 | 577 | 444 | 595 | 570 |
| Natural sciences | 771 | 937 | 775 | 590 | 790 | 505 |
| Computer sciences and engineering | 617 | 555 | 420 | 400 | 416 | 621 |
| Technical/professional | 384 | 293 | 254 | 165 | 205 | 278 |
| Education | 254 | 217 | 429 | 302 | 400 | 354 |
| Business | 304 | 391 | 330 | 219 | 410 | 526 |
| Other professional or technical | 716 | 491 | 416 | 321 | 538 | 567 |
| Sex |  |  |  |  |  |  |
| Male | 210 | 389 | 336 | 198 | 370 | 381 |
| Female | 246 | 204 | 283 | 194 | 229 | 228 |
| Race/ethnicity |  |  |  |  |  |  |
| White | 335 | 283 | 238 | 161 | 182 | 269 |
| Black | 1150 | 754 | 1114 | 797 | 765 | 836 |
| Hispanic | 1699 | 3323 | 1325 | 689 | 912 | 715 |
| Asian/Pacific Islander | 2919 | 2283 | 1429 | 904 | 1061 | 1021 |
| American Indian/Alaskan Native | - | - | - | 2003 | 1798 | 2056 |

[^82]SOURCE: U.S. Department of Education, National Center for Education Statistics, Recent College Graduates Surveys (1977-90) and 1993 Baccalaureate and Beyond Longitudinal Study, First Followup (B\&B:93/94).

Table S35-1 Standard errors for table 35-1

| Selected characteristics | Attended postsecondary institution |  |  | Had not attended postsecondary institution |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | No service in high school | Service in high school | Total | No service in high school | Service in high school |
| Total | 0.8 | 1.1 | 1.1 | 1.0 | 1.1 | 2.3 |
| Sex |  |  |  |  |  |  |
| Male | 1.1 | 1.5 | 1.5 | 1.5 | 1.7 | 3.4 |
| Female | 1.1 | 1.4 | 1.4 | 1.3 | 1.5 | 2.9 |
| Race/ethnicity |  |  |  |  |  |  |
| White | 0.9 | 1.3 | 1.2 | 1.2 | 1.3 | 2.7 |
| Black | 2.9 | 3.9 | 4.1 | 2.9 | 3.1 | 7.2 |
| Hispanic | 2.0 | 2.6 | 3.0 | 2.7 | 3.0 | 6.1 |
| Asian/Pacific Islander | 2.7 | 4.4 | 3.1 | 4.0 | 3.8 | 9.2 |
| American Indian/Alaskan Native | 9.6 | 10.1 | - | 7.9 | 8.4 | - |
| Control of high school |  |  |  |  |  |  |
| Public | 0.8 | 1.1 | 1.2 | 1.1 | 1.2 | 2.4 |
| Catholic | 2.5 | 4.1 | 2.9 | 7.8 | 11.7 | 7.6 |
| Private, other | 4.2 | 5.9 | 3.9 | 10.7 | - | - |
| Urbanicity of high school |  |  |  |  |  |  |
| Central city | 1.6 | 2.0 | 2.2 | 2.2 | 2.1 | 5.3 |
| Urban fringe/large town | 1.2 | 1.6 | 1.5 | 1.8 | 2.0 | 3.7 |
| Rural/small town | 1.4 | 1.7 | 1.8 | 1.6 | 1.8 | 3.7 |
| Achievement test quartile of 1992 |  |  |  |  |  |  |
| First (low) | 2.6 | 3.5 | 3.8 | 1.8 | 1.9 | 4.5 |
| Second | 1.6 | 2.0 | 2.3 | 2.0 | 1.9 | 5.0 |
| Third | 1.4 | 1.7 | 1.9 | 2.4 | 2.4 | 4.6 |
| Fourth (high) | 1.3 | 2.1 | 1.4 | 5.3 | 7.7 | 6.9 |
| Parents' highest education level |  |  |  |  |  |  |
| Less than a high school diploma | 2.7 | 3.0 | 4.2 | 2.4 | 2.6 | 6.3 |
| High school diploma or GED | 1.9 | 2.3 | 3.1 | 1.5 | 1.6 | 4.1 |
| Some college | 1.3 | 1.7 | 1.9 | 1.9 | 2.2 | 3.6 |
| Bachelor's degree or higher | 1.2 | 1.9 | 1.4 | 3.6 | 4.6 | 5.5 |
| High school program |  |  |  |  |  |  |
| General | 1.3 | 1.6 | 1.9 | 1.5 | 1.6 | 3.3 |
| College preparatory | 1.1 | 1.6 | 1.2 | 3.0 | 3.9 | 4.6 |
| Vocational/technical | 2.3 | 2.6 | 3.9 | 1.9 | 2.1 | 4.6 |
| Other specialized program | 4.1 | 5.5 | 6.6 | 2.4 | 2.1 | 6.8 |

[^83]SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, Second Follow-up (1992) and Third Follow-up (1994).

Standard Error Tables
Table S35-2 Standard errors for table 35-2

| Selected characteristics |  | No community service in high school | Reported performing community service in high school |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  | Total | Strictly voluntary | Required |
| Total | 0.7 | 0.8 | 1.0 | 1.1 | 1.5 |
| Sex |  |  |  |  |  |
| Male | 0.9 | 1.2 | 1.5 | 1.6 | 2.3 |
| Female | 0.9 | 1.1 | 1.3 | 1.4 | 2.0 |
| Race/ethnicity |  |  |  |  |  |
| White | 0.8 | 0.9 | 1.1 | 1.2 | 1.6 |
| Black | 2.3 | 2.8 | 3.4 | 3.9 | 5.7 |
| Hispanic | 1.7 | 2.1 | 2.8 | 2.9 | 4.5 |
| Asian/Pacific Islander | 2.6 | 3.9 | 3.1 | 3.6 | 5.6 |
| American Indian/Alaskan Native | 7.6 | 8.0 | 8.6 | 8.1 | - |
| Control of high school |  |  |  |  |  |
| Public | 0.7 | 0.8 | 1.0 | 1.1 | 1.7 |
| Catholic | 2.4 | 3.9 | 2.9 | 3.6 | 3.7 |
| Private, other | 4.2 | 5.8 | 4.0 | 4.2 | 5.2 |
| Urbanicity of high school |  |  |  |  |  |
| Central city | 1.3 | 1.6 | 1.9 | 2.2 | 2.6 |
| Urban fringe/large town | 1.1 | 1.3 | 1.5 | 1.5 | 2.3 |
| Rural/small town | 1.1 | 1.2 | 1.7 | 1.8 | 2.7 |
| Achievement test quartile of 1992 |  |  |  |  |  |
| First (low) | 1.7 | 2.1 | 2.8 | 3.4 | 4.4 |
| Second | 1.2 | 1.4 | 2.1 | 2.3 | 3.5 |
| Third | 1.2 | 1.5 | 1.8 | 2.0 | 3.1 |
| Fourth (high) | 1.3 | 2.1 | 1.4 | 1.5 | 2.3 |
| Parents' highest education level |  |  |  |  |  |
| Less than a high school diploma | 1.9 | 2.0 | 3.7 | 4.2 | 6.3 |
| High school diploma or GED | 1.3 | 1.5 | 2.5 | 2.8 | 3.6 |
| Some college | 1.1 | 1.4 | 1.6 | 1.8 | 2.5 |
| Bachelor's degree or higher | 1.2 | 1.7 | 1.4 | 1.5 | 2.3 |
| High school program |  |  |  |  |  |
| General | 1.0 | 1.2 | 1.6 | 1.7 | 2.8 |
| College preparatory | 1.0 | 1.5 | 1.2 | 1.3 | 1.9 |
| Vocational/technical | 1.5 | 1.6 | 3.1 | 3.5 | 4.9 |
| Other specialized program | 2.7 | 3.2 | 4.8 | 5.5 | 6.2 |
| - Not available. |  | sou <br> Educ <br> Seco | partme Nation 1992) | ducation, ation Long Follow-up | Center for dy of 1988, |

Table S35-3 Standard errors for table 35-3

| Selected characteristics | $\begin{aligned} & \text { Youth } \\ & \text { organ- } \\ & \text { ization } \\ & \hline \end{aligned}$ | Union/farm/ professional organization | $\begin{array}{r} \text { Political } \\ \text { club } \\ \hline \end{array}$ | Churchrelated group | Service organization | Sports team or club | $\begin{array}{r} \hline \text { Education } \\ \text { organ- } \\ \text { ization } \\ \hline \end{array}$ | $\begin{array}{r} \text { Other } \\ \text { groups } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 0.4 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 |
| Sex |  |  |  |  |  |  |  |  |
| Male | 0.7 | 0.2 | 0.4 | 0.6 | 0.5 | 0.7 | 0.4 | 0.4 |
| Female | 0.5 | 0.4 | 0.3 | 0.5 | 0.6 | 0.4 | 0.4 | 0.5 |
| Race/ethnicity |  |  |  |  |  |  |  |  |
| White | 0.5 | 0.3 | 0.3 | 0.5 | 0.5 | 0.5 | 0.3 | 0.4 |
| Black | 1.7 | 0.3 | 0.6 | 1.5 | 0.7 | 1.2 | 1.2 | 1.0 |
| Hispanic | 1.2 | 0.3 | 0.4 | 1.0 | 0.8 | 1.1 | 0.8 | 0.8 |
| Asian/Pacific Islander | 1.6 | 0.5 | 0.8 | 1.4 | 1.5 | 0.9 | 1.0 | 1.5 |
| American Indian/Alaskan Native | 4.0 | 2.5 | 2.1 | 4.4 | 1.9 | 4.5 | 3.2 | 1.1 |
| Control of high school |  |  |  |  |  |  |  |  |
| Public | 0.4 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 |
| Catholic | 1.3 | 0.6 | 1.0 | 2.1 | 1.6 | 2.0 | 2.0 | 1.6 |
| Private, other | 3.0 | 0.6 | 1.1 | 1.5 | 3.3 | 3.0 | 1.6 | 2.1 |
| Urbanicity of high school |  |  |  |  |  |  |  |  |
| Central city | 0.7 | 0.3 | 0.4 | 0.8 | 0.7 | 0.7 | 0.7 | 0.9 |
| Urban fringe/large town | 0.6 | 0.4 | 0.5 | 0.6 | 0.7 | 0.6 | 0.4 | 0.5 |
| Rural/small town | 0.7 | 0.2 | 0.3 | 0.7 | 0.7 | 0.7 | 0.6 | 0.4 |
| Achievement test quartile of 1992 |  |  |  |  |  |  |  |  |
| First (low) | 0.7 | 0.4 | 0.3 | 0.9 | 0.5 | 1.4 | 0.5 | 0.5 |
| Second | 0.7 | 0.3 | 0.4 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 |
| Third | 0.9 | 0.3 | 0.8 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 |
| Fourth (high) | 0.9 | 0.7 | 0.5 | 0.8 | 1.1 | 0.8 | 0.7 | 1.0 |
| Parents' highest education level |  |  |  |  |  |  |  |  |
| Less than a high school diploma | 1.1 | 0.6 | 0.4 | 1.4 | 0.9 | 0.8 | 0.8 | 0.9 |
| High school diploma or GED | 1.0 | 0.3 | 0.9 | 1.1 | 0.6 | 0.6 | 0.4 | 0.6 |
| Some college | 0.7 | 0.5 | 0.3 | 0.6 | 0.7 | 0.5 | 0.4 | 0.5 |
| Bachelor's degree or higher | 0.8 | 0.3 | 0.4 | 0.9 | 0.8 | 0.8 | 0.7 | 0.9 |
| High school program |  |  |  |  |  |  |  |  |
| General | 0.6 | 0.3 | 0.2 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 |
| College preparatory | 0.7 | 0.4 | 0.5 | 0.7 | 0.8 | 0.7 | 0.5 | 0.6 |
| Vocational/technical | 0.8 | 0.4 | 0.4 | 1.0 | 0.7 | 0.9 | 0.4 | 0.7 |
| Other specialized program | 2.1 | 0.5 | 0.6 | 1.0 | 1.1 | 0.6 | 0.9 | 2.0 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, National Education Longitudinal Study of 1988,
Second Follow-up (1992) and Third Follow-up (1994).

Table S36-1 Standard errors for table 36-1

| Type of homework assignment and teachers' use of homework | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Years of teaching experience |  |  | Years of teaching experience |  |  |
|  | Total | Less than 4 years | 4 years or more | Total | Less than 4 years | 4 years or more |
| Percentage of teachers who reported assigning types of homework at least once a week |  |  |  |  |  |  |
| Write a journal entry | 2.2 | 3.1 | 2.5 | 2.4 | 3.8 | 3.0 |
| Prepare a written report | 2.0 | 2.5 | 2.4 | 1.7 | 2.3 | 2.0 |
| Work on problems for which there is no obvious method of solution | 1.4 | 3.3 | 1.7 | 1.5 | 1.8 | 1.8 |
| Read the textbook or other assigned reading | 2.0 | 3.6 | 2.2 | 2.3 | 4.0 | 2.8 |
| Apply concepts or principles to different or unfamiliar situations | 1.6 | 3.4 | 1.7 | 2.6 | 3.5 | 2.9 |
| Read supplementary material | 1.9 | 3.4 | 2.1 | 2.2 | 3.7 | 2.6 |
| Complete routine exercises or problems from worksheets, workbooks, or text | 1.9 | 2.6 | 2.1 | 1.7 | 2.8 | 2.0 |
| Work on a project, gather data, or conduct an experiment | 2.0 | 3.5 | 2.2 | 2.1 | 3.3 | 2.5 |
| Prepare an oral report | 1.3 | 2.0 | 1.5 | 1.7 | 2.5 | 1.9 |
| Complete a short writing assignment | 2.0 | 3.3 | 2.3 | 2.5 | 4.2 | 3.0 |
| Percentage of teachers who often used written homework in the following ways: |  |  |  |  |  |  |
| Record only whether assignments were completed | 2.7 | 3.6 | 3.1 | 2.5 | 4.0 | 2.8 |
| Collect, correct, and keep assignments | 2.0 | 3.7 | 2.3 | 2.6 | 3.7 | 3.0 |
| Keep items in a student portfolio | 2.1 | 3.5 | 2.4 | 3.0 | 3.0 | 3.4 |
| Collect, correct, and return assignments to students | 2.2 | 2.9 | 2.5 | 2.2 | 2.6 | 2.5 |
| Have students exchange assignments and correct them in class | 2.1 | 3.5 | 2.4 | 2.3 | 3.7 | 2.6 |
| Have students correct their own assignments in class | 2.4 | 3.2 | 2.7 | 3.2 | 3.7 | 3.6 |
| Use assignments as a basis for class discussion | 2.5 | 3.5 | 2.7 | 2.6 | 3.9 | 3.0 |
| Use assignments as a basis for grading students | 2.2 | 3.8 | 2.4 | 2.7 | 4.3 | 3.1 |
| Use assignments as a basis for lesson planning | 2.2 | 4.2 | 2.5 | 2.8 | 4.2 | 3.3 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Teacher Follow-up Survey, 1994-95.

Table S37-1 Standard errors for table 37-1


SOURCE: U.S. Department of Education, National Center for
Education Statistics, Teacher Follow-up Survey, 1994-95.

Table S37-2 Standard errors for table 37-2

| Selected teaching methods | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Elementary Secondary |  |  | Total Elementary Secondary |  |  |
| Percentage of teachers who reported using the following instructional strategies at least once a week |  |  |  |  |  |  |
| Provide instruction to the class as a whole | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.7 |
| Facilitate a discussion | 0.7 | 0.6 | 1.2 | 0.9 | 0.7 | 1.6 |
| Demonstrate a concept using the board or overhead projector | 0.7 | 0.7 | 1.2 | 1.1 | 1.0 | 1.7 |
| Work with individual students | 0.4 | 0.2 | 0.7 | 0.7 | 0.5 | 1.4 |
| Demonstrate a concept using a computer, videotape, or other electronic medium | 1.0 | 2.0 | 1.7 | 1.5 | 2.5 | 2.2 |
| Lecture | 1.3 | 2.1 | 1.5 | 1.6 | 2.3 | 2.3 |
| Work with small groups of students | 0.6 | 0.9 | 1.1 | 1.2 | 1.8 | 2.2 |
| Lead a question-and-answer session | 0.7 | 1.0 | 1.1 | 1.1 | 1.2 | 1.9 |
| Demonstrate a concept using manipulatives, models, other tools, or objects | 1.2 | 1.4 | 1.7 | 1.5 | 2.0 | 2.3 |
| Administer a test or quiz for less than a full period | 1.2 | 1.8 | 1.7 | 1.9 | 2.9 | 2.8 |
| Administer a test or quiz for a full period | 0.8 | 2.0 | 0.9 | 1.3 | 2.4 | 1.7 |
| Percentage of teachers who emphasized the following at least once a week |  |  |  |  |  |  |
| Generalizing from patterns or examples | 0.9 | 1.4 | 1.0 | 1.3 | 2.3 | 2.1 |
| Analyzing and interpreting information | 0.9 | 1.7 | 1.2 | 1.2 | 1.9 | 1.5 |
| Organizing, summarizing, or displaying information | 1.0 | 2.0 | 1.2 | 1.1 | 2.4 | 2.0 |
| Percentage of teachers who responded in the following ways if a student gave an incorrect response Call on other students to get their responses and |  |  |  |  |  |  |
| Call on other students to get their responses and then discuss what is correct | $0.9$ | $1.5$ | $1.0$ | 1.1 | 1.1 | 1.5 |
| Ask the student another question to help him or her get the correct response | 0.5 | 0.8 | 1.0 | 0.6 | 0.7 | 0.9 |
| Call on another student likely to give the correct response | 1.0 | 1.7 | 1.5 | 1.6 | 2.7 | 2.1 |
| Provide the correct response | 1.2 | 2.2 | 1.7 | 1.5 | 2.4 | 2.1 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey, 1994-95.

Table S37-3 Standard errors for table 37-3

| Selected teaching methods | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Elementary Secondary |  |  | Total Elementary Secondary |  |  |
| Percentage of teachers who required students to perform the following in-class activities at least once a week |  |  |  |  |  |  |
| Respond orally to questions testing recall | 0.8 | 0.8 | 1.3 | 1.0 | 1.4 | 1.5 |
| Use school- or student-owned calculators | 1.0 | 1.9 | 1.3 | 1.0 | 2.3 | 1.7 |
| Lead whole group discussions | 0.9 | 2.2 | 1.4 | 1.9 | 2.5 | 2.8 |
| Listen to or observe teacher presentations | 1.1 | 1.6 | 1.3 | 1.1 | 2.2 | 2.0 |
| Use hands-on materials or objects | 1.0 | 1.3 | 1.6 | 1.3 | 2.2 | 1.9 |
| Complete a worksheet or workbook emphasizing routine practice | 0.9 | 1.3 | 1.4 | 1.2 | 1.2 | 2.0 |
| Use a textbook | 1.2 | 1.5 | 1.4 | 1.3 | 1.6 | 1.7 |
| Engage in discussion primarily with the teacher | 0.9 | 0.8 | 1.4 | 1.2 | 1.5 | 1.8 |
| Use school computers for writing | 1.1 | 2.5 | 1.4 | 1.5 | 2.8 | 1.6 |
| Use supplementary printed materials other than textbooks | 0.9 | 1.1 | 1.5 | 1.2 | 1.8 | 1.9 |
| Engage in discussion primarily with other students | 0.9 | 1.6 | 1.5 | 1.1 | 1.8 | 1.8 |
| Respond orally to open-ended questions | 0.8 | 1.2 | 1.4 | 1.0 | 1.1 | 1.8 |
| Work on a performing arts project | 0.9 | 2.1 | 1.1 | 1.2 | 2.9 | 1.2 |
| Percentage of teachers who reported that students performed the following at least once a week |  |  |  |  |  |  |
| Explained how what they learned in class related to the real world | $1.1$ | $1.8$ | $1.7$ | 1.3 | 2.1 | 2.1 |
| Worked individually on projects or presentations | 1.4 | 2.4 | 1.7 | 1.5 | 2.5 | 2.2 |
| Worked on projects that required at least one week to complete | 1.0 | 2.0 | 1.3 | 1.3 | 2.4 | 1.8 |
| Evaluated and improved their own work | 1.1 | 2.0 | 1.6 | 1.6 | 3.0 | 2.4 |
| Worked on problems for which there were several appropriate answers | 1.1 | 1.8 | 1.8 | 1.4 | 2.9 | 1.9 |
| Worked on problems for which there were several appropriate methods of solution | 1.2 | 1.7 | 1.5 | 1.2 | 2.4 | 2.1 |
| Worked as part of a group on projects or presentations to earn individual grades | 1.2 | 2.4 | 1.6 | 1.0 | 2.3 | 1.8 |
| Evaluated the work of other students | 1.2 | 2.5 | 1.5 | 1.3 | 2.2 | 1.6 |
| Worked as part of a group on projects or presentations to earn a group grade | 1.0 | 1.9 | 1.4 | 1.0 | 2.2 | 1.3 |
| Put events or things in order and explained why they were organized that way | 1.1 | 2.4 | 1.5 | 1.7 | 2.6 | 2.7 |
| Discussed with the whole class solutions developed in small groups | 1.0 | 2.3 | 1.4 | 1.2 | 2.1 | 2.0 |
| Conferred with other student about their work | 1.2 | 1.8 | 1.7 | 1.3 | 2.7 | 2.2 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Teacher Follow-up Survey, 1994-95.

Table S37-4 Standard errors for table 37-4

| Selected teaching methods | Years of teaching experience |  |  | Level of education |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | $\begin{array}{r} \text { Less } \\ \text { than } 4 \end{array}$ | $\begin{gathered} 4 \text { or } \\ \text { more } \end{gathered}$ | Associate's | Bachelor's | Ed specialist <br> 's or doctor's |  |
| Percentage of teachers who required students to perform the following in-class activities at least once a week |  |  |  |  |  |  |  |
| Respond orally to questions testing recall | 0.7 | 1.0 | 0.8 | 5.9 | 0.8 | 1.0 | 2.9 |
| Use school- or student-owned calculators | 0.9 | 1.4 | 1.0 | 4.2 | 1.2 | 1.5 | 5.6 |
| Lead whole group discussions | 0.9 | 1.7 | 1.0 | 10.8 | 1.5 | 1.4 | 4.4 |
| Listen to or observe teacher presentations | 0.9 | 1.5 | 1.1 | 7.7 | 1.1 | 1.5 | 4.7 |
| Use hands-on materials or objects | 0.9 | 1.4 | 1.0 | 6.7 | 1.1 | 1.4 | 4.4 |
| Complete a worksheet or workbook emphasizing routine practice | 0.8 | 1.4 | 0.9 | 9.8 | 1.1 | 1.4 | 3.7 |
| Use a textbook | 1.1 | 1.2 | 1.2 | 9.5 | 1.3 | 1.9 | 3.6 |
| Engage in discussion primarily with the teacher | 0.8 | 1.3 | 0.9 | 4.8 | 0.9 | 1.4 | 3.0 |
| Use school computers for writing | 0.9 | 1.5 | 1.0 | 4.5 | 1.3 | 1.6 | 5.2 |
| Use supplementary printed materials other than textbooks | 0.8 | 1.3 | 0.9 | 4.5 | 0.9 | 1.5 | 2.5 |
| Engage in discussion primarily with other students | 0.8 | 1.2 | 1.0 | 9.8 | 1.2 | 1.6 | 3.1 |
| Respond orally to open-ended questions | 0.7 | 1.1 | 0.8 | 2.8 | 1.0 | 1.1 | 2.0 |
| Work on a performing arts project | 0.8 | 1.3 | 0.8 | 7.4 | 1.2 | 1.3 | 4.8 |
| Percentage of teachers who reported that students performed the following at least once a week Explained how what they learned in class |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Worked individually on projects or presentations | 1.2 | 1.5 | 1.4 | 9.3 | 1.7 | 1.8 | 5.2 |
| Worked on projects that required at least one week to complete | 0.9 | 1.5 | 1.0 | 9.5 | 1.0 | 1.4 | 4.6 |
| Evaluated and improved their own work | 1.0 | 1.1 | 1.1 | 6.5 | 1.4 | 1.3 | 4.5 |
| Worked on problems for which there were several appropriate answers | 1.0 | 1.3 | 1.2 | 7.7 | 1.2 | 1.6 | 4.9 |
| Worked on problems for which there were several appropriate methods of solution | 1.1 | 1.6 | 1.3 | 9.3 | 1.2 | 1.7 | 5.0 |
| Worked as part of a group on projects or presentations to earn individual grades | 1.1 | 1.5 | 1.3 | 10.8 | 1.1 | 1.9 | 5.0 |
| Evaluated the work of other students | 1.0 | 1.7 | 1.2 | 9.8 | 1.1 | 1.6 | 5.4 |
| Worked as part of a group on projects or presentations to earn a group grade | 0.9 | 1.3 | 1.0 | 10.4 | 1.0 | 1.7 | 4.0 |
| Put events or things in order and explained why they were organized that way | 1.0 | 1.7 | 1.1 | 10.7 | 1.4 | 1.3 | 4.9 |
| Discussed with the whole class solutions developed in small groups | 0.9 | 1.3 | 1.0 | 10.6 | 1.3 | 1.7 | 4.1 |
| Conferred with other student about their work | 1.1 | 1.3 | 1.2 | 9.5 | 1.3 | 1.7 | 5.6 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Teacher Follow-up Survey, 1994-95.

## Table S38-1 Standard errors for table 38-1

| Portfolio uses | Urbanicity |  |  | Percentage of minority students enrolled |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Central city | Urban fringe/ large town | Rural/ small town | Less than 20 percent | 20 percent or more |
| Total teachers who used student portfolios | 3.6 | 3.6 | 3.5 | 4.0 | 2.7 |
| Of those teachers who used student portfolios, those who used them for more than one subject | 2.0 | 1.6 | 0.7 | 1.1 | 1.3 |
| Teachers using student portfolios who reported using them at least once a week in the following ways: |  |  |  |  |  |
| Training students to reflect upon and/or assess each piece of work | $4.6$ | $4.3$ | $4.4$ | 3.1 | 3.8 |
| Training students to reflect upon and/or assess their overall progress | 3.6 | 3.9 | 4.1 | 3.8 | 3.7 |
| Communicating student progress to parents | 3.5 | 3.6 | 2.8 | 2.3 | 3.1 |
| Determining student grades or other formal progress reports | 3.8 | 4.3 | 3.9 | 3.2 | 3.4 |
| Planning for future lessons | 5.6 | 4.8 | 4.4 | 3.9 | 4.2 |
| Diagnosing student learning problems | 5.2 | 4.9 | 3.5 | 2.8 | 4.1 |
| Making informed decisions about student placement | 3.8 | 4.1 | 3.7 | 2.8 | 3.5 |
| Providing information for program/school accountability | 3.8 | 1.9 | 2.9 | 2.3 | 2.5 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Teacher Follow-up Survey, 1994-95.
Table S38-2 Standard errors for table 38-2

|  | Percentage of students eligible for free or reduced-price lunch |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Portfolio uses | 0-5 | 6-20 | 21-40 | 41 or more |
| Total teachers who used student portfolios | 7.4 | 5.0 | 5.2 | 2.6 |
| Of those teachers who used student portfolios, those who used them for more than one subject | 6.3 | 1.5 | 1.6 | 1.3 |
| Teachers using student portfolios who reported using them Training students to reflect upon and/or assess each piece of work | week 9.7 | wing $4.2$ | 5.9 | 3.7 |
| Training students to reflect upon and/or assess their overall progress | 9.0 | 4.8 | 5.0 | 4.0 |
| Communicating student progress to parents | 7.7 | 4.2 | 4.3 | 3.0 |
| Determining student grades or other formal progress reports | - | 5.3 | 4.7 | 3.7 |
| Planning for future lessons | 5.9 | 5.6 | 6.2 | 4.1 |
| Diagnosing student learning problems | 10.8 | 5.7 | 5.4 | 3.7 |
| Making informed decisions about student placement | - | 3.3 | 5.4 | 3.6 |
| Providing information for program/school accountability | 6.3 | 3.9 | 2.7 | 2.6 |

[^84]SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey, 1994-95.

Standard Error Tables
Table S38-3 Standard errors for table 38-3

| Types of work and subject areas | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than |  | 4 or more years | Less than |  | 4 or more |
|  | Total | 4 years |  | Total | 4 years | years |
| Types of work |  |  |  |  |  |  |
| Worksheets | 2.8 | 4.3 | 3.0 | 3.9 | 5.1 | 4.6 |
| Open-ended problems | 3.1 | 4.6 | 3.4 | 3.1 | 4.4 | 3.5 |
| Exploratory investigation | 2.4 | 3.1 | 2.7 | 3.5 | 5.2 | 4.1 |
| Long-term projects | 2.8 | 4.4 | 3.1 | 3.7 | 4.8 | 4.1 |
| Interdisciplinary problems | 2.3 | 2.9 | 2.6 | 3.6 | 3.7 | 4.0 |
| Journal entries | 3.0 | 3.6 | 3.4 | 3.8 | 5.5 | 4.1 |
| Regularly assigned homework | 2.5 | 3.8 | 2.8 | 3.6 | 3.9 | 4.1 |
| Self-reflective writing | 1.8 | 3.5 | 3.1 | 3.3 | 4.3 | 3.8 |
| Narrative writing | 2.4 | 3.5 | 2.7 | 3.5 | 4.9 | 4.1 |
| Audio/video examples | 1.6 | 2.3 | 1.7 | - | - | - |
| Group work | 2.7 | 3.4 | 3.0 | 3.1 | 5.0 | 3.6 |
| Independent work | 2.3 | 3.2 | 2.5 | 2.8 | 4.5 | 3.3 |
| Tests and assessments | 2.9 | 3.2 | 3.3 | 3.4 | 5.6 | 3.9 |
| Subject areas |  |  |  |  |  |  |
| English/language arts | 1.9 | 2.2 | 2.1 | 2.3 | 2.7 | 2.6 |
| Mathematics | 3.1 | 4.0 | 3.5 | 3.6 | 6.3 | 4.2 |
| Reading | 3.0 | 3.2 | 3.3 | 3.5 | 4.7 | 4.1 |
| Social studies | 2.6 | 3.3 | 3.0 | 3.6 | 6.0 | 4.1 |
| Science | 2.7 | 3.8 | 3.1 | 3.5 | 5.5 | 3.9 |
| Art | 2.4 | 3.5 | 2.5 | 3.0 | 5.2 | 3.6 |
| Other | 1.3 | 2.0 | 1.4 | - | - | - |
| Source of directives and suggestions |  |  |  |  |  |  |
| School administration | 2.7 | 3.5 | 3.1 | 3.4 | 5.6 | 4.0 |
| School committee or task force | 3.2 | 3.3 | 3.8 | 3.3 | 3.7 | 3.7 |
| District staff | 2.3 | 3.6 | 2.6 | 1.9 | 3.5 | 2.2 |
| District committee or task force | 2.1 | 3.8 | 2.5 | 2.0 | 3.1 | 2.2 |
| State administration | 2.3 | 2.6 | 2.5 | 2.3 | 3.8 | 2.7 |
| State committee or task force | 2.2 | 3.0 | 2.4 | 2.5 | 3.3 | 3.8 |
| Classroom teacher | 1.5 | 1.8 | 1.7 | 1.4 | 4.3 | 1.6 |
| Students | 3.1 | 3.7 | 3.5 | 4.0 | 4.6 | 4.6 |
| Other | 1.8 | 2.4 | 2.1 | 2.3 | 3.0 | 2.5 |

[^85]SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey, 1994-95.

Table S38-4 Standard errors for table 38-4

| Types of work and subject areas | Urbanicity |  |  | Percentage of minority students enrolled |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Central city | Urban fringe/ large town | Rural/ small town | Less than 20 percent | 20 percent or more |
| Types of work |  |  |  |  |  |
| Worksheets | 4.6 | 4.9 | 5.1 | 3.7 | 4.3 |
| Open-ended problems | 6.5 | 4.2 | 4.3 | 4.4 | 4.2 |
| Exploratory investigation | 5.0 | 4.0 | 3.5 | 3.3 | 3.4 |
| Long-term projects | 4.6 | 5.1 | 3.8 | 4.8 | 4.4 |
| Interdisciplinary problems | 4.5 | 3.3 | 4.3 | 3.7 | 3.1 |
| Journal entries | 4.4 | 4.4 | 4.3 | 4.1 | 4.6 |
| Regularly assigned homework | 4.7 | 4.0 | 4.2 | 3.3 | 4.0 |
| Self-reflective writing | 4.4 | 3.8 | 3.3 | 3.2 | 3.7 |
| Narrative writing | 4.8 | 4.3 | 4.3 | 3.8 | 3.5 |
| Audio/video examples | 2.5 | 2.9 | 2.6 | 2.4 | 2.4 |
| Group work | 4.7 | 4.5 | 4.4 | 3.9 | 3.7 |
| Independent work | 5.0 | 3.8 | 3.2 | 3.4 | 3.2 |
| Tests and assessments | 5.6 | 4.2 | 4.8 | 4.1 | 3.6 |
| Subject areas |  |  |  |  |  |
| English/language arts | 3.5 | 3.3 | 3.7 | 2.9 | 3.1 |
| Mathematics | 5.5 | 4.5 | 5.2 | 5.0 | 3.7 |
| Reading | 5.0 | 5.2 | 3.6 | 4.5 | 3.9 |
| Social studies | 5.9 | 4.9 | 4.2 | 4.1 | 3.9 |
| Science | 5.5 | 3.9 | 3.8 | 4.0 | 3.9 |
| Art | 4.4 | 4.6 | 2.9 | 3.3 | 3.9 |
| Other | 2.1 | 2.7 | 1.7 | 2.2 | 1.4 |
| Source of directives and suggestions |  |  |  |  |  |
| School administration | 4.7 | 5.3 | 4.9 | 4.4 | 3.8 |
| School committee or task force | 4.0 | 5.9 | 4.5 | 4.3 | 4.2 |
| District staff | 4.6 | 4.7 | 3.6 | 3.6 | 3.8 |
| District committee or task force | 4.7 | 4.8 | 4.1 | 3.2 | 3.5 |
| State administration | 3.6 | 3.9 | 3.3 | 2.5 | 3.5 |
| State committee or task force | 3.6 | 3.7 | 3.1 | 2.4 | 3.0 |
| Classroom teacher | 3.3 | 2.8 | 2.3 | 1.9 | 2.4 |
| Students | 5.2 | 5.4 | 4.6 | 4.1 | 4.4 |
| Other | 3.5 | 3.5 | 1.7 | 2.8 | 3.1 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Teacher Follow-up Survey, 1994-95.

Table S38-5 Standard errors for table 38-5

| Types of work and subject areas | 0-5 | 6-20 | 21-40 | 41 or more |
| :---: | :---: | :---: | :---: | :---: |
| Types of work |  |  |  |  |
| Worksheets | 11.6 | 6.1 | 5.7 | 4.3 |
| Open-ended problems | 12.3 | 6.0 | 6.2 | 3.8 |
| Exploratory investigation | 9.2 | 5.9 | 4.8 | 3.6 |
| Long-term projects | 11.4 | 6.2 | 5.9 | 3.7 |
| Interdisciplinary problems | 9.0 | 4.9 | 5.1 | 2.9 |
| Journal entries | 8.6 | 6.9 | 5.5 | 4.1 |
| Regularly assigned homework | 13.2 | 4.1 | 5.3 | 4.1 |
| Self-reflective writing | 6.8 | 4.5 | 6.0 | 3.4 |
| Narrative writing | 9.1 | 5.9 | 5.5 | 3.4 |
| Audio/video examples | 9.8 | 3.4 | 1.5 | 2.5 |
| Group work | 10.1 | 6.7 | 6.3 | 3.6 |
| Independent work | 9.7 | 5.0 | 5.7 | 2.9 |
| Tests and assessments | 11.1 | 6.1 | 5.6 | 4.3 |
| Subject areas |  |  |  |  |
| English/language arts | 8.0 | 4.4 | 5.1 | 3.2 |
| Mathematics | 10.9 | 5.9 | 6.0 | 4.1 |
| Reading | 12.4 | 5.9 | 6.8 | 3.6 |
| Social studies | 11.0 | 6.3 | 6.3 | 3.8 |
| Science | 11.9 | 5.8 | 6.5 | 3.8 |
| Art | 9.2 | 4.9 | 4.7 | 3.8 |
| Other | 3.9 | 3.4 | 3.6 | 4.5 |
| Source of directives and suggestions |  |  |  |  |
| School administration | 10.1 | 7.2 | 6.4 | 4.3 |
| School committee or task force | 10.4 | 7.1 | 6.4 | 3.6 |
| District staff | 8.2 | 5.6 | 5.8 | 3.7 |
| District committee or task force | 8.5 | 6.4 | 5.5 | 3.6 |
| State administration | 9.7 | 3.7 | 3.6 | 3.2 |
| State committee or task force | 8.2 | 3.8 | 3.4 | 2.8 |
| Classroom teacher | 0.0 | 3.8 | 4.6 | 2.1 |
| Students | 9.3 | 6.0 | 5.2 | 4.6 |
| Other | 8.4 | 4.5 | 4.0 | 3.1 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Teacher Follow-up Survey, 1994-95.

Table S39-1 Standard errors for table 39-1

| Control of school | $1987-88$ | $1990-91$ | $1993-94$ |
| :--- | ---: | ---: | ---: |
| Public | 0.1 | 0.2 | 0.2 |
| Private | 0.3 | 0.4 | 0.3 |

[^86]Table S39-2 Standard errors for table 39-2

| State | Elementary | Secondary |
| :---: | :---: | :---: |
| Total | 0.1 | 0.1 |
| Alabama | 0.4 | 0.2 |
| Alaska | 0.5 | 0.5 |
| Arizona | 0.4 | 0.3 |
| Arkansas | 0.4 | 0.3 |
| California | 0.3 | 0.4 |
| Colorado | 0.3 | 0.4 |
| Connecticut | 0.2 | 0.2 |
| Delaware | 0.4 | 0.4 |
| District of Columbia | 0.3 | 0.6 |
| Florida | 0.3 | 0.4 |
| Georgia | 0.2 | 0.3 |
| Hawaii | 0.3 | 0.8 |
| Idaho | 0.5 | 0.4 |
| Illinois | 0.3 | 0.3 |
| Indiana | 0.4 | 0.3 |
| lowa | 0.6 | 0.5 |
| Kansas | 0.3 | 0.4 |
| Kentucky | 0.9 | 0.4 |
| Louisiana | 0.3 | 0.3 |
| Maine | 1.1 | 0.4 |
| Maryland | 0.7 | 0.3 |
| Massachusetts | 0.4 | 0.3 |
| Michigan | 1.9 | 0.3 |
| Minnesota | 1.0 | 0.4 |
| Mississippi | 0.4 | 0.4 |
| Missouri | 0.5 | 0.4 |
| Montana | 0.8 | 0.4 |
| Nebraska | 0.8 | 0.4 |
| Nevada | 0.7 | 0.6 |
| New Hampshire | 0.4 | 0.4 |
| New Jersey | 0.8 | 0.4 |
| New Mexico | 0.3 | 0.4 |
| New York | 0.4 | 0.4 |
| North Carolina | 0.2 | 0.3 |
| North Dakota | 0.7 | 0.5 |
| Ohio | 1.2 | 0.4 |
| Oklahoma | 0.4 | 0.3 |
| Oregon | 0.3 | 0.4 |
| Pennsylvania | 0.6 | 0.3 |
| Rhode Island | 0.6 | 0.5 |
| South Carolina | 0.7 | 0.4 |
| South Dakota | 0.3 | 0.4 |
| Tennessee | 1.2 | 0.4 |
| Texas | 0.2 | 0.4 |
| Utah | 0.4 | 0.2 |
| Vermont | 0.8 | 0.4 |
| Virginia | 0.3 | 0.3 |
| Washington | 1.3 | 0.2 |
| West Virginia | 0.5 | 0.3 |
| Wisconsin | 0.4 | 0.4 |
| Wyoming | 0.3 | 0.3 |

[^87]Table S40-1 Standard errors for table 40-1

|  | Participated in a formal teacher induction <br> program during first year of teaching |  |  | Master or |
| :--- | ---: | ---: | ---: | ---: |
| Control and level of school | 1 year | $2-3$ years | 4 years or more | $\mathbf{0 . 4}$ |
| Public | $\mathbf{2 . 1}$ | $\mathbf{1 . 6}$ | 0.5 | $\mathbf{0 . 3}$ |
| Elementary | 2.8 | 2.2 | 0.4 |  |
| Secondary | 1.8 | 1.4 | 0.3 |  |
| Private | $\mathbf{2 . 6}$ | $\mathbf{1 . 6}$ | $\mathbf{0 . 6}$ | $\mathbf{0 . 5}$ |
| Elementary | 3.0 | 1.7 | 0.7 |  |
| Secondary | 4.2 | 3.2 | 1.1 | 0.6 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table S40-2 Standard errors for table 40-2

| Topic, type of support and activity, and outcomes of professional development | Elementary teachers |  |  |  | Secondary teachers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Central |  | Urban fringe/ | Rural/ small town | Central |  | Urban fringe/ | Rural/ small |
|  | Total | city | large town |  | Total |  | large town | town |
|  | Public |  |  |  |  |  |  |  |
| In-service education or professional development topic |  |  |  |  |  |  |  |  |
| Uses of educational technology for instruction | 0.6 | 1.2 | 1.4 | 1.0 | 0.5 | 1.1 | 0.8 | 0.7 |
| Methods of teaching in specific subject field | 0.6 | 1.1 | 1.0 | 0.9 | 0.4 | 1.0 | 0.6 | 0.6 |
| In-depth study in specific field | 0.5 | 1.1 | 1.0 | 0.8 | 0.3 | 0.7 | 0.6 | 0.5 |
| Student assessment | 0.6 | 1.1 | 1.1 | 0.9 | 0.5 | 0.8 | 0.6 | 0.7 |
| Cooperative learning in the classroom | 0.6 | 1.2 | 1.2 | 0.9 | 0.5 | 1.1 | 0.9 | 0.7 |
| Type of support received during 1993-94 school year for in-service education or professional development |  |  |  |  |  |  |  |  |
| Released time from teaching | 0.7 | 1.2 | 1.3 | 1.1 | 0.4 | 0.9 | 0.7 | 0.5 |
| Scheduled time (built-in time) | 0.6 | 0.9 | 1.3 | 0.9 | 0.4 | 0.8 | 0.8 | 0.6 |
| Travel and/or per diem expenses | 0.6 | 0.9 | 1.1 | 0.9 | 0.3 | 0.7 | 0.8 | 0.5 |
| Tuition and/or fees | 0.5 | 1.0 | 1.1 | 0.7 | 0.3 | 0.6 | 0.6 | 0.6 |
| Professional growth credits | 0.5 | 1.1 | 1.2 | 0.8 | 0.3 | 0.8 | 0.7 | 0.6 |
| None of above | 0.5 | 0.8 | 0.9 | 0.8 | 0.3 | 0.7 | 0.6 | 0.6 |
| Type of professional development activity |  |  |  |  |  |  |  |  |
| School district sponsored workshop or in-service | 0.4 | 0.7 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.4 |
| School sponsored workshop or in-service | 0.5 | 0.8 | 0.9 | 0.7 | 0.4 | 0.8 | 0.7 | 0.4 |
| University extension or adult education course | 0.5 | 0.9 | 1.0 | 0.8 | 0.4 | 0.9 | 0.6 | 0.5 |
| College course in specific subject field | 0.5 | 0.8 | 1.0 | 0.8 | 0.3 | 0.8 | 0.5 | 0.5 |
| Professional association sponsored workshop | 0.6 | 1.1 | 1.2 | 0.9 | 0.4 | 0.9 | 0.7 | 0.5 |
| Those who agreed with the following statements about their in-service education or professional development |  |  |  |  |  |  |  |  |
| Provided information that was new to me | 0.4 | 0.7 | 0.7 | 0.7 | 0.3 | 0.8 | 0.6 | 0.4 |
| Changed my views on teaching | 0.6 | 1.1 | 1.2 | 0.9 | 0.5 | 0.9 | 0.7 | 0.6 |
| Caused me to change my teaching practices | 0.5 | 1.1 | 1.2 | 0.8 | 0.4 | 1.0 | 0.7 | 0.6 |
| Caused me to seek further information or training | 0.6 | 1.1 | 1.1 | 0.8 | 0.4 | 0.9 | 0.8 | 0.7 |
| Were generally a waste of my time | 0.4 | 0.6 | 0.7 | 0.6 | 0.3 | 0.8 | 0.5 | 0.4 |

Table S40-2 Standard errors for table 40-2 - Continued

| Topic, type of support and activity, and outcomes of professional development | Elementary teachers |  |  |  | Secondary teachers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Central |  | Urban fringe/ | Rural/ small town | Central |  | Urban Rural/ fringe/ small |  |
|  | Total | city | large town |  | Total | city | large town | town |
| Private |  |  |  |  |  |  |  |  |
| In-service education or professional development topic |  |  |  |  |  |  |  |  |
| Uses of educational technology for instruction | 0.9 | 1.3 | 1.5 | 1.7 | 1.2 | 1.6 | 2.1 | 2.7 |
| Methods of teaching in specific subject field | 0.8 | 1.4 | 1.2 | 1.7 | 1.4 | 2.0 | 2.1 | 2.6 |
| In-depth study in specific field | 0.5 | 1.0 | 1.0 | 1.7 | 1.1 | 1.8 | 1.5 | 2.7 |
| Student assessment | 1.0 | 1.3 | 1.7 | 2.1 | 1.3 | 1.5 | 2.2 | 3.5 |
| Cooperative learning in the classroom | 1.0 | 1.4 | 1.6 | 2.3 | 1.5 | 2.1 | 2.0 | 3.0 |
| Type of support received during 1993-94 school year for in-service education or professional development |  |  |  |  |  |  |  |  |
| Released time from teaching | 1.1 | 1.8 | 1.6 | 2.3 | 1.0 | 1.5 | 1.4 | 3.1 |
| Scheduled time (built-in time) | 0.9 | 1.2 | 1.4 | 1.7 | 1.0 | 1.8 | 1.8 | 2.4 |
| Travel and/or per diem expenses | 0.8 | 1.3 | 1.2 | 2.2 | 1.1 | 1.3 | 1.7 | 4.6 |
| Tuition and/or fees | 0.9 | 1.4 | 1.6 | 2.2 | 1.4 | 1.6 | 1.9 | 4.7 |
| Professional growth credits | 0.7 | 1.2 | 1.5 | 2.0 | 0.9 | 1.4 | 1.8 | 3.2 |
| None of above | 0.9 | 1.3 | 1.5 | 2.0 | 1.2 | 1.4 | 2.1 | 3.5 |
| Type of professional development activity |  |  |  |  |  |  |  |  |
| School district sponsored workshop or in-service | 1.0 | 1.1 | 1.4 | 1.8 | 1.4 | 1.2 | 2.0 | 4.6 |
| School sponsored workshop or in-service | 0.8 | 1.2 | 1.4 | 2.0 | 1.0 | 1.4 | 1.6 | 2.8 |
| University extension or adult education course | 0.9 | 1.3 | 1.1 | 2.2 | 1.0 | 1.3 | 1.7 | 2.7 |
| College course in specific subject field | 0.8 | 1.4 | 0.9 | 1.8 | 1.2 | 1.6 | 1.5 | 2.2 |
| Professional association sponsored workshop | 1.0 | 1.7 | 1.9 | 1.8 | 1.2 | 1.9 | 1.9 | 4.5 |
| Those who agreed with the following statements about their in-service education or professional development |  |  |  |  |  |  |  |  |
| Provided information that was new to me | 0.7 | 1.1 | 0.9 | 1.7 | 0.9 | 1.2 | 1.4 | 1.8 |
| Changed my views on teaching | 0.8 | 1.2 | 1.5 | 2.0 | 1.5 | 1.6 | 2.3 | 3.3 |
| Caused me to change my teaching practices | 1.0 | 1.6 | 1.5 | 2.1 | 1.6 | 2.0 | 2.3 | 3.2 |
| Caused me to seek further information or training | 0.6 | 1.3 | 1.3 | 1.9 | 1.3 | 1.9 | 2.2 | 3.7 |
| Were generally a waste of my time | 0.4 | 0.6 | 0.7 | 0.9 | 0.8 | 1.2 | 1.1 | 1.8 |

[^88]Table S40-3 Standard errors for table 40-3

| Topic, type of support and activity, and outcomes of professional development | Elementary teachers |  |  |  | Secondary teachers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-5 | 6-20 | 21-40 | 41-100 | 0-5 | 6-20 | 21-40 | 41-100 |
| In-service education or professional development topic |  |  |  |  |  |  |  |  |
| Uses of educational technology for instruction | 2.5 | 1.3 | 1.5 | 0.8 | 1.2 | 0.8 | 1.2 | 1.0 |
| Methods of teaching in specific subject field | 2.0 | 1.5 | 1.1 | 0.9 | 1.0 | 0.7 | 1.1 | 0.8 |
| In-depth study in specific field | 2.1 | 1.3 | 1.0 | 0.8 | 0.8 | 0.5 | 0.9 | 0.7 |
| Student assessment | 2.2 | 1.5 | 1.3 | 0.8 | 1.0 | 0.8 | 1.1 | 0.9 |
| Cooperative learning in the classroom | 2.8 | 1.1 | 1.3 | 0.8 | 1.4 | 0.8 | 1.0 | 0.9 |
| Type of support received during 1993-94 school year for in-service education or professional development |  |  |  |  |  |  |  |  |
| Released time from teaching | 2.0 | 1.7 | 1.2 | 0.9 | 0.9 | 0.8 | 0.7 | 0.8 |
| Scheduled time (built-in time) | 2.3 | 1.4 | 1.2 | 0.8 | 1.0 | 0.7 | 0.7 | 0.9 |
| Travel and/or per diem expenses | 2.1 | 1.1 | 1.2 | 0.7 | 1.0 | 0.6 | 0.8 | 0.8 |
| Tuition and/or fees | 2.1 | 1.0 | 1.2 | 0.8 | 0.8 | 0.6 | 0.7 | 0.6 |
| Professional growth credits | 2.3 | 1.3 | 1.4 | 0.8 | 1.3 | 0.6 | 0.8 | 0.8 |
| None of above | 1.6 | 1.0 | 1.0 | 0.7 | 1.0 | 0.6 | 0.6 | 0.7 |
| Type of professional development activity |  |  |  |  |  |  |  |  |
| School district sponsored workshop or in-service | 1.4 | 0.8 | 0.7 | 0.6 | 0.9 | 0.5 | 0.6 | 0.7 |
| School sponsored workshop or in-service | 2.0 | 1.0 | 1.0 | 0.6 | 1.0 | 0.6 | 0.7 | 0.8 |
| University extension or adult education course | 1.9 | 1.1 | 1.1 | 0.6 | 0.9 | 0.6 | 0.7 | 0.8 |
| College course in specific subject field | 1.7 | 1.0 | 1.0 | 0.7 | 0.8 | 0.6 | 0.8 | 0.8 |
| Professional association sponsored workshop | 2.1 | 1.7 | 1.0 | 0.8 | 1.0 | 0.7 | 0.9 | 0.8 |
| Those who agreed with the following statements about their in-service education or professional development |  |  |  |  |  |  |  |  |
| Provided information that was new to me | 1.2 | 1.0 | 0.7 | 0.6 | 0.7 | 0.5 | 0.8 | 0.7 |
| Changed my views on teaching | 2.4 | 1.4 | 1.0 | 0.8 | 1.2 | 0.7 | 0.9 | 0.8 |
| Caused me to change my teaching practices | 1.6 | 1.5 | 1.2 | 0.9 | 1.1 | 0.8 | 0.8 | 1.0 |
| Caused me to seek further information or training | 1.8 | 1.2 | 1.2 | 0.9 | 1.0 | 0.7 | 1.1 | 0.9 |
| Were generally a waste of my time | 1.1 | 0.9 | 0.7 | 0.6 | 0.8 | 0.6 | 0.7 | 0.7 |

[^89]Table S40-4 Standard errors for table 40-4

| Topic, type of support and activity, and outcomes of professional development | Elementary teachers |  |  |  | Secondary teachers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than $150$ | 150-499 | 500-749 | $\begin{aligned} & 750 \text { or } \\ & \text { more } \end{aligned}$ | Less than $150$ | 150-499 | 500-749 | $\begin{gathered} 750 \text { or } \\ \text { more } \end{gathered}$ |
| Public |  |  |  |  |  |  |  |  |
| In-service education or professional development topic |  |  |  |  |  |  |  |  |
| Uses of educational technology for instruction | 2.6 | 0.8 | 1.1 | 2.0 | 2.3 | 0.9 | 1.0 | 0.6 |
| Methods of teaching in specific subject field | 2.8 | 0.8 | 1.0 | 1.5 | 1.9 | 0.8 | 1.1 | 0.6 |
| In-depth study in specific field | 2.3 | 0.8 | 0.8 | 1.0 | 1.6 | 0.7 | 0.9 | 0.4 |
| Student assessment | 2.9 | 0.9 | 1.0 | 1.4 | 1.9 | 1.1 | 1.2 | 0.6 |
| Cooperative learning in the classroom | 2.8 | 0.9 | 1.1 | 1.3 | 1.8 | 0.9 | 1.2 | 0.7 |
| Type of support received during 1993-94 school year for in-service education or professional development |  |  |  |  |  |  |  |  |
| Released time from teaching | 2.6 | 0.9 | 1.1 | 1.6 | 1.5 | 0.7 | 1.1 | 0.5 |
| Scheduled time (built-in time) | 2.3 | 1.0 | 1.0 | 1.4 | 1.4 | 0.8 | 0.9 | 0.6 |
| Travel and/or per diem expenses | 2.0 | 0.8 | 0.9 | 1.4 | 1.6 | 0.8 | 0.9 | 0.6 |
| Tuition and/or fees | 2.3 | 0.7 | 0.8 | 1.4 | 1.6 | 0.7 | 1.0 | 0.4 |
| Professional growth credits | 2.1 | 0.9 | 1.0 | 1.6 | 1.8 | 0.7 | 0.9 | 0.5 |
| None of above | 1.8 | 0.7 | 0.8 | 1.2 | 1.1 | 0.7 | 0.9 | 0.5 |
| Type of professional development activity |  |  |  |  |  |  |  |  |
| School district sponsored workshop or in-service | 1.8 | 0.5 | 0.7 | 1.0 | 1.4 | 0.8 | 0.8 | 0.4 |
| School sponsored workshop or in-service | 2.5 | 0.7 | 1.0 | 1.1 | 1.2 | 0.9 | 0.8 | 0.5 |
| University extension or adult education course | 2.5 | 0.7 | 1.1 | 1.2 | 1.6 | 0.8 | 1.0 | 0.5 |
| College course in specific subject field | 1.9 | 0.7 | 0.9 | 1.2 | 1.7 | 0.7 | 0.9 | 0.3 |
| Professional association sponsored workshop | 2.0 | 1.0 | 1.0 | 1.2 | 1.8 | 0.8 | 0.9 | 0.6 |
| Those who agreed with the following statements about their in-service education or professional development |  |  |  |  |  |  |  |  |
| Provided information that was new to me | 2.8 | 0.6 | 0.7 | 0.8 | 1.6 | 0.7 | 0.8 | 0.4 |
| Changed my views on teaching | 2.5 | 0.8 | 1.1 | 1.5 | 1.8 | 0.8 | 1.0 | 0.6 |
| Caused me to change my teaching practices | 2.8 | 1.0 | 0.9 | 1.3 | 1.7 | 0.8 | 0.8 | 0.6 |
| Caused me to seek further information or training | 2.5 | 0.8 | 1.2 | 1.4 | 1.9 | 0.9 | 1.0 | 0.5 |
| Were generally a waste of my time | 0.9 | 0.6 | 0.5 | 0.8 | 1.7 | 0.6 | 0.7 | 0.4 |

Table S40-4 Standard errors for table 40-4-Continued

| Topic, type of support and activity, and outcomes of professional development | Elementary teachers |  |  |  | Secondary teachers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than 150 | 150-499 | 500-749 | $\begin{gathered} 750 \text { or } \\ \text { more } \end{gathered}$ | Less than 150 | 150-499 | 500-749 | $\begin{array}{r} 750 \text { or } \\ \text { more } \end{array}$ |
| Private |  |  |  |  |  |  |  |  |
| In-service education or professional development topic |  |  |  |  |  |  |  |  |
| Uses of educational technology for instruction | 1.6 | 1.1 | 3.0 | 6.9 | 3.1 | 2.1 | 2.2 | 2.2 |
| Methods of teaching in specific subject field | 1.3 | 1.2 | 2.4 | 4.2 | 4.8 | 2.4 | 2.5 | 1.7 |
| In-depth study in specific field | 1.3 | 0.8 | 1.7 | 4.8 | 4.4 | 1.7 | 2.4 | 1.8 |
| Student assessment | 1.7 | 1.2 | 3.1 | 6.6 | 3.3 | 1.6 | 2.8 | 2.2 |
| Cooperative learning in the classroom | 1.8 | 1.2 | 2.8 | 6.7 | 3.8 | 2.3 | 3.0 | 2.2 |
| Type of support received during 1993-94 school year for in-service education or professional development |  |  |  |  |  |  |  |  |
| Released time from teaching | 2.0 | 1.3 | 2.5 | 7.3 | 3.7 | 1.9 | 2.4 | 1.7 |
| Scheduled time (built-in time) | 1.7 | 1.3 | 2.2 | 5.5 | 4.2 | 1.6 | 2.6 | 1.9 |
| Travel and/or per diem expenses | 1.8 | 1.1 | 1.9 | 5.1 | 4.0 | 1.6 | 3.0 | 2.6 |
| Tuition and/or fees | 1.7 | 1.2 | 2.1 | 7.1 | 3.6 | 2.2 | 3.0 | 2.6 |
| Professional growth credits | 1.1 | 1.2 | 2.4 | 6.2 | 2.7 | 1.6 | 2.0 | 2.5 |
| None of above | 1.8 | 1.1 | 1.7 | 6.4 | 4.1 | 1.9 | 2.1 | 2.1 |
| Type of professional development activity |  |  |  |  |  |  |  |  |
| School district sponsored workshop or in-service | 2.4 | 1.6 | 2.9 | 2.0 | 4.1 | 1.8 | 2.0 | 2.5 |
| School sponsored workshop or in-service | 1.9 | 1.0 | 1.5 | 3.9 | 4.7 | 1.6 | 1.7 | 1.5 |
| University extension or adult education course | 1.5 | 1.0 | 1.8 | 5.2 | 3.4 | 1.8 | 1.9 | 2.3 |
| College course in specific subject field | 1.3 | 1.0 | 3.0 | 3.2 | 2.8 | 1.9 | 1.7 | 1.6 |
| Professional association sponsored workshop | 1.6 | 1.3 | 2.7 | 5.5 | 4.5 | 2.0 | 2.6 | 2.2 |
| Those who agreed with the following statements about their in-service education or professional development |  |  |  |  |  |  |  |  |
| Provided information that was new to me | 1.4 | 0.9 | 1.9 | 5.4 | 1.9 | 1.4 | 1.9 | 1.7 |
| Changed my views on teaching | 1.9 | 1.0 | 3.3 | 4.3 | 5.6 | 2.3 | 2.3 | 2.3 |
| Caused me to change my teaching practices | 1.8 | 1.0 | 3.1 | 5.0 | 4.6 | 2.3 | 2.4 | 1.8 |
| Caused me to seek further information or training | 2.2 | 0.9 | 2.8 | 4.0 | 3.6 | 2.2 | 3.0 | 2.3 |
| Were generally a waste of my time | 0.9 | 0.5 | 1.1 | 4.6 | 2.2 | 1.7 | 1.2 | 1.3 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table S40-5 Standard errors for table 40-5

| Topic, type of support and activity, and outcomes of professional development | Central city |  |  |  | Urban fringe/large town |  |  |  | Rural/small town |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-5 6-20 21-40 41-100 |  |  |  | 0-5 6-20 21-40 41-100 |  |  |  | 0-5 6-20 21-40 41-100 |  |  |  |
| In-service education or professional development topic |  |  |  |  |  |  |  |  |  |  |  |  |
| Uses of educational technology for instruction | 3.3 | 2.0 | 2.1 | 1.3 | 2.0 | 1.4 | 1.8 | 2.3 | 1.9 | 1.2 | 1.6 | 1.2 |
| Methods of teaching in specific subject field | 3.1 | 1.6 | 1.4 | 1.1 | 1.6 | 1.3 | 1.8 | 2.0 | 1.9 | 1.2 | 1.1 | 0.9 |
| In-depth study in specific field | 2.6 | 1.5 | 1.6 | 1.3 | 1.4 | 1.5 | 1.5 | 1.5 | 2.5 | 0.9 | 0.9 | 0.8 |
| Student assessment | 3.1 | 1.5 | 1.8 | 1.2 | 1.8 | 1.5 | 2.0 | 1.5 | 2.3 | 1.1 | 1.1 | 1.1 |
| Cooperative learning in the classroom | 3.2 | 1.8 | 1.8 | 1.2 | 1.9 | 1.4 | 1.8 | 1.6 | 2.4 | 1.1 | 1.3 | 1.1 |
| Type of support received during 1993-94 school year for in-service education or professional development |  |  |  |  |  |  |  |  |  |  |  |  |
| Released time from teaching | 3.1 | 2.0 | 1.6 | 1.3 | 1.8 | 1.4 | 1.9 | 2.1 | 2.3 | 1.3 | 1.1 | 1.2 |
| Scheduled time (built-in time) | 2.3 | 1.7 | 2.2 | 1.0 | 2.0 | 1.7 | 1.8 | 1.6 | 2.3 | 1.1 | 0.9 | 0.9 |
| Travel and/or per diem expenses | 2.5 | 1.8 | 1.2 | 1.1 | 1.8 | 1.1 | 1.3 | 1.2 | 2.2 | 0.8 | 1.3 | 0.8 |
| Tuition and/or fees | 1.6 | 1.7 | 1.2 | 1.2 | 1.7 | 1.0 | 1.4 | 1.6 | 2.3 | 0.9 | 1.0 | 0.9 |
| Professional growth credits | 4.3 | 1.5 | 1.9 | 1.1 | 1.6 | 1.3 | 1.9 | 1.9 | 2.3 | 1.1 | 1.4 | 0.9 |
| None of above | 2.0 | 1.5 | 1.3 | 1.0 | 1.5 | 0.9 | 1.4 | 1.6 | 1.9 | 0.8 | 1.2 | 0.8 |
| Type of professional development activity |  |  |  |  |  |  |  |  |  |  |  |  |
| School district sponsored workshop or in-service | 1.7 | 1.1 | 1.0 | 0.9 | 1.2 | 0.9 | 0.9 | 1.0 | 1.6 | 0.7 | 0.8 | 0.5 |
| School sponsored workshop or in-service | 2.5 | 1.3 | 1.1 | 0.8 | 1.3 | 1.2 | 1.6 | 1.1 | 2.7 | 0.8 | 0.8 | 0.8 |
| University extension or adult education course | 2.4 | 1.2 | 1.6 | 0.9 | 1.4 | 1.4 | 1.2 | 1.2 | 2.1 | 1.0 | 1.0 | 0.8 |
| College course in specific subject field | 2.3 | 1.2 | 1.3 | 0.8 | 1.5 | 0.9 | 1.2 | 1.4 | 1.8 | 0.9 | 0.8 | 0.9 |
| Professional association sponsored workshop | 2.4 | 1.6 | 1.5 | 1.3 | 1.8 | 1.5 | 1.6 | 1.9 | 2.1 | 1.1 | 1.1 | 0.9 |
| Those who agreed with the following statement about their in-service education or professional development |  |  |  |  |  |  |  |  |  |  |  |  |
| Provided information that was new to me | 2.5 | 1.0 | 1.6 | 0.8 | 0.9 | 0.9 | 1.1 | 1.3 | 1.6 | 0.9 | 0.9 | 0.9 |
| Changed my views on teaching | 2.7 | 1.7 | 1.5 | 1.3 | 1.8 | 1.3 | 1.6 | 1.8 | 1.9 | 1.2 | 1.3 | 1.0 |
| Caused me to change my teaching practices | 2.8 | 1.7 | 1.7 | 1.3 | 1.5 | 1.6 | 1.7 | 1.6 | 2.0 | 1.3 | 1.2 | 1.0 |
| Caused me to seek further information or training | 3.5 | 1.8 | 2.0 | 1.4 | 1.4 | 1.1 | 2.0 | 1.6 | 1.4 | 1.3 | 1.1 | 1.0 |
| Were generally a waste of my time | 1.9 | 1.2 | 1.2 | 0.8 | 0.9 | 0.9 | 1.0 | 1.0 | 1.4 | 0.8 | 0.8 | 0.7 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Standard Error Tables
Table S40-6 Standard errors for table 40-6

| State | $\begin{array}{r} \hline \text { Uses of educational } \\ \text { technology } \\ \text { for instruction } \\ \hline \end{array}$ | Methods of teaching in your subject field | In-depth study in your subject field | Student assessment | Cooperative learning in the classroom |
| :---: | :---: | :---: | :---: | :---: | :---: |
| All states | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 |
| Alabama | 1.8 | 1.5 | 2.2 | 2.5 | 2.4 |
| Alaska | 2.2 | 1.8 | 1.5 | 2.9 | 2.3 |
| Arizona | 2.3 | 1.7 | 1.6 | 2.0 | 1.9 |
| Arkansas | 2.2 | 1.8 | 1.8 | 1.9 | 1.9 |
| California | 2.3 | 1.6 | 1.7 | 1.7 | 1.9 |
| Colorado | 2.4 | 1.4 | 1.7 | 1.7 | 2.2 |
| Connecticut | 1.9 | 1.8 | 1.3 | 1.5 | 1.8 |
| Delaware | 2.8 | 2.1 | 2.2 | 1.7 | 2.5 |
| District of Columbia | 3.1 | 3.2 | 2.3 | 2.5 | 3.2 |
| Florida | 1.5 | 1.7 | 2.3 | 2.0 | 2.4 |
| Georgia | 1.6 | 1.8 | 1.2 | 2.2 | 2.1 |
| Hawaii | 2.5 | 2.0 | 2.7 | 2.3 | 2.3 |
| Idaho | 2.3 | 1.9 | 1.9 | 2.0 | 2.1 |
| Illinois | 1.5 | 1.3 | 1.1 | 1.2 | 1.5 |
| Indiana | 1.8 | 2.3 | 1.3 | 1.9 | 2.4 |
| lowa | 2.9 | 2.2 | 1.8 | 2.1 | 2.4 |
| Kansas | 1.7 | 1.6 | 1.3 | 1.9 | 1.7 |
| Kentucky | 2.2 | 1.8 | 3.0 | 1.0 | 2.3 |
| Lovisiana | 2.1 | 1.4 | 1.6 | 1.8 | 1.8 |
| Maine | 1.9 | 2.3 | 2.0 | 2.6 | 2.1 |
| Maryland | 1.8 | 1.9 | 1.8 | 2.2 | 1.9 |
| Massachusetts | 1.3 | 1.2 | 1.3 | 1.2 | 1.2 |
| Michigan | 2.1 | 2.1 | 1.8 | 2.7 | 1.8 |
| Minnesota | 2.3 | 2.0 | 1.8 | 2.5 | 2.4 |
| Mississippi | 1.9 | 2.2 | 1.5 | 2.2 | 2.1 |
| Missouri | 2.3 | 1.9 | 1.4 | 1.8 | 2.1 |
| Montana | 1.8 | 1.4 | 1.3 | 1.3 | 1.5 |
| Nebraska | 2.2 | 1.5 | 1.5 | 1.7 | 1.8 |
| Nevada | 2.4 | 2.0 | 2.2 | 2.4 | 1.9 |
| New Hampshire | 2.7 | 2.3 | 2.8 | 2.2 | 2.4 |
| New Jersey | 2.5 | 2.1 | 2.1 | 2.6 | 2.2 |
| New Mexico | 1.8 | 1.7 | 1.7 | 1.9 | 2.1 |
| New York | 2.1 | 2.2 | 1.6 | 2.4 | 2.0 |
| North Carolina | 2.3 | 1.9 | 1.9 | 1.9 | 1.8 |
| North Dakota | 1.9 | 1.9 | 1.6 | 2.2 | 1.7 |
| Ohio | 2.0 | 1.9 | 1.7 | 1.5 | 2.2 |
| Oklahoma | 2.3 | 1.8 | 1.7 | 1.3 | 2.0 |
| Oregon | 2.1 | 2.3 | 1.7 | 2.5 | 2.5 |
| Pennsylvania | 2.3 | 2.0 | 1.6 | 2.0 | 2.4 |
| Rhode Island | 2.2 | 3.0 | 1.8 | 3.0 | 3.5 |
| South Carolina | 2.8 | 2.8 | 2.2 | 2.4 | 2.3 |
| South Dakota | 2.7 | 1.5 | 1.6 | 2.2 | 1.5 |
| Tennessee | 2.4 | 2.3 | 1.8 | 2.0 | 2.2 |
| Texas | 1.9 | 1.7 | 1.7 | 1.7 | 1.3 |

Table S40-6 Standard errors for table 40-6 - Continued

|  | Uses of educational <br> technology <br> for instruction | Methods of <br> teaching in your <br> subject field | In-depth study in <br> your subject field | Student <br> assessment | Cooperative <br> learning in the <br> classroom |
| :--- | ---: | ---: | ---: | ---: | ---: |
| State | 2.0 | 1.3 | 1.2 | 1.7 | 1.3 |
| Utah | 2.8 | 2.2 | 2.0 | 2.8 | 2.0 |
| Vermont | 2.4 | 2.4 | 2.1 | 2.2 | 2.9 |
| Virginia | 2.0 | 1.7 | 1.8 | 2.1 | 2.5 |
| Washington | 2.5 | 2.0 | 1.9 | 2.2 | 2.0 |
| West Virginia | 2.2 | 2.3 | 1.8 | 2.3 | 2.3 |
| Wisconsin | 1.5 | 1.5 | 1.0 | 1.9 | 1.8 |
| Wyoming |  |  |  |  |  |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher
Questionnaire).
Table S41-1 Standard errors for table 41-1

| School and classroom decisions | Total | Percentage of students eligible for free or reduced-price lunch |  |  |  | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Less than | 150-499 | 500-749 | $\begin{array}{r} \hline 750 \text { and } \\ \text { more } \\ \hline \end{array}$ |
|  |  | 0-5 | 6-20 | 21-40 | 41-100 | 150 |  |  |  |
| Percentage of teachers who reported that teachers had a good deal of influence in their school over: |  |  |  |  |  |  |  |  |  |
| Setting discipline policy | 0.7 | 3.2 | 1.5 | 1.4 | 1.0 | 1.9 | 1.0 | 1.3 | 1.6 |
| Determining the content of inservice programs | 0.7 | 2.2 | 1.4 | 1.1 | 1.0 | 2.0 | 0.7 | 1.1 | 1.8 |
| Establishing curriculum | 0.6 | 2.8 | 1.6 | 1.3 | 0.8 | 2.2 | 0.9 | 1.1 | 1.5 |
| Percentage of teachers who reported a good deal of control in their classroom over: |  |  |  |  |  |  |  |  |  |
| Selecting textbooks and other instructional materials | 0.7 | 3.0 | 1.5 | 1.3 | 1.0 | 1.7 | 0.8 | 1.3 | 1.8 |
| Selecting content, topics, and skills to be taught | 0.7 | 3.0 | 1.3 | 1.0 | 1.0 | 1.8 | 0.9 | 1.3 | 1.6 |
| Selecting teaching techniques | 0.5 | 1.6 | 0.9 | 0.8 | 0.7 | 1.2 | 0.6 | 0.8 | 1.2 |
| Evaluating and grading students | 0.4 | 2.1 | 1.0 | 0.7 | 0.6 | 1.3 | 0.6 | 0.9 | 1.2 |
| Disciplining students | 0.7 | 2.1 | 1.3 | 1.1 | 0.9 | 1.5 | 0.6 | 1.4 | 1.5 |
| Determining the amount of homework to be assigned | 0.6 | 2.2 | 1.3 | 1.0 | 0.8 | 0.9 | 0.6 | 1.0 | 1.7 |

[^90]Standard Error Tables
Table S41-2 Standard errors for table 41-2

| School and classroom decisions | Percentage of students eligible for free or reduced-price lunch |  |  |  |  | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 0-5 | 6-20 | 21-40 | 41-100 | $\begin{array}{r} \hline \text { Less than } \\ 150 \\ \hline \end{array}$ | 150-499 | 500-749 | 750 and more |
| Percentage of principals who reported that a group had a good deal of influence over: |  |  |  |  |  |  |  |  |  |
| Setting discipline policy |  |  |  |  |  |  |  |  |  |
| State Department of Education | 0.6 | 2.3 | 1.6 | 1.5 | 1.3 | 3.0 | 1.0 | 1.3 | 2.2 |
| School district staff | 0.9 | 2.9 | 2.0 | 2.0 | 1.2 | 3.4 | 1.3 | 2.0 | 2.2 |
| School board | 1.0 | 4.4 | 2.1 | 1.7 | 1.6 | 2.5 | 1.3 | 1.9 | 2.6 |
| Principal | 0.6 | 2.1 | 1.6 | 1.0 | 1.1 | 2.0 | 1.0 | 1.1 | 1.5 |
| Teachers | 0.7 | 2.4 | 1.7 | 1.4 | 1.4 | 1.9 | 1.2 | 1.3 | 2.2 |
| Parent association | 0.8 | 3.3 | 1.9 | 1.6 | 1.0 | 1.7 | 1.1 | 1.6 | 1.9 |
| Determining the content of in-service programs |  |  |  |  |  |  |  |  |  |
| State Department of Education | 0.7 | 2.2 | 1.5 | 1.5 | 1.2 | 2.4 | 1.0 | 1.7 | 2.1 |
| School district staff | 0.8 | 3.4 | 1.7 | 1.6 | 1.4 | 3.5 | 1.0 | 1.4 | 2.4 |
| School board | 0.8 | 2.5 | 1.7 | 1.6 | 1.2 | 2.1 | 1.0 | 1.7 | 2.2 |
| Principal | 1.0 | 3.1 | 2.0 | 1.9 | 1.2 | 2.8 | 1.4 | 1.3 | 2.1 |
| Teachers | 0.9 | 2.9 | 2.1 | 2.0 | 1.3 | 3.2 | 1.2 | 1.4 | 2.4 |
| Parent association | 0.5 | 0.9 | 0.7 | 1.0 | 0.7 | 1.2 | 0.5 | 1.0 | 1.6 |
| Establishing curriculum |  |  |  |  |  |  |  |  |  |
| State Department of Education | 0.9 | 3.4 | 1.8 | 1.9 | 1.2 | 3.1 | 1.3 | 1.3 | 2.3 |
| School district staff | 1.0 | 3.3 | 1.9 | 2.0 | 1.4 | 3.7 | 1.3 | 1.8 | 2.4 |
| School board | 0.9 | 3.4 | 2.0 | 1.8 | 1.5 | 2.8 | 1.4 | 1.5 | 2.5 |
| Principal | 1.0 | 3.4 | 2.2 | 2.4 | 1.5 | 3.1 | 1.5 | 1.8 | 2.3 |
| Teachers | 1.1 | 2.9 | 2.4 | 2.2 | 1.5 | 3.2 | 1.5 | 1.7 | 2.2 |
| Parent association | 0.5 | 2.8 | 1.5 | 0.9 | 0.7 | 1.7 | 0.7 | 1.2 | 1.6 |
| Deciding how the school budget will be spent |  |  |  |  |  |  |  |  |  |
| State Department of Education | 0.9 | 3.1 | 2.1 | 2.1 | 1.4 | 3.3 | 1.2 | 1.8 | 2.2 |
| School district staff | 1.0 | 4.1 | 2.2 | 1.8 | 1.5 | 3.0 | 1.1 | 1.8 | 2.9 |
| School board | 1.0 | 3.1 | 2.3 | 1.7 | 1.7 | 3.3 | 1.3 | 1.7 | 2.6 |
| Principal | 1.0 | 3.3 | 2.3 | 1.9 | 1.4 | 3.5 | 1.6 | 1.8 | 2.4 |
| Teachers | 0.8 | 3.7 | 2.6 | 1.7 | 1.4 | 3.1 | 1.3 | 1.8 | 2.3 |
| Parent association | 0.7 | 2.3 | 1.4 | 1.5 | 0.8 | 1.6 | 0.9 | 1.1 | 1.6 |

[^91]Table S41-3 Standard errors for table 41-3

|  |  | Percentage of students eligible for free or reduced-price lunch |  |  |  | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School and classroom decisions | Total | 0-6 | 6-20 | 21-40 | 41-100 | than 150 | 150-499 | 500-749 | $\begin{gathered} 750 \text { and } \\ \text { more } \end{gathered}$ |

Percentage of teachers who reported that teachers had a good deal of influence in their school over:

|  | 0.4 |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Setting discipline policy <br> Determining the content of in- | 0.3 | 1.1 | 0.7 | 0.9 | 0.8 | 1.6 | 0.9 | 1.1 | 0.9 |
| service programs | 0.4 | 1.3 | 0.7 | 0.8 | 0.7 | 1.4 | 0.9 | 1.1 | 0.5 |
| Establishing curriculum | 0.4 | 1.1 | 0.7 | 0.9 | 0.8 | 1.3 | 1.1 | 1.0 | 0.5 |

Percentage of teachers who reported a good deal of control in their classroom over:

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Selecting textbooks and other instruc- <br> tional materials | 0.4 | 1.1 | 0.9 | 0.9 | 1.0 | 1.0 | 0.9 | 1.0 | 0.7 |
| Selecting content, topics, and skills | 0.4 | 1.0 | 0.8 | 1.0 | 0.8 | 1.0 | 0.8 | 1.1 | 0.5 |
| to be taught | 0.3 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 0.5 | 0.7 | 0.4 |
| $\quad$ Selecting teaching techniques | 0.3 | 0.7 | 0.4 | 0.5 | 0.5 | 0.7 | 0.5 | 0.5 | 0.4 |
| Evaluating and grading students | 0.5 | 1.2 | 0.8 | 1.0 | 0.9 | 1.4 | 0.7 | 1.1 | 0.6 |
| Disciplining students | 0.3 | 0.6 | 0.6 | 0.7 | 0.5 | 0.9 | 0.5 | 0.7 | 0.4 |
| Determining the amount of homework <br> to be assigned |  |  |  |  |  |  |  |  |  |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Standard Error Tables
Table S41-4 Standard errors for table 41-4

| School and classroom decisions | Percentage of students eligible for free or reduced-price lunch |  |  |  |  | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 0-6 | 6-20 | 21-40 | 41-100 | $\begin{array}{r} \hline \text { Less than } \\ 150 \\ \hline \end{array}$ | 150-499 | 500-749 | $\begin{array}{r} \hline 750 \text { and } \\ \text { more } \\ \hline \end{array}$ |
| Percentage of principals who reported that a group had a good deal of influence over: |  |  |  |  |  |  |  |  |  |
| Setting discipline policy |  |  |  |  |  |  |  |  |  |
| State Department of Education | 0.6 | 2.4 | 0.8 | 1.4 | 1.3 | 2.6 | 0.9 | 1.3 | 0.9 |
| School district staff | 1.0 | 2.5 | 1.4 | 1.9 | 1.8 | 3.0 | 1.9 | 2.2 | 1.1 |
| School board | 0.8 | 2.5 | 1.7 | 1.5 | 1.6 | 2.6 | 1.6 | 2.3 | 1.2 |
| Principal | 0.5 | 1.2 | 0.7 | 1.1 | 1.1 | 1.9 | 1.1 | 0.8 | 0.7 |
| Teachers | 1.0 | 1.8 | 1.5 | 1.8 | 1.4 | 2.5 | 1.7 | 1.4 | 1.2 |
| Parent association | 0.6 | 2.3 | 0.9 | 1.1 | 1.6 | 2.1 | 1.1 | 1.5 | 0.8 |
| Determining the content of in-service programs |  |  |  |  |  |  |  |  |  |
| State Department of Education | 0.7 | 1.2 | 1.1 | 1.7 | 1.5 | 2.2 | 1.6 | 1.5 | 1.0 |
| School district staff | 0.9 | 2.5 | 1.5 | 1.6 | 1.4 | 3.2 | 1.3 | 2.2 | 1.4 |
| School board | 0.7 | 1.1 | 0.9 | 1.5 | 1.6 | 2.1 | 1.2 | 1.6 | 0.8 |
| Principal | 1.0 | 2.8 | 1.1 | 1.6 | 1.7 | 3.5 | 1.4 | 1.9 | 1.1 |
| Teachers | 0.7 | 1.7 | 1.2 | 1.1 | 1.7 | 2.1 | 1.4 | 1.8 | 1.0 |
| Parent association | 0.4 | 1.8 | 0.5 | 1.2 | 0.7 | 2.1 | 0.6 | 0.8 | 0.3 |
| Establishing curriculum |  |  |  |  |  |  |  |  |  |
| State Department of Education | 0.7 | 2.3 | 1.2 | 1.4 | 1.6 | 2.8 | 1.2 | 1.8 | 1.0 |
| School district staff | 0.9 | 2.7 | 1.5 | 1.7 | 1.5 | 2.8 | 1.7 | 1.9 | 1.1 |
| School board | 0.9 | 2.3 | 1.5 | 1.6 | 2.0 | 2.8 | 1.7 | 2.4 | 1.0 |
| Principal | 0.8 | 2.7 | 1.3 | 1.8 | 1.7 | 3.0 | 1.7 | 1.8 | 1.1 |
| Teachers | 0.8 | 2.0 | 1.4 | 2.1 | 1.4 | 2.6 | 1.5 | 1.5 | 1.2 |
| Parent association | 0.5 | 1.6 | 0.5 | 0.8 | 0.9 | 1.7 | 0.7 | 1.1 | 0.5 |
| Deciding how the school budget will be spent |  |  |  |  |  |  |  |  |  |
| State Department of Education | 0.6 | 1.9 | 1.2 | 1.6 | 1.8 | 2.3 | 1.6 | 2.0 | 0.8 |
| School district staff | 0.9 | 2.3 | 1.6 | 1.8 | 1.5 | 2.6 | 1.8 | 2.1 | 1.3 |
| School board | 0.7 | 2.9 | 1.2 | 1.4 | 1.6 | 3.2 | 1.6 | 2.0 | 1.1 |
| Principal | 0.8 | 2.1 | 1.5 | 1.5 | 1.5 | 3.2 | 1.5 | 2.0 | 0.9 |
| Teachers | 0.8 | 2.1 | 1.2 | 1.6 | 1.7 | 2.7 | 1.4 | 2.3 | 1.0 |
| Parent association | 0.3 | 1.9 | 0.5 | 0.5 | 0.7 | 1.8 | 0.5 | 0.8 | 0.5 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Schools and Staffing Survey, 1993-94 (Administrator Questionnaire).

Table S41-5 Standard errors for table 41-5

| School and classroom decisions | Central city |  |  |  |  | Urban fringe |  |  |  |  | Rural |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 0-5 | 6-20 | 21-40 | 41-100 | Total | 0-5 | 6-20 | 21-40 | 41-100 | Total | 0-5 | 6-20 | 21-40 | 41-100 |


| Percentage of teachers who reported that teachers had a good deal of influence in their school over: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Setting discipline policy | 1.2 | 4.3 | 2.4 | 2.7 | 1.7 | 1.3 | 5.2 | 2.5 | 2.8 | 1.5 | 1.0 | 3.4 | 2.7 | 1.9 | 1.5 |
| Determining the content of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| in-service programs | 1.3 | 5.6 | 3.7 | 2.3 | 1.7 | 1.1 | 3.4 | 2.3 | 2.6 | 1.9 | 0.8 | 3.6 | 1.8 | 1.4 | 1.3 |
| Establishing curriculum | 1.2 | 4.5 | 3.4 | 2.2 | 1.2 | 1.2 | 4.0 | 2.6 | 2.4 | 1.5 | 1.0 | 4.0 | 2.3 | 2.1 | 1.4 |

## Percentage of teachers who reported a good deal of control in their classroom over:

| Selecting textbooks and other instructional materials | 1.2 | 5.0 | 3.3 | 2.5 | 1.5 | 1.6 | 3.6 | 2.6 | 3.1 | 2.1 | 0.8 | 4.6 | 1.9 | 1.7 | 1.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Selecting content, topics, and skills to be taught | 1.2 | 4.5 | 3.8 | 2.5 | 1.4 | 1.5 | 3.3 | 2.1 | 2.9 | 2.5 | 0.9 | 5.5 | 2.0 | 1.4 | 1.1 |
| Selecting teaching techniques | 0.9 | 3.2 | 2.4 | 2.3 | 1.0 | 0.9 | 2.1 | 1.3 | 1.6 | 1.7 | 0.6 | 2.8 | 2.0 | 1.0 | 0.9 |
| Evaluating and grading students | 0.9 | 6.3 | 2.5 | 1.5 | 1.1 | 0.8 | 1.7 | 1.3 | 1.3 | 1.6 | 0.7 | 3.2 | 1.7 | 1.3 | 0.8 |
| Disciplining students | 1.4 | 4.9 | 2.5 | 1.8 | 1.8 | 1.1 | 2.4 | 1.9 | 2.3 | 2.2 | 1.0 | 2.6 | 2.1 | 2.0 | 1.1 |
| Determining the amount of homework to be assigned | 1.1 | 5.4 | 2.6 | 2.3 | 1.4 | 1.0 | 2.4 | 2.4 | 1.9 | 1.7 | 0.7 | 5.0 | 1.4 | 1.4 | 0.7 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table S41-6 Standard errors for table 41-6

| School and classroom decisions | Central city |  |  |  |  | Urban fringe |  |  |  |  | Rural |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 0-5 | 6-20 | 21-40 | 41-100 | Total | 0-5 | 6-20 | 21-40 | 41-100 | Total | 0-5 | 6-20 | 21-40 | 41-100 |

## Percentage of principals who reported that a group had a good deal of influence over:

Setting discipline policy

| State Department of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\quad$ Education | 1.4 | 7.0 | 3.6 | 2.9 | 2.0 | 1.7 | 3.4 | 2.9 | 3.4 | 2.6 | 0.9 | 3.0 | 2.7 | 2.0 | 1.6 |
| $\quad$ School district staff | 1.6 | 7.5 | 5.1 | 5.0 | 2.2 | 2.0 | 4.4 | 3.5 | 3.6 | 2.9 | 1.4 | 6.6 | 3.7 | 3.0 | 1.5 |
| School board | 2.0 | 9.3 | 4.5 | 4.8 | 2.8 | 2.2 | 5.5 | 3.5 | 3.8 | 4.3 | 1.3 | 6.5 | 3.8 | 2.4 | 1.9 |
| Principal | 1.4 | 4.6 | 3.3 | 2.4 | 1.8 | 1.5 | 2.9 | 2.8 | 1.3 | 3.0 | 1.0 | 1.2 | 2.5 | 1.7 | 1.6 |
| Teachers | 1.2 | 7.1 | 3.6 | 3.8 | 2.0 | 1.4 | 3.4 | 2.7 | 2.6 | 3.3 | 1.2 | 4.6 | 2.7 | 2.0 | 1.9 |
| Parent association | 1.5 | 7.3 | 3.6 | 4.2 | 1.9 | 1.6 | 4.2 | 3.6 | 3.4 | 2.4 | 1.0 | 5.7 | 2.1 | 2.2 | 1.1 |

Determining the content of in-service programs
State Department of

|  | 2.0 | 4.1 | 3.4 | 4.1 | 2.3 | 1.6 | 3.5 | 2.8 | 2.3 | 3.2 | 1.0 | 4.3 | 2.4 | 2.1 | 1.4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\quad$ Education | 1.7 | 8.8 | 4.2 | 3.9 | 2.3 | 1.9 | 5.4 | 3.4 | 3.2 | 3.0 | 1.1 | 5.8 | 3.0 | 2.3 | 1.6 |
| School district staff | 1.8 | 8.0 | 3.2 | 3.9 | 2.5 | 1.5 | 3.6 | 3.4 | 2.8 | 2.4 | 0.9 | 4.4 | 2.7 | 2.0 | 1.3 |
| School board | 1.8 | 7.0 | 4.2 | 4.2 | 2.3 | 1.8 | 3.9 | 2.8 | 3.1 | 3.4 | 1.4 | 5.1 | 3.2 | 2.6 | 1.8 |
| Principal | 1.8 | 7.9 | 4.2 | 3.9 | 2.4 | 1.6 | 3.6 | 3.5 | 3.4 | 3.2 | 1.4 | 4.9 | 3.4 | 2.7 | 1.8 |
| Teachers | 0.9 | 1.3 | 2.1 | 2.1 | 1.1 | 0.9 | 1.0 | 1.1 | 1.9 | 1.9 | 0.5 | 2.5 | 1.1 | 1.4 | 1.0 |

Establishing curriculum
State Department of

|  | 1.7 | 9.2 | 3.6 | 4.0 | 2.3 | 1.8 | 4.7 | 2.5 | 3.0 | 3.1 | 1.3 | 6.2 | 3.7 | 2.8 | 1.5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\quad$ Education | 1.9 | 8.4 | 5.4 | 5.0 | 2.0 | 1.5 | 3.7 | 2.7 | 3.8 | 3.0 | 1.6 | 6.1 | 3.8 | 2.7 | 2.1 |
| School district staff | 2.1 | 8.9 | 4.6 | 4.6 | 2.5 | 1.7 | 5.1 | 3.8 | 3.5 | 3.3 | 1.3 | 5.3 | 3.6 | 2.6 | 1.9 |
| School board | 1.9 | 6.7 | 5.1 | 4.0 | 2.6 | 1.5 | 4.7 | 3.2 | 4.0 | 3.3 | 1.7 | 5.4 | 3.6 | 3.4 | 2.1 |
| Principal | 2.1 | 8.4 | 4.7 | 4.3 | 2.7 | 1.6 | 3.4 | 3.6 | 4.2 | 3.3 | 1.5 | 5.0 | 3.4 | 2.6 | 2.0 |
| Teachers | 1.0 | 7.0 | 3.6 | 1.8 | 1.5 | 1.1 | 3.5 | 2.5 | 2.0 | 1.8 | 0.6 | 3.7 | 2.3 | 1.1 | 0.9 |

Deciding how the school budget will be spent

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| State Department of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\quad$ Education | 1.9 | 7.7 | 3.9 | 4.7 | 2.6 | 1.6 | 4.0 | 3.2 | 2.3 | 3.0 | 1.4 | 6.2 | 4.2 | 2.9 | 1.6 |
| $\quad$ School district staff | 2.2 | 7.6 | 4.2 | 4.7 | 2.7 | 1.8 | 5.6 | 3.4 | 4.1 | 3.4 | 1.4 | 6.1 | 3.6 | 2.6 | 1.9 |
| School board | 2.1 | 8.2 | 4.1 | 5.7 | 3.1 | 1.8 | 4.5 | 3.9 | 3.6 | 3.7 | 1.4 | 6.8 | 3.0 | 2.6 | 1.9 |
| Principal | 2.2 | 7.6 | 4.5 | 4.0 | 2.7 | 2.0 | 4.4 | 3.6 | 3.2 | 3.4 | 1.6 | 5.8 | 3.5 | 2.8 | 2.1 |
| Teachers | 2.2 | 7.1 | 5.0 | 4.6 | 2.9 | 1.8 | 4.7 | 3.5 | 3.2 | 3.4 | 1.4 | 6.7 | 3.3 | 2.8 | 2.0 |
| Parent association | 1.4 | 6.0 | 4.0 | 4.4 | 1.5 | 0.9 | 3.2 | 2.0 | 2.1 | 2.0 | 0.7 | 2.1 | 1.5 | 1.6 | 1.0 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Schools and Staffing Survey, 1993-94
(Administrator Questionnaire).

Table S41-7 Standard errors for table 41-7

| School and classroom decisions | Central city | Urban fringe | Rural |
| :---: | :---: | :---: | :---: |
|  | Total 0-5 6-20 21-40 41-100 | Total 0-5 6-20 21-40 41-100 | Total 0-5 6-20 21-40 41-100 |


| Percentage of teachers who reported that teachers had a good deal of influence in their school over: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Setting discipline policy | 0.8 | 2.7 | 1.4 | 1.8 | 1.3 | 0.6 | 1.7 | 1.2 | 1.3 | 1.6 | 0.7 | 2.0 | 1.1 | 1.6 | 1.0 |
| Determining the content of in-service programs | 0.7 | 2.4 | 1.7 | 1.5 | 1.2 | 0.9 | 1.8 | 1.2 | 1.4 | 2.2 | 0.6 | 2.0 | 1.0 | 1.2 | 1.0 |
| Establishing curriculum | 0.7 | 2.6 | 1.4 | 1.7 | 1.4 | 1.0 | 1.9 | 1.4 | 1.8 | 2.1 | 0.7 | 1.9 | 1.0 | 1.4 | 1.0 |

## Percentage of teachers who reported a good deal of control in their classroom over:

| Selecting textbooks and other instructional materials | 1.0 | 2.5 | 1.7 | 1.5 | 1.6 | 0.7 | 1.6 | 1.3 | 1.7 | 1.9 | 0.5 | 1.4 | 0.9 | 1.3 | 1.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Selecting content, topics, and skills to be taught | 0.9 | 2.7 | 1.8 | 1.9 | 1.5 | 0.8 | 1.5 | 1.4 | 1.8 | 2.1 | 0.6 | 1.4 | 0.9 | 1.7 | 1.0 |
| Selecting teaching techniques | 0.5 | 1.7 | 1.0 | 1.1 | 0.9 | 0.6 | 1.0 | 0.8 | 0.9 | 1.9 | 0.3 | 1.0 | 0.7 | 0.9 | 0.6 |
| Evaluating and grading students | 0.6 | 1.5 | 0.9 | 1.2 | 0.9 | 0.5 | 0.9 | 0.7 | 1.1 | 1.2 | 0.4 | 1.3 | 0.5 | 0.7 | 0.6 |
| Disciplining students | 0.9 | 2.7 | 1.5 | 1.6 | 1.7 | 0.8 | 1.7 | 1.5 | 1.5 | 2.2 | 0.6 | 1.7 | 0.9 | 1.5 | 1.0 |
| Determining the amount of homework to be assigned | 0.6 | 1.7 | 1.3 | 1.6 | 0.7 | 0.6 | 0.9 | 1.2 | 0.8 | 1.6 | 0.4 | 1.2 | 0.7 | 1.0 | 0.5 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table S41-8 Standard errors for table 41-8


## Percentage of principals who reported that a group had a good deal of influence over:

Setting discipline policy

| State Department of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\quad$ Education | 1.5 | 2.6 | 2.7 | 3.4 | 3.0 | 1.5 | 4.0 | 2.2 | 2.2 | 3.8 | 0.8 | 2.7 | 1.2 | 1.9 | 1.6 |
| School district staff | 1.6 | 6.1 | 3.7 | 3.5 | 2.9 | 1.6 | 3.2 | 2.7 | 3.3 | 5.3 | 1.2 | 4.3 | 1.9 | 2.4 | 2.5 |
| School board | 1.6 | 5.0 | 3.5 | 2.8 | 2.9 | 1.6 | 3.8 | 3.0 | 3.3 | 5.0 | 1.1 | 4.1 | 2.1 | 2.1 | 2.3 |
| Principal | 1.3 | 3.5 | 2.4 | 2.3 | 2.2 | 0.9 | 1.7 | 1.5 | 2.7 | 3.5 | 0.7 | 1.7 | 1.0 | 1.5 | 1.4 |
| Teachers | 1.7 | 5.2 | 3.4 | 3.4 | 2.6 | 1.6 | 2.3 | 3.2 | 2.7 | 4.4 | 1.3 | 3.0 | 1.8 | 2.6 | 2.2 |
| Parent association | 1.4 | 3.0 | 1.9 | 2.5 | 2.7 | 1.5 | 4.2 | 1.7 | 2.3 | 4.7 | 0.8 | 2.6 | 1.2 | 1.3 | 1.8 |

Determining the content of in-service programs
State Department of

| $\quad$ Education | 1.4 | 3.1 | 1.8 | 3.7 | 2.8 | 1.5 | 2.0 | 2.3 | 2.3 | 4.2 | 1.0 | 2.4 | 1.5 | 2.3 | 2.0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| School district staff | 2.0 | 4.3 | 3.9 | 3.8 | 3.2 | 1.8 | 3.9 | 3.1 | 2.8 | 3.8 | 1.1 | 3.8 | 1.9 | 2.1 | 2.1 |
| School board | 1.7 | 4.2 | 2.1 | 3.4 | 2.6 | 1.4 | 1.5 | 2.1 | 2.9 | 4.0 | 0.8 | 2.4 | 1.2 | 2.1 | 2.0 |
| Principal | 1.9 | 4.7 | 3.3 | 3.2 | 2.9 | 1.6 | 2.7 | 2.5 | 3.5 | 3.8 | 1.2 | 5.7 | 1.4 | 2.1 | 2.0 |
| Teachers | 1.7 | 4.8 | 2.7 | 3.1 | 3.3 | 1.5 | 2.3 | 2.8 | 2.5 | 4.3 | 1.1 | 3.6 | 1.5 | 1.5 | 2.2 |
| Parent association | 0.8 | 0.7 | 1.6 | 1.4 | 1.7 | 1.1 | 3.8 | 1.2 | 1.6 | 1.7 | 0.6 | 1.1 | 0.5 | 1.7 | 0.8 |

Establishing curriculum
$\quad$ State Department of

| Deciding how the school budget will be spent |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State Department of Education | 1.7 | 4.7 | 3.1 | 3.2 | 3.5 | 1.4 | 2.7 | 2.5 | 2.8 | 4.9 | 0.8 | 3.3 | 1.5 | 2.1 | 2.3 |
| School district staff | 1.8 | 5.5 | 3.6 | 3.3 | 2.9 | 1.8 | 3.8 | 2.9 | 3.8 | 5.5 | 1.2 | 4.2 | 1.9 | 2.4 | 2.1 |
| School board | 1.4 | 5.6 | 3.6 | 2.9 | 2.7 | 1.7 | 3.7 | 3.2 | 2.6 | 5.0 | 1.0 | 5.6 | 2.0 | 2.1 | 2.2 |
| Principal | 1.8 | 5.1 | 3.3 | 3.2 | 3.5 | 1.4 | 2.8 | 3.1 | 2.5 | 4.4 | 1.2 | 4.9 | 2.2 | 2.2 | 1.9 |
| Teachers | 1.7 | 4.2 | 3.8 | 3.7 | 3.3 | 1.7 | 3.7 | 2.6 | 3.2 | 4.9 | 1.1 | 4.2 | 1.7 | 2.2 | 2.2 |
| Parent association | 1.0 | 1.8 | 1.4 | 1.4 | 1.4 | 1.1 | 3.8 | 1.0 | 1.2 | 2.6 | 0.3 | 1.8 | 0.6 | 0.6 | 0.7 |

[^92]Table S41-9 Standard errors for table 41-9

| School and classroom decisions | Urbanicity |  |  | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Central city | Urban fringe | Rural | Less than 150 | 150-499 | 500-749 | 750 and more |


| Percentage of teachers who reported that teachers had a good deal of influence in their school over: |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Setting discipline policy | 1.1 | 1.2 | 1.6 | 1.4 | 0.9 | 2.1 | 1.9 |
| Determining the content of inservice programs | 0.9 | 0.9 | 1.8 | 1.5 | 0.9 | 1.7 | 1.8 |
| Establishing curriculum | 1.1 | 0.9 | 1.4 | 1.2 | 0.8 | 1.8 | 1.7 |

Percentage of teachers who reported a good deal of control in their classroom over:

|  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Selecting textbooks and other instruc- <br> tional materials | 1.0 | 1.0 | 1.3 | 1.4 | 0.9 | 1.7 | 1.8 |
| Selecting content, topics, and skills <br> to be taught | 0.9 | 1.0 | 1.3 | 1.5 | 0.7 | 1.3 | 1.3 |
| Selecting teaching techniques | 0.5 | 0.6 | 0.9 | 0.9 | 0.5 | 0.8 | 0.6 |
| Evaluating and grading students | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.8 | 1.1 |
| Disciplining students | 0.7 | 0.7 | 1.0 | 0.9 | 0.6 | 0.9 | 1.2 |
| Determining the amount of homework <br> to be assigned | 0.7 | 0.9 | 0.9 | 0.9 | 0.7 | 1.2 | 1.0 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher
Questionnaire).

## Table S41-10 Standard errors for table 41-10

| School and classroom decisions | Urbanicity |  |  | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Central city | Urban fringe | Rural | Less than 150 | 150-499 | 500-749 | $\begin{array}{r} 750 \text { and } \\ \text { more } \end{array}$ |


| Percentage of principals who reported that a group had a good deal of influence over: |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Setting discipline policy |  |  |  |  |  |  |  |
| Governing board | 2.4 | 1.7 | 3.0 | 2.5 | 1.5 | 3.8 | 3.1 |
| Principal | 0.9 | 0.6 | 1.6 | 1.2 | 0.5 | 1.4 | 0.6 |
| Teachers | 1.6 | 1.9 | 3.1 | 2.4 | 1.1 | 3.6 | 3.1 |
| Parent association | 1.6 | 3.0 | 2.0 | 2.5 | 1.1 | 2.1 | 2.9 |
| Determining the content of in-service programs |  |  |  |  |  |  |  |
| Governing board | 1.3 | 2.2 | 2.4 | 2.1 | 1.2 | 2.7 | 3.2 |
| Principal | 1.2 | 2.8 | 3.1 | 3.1 | 0.6 | 2.5 | 2.1 |
| Teachers | 1.9 | 3.3 | 3.2 | 2.5 | 1.7 | 4.0 | 4.7 |
| Parent association | 1.1 | 1.4 | 0.8 | 1.3 | 0.7 | 1.0 | 1.6 |
| Establishing curriculum |  |  |  |  |  |  |  |
| Governing board | 2.0 | 1.8 | 2.4 | 1.7 | 1.4 | 3.4 | 3.5 |
| Principal | 1.8 | 1.8 | 3.5 | 2.2 | 1.2 | 3.1 | 1.7 |
| Teachers | 2.1 | 2.2 | 2.9 | 2.4 | 1.5 | 3.9 | 3.7 |
| Parent association | 1.6 | 1.9 | 1.3 | 1.7 | 0.9 | 1.6 | 1.0 |
| Deciding how the school budget will be spent |  |  |  |  |  |  |  |
| Governing board | 1.8 | 2.6 | 3.3 | 2.3 | 1.7 | 3.2 | 3.8 |
| Principal | 1.7 | 1.2 | 3.5 | 2.1 | 1.0 | 1.9 | 2.8 |
| Teachers | 1.7 | 2.0 | 2.9 | 2.0 | 1.4 | 3.1 | 1.7 |
| Parent association | 1.0 | 0.9 | 2.9 | 1.8 | 0.8 | 3.2 | 1.8 |

[^93]Standard Error Tables
Table S41-11 Standard errors for table 41-11

| State | Percentage of teachers reporting that teachers had a good deal of influence in their school over: |  |  | Percentage of principals reporting that teachers had a good deal of influence over: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Setting discipline policy | Determining the content of in- <br> service programs | Establishing curriculum | Setting discipline policy | Determining the content of in- <br> service programs | Establishing curriculum |
| Alabama | 1.5 | 1.5 | 1.5 | 3.1 | 3.9 | 3.7 |
| Alaska | 1.7 | 4.4 | 4.1 | 2.5 | 10.2 | 10.9 |
| Arizona | 2.2 | 1.9 | 2.1 | 3.1 | 3.9 | 4.4 |
| Arkansas | 1.5 | 1.5 | 2.2 | 4.0 | 3.6 | 3.2 |
| California | 1.7 | 1.6 | 1.7 | 2.4 | 2.9 | 2.8 |
| Colorado | 2.2 | 2.0 | 1.6 | 3.0 | 3.5 | 3.1 |
| Connecticut | 1.9 | 1.2 | 1.7 | 2.6 | 2.9 | 3.5 |
| Delaware | 3.0 | 3.1 | 2.4 | 4.1 | 3.4 | 4.7 |
| District of Columbia | - 3.2 | 2.1 | 3.0 | 5.0 | 4.3 | 5.7 |
| Florida | 1.6 | 1.6 | 1.5 | 2.5 | 2.6 | 3.1 |
| Georgia | 1.4 | 1.8 | 1.5 | 3.8 | 3.5 | 2.9 |
| Hawaii | 2.9 | 2.7 | 2.1 | 5.4 | 2.1 | 5.5 |
| Idaho | 1.6 | 1.5 | 1.6 | 4.3 | 5.0 | 4.4 |
| Illinois | 1.5 | 1.4 | 1.3 | 2.1 | 2.2 | 2.5 |
| Indiana | 1.9 | 1.5 | 1.9 | 3.1 | 3.6 | 3.1 |
| lowa | 2.2 | 1.9 | 2.3 | 2.6 | 3.6 | 3.7 |
| Kansas | 1.8 | 1.4 | 1.5 | 2.5 | 3.1 | 2.9 |
| Kentucky | 3.1 | 2.4 | 2.4 | 4.3 | 3.6 | 4.1 |
| Lovisiana | 1.7 | 1.4 | 1.5 | 2.7 | 3.1 | 2.6 |
| Maine | 2.2 | 2.4 | 1.9 | 4.1 | 3.3 | 3.5 |
| Maryland | 1.2 | 1.7 | 1.6 | 2.7 | 3.3 | 3.3 |
| Massachusetts | 1.4 | 1.5 | 1.4 | 2.5 | 3.2 | 2.7 |
| Michigan | 2.4 | 1.8 | 2.2 | 3.4 | 2.8 | 3.4 |
| Minnesota | 2.4 | 2.1 | 2.1 | 2.0 | 2.5 | 2.6 |
| Mississippi | 1.7 | 1.8 | 1.5 | 3.5 | 3.8 | 4.0 |
| Missouri | 1.8 | 1.9 | 2.2 | 3.1 | 3.1 | 3.6 |
| Montana | 2.1 | 1.7 | 2.0 | 2.2 | 2.9 | 2.1 |
| Nebraska | 1.7 | 1.4 | 1.4 | 2.5 | 2.7 | 3.0 |
| Nevada | 2.8 | 1.8 | 1.7 | 4.1 | 4.5 | 5.1 |
| New Hampshire | 2.1 | 2.4 | 2.2 | 2.4 | 6.6 | 3.7 |
| New Jersey | 2.2 | 2.2 | 2.6 | 4.5 | 4.2 | 3.9 |
| New Mexico | 2.5 | 2.0 | 2.3 | 6.8 | 6.5 | 3.3 |
| New York | 1.8 | 1.8 | 1.7 | 2.5 | 3.9 | 3.2 |
| North Carolina | 2.3 | 1.6 | 1.4 | 3.6 | 3.4 | 2.6 |
| North Dakota | 1.8 | 1.4 | 1.4 | 3.3 | 4.1 | 3.7 |
| Ohio | 2.1 | 2.1 | 2.2 | 3.6 | 3.5 | 4.1 |
| Oklahoma | 2.0 | 1.9 | 1.7 | 3.4 | 4.3 | 3.9 |
| Oregon | 2.6 | 1.7 | 2.1 | 3.5 | 3.5 | 4.3 |
| Pennsylvania | 2.3 | 1.8 | 2.2 | 4.5 | 4.3 | 3.9 |
| Rhode Island | 2.4 | 2.2 | 2.7 | 7.3 | 9.3 | 9.5 |
| South Carolina | 2.5 | 2.1 | 2.4 | 3.9 | 3.9 | 4.3 |
| South Dakota | 1.4 | 2.7 | 1.5 | 2.0 | 2.9 | 2.8 |
| Tennessee | 1.6 | 1.6 | 1.9 | 4.7 | 3.8 | 3.5 |
| Texas | 1.8 | 1.4 | 1.4 | 2.8 | 2.8 | 3.4 |

Table S41-11 Standard errors for table 41-11 - Continued

| State | Percentage of teachers reporting that teachers had a good deal of influence in their school over: |  |  | Percentage of principals reporting that teachers had a good deal of influence over: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Setting discipline policy | Determining the content of in- <br> service programs | Establishing curriculum | Setting discipline policy | Determining the content of in- <br> service programs | Establishing curriculum |
| Utah | 1.6 | 1.4 | 1.4 | 1.7 | 2.7 | 2.9 |
| Vermont | 4.6 | 3.3 | 3.3 | 2.5 | 2.8 | 4.2 |
| Virginia | 2.6 | 2.1 | 1.9 | 3.8 | 4.1 | 4.0 |
| Washington | 2.3 | 2.4 | 2.3 | 2.2 | 2.6 | 3.0 |
| West Virginia | 2.7 | 1.9 | 2.5 | 3.9 | 4.5 | 5.0 |
| Wisconsin | 2.0 | 1.9 | 2.3 | 2.2 | 3.2 | 2.5 |
| Wyoming | 1.5 | 1.2 | 1.3 | 6.1 | 5.5 | 3.5 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher and Administrator Questionnaires).

Standard Error Tables
Table S42-1 Standard errors for table 42-1

| School characteristics | Average hours worked per week | Average hours required at school | Average hours spent before and after school and on weekends |  |  | Averageclasssize | Average number of classes taught per day |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | Activities involving students | Other related activities |  |  |
| Total | 0.1 | 0.1 | 0.1 | *0.0 | *0.0 | 0.1 | ${ }^{*} 0.0$ |
| Urbanicity |  |  |  |  |  |  |  |
| Central city | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 |
| Urban fringe/large town | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | *0.0 |
| Rural/small town | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | *0.0 |
| Percentage of students eligible for free or reduced-price lunch |  |  |  |  |  |  |  |
| 0-5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 |
| 6-20 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | *0.0 |
| 21-40 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | *0.0 |
| 41-100 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 |
| Percentage of students eligible for free or reduced-price lunch within urbanicity Central city |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 0-5 | 0.8 | 0.7 | 0.4 | 0.2 | 0.3 | 0.5 | 0.1 |
| 6-20 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.1 |
| 21-40 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.1 |
| 41-100 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.4 | 0.1 |
| Urban fringe/large town |  |  |  |  |  |  |  |
| 0-5 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 | 0.1 |
| 6-20 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.3 | 0.1 |
| 21-40 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 |
| 41-100 | 0.5 | 0.4 | 0.2 | 0.1 | 0.2 | 0.5 | 0.1 |
| Rural/small town |  |  |  |  |  |  |  |
| 0-5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 0.1 |
| 6-20 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 |
| 21-40 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 |
| 41-100 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | *0.0 |
| School size |  |  |  |  |  |  |  |
| Less than 150 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.3 | 0.1 |
| 150-499 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 500-749 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 |
| 750 or more | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | *0.0 |
| Percentage of minority students |  |  |  |  |  |  |  |
| Less than 20 percent | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | *0.0 |
| 20 percent or more | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | *0.0 |

[^94]SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table S42-2 Standard errors for table 42-2

| School characteristics | Average hours worked per week | Average hours required at school | Average hours spent before and after school and on weekends |  |  | $\begin{array}{r} \text { Average } \\ \text { class } \\ \text { size } \\ \hline \end{array}$ | Average number of classes taught per day |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | Activities involving students | $\qquad$ |  |  |
| Total | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | *0.0 |
| Urbanicity |  |  |  |  |  |  |  |
| Central city | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 |
| Urban fringe/large town | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.1 |
| Rural/small town | 0.6 | 0.4 | 0.4 | 0.2 | 0.3 | 0.3 | 0.1 |
| School size |  |  |  |  |  |  |  |
| Less than 150 | 0.4 | 0.3 | 0.3 | 0.1 | 0.3 | 0.4 | 0.2 |
| 150-499 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 |
| 500-749 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 | 0.1 |
| 750 or more | 0.5 | 0.3 | 0.4 | 0.2 | 0.3 | 0.3 | 0.1 |
| Percentage of minority students |  |  |  |  |  |  |  |
| Less than 20 percent | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 |
| 20 percent or more | 0.4 | 0.3 | 0.3 | 0.1 | 0.3 | 0.3 | 0.1 |

[^95]SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Standard Error Tables
Table S42-3 Standard errors for table 42-3

| School characteristics and years of experience | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Committee to integrate academic skills into vocational education | Other curriculum committee | Committee on selecting textbooks or materials | Committee to integrate academic skills into vocational education | Other curriculum committee | Committee on selecting textbooks or materials |
| Total | 0.3 | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 |
| Urbanicity |  |  |  |  |  |  |
| Central city | 0.7 | 0.8 | 0.6 | 0.6 | 1.0 | 0.8 |
| Urban fringe/large town | 0.4 | 0.9 | 0.7 | 0.5 | 1.2 | 1.2 |
| Rural/small town | 0.3 | 0.6 | 0.5 | 1.0 | 1.4 | 1.4 |
| Percentage of students eligible for free or reduced-price lunch |  |  |  |  |  |  |
| 0-5 | 1.0 | 1.1 | 1.2 | - | - | - |
| 6-20 | 0.5 | 0.8 | 0.7 | - | - | - |
| 21-40 | 0.6 | 1.0 | 0.7 | - | - | - |
| 41-100 | 0.5 | 0.7 | 0.5 | - | - | - |
| Percentage of students eligible for free or reduced-price lunch within urbanicity |  |  |  |  |  |  |
| Central city |  |  |  |  |  |  |
| 0-5 | 2.2 | 3.0 | 3.3 | - | - | - |
| 6-20 | 1.1 | 1.4 | 1.4 | - | - | - |
| 21-40 | 1.2 | 1.9 | 1.1 | - | - | - |
| 41-100 | 1.0 | 1.2 | 0.8 | - | - | - |
| Urban fringe/large town |  |  |  |  |  |  |
| 0-5 | 1.3 | 1.6 | 1.6 | - | - | - |
| 6-20 | 0.8 | 1.6 | 1.2 | - | - | - |
| 21-40 | 1.1 | 2.0 | 1.8 | - | - | - |
| 41-100 | 1.0 | 1.6 | 1.5 | - | - | - |
| Rural/small town |  |  |  |  |  |  |
| 0-5 | 1.3 | 1.3 | 2.1 | - | - | - |
| 6-20 | 0.8 | 1.1 | 1.0 | - | - | - |
| 21-40 | 0.8 | 1.3 | 1.0 | - | - | - |
| 41-100 | 0.6 | 1.0 | 0.8 | - | - | - |
| School size |  |  |  |  |  |  |
| Less than 150 | 0.8 | 1.3 | 1.1 | 0.7 | 1.3 | 1.1 |
| 150-499 | 0.4 | 0.7 | 0.6 | 0.5 | 0.9 | 1.0 |
| 500-749 | 0.5 | 1.0 | 0.7 | 0.9 | 1.8 | 2.0 |
| 750 or more | 0.5 | 0.5 | 0.5 | 0.8 | 1.6 | 1.2 |
| Percentage of minority students |  |  |  |  |  |  |
| Less than 20 percent | 0.3 | 0.6 | 0.5 | 0.5 | 0.8 | 0.9 |
| 20 percent or more | 0.4 | 0.6 | 0.4 | 0.7 | 1.0 | 1.0 |
| Years of teaching experience |  |  |  |  |  |  |
| Less than 4 years | 1.1 | 1.2 | 1.0 | 0.5 | 1.2 | 1.2 |
| 4 years and more | 0.3 | 0.4 | 0.3 | 0.5 | 0.7 | 0.7 |

[^96]SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table S42-4 Standard errors for table 42-4

| State | Average hours worked per week | Average hours required at school | Average hours spent before and after school and on weekends |  |  | Average class size | Average number of classes taught per day |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | Activities involving students | $\qquad$ |  |  |
| Alabama | 0.7 | 0.6 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 |
| Alaska | 0.5 | 0.6 | 0.4 | 0.3 | 0.2 | 0.6 | 0.1 |
| Arizona | 0.6 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 |
| Arkansas | 0.5 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 |
| California | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 | 0.1 |
| Colorado | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.1 |
| Connecticut | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.5 | 0.2 |
| Delaware | 0.8 | 0.6 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 |
| District of Columbia | 0.8 | 0.6 | 0.7 | 0.3 | 0.4 | 0.8 | 0.2 |
| Florida | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.1 |
| Georgia | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 |
| Hawaii | 0.4 | 0.4 | 0.4 | 0.2 | 0.4 | 0.8 | 0.2 |
| Idaho | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.1 |
| Illinois | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | 0.3 | 0.1 |
| Indiana | 0.5 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 |
| lowa | 0.7 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 0.1 |
| Kansas | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.1 |
| Kentucky | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 0.1 |
| Louisiana | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.3 | 0.1 |
| Maine | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 |
| Maryland | 0.5 | 0.3 | 0.4 | 0.2 | 0.3 | 0.5 | 0.1 |
| Massachusetts | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 |
| Michigan | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.1 |
| Minnesota | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.1 |
| Mississippi | 0.5 | 0.5 | 0.3 | 0.2 | 0.2 | 0.4 | 0.1 |
| Missouri | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.1 |
| Montana | 0.4 | 0.2 | 0.3 | 0.3 | 0.2 | 0.4 | 0.1 |
| Nebraska | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 0.1 |
| Nevada | 0.8 | 0.6 | 0.3 | 0.2 | 0.3 | 0.8 | 0.1 |
| New Hampshire | 0.6 | 0.4 | 0.5 | 0.3 | 0.3 | 0.5 | 0.1 |
| New Jersey | 0.5 | 0.4 | 0.4 | 0.2 | 0.3 | 0.4 | 0.1 |
| New Mexico | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 | 0.1 |
| New York | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.2 |
| North Carolina | 0.6 | 0.4 | 0.4 | 0.3 | 0.2 | 0.3 | 0.1 |
| North Dakota | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.5 | 0.1 |
| Ohio | 0.6 | 0.4 | 0.4 | 0.2 | 0.3 | 0.3 | 0.1 |
| Oklahoma | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.1 |
| Oregon | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.1 |
| Pennsylvania | 0.5 | 0.5 | 0.3 | 0.2 | 0.2 | 0.3 | 0.1 |
| Rhode Island | 0.6 | 0.3 | 0.5 | 0.3 | 0.4 | 0.6 | 0.2 |
| South Carolina | 0.6 | 0.4 | 0.3 | 0.2 | 0.3 | 0.4 | 0.1 |
| South Dakota | 0.8 | 0.6 | 0.4 | 0.2 | 0.3 | 0.5 | 0.1 |
| Tennessee | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.4 | 0.1 |
| Texas | 0.5 | 0.4 | 0.2 | 0.3 | 0.2 | 0.4 | 0.1 |

Standard Error Tables
Table S42-4 Standard errors for table 42-4-Continued

| State |  |  | Average hours spent before and after school and on weekends |  |  | Average class size | Average number of classes taught per day |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average hours worked per week | Average hours required at school | Total | Activities involving students | Other related activities |  |  |
| Utah | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 |
| Vermont | 1.1 | 0.5 | 1.1 | 0.5 | 0.7 | 0.5 | 0.2 |
| Virginia | 0.7 | 0.5 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 |
| Washington | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.3 | 0.1 |
| West Virginia | 0.4 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 |
| Wisconsin | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.1 |
| Wyoming | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.1 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table S43-1 Standard errors for table 43-1

| Characteristics | Mean classroom hours per week | Mean student contact hours per week | Average class size |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Total | 0.1 | 7.2 | 0.4 |
| Academic rank |  |  |  |
| Full professor | 0.2 | 12.8 | 0.8 |
| Associate professor | 0.2 | 10.2 | 0.7 |
| Assistant professor | 0.2 | 9.8 | 0.6 |
| Instructor | 0.4 | 19.9 | 0.5 |
| Lecturer | 0.5 | 30.1 | 3.8 |
| Type of institution |  |  |  |
| Research | 0.2 | 13.6 | 1.2 |
| Doctoral | 0.3 | 34.6 | 2.2 |
| Comprehensive | 0.2 | 6.6 | 0.5 |
| Liberal arts | 0.3 | 9.3 | 0.5 |
| 2-year | 0.3 | 13.5 | 0.4 |
| Control of institution |  |  |  |
| Public | 0.2 | 7.0 | 0.4 |
| Private | 0.3 | 18.3 | 1.1 |
| Academic discipline of class taught |  |  |  |
| Agriculture | 0.9 | 36.9 | 2.2 |
| Business | 0.3 | 9.6 | 0.7 |
| Education | 0.3 | 17.7 | 0.9 |
| Engineering | 0.5 | 14.2 | 1.0 |
| Fine arts | 0.4 | 10.1 | 0.7 |
| Humanities | 0.2 | 7.8 | 0.4 |
| Natural sciences | 0.3 | 19.9 | 1.1 |
| Social sciences | 0.2 | 17.9 | 0.9 |

Table S43-1 Standard errors for table 43-1 - Continued

| Characteristics | Mean classroom hours per week | Mean student contact hours per week | Average class size |
| :---: | :---: | :---: | :---: |
|  | Fall 1987 |  |  |
| Total | 0.2 | 7.6 | 0.6 |
| Academic rank |  |  |  |
| Full professor | 0.3 | 12.4 | 1.1 |
| Associate professor | 0.2 | 19.5 | 1.3 |
| Assistant professor | 0.3 | 11.9 | 0.8 |
| Instructor | 0.5 | 24.2 | 1.1 |
| Lecturer | 0.6 | 62.1 | 4.9 |
| Type of institution |  |  |  |
| Research | 0.2 | 14.4 | 1.8 |
| Doctoral | 0.3 | 19.6 | 2.3 |
| Comprehensive | 0.3 | 10.8 | 1.0 |
| Liberal arts | 0.6 | 18.3 | 0.9 |
| 2-year | 0.3 | 18.6 | 0.7 |
| Control of institution |  |  |  |
| Public | 0.2 | 8.4 | 0.6 |
| Private | 0.3 | 15.3 | 1.3 |
| Academic discipline of class taught |  |  |  |
| Agriculture | 0.8 | 22.0 | 2.7 |
| Business | 0.3 | 13.3 | 1.0 |
| Education | 0.4 | 19.9 | 0.9 |
| Engineering | 0.4 | 15.1 | 1.3 |
| Fine arts | 0.5 | 17.4 | 0.9 |
| Humanities | 0.2 | 10.3 | 0.5 |
| Natural sciences | 0.3 | 23.4 | 1.7 |
| Social sciences | 0.3 | 17.0 | 1.8 |

[^97]Standard Error Tables
Table S43-2 Standard errors for table 43-2

| Control of institution and academic discipline | Teaching | Research/ scholarship | Professional growth | Administration | Outside consulting/ freelance work | Service and other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fall 1992 |  |  |  |  |  |
| Total | 0.5 | 0.4 | 0.1 | 0.2 | 0.1 | 0.2 |
| Control of institution |  |  |  |  |  |  |
| Public | 0.6 | 0.6 | 0.1 | 0.3 | 0.1 | 0.2 |
| Private | 1.1 | 0.9 | 0.1 | 0.4 | 0.2 | 0.5 |
| Academic discipline of class taught |  |  |  |  |  |  |
| Agriculture | 2.2 | 2.5 | 0.5 | 1.9 | 0.5 | 0.8 |
| Business | 1.0 | 0.7 | 0.2 | 0.7 | 0.4 | 0.4 |
| Education | 1.0 | 0.7 | 0.3 | 0.9 | 0.2 | 0.5 |
| Engineering | 1.6 | 1.4 | 0.4 | 0.9 | 0.4 | 0.6 |
| Fine arts | 1.1 | 0.8 | 0.3 | 0.7 | 0.4 | 0.5 |
| Humanities | 0.7 | 0.5 | 0.2 | 0.6 | 0.1 | 0.2 |
| Natural sciences | 0.9 | 0.9 | 0.2 | 0.4 | 0.1 | 0.2 |
| Social sciences | 0.9 | 0.8 | 0.2 | 0.6 | 0.2 | 0.4 |
|  | Fall 1987 |  |  |  |  |  |
| Total | 0.8 | 0.6 | 0.2 | 0.3 | 0.1 | 0.4 |
| Control of institution |  |  |  |  |  |  |
| Public | 0.9 | 0.6 | 0.2 | 0.4 | 0.1 | 0.3 |
| Private | 1.6 | 1.2 | 0.3 | 0.5 | 0.2 | 1.0 |
| Academic discipline of class taught |  |  |  |  |  |  |
| Agriculture | 2.8 | 2.3 | 1.1 | 1.0 | 0.4 | 0.7 |
| Business | 1.3 | 1.0 | 0.4 | 0.8 | 0.6 | 0.2 |
| Education | 1.4 | 0.6 | 0.3 | 1.1 | 0.3 | 0.7 |
| Engineering | 1.7 | 1.3 | 0.4 | 0.8 | 0.6 | 0.2 |
| Fine arts | 1.2 | 1.1 | 0.7 | 0.8 | 0.5 | 0.3 |
| Humanities | 0.9 | 0.6 | 0.2 | 0.7 | 0.2 | 0.2 |
| Natural sciences | 1.1 | 1.0 | 0.3 | 0.6 | 0.2 | 0.3 |
| Social sciences | 1.2 | 1.0 | 0.3 | 0.8 | 0.3 | 0.5 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1988 and 1993.

Table S45-1 Standard errors for table 45-1

| Region and state | Percentageof schoolswith LEPstudents | Percentage of schools providing: |  |  |  |  |  | Percentage of schools with bilingual/ESL vacancies that found them difficult or impossible to fill |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bilingual programs |  | ESL programs |  | Either bilingual or ESL programs |  |  |  |
|  |  | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1990-91 | 1993-94 |
| Total | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 2.7 | 1.9 |
| Region |  |  |  |  |  |  |  |  |  |
| Northeast | 1.6 | 1.1 | 1.1 | 1.4 | 1.7 | 1.4 | 1.7 | 6.2 | 2.4 |
| Midwest | 1.0 | 0.7 | 0.7 | 0.9 | 1.0 | 1.0 | 1.0 | 6.9 | 5.0 |
| South | 1.0 | 0.7 | 0.9 | 0.8 | 1.0 | 0.8 | 1.0 | 3.4 | 3.4 |
| West | 1.0 | 1.1 | 1.7 | 1.1 | 1.4 | 1.0 | 1.4 | 4.8 | 3.6 |
| State |  |  |  |  |  |  |  |  |  |
| Alabama | 2.4 | 1.8 | 1.0 | 1.8 | 2.5 | 2.5 | 2.6 | - | - |
| Alaska | 3.2 | 4.8 | 2.9 | 5.4 | 2.9 | 4.5 | 2.4 | - | - |
| Arizona | 3.3 | 4.6 | 3.5 | 4.5 | 3.8 | 4.6 | 3.8 | 7.3 | 5.3 |
| Arkansas | 2.9 | 1.8 | 1.8 | 1.9 | 2.8 | 2.4 | 2.6 | - | - |
| California | 1.4 | 2.1 | 3.5 | 1.9 | 2.4 | 1.6 | 2.4 | 7.0 | 6.9 |
| Colorado | 3.8 | 4.1 | 2.8 | 4.1 | 3.7 | 4.0 | 3.6 | - | - |
| Connecticut | 3.9 | 4.8 | 1.3 | 5.0 | 4.0 | 4.6 | 4.1 | - | - |
| Delaware | 4.7 | 6.1 | 3.2 | 5.7 | 5.1 | 6.4 | 5.1 | - | - |
| District of Columbia | 3.7 | 5.2 | 3.5 | 6.5 | 4.0 | 6.6 | 4.1 | - | - |
| Florida | 2.8 | 2.9 | 2.7 | 3.9 | 3.5 | 3.6 | 3.5 | 4.2 | 1.3 |
| Georgia | 3.1 | 2.7 | 1.9 | 2.2 | 3.0 | 3.0 | 3.1 | - | - |
| Hawaii | 2.2 | 6.9 | 4.8 | 4.7 | 3.8 | 3.2 | 3.1 | - | - |
| Idaho | 3.7 | 5.1 | 3.4 | 4.2 | 3.6 | 4.7 | 3.5 | - | - |
| Illinois | 2.0 | 2.2 | 2.0 | 2.7 | 1.9 | 2.9 | 1.9 | - | - |
| Indiana | 3.1 | 1.0 | 1.8 | 1.7 | 3.6 | 1.6 | 3.7 | - | - |
| lowa | 3.3 | 2.0 | 1.1 | 3.2 | 3.3 | 3.2 | 3.3 | - | - |
| Kansas | 2.7 | 1.9 | 1.7 | 2.6 | 2.7 | 2.7 | 2.8 | - | - |
| Kentucky | 3.1 | 1.7 | 1.5 | 2.4 | 3.2 | 2.6 | 3.1 | - | - |
| Louisiana | 1.8 | 2.2 | 1.8 | 4.2 | 2.3 | 4.2 | 2.6 | - | - |
| Maine | 3.0 | 1.5 | 1.5 | 3.2 | 3.4 | 3.4 | 3.5 | - | - |
| Maryland | 2.6 | 2.7 | 1.3 | 4.2 | 3.0 | 4.2 | 2.6 | - | - |
| Massachusetts | 4.0 | 2.9 | 2.3 | 3.6 | 3.6 | 3.6 | 3.6 | - | 7.7 |
| Michigan | 4.6 | 2.4 | 3.3 | 2.2 | 4.3 | 2.6 | 4.0 | - | - |
| Minnesota | 3.6 | 2.9 | 1.9 | 3.6 | 3.9 | 3.6 | 4.0 | - | - |
| Mississippi | 1.8 | 2.7 | 1.6 | 2.3 | 1.7 | 3.3 | 1.9 | - | - |
| Missouri | 3.1 | 1.9 | 1.2 | 2.6 | 3.0 | 3.2 | 3.0 | - | - |
| Montana | 2.0 | 3.2 | 1.3 | 2.8 | 1.8 | 3.8 | 2.4 | - | - |
| Nebraska | 1.9 | 2.4 | 1.2 | 2.7 | 2.8 | 2.8 | 2.9 | - | - |

Standard Error Tables
Table S45-1 Standard errors for table 45-1 - Continued

| Region and state | $\begin{array}{r} \text { Percentage } \\ \text { of schools } \\ \text { with LEP } \\ \text { students } \end{array}$ | Percentage of schools providing: |  |  |  |  |  | Percentage of schools with bilingual/ESL vacancies that found them difficult or impossible to fill |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bilingual programs |  | ESL programs |  | Either bilingual or ESL programs |  |  |  |
|  |  | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1990-91 | 1993-94 |
| Nevada | 3.1 | 3.8 | 2.5 | 5.3 | 2.6 | 5.6 | 2.6 | - | - |
| New Hampshire | 4.0 | 4.1 | 1.1 | 5.1 | 5.5 | 5.1 | 5.5 | - | - |
| New Jersey | 5.0 | 2.7 | 4.2 | 3.8 | 5.0 | 3.5 | 5.0 | - | - |
| New Mexico | 3.9 | 5.7 | 4.3 | 5.3 | 3.9 | 5.5 | 3.8 | 7.9 | 7.4 |
| New York | 3.8 | 2.0 | 3.3 | 2.6 | 3.6 | 2.6 | 3.6 | 11.5 | 3.8 |
| North Carolina | 3.4 | 2.0 | 2.4 | 2.7 | 2.7 | 3.1 | 2.7 | - | - |
| North Dakota | 2.8 | 2.2 | 2.2 | 3.6 | 2.7 | 3.5 | 2.9 | - | - |
| Ohio | 3.3 | 1.6 | 2.8 | 1.8 | 3.5 | 2.0 | 3.7 | - | - |
| Oklahoma | 3.2 | 3.2 | 2.3 | 3.1 | 3.1 | 3.7 | 3.1 | - | - |
| Oregon | 4.8 | 2.9 | 3.5 | 3.9 | 4.9 | 4.0 | 4.9 | - | - |
| Pennsylvania | 4.5 | 2.0 | 2.6 | 3.3 | 4.8 | 3.4 | 4.8 | - | - |
| Rhode Island | 4.5 | 4.7 | 1.9 | 5.9 | 4.8 | 6.2 | 4.9 | - | - |
| South Carolina | 4.6 | 2.5 | 0.8 | 2.5 | 4.7 | 2.5 | 4.7 | - | - |
| South Dakota | 1.3 | 4.5 | 0.8 | 4.0 | 1.1 | 4.8 | 1.1 | - | - |
| Tennessee | 4.0 | 2.1 | 0.4 | 2.6 | 2.9 | 2.3 | 2.9 | - | - |
| Texas | 3.0 | 2.0 | 3.4 | 2.3 | 3.1 | 2.2 | 2.9 | 4.2 | 6.0 |
| Utah | 2.7 | 3.0 | 2.0 | 3.5 | 3.0 | 3.6 | 3.1 | - | - |
| Vermont | 3.6 | 1.6 | 1.1 | 2.9 | 3.2 | 3.0 | 3.2 | - | - |
| Virginia | 4.9 | 2.0 | 1.9 | 3.0 | 5.0 | 3.0 | 5.1 | - | - |
| Washington | 3.6 | 3.4 | 2.4 | 3.8 | 3.9 | 4.1 | 3.8 | - | 5.0 |
| West Virginia | 2.4 | - | 0.0 | 1.7 | 1.3 | 1.8 | 1.3 | - | - |
| Wisconsin | 3.3 | 1.8 | 2.1 | 3.3 | 3.1 | 3.6 | 3.1 | - | - |
| Wyoming | 2.3 | 3.4 | 1.4 | 4.2 | 2.0 | 4.7 | 2.0 | - | - |
| - Not available. |  |  |  | SOURC Educatio and 19 | EE: U.S. D ion Statisti 93-94 (Sch | partment <br> Schools <br> ol Question | of Educa and Staffin nnaire). | on, Nationa Survey, 1987 | Center for 3, 1990-91, |

Table S45-2 Standard errors for table 45-2

| Selected School characteristics | Percentageof schoolswith LEPstudents | Percentage of schools providing: |  |  |  |  |  | Percentage of schools with bilingual/ESL vacancies that found them difficult or impossible to fill |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bilingual programs |  | ESL programs |  | Either bilingual or ESL programs |  |  |  |
|  |  | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1990-91 | 1993-94 |
| Total | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 2.7 | 1.9 |
| Level of school |  |  |  |  |  |  |  |  |  |
| Elementary | 0.7 | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 3.6 | 2.6 |
| Secondary | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | 0.8 | 0.7 | 2.8 | 2.5 |
| Urbanicity |  |  |  |  |  |  |  |  |  |
| Central city | 1.0 | 1.1 | 1.5 | 1.2 | 1.1 | 1.4 | 1.2 | 4.5 | 3.4 |
| Urban fringe/large town | 1.0 | 0.9 | 1.1 | 1.3 | 1.2 | 1.3 | 1.2 | 4.4 | 3.2 |
| Rural/small town | 0.9 | 0.6 | 0.6 | 0.8 | 0.8 | 0.8 | 0.7 | 4.2 | 4.2 |
| School size |  |  |  |  |  |  |  |  |  |
| 1-149 | 1.3 | 1.4 | 0.8 | 1.5 | 1.4 | 1.6 | 1.4 | 9.3 | 8.9 |
| 150-499 | 0.9 | 0.6 | 0.8 | 0.9 | 0.9 | 1.0 | 0.9 | 4.2 | 3.6 |
| 500-749 | 1.3 | 1.0 | 1.1 | 1.3 | 1.3 | 1.3 | 1.2 | 5.9 | 4.4 |
| 750 or more | 1.4 | 1.1 | 1.4 | 1.2 | 1.3 | 1.1 | 1.3 | 3.3 | 3.8 |
| School size within level of school |  |  |  |  |  |  |  |  |  |
| Elementary |  |  |  |  |  |  |  |  |  |
| 1-349 | 1.4 | 0.8 | 1.1 | 1.2 | 1.4 | 1.3 | 1.3 | 8.4 | 6.6 |
| 350-549 | 1.5 | 0.9 | 1.5 | 1.1 | 1.5 | 1.2 | 1.6 | 7.0 | 5.1 |
| 550 or more | 1.4 | 1.2 | 1.6 | 1.3 | 1.5 | 1.4 | 1.5 | 5.3 | 4.6 |
| Secondary |  |  |  |  |  |  |  |  |  |
| 1-349 | 1.7 | 1.3 | 1.3 | 1.6 | 1.7 | 1.8 | 1.7 | - | 9.9 |
| 350-799 | 1.3 | 1.3 | 1.0 | 1.5 | 1.2 | 1.4 | 1.2 | 8.2 | 4.7 |
| 800 or more | 1.0 | 1.1 | 0.9 | 1.3 | 1.1 | 1.3 | 1.1 | 3.2 | 3.1 |
| School size within urbanicity |  |  |  |  |  |  |  |  |  |
| Central city |  |  |  |  |  |  |  |  |  |
| 1-449 | 2.5 | 1.6 | 2.4 | 1.9 | 2.6 | 1.9 | 2.6 | 12.2 | 9.9 |
| 450-649 | 2.6 | 2.3 | 3.0 | 2.9 | 2.5 | 2.7 | 2.4 | 10.3 | 7.6 |
| 650 or more | 1.8 | 1.6 | 2.1 | 1.6 | 2.0 | 1.5 | 1.9 | 5.2 | 5.4 |
| Urban fringe/large town | 1.9 |  |  |  |  |  |  |  |  |
| 1-449 | 2.0 | 1.4 | 1.6 | 2.0 | 2.0 | 2.1 | 2.0 | 12.3 | 1.2 |
| 450-649 | 1.4 | 1.7 | 2.2 | 2.5 | 2.7 | 2.3 | 2.6 | 10.4 | 8.1 |
| 650 or more |  | 1.8 | 1.9 | 1.6 | 1.8 | 1.6 | 1.7 | 6.1 | 3.7 |
| Rural/small town | 1.4 |  |  |  |  |  |  |  |  |
| 1-249 | 1.9 | 1.0 | 1.0 | 1.2 | 1.3 | 1.2 | 1.3 | 9.3 | 6.3 |
| 250-449 | 1.6 | 1.3 | 1.7 | 1.2 | 1.7 | 1.7 | 1.9 | 11.0 | 6.1 |
| 450 or more |  | 0.9 | 1.4 | 1.1 | 1.6 | 1.2 | 1.5 | 5.0 | 5.9 |

Standard Error Tables
Table S45-2 Standard errors for table 45-2-Continued

| Selected School characteristics | Percentageof schoolswith LEPstudents | Percentage of schools providing: |  |  |  |  |  | Percentage of schools with bilingual/ESL vacancies that found them difficult or impossible to fill |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bilingual programs |  | ESL programs |  | Either bilingual or ESL programs |  |  |  |
|  |  | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1987-88 | 1993-94 | 1990-91 | 1993-94 |
| Percentage of students receiving free or reduced-price lunch |  |  |  |  |  |  |  |  |  |
| 0-5 | 2.1 | 1.2 | 1.3 | 1.6 | 2.2 | 1.6 | 2.2 | 10.4 | 6.0 |
| 6-20 | 1.3 | 0.8 | 0.6 | 1.1 | 1.5 | 1.1 | 1.5 | 4.9 | 3.2 |
| 21-40 | 1.5 | 0.9 | 1.0 | 1.2 | 1.4 | 1.2 | 1.3 | 4.5 | 5.0 |
| 41 or more | 1.0 | 1.0 | 1.1 | 1.2 | 1.2 | 1.3 | 1.1 | 4.3 | 3.0 |
| Percentage of students receiving free or reduced-price lunch within urbanicity |  |  |  |  |  |  |  |  |  |
| Central city |  |  |  |  |  |  |  |  |  |
| Less than 20 percent | 2.8 | 1.9 | 1.8 | 2.2 | 2.6 | 2.0 | 2.7 | 8.4 | 7.5 |
| 20 percent or more | 1.3 | 1.4 | 1.8 | 1.8 | 1.5 | 2.0 | 1.5 | 5.2 | 4.2 |
| Urban fringe/large town |  |  |  |  |  |  |  |  |  |
| Less than 20 percent | 1.7 | 1.1 | 1.0 | 1.6 | 1.7 | 1.7 | 1.7 | 6.4 | 3.5 |
| 20 percent or more | 2.0 | 2.1 | 2.1 | 1.9 | 1.9 | 1.8 | 1.9 | 8.2 | 4.8 |
| Rural/small town |  |  |  |  |  |  |  |  |  |
| Less than 20 percent | 1.6 | 1.0 | 0.8 | 1.1 | 1.6 | 1.4 | 1.6 | 9.4 | 4.2 |
| 20 percent or more | 1.2 | 0.8 | 0.9 | 1.0 | 1.1 | 1.0 | 1.0 | 4.9 | 4.7 |
| - Not available. |  |  |  | SOURCE: <br> Education and 1993 | U.S. Dep Statistics, -94 (Schoo | artment Schools and Question | of Education nd Staffing naire). | on, Nationa Survey, 1987 | Center for $3,1990-91 \text {, }$ |

Table S46-1 Standard errors for table 46-2

| Type of disability | 1986 | 1988 | 1990 | 1992 |
| :---: | :---: | :---: | :---: | :---: |
|  | Total |  |  |  |
| All disabilities listed |  |  |  |  |
| Specific learning disabilities | 0.02 | 0.02 | 0.02 | 0.01 |
| Mental retardation | 0.02 | 0.02 | 0.02 | 0.02 |
| Serious emotional disturbance | 0.02 | 0.02 | 0.02 | 0.02 |
| Male |  |  |  |  |
| All disabilities listed | 0.09 | 0.09 | 0.08 | 0.08 |
| Specific learning disabilities | 0.09 | 0.09 | 0.08 | 0.08 |
| Mental retardation | 0.09 | 0.09 | 0.08 | 0.08 |
| Serious emotional disturbance | 0.09 | 0.09 | 0.09 | 0.08 |
| Female |  |  |  |  |
| All disabilities listed | 0.16 | 0.16 | 0.15 | 0.14 |
| Specific learning disabilities | 0.16 | 0.16 | 0.15 | 0.15 |
| Mental retardation | 0.17 | 0.17 | 0.16 | 0.15 |
| Serious emotional disturbance | 0.17 | 0.17 | 0.16 | 0.15 |
| White |  |  |  |  |
| All disabilities listed | 0.02 | 0.02 | 0.02 | 0.02 |
| Specific learning disabilities | 0.02 | 0.02 | 0.02 | 0.02 |
| Mental retardation | 0.02 | 0.02 | 0.02 | 0.02 |
| Serious emotional disturbance | 0.02 | 0.02 | 0.02 | 0.02 |
| Black |  |  |  |  |
| All disabilities listed | 0.04 | 0.04 | 0.04 | 0.04 |
| Specific learning disabilities | 0.04 | 0.04 | 0.04 | 0.04 |
| Mental retardation | 0.04 | 0.04 | 0.04 | 0.04 |
| Serious emotional disturbance | 0.04 | 0.04 | 0.04 | 0.04 |
| Hispanic |  |  |  |  |
| All disabilities listed | 0.05 | 0.05 | 0.04 | 0.04 |
| Specific learning disabilities | 0.05 | 0.05 | 0.04 | 0.04 |
| Mental retardation | 0.05 | 0.05 | 0.05 | 0.04 |
| Serious emotional disturbance | 0.05 | 0.05 | 0.05 | 0.04 |

SOURCE: U.S. Department of Education, Office for Civil Rights,
National Summaries from the Elementary and Secondary School Civil Rights Survey, various years.

## Standard Error Tables

Table S47-1 Standard errors for table 47-1

| Type of drug | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Alcohol | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |


| Type of drug | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

- Not available.

SOURCE: University of Michigan, Survey Research Center, Institute for Social Research, Monitoring the Future Study.

Table S47-2 Standard errors for table 47-2

| Type of drug and grade | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alcohol |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| $10^{\text {th }}$-graders | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| $12^{\text {th }}$-graders | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| Marijuana/hashish |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 |
| $10^{\text {th }}$-graders | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 |
| $12^{\text {th }}$-graders | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 |
| Any illicit drug other than marijuana |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| $10^{\text {th }}$-graders | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| $12^{\text {th }}$-graders | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Stimulants |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 |
| $10^{\text {th }}$-graders | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| $12^{\text {th }}$-graders | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Inhalants |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| $10^{\text {th }}$-graders | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| $12^{\text {th }}$-graders | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| LSD |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 10th-graders | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| $12^{\text {th }}$-graders | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Cocaine |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| $10^{\text {th }}$-graders | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| $12^{\text {th }}$-graders | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Tranquilizers |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| $10^{\text {th }}$-graders | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| $12^{\text {th }}$-graders | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Cigarettes |  |  |  |  |  |  |
| $8^{\text {th }}$-graders | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| $10^{\text {th }}$-graders | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| $12^{\text {th }}$-graders | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 |

SOURCE: University of Michigan, Survey Research Center, Institute for Social Research, Monitoring the Future Study.

Standard Error Tables
Table S47-3 Standard errors for table 47-3

|  | Alcohol |  |  | Marijuana |  |  | Cocaine |  |  | Inhalants |  |  | Stimulants |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Selected characteristics | $8^{\text {th }}$ | $10^{\text {th }}$ | $12^{\text {th }}$ | $8^{\text {th }}$ | $10^{\text {th }}$ | $12^{\text {th }}$ | $8^{\text {th }}$ | $10^{\text {th }}$ | $12^{\text {th }}$ | $8^{\text {th }}$ | $10^{\text {th }}$ | $12^{\text {th }}$ | $8^{\text {th }}$ | $10^{\text {th }}$ | $12^{\text {th }}$ |
| Total | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 |
| Female | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 |
| College plans |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than 4 years or none | 1.1 | 0.9 | 0.7 | 1.1 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.9 | 0.7 | 0.5 | 0.9 | 0.8 | 0.6 |
| Complete 4 years | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Northeast | 0.9 | 0.8 | 0.8 | 0.6 | 0.8 | 0.9 | 0.3 | 0.3 | 0.4 | 0.6 | 0.5 | 0.6 | 0.5 | 0.5 | 0.6 |
| North Central | 0.8 | 0.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.2 | 0.3 | 0.3 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 |
| South | 0.6 | 0.6 | 0.6 | 0.4 | 0.6 | 0.6 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 |
| West | 0.8 | 0.9 | 0.9 | 0.7 | 0.8 | 0.9 | 0.3 | 0.4 | 0.4 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Population density |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Large metropolitan statistical area | 0.7 | 0.7 | 0.7 | 0.5 | 0.7 | 0.7 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| Other metropolitan statistical area | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 |
| Non-metropolitan statistical area | 0.7 | 0.7 | 0.7 | 0.5 | 0.7 | 0.7 | 0.2 | 0.3 | 0.3 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 |
| Parents' education range |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Some high school or less | 1.3 | 1.4 | 1.3 | 1.1 | 1.3 | 1.3 | 0.6 | 0.6 | 0.6 | 0.9 | 0.8 | 0.8 | 0.8 | 1.0 | 0.9 |
| Some high school to completed high school | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 0.8 | 0.2 | 0.3 | 0.3 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 |
| Completed high school to some college | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | 0.3 | 0.3 | 0.3 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 |
| Some college to completed college | 0.8 | 0.8 | 0.7 | 0.5 | 0.7 | 0.8 | 0.2 | 0.3 | 0.3 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 |
| Completed college to at least some graduate or professional school | 1.0 | 1.0 | 1.0 | 0.7 | 0.9 | 1.1 | 0.3 | 0.3 | 0.4 | 0.7 | 0.5 | 0.7 | 0.5 | 0.6 | 0.6 |

SOURCE: Lloyd D. Johnston, Patrick O'Malley, and Jerald G. Bachman,
National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995, Volume I, Secondary School Students, table 7, Institute for Social Research, University of Michigan, 1996.

Table S47-4 Standard errors for table 47-4

|  | $8^{\text {th }}$-graders in 1988 |  |  | $10^{\text {th }}$-graders in 1990 |  |  | $12^{\text {th }}$-graders in 1992 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sex, race/ethnicity and control of school | Ever | Once or twice | More than twice | Ever | Once or twice | More than twice | Ever | Once or twice | More than twice |
| All students | 0.3 | 0.2 | 0.1 | 0.6 | 0.4 | 0.3 | 0.5 | 0.3 | 0.3 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 0.4 | 0.3 | 0.2 | 0.8 | 0.7 | 0.5 | 0.7 | 0.5 | 0.5 |
| Female | 0.3 | 0.2 | 0.2 | 0.6 | 0.5 | 0.4 | 0.6 | 0.4 | 0.4 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |
| White | 0.3 | 0.3 | 0.2 | 0.7 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 |
| Black | 0.6 | 0.5 | 0.3 | 1.5 | 1.4 | 0.6 | 1.1 | 0.9 | 0.5 |
| Hispanic | 0.8 | 0.6 | 0.5 | 1.2 | 0.8 | 0.8 | 1.5 | 1.0 | 1.2 |
| Asian/Pacific Islander | 0.7 | 0.6 | 0.4 | 1.8 | 1.5 | 1.1 | 1.4 | 1.0 | 1.0 |
| American Indian/Alaskan Native | 2.1 | 1.7 | 1.2 | 5.9 | 5.7 | 1.8 | 5.0 | 3.1 | 2.6 |
| Control of school |  |  |  |  |  |  |  |  |  |
| Public | 0.3 | 0.2 | 0.2 | 0.6 | 0.5 | 0.3 | 0.5 | 0.3 | 0.4 |
| Catholic | 0.4 | 0.4 | 0.2 | 1.9 | 1.7 | 0.8 | 1.7 | 1.3 | 1.0 |
| Private, other religious affiliation | 0.5 | 0.4 | 0.3 | 1.1 | 0.5 | 1.1 | 1.1 | 1.0 | 0.3 |
| Private, no religious affiliation | 0.7 | 0.6 | 0.5 | 1.6 | 1.1 | 1.2 | 2.5 | 0.9 | 2.2 |

[^98]Standard Error Tables
Table S47-5 Standard errors for table 47-5

|  | $8^{\text {th }}$-graders in 1988 |  |  | $10^{\text {th }}$-graders in 1990 |  |  | $12^{\text {th }}$-graders in 1992 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School characteristics | Ever | Once or twice | More than twice | Ever | Once or twice | More than twice | Ever | Once or twice | More than twice |
| All public schools | 0.3 | 0.2 | 0.2 | 0.6 | 0.5 | 0.3 | 0.5 | 0.3 | 0.4 |
| Minority enrollment |  |  |  |  |  |  |  |  |  |
| Less than 20 percent | 0.4 | 0.3 | 0.2 | 0.8 | 0.6 | 0.4 | - | - | - |
| 20 percent or more | 0.5 | 0.3 | 0.3 | 0.8 | 0.6 | 0.5 | - | - | - |
| School size |  |  |  |  |  |  |  |  |  |
| Less than 150 | 2.1 | 1.3 | 1.5 | 1.9 | 0.0 | 1.9 | 2.8 | 1.6 | 2.7 |
| 150-449 | 0.7 | 0.5 | 0.3 | 1.7 | 1.6 | 0.7 | 1.2 | 0.7 | 1.0 |
| 450-749 | 0.5 | 0.4 | 0.3 | 1.2 | 0.9 | 0.7 | 1.7 | 0.9 | 1.4 |
| 750 or more | 0.5 | 0.4 | 0.3 | 0.6 | 0.5 | 0.4 | 0.6 | 0.4 | 0.4 |
| Metropolitan status |  |  |  |  |  |  |  |  |  |
| Urban | 0.7 | 0.5 | 0.3 | 1.1 | 0.8 | 0.7 | 1.1 | 0.8 | 0.8 |
| Suburban | 0.5 | 0.4 | 0.3 | 0.8 | 0.6 | 0.4 | 0.8 | 0.5 | 0.6 |
| Rural | 0.5 | 0.4 | 0.3 | 0.9 | 0.7 | 0.5 | 0.7 | 0.5 | 0.4 |
| Percentage of students who received free or reduced-price lunch Total |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 0-5 | 0.8 | 0.6 | 0.3 | 1.1 | 0.9 | 0.6 | 1.2 | 0.8 | 1.1 |
| 6-20 | 0.6 | 0.4 | 0.3 | 0.9 | 0.8 | 0.5 | 0.8 | 0.6 | 0.6 |
| 21-40 | 0.6 | 0.5 | 0.3 | 1.1 | 0.7 | 0.7 | 0.9 | 0.7 | 0.6 |
| 41 or more | 0.7 | 0.5 | 0.4 | 1.7 | 1.2 | 0.9 | 1.4 | 0.9 | 1.0 |
| Urban |  |  |  |  |  |  |  |  |  |
| 0-5 | 2.9 | 2.1 | 1.0 | 2.6 | 1.8 | 1.4 | 2.9 | 2.4 | 1.7 |
| 6-20 | 1.5 | 1.0 | 0.8 | 1.8 | 1.5 | 1.1 | 1.9 | 1.6 | 1.4 |
| 21-40 | 1.2 | 1.0 | 0.6 | 2.0 | 1.3 | 1.6 | 2.1 | 1.6 | 1.6 |
| 41 or more | 1.1 | 0.8 | 0.5 | 3.1 | 2.1 | 1.9 | 2.5 | 1.5 | 2.0 |
| Suburban |  |  |  |  |  |  |  |  |  |
| 0-5 | 0.9 | 0.6 | 0.4 | 1.3 | 1.1 | 0.7 | 1.5 | 0.9 | 1.4 |
| 6-20 | 0.8 | 0.6 | 0.4 | 1.3 | 1.0 | 0.8 | 1.3 | 0.8 | 0.9 |
| 21-40 | 1.3 | 0.9 | 0.7 | 3.0 | 1.9 | 1.6 | 1.5 | 1.3 | 0.8 |
| 41 or more | 1.4 | 0.9 | 0.8 | 2.6 | 1.7 | 1.4 | 2.8 | 1.7 | 1.7 |
| Rural |  |  |  |  |  |  |  |  |  |
| 0-5 | 1.7 | 1.4 | 0.6 | 3.2 | 2.1 | 2.3 | 2.1 | 1.6 | 1.2 |
| 6-20 | 1.0 | 0.7 | 0.6 | 1.7 | 1.5 | 0.8 | 1.1 | 0.8 | 0.8 |
| 21-40 | 0.8 | 0.5 | 0.4 | 1.5 | 1.0 | 0.9 | 1.1 | 0.8 | 0.7 |
| 41 or more | 1.1 | 0.8 | 0.6 | 2.6 | 2.1 | 1.3 | 2.0 | 1.4 | 0.8 |

- Not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, Base Year (1988), First Follow-up (1990), and Second Follow-up (1992) Student Surveys.

## Table S49-1 Standard errors for table 49-1

| Perceptions and attitudes | Public |  | Private |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1987-88 | 1993-94 | 1987-88 | 1993-94 |
| Percentage of teachers who strongly agree with the following: |  |  |  |  |
| Teachers in this school are evaluated fairly | 0.3 | 0.5 | 0.9 | 0.6 |
| The principal lets staff members know what is expected of them | 0.3 | 0.5 | 0.9 | 0.6 |
| The school administration's behavior toward the staff is supportive and encouraging | 0.3 | 0.4 | 1.1 | 0.6 |
| I am satisfied with my teaching salary | 0.2 | 0.2 | 0.6 | 0.4 |
| The level of student misbehavior (e.g., noise, horseplay, or fighting in the halls, cafeteria, or student lounge) in this school interferes with my teaching | 0.2 | 0.3 | 0.4 | 0.2 |
| Teachers participate in making most of the important educational decisions |  |  |  |  |
| I receive a great deal of support from parents for the work I do | 0.2 | 0.2 | 1.0 | 0.8 |
| Necessary materials are available as needed by the staff | 0.3 | 0.4 | 1.0 | 0.6 |
| The principal does a poor job of getting resources for this school | 0.1 | 0.1 | 0.3 | 0.1 |
| Routine duties and paperwork interfere with my job of teaching | 0.3 | 0.3 | 0.5 | 0.3 |
| My principal enforces school rules for student conduct and backs me up when I need it |  |  |  |  |
| The principal talks with me frequently about my instructional practices | 0.2 | 0.3 | 0.7 | 0.4 |
| Rules for student behavior are consistently enforced by teachers in this school, even for students who are not in their classes | 0.3 | 0.3 | 0.8 | 0.6 |
| Most of my colleagues share my beliefs and values about what the central mission of the school should be | 0.3 | 0.4 | 0.9 | 0.6 |
| The principal knows what kind of school he/she wants and has communicated it to the staff | 0.3 | 0.4 | 1.1 | 0.6 |
| There is a great deal of cooperative effort among the staff members | 0.3 | 0.5 | 0.9 | 0.6 |
| In this school, staff members are recognized for a job well done | 0.2 | 0.4 | 1.0 | 0.5 |
| I have to follow rules in this school that conflict with my best professional judgment | 0.1 | 0.2 | 0.3 | 0.2 |
| I am satisfied with my class size | 0.3 | 0.4 | 1.0 | 0.6 |
| I make a conscious effort to coordinate the content of my courses with that of other teachers | 0.3 | 0.4 | 0.7 | 0.5 |
| Goals and priorities for the school are clear | 0.3 | 0.3 | 1.1 | 0.6 |
| The amount of student tardiness and class cutting in this school interferes with my teaching | 0.2 | 0.2 | 0.3 | 0.2 |
| I sometimes feel it is a waste of time to try to do my best as a teacher | 0.1 | 0.1 | 0.3 | 0.2 |
| I plan with the library media specialist/librarian for the integration of library/ media services into my teaching | - | 0.3 | - | 0.6 |
| Library/media materials are adequate to support my instructional objectives | - | 0.4 | - | 0.6 |
| If I could go back to college and start again I would most likely become a teacher again | 0.3 | 0.3 | 0.8 | 0.5 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88 and 199394.

## Table S49-2 Standard errors for table 49-2

|  | Public | Private |
| :---: | :---: | :---: |
| Perceptions and attitudes | Elementary Secondary | Elementary Secondary |
| Percentage of teachers who strongly agree with the following: |  |  |
| Teachers in this school are evaluated fairly | $0.8 \quad 0.4$ | $0.7 \quad 1.0$ |
| The principal lets staff members know what is expected of them | $\begin{array}{ll}0.8 & 0.5\end{array}$ | $0.7 \quad 1.0$ |
| The school administration's behavior toward the staff is supportive and encouraging | 0.6 | $0.9 \quad 1.0$ |
| I am satisfied with my teaching salary | $0.4-0.3$ | $\begin{array}{ll}0.5 & 0.7\end{array}$ |
| The level of student misbehavior (e.g., noise, horseplay, or fighting in the halls, cafeteria, or student lounge) in this school interferes with my teaching | $0.4 \quad 0.3$ | $0.2 \quad 0.4$ |
| Teachers participate in making most of the important educational decisions in this school | $0.4 \quad 0.3$ | $0.9 \quad 1.1$ |
| I receive a great deal of support from parents for the work I do | $0.4 \quad 0.3$ | $1.1 \quad 0.9$ |
| Necessary materials are available as needed by the staff | $0.6 \quad 0.5$ | $0.9 \quad 0.8$ |
| The principal does a poor job of getting resources for this school | $0.2-0.1$ | $0.2-0.3$ |
| Routine duties and paperwork interfere with my job of teaching | $\begin{array}{ll}0.5 & 0.4\end{array}$ | $0.4 \quad 0.6$ |
| My principal enforces school rules for student conduct and backs me up when I need it | $0.8 \quad 0.4$ | $0.9 \quad 0.9$ |
| The principal talks with me frequently about my instructional practices | $0.4 \quad 0.2$ | $\begin{array}{ll}0.5 & 0.7\end{array}$ |
| Rules for student behavior are consistently enforced by teachers in this school, even for students who are not in their classes | $\begin{array}{ll}0.5 & 0.3\end{array}$ | $0.8 \quad 1.1$ |
| Most of my colleagues share my beliefs and values about what the central mission of the school should be | $0.6 \quad 0.4$ | $0.7 \quad 1.2$ |
| The principal knows what kind of school he/she wants and has communicated it to the staff | $\begin{array}{ll}0.7 & 0.5\end{array}$ | $0.7 \quad 1.2$ |
| There is a great deal of cooperative effort among the staff members | $0.7 \quad 0.4$ | $0.8 \quad 1.1$ |
| In this school, staff members are recognized for a job well done | $0.6 \quad 0.4$ | $\begin{array}{ll}0.7 & 1.0\end{array}$ |
| I have to follow rules in this school that conflict with my best professional judgment | $0.3-2.2$ | $0.3-0.4$ |
| I am satisfied with my class size | $\begin{array}{ll}0.7 & 0.4\end{array}$ | $\begin{array}{ll}0.8 & 0.9\end{array}$ |
| I make a conscious effort to coordinate the content of my courses with that of other teachers | 0.6 | $0.7 \quad 0.8$ |
| Goals and priorities for the school are clear | $0.6-0.4$ | $0.8 \quad 1.1$ |
| The amount of student tardiness and class cutting in this school interferes with my teaching | 0.20 .2 | $0.1 \quad 0.3$ |
| I sometimes feel it is a waste of time to try to do my best as a teacher | $0.2-2$ | $\begin{array}{ll}0.2 & 0.3\end{array}$ |
| I plan with the library media specialist/librarian for the integration of library/ media services into my teaching | 0.6 0.3 | $\begin{array}{ll}0.7 & 0.8\end{array}$ |
| Library/media materials are adequate to support my instructional objectives | 0.6 0.3 | $\begin{array}{ll}0.7 & 0.8\end{array}$ |
| If I could go back to college and start again I would most likely become a teacher again | $0.5-4$ | $0.5-0.8$ |

[^99]Table S49-3 Standard errors for table 49-3

| Perceptions and attitudes | Total | Percentage of students eligible for free or reduced-price lunch |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0-5 | 6-20 | 21-40 | 41 or more |
| Percentage of teachers who strongly agree with the following: |  |  |  |  |  |
| Teachers in this school are evaluated fairly | 0.5 | 1.1 | 0.8 | 0.7 | 0.9 |
| The principal lets staff members know what is expected of them | 0.5 | 1.1 | 0.9 | 0.8 | 0.9 |
| The school administration's behavior toward the staff is supportive and encouraging | 0.4 | 1.4 | 0.9 | 0.7 | 0.8 |
| I am satisfied with my teaching salary | 0.2 | 1.2 | 0.6 | 0.7 | 0.3 |
| The level of student misbehavior (e.g., noise, horseplay, or fighting in the halls, cafeteria, or student lounge) in this school interferes with my teaching | 0.3 | 0.5 | 0.4 | 0.5 | 0.6 |
| Teachers participate in making most of the important educational decisions |  |  |  |  |  |
| I receive a great deal of support from parents for the work I do | 0.2 | 1.2 | 0.6 | 0.5 | 0.4 |
| Necessary materials are available as needed by the staff | 0.4 | 1.3 | 0.8 | 0.7 | 0.7 |
| The principal does a poor job of getting resources for this school | 0.1 | 0.5 | 0.3 | 0.2 | 0.3 |
| Routine duties and paperwork interfere with my job of teaching | 0.3 | 1.0 | 0.7 | 0.7 | 0.6 |
| My principal enforces school rules for student conduct and backs me up when I need it | 0.5 | 1.2 | 0.9 | 0.7 | 0.8 |
| The principal talks with me frequently about my instructional practices | 0.3 | 0.7 | 0.4 | 0.4 | 0.5 |
| Rules for student behavior are consistently enforced by teachers in this school, even for students who are not in their classes | 0.3 | 1.3 | 0.7 | 0.7 | 0.6 |
| Most of my colleagues share my beliefs and values about what the central mission of the school should be | 0.4 | 1.3 | 0.9 | 0.8 | 0.6 |
| The principal knows what kind of school he/she wants and has communicated it to the staff | 0.4 | 1.4 | 0.9 | 0.7 | 0.9 |
| There is a great deal of cooperative effort among the staff members | 0.5 | 1.3 | 0.9 | 0.8 | 0.8 |
| In this school, staff members are recognized for a job well done | 0.4 | 1.2 | 0.8 | 0.7 | 0.7 |
| I have to follow rules in this school that conflict with my best professional judgment | 0.2 | 0.5 | 0.2 | 0.3 | 0.4 |
| I am satisfied with my class size | 0.4 | 1.1 | 0.7 | 0.7 | 0.6 |
| I make a conscious effort to coordinate the content of my courses with that of other teachers | 0.4 | 1.3 | 0.8 | 0.8 | 0.7 |
| Goals and priorities for the school are clear | 0.3 | 1.2 | 0.7 | 0.8 | 0.6 |
| The amount of student tardiness and class cutting in this school interferes with my teaching | 0.2 | 0.5 | 0.2 | 0.5 | 0.4 |
| I sometimes feel it is a waste of time to try to do my best as a teacher | 0.1 | 0.4 | 0.3 | 0.3 | 0.3 |
| I plan with the library media specialist/librarian for the integration of library/ media services into my teaching | 0.3 | 0.9 | 0.7 | 0.6 | 0.7 |
| Library/media materials are adequate to support my instructional objectives | 0.4 | 1.0 | 0.7 | 0.8 | 0.7 |
| If I could go back to college and start again I would most likely become a teacher again | 0.3 | 1.1 | 0.7 | 0.8 | 0.6 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Schools and Staffing Survey, 1993-94.

Table S49-4 Standard errors for table 49-4

| Perceptions and attitudes | Total | Urbanicity |  |  | Percentage of $\underline{\text { minority enrollment }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Central city | Urban fringe/ large town | Rural/ <br> small <br> town | Less <br> than 20 percent | $\begin{array}{r} 20 \\ \text { percent } \\ \text { or more } \\ \hline \end{array}$ |
| Percentage of teachers who strongly agree with the following: |  |  |  |  |  |  |
| Teachers in this school are evaluated fairly | 0.5 | 0.8 | 0.8 | 0.8 | 0.5 | 0.7 |
| The principal lets staff members know what is expected of them | 0.5 | 1.0 | 0.8 | 0.6 | 0.6 | 0.8 |
| The school administration's behavior toward the staff is supportive and encouraging | 0.4 | 0.9 | 0.9 | 0.6 | 0.6 | 0.6 |
| I am satisfied with my teaching salary | 0.2 | 0.4 | 0.6 | 0.4 | 0.4 | 0.3 |
| The level of student misbehavior (e.g., noise, horseplay, or fighting in the halls, cafeteria, or student lounge) in this school interferes with my teaching | 0.3 | 0.6 | 0.4 | 0.3 | 0.2 | 0.5 |
| Teachers participate in making most of the important educational decisions in this school | 0.3 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 |
| I receive a great deal of support from parents for the work I do | 0.2 | 0.4 | 0.6 | 0.3 | 0.4 | 0.4 |
| Necessary materials are available as needed by the staff | 0.4 | 0.8 | 0.7 | 0.5 | 0.5 | 0.6 |
| The principal does a poor job of getting resources for this school | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 |
| Routine duties and paperwork interfere with my job of teaching | 0.3 | 0.7 | 0.6 | 0.4 | 0.5 | 0.5 |
| My principal enforces school rules for student conduct and backs me up when I need it | 0.5 | 0.9 | 0.9 | 0.7 | 0.7 | 0.7 |
| The principal talks with me frequently about my instructional practices | 0.3 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 |
| Rules for student behavior are consistently enforced by teachers in this school, even for students who are not in their classes | 0.3 | 0.6 | 0.7 | 0.5 | 0.4 | 0.5 |
| Most of my colleagues share my beliefs and values about what the central mission of the school should be | 0.4 | 0.6 | 0.8 | 0.6 | 0.6 | 0.5 |
| The principal knows what kind of school he/she wants and has communicated it to the staff | 0.4 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 |
| There is a great deal of cooperative effort among the staff members | 0.5 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 |
| In this school, staff members are recognized for a job well done | 0.4 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 |
| I have to follow rules in this school that conflict with my best professional judgment | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 |
| I am satisfied with my class size | 0.4 | 0.6 | 0.6 | 0.5 | 0.4 | 0.6 |
| I make a conscious effort to coordinate the content of my courses with that of other teachers | 0.4 | 0.7 | 0.7 | 0.5 | 0.5 | 0.6 |
| Goals and priorities for the school are clear | 0.3 | 0.6 | 0.9 | 0.6 | 0.5 | 0.5 |
| The amount of student tardiness and class cutting in this school interferes with my teaching | 0.2 | 0.5 | 0.4 | 0.2 | 0.2 | 0.4 |
| I sometimes feel it is a waste of time to try to do my best as a teacher I plan with the library media specialist/librarian for the integration of library/ media services into my teaching | 0.1 0.3 | 0.4 0.7 | 0.2 0.6 | 0.2 0.5 | 0.2 0.4 | 0.3 0.6 |
| Library/media materials are adequate to support my instructional objectives | 0.4 | 0.7 | 0.5 | 0.4 | 0.4 | 0.6 |
| If I could go back to college and start again I would most likely become a teacher again | 0.3 | 0.5 | 0.6 | 0.5 | 0.5 | 0.4 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94.

Table S49-5 Standard errors for table 49-5

| Perceptions and attitudes | Total | School size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \text { Less } \\ \text { than } 150 \end{array}$ | 150-499 | $\begin{array}{cc} \hline 750 \text { or } \\ 500-749 & \text { more } \end{array}$ |  |
| Percentage of teachers who strongly agree with the following: |  |  |  |  |  |
| Teachers in this school are evaluated fairly | 0.5 | 1.1 | 0.7 | 0.9 | 0.6 |
| The principal lets staff members know what is expected of them | 0.5 | 1.1 | 0.6 | 0.8 | 0.7 |
| The school administration's behavior toward the staff is supportive and encouraging | 0.4 | 1.1 | 0.6 | 0.7 | 0.6 |
| I am satisfied with my teaching salary | 0.2 | 0.7 | 0.5 | 0.7 | 0.4 |
| The level of student misbehavior (e.g., noise, horseplay, or fighting in the halls, cafeteria, or student lounge) in this school interferes with my teaching | 0.3 | 0.4 | 0.4 | 0.6 | 0.5 |
| Teachers participate in making most of the important educational decisions in this school | 0.3 | 1.2 | 0.5 | 0.6 | 0.3 |
| I receive a great deal of support from parents for the work I do | 0.2 | 1.2 | 0.4 | 0.5 | 0.4 |
| Necessary materials are available as needed by the staff | 0.4 | 0.9 | 0.6 | 0.9 | 0.7 |
| The principal does a poor job of getting resources for this school | 0.1 | 0.5 | 0.2 | 0.3 | 0.2 |
| Routine duties and paperwork interfere with my job of teaching | 0.3 | 0.7 | 0.4 | 0.7 | 0.6 |
| My principal enforces school rules for student conduct and backs me up when I need it | 0.5 | 1.0 | 0.5 | 1.0 | 0.6 |
| The principal talks with me frequently about my instructional practices | 0.3 | 0.9 | 0.4 | 0.5 | 0.3 |
| Rules for student behavior are consistently enforced by teachers in this school, even for students who are not in their classes | 0.3 | 0.9 | 0.6 | 0.8 | 0.5 |
| Most of my colleagues share my beliefs and values about what the central mission of the school should be | 0.4 | 1.0 | 0.7 | 0.8 | 0.6 |
| The principal knows what kind of school he/she wants and has communicated it to the staff | 0.4 | 1.1 | 0.7 | 0.9 | 0.8 |
| There is a great deal of cooperative effort among the staff members | 0.5 | 1.0 | 0.6 | 0.7 | 0.6 |
| In this school, staff members are recognized for a job well done | 0.4 | 1.0 | 0.7 | 0.7 | 0.4 |
| I have to follow rules in this school that conflict with my best professional judgment | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 |
| I am satisfied with my class size | 0.4 | 1.2 | 0.5 | 0.8 | 0.5 |
| I make a conscious effort to coordinate the content of my courses with that of other teachers | 0.4 | 0.9 | 0.6 | 0.8 | 0.6 |
| Goals and priorities for the school are clear | 0.3 | 1.0 | 0.6 | 0.8 | 0.5 |
| The amount of student tardiness and class cutting in this school interferes with my teaching | 0.2 | 0.4 | 0.2 | 0.3 | 0.4 |
| I sometimes feel it is a waste of time to try to do my best as a teacher | 0.1 | 0.3 | 0.2 | 0.3 | 0.3 |
| I plan with the library media specialist/librarian for the integration of library/ media services into my teaching | 0.3 | 0.7 | 0.5 | 0.8 | 0.5 |
| Library/media materials are adequate to support my instructional objectives | 0.4 | 0.7 | 0.5 | 0.8 | 0.5 |
| If I could go back to college and start again I would most likely become a teacher again | 0.3 | 0.8 | 0.5 | 0.7 | 0.5 |

[^100]Education Statistics, Schools and Staffing Survey, 1993-94.

Standard Error Tables
Table S50-1 Standard errors for table 50-1

|  | All students |  |  |  |  |  | Black |  |  | Hispanic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total | 20 or more hours | 35 or more hours | Total | 20 or more hours | 35 or <br> more hours | Total | 20 or more hours | 35 or more hours | Total | 20 or more hours | 35 or <br> more <br> hours |
|  | Full-time college students |  |  |  |  |  |  |  |  |  |  |  |
| 1970 | 0.9 | 0.7 | 0.4 | 1.0 | 0.7 | 0.4 | 3.0 | 2.0 | 1.0 | - | - | - |
| 1971 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.4 | 2.5 | 1.6 | 1.0 | - | - | - |
| 1972 | 0.9 | 0.7 | 0.3 | 1.0 | 0.7 | 0.4 | 2.7 | 2.2 | 1.6 | 5.2 | 4.3 | 1.7 |
| 1973 | 0.9 | 0.7 | 0.4 | 1.0 | 0.8 | 0.4 | 3.0 | 2.4 | 1.6 | 4.7 | 3.4 | 1.8 |
| 1974 | 0.9 | 0.7 | 0.4 | 1.0 | 0.8 | 0.4 | 2.8 | 2.2 | 1.4 | 4.2 | 3.3 | 2.2 |
| 1975 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.4 | 2.5 | 2.0 | 1.3 | 4.1 | 3.2 | 1.8 |
| 1976 | 0.9 | 0.7 | 0.3 | 1.0 | 0.7 | 0.4 | 2.3 | 1.8 | 1.2 | 4.0 | 2.9 | 1.4 |
| 1977 | 0.9 | 0.7 | 0.4 | 1.0 | 0.8 | 0.4 | 2.4 | 1.8 | 1.3 | 4.3 | 3.7 | 1.8 |
| 1978 | 0.9 | 0.7 | 0.4 | 1.0 | 0.8 | 0.4 | 2.4 | 1.9 | 1.2 | 4.9 | 4.3 | 2.5 |
| 1979 | 0.9 | 0.7 | 0.4 | 1.0 | 0.8 | 0.4 | 2.5 | 2.0 | 1.3 | 4.1 | 3.4 | 1.9 |
| 1980 | 0.9 | 0.7 | 0.3 | 1.0 | 0.8 | 0.4 | 2.5 | 1.9 | 1.3 | 4.2 | 3.8 | 1.8 |
| 1981 | 0.9 | 0.7 | 0.4 | 1.0 | 0.8 | 0.4 | 2.4 | 1.8 | 1.1 | 3.9 | 3.3 | 1.9 |
| 1982 | 0.9 | 0.7 | 0.3 | 1.0 | 0.8 | 0.4 | 2.7 | 2.0 | 1.2 | 4.3 | 3.2 | 1.1 |
| 1983 | 0.9 | 0.7 | 0.4 | 1.0 | 0.8 | 0.4 | 2.7 | 2.2 | 0.9 | 4.1 | 3.5 | 2.0 |
| 1984 | 0.9 | 0.8 | 0.4 | 1.0 | 0.8 | 0.4 | 2.6 | 2.1 | 1.1 | 4.0 | 3.3 | 1.7 |
| 1985 | 0.9 | 0.8 | 0.4 | 1.0 | 0.9 | 0.4 | 2.7 | 2.3 | 1.3 | 4.4 | 3.8 | 1.6 |
| 1986 | 0.9 | 0.8 | 0.4 | 1.1 | 0.9 | 0.4 | 2.5 | 2.0 | 1.1 | 4.2 | 3.6 | 1.2 |
| 1987 | 0.9 | 0.8 | 0.4 | 1.0 | 0.9 | 0.4 | 2.7 | 2.2 | 1.2 | 4.3 | 4.0 | 2.3 |
| 1988 | 1.0 | 0.9 | 0.4 | 1.1 | 1.0 | 0.5 | 3.0 | 2.5 | 1.2 | 4.9 | 4.5 | 2.5 |
| 1989 | 1.0 | 0.9 | 0.5 | 1.1 | 1.0 | 0.5 | 2.8 | 2.4 | 1.3 | 4.9 | 4.7 | 2.4 |
| 1990 | 0.9 | 0.8 | 0.4 | 1.1 | 0.9 | 0.5 | 2.7 | 2.3 | 1.0 | 4.5 | 4.0 | 2.2 |
| 1991 | 0.9 | 0.8 | 0.4 | 1.1 | 0.9 | 0.5 | 2.8 | 2.4 | 1.1 | 4.1 | 3.8 | 1.7 |
| 1992 | 0.9 | 0.8 | 0.4 | 1.1 | 0.9 | 0.5 | 2.7 | 2.3 | 1.2 | 3.9 | 3.6 | 1.7 |
| 1993 | 0.9 | 0.8 | 0.4 | 1.1 | 1.0 | 0.5 | 2.7 | 2.3 | 1.1 | 3.8 | 3.3 | 1.8 |
| 1994 | 0.9 | 0.8 | 0.4 | 1.1 | 1.0 | 0.5 | 2.6 | 2.3 | 1.3 | 4.1 | 3.7 | 1.8 |
| 1995 | 0.9 | 0.8 | 0.5 | 1.1 | 1.0 | 0.5 | 2.7 | 2.4 | 1.1 | 3.5 | 3.1 | 2.0 |

Table S50-1 Standard errors for table 50-1 - Continued

|  | All students |  |  | White |  |  | Black |  |  | Hispanic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total | 20 or more hours | 35 or <br> more <br> hours | Total | 20 or <br> more <br> hours | 35 or <br> more <br> hours | Total | 20 or <br> more <br> hours | 35 or <br> more <br> hours | Total | 20 or more hours | 35 or <br> more <br> hours |
|  | Part-time college students |  |  |  |  |  |  |  |  |  |  |  |
| 1970 | 1.9 | 2.1 | 2.4 | 1.9 | 2.2 | 2.5 | - | - | - | - | - | - |
| 1971 | 1.7 | 2.0 | 2.3 | 1.8 | 2.1 | 2.4 | 6.6 | 7.2 | 7.9 | - | - | - |
| 1972 | 1.7 | 2.0 | 2.3 | 1.8 | 2.1 | 2.5 | 6.2 | 6.5 | 6.9 | - | - | - |
| 1973 | 1.6 | 2.0 | 2.3 | 1.7 | 2.1 | 2.5 | 7.6 | 7.8 | 8.2 | - | - | - |
| 1974 | 1.5 | 1.8 | 2.1 | 1.6 | 1.9 | 2.3 | 6.7 | 6.9 | 7.3 | - | - | - |
| 1975 | 1.6 | 1.8 | 2.1 | 1.7 | 2.0 | 2.2 | 6.0 | 6.8 | 6.9 | - | - | - |
| 1976 | 1.5 | 1.7 | 2.0 | 1.5 | 1.8 | 2.2 | 6.6 | 7.0 | 7.3 | - | - | - |
| 1977 | 1.5 | 1.7 | 2.0 | 1.5 | 1.8 | 2.2 | 6.1 | 6.3 | 6.4 | - | - | - |
| 1978 | 1.4 | 1.7 | 2.0 | 1.4 | 1.8 | 2.2 | 7.3 | 7.7 | 7.0 | 5.8 | 6.4 | 7.3 |
| 1979 | 1.4 | 1.7 | 2.0 | 1.4 | 1.7 | 2.2 | 6.5 | 6.9 | 7.3 | - | - | - |
| 1980 | 1.4 | 1.7 | 2.0 | 1.5 | 1.9 | 2.2 | 6.4 | 7.1 | 6.9 | 6.3 | 6.7 | 7.4 |
| 1981 | 1.4 | 1.7 | 2.0 | 1.5 | 1.8 | 2.2 | 5.8 | 6.5 | 6.6 | - | - | - |
| 1982 | 1.6 | 1.9 | 2.0 | 1.7 | 2.1 | 2.3 | 6.4 | 6.5 | 6.2 | 5.6 | 6.5 | 7.0 |
| 1983 | 1.6 | 1.8 | 2.1 | 1.6 | 1.9 | 2.4 | 7.0 | 7.0 | 5.9 | 6.3 | 6.7 | 7.1 |
| 1984 | 1.5 | 1.8 | 2.1 | 1.6 | 2.0 | 2.4 | 5.7 | 5.9 | 6.0 | 5.0 | 6.1 | 8.1 |
| 1985 | 1.5 | 1.7 | 2.1 | 1.6 | 1.9 | 2.4 | 6.0 | 6.3 | 6.6 | 6.2 | 7.9 | 7.8 |
| 1986 | 1.4 | 1.8 | 2.1 | 1.5 | 1.9 | 2.4 | 5.8 | 6.1 | 6.9 | 5.5 | 6.7 | 6.9 |
| 1987 | 1.4 | 1.6 | 2.0 | 1.5 | 1.8 | 2.3 | 5.5 | 5.8 | 5.9 | 4.6 | 5.7 | 6.8 |
| 1988 | 1.4 | 1.7 | 2.2 | 1.5 | 1.8 | 2.5 | 6.8 | 7.6 | 8.2 | 6.3 | 7.6 | 8.5 |
| 1989 | 1.6 | 1.8 | 2.3 | 1.6 | 2.0 | 2.6 | 6.7 | 7.1 | 7.5 | 6.0 | 6.8 | 8.4 |
| 1990 | 1.6 | 1.8 | 2.2 | 1.7 | 2.0 | 2.5 | 5.0 | 5.0 | 5.9 | 5.7 | 6.1 | 7.4 |
| 1991 | 1.5 | 1.9 | 2.2 | 1.6 | 2.1 | 2.5 | 7.2 | 7.3 | 7.4 | 5.6 | 6.4 | 6.8 |
| 1992 | 1.6 | 1.8 | 2.1 | 1.7 | 2.1 | 2.5 | 5.4 | 6.1 | 6.5 | 5.5 | 5.8 | 6.0 |
| 1993 | 1.5 | 1.8 | 2.1 | 1.5 | 2.0 | 2.4 | 6.7 | 7.0 | 6.8 | 5.5 | 6.2 | 6.0 |
| 1994 | 1.4 | 1.7 | 2.0 | 1.5 | 2.0 | 2.4 | 5.0 | 5.4 | 5.8 | 4.6 | 5.2 | 5.2 |
| 1995 | 1.5 | 1.8 | 2.0 | 1.7 | 2.2 | 2.5 | 5.5 | 5.8 | 5.7 | 4.9 | 5.1 | 5.6 |
| - Not ava |  |  |  |  |  |  | U.S. De urrent | artmen opulation | of Com Surve | Bure | of the | Eensus, |

Standard Error Tables
Table S50-2 Standard errors for table 50-2

|  | All students |  |  | White |  |  | Black |  |  | Hispanic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total | 20 or more hours | 35 or <br> more <br> hours | Total | 20 or more hours | 35 or <br> more <br> hours | Total | 20 or more hours | 35 or <br> more <br> hours | Total | 20 or <br> more <br> hours | 35 or <br> more <br> hours |
| 1970 | 0.8 | 0.5 | 0.3 | 0.9 | 0.6 | 0.3 | 2.0 | 1.1 | 0.7 | - | - | - |
| 1971 | 0.8 | 0.5 | 0.2 | 0.8 | 0.6 | 0.3 | 1.8 | 1.2 | 0.7 | - | - | - |
| 1972 | 0.8 | 0.6 | 0.3 | 0.9 | 0.7 | 0.3 | 1.6 | 1.1 | 0.7 | 4.7 | 3.1 | 1.7 |
| 1973 | 0.8 | 0.6 | 0.3 | 0.9 | 0.7 | 0.3 | 1.7 | 1.2 | 0.6 | 5.1 | 3.5 | 2.2 |
| 1974 | 0.8 | 0.6 | 0.3 | 0.9 | 0.7 | 0.3 | 1.8 | 1.4 | 0.7 | 4.6 | 3.4 | 1.8 |
| 1975 | 0.8 | 0.5 | 0.3 | 0.9 | 0.7 | 0.3 | 1.6 | 1.0 | 0.5 | 4.2 | 3.1 | 1.8 |
| 1976 | 0.8 | 0.6 | 0.3 | 0.9 | 0.7 | 0.3 | 1.6 | 1.1 | 0.7 | 4.2 | 3.2 | 1.7 |
| 1977 | 0.8 | 0.6 | 0.3 | 0.9 | 0.7 | 0.3 | 1.6 | 1.1 | 0.6 | 4.5 | 3.7 | 2.2 |
| 1978 | 0.8 | 0.6 | 0.3 | 0.9 | 0.7 | 0.3 | 1.8 | 1.2 | 0.6 | 4.9 | 4.0 | 1.9 |
| 1979 | 0.8 | 0.6 | 0.3 | 0.9 | 0.7 | 0.3 | 1.7 | 1.1 | 0.5 | 4.5 | 3.4 | 2.0 |
| 1980 | 0.8 | 0.6 | 0.2 | 0.9 | 0.7 | 0.3 | 1.7 | 1.1 | 0.7 | 4.4 | 3.2 | 2.2 |
| 1981 | 0.8 | 0.5 | 0.2 | 0.9 | 0.7 | 0.3 | 1.5 | 1.0 | 0.5 | 4.0 | 3.0 | 1.4 |
| 1982 | 0.8 | 0.5 | 0.2 | 1.0 | 0.7 | 0.3 | 1.5 | 0.8 | 0.1 | 3.7 | 2.5 | 1.3 |
| 1983 | 0.8 | 0.5 | 0.2 | 1.0 | 0.7 | 0.3 | 1.3 | 0.8 | 0.2 | 4.1 | 3.2 | 1.8 |
| 1984 | 0.8 | 0.6 | 0.2 | 1.0 | 0.7 | 0.2 | 1.8 | 1.2 | 0.4 | 4.5 | 3.2 | 2.0 |
| 1985 | 0.8 | 0.6 | 0.2 | 1.0 | 0.7 | 0.3 | 1.8 | 1.2 | 0.3 | 3.7 | 2.6 | 0.7 |
| 1986 | 0.8 | 0.6 | 0.2 | 1.0 | 0.8 | 0.3 | 1.8 | 1.3 | 0.5 | 4.2 | 3.5 | 1.2 |
| 1987 | 0.8 | 0.6 | 0.2 | 1.0 | 0.8 | 0.3 | 2.0 | 1.4 | 0.6 | 4.0 | 2.9 | 1.5 |
| 1988 | 0.9 | 0.7 | 0.2 | 1.1 | 0.8 | 0.3 | 2.2 | 1.5 | 0.6 | 4.7 | 3.4 | 1.8 |
| 1989 | 1.0 | 0.7 | 0.3 | 1.2 | 0.9 | 0.3 | 2.3 | 1.5 | 0.6 | 4.6 | 3.8 | 2.3 |
| 1990 | 0.9 | 0.6 | 0.3 | 1.2 | 0.8 | 0.3 | 2.1 | 1.2 | 0.6 | 4.2 | 3.3 | 2.0 |
| 1991 | 0.9 | 0.6 | 0.2 | 1.2 | 0.8 | 0.3 | 1.9 | 1.2 | 0.2 | 3.9 | 2.9 | 1.2 |
| 1992 | 0.8 | 0.6 | 0.2 | 1.1 | 0.7 | 0.2 | 1.6 | 1.0 | 0.3 | 2.2 | 2.8 | 0.8 |
| 1993 | 0.8 | 0.6 | 0.2 | 1.1 | 0.7 | 0.3 | 1.5 | 1.1 | 0.4 | 2.2 | 2.8 | 0.6 |
| 1994 | 0.8 | 0.6 | 0.2 | 1.1 | 0.8 | 0.3 | 1.7 | 1.3 | 0.5 | 2.1 | 2.6 | 0.9 |
| 1995 | 0.8 | 0.6 | 0.2 | 1.1 | 0.8 | 0.3 | 1.7 | 1.2 | 0.4 | 2.2 | 2.5 | 0.9 |

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table S50-3 Standard errors for table 50-3

| October | All students |  |  | Low |  |  | Middle |  |  | High |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 20 or more hours | 35 or <br> more <br> hours | Total | 20 or more hours | 35 or <br> more <br> hours | Total | 20 or more hours | 35 or more hours | Total | 20 or more hours | 35 or <br> more <br> hours |
|  | Full-time college students |  |  |  |  |  |  |  |  |  |  |  |
| 1970 | 0.9 | 0.7 | 0.4 | 1.0 | 0.7 | 0.4 | 0.9 | 0.7 | 0.4 | 0.9 | 0.6 | 0.3 |
| 1971 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.3 | 0.9 | 0.7 | 0.4 | 0.9 | 0.6 | 0.3 |
| 1972 | 0.9 | 0.7 | 0.3 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.4 | 0.9 | 0.6 | 0.3 |
| 1973 | 0.9 | 0.7 | 0.4 | 0.9 | 0.8 | 0.4 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.3 |
| 1974 | 0.9 | 0.7 | 0.4 | - | - | - | - | - | - | - | - | - |
| 1975 | 0.9 | 0.7 | 0.4 | 0.8 | 0.6 | 0.4 | 0.9 | 0.7 | 0.4 | 0.8 | 0.6 | 0.3 |
| 1976 | 0.9 | 0.7 | 0.3 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.4 | 0.8 | 0.6 | 0.3 |
| 1977 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.3 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.3 |
| 1978 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.3 |
| 1979 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.3 |
| 1980 | 0.9 | 0.7 | 0.3 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.3 |
| 1981 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.3 |
| 1982 | 0.9 | 0.7 | 0.3 | 0.9 | 0.7 | 0.3 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.3 |
| 1983 | 0.9 | 0.7 | 0.4 | 0.9 | 0.7 | 0.4 | 0.9 | 0.8 | 0.4 | 0.9 | 0.7 | 0.3 |
| 1984 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.5 | 0.9 | 0.8 | 0.4 | 0.9 | 0.7 | 0.3 |
| 1985 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.4 | 0.9 | 0.7 | 0.3 |
| 1986 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.3 |
| 1987 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.3 | 0.9 | 0.8 | 0.4 | 0.9 | 0.7 | 0.3 |
| 1988 | 1.0 | 0.9 | 0.4 | 1.0 | 0.9 | 0.4 | 1.0 | 0.9 | 0.5 | 1.0 | 0.8 | 0.4 |
| 1989 | 1.0 | 0.9 | 0.5 | 1.0 | 0.9 | 0.4 | 1.0 | 0.9 | 0.5 | 1.0 | 0.8 | 0.4 |
| 1990 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.5 | 0.9 | 0.8 | 0.3 |
| 1991 | 0.9 | 0.8 | 0.4 | 0.9 | 0.9 | 0.5 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.4 |
| 1992 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.4 |
| 1993 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.5 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.3 |
| 1994 | 0.9 | 0.8 | 0.4 | 0.9 | 0.9 | 0.4 | 0.9 | 0.8 | 0.5 | 0.9 | 0.8 | 0.4 |
| 1995 | 0.9 | 0.8 | 0.5 | 0.9 | 0.8 | 0.4 | 0.9 | 0.8 | 0.5 | 0.9 | 0.8 | 0.4 |

Standard Error Tables
Table S50-3 Standard errors for table 50-3 - Continued

| October | All students |  |  | Low |  |  | Middle |  |  | High |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 20 or more hours | 35 or <br> more <br> hours | Total | 20 or more hours | 35 or <br> more <br> hours | Total | 20 or more hours | 35 or <br> more <br> hours | Total | 20 or more hours | 35 or more hours |
|  | Part-time college students |  |  |  |  |  |  |  |  |  |  |  |
| 1970 | 1.9 | 2.1 | 2.4 | - | - | - | 2.4 | 2.6 | 2.9 | 3.3 | 4.1 | 4.7 |
| 1971 | 1.7 | 2.0 | 2.3 | - | - | - | 2.2 | 2.5 | 2.9 | 3.0 | 3.7 | 4.2 |
| 1972 | 1.7 | 2.0 | 2.3 | 6.4 | 6.9 | 6.9 | 2.2 | 2.4 | 2.9 | 3.0 | 3.7 | 4.4 |
| 1973 | 1.6 | 2.0 | 2.3 | 6.1 | 7.6 | 7.8 | 2.0 | 2.4 | 2.9 | 3.2 | 3.8 | 4.4 |
| 1974 | 1.5 | 1.8 | 2.1 | - | - | - | - | - | - | - | - | - |
| 1975 | 1.6 | 1.8 | 2.1 | 5.8 | 6.2 | 5.6 | 2.0 | 2.2 | 2.6 | 3.0 | 3.5 | 3.9 |
| 1976 | 1.5 | 1.7 | 2.0 | 4.3 | 5.0 | 6.0 | 1.8 | 2.2 | 2.6 | 2.8 | 3.2 | 3.7 |
| 1977 | 1.5 | 1.7 | 2.0 | 6.0 | 6.3 | 6.2 | 1.8 | 2.2 | 2.5 | 2.6 | 3.0 | 3.7 |
| 1978 | 1.4 | 1.7 | 2.0 | 5.4 | 5.9 | 6.1 | 1.7 | 2.2 | 2.6 | 2.5 | 3.2 | 3.8 |
| 1979 | 1.4 | 1.7 | 2.0 | 5.1 | 5.8 | 6.0 | 1.7 | 2.1 | 2.6 | 2.4 | 2.9 | 3.8 |
| 1980 | 1.4 | 1.7 | 2.0 | 6.4 | 6.9 | 6.5 | 1.8 | 2.1 | 2.6 | 2.4 | 3.1 | 3.6 |
| 1981 | 1.4 | 1.7 | 2.0 | 6.1 | 6.4 | 6.4 | 1.8 | 2.1 | 2.5 | 1.9 | 3.0 | 3.7 |
| 1982 | 1.6 | 1.9 | 2.0 | 6.9 | 7.1 | 6.9 | 2.0 | 2.4 | 2.6 | 2.6 | 3.3 | 3.6 |
| 1983 | 1.6 | 1.8 | 2.1 | 6.1 | 6.3 | 6.0 | 2.3 | 2.5 | 2.9 | 2.2 | 2.8 | 3.5 |
| 1984 | 1.5 | 1.8 | 2.1 | 5.8 | 6.2 | 6.3 | 2.0 | 2.2 | 2.8 | 2.3 | 3.1 | 3.8 |
| 1985 | 1.5 | 1.7 | 2.1 | 5.7 | 6.2 | 6.1 | 1.8 | 2.1 | 2.7 | 2.6 | 3.1 | 3.9 |
| 1986 | 1.4 | 1.8 | 2.1 | 5.7 | 6.2 | 6.0 | 1.7 | 2.2 | 2.7 | 2.3 | 2.8 | 3.9 |
| 1987 | 1.4 | 1.6 | 2.0 | 4.8 | 5.3 | 5.5 | 1.8 | 2.1 | 2.6 | 2.3 | 2.8 | 3.5 |
| 1988 | 1.4 | 1.7 | 2.2 | 6.3 | 6.7 | 6.7 | 2.0 | 2.3 | 2.9 | 1.8 | 2.5 | 3.9 |
| 1989 | 1.6 | 1.8 | 2.3 | 6.4 | 6.8 | 6.1 | 2.0 | 2.4 | 3.1 | 2.2 | 2.7 | 4.0 |
| 1990 | 1.5 | 1.9 | 2.2 | 3.2 | 3.8 | 4.0 | 1.5 | 1.6 | 1.9 | 1.9 | 2.2 | 3.1 |
| 1991 | 1.5 | 1.9 | 2.2 | 5.6 | 6.1 | 6.4 | 1.9 | 2.3 | 2.8 | 2.8 | 3.6 | 4.5 |
| 1992 | 1.6 | 1.8 | 2.1 | 4.8 | 5.3 | 5.5 | 2.0 | 2.4 | 2.8 | 2.9 | 3.4 | 4.0 |
| 1993 | 1.5 | 1.8 | 2.1 | 5.4 | 5.7 | 5.6 | 1.9 | 2.3 | 2.6 | 2.4 | 3.2 | 4.3 |
| 1994 | 1.4 | 1.7 | 2.0 | 4.2 | 5.1 | 5.6 | 1.7 | 2.2 | 2.5 | 2.6 | 3.2 | 3.8 |
| 1995 | 1.5 | 1.8 | 2.0 | 5.1 | 5.2 | 4.8 | 1.9 | 2.2 | 2.7 | 2.5 | 3.6 | 4.0 |

- Not available.

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table S50-4 Standard errors for table 50-4

|  | All students |  |  | Male |  |  | Female |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total | 20 or more hours | 35 or more hours | Total | 20 or more hours | 35 or more hours | Total | 20 or <br> more <br> hours | 35 or more hours |
|  | Full-time college students |  |  |  |  |  |  |  |  |
| 1970 | 0.9 | 0.7 | 0.4 | 1.2 | 1.0 | 0.5 | 1.3 | 0.8 | 0.4 |
| 1971 | 0.9 | 0.7 | 0.4 | 1.2 | 1.0 | 0.6 | 1.2 | 0.8 | 0.3 |
| 1972 | 0.9 | 0.7 | 0.3 | 1.2 | 1.0 | 0.6 | 1.2 | 0.8 | 0.3 |
| 1973 | 0.9 | 0.7 | 0.4 | 1.2 | 1.0 | 0.6 | 1.2 | 0.8 | 0.4 |
| 1974 | 0.9 | 0.7 | 0.4 | 1.2 | 1.0 | 0.6 | 1.2 | 0.9 | 0.4 |
| 1975 | 0.9 | 0.7 | 0.4 | 1.2 | 0.9 | 0.6 | 1.2 | 0.9 | 0.4 |
| 1976 | 0.9 | 0.7 | 0.3 | 1.2 | 1.0 | 0.5 | 1.1 | 0.8 | 0.4 |
| 1977 | 0.9 | 0.7 | 0.4 | 1.2 | 1.0 | 0.6 | 1.2 | 0.9 | 0.4 |
| 1978 | 0.9 | 0.7 | 0.4 | 1.2 | 1.0 | 0.6 | 1.2 | 0.9 | 0.4 |
| 1979 | 0.9 | 0.7 | 0.4 | 1.2 | 1.0 | 0.5 | 1.2 | 0.9 | 0.4 |
| 1980 | 0.9 | 0.7 | 0.3 | 1.2 | 1.0 | 0.5 | 1.2 | 0.9 | 0.4 |
| 1981 | 0.9 | 0.7 | 0.4 | 1.2 | 1.0 | 0.5 | 1.1 | 0.9 | 0.4 |
| 1982 | 0.9 | 0.7 | 0.3 | 1.3 | 1.0 | 0.5 | 1.2 | 0.9 | 0.4 |
| 1983 | 0.9 | 0.7 | 0.4 | 1.3 | 1.1 | 0.5 | 1.2 | 0.9 | 0.4 |
| 1984 | 0.9 | 0.8 | 0.4 | 1.3 | 1.0 | 0.6 | 1.2 | 1.0 | 0.4 |
| 1985 | 0.9 | 0.8 | 0.4 | 1.3 | 1.1 | 0.6 | 1.2 | 1.0 | 0.5 |
| 1986 | 0.9 | 0.8 | 0.4 | 1.3 | 1.1 | 0.5 | 1.2 | 1.0 | 0.5 |
| 1987 | 0.9 | 0.8 | 0.4 | 1.3 | 1.1 | 0.6 | 1.2 | 1.0 | 0.5 |
| 1988 | 1.0 | 0.9 | 0.4 | 1.4 | 1.2 | 0.6 | 1.3 | 1.1 | 0.5 |
| 1989 | 1.0 | 0.9 | 0.5 | 1.4 | 1.2 | 0.7 | 1.3 | 1.1 | 0.6 |
| 1990 | 0.9 | 0.8 | 0.4 | 1.3 | 1.1 | 0.6 | 1.2 | 1.1 | 0.5 |
| 1991 | 0.9 | 0.8 | 0.4 | 1.3 | 1.2 | 0.7 | 1.2 | 1.0 | 0.5 |
| 1992 | 0.9 | 0.8 | 0.4 | 1.3 | 1.2 | 0.7 | 1.2 | 1.0 | 0.5 |
| 1993 | 0.9 | 0.8 | 0.4 | 1.3 | 1.2 | 0.6 | 1.2 | 1.1 | 0.5 |
| 1994 | 0.9 | 0.8 | 0.4 | 1.3 | 1.2 | 0.7 | 1.2 | 1.0 | 0.5 |
| 1995 | 0.9 | 0.8 | 0.5 | 1.3 | 1.2 | 0.7 | 1.2 | 1.0 | 0.5 |

Standard Error Tables
Table S50-4 Standard errors for table 50-4-Continued

|  | All students |  |  | Male |  |  | Female |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total | 20 or more hours | 35 or <br> more <br> hours | Total | 20 or <br> more <br> hours | 35 or <br> more <br> hours | Total | 20 or more hours | 35 or <br> more <br> hours |
|  | Part-time college students |  |  |  |  |  |  |  |  |
| 1970 | 1.9 | 2.1 | 2.4 | 2.3 | 2.7 | 3.3 | 2.6 | 2.8 | 3.1 |
| 1971 | 1.7 | 2.0 | 2.3 | 2.1 | 2.5 | 3.1 | 2.6 | 2.9 | 3.1 |
| 1972 | 1.7 | 2.0 | 2.3 | 2.0 | 2.5 | 3.1 | 2.6 | 2.8 | 3.0 |
| 1973 | 1.6 | 2.0 | 2.3 | 2.2 | 2.7 | 3.2 | 2.2 | 2.7 | 3.0 |
| 1974 | 1.5 | 1.8 | 2.1 | 1.9 | 2.3 | 2.9 | 2.2 | 2.4 | 2.7 |
| 1975 | 1.6 | 1.8 | 2.1 | 2.2 | 2.6 | 2.9 | 2.2 | 2.4 | 2.7 |
| 1976 | 1.5 | 1.7 | 2.0 | 2.2 | 2.5 | 2.9 | 1.8 | 2.2 | 2.5 |
| 1977 | 1.5 | 1.7 | 2.0 | 1.9 | 2.3 | 2.8 | 2.0 | 2.3 | 2.6 |
| 1978 | 1.4 | 1.7 | 2.0 | 1.9 | 2.3 | 2.9 | 1.9 | 2.3 | 2.6 |
| 1979 | 1.4 | 1.7 | 2.0 | 1.8 | 2.3 | 2.9 | 1.9 | 2.2 | 2.5 |
| 1980 | 1.4 | 1.7 | 2.0 | 2.1 | 2.5 | 3.0 | 1.8 | 2.2 | 2.5 |
| 1981 | 1.4 | 1.7 | 2.0 | 1.8 | 2.4 | 2.8 | 1.8 | 2.2 | 2.5 |
| 1982 | 1.6 | 1.9 | 2.0 | 2.4 | 2.8 | 3.0 | 1.9 | 2.3 | 2.5 |
| 1983 | 1.6 | 1.8 | 2.1 | 2.2 | 2.5 | 3.0 | 2.2 | 2.5 | 2.7 |
| 1984 | 1.5 | 1.8 | 2.1 | 1.9 | 2.4 | 3.1 | 2.1 | 2.3 | 2.6 |
| 1985 | 1.5 | 1.7 | 2.1 | 2.2 | 2.6 | 3.2 | 1.8 | 2.2 | 2.6 |
| 1986 | 1.4 | 1.8 | 2.1 | 2.1 | 2.4 | 3.1 | 1.8 | 2.3 | 2.6 |
| 1987 | 1.4 | 1.6 | 2.0 | 1.9 | 2.4 | 2.9 | 1.8 | 2.1 | 2.4 |
| 1988 | 1.4 | 1.7 | 2.2 | 2.2 | 2.5 | 3.3 | 1.7 | 2.2 | 2.8 |
| 1989 | 1.6 | 1.8 | 2.3 | 2.3 | 2.7 | 3.5 | 1.9 | 2.3 | 2.8 |
| 1990 | 1.6 | 1.8 | 2.2 | 2.2 | 2.4 | 3.1 | 2.1 | 2.3 | 2.7 |
| 1991 | 1.5 | 1.9 | 2.2 | 2.2 | 2.6 | 3.2 | 2.0 | 2.4 | 2.8 |
| 1992 | 1.6 | 1.8 | 2.1 | 2.4 | 2.8 | 3.3 | 1.9 | 2.2 | 2.6 |
| 1993 | 1.5 | 1.8 | 2.1 | 2.1 | 2.5 | 3.1 | 2.0 | 2.4 | 2.6 |
| 1994 | 1.4 | 1.7 | 2.0 | 2.2 | 2.6 | 3.0 | 1.6 | 2.1 | 2.4 |
| 1995 | 1.5 | 1.8 | 2.0 | 2.0 | 2.6 | 3.1 | 2.0 | 2.3 | 2.4 |

SOURCE: U.S. Department of Commerce, Bureau of the Census,
October Current Population Surveys.

Table S50-5 Standard errors for table 50-5

|  | All students |  |  | Male |  |  | Female |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | tal | 20 or more | $35 \text { or }$ <br> more |  | $20 \text { or }$ <br> more | $35 \text { or }$ <br> more | Total | 20 or more | $35 \text { or }$ <br> more |
| 1970 | 0.8 | 0.5 | 0.3 | 1.1 | 0.8 | 0.5 | 1.1 | 0.6 | 0.3 |
| 1971 | 0.8 | 0.5 | 0.2 | 1.1 | 0.8 | 0.4 | 1.1 | 0.6 | 0.3 |
| 1972 | 0.8 | 0.6 | 0.3 | 1.1 | 0.8 | 0.5 | 1.1 | 0.7 | 0.3 |
| 1973 | 0.8 | 0.6 | 0.3 | 1.1 | 0.9 | 0.5 | 1.1 | 0.7 | 0.3 |
| 1974 | 0.8 | 0.6 | 0.3 | 1.1 | 0.9 | 0.5 | 1.1 | 0.7 | 0.3 |
| 1975 | 0.8 | 0.5 | 0.3 | 1.1 | 0.8 | 0.4 | 1.1 | 0.7 | 0.3 |
| 1976 | 0.8 | 0.6 | 0.3 | 1.1 | 0.8 | 0.4 | 1.1 | 0.7 | 0.3 |
| 1977 | 0.8 | 0.6 | 0.3 | 1.1 | 0.9 | 0.5 | 1.1 | 0.8 | 0.3 |
| 1978 | 0.8 | 0.6 | 0.3 | 1.1 | 0.9 | 0.4 | 1.1 | 0.8 | 0.3 |
| 1979 | 0.8 | 0.6 | 0.3 | 1.1 | 0.9 | 0.4 | 1.1 | 0.8 | 0.3 |
| 1980 | 0.8 | 0.6 | 0.2 | 1.1 | 0.8 | 0.4 | 1.1 | 0.8 | 0.3 |
| 1981 | 0.8 | 0.5 | 0.2 | 1.1 | 0.8 | 0.4 | 1.1 | 0.7 | 0.3 |
| 1982 | 0.8 | 0.5 | 0.2 | 1.1 | 0.8 | 0.4 | 1.2 | 0.7 | 0.2 |
| 1983 | 0.8 | 0.5 | 0.2 | 1.1 | 0.7 | 0.3 | 1.2 | 0.8 | 0.3 |
| 1984 | 0.8 | 0.6 | 0.2 | 1.1 | 0.8 | 0.3 | 1.2 | 0.8 | 0.2 |
| 1985 | 0.8 | 0.6 | 0.2 | 1.2 | 0.8 | 0.3 | 1.2 | 0.8 | 0.2 |
| 1986 | 0.8 | 0.6 | 0.2 | 1.1 | 0.8 | 0.4 | 1.2 | 0.9 | 0.3 |
| 1987 | 0.8 | 0.6 | 0.2 | 1.1 | 0.9 | 0.4 | 1.2 | 0.8 | 0.3 |
| 1988 | 0.9 | 0.7 | 0.2 | 1.3 | 1.0 | 0.4 | 1.4 | 0.9 | 0.3 |
| 1989 | 1.0 | 0.7 | 0.3 | 1.3 | 1.0 | 0.4 | 1.4 | 1.0 | 0.3 |
| 1990 | 0.9 | 0.6 | 0.3 | 1.3 | 0.9 | 0.4 | 1.3 | 0.9 | 0.4 |
| 1991 | 0.9 | 0.6 | 0.2 | 1.2 | 0.9 | 0.3 | 1.3 | 0.9 | 0.3 |
| 1992 | 0.8 | 0.6 | 0.2 | 1.2 | 0.8 | 0.3 | 1.1 | 0.7 | 0.2 |
| 1993 | 0.8 | 0.6 | 0.2 | 1.1 | 0.8 | 0.3 | 1.1 | 0.8 | 0.3 |
| 1994 | 0.8 | 0.6 | 0.2 | 1.2 | 0.9 | 0.3 | 1.1 | 0.8 | 0.3 |
| 1995 | 0.8 | 0.6 | 0.2 | 1.1 | 0.8 | 0.3 | 1.1 | 0.8 | 0.3 |

[^101]Standard Error Tables
Table S50-6 Standard errors for table 50-6

| October | All students |  |  | Low |  |  | Middle |  |  | High |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | $20 \text { or }$ <br> more hours | 35 or more hours | Total | 20 or more hours | 35 or more hours | Total | 20 or <br> more <br> hours | 35 or more hours | Total | 20 or more hours | 35 or more hours |
| 1970 | 0.8 | 0.5 | 0.3 | 2.2 | 1.4 | 0.9 | 1.0 | 0.7 | 0.4 | 1.4 | 0.9 | 0.4 |
| 1971 | 0.8 | 0.5 | 0.2 | 2.2 | 1.5 | 0.9 | 0.9 | 0.7 | 0.3 | 1.4 | 0.9 | 0.4 |
| 1972 | 0.8 | 0.6 | 0.3 | 2.0 | 1.5 | 0.9 | 0.9 | 0.7 | 0.4 | 1.4 | 1.0 | 0.5 |
| 1973 | 0.8 | 0.6 | 0.3 | 2.1 | 1.5 | 1.0 | 1.0 | 0.7 | 0.4 | 1.4 | 1.1 | 0.5 |
| 1974 | 0.8 | 0.6 | 0.3 | - | - | - | - | - | - | - | - | - |
| 1975 | 0.8 | 0.5 | 0.3 | 1.9 | 1.3 | 0.8 | 0.9 | 0.7 | 0.4 | 1.4 | 1.0 | 0.4 |
| 1976 | 0.8 | 0.6 | 0.3 | 2.1 | 1.6 | 1.0 | 1.0 | 0.7 | 0.3 | 1.3 | 1.0 | 0.4 |
| 1977 | 0.8 | 0.6 | 0.3 | 1.9 | 1.5 | 1.0 | 1.0 | 0.7 | 0.3 | 1.4 | 1.1 | 0.5 |
| 1978 | 0.8 | 0.6 | 0.3 | 2.0 | 1.5 | 0.9 | 1.0 | 0.8 | 0.4 | 1.4 | 1.0 | 0.4 |
| 1979 | 0.8 | 0.6 | 0.3 | 2.0 | 1.5 | 0.8 | 1.0 | 0.8 | 0.4 | 1.4 | 1.1 | 0.4 |
| 1980 | 0.8 | 0.6 | 0.2 | 1.9 | 1.3 | 0.6 | 1.0 | 0.7 | 0.3 | 1.4 | 1.0 | 0.3 |
| 1981 | 0.8 | 0.5 | 0.2 | 1.7 | 1.1 | 0.5 | 1.0 | 0.7 | 0.3 | 1.4 | 1.0 | 0.4 |
| 1982 | 0.8 | 0.5 | 0.2 | 1.7 | 1.0 | 0.6 | 1.0 | 0.7 | 0.3 | 1.5 | 1.0 | 0.4 |
| 1983 | 0.8 | 0.5 | 0.2 | 1.5 | 0.9 | 0.5 | 1.0 | 0.7 | 0.3 | 1.6 | 1.0 | 0.4 |
| 1984 | 0.8 | 0.6 | 0.2 | 1.7 | 1.2 | 0.5 | 1.1 | 0.7 | 0.2 | 1.6 | 1.1 | 0.4 |
| 1985 | 0.8 | 0.6 | 0.2 | 1.6 | 1.1 | 0.6 | 1.1 | 0.8 | 0.3 | 1.6 | 1.2 | 0.3 |
| 1986 | 0.8 | 0.6 | 0.2 | 1.8 | 1.4 | 0.6 | 1.1 | 0.8 | 0.3 | 1.6 | 1.2 | 0.4 |
| 1987 | 0.8 | 0.6 | 0.2 | 1.8 | 1.4 | 0.7 | 1.1 | 0.8 | 0.3 | 1.5 | 1.1 | 0.3 |
| 1988 | 0.9 | 0.7 | 0.2 | 2.1 | 1.5 | 0.8 | 1.2 | 0.9 | 0.3 | 1.8 | 1.3 | 0.3 |
| 1989 | 1.0 | 0.7 | 0.3 | 2.1 | 1.5 | 0.7 | 1.3 | 0.9 | 0.4 | 1.8 | 1.3 | 0.4 |
| 1990 | 0.9 | 0.6 | 0.3 | 1.4 | 1.0 | 0.5 | 0.8 | 0.6 | 0.2 | 1.2 | 0.8 | 0.3 |
| 1991 | 0.9 | 0.6 | 0.2 | 1.7 | 1.3 | 0.6 | 1.1 | 0.8 | 0.3 | 1.7 | 1.1 | 0.3 |
| 1992 | 0.8 | 0.6 | 0.2 | 1.7 | 1.0 | 0.5 | 1.1 | 0.8 | 0.3 | 1.7 | 1.1 | 0.4 |
| 1993 | 0.8 | 0.6 | 0.2 | 1.7 | 1.2 | 0.7 | 1.1 | 0.8 | 0.3 | 1.7 | 1.1 | 0.4 |
| 1994 | 0.8 | 0.6 | 0.2 | 2.0 | 1.5 | 0.6 | 1.1 | 0.8 | 0.3 | 1.7 | 1.2 | 0.4 |
| 1995 | 0.8 | 0.6 | 0.2 | 1.7 | 1.2 | 0.8 | 1.1 | 0.8 | 0.3 | 1.7 | 1.2 | 0.3 |

- Not available.

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table S50-7 Standard errors for table 50-7

|  |  | 20 or | more |
| :--- | :---: | :---: | :---: |
| Parents' highest education level |  | Total | hours |

SOURCE: U.S. Department of Commerce, Bureau of the Census,
October Current Population Surveys.

Table S51-1 Standard errors for table 51-1

| October | Aged 18-24 |  |  | Aged 25-34 |  |  | Aged 35 or older |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White | Black | Hispanic | White | Black | Hispanic | White | Black | Hispanic |
| 1976 | 0.7 | 1.9 | 4.6 | 2.0 | 5.7 | 10.4 | 2.3 | 8.8 | 14.4 |
| 1977 | 0.7 | 2.3 | 4.7 | 1.9 | 5.1 | 9.9 | - | - | - |
| 1978 | 0.7 | 2.1 | 5.8 | 2.0 | 5.5 | 11.1 | 2.0 | 8.0 | 13.6 |
| 1979 | 0.7 | 2.2 | 4.6 | 1.9 | 5.8 | 9.9 | 1.9 | 8.4 | 13.6 |
| 1980 | 0.7 | 2.3 | 4.9 | 1.8 | 5.5 | 10.5 | 2.1 | 7.5 | 14.3 |
| 1981 | 0.7 | 2.2 | 4.1 | 1.8 | 5.4 | 8.5 | 2.1 | 8.2 | 12.6 |
| 1982 | 0.7 | 2.4 | 5.1 | 1.9 | 5.2 | 9.7 | 2.1 | 8.8 | 4.8 |
| 1983 | 0.7 | 2.3 | 4.9 | 1.8 | 5.3 | 8.8 | 1.9 | 9.3 | 11.4 |
| 1984 | 0.7 | 2.4 | 4.4 | 1.8 | 5.5 | 9.1 | 2.2 | 7.3 | 18.0 |
| 1985 | 0.7 | 2.4 | 4.4 | 1.8 | 5.6 | 8.2 | 2.0 | 6.9 | 9.8 |
| 1986 | 0.8 | 2.3 | 4.6 | 1.9 | 5.6 | 7.8 | 2.2 | 6.7 | 12.5 |
| 1987 | 0.7 | 2.4 | 4.6 | 1.9 | 5.6 | 8.2 | 2.1 | 8.2 | 9.2 |
| 1988 | 0.7 | 2.3 | 4.4 | 2.0 | 5.5 | 8.3 | 2.0 | 5.9 | 8.0 |
| 1989 | 0.7 | 2.2 | 4.9 | 1.9 | 5.9 | 9.3 | 2.0 | 8.0 | 11.7 |
| 1990 | 0.7 | 2.5 | 5.0 | 1.8 | 6.3 | 9.2 | 1.9 | 7.6 | 10.3 |
| 1991 | 0.7 | 2.2 | 4.5 | 1.9 | 5.4 | 9.3 | 1.9 | 6.4 | 9.8 |
| 1992 | 0.8 | 2.5 | 5.2 | 2.1 | 6.3 | 8.9 | 2.1 | 7.4 | 13.6 |
| 1993 | 0.8 | 2.4 | 4.9 | 2.2 | 5.7 | 9.7 | 2.2 | 6.9 | 12.8 |
| 1994 | 0.7 | 2.2 | 4.6 | 2.0 | 4.9 | 7.8 | 2.0 | 5.8 | 9.1 |
| 1995 | 0.7 | 2.4 | 4.0 | 2.0 | 5.3 | 8.3 | 2.1 | 6.0 | 8.5 |

- Not available.

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table S51-2 Standard errors for table 51-2

| October | Total |  | Aged 18-24 |  | Aged 25-34 |  | Aged 35 or older |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female | Male | Female |
| 1976 | 0.9 | 1.0 | 0.9 | 0.9 | 2.3 | 2.8 | 3.8 | 2.6 |
| 1977 | - | - | 0.9 | 0.9 | 2.3 | 2.4 | - | - |
| 1978 | 1.0 | 1.0 | 0.9 | 1.0 | 2.5 | 2.5 | 3.5 | 2.3 |
| 1979 | 1.0 | 1.0 | 0.9 | 0.9 | 2.6 | 2.3 | 3.3 | 2.2 |
| 1980 | 1.0 | 1.0 | 0.8 | 0.9 | 2.5 | 2.2 | 3.9 | 2.2 |
| 1981 | 0.9 | 1.0 | 0.9 | 0.9 | 2.4 | 2.2 | 3.4 | 2.4 |
| 1982 | 0.9 | 1.0 | 0.9 | 0.9 | 2.5 | 2.2 | 3.1 | 2.4 |
| 1983 | 0.9 | 1.0 | 0.9 | 0.9 | 2.4 | 2.2 | 3.6 | 2.2 |
| 1984 | 0.9 | 1.0 | 0.8 | 0.9 | 2.4 | 2.2 | 4.1 | 2.2 |
| 1985 | 0.9 | 0.9 | 0.8 | 0.9 | 2.4 | 2.1 | 3.4 | 2.1 |
| 1986 | 1.0 | 1.0 | 0.9 | 1.0 | 2.5 | 2.2 | 3.6 | 2.3 |
| 1987 | 1.0 | 1.0 | 0.9 | 1.0 | 2.5 | 2.2 | 3.7 | 2.3 |
| 1988 | 1.0 | 1.0 | 0.9 | 0.9 | 2.6 | 2.3 | 3.4 | 2.1 |
| 1989 | 1.0 | 1.0 | 0.9 | 0.9 | 2.5 | 2.2 | 3.4 | 2.2 |
| 1990 | 1.0 | 0.9 | 0.9 | 0.9 | 2.6 | 2.1 | 3.0 | 2.1 |
| 1991 | 1.0 | 0.9 | 0.9 | 0.9 | 2.4 | 2.2 | 3.2 | 2.0 |
| 1992 | 1.1 | 1.0 | 1.0 | 1.0 | 2.8 | 2.4 | 3.6 | 2.3 |
| 1993 | 1.0 | 1.0 | 1.0 | 1.0 | 2.8 | 2.4 | 3.5 | 2.3 |
| 1994 | 1.0 | 0.9 | 0.9 | 0.9 | 2.5 | 2.2 | 3.0 | 2.1 |
| 1995 | 1.0 | 0.9 | 0.9 | 0.9 | 2.6 | 2.3 | 3.1 | 2.3 |

[^102]SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Standard Error Tables
Table S51-3 Standard errors for table 51-3

| October | Total |  | Aged 18-24 |  | Aged 25-34 |  | Aged 35 or older |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2-year | 4-year | 2-year | 4 -year | 2-year | 4-year | 2-year | 4 -year |
| 1976 | 1.3 | 0.7 | 1.6 | 0.6 | 2.4 | 2.7 | 2.7 | 3.6 |
| 1977 | - | - | 1.6 | 0.6 | 2.3 | 2.6 | - | - |
| 1978 | 1.3 | 0.7 | 1.6 | 0.6 | 2.3 | 2.6 | 2.2 | 3.5 |
| 1979 | 1.3 | 0.8 | 1.7 | 0.6 | 2.4 | 2.5 | 2.2 | 3.2 |
| 1980 | 1.3 | 0.7 | 1.5 | 0.6 | 2.2 | 2.6 | 2.5 | 3.5 |
| 1981 | 1.2 | 0.7 | 1.5 | 0.6 | 2.2 | 2.4 | 2.7 | 3.2 |
| 1982 | 1.2 | 0.7 | 1.5 | 0.6 | 2.3 | 2.6 | 2.5 | 3.3 |
| 1983 | 1.2 | 0.7 | 1.5 | 0.6 | 2.2 | 2.4 | 2.3 | 3.2 |
| 1984 | 1.3 | 0.7 | 1.5 | 0.6 | 2.3 | 2.4 | 2.7 | 3.1 |
| 1985 | 1.2 | 0.7 | 1.6 | 0.5 | 2.1 | 2.4 | 2.1 | 3.1 |
| 1986 | 1.3 | 0.8 | 1.7 | 0.6 | 2.2 | 2.5 | 2.5 | 3.2 |
| 1987 | 1.3 | 0.8 | 1.6 | 0.6 | 2.3 | 2.4 | 2.4 | 3.1 |
| 1988 | 1.3 | 0.8 | 1.5 | 0.6 | 2.3 | 2.4 | 2.3 | 2.7 |
| 1989 | 1.3 | 0.7 | 1.6 | 0.6 | 2.2 | 2.3 | 2.3 | 2.9 |
| 1990 | 1.2 | 0.7 | 1.5 | 0.6 | 2.3 | 2.3 | 2.2 | 2.8 |
| 1991 | 1.2 | 0.7 | 1.5 | 0.5 | 2.2 | 2.4 | 2.4 | 2.5 |
| 1992 | 1.3 | 0.8 | 1.6 | 0.7 | 2.5 | 2.5 | 2.5 | 2.9 |
| 1993 | 1.3 | 0.8 | 1.6 | 0.7 | 2.6 | 2.5 | 2.7 | 2.8 |
| 1994 | 1.2 | 0.8 | 1.6 | 0.7 | 2.4 | 2.2 | 2.4 | 2.5 |
| 1995 | 1.3 | 0.7 | 1.6 | 0.6 | 2.6 | 2.2 | 2.5 | 2.6 |

- Not available.

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table S51-4 Standard errors for table 51-4

|  |  | Age |  |  | Race/ethnicity |  |  | Sex |  | Type of institution |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October | Total | 18-24 | 25-34 | 35 or older | White | Black | anic | Male | ale | 2-year | 4-year |
| 1976 | 0.7 | 0.6 | 0.7 | 1.6 | 0.8 | 2.3 | 4.6 | 0.9 | 1.0 | 1.3 | 0.7 |
| 1977 | - | 0.6 | 0.8 | - | 0.8 | 2.4 | 4.8 | - | - | - | - |
| 1978 | 0.7 | 0.7 | 0.7 | 1.5 | 0.8 | 2.4 | 5.2 | 1.0 | 1.0 | 1.3 | 0.7 |
| 1979 | 0.7 | 0.7 | 0.7 | 1.5 | 0.8 | 2.4 | 4.4 | 1.0 | 1.0 | 1.3 | 0.8 |
| 1980 | 0.7 | 0.6 | 0.7 | 1.5 | 0.8 | 2.5 | 4.6 | 1.0 | 1.0 | 1.3 | 0.7 |
| 1981 | 0.7 | 0.6 | 0.7 | 1.6 | 0.8 | 2.3 | 4.3 | 0.9 | 1.0 | 1.2 | 0.7 |
| 1982 | 0.7 | 0.6 | 0.7 | 1.5 | 0.7 | 2.4 | 4.6 | 0.9 | 1.0 | 1.2 | 0.7 |
| 1983 | 0.7 | 0.6 | 0.7 | 1.5 | 0.8 | 2.4 | 4.4 | 0.9 | 1.0 | 1.2 | 0.7 |
| 1984 | 0.7 | 0.6 | 0.7 | 1.6 | 0.7 | 2.4 | 4.3 | 0.9 | 1.0 | 1.3 | 0.7 |
| 1985 | 0.7 | 0.6 | 0.7 | 1.5 | 0.7 | 2.4 | 4.2 | 0.9 | 0.9 | 1.2 | 0.7 |
| 1986 | 0.7 | 0.7 | 0.7 | 1.8 | 0.8 | 2.4 | 4.1 | 1.0 | 1.0 | 1.3 | 0.8 |
| 1987 | 0.7 | 0.7 | 0.7 | 1.7 | 0.8 | 2.5 | 4.2 | 1.0 | 1.0 | 1.3 | 0.8 |
| 1988 | 0.7 | 0.7 | 0.7 | 1.6 | 0.8 | 2.5 | 4.1 | 1.0 | 1.0 | 1.3 | 0.8 |
| 1989 | 0.7 | 0.6 | 0.7 | 1.8 | 0.8 | 2.5 | 4.5 | 1.0 | 1.0 | 1.3 | 0.7 |
| 1990 | 0.7 | 0.6 | 0.7 | 1.8 | 0.8 | 2.4 | 4.6 | 1.0 | 0.9 | 1.2 | 0.7 |
| 1991 | 0.7 | 0.6 | 0.7 | 1.7 | 0.8 | 2.4 | 4.2 | 1.0 | 0.9 | 1.2 | 0.7 |
| 1992 | 0.7 | 0.7 | 0.8 | 2.1 | 0.8 | 2.5 | 4.7 | 1.1 | 1.0 | 1.3 | 0.8 |
| 1993 | 0.7 | 0.7 | 0.8 | 2.1 | 0.8 | 2.5 | 4.5 | 1.0 | 1.0 | 1.3 | 0.8 |
| 1994 | 0.7 | 0.7 | 0.7 | 1.9 | 0.8 | 2.2 | 3.7 | 1.0 | 0.9 | 1.2 | 0.8 |
| 1995 | 0.7 | 0.7 | 0.7 | 1.9 | 0.8 | 2.3 | 3.6 | 1.0 | 0.9 | 1.3 | 0.7 |

SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

Table S51-5 Standard errors for table 51-5

| October | Total | Total |  | Aged 18-24 |  | Aged 25-34 |  | Aged 35 or older |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Male | Female | Male | Female | Male | Female |
| 1976 | 1.5 | 2.0 | 2.2 | 3.0 | 4.1 | 2.8 | 3.2 | 4.7 | 4.0 |
| 1977 | - | - | - | 3.3 | 4.1 | 2.8 | 3.0 | - | - |
| 1978 | 1.5 | 2.1 | 2.1 | 3.4 | 4.1 | 2.8 | 3.1 | 4.7 | 3.7 |
| 1979 | 1.5 | 2.1 | 2.0 | 3.5 | 4.2 | 2.8 | 2.7 | 4.7 | 3.6 |
| 1980 | 1.5 | 2.1 | 2.1 | 3.4 | 4.0 | 2.9 | 2.8 | 5.1 | 3.8 |
| 1981 | 1.5 | 2.1 | 2.0 | 3.5 | 4.7 | 2.9 | 3.0 | 5.1 | 3.8 |
| 1982 | 1.5 | 2.1 | 2.0 | 3.4 | 4.4 | 2.9 | 2.7 | 4.5 | 3.7 |
| 1983 | 1.4 | 2.0 | 2.0 | 3.1 | 4.2 | 2.8 | 2.9 | 4.4 | 3.6 |
| 1984 | 1.5 | 2.0 | 2.1 | 3.1 | 4.2 | 2.8 | 3.0 | 4.5 | 3.8 |
| 1985 | 1.4 | 2.0 | 2.0 | 3.4 | 4.4 | 2.9 | 2.7 | 4.3 | 3.2 |
| 1986 | 1.6 | 2.2 | 2.2 | 3.5 | 3.8 | 3.0 | 3.5 | 4.6 | 3.4 |
| 1987 | 1.5 | 2.2 | 2.1 | 3.7 | 4.4 | 3.2 | 3.1 | 4.4 | 3.5 |
| 1988 | 1.5 | 2.2 | 2.0 | 4.4 | 4.7 | 3.2 | 3.2 | 3.9 | 3.2 |
| 1989 | 1.5 | 2.2 | 2.1 | 3.9 | 4.1 | 3.1 | 3.1 | 4.1 | 3.4 |
| 1990 | 1.5 | 2.2 | 2.0 | 3.8 | 4.0 | 3.2 | 3.3 | 4.1 | 3.2 |
| 1991 | 1.5 | 2.1 | 2.0 | 3.4 | 4.0 | 3.0 | 3.2 | 3.9 | 3.1 |
| 1992 | 1.7 | 2.5 | 2.3 | 3.7 | 4.6 | 3.6 | 3.6 | 4.8 | 3.6 |
| 1993 | 1.7 | 2.5 | 2.3 | 4.4 | 4.9 | 3.7 | 3.7 | 4.4 | 3.7 |
| 1994 | 1.5 | 2.3 | 2.1 | 3.7 | 4.6 | 3.3 | 3.3 | 4.1 | 3.5 |
| 1995 | 1.5 | 2.2 | 2.0 | 4.3 | 4.0 | 3.2 | 3.3 | 3.8 | 3.2 |
| - Not ava |  |  |  |  | RCE: U.S. ber Curr | ment ulation | Commer urveys. | au of | Census, |

Standard Error Tables
Table S56-1 Standard errors for table 56-2

| School characteristics | School earnings |  |  |  | Non-school compensation |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total school earnings | $\begin{array}{r} \text { Base } \\ \text { salary } \end{array}$ | Summer supplemental earnings | Other school compensation |  |
| Total | \$181 | \$183 | \$103 | \$64 | \$257 |
| Central city |  |  |  |  |  |
| Percentage of students eligible for free or reduced-price lunch |  |  |  |  |  |
| 0-5 | 884 | 874 | 200 | 176 | 1,732 |
| 6-20 | 455 | 458 | 131 | 106 | 318 |
| 21-40 | 365 | 374 | 116 | 152 | 546 |
| 41 or more | 227 | 237 | 201 | 121 | 421 |
| School level |  |  |  |  |  |
| Elementary | 220 | 228 | 180 | 123 | 491 |
| Secondary | 245 | 233 | 82 | 76 | 278 |
| Combined | 663 | 613 | 203 | 201 | 828 |
| Minority enrollment |  |  |  |  |  |
| Less than 20 percent | 352 | 345 | 94 | 80 | 443 |
| 20 percent or more | 207 | 210 | 145 | 90 | 314 |
| School size |  |  |  |  |  |
| Less than 150 | 612 | 639 | 369 | 236 | 1,076 |
| 150-499 | 401 | 360 | 439 | 229 | 948 |
| 500-749 | 379 | 380 | 138 | 138 | 533 |
| 750 or more | 326 | 324 | 95 | 75 | 259 |
| Urban fringe/large town | 253 | 244 | 69 | 71 | 379 |
| Percentage of students eligible for free or reduced-price lunch |  |  |  |  |  |
| 0-5 | 759 | 709 | 158 | 183 | 1,735 |
| 6-20 | 480 | 479 | 125 | 152 | 352 |
| 21-40 | 610 | 604 | 144 | 148 | 381 |
| 41 or more | 627 | 614 | 166 | 138 | 367 |
| School level |  |  |  |  |  |
| Elementary | 407 | 391 | 104 | 142 | 726 |
| Secondary | 305 | 299 | 68 | 53 | 219 |
| Combined | 964 | 1,042 | 178 | 247 | 617 |
| Minority enrollment |  |  |  |  |  |
| Less than 20 percent | 411 | 404 | 99 | 91 | 257 |
| 20 percent or more | 345 | 340 | 99 | 106 | 803 |
| School size |  |  |  |  |  |
| Less than 150 | 752 | 796 | 242 | 378 | 834 |
| 150-499 | 611 | 571 | 239 | 174 | 354 |
| 500-749 | 607 | 602 | 95 | 200 | 289 |
| 750 or more | 403 | 399 | 73 | 79 | 768 |

Table S56-1 Standard errors for table 56-2-Continued

| School characteristics | School earnings |  |  |  | Non-school compensation |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total school earnings | $\begin{array}{r} \text { Base } \\ \text { salary } \\ \hline \end{array}$ | Summer supplemental earnings | Other school compensation |  |
| Rural/small town | 165 | 160 | 43 | 39 | 172 |
| Percentage of students eligible for free or reduced-price lunch |  |  |  |  |  |
| 0-5 | 1,405 | 1,308 | 107 | 238 | 541 |
| 6-20 | 352 | 365 | 78 | 60 | 345 |
| 21-40 | 371 | 361 | 105 | 98 | 219 |
| 41 or more | 311 | 314 | 62 | 59 | 356 |
| School level |  |  |  |  |  |
| Elementary | 277 | 266 | 72 | 73 | 316 |
| Secondary | 142 | 134 | 51 | 42 | 159 |
| Combined | 593 | 541 | 124 | 108 | 680 |
| Minority enrollment |  |  |  |  |  |
| Less than 20 percent | 225 | 221 | 54 | 46 | 229 |
| 20 percent or more | 285 | 285 | 74 | 74 | 264 |
| School size |  |  |  |  |  |
| Less than 150 | 294 | 295 | 216 | 97 | 505 |
| 150-499 | 224 | 208 | 63 | 55 | 305 |
| 500-749 | 523 | 517 | 67 | 95 | 358 |
| 750 or more | 383 | 405 | 73 | 109 | 218 |
| Percentage of students eligible for free or reduced-price lunch |  |  |  |  |  |
| 0-5 | 667 | 616 | 108 | 130 | 1,050 |
| 6-20 | 243 | 244 | 63 | 60 | 201 |
| 21-40 | 256 | 254 | 72 | 80 | 191 |
| 41 or more | 183 | 188 | 112 | 62 | 251 |

[^103]Standard Error Tables
Table S56-2 Standard errors for table 56-5

| School characteristics | School earnings |  |  |  | Non-school compensation |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total school earnings | $\begin{gathered} \text { Base } \\ \text { salary } \end{gathered}$ | $\begin{array}{r} \text { Summer } \\ \text { supplemental } \\ \text { earnings } \end{array}$ | Other school compensation |  |
| Total | \$222 | \$212 | \$64 | \$61 | \$170 |
| Central city | 390 | 364 | 90 | 80 | 241 |
| School level |  |  |  |  |  |
| Elementary | 281 | 278 | 105 | 151 | 480 |
| Secondary | 526 | 492 | 117 | 127 | 355 |
| Combined | 699 | 613 | 191 | 265 | 285 |
| Minority enrollment |  |  |  |  |  |
| Less than 20 percent | 427 | 389 | 105 | 147 | 438 |
| 20 percent or more | 438 | 410 | 125 | 109 | 254 |
| School size |  |  |  |  |  |
| Less than 150 | 453 | 397 | 132 | 229 | 254 |
| 150-499 | 276 | 278 | 138 | 121 | 410 |
| 500-749 | 648 | 636 | 220 | 152 | 593 |
| 750 or more | 735 | 620 | 189 | 295 | 671 |
| Urban fringe/large town | 313 | 311 | 115 | 93 | 270 |
| School level |  |  |  |  |  |
| Elementary | 294 | 297 | 150 | 211 | 341 |
| Secondary | 464 | 405 | 156 | 187 | 667 |
| Combined | 797 | 761 | 205 | 188 | 602 |
| Minority enrollment |  |  |  |  |  |
| Less than 20 percent | 324 | 325 | 119 | 139 | 341 |
| 20 percent or more | 686 | 641 | 214 | 248 | 435 |
| School size |  |  |  |  |  |
| Less than 150 | 710 | 642 | 168 | 364 | 372 |
| 150-499 | 392 | 387 | 156 | 156 | 346 |
| 500-749 | 844 | 801 | 227 | 257 | 550 |
| 750 or more | 726 | 775 | 543 | 241 | 1,332 |
| Rural/small town | 437 | 415 | 142 | 206 | 405 |
| School level |  |  |  |  |  |
| Elementary | 392 | 395 | 297 | 267 | 325 |
| Secondary | 1,119 | 1,046 | 279 | 585 | 463 |
| Combined | 827 | 804 | 182 | 243 | 649 |
| Minority enrollment |  |  |  |  |  |
| Less than 20 percent | 523 | 499 | 169 | 253 | 378 |
| 20 percent or more | 1,175 | 1,199 | 238 | 532 | 583 |
| School size |  |  |  |  |  |
| Less than 150 | 644 | 598 | 202 | 453 | 577 |
| 150-499 | 449 | 436 | 238 | 389 | 510 |
| 500-749 | 1,529 | 1,474 | - | 433 | - |
| 750 or more | 3,255 | 2,719 | - | - | - |

[^104]SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table S56-3 Standard errors for table 56-6

| School characteristics | Districts/schools with salary schedules |  |  |  |  | Districts/schools without salary schedules |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage with salary schedules | Bachelor's, no experience | Master's, no experience | $\begin{array}{r} \text { Master's, } \\ 20 \text { years } \\ \text { experience } \end{array}$ | Highest step on schedule | Percentage without salary schedules | Salary range |  |
|  |  |  |  |  |  |  | Average lowest | Average highest |
| Public school districts | 0.7 | \$64 | \$67 | \$119 | \$126 | 0.7 | \$633 | \$1,203 |
| Region |  |  |  |  |  |  |  |  |
| Northeast | 1.1 | 138 | 171 | 340 | 347 | 1.1 | 595 | 1,154 |
| Midwest | 1.8 | 92 | 99 | 206 | 237 | 1.8 | 701 | 1,682 |
| South | 0.1 | 42 | 45 | 75 | 90 | 0.1 | - | - |
| West | 1.5 | 204 | 216 | 354 | 358 | 1.5 | - | - |
| District size |  |  |  |  |  |  |  |  |
| Less than 1,000 | 1.4 | 127 | 146 | 287 | 283 | 1.4 | 767 | 1,345 |
| 1,000-4,999 | 0.3 | 86 | 101 | 191 | 204 | 0.3 | 425 | 1,633 |
| 5,000-9,999 | 0.3 | 132 | 147 | 283 | 329 | 0.3 | - | - |
| 10,000 or more | *0.0 | 50 | 57 | 135 | 153 | *0.0 | - | - |
| Minority enrollment |  |  |  |  |  |  |  |  |
| Less than 20 percent | 1.0 | 79 | 86 | 197 | 203 | 1.0 | 490 | 1,342 |
| 20 percent or more | 0.7 | 158 | 176 | 312 | 254 | 0.7 | 2,705 | 3,807 |
| Minority teachers |  |  |  |  |  |  |  |  |
| Less than 10 percent | 0.9 | 74 | 82 | 174 | 181 | 0.9 | 665 | 1,255 |
| 10 percent or more | 0.3 | 174 | 232 | 406 | 314 | 0.3 | - | - |
| Private schools | 1.1 | 147 | 171 | 297 | 301 | 1.1 | 301 | 503 |
| Region |  |  |  |  |  |  |  |  |
| Northeast | 3.1 | 326 | 378 | 708 | 723 | 3.1 | 441 | 1,186 |
| Midwest | 2.4 | 256 | 274 | 484 | 518 | 2.4 | 661 | 945 |
| South | 2.1 | 236 | 264 | 385 | 431 | 2.1 | 534 | 829 |
| West | 3.5 | 391 | 418 | 738 | 774 | 3.5 | 782 | 1,051 |
| School size |  |  |  |  |  |  |  |  |
| Less than 150 | 2.1 | 337 | 388 | 645 | 676 | 2.1 | 377 | 630 |
| 150-499 | 1.1 | 119 | 136 | 202 | 207 | 1.1 | 263 | 732 |
| 500-749 | 2.2 | 321 | 373 | 635 | 714 | 2.2 | 629 | 1,702 |
| 750 or more | 2.6 | 233 | 260 | 617 | 694 | 2.6 | 1,196 | 2,620 |
| Minority enrollment |  |  |  |  |  |  |  |  |
| Less than 20 percent | 1.4 | 182 | 212 | 381 | 396 | 1.4 | 294 | 599 |
| 20 percent or more | 2.1 | 311 | 360 | 481 | 529 | 2.1 | 576 | 921 |
| Minority teachers |  |  |  |  |  |  |  |  |
| Less than 10 percent | 1.5 | 170 | 194 | 354 | 353 | 1.5 | 351 | 643 |
| 10 percent or more | 2.4 | 299 | 327 | 525 | 605 | 2.4 | 743 | 964 |

- Not available.
* Standard errors less than 0.05 are rounded to 0.0.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Private School and Teacher Demand and Shortage Questionnaires).

Table S57-1 Standard errors for table 57-1

| Class subject | Percentage of students eligible for free or reduced-price lunch |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 0-5 | 6-20 | 21-40 | 41-100 |
|  | Majored in class subject |  |  |  |
| Mathematics | 2.5 | 1.5 | 2.4 | 2.9 |
| Science | 2.8 | 1.6 | 1.6 | 2.0 |
| Biology | 3.2 | 2.9 | 3.2 | 3.8 |
| Chemistry | 5.3 | 4.0 | 5.3 | 5.6 |
| Physics | 10.2 | 4.7 | 5.8 | 10.3 |
|  | Majored or minored in class subject |  |  |  |
| Mathematics | 2.1 | 1.5 | 2.0 | 2.7 |
| Science | 2.3 | 1.1 | 0.9 | 1.2 |
| Biology | 2.8 | 2.3 | 2.5 | 2.8 |
| Chemistry | 5.1 | 3.4 | 4.3 | 5.8 |
| Physics | 10.4 | 5.9 | 5.6 | 10.0 |
|  | Certified in class subject |  |  |  |
| Mathematics | 1.3 | 1.4 | 1.1 | 2.5 |
| Science | 1.2 | 0.8 | 1.2 | 2.0 |
| Biology | 1.6 | 1.0 | 2.3 | 3.2 |
| Chemistry | 2.5 | 1.9 | 2.7 | 4.1 |
| Physics | 2.9 | 2.0 | 5.5 | 8.0 |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher
Questionnaire)

Table S57-2 Standard errors for table 57-2

| Class subject | Public |  |  |  | Private |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than $150$ | 150-499 | 500-749 | 750 or more | Less than 150 | 150-499 | 500-749 | 750 or more |
|  | Majored in class subject |  |  |  |  |  |  |  |
| Mathematics | 3.8 | 2.2 | 3.2 | 1.3 | 8.2 | 4.4 | 5.5 | 5.6 |
| Science | 3.5 | 2.2 | 1.6 | 1.3 | 6.6 | 2.5 | 5.7 | 3.0 |
| Biology | 6.0 | 3.2 | 3.8 | 2.0 | - | 4.9 | - | - |
| Chemistry | 7.2 | 4.4 | 7.0 | 2.7 | - | 9.1 | - | - |
| Physics | - | 4.5 | 8.1 | 4.4 | - | 8.3 | - | - |
|  | Majored or minored in class subject |  |  |  |  |  |  |  |
| Mathematics | 3.6 | 1.9 | 2.7 | 1.2 | 8.4 | 3.9 | 5.1 | 5.5 |
| Science | 2.4 | 1.1 | 0.9 | 0.8 | 6.6 | 1.7 | 2.8 | 2.6 |
| Biology | 5.2 | 3.1 | 3.5 | 1.3 | - | 4.9 | - | - |
| Chemistry | 11.4 | 4.3 | 6.7 | 2.4 | - | 11.8 | - | - |
| Physics | - | 4.3 | 8.4 | 4.7 | - | 9.9 | - | - |
|  | Certified in class subject |  |  |  |  |  |  |  |
| Mathematics | 2.6 | 1.9 | 1.8 | 1.0 | 7.2 | 4.0 | 5.5 | 5.5 |
| Science | 1.6 | 1.1 | 1.1 | 0.9 | 9.6 | 4.0 | 4.5 | 4.0 |
| Biology | 3.8 | 2.7 | 2.5 | 1.3 | - | 4.3 | - | - |
| Chemistry | 13.1 | 3.0 | 4.6 | 1.7 | - | 11.0 | - | - |
| Physics | 5.9 | 5.0 | 8.0 | 2.0 | - | 7.7 | - | - |
| - Not available |  |  |  | E: U.S. on Statis nnaire) | artment o Schools an | Education Staffing Su | National <br> ey, 1993-9 | nter for Teacher |

Table S57-3 Standard errors for table 57-3

| Class subject | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Central city | rban fringe/ large town | Rural/ small town | Central city | rban fringe/ large town | Rural/ small town |
| Majored in class subject |  |  |  |  |  |  |
| Mathematics | 2.7 | 1.8 | 1.6 | 4.1 | 3.9 | 7.4 |
| Science | 2.2 | 2.1 | 0.9 | 2.7 | 2.9 | 2.9 |
| Biology | 3.4 | 3.2 | 1.9 | 6.1 | 6.3 | - |
| Chemistry | 4.1 | 4.3 | 3.3 | 8.1 | 8.9 | - |
| Physics | 6.7 | 6.3 | 2.7 | - | - | - |
| Majored or minored in class subject |  |  |  |  |  |  |
| Mathematics | 2.3 | 1.8 | 1.2 | 3.9 | 3.5 | 7.3 |
| Science | 0.9 | 1.5 | 0.6 | 2.0 | 1.7 | 2.5 |
| Biology | 2.6 | 2.3 | 1.6 | 5.7 | 5.1 | - |
| Chemistry | 4.7 | 3.4 | 3.1 | 3.7 | 10.5 | - |
| Physics | 7.0 | 7.1 | 2.7 | - | - | - |
| Certified in class subject |  |  |  |  |  |  |
| Mathematics | 1.7 | 1.2 | 1.1 | 3.7 | 3.8 | 6.8 |
| Science | 1.5 | 0.9 | 0.9 | 4.0 | 2.9 | 5.6 |
| Biology | 2.4 | 1.6 | 1.6 | 5.0 | 3.5 | - |
| Chemistry | 3.6 | 2.7 | 1.5 | 5.9 | 8.5 | - |
| Physics | 4.3 | 3.3 | 3.2 | - | - | - |

- Not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

## Table S57-4 Standard errors for table 57-4

|  | Central city |  |  |  | Urban fringe/large town |  |  |  | Rural/small town |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class subject | 0-5 | 6-20 | 21-40 | 41-100 | 0-5 | 6-20 | 21-40 | 41-100 | 0-5 | 6-20 | 21-40 | 41-100 |
|  | Majored in class subject |  |  |  |  |  |  |  |  |  |  |  |
| Mathematics | 6.0 | 3.8 | 5.8 | 4.9 | 3.3 | 2.2 | 3.5 | 8.6 | 3.5 | 2.5 | 3.6 | 2.6 |
| Science | 9.6 | 3.0 | 3.3 | 3.8 | 3.1 | 3.4 | 4.0 | 5.0 | 3.3 | 1.6 | 1.9 | 3.0 |
| Biology | - | 5.9 | 4.9 | 7.2 | 3.5 | 5.5 | 6.8 | 9.8 | 4.8 | 3.8 | 3.4 | 4.9 |
| Chemistry | - | 8.0 | - | 8.0 | 7.6 | 6.0 | - | - | 8.7 | 6.3 | 5.1 | 7.4 |
| Physics | - | - | - | - | - | 6.8 | - | - | - | 5.4 | 4.0 | - |
|  | Majored or minored in class subject |  |  |  |  |  |  |  |  |  |  |  |
| Mathematics | 6.7 | 3.0 | 5.6 | 4.3 | 2.8 | 2.3 | 2.7 | 10.2 | 2.9 | 2.2 | 2.0 | 2.0 |
| Science | 0.2 | 1.8 | 2.3 | 2.0 | 3.0 | 2.4 | 2.3 | 4.9 | 2.9 | 1.4 | 1.0 | 1.7 |
| Biology | - | 5.8 | 4.5 | 4.6 | 2.9 | 4.2 | 5.2 | 6.2 | 4.8 | 3.3 | 3.2 | 3.7 |
| Chemistry | - | 7.6 | - | 7.8 | 6.5 | 5.7 | - | - | 8.5 | 5.9 | 5.5 | 7.6 |
| Physics | - | - | - | - | - | 11.2 | - | - | - | 5.4 | 4.8 | 2.0 |
|  | Certified in class subject |  |  |  |  |  |  |  |  |  |  |  |
| Mathematics | 3.0 | 2.4 | 2.8 | 4.0 | 2.0 | 2.4 | 1.7 | 6.8 | 1.2 | 2.0 | 1.7 | 2.3 |
| Science | 4.1 | 1.2 | 2.7 | 3.5 | 1.2 | 1.4 | 2.0 | 5.6 | 2.7 | 1.3 | 2.1 | 1.1 |
| Biology | - | 3.5 | 4.7 | 5.4 | 1.4 | 2.0 | 4.0 | 10.8 | 4.3 | 1.1 | 4.1 | 2.9 |
| Chemistry | - | 3.2 | - | 5.3 | 3.5 | 4.0 | - | - | 2.7 | 2.1 | 3.3 | 5.9 |
| Physics | - | - | - | - | - | 3.2 | - | - | - | 3.3 | 7.5 | 8.5 |

[^105]SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

Table S58-1 Standard errors for table 58-1

| Age of teacher | Public |  |  |  | Private |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage distribution | Teaching at same school | Moved to another school | Left teaching | Percentage distribution | Teaching at same school | Moved to another school | Left teaching |
| Total | (*) | 0.5 | 0.4 | 0.4 | (*) | 0.8 | 0.5 | 0.7 |
| Younger than 25 | 0.2 | 3.2 | 3.0 | 0.6 | 0.4 | 5.1 | 2.9 | 4.0 |
| 25-29 | 0.5 | 1.9 | 1.4 | 1.3 | 0.8 | 1.7 | 1.1 | 1.4 |
| 30-39 | 0.8 | 1.5 | 0.9 | 1.1 | 1.0 | 2.1 | 1.1 | 1.7 |
| 40-49 | 0.9 | 0.8 | 0.6 | 0.6 | 0.9 | 1.4 | 0.7 | 1.2 |
| 50-59 | 0.8 | 0.9 | 0.7 | 0.5 | 0.9 | 1.1 | 0.5 | 1.1 |
| 60-64 | 0.3 | 5.3 | 0.9 | 5.0 | 0.7 | 2.4 | - | 2.4 |
| 65 and older | 0.1 | 9.0 | - | 7.9 | 0.4 | 9.4 | - | 8.7 |

- Not available.

SOURCE: U.S. Department of Education, National Center for

* Not applicable.

Education Statistics, Schools and Staffing Survey, 1993-94, and the Teacher Follow-up Survey, 1994-95.

Table S58-2 Standard errors for table 58-2

| Teaching status, destination, and reasons for leaving | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Elementary | Secondary | Total | Elementary | Secondary |
|  | Teaching status |  |  |  |  |  |
| Left teaching | 0.4 | 0.6 | 0.5 | 0.7 | 1.0 | 1.0 |
| Moved to another school | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | 0.6 |
| Teaching at same school | 0.5 | 0.7 | 0.8 | 0.8 | 1.1 | 1.1 |
|  | Destination of leavers |  |  |  |  |  |
| Working in education | 2.0 | 3.5 | 2.0 | 2.4 | 1.2 | 5.0 |
| Working outside education | 2.5 | 3.6 | 3.4 | 2.9 | 3.7 | 4.0 |
| Attending college | 0.6 | 0.7 | 0.8 | 1.8 | 2.9 | 1.0 |
| Homemaking/child rearing | 2.9 | 4.2 | 3.7 | 2.7 | 2.1 | 5.2 |
| Retired | 2.4 | 4.1 | 2.5 | 1.5 | 2.4 | 1.5 |
| Disabled | 0.9 | 0.5 | 1.8 | 0.4 | - | - |
| Other | 2.9 | 5.1 | 2.0 | 3.1 | 3.7 | 3.7 |
|  | Reasons for leaving |  |  |  |  |  |
| Family or personal move | 2.2 | 4.3 | 2.6 | 3.1 | 3.5 | 4.6 |
| Pregnancy/child rearing | 2.2 | 3.0 | 3.1 | 2.4 | 3.5 | 1.7 |
| Health | 1.5 | 2.3 | 1.8 | 0.7 | 0.9 | 0.9 |
| Retirement | 2.8 | 4.2 | 3.5 | 0.8 | 1.3 | 1.3 |
| To pursue another career | 1.3 | 2.9 | 1.0 | 1.8 | 2.0 | 3.5 |
| To take courses to improve career opportunities |  |  |  |  |  |  |
| To take courses to improve career opportunities in the field of education | 0.7 | 1.0 | 1.0 | 1.9 | 2.5 | 2.4 |
| To take courses to improve career |  |  |  |  |  |  |
| School staffing action | 0.8 | 0.5 | 1.4 | 2.1 | 0.9 | 4.7 |
| To take a sabbatical or |  |  |  |  |  |  |
| Dissatisfied with teaching as a career | 1.2 | 0.8 | 2.3 | 1.8 | 2.4 | 2.2 |
| Other family or personal reason | 1.9 | 3.6 | 1.6 | 2.0 | 2.3 | 3.7 |

Table S58-3 Standard errors for table 58-3

| Age and race/ethnicity of teacher | Elementary |  |  | Secondary |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stayers | Movers | Leavers | Stayers | Movers | Leavers |
|  | All teachers |  |  |  |  |  |
| Total | 0.6 | 0.4 | 0.5 | 0.8 | 0.4 | 0.5 |
| Age (in years) |  |  |  |  |  |  |
| Younger than 25 | 4.1 | 3.4 | 1.4 | 3.6 | 2.6 | 2.1 |
| 25-29 | 2.0 | 1.3 | 1.1 | 3.1 | 2.2 | 2.3 |
| 30-39 | 1.9 | 1.4 | 1.4 | 1.2 | 0.7 | 0.9 |
| 40-49 | 0.7 | 0.6 | 0.6 | 1.2 | 0.7 | 0.7 |
| 50-59 | 1.0 | 0.8 | 0.6 | 1.1 | 0.9 | 0.7 |
| 60-64 | 6.7 | 0.3 | 6.7 | 4.9 | 1.5 | 4.3 |
| 65 and older | 12.9 | - | 10.5 | 9.6 | - | 9.5 |
| Race/ethnicity |  |  |  |  |  |  |
| White | 0.6 | 0.5 | 0.5 | 0.7 | 0.5 | 0.4 |
| Black | 3.1 | 1.6 | 2.7 | 2.3 | 1.7 | 1.1 |
| Hispanic | 4.2 | 2.6 | 3.0 | 4.5 | 2.4 | 3.6 |
| Asian/Pacific Islander | 5.1 | 4.3 | 2.2 | 3.9 | 3.6 | 1.0 |
| American Indian/Alaskan Native | 9.3 | 5.1 | 5.6 | 3.1 | 2.8 | 0.8 |
|  | Public school teachers |  |  |  |  |  |
| Total | 0.7 | 0.4 | 5.8 | 0.8 | 0.5 | 0.5 |
| Age (in years) |  |  |  |  |  |  |
| Younger than 25 | 4.4 | 4.4 | 0.8 | 3.6 | 3.0 | 1.1 |
| 25-29 | 2.4 | 1.5 | 1.4 | 3.5 | 2.5 | 2.6 |
| 30-39 | 2.3 | 1.6 | 1.6 | 1.2 | 0.8 | 0.8 |
| 40-49 | 0.8 | 0.6 | 0.7 | 1.3 | 0.8 | 5.5 |
| 50-59 | 1.1 | 0.9 | 0.6 | 1.3 | 1.0 | 0.7 |
| 60-64 | 8.4 | - | 8.4 | 5.9 | 1.8 | 5.0 |
| 65 and older | 16.7 | - | 13.2 | 12.7 | - | 12.7 |
| Race/ethnicity |  |  |  |  |  |  |
| White | 0.7 | 0.5 | 0.6 | 0.7 | 0.5 | 0.5 |
| Black | 3.3 | 1.6 | 2.9 | 2.4 | 1.8 | 1.2 |
| Hispanic | 4.5 | 2.8 | 3.1 | 4.9 | 2.6 | 3.9 |
| Asian/Pacific Islander | 5.6 | 4.5 | 1.6 | - | - | - |
| American Indian/Alaskan Native | 9.2 | 5.2 | 5.5 | 3.0 | 2.8 | 0.8 |
|  | Private school teachers |  |  |  |  |  |
| Total | 1.1 | 0.6 | 1.0 | 1.1 | 0.6 | 1.0 |
| Age (in years) |  |  |  |  |  |  |
| Younger than 25 | 5.9 | 3.1 | 4.1 | 7.3 | 5.9 | 7.1 |
| 25-29 | 2.2 | 1.4 | 1.8 | 2.5 | 1.9 | 1.9 |
| 30-39 | 2.9 | 1.7 | 2.4 | 3.3 | 1.8 | 3.0 |
| 40-49 | 2.0 | 1.1 | 1.5 | 1.8 | 0.7 | 1.5 |
| 50-59 | 1.1 | 0.7 | 0.8 | 2.4 | 0.5 | 2.5 |
| 60-64 | - | - | - | - | - | - |
| 65 and older | - | - | - | - | - | - |
| Race/ethnicity |  |  |  |  |  |  |
| White | 1.2 | 0.7 | 0.9 | 1.2 | 0.6 | 1.1 |
| Black | 7.3 | 4.6 | 4.7 | - | - | - |
| Hispanic | - | - | - | - | - | - |
| Asian/Pacific Islander | - | - | - | - | - | - |
| American Indian/Alaskan Native | - | - | - | - | - | - |
| - Not available. |  | SOUR <br> Educ <br> Teach | U.S. Dep Statistics ollow-up | of Educ and Staf 4-95. | , Nationa urvey, 1993 | enter for and the |

Standard Error Tables
Table S58-4 Standard errors for table 58-4

|  | Academic: <br> Science/ | Academic: Non- <br> Science/ <br> mathematics | Vocational | Special groups | Other fields |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Teaching status | 1.0 | 0.7 | 0.8 | 3.0 | 2.0 |
| Left teaching | 1.5 | 0.5 | 1.5 | 1.9 | 1.2 |
| Moved to another school | 1.7 | 1.0 | 1.9 | 3.6 | 2.5 |
| Teaching at same school |  |  |  |  |  |

SOURCE: U.S. Department of Education, National Center for
Education Statistics, Schools and Staffing Survey, 1993-94, and the
Teacher Follow-up Survey, 1994-95.

Table S58-5 Standard errors for table 58-5

|  | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reasons for leaving | Between <br> 1987-88 <br> 1988-89 | Between 1990-91 <br> 1991-92 | Between 1993-94 <br> 1994-95 | Between <br> 1987-88 <br> 1988-89 | Between 1990-91 <br> and 1991-92 | Between 1993-94 |
| Family or personal move | 1.8 | 2.8 | 2.2 | 3.2 | 2.5 | 3.1 |
| Pregnancy/child rearing | 3.3 | 2.6 | 2.2 | 4.3 | 2.3 | 2.4 |
| Health | 0.5 | 1.6 | 1.5 | 0.7 | 1.5 | 0.7 |
| Retirement | 2.9 | 2.8 | 2.8 | 1.5 | 2.2 | 0.8 |
| To pursue another career | 2.1 | 1.3 | 1.3 | 1.9 | 3.1 | 1.8 |
| For better salary or benefits | 1.0 | 0.7 | 1.0 | 1.6 | 1.8 | 1.5 |
| To take courses to improve career opportunities in the field of education | 0.6 | 1.7 | 0.7 | 0.8 | 1.0 | 1.9 |
| To take courses to improve career opportunities outside the field of education | 0.4 | 0.5 | 0.3 | 0.3 | 2.9 | - |
| School staffing action | 0.7 | 2.6 | 0.8 | 1.4 | 2.8 | 2.1 |
| To take a sabbatical or other break from teaching | 1.8 | 0.5 | 1.3 | 2.2 | 1.0 | 2.0 |
| Dissatisfied with teaching as a career | 1.5 | 2.2 | 1.2 | 1.9 | 1.9 | 1.8 |
| Other family or personal reason | 1.6 | 1.4 | 1.9 | 2.1 | 1.7 | 2.0 |

[^106]SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88, 1990-91, and 1993-94, and the Teacher Follow-up Survey, 1988-89, 1991-92, and 1994-95.

Table S58-6 Standard errors for table 58-6

| Teaching status, destination, and reasons for leaving | Public |  |  | Private |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Full-time | Part-time | Total | Full-time | Part-time |
|  | Teaching status |  |  |  |  |  |
| Left teaching | 0.3 | 0.3 | 1.9 | 0.7 | 0.7 | 1.7 |
| Moved to another school | 0.3 | 0.4 | 2.0 | 0.4 | 0.5 | 0.7 |
| Teaching at same school | 0.5 | 0.5 | 2.4 | 0.8 | 0.8 | 1.8 |
|  | Destination of leavers |  |  |  |  |  |
| Working in education | 2.7 | 2.0 | 7.5 | 2.0 | 2.4 | 3.4 |
| Working outside education | 2.2 | 2.5 | 4.7 | 2.8 | 2.8 | 5.1 |
| Attending college | 0.5 | 0.6 | 0.6 | 1.7 | 1.8 | 3.2 |
| Homemaking/child rearing | 2.6 | 2.9 | 2.7 | 2.0 | 2.7 | 2.2 |
| Retired | 2.0 | 2.4 | 1.5 | 2.0 | 1.5 | 4.6 |
| Disabled | 0.8 | 0.9 | - | 0.9 | 0.4 | - |
| Other | 2.5 | 2.9 | 2.1 | 2.4 | 3.1 | 3.1 |
|  | Reasons for leaving |  |  |  |  |  |
| Family or personal move | 2.0 | 2.2 | 1.2 | 2.1 | 3.1 | 2.6 |
| Pregnancy/child rearing | 2.0 | 2.2 | 2.5 | 1.7 | 2.4 | 1.6 |
| Health | 1.3 | 1.5 | 0.8 | 0.9 | 0.7 | 2.8 |
| Retirement | 2.3 | 2.8 | 1.5 | 1.8 | 0.8 | 5.1 |
| To pursue another career | 1.8 | 1.3 | 7.6 | 1.7 | 1.8 | 3.8 |
| For better salary or benefits | 0.9 | 1.0 | 2.9 | 1.2 | 1.5 | 2.5 |
| To take courses to improve career opportunities in the field of education | 1.8 | 0.7 | 8.9 | 1.7 | 1.9 | 2.0 |
| To take courses to improve career opportunities outside the field of education | 0.2 | 0.3 | - | 0.4 | - | - |
| school staffing action <br> To take a sabbatical or | 0.6 | 0.8 | 1.1 | 1.8 | 2.1 | 4.2 |
| To take a sabbatical or other break from teaching | 1.1 | 1.3 | 1.2 | 1.4 | 2.0 | 0.3 |
| Dissatisfied with teaching as a career | 1.0 | 1.2 | 1.8 | 1.2 | 1.8 | 0.9 |
| Other family or personal reason | 1.7 | 1.9 | 2.0 | 1.5 | 2.0 | 2.7 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94, and the Teacher Follow-up Survey, 1994-95.

Table S58-7 Standard errors for table 58-7


[^107]SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94, and the Teacher Follow-up Survey, 1994-95.

Table S59-1 Standard errors for table 59-1

| Tenure status, academic rank, and control of institution | Fall 1987 |  |  |  | Fall 1992 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Articles/ creative works | Books/ monographs | Presentations/ exhibits | Other | Articles/ creative works | Books/ monograph | Presentations/ exhibits | Other |
| Total | 0.1 | ${ }^{*} 0.0$ | 0.2 | 0.1 | 0.1 | ${ }^{*} 0.0$ | 0.1 | 0.1 |
| Tenure status |  |  |  |  |  |  |  |  |
| Tenured | 0.2 | *0.0 | 0.2 | 0.2 | 0.1 | *0.0 | 0.2 | 0.1 |
| Not tenured | 0.2 | 0.1 | 0.3 | 0.2 | 0.1 | *0.0 | 0.2 | 0.1 |
| Academic rank |  |  |  |  |  |  |  |  |
| Full professor | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 | *0.0 | 0.3 | 0.1 |
| Associate professor | 0.2 | 0.1 | 0.3 | 0.2 | 0.1 | *0.0 | 0.3 | 0.1 |
| Assistant professor | 0.3 | *0.0 | 0.4 | 0.2 | 0.1 | *0.0 | 0.2 | 0.1 |
| Instructor/lecturer | 0.2 | 0.1 | 0.4 | 0.2 | 0.1 | *0.0 | 0.2 | 0.1 |
| Other/not applicable | 0.2 | *0.0 | 0.8 | 0.2 | 0.2 | *0.0 | 0.7 | 0.2 |
| Control of institution |  |  |  |  |  |  |  |  |
| Public | 0.2 | 0.5 | 0.2 | 0.2 | 0.1 | *0.0 | 0.2 | 0.1 |
| Private | 0.3 | 0.6 | 0.4 | 0.1 | 0.2 | *0.0 | 0.2 | 0.1 |

* Standard errors less than 0.05 are rounded to 0.0.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1988 and 1993.

Table S59-2 Standard errors for table 59-2

| Academic discipline and type of institution | Fall 1987 |  |  |  | Fall 1992 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Articles/ creative works | Books/ monographs | Presentations/ exhibits | Other | Articles/ creative works | Books/ monographs | Presentations/ exhibits | Other |
| Total | 0.9 | 0.1 | 1.2 | 0.5 | 0.7 | 0.1 | 1.2 | 0.4 |
| Academic discipline |  |  |  |  |  |  |  |  |
| Agriculture/home economics | 4.0 | 1.1 | 3.6 | 1.3 | 6.7 | 0.6 | 7.1 | 3.1 |
| Business | 1.0 | 0.2 | 1.0 | 1.6 | 1.1 | 0.2 | 1.6 | 1.3 |
| Education | 1.5 | 0.2 | 2.4 | 1.0 | 1.0 | 0.3 | 2.4 | 0.8 |
| Engineering | 1.9 | 0.3 | 1.8 | 3.1 | 3.0 | 0.2 | 2.4 | 3.3 |
| Fine arts | 1.1 | 0.2 | 6.5 | 1.5 | 1.8 | 0.2 | 14.7 | 1.1 |
| Humanities | 0.8 | 0.3 | 1.0 | 0.7 | 0.8 | 0.2 | 1.2 | 0.7 |
| Natural sciences | 1.5 | 0.2 | 1.1 | 1.5 | 1.6 | 0.2 | 1.4 | 0.9 |
| Social sciences | 2.3 | 0.4 | 2.4 | 1.4 | 1.3 | 0.3 | 1.8 | 1.1 |
| All other fields | 2.5 | 0.3 | 2.8 | 1.7 | 1.3 | 0.2 | 1.2 | 0.7 |
| Type of institution |  |  |  |  |  |  |  |  |
| Research | 1.4 | 0.3 | 2.1 | 1.0 | 1.8 | 0.3 | 2.3 | 1.1 |
| Doctoral | 3.0 | 0.3 | 3.3 | 1.0 | 1.2 | 0.2 | 3.5 | 0.7 |
| Comprehensive | 1.1 | 0.1 | 2.5 | 1.3 | 0.8 | 0.1 | 2.4 | 0.5 |
| Liberal arts | 1.1 | 0.3 | 3.8 | 0.8 | 0.9 | 0.1 | 4.0 | 0.9 |
| 2-year | 0.6 | 0.2 | 1.3 | 0.7 | 0.4 | 0.1 | 1.3 | 0.5 |
| Other | 1.4 | 0.4 | 3.9 | 1.0 | 1.7 | 0.3 | 8.5 | 1.3 |

[^108]Standard Error Tables
Table S59-3 Standard errors for table 59-3

| Tenure status, academic rank, and control of institution | Fall 1987 |  |  |  | Fall 1992 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Articles/ creative works | Books/ monographs | Presentations/ exhibits | Other | Articles/ creative works | Books/ monographs | Presentations/ exhibits | Other |
| Total | 0.9 | 0.1 | 1.2 | 0.5 | 0.7 | 0.1 | 1.2 | 0.4 |
| Tenure status |  |  |  |  |  |  |  |  |
| Tenured | 1.4 | 0.2 | 1.7 | 0.6 | 1.1 | 0.2 | 1.7 | 0.6 |
| Not tenured | 0.7 | 0.2 | 1.3 | 0.7 | 0.6 | 0.1 | 2.2 | 0.6 |
| Academic rank |  |  |  |  |  |  |  |  |
| Full professor | 2.1 | 0.3 | 2.6 | 1.1 | 1.7 | 0.3 | 2.5 | 0.8 |
| Associate professor | 1.1 | 0.2 | 1.5 | 0.7 | 0.7 | 0.1 | 2.1 | 0.6 |
| Assistant professor | 0.6 | 0.1 | 1.8 | 1.1 | 0.6 | 0.1 | 2.0 | 0.5 |
| Instructor/lecturer | 0.4 | 0.2 | 1.6 | 0.6 | 0.4 | 0.1 | 2.0 | 0.4 |
| Other/not applicable | 1.1 | 0.2 | 2.0 | 0.8 | 1.7 | 0.2 | 5.1 | 2.5 |
| Control of institution |  |  |  |  |  |  |  |  |
| Public | 1.0 | 0.2 | 1.4 | 0.6 | 0.9 | 0.1 | 1.5 | 0.5 |
| Private | 2.0 | 0.2 | 2.2 | 0.8 | 1.4 | 0.2 | 2.0 | 0.5 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1988 and 1993.

Table S60-1 Standard errors for table 60-1

| Institutional and faculty characteristics | All institutions |  |  | Institutions with tenure systems |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | No tenure |  |  |
|  | Tenuretrack | Nontenuretrack | system at institution | Tenuretrack | Nontenuretrack |
| Total | 0.9 | 0.8 | 0.6 | 0.9 | 0.9 |
| Level of institution |  |  |  |  |  |
| 4 -year institutions | 1.2 | 1.0 | 0.6 | 1.1 | 1.1 |
| 2-year institutions | 1.3 | 1.2 | 1.2 | 1.3 | 1.3 |
| Public institutions |  |  |  |  |  |
| 4 -year | 1.3 | 1.3 | 0.4 | 1.3 | 1.3 |
| 2-year | 1.3 | 1.1 | 1.2 | 1.3 | 1.3 |
| Private institutions |  |  |  |  |  |
| 4 -year | 1.9 | 1.5 | 1.2 | 1.7 | 1.7 |
| 2-year | 6.6 | 8.3 | 8.6 | 8.8 | 8.8 |
| Type of institution |  |  |  |  |  |
| 4 -year institution | 1.2 | 1.0 | 0.6 | 1.1 | 1.1 |
| University | 1.2 | 1.1 | 0.5 | 1.2 | 1.2 |
| Research university | 2.4 | 2.3 | 0.2 | 2.4 | 2.4 |
| Doctoral university | 2.1 | 2.1 | 0.3 | 2.1 | 2.1 |
| Comprehensive university | 1.8 | 1.6 | 0.6 | 1.6 | 1.6 |
| Liberal arts | 3.5 | 2.3 | 2.6 | 2.9 | 2.9 |
| 2-year | 1.3 | 1.2 | 1.2 | 1.3 | 1.3 |
| Other | 4.1 | 3.7 | 4.8 | 4.0 | 4.0 |
| Carnegie classification |  |  |  |  |  |
| Research university I | 3.1 | 2.9 | 0.3 | 3.0 | 3.0 |
| Research university II | 3.3 | 3.3 | 0.1 | 3.3 | 3.3 |
| Doctoral university I | 2.4 | 2.4 | 0.4 | 2.5 | 2.5 |
| Doctoral university II | 3.4 | 3.4 | 0.6 | 3.4 | 3.4 |
| Comprehensive university I | 2.0 | 1.7 | 0.7 | 1.8 | 1.8 |
| Comprehensive university II | 4.2 | 3.7 | 1.8 | 4.0 | 4.0 |
| Liberal arts I | 4.0 | 3.3 | 2.2 | 3.5 | 3.5 |
| Liberal arts II | 4.4 | 2.8 | 4.1 | 3.7 | 3.7 |
| 2-year | 1.3 | 1.2 | 1.2 | 1.3 | 1.3 |
| Other | 4.1 | 3.7 | 4.8 | 4.0 | 4.0 |
| Academic discipline |  |  |  |  |  |
| Agriculture/home economics | 3.8 | 3.7 | 1.2 | 3.8 | 3.8 |
| Business | 1.8 | 1.7 | 1.2 | 1.9 | 1.9 |
| Education | 1.9 | 2.0 | 0.7 | 2.0 | 2.0 |
| Engineering | 3.1 | 3.1 | 1.6 | 3.2 | 3.2 |
| Fine arts | 2.3 | 2.1 | 2.7 | 1.9 | 1.9 |
| Health sciences | 2.1 | 1.9 | 1.2 | 2.1 | 2.1 |
| Humanities | 1.2 | 1.1 | 0.8 | 1.2 | 1.2 |
| Natural sciences | 1.6 | 1.6 | 0.7 | 1.7 | 1.7 |
| Social sciences | 1.8 | 1.6 | 0.7 | 1.8 | 1.8 |
| All other fields | 1.4 | 1.4 | 0.9 | 1.4 | 1.4 |

Standard Error Tables
Table S60-1 Standard errors for table 60-1 - Continued

| Institutional and faculty characteristics | All institutions |  |  | Institutions with tenure systems |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | No tenure |  |  |
|  | Tenuretrack | Nontenuretrack | system at institution | Tenuretrack | Nontenuretrack |
| Academic discipline by level of institution |  |  |  |  |  |
| Agriculture/home economics, 4-year | 4.2 | 4.2 | 0.6 | 4.2 | 4.2 |
| Agriculture/home economics, 2-year | 5.9 | 6.1 | 4.5 | 6.5 | 6.5 |
| Business, 4-year | 2.8 | 2.3 | 1.5 | 2.5 | 2.5 |
| Business, 2-year | 2.1 | 2.5 | 2.0 | 2.4 | 2.4 |
| Education, 4-year | 2.3 | 2.3 | 0.8 | 2.4 | 2.4 |
| Education, 2-year | 3.3 | 3.6 | 1.7 | 3.7 | 3.7 |
| Engineering, 4-year | 3.7 | 3.6 | 1.9 | 3.6 | 3.6 |
| Engineering, 2-year | 4.8 | 5.3 | 3.2 | 5.6 | 5.6 |
| Fine arts, 4 -year | 3.1 | 2.4 | 3.6 | 2.4 | 2.4 |
| Fine arts, 2-year | 2.6 | 3.1 | 2.1 | 2.9 | 2.9 |
| Health sciences, 4-year | 2.6 | 2.4 | 1.0 | 2.5 | 2.5 |
| Health sciences, 2-year | 3.1 | 3.0 | 2.8 | 3.3 | 3.3 |
| Humanities, 4-year | 1.5 | 1.5 | 0.7 | 1.5 | 1.5 |
| Humanities, 2-year | 2.0 | 1.7 | 1.8 | 2.0 | 2.0 |
| Natural sciences, 4-year | 1.7 | 1.5 | 0.7 | 1.6 | 1.6 |
| Natural sciences, 2-year | 2.0 | 2.3 | 1.4 | 2.2 | 2.2 |
| Social sciences, 4-year | 2.2 | 2.0 | 0.8 | 2.1 | 2.1 |
| Social sciences, 2-year | 2.5 | 2.6 | 1.7 | 2.7 | 2.7 |
| All other fields, 4 -year | 1.9 | 1.8 | 0.7 | 1.9 | 1.9 |
| All other fields, 2-year | 1.8 | 2.2 | 1.9 | 2.0 | 2.0 |
| Employment status |  |  |  |  |  |
| Part-time | 0.4 | 0.7 | 0.6 | 0.4 | 0.4 |
| Full-time | 0.8 | 0.4 | 0.7 | 0.5 | 0.5 |
| Sex |  |  |  |  |  |
| Male | 1.1 | 1.0 | 0.5 | 1.0 | 1.0 |
| Female | 0.9 | 0.9 | 0.8 | 0.9 | 0.9 |
| Employment status, by sex |  |  |  |  |  |
| Part-time |  |  |  |  |  |
| Male | 0.7 | 0.9 | 0.7 | 0.7 | 0.7 |
| Female | 0.4 | 0.7 | 0.6 | 0.4 | 0.4 |
| Full-time |  |  |  |  |  |
| Male | 0.8 | 0.4 | 0.7 | 0.5 | 0.5 |
| Female | 1.3 | 0.8 | 1.1 | 0.9 | 0.9 |
| Age by sex |  |  |  |  |  |
| Younger than 40 years | 1.2 | 1.2 | 0.7 | 1.3 | 1.3 |
| Male | 1.7 | 1.7 | 0.8 | 1.7 | 1.7 |
| Female | 1.2 | 1.4 | 0.8 | 1.3 | 1.3 |
| 40-49 years | 1.1 | 1.0 | 0.7 | 1.1 | 1.1 |
| Male | 1.4 | 1.3 | 0.8 | 1.4 | 1.4 |
| Female | 1.2 | 1.2 | 0.8 | 1.2 | 1.2 |
| 50-59 years | 1.2 | 1.1 | 0.6 | 1.2 | 1.2 |
| Male | 1.4 | 1.3 | 0.6 | 1.4 | 1.4 |
| Female | 1.6 | 1.6 | 1.1 | 1.6 | 1.6 |
| 60 years or older | 1.8 | 1.7 | 0.7 | 1.8 | 1.8 |
| Male | 1.9 | 1.8 | 0.7 | 1.9 | 1.9 |
| Female | 2.4 | 2.7 | 1.8 | 2.7 | 2.7 |

Table S60-1 Standard errors for table 60-1 - Continued

| Institutional and faculty characteristics | All institutions |  |  | Institutions with tenure systems |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tenuretrack | Nontenuretrack | No tenure system at institution |  |  |
|  |  |  |  | Tenuretrack | Nontenuretrack |
| Academic rank |  |  |  |  |  |
| Professor | 1.4 | 1.1 | 0.9 | 1.1 | 1.1 |
| Associate professor | 1.4 | 1.2 | 0.7 | 1.2 | 1.2 |
| Assistant professor | 1.5 | 1.3 | 0.8 | 1.4 | 1.4 |
| Instructor | 0.7 | 0.9 | 0.8 | 0.8 | 0.8 |
| Lecturer | 0.8 | 1.0 | 0.6 | 0.8 | 0.8 |
| Other | 1.8 | 2.5 | 1.9 | 2.0 | 2.0 |
| Faculty status |  |  |  |  |  |
| Has | 0.9 | 0.8 | 0.6 | 0.9 | 0.9 |
| Does not have | 0.4 | 0.8 | 0.8 | 0.4 | 0.4 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaskan Native | 5.3 | 6.0 | 3.8 | 5.9 | 5.9 |
| Asian/Pacific Islander | 2.3 | 2.2 | 0.8 | 2.3 | 2.3 |
| Black | 2.1 | 2.0 | 0.9 | 2.1 | 2.1 |
| Hispanic | 2.6 | 2.7 | 1.1 | 2.7 | 2.7 |
| White | 1.0 | 0.9 | 0.6 | 0.9 | 0.9 |

[^109]Standard Error Tables
Table S60-2 Standard errors for table 60-2

| Institutional characteristics and academic discipline | Graduate courses | Undergraduate courses |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Lower division | Upper division |
| Total | 1.6 | 1.0 | 1.3 | 1.0 |
| Public institutions |  |  |  |  |
| 4 -year | 1.4 | 1.2 | 1.8 | 1.1 |
| University | 1.4 | 1.2 | 1.8 | 1.1 |
| College | 0.0 | 5.6 | 10.3 | 3.5 |
| Private institutions |  |  |  |  |
| 4 -year | 3.2 | 1.7 | 1.9 | 1.9 |
| University | 3.5 | 2.3 | 2.4 | 2.6 |
| College | 6.9 | 2.5 | 3.0 | 2.8 |
| Type of institution |  |  |  |  |
| Research university | 3.0 | 2.1 | 3.1 | 2.2 |
| Doctoral university | 2.0 | 2.3 | 2.8 | 2.7 |
| Comprehensive university | 2.9 | 1.4 | 1.9 | 1.4 |
| Liberal arts | 6.9 | 2.4 | 3.1 | 2.6 |
| Carnegie classification |  |  |  |  |
| Research university I | 3.8 | 2.5 | 4.1 | 2.7 |
| Research university II | 3.3 | 3.5 | 4.9 | 2.9 |
| Doctoral university I | 2.9 | 2.6 | 3.8 | 2.8 |
| Doctoral university II | 2.7 | 3.8 | 4.1 | 4.5 |
| Comprehensive university I | 3.0 | 1.6 | 2.1 | 1.6 |
| Comprehensive university II | 8.1 | 3.3 | 3.8 | 3.6 |
| Liberal arts I | 10.2 | 3.0 | 3.5 | 3.7 |
| Liberal arts II | 9.2 | 3.2 | 4.1 | 3.5 |
| Other | 5.0 | 5.8 | 7.0 | 6.4 |
| Academic discipline |  |  |  |  |
| Agriculture/home economics | 3.4 | 3.9 | 6.0 | 4.4 |
| Business | 5.6 | 2.6 | 3.9 | 2.9 |
| Education | 4.1 | 2.4 | 3.8 | 2.7 |
| Engineering | 4.0 | 4.9 | 7.4 | 4.1 |
| Fine arts | 6.5 | 2.3 | 3.1 | 2.8 |
| Health sciences | 3.2 | 3.4 | 6.9 | 3.2 |
| Humanities | 3.4 | 1.5 | 1.8 | 1.9 |
| Natural sciences | 2.0 | 1.6 | 1.9 | 1.8 |
| Social sciences | 4.0 | 1.9 | 2.3 | 2.3 |
| All other fields | 3.0 | 2.0 | 3.6 | 2.4 |

[^110]
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http://www.ed.gov/NCES/timss/index.html (The Third International Mathematics and Science Study)
http://www.ed.gov/NCES/ipeds/index.html (for information on the nation's colleges and universities)
http://www.ed.gov/NCES/ccd/index.html (for information on the nation's public elementary and secondary schools and school districts)

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ftp://ftp.ed.gov/ncesgopher
gopher://gopher.ed.gov:10000
Future plans include improving our search capabilities and allowing customers to retrieve portions of our data bases by user-defined selection criteria.

## The National Education Data Resource Center

The National Education Data Resource Center (NEDRC) was established by the U.S. Department of Education's National Center for Education Statistics (NCES) to serve the education information needs of teachers, researchers, policymakers, and others who need access to the most current education data. Data sets for some 16 studies maintained by NCES are currently available through NEDRC and there are plans to include additional databases, as well as to link database files to allow for higher level analyses.

You can contact the NEDRC to request specific analyses of education data sets; assistance for on-site research at NEDRC facilities; tables, graphic materials, or detailed reports from education studies and surveys; and limited programming analysis (e.g., cross tabulations). The following studies are currently available through NEDRC:

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- Schools and Staffing Survey (SASS) <br> - Private School Survey (PSS) <br> - National Survey of Postsecondary Faculty (NSOPF) <br> - Common Core of Data (CCD)
- <br> - National Postsecondary Student Aid Study (NPSAS) <br> - National Longitudinal Study (NLS) <br> - National Education Longitudinal Study (NELS:88) <br> - Integrated Postsecondary Education Data
- $\quad$ Recent College Graduates Study (RCG) <br> - Beginning Postsecondary Students (BPS) <br> - National Household Education Survey (NHES) <br> - Public Library Survey (PLS) <br> - Academic Library Survey (ALS) <br> - National Assessment of Educational Progress (NAEP)
}

To request research information from the NEDRC, call 703-845-3151, fax 703-820-7464, or E-mail the NEDRC at nedrc@inet.ed.gov. To receive the information you need, make your request as specific as possible, including the name and year of the data set (e.g., NELS:88), specific survey (e.g., NELS: Parent Questionnaire), population of interest (e.g., public school teachers with one year of experience), data elements (e.g., set and subject taught), and analysis type (e.g., cross tabulations). Please let us know how you wish to receive the requested material: diskette, hard copy, or via E-mail.


[^0]:    Center-based programs include nursery, prekindergarten, and Head Start programs.
    ${ }^{2}$ The poverty measure presented in this analysis was developed by combining information about household composition and household income. See the supplemental note to this indicator for further discussion.

[^1]:    - Not available.
    ' "Behavioral problems" and "problems with school work" represent students whose parents reported they had been contacted by the school about these types of problems.
    ${ }^{2}$ In 1995, parents were asked to rate how well their child was doing compared to other children in the class using the following scale: "near the top of the class," "above the middle of the class," "around the middle," "below the middle," or "near the bottom." Students whose parents answered "below the middle" or "near the bottom" were categorized as "academically below the middle of the class."

[^2]:    * Kominski, Robert, "How Good Is 'How Well?’ An Examination of the Census English-speaking Ability Question," 1989.

[^3]:    * Based on the percentage of students who reported ever using a computer in school.
    NOTE: Data in this table may appear inconsistent with data in table $5-1$ due to a difference in respondents for the two sources. See the supplemental note to this indicator for further explanation.

[^4]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, National Assessment of Educational Progress, Almanac: Science, 1986 to 1994, 1996.

[^5]:    ${ }^{1}$ During the most recent full week of school.
    ${ }^{2}$ Locally budgeted expenditures exclude federal gifts and grants.
    NOTE: Percentages are based on schools that have library media centers. In school year 1990-91, 96 percent of public schools had library media centers.

[^6]:    October Current Population Surveys.

[^7]:    - Too few cases for a reliable estimate.
    ' "Average hours worked per week while enrolled" was calculated relative to students' enrollment and included only hours for those months students were both working and enrolled up to first attainment (if any) or last enrollment.
    ${ }^{2}$ Students were considered to have a diploma only if they had a regular high school diploma. Students with a GED or other high school credentials were considered to have no diploma.
    ${ }^{3}$ Does not include students enrolled in either public less-than-2-year or private, not-for-profit less-than-4-year institutions.

[^8]:    'Statistically significant difference from 1994.
    ${ }^{2}$ Statistically significant difference from 1971.
    ${ }^{3}$ Revised from previously published figures.
    NOTE: "Percentage of students" represents the percentage of all students from each subgroup. Not shown are about one-third of

[^9]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, National Assessment of Educational Progess,
    Almanac: Reading, 1984 to 1994, 1996.

[^10]:    - Not available.

[^11]:    SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to Education Statistics, National Assessment of Educational Progress, 1994; Writing, 1984 to 1994, 1996. Trends in Academic Progress: Achievement of U.S. Students in

[^12]:    NOTE: Details may not add to totals due to rounding.

[^13]:    SOURCE: Organization for Economic Co-operation and Development and Statistics Canada, Literacy, Economy and Society, Results of the International Adult Literacy Survey, 1995.

[^14]:    ${ }^{1}$ These data only report the percentage of students who earned credit in mathematics courses while in high school and do not count those students who took these courses prior to entering high school. In 1992, for example, approximately 93 percent of students had taken algebra I at any time prior to graduating from high school, and about

    SOURCE: U.S. Department of Education, National Center for Education Statistics, The 1994 High School Transcript Study Tabulations: Comparative Data on Credits Earned and Demographics for 1994, 1990, 1987, and 1982 High School Graduates, 1996. 70 percent had taken geometry.
    ${ }^{2}$ Percents less than 0.05 are rounded to 0.0.

[^15]:    SOURCE: U.S. Department of Education, National Center for Education Statistics, The 1994 High School Transcript Study Tabulations, 1996.

[^16]:    SOURCE: The College Board, Advanced Placement Program,
    Statistical Tables 1995-96 and National Summary Reports, various years (Copyright © 1996 by the College Entrance Examination Board. All rights reserved.).

[^17]:    * Engineering technologies cannot be derived by race/ethnicity from the "Engineering" category.
    NOTE: See the supplemental note to this indicator for a description of the fields of study.

    SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1996, table 260, (based on IPEDS/HEGIS "Completion" surveys).

[^18]:    ${ }^{1}$ The female field concentration ratio is calculated as the percentage of females earning degrees who majored in a specific field divided by the percentage of males earning degrees who majored in the same field. Includes degrees conferred to U.S. and non-U.S. citizens.
    ${ }^{2}$ Principally composed of public administration at the master's degree level and agriculture and natural resources at the doctor's degree level. See the glossary for a full definition of "other technical/ professional" fields.

[^19]:    ${ }^{1}$ The female field concentration ratio is calculated as the percentage of females earning degrees who majored in a specific field divided by the percentage of males earning degrees who majored in the same field. Includes degrees conferred to U.S. and non-U.S. citizens.
    ${ }^{2}$ Principally composed of public administration at the master's degree level and agriculture and natural resources at the doctor's degree level. See the glossary for a full definition of "other technical/ professional" fields.

[^20]:    ' Principally composed of public administration at the master's degree level and agriculture and natural resources at the doctor's degree level. See the glossary for a full definition of "other technical/ professional" fields.
    ${ }^{2}$ The index of dissimilarity is calculated as the sum of the absolute difference between the proportions of females and males earning degrees in each of the fields, divided by two. For this analysis, it was calculated using the 11 detailed categories shown above. (For example, the "life sciences," "physical sciences," and "mathematics" categories were used in this analysis, but the "natural sciences"

[^21]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, 1993 Baccalaureate and Beyond Longitudinal
    Study, First Follow-up (B\&B:93/94).

[^22]:    NOTE: In 1992, the Current Population Survey (CPS) changed the SOURCE: U.S. Department of Commerce, Bureau of the Census, questions used to obtain the educational attainment of respondents. See the supplemental note to Indicator 22 for further discussion.

[^23]:    * This ratio is most useful when compared to 1.0 . For example, the ratio of 1.52 in 1995 for males whose highest education level was a bachelor's degree or higher means that they earned 52 percent more than males who had a high school diploma. The ratio of 0.74 in 1995 for males whose highest education level was grades 9-11 means that they earned 26 percent less than males who had only a high school diploma.

[^24]:    - Too few sample observations for a reliable estimate.

[^25]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, National Education Longitudinal Study of 1988,
    Second Follow-up (1992) and Third Follow-up (1994).

[^26]:    ${ }^{1}$ Includes only those teachers who taught in both the 1993-94 and 1994-95 school years; therefore, new teachers are not included in this analysis.
    ${ }^{2}$ Includes those teachers who responded "almost every day" and "once or twice a week."

[^27]:    ${ }^{1}$ Includes only those teachers who taught in both the 1993-94 and 1994-95 school years; therefore, new teachers are not included in this analysis.
    ${ }^{2}$ "Total" includes all elementary and secondary teachers, while "elementary" includes only those whose main assignment was teaching "general elementary." See the supplemental note to Indicator 36 for further discussion.

[^28]:    ' Includes only those teachers who taught in both the 1993-94 and 1994-95 school years; therefore, new teachers are not included in this analysis.
    ${ }^{2}$ Includes those teachers who responded "almost every day" and "once or twice a week."

[^29]:    * Includes only those elementary teachers whose main assignment was teaching "general elementary" and who taught in both the 1993-94 and 1994-95 school years; therefore, new teachers were not included in this analysis. See the supplemental note to Indicator 36 for further discussion.

[^30]:    SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88, 1990-91, and 1993-94.

[^31]:    * Includes those who responded "strongly agree" or "agree." SOURCE: U.S. Department of Education, National Center for NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire.

    Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

[^32]:    * Includes those who responded "strongly agree" or "agree."

    NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire.

    SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

[^33]:    * Respondents were asked about influence and control on a scale of $0-5$, with 0 meaning "no influence" or "no control" and 5 meaning a "great deal of influence" or "complete control." Responses 4 and 5 were combined in this analysis.
    NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire.

[^34]:    * Respondents were asked about influence on a scale of 0-5, with 0 meaning "no influence" and 5 meaning a "great deal of influence." Responses 4 and 5 were combined in this analysis.

    SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher

    NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire.

[^35]:    * Respondents were asked about influence on a scale of 0-5, with 0 meaning "no influence" and 5 meaning a "great deal of influence." Responses 4 and 5 were combined in this analysis.

    SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Administrator Questionnaire).
    NOTE: Excludes a small number of principals whose schools did no $\dagger$ respond to the questionnaire.

[^36]:    * Respondents were asked about influence and control on a scale of 0-5, with 0 meaning "no influence" or "no control" and 5 meaning a "great deal of influence" or "complete control." Responses 4 and 5

    SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire). were combined in this analysis.
    NOTE: Excludes a small number of teachers whose schools did not respond to the questionnaire.

[^37]:    * Respondents were asked about influence on a scale of 0-5, with 0 meaning "no influence" and 5 meaning a "great deal of influence." Responses 4 and 5 were combined in this analysis.

    SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Administrator Questionnaire).

[^38]:    * Included in the total but not shown separately are other types of academic ranks, institutions, and academic disciplines.
    NOTE: See the supplemental note to this indicator for definitions of
    SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1988 and 1993.

[^39]:    Beginning in fall 1980, data include estimates for the expanded universe of private schools.
    ${ }^{2}$ Enrollment includes most kindergartners and a relatively small number of nursery school students.
    ${ }^{3}$ Revised from previously published figures.
    ${ }^{4}$ Estimates based on preliminary data.

[^40]:    ' Beginning in fall 1980, data include estimates for the expanded universe of private schools.
    ${ }^{2}$ Enrollment includes most kindergartners and a relatively small number of nursery school students.
    ${ }^{3}$ Revised from previously published figures.
    ${ }^{4}$ Estimates based on preliminary data.
    NOTE: The private school enrollment figures for years 1971-75, 1979, 1981-82, 1984, and 1986 are estimated. The 1987 private school

[^41]:    SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, Base Year (1988), First Follow-up (1990), and Second Follow-up (1992) Student Surveys.

[^42]:    * Includes those teachers who responded "certainly would become a teacher" and "probably would become a teacher."

    SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94.

[^43]:    *Includes those teachers who responded "certainly would become a teacher" and "probably would become a teacher."

    SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94.

[^44]:    * Includes those who were employed but not at work during the SOURCE: U.S. Department of Commerce, Bureau of the Census, survey week.

    October Current Population Surveys.

[^45]:    * Includes those who were employed but not at work during the

    SOURCE: U.S. Department of Commerce, Bureau of the Census,

[^46]:    - Data for college students aged 35 or older were not available in 1977.

    NOTE: Students who were enrolled in college but had not completed high school (less than 1 percent of the total enrolled) were not included in this analysis.
    SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

[^47]:    -Data for college students aged 35 or older were not available in 1977.

    SOURCE: U.S. Department of Commerce, Bureau of the Census,
    NOTE: Students who were enrolled in college but had not completed high school (less than 1 percent of the total enrolled) were not included in this analysis.

[^48]:    - Data for college students aged 35 or older were not available in 1977.

    SOURCE: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys.

[^49]:    — Data for college students aged 35 or older were not available in SOURCE: U.S. Department of Commerce, Bureau of the Census, 1977.

    October Current Population Surveys.
    NOTE: Students who were enrolled in college but had not completed high school (less than 1 percent of the total enrolled) were not included in this analysis.

[^50]:    NOTES:
    For a further argument against using market exchange rates, see Edith M. Rasel and Lawrence Mishel, Short-changing Education, Economic Policy Institute, January 1990.
    ${ }^{2}$ PPP Indices for other aggregates such as private consumption expenditures are available. See Stephen M. Barro, International Comparisons of Education Spending: Some Conceptual and Methodological Issues, SMB Economic Research, Inc., April 1990, for a discussion of the strengths and weaknesses of using various indices.
    ${ }^{3}$ Organization for Economic Cooperation and Development, Centre for Educational Research and Innovation, Education At a Glance, OECD Indicators. Author: Paris, France, 1996, p. 57.
    ${ }^{4}$ Stephen M. Barro. Preliminary Findings from the Expenditure Comparability Study. SMB Economic Research, Inc., June 1993.

[^51]:    * Estimated by National Education Association (NEA).

[^52]:    NOTE: Included in the totals but not shown separately are health sciences faculty. See the supplemental note to Indicator 43 for a description of research production measures.

    SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1988 and 1993.

[^53]:    - Not available.

[^54]:    - Not applicable.
    ${ }^{1}$ Not available.
    ${ }^{2}$ Standard errors less than 0.05 are rounded to 0.0 .

[^55]:    * Standard errors less than 0.5 are rounded to 0 .

[^56]:    * Standard errors less than 0.5 are rounded to 0 .

[^57]:    * Standard errors less than 0.5 are rounded to 0 .

[^58]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, Schools and Staffing Survey (Library Media
    Center Questionnaire), 1993-94.

[^59]:    - Not available.

[^60]:    - Not available.

[^61]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, National Longitudinal Study of the High School
    Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond
    (HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

[^62]:    SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond
    (HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

[^63]:    SOURCE: U.S. Department of Education, National Center for (HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and
    Education Statistics, National Longitudinal Study of the High School
    Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

[^64]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, National Longitudinal Study of the High School
    Class of 1972 (NLS-72), First Follow-up (1974); High School and Beyond
    (HS\&B) study, Senior Cohort, Third Follow-up Survey (1986); and National Education Longitudinal Study of 1988 (NELS:88), Second (1992) and Third Follow-up (1994).

[^65]:    — Not applicable.

[^66]:    SOURCE: U.S. Department of Education, National Center for Science, 1969 to 1994; Mathematics, 1973 to 1994; Reading, 1971 to

[^67]:    SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in

[^68]:    SOURCE: U.S. Department of Education, National Center for Education Statistics, NAEP 1996 Mathematics Report Card for the Nation and the States: Findings from the National Assessment of Educational Progress, 1997.

[^69]:    - Not available.

[^70]:    * Standard errors less than 0.05 were rounded to 0.0 .

[^71]:    - Not available.

[^72]:    SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

[^73]:    * Standard errors less than 0.05 are rounded to 0.0 .

[^74]:    * Standard errors less than 0.05 are rounded to 0.0.

[^75]:    * Standard errors less than 0.05 are rounded to 0.0.

[^76]:    * Standard errors less than 0.05 are rounded to 0.0.

[^77]:    * Standard errors less than 0.05 are rounded to 0.0.

[^78]:    - Not available.

[^79]:    - Not available.

[^80]:    - Not available.

[^81]:    - Not available.

[^82]:    - Not available.

[^83]:    - Not available.

[^84]:    - Not available.

[^85]:    - Not available.

[^86]:    SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88, 1990-91, and 1993-94.

[^87]:    SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94.

[^88]:    SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

[^89]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

[^90]:    SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

[^91]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, Schools and Staffing Survey, 1993-94
    (Administrator Questionnaire).

[^92]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, Schools and Staffing Survey, 1993-94
    (Administrator Questionnaire).

[^93]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, Schools and Staffing Survey, 1993-94
    (Administrator Questionnaire).

[^94]:    * Standard errors less than 0.05 are rounded to 0.0.

[^95]:    * Standard error less than 0.05 is rounded to 0.0.

[^96]:    - Not applicable.

[^97]:    SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1988 and 1993.

[^98]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, National Education Longitudinal Study of 1988,
    Base Year (1988), First Follow-up (1990), and Second Follow-up (1992)
    Student Surveys.

[^99]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, Schools and Staffing Survey, 1993-94.

[^100]:    SOURCE: U.S. Department of Education, National Center for

[^101]:    SOURCE: U.S. Department of Commerce, Bureau of the Census,
    October Current Population Surveys.

[^102]:    - Not available.

[^103]:    SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Teacher Questionnaire).

[^104]:    - Not available.

[^105]:    - Not available.

[^106]:    - Not available.

[^107]:    - Not available.

[^108]:    SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1988 and 1993.

[^109]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, National Study of Postsecondary Faculty, 1993.

[^110]:    SOURCE: U.S. Department of Education, National Center for
    Education Statistics, National Study of Postsecondary Faculty, 1993.

