Tables

Table 1. Percentage of public high school graduates taking vocational/technical education courses, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 98.2 | 98.0 | 97.7 | 97.2 | 96.5 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 98.8 | 96.5 | 98.4 | 98.7 | 97.6 |
| Asian/Pacific Islander | 97.7 | 97.5 | 97.4 | 96.7 | 94.4 |
| Black, non-Hispanic | 99.2 | 98.8 | 97.3 | 98.4 | 98.4 |
| Hispanic | 99.2 | 98.6 | 98.6 | 98.7 | 97.7 |
| White, non-Hispanic | 97.8 | 97.7 | 97.7 | 97.0 | 96.1 |
| Sex |  |  |  |  |  |
| Male | 98.0 | 98.2 | 97.9 | 97.6 | 97.0 |
| Female | 98.4 | 97.7 | 97.6 | 96.8 | 96.1 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 99.4 | 99.8 | - | 99.2 | 99.1 |
| No indicated disability | 98.0 | 97.9 | - | 97.1 | 96.5 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 97.1 | - | 97.0 | 95.8 |
| Proficient | - | 98.0 | - | 97.2 | 96.6 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 95.3 | 94.1 | 95.9 | 94.4 | 92.6 |
| Mid-level (2.0 to 3.5) | 98.2 | 98.1 | 97.7 | 97.4 | 97.3 |
| Low (less than 2.0) | 99.5 | 99.6 | 99.0 | 99.0 | 98.8 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 95.8 | 94.0 | 95.1 | 91.7 | 92.2 |
| Mid-level or mixed ${ }^{2}$ | 98.1 | 98.4 | 98.1 | 98.1 | 97.3 |
| All low ${ }^{3}$ | 100.0 | 99.8 | 98.7 | 99.9 | 99.5 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 94.9 | 94.8 | 95.5 | 93.6 | 94.3 |
| Mid-level (prealgebra or algebra 1) | 98.1 | 97.9 | 97.7 | 97.5 | 96.8 |
| Low (no or low mathematics) ${ }^{5}$ | 98.9 | 99.3 | 99.1 | 98.6 | 98.3 |
| School urbanicity |  |  |  |  |  |
| Urban | 97.7 | - | 97.4 | - | 95.1 |
| Suburban | 97.9 | - | 97.6 | - | 96.1 |
| Rural | 98.9 | - | 98.1 | - | 98.4 |

See notes at end of table.

Table 1. Percentage of public high school graduates taking vocational/technical education courses, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level |  |  |  | 98.3 | 98.8 |
| High (greater than 50 percent in NSLP) | - | - | - | 97.8 | 96.7 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 94.1 | 94.3 |
| Low (5 percent or less in NSLP) | - | - | - | 97.3 | 96.8 |
| Not reported | - | - | - |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 2. Percentage of public high school graduates taking occupational courses, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 88.7 | 90.6 | 92.2 | 90.8 | 90.7 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 93.1 | 93.6 | 95.3 | 94.2 | 92.4 |
| Asian/Pacific Islander | 81.7 | 87.6 | 90.1 | 91.3 | 87.6 |
| Black, non-Hispanic | 88.4 | 91.9 | 91.7 | 92.3 | 92.2 |
| Hispanic | 90.4 | 94.2 | 93.5 | 94.1 | 92.0 |
| White, non-Hispanic | 88.5 | 90.2 | 92.2 | 90.4 | 90.3 |
| Sex |  |  |  |  |  |
| Male | 91.1 | 93.7 | 93.6 | 92.5 | 92.7 |
| Female | 86.5 | 87.8 | 90.9 | 89.2 | 88.6 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 87.7 | 90.9 | - | 92.3 | 92.1 |
| No indicated disability | 88.8 | 90.6 | - | 90.7 | 90.6 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 87.4 | - | 87.4 | 86.4 |
| Proficient | - | 90.6 | - | 90.8 | 90.7 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 79.1 | 82.4 | 86.6 | 85.0 | 84.6 |
| Mid-level (2.0 to 3.5) | 88.9 | 91.0 | 92.4 | 91.2 | 91.8 |
| Low (less than 2.0) | 92.5 | 94.1 | 95.4 | 94.6 | 93.5 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 67.5 | 82.8 | 85.2 | 82.5 | 83.3 |
| Mid-level or mixed ${ }^{2}$ | 88.7 | 91.4 | 93.2 | 92.2 | 92.0 |
| All low ${ }^{3}$ | 95.2 | 95.4 | 96.7 | 95.8 | 94.9 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 81.3 | 84.9 | 88.6 | 85.8 | 86.9 |
| Mid-level (prealgebra or algebra 1) | 87.9 | 90.6 | 92.4 | 91.2 | 91.4 |
| Low (no or low mathematics) ${ }^{5}$ | 91.3 | 92.9 | 93.7 | 93.0 | 92.4 |
| School urbanicity |  |  |  |  |  |
| Urban | 88.1 | - | 91.0 | - | 86.3 |
| Suburban | 88.1 | - | 92.0 | - | 89.9 |
| Rural | 89.8 | - | 93.3 | - | 95.3 |

See notes at end of table.

Table 2. Percentage of public high school graduates taking occupational courses, by selected characteristics, including special and protected populations status: Various years, 1982-98 —Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 93.4 | 94.4 |
| High (greater than 50 percent in NSLP) | - | - | - | 91.4 | 90.6 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 87.0 | 88.5 |  |
| Low (5 percent or less in NSLP) | - | - | - | 91.0 | 90.9 |
| Not reported | - | - |  |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 3. Average number of vocational/technical credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 4.68 | 4.19 | 3.99 | 3.96 | 3.99 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 4.93 | 4.62 | 4.79 | 4.26 | 4.02 |
| Asian/Pacific Islander | 3.31 | 3.07 | 3.40 | 3.01 | 3.15 |
| Black, non-Hispanic | 4.81 | 4.41 | 4.12 | 4.29 | 4.33 |
| Hispanic | 5.26 | 4.12 | 4.04 | 3.87 | 3.97 |
| White, non-Hispanic | 4.59 | 4.22 | 3.98 | 3.96 | 3.97 |
| Sex |  |  |  |  |  |
| Male | 4.68 | 4.32 | 4.17 | 4.13 | 4.25 |
| Female | 4.67 | 4.08 | 3.81 | 3.80 | 3.77 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 4.82 | 6.01 | - | 5.99 | 5.85 |
| No indicated disability | 4.67 | 4.14 | - | 3.88 | 3.94 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 2.85 | - | 3.06 | 3.19 |
| Proficient | - | 4.20 | - | 3.97 | 4.00 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 3.35 | 2.59 | 2.61 | 2.60 | 2.82 |
| Mid-level (2.0 to 3.5) | 4.72 | 4.21 | 4.04 | 4.07 | 4.18 |
| Low (less than 2.0) | 5.17 | 5.03 | 4.80 | 4.73 | 4.81 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 2.66 | 2.22 | 2.25 | 2.14 | 2.59 |
| Mid-level or mixed ${ }^{2}$ | 4.65 | 4.31 | 4.17 | 4.19 | 4.16 |
| All low ${ }^{3}$ | 6.09 | 6.28 | 6.54 | 6.18 | 6.23 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 3.11 | 2.68 | 2.62 | 2.56 | 3.04 |
| Mid-level (prealgebra or algebra 1) | 4.36 | 3.94 | 3.87 | 3.85 | 4.09 |
| Low (no or low mathematics) ${ }^{5}$ | 5.41 | 5.32 | 5.03 | 5.16 | 4.76 |
| School urbanicity |  |  |  |  |  |
| Urban | 4.28 | - | 3.70 | - | 3.55 |
| Suburban | 4.46 | - | 3.55 | - | 3.62 |
| Rural | 5.23 | - | 4.77 | - | 4.84 |

See notes at end of table.

Table 3. Average number of vocational/technical credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 4.33 | 4.65 |
| High (greater than 50 percent in NSLP) | - | - | - | 4.10 | 4.13 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 3.10 | 3.22 |  |
| Low (5 percent or less in NSLP) | - | - | - | 4.10 | 3.85 |
| Not reported | - | - |  |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 4. Average number of occupational credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 3.03 | 2.89 | 2.84 | 2.79 | 2.87 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 3.40 | 3.16 | 3.73 | 2.84 | 2.92 |
| Asian/Pacific Islander | 2.01 | 2.07 | 2.53 | 2.13 | 2.30 |
| Black, non-Hispanic | 2.90 | 2.79 | 2.78 | 2.94 | 2.95 |
| Hispanic | 3.30 | 2.85 | 2.90 | 2.75 | 2.82 |
| White, non-Hispanic | 3.02 | 2.97 | 2.84 | 2.81 | 2.90 |
| Sex |  |  |  |  |  |
| Male | 3.43 | 3.28 | 3.17 | 3.08 | 3.23 |
| Female | 2.66 | 2.53 | 2.52 | 2.52 | 2.54 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 3.00 | 3.88 | - | 3.74 | 3.87 |
| No indicated disability | 3.03 | 2.86 | - | 2.76 | 2.84 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 1.82 | - | 2.11 | 1.99 |
| Proficient | - | 2.89 | - | 2.80 | 2.88 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 2.05 | 1.75 | 1.82 | 1.83 | 2.02 |
| Mid-level (2.0 to 3.5) | 3.06 | 2.91 | 2.87 | 2.87 | 3.00 |
| Low (less than 2.0) | 3.39 | 3.48 | 3.43 | 3.34 | 3.57 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 1.51 | 1.53 | 1.65 | 1.56 | 1.94 |
| Mid-level or mixed ${ }^{2}$ | 3.01 | 2.97 | 2.95 | 2.97 | 3.00 |
| All low ${ }^{3}$ | 4.01 | 4.46 | 4.72 | 4.18 | 4.24 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 2.03 | 1.85 | 1.95 | 1.83 | 2.31 |
| Mid-level (prealgebra or algebra 1) | 2.84 | 2.74 | 2.73 | 2.75 | 2.96 |
| Low (no or low mathematics) ${ }^{5}$ | 3.48 | 3.63 | 3.57 | 3.54 | 3.22 |
| School urbanicity |  |  |  |  |  |
| Urban | 2.83 | - | 2.64 | - | 2.60 |
| Suburban | 2.91 | - | 2.56 | - | 2.64 |
| Rural | 3.32 | - | 3.32 | - | 3.39 |

See notes at end of table.

Table 4. Average number of occupational credits earned by public high school graduates, by selected
characteristics, including special and protected populations status: Various years, 1982-98
-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 2.95 | 3.30 |
| High (greater than 50 percent in NSLP) | - | - | - | 2.90 | 2.97 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 2.25 | 2.22 |
| Low (5 percent or less in NSLP) | - | - | - | 2.86 | 2.92 |
| Not reported | - |  |  |  |  |

—Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 5. Percentage of total credits earned by public high school graduates that are vocational/technical credits, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 21.8 | 17.9 | 16.8 | 16.5 | 15.9 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 22.9 | 20.4 | 20.2 | 17.5 | 16.5 |
| Asian/Pacific Islander | 14.9 | 12.9 | 14.1 | 12.5 | 12.6 |
| Black, non-Hispanic | 22.7 | 18.8 | 17.6 | 18.2 | 17.4 |
| Hispanic | 24.7 | 17.4 | 17.2 | 16.1 | 15.7 |
| White, non-Hispanic | 21.3 | 18.1 | 16.8 | 16.3 | 15.8 |
| Sex |  |  |  |  |  |
| Male | 22.0 | 18.6 | 17.7 | 17.3 | 17.1 |
| Female | 21.7 | 17.3 | 16.0 | 15.7 | 14.9 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 22.8 | 26.3 | - | 24.8 | 23.5 |
| No indicated disability | 21.7 | 17.7 | - | 16.2 | 15.7 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 11.8 | - | 12.4 | 12.7 |
| Proficient | - | 18.0 | - | 16.5 | 15.9 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 14.4 | 10.5 | 10.3 | 10.2 | 10.5 |
| Mid-level (2.0 to 3.5) | 21.8 | 17.8 | 16.9 | 16.8 | 16.7 |
| Low (less than 2.0) | 25.6 | 22.7 | 21.4 | 21.1 | 20.9 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 11.9 | 8.8 | 9.0 | 8.4 | 9.6 |
| Mid-level or mixed ${ }^{2}$ | 21.6 | 18.5 | 17.7 | 17.5 | 16.7 |
| All low ${ }^{3}$ | 29.7 | 27.7 | 27.8 | 26.3 | 26.0 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 13.8 | 11.0 | 10.5 | 10.3 | 11.5 |
| Mid-level (prealgebra or algebra 1) | 20.0 | 16.8 | 16.2 | 15.9 | 16.3 |
| Low (no or low mathematics) ${ }^{5}$ | 25.9 | 23.3 | 21.9 | 22.0 | 19.8 |
| School urbanicity |  |  |  |  |  |
| Urban | 20.3 | - | 15.7 | - | 14.2 |
| Suburban | 20.8 | - | 15.1 | - | 14.5 |
| Rural | 24.3 | - | 19.8 | - | 19.1 |

See notes at end of table.

Table 5. Percentage of total credits earned by public high school graduates that are vocational/technical credits, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| School poverty level |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | - | - | - | 18.2 | 18.1 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 17.0 | 16.5 |
| Low (5 percent or less in NSLP) | - | - | - | 13.1 | 13.2 |
| Not reported | - | - | - | 17.1 | 15.2 |

—Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 6. Percentage of total vocational/technical credits earned by public high school graduates that are occupational credits, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 59.4 | 64.2 | 67.9 | 67.1 | 68.4 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 66.1 | 66.7 | 73.6 | 64.8 | 68.1 |
| Asian/Pacific Islander | 56.2 | 63.0 | 69.8 | 69.8 | 69.4 |
| Black, non-Hispanic | 55.2 | 59.6 | 64.6 | 64.8 | 65.5 |
| Hispanic | 58.8 | 65.9 | 67.9 | 69.2 | 67.2 |
| White, non-Hispanic | 60.1 | 64.9 | 68.3 | 67.3 | 69.1 |
| Sex |  |  |  |  |  |
| Male | 67.9 | 71.9 | 72.7 | 71.5 | 72.9 |
| Female | 51.6 | 57.1 | 63.2 | 62.9 | 63.8 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 56.7 | 60.4 | - | 62.1 | 62.9 |
| No indicated disability | 59.7 | 64.3 | - | 67.3 | 68.6 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 58.7 | - | 62.7 | 59.9 |
| Proficient | - | 64.2 | - | 67.2 | 68.5 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 53.6 | 63.1 | 67.1 | 66.7 | 67.7 |
| Mid-level (2.0 to 3.5) | 59.7 | 64.3 | 67.9 | 67.2 | 68.3 |
| Low (less than 2.0) | 61.5 | 64.4 | 68.7 | 67.2 | 70.6 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 44.8 | 64.7 | 68.5 | 69.1 | 70.1 |
| Mid-level or mixed ${ }^{2}$ | 59.5 | 64.1 | 67.7 | 67.0 | 68.4 |
| All low ${ }^{3}$ | 64.0 | 66.3 | 70.2 | 65.6 | 64.9 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 58.4 | 64.1 | 71.1 | 68.8 | 70.8 |
| Mid-level (prealgebra or algebra 1) | 58.9 | 64.7 | 67.7 | 67.4 | 68.6 |
| Low (no or low mathematics) ${ }^{5}$ | 60.3 | 63.2 | 66.8 | 65.3 | 64.7 |
| School urbanicity |  |  |  |  |  |
| Urban | 61.1 | - | 68.0 | - | 68.4 |
| Suburban | 60.0 | - | 68.8 | - | 68.8 |
| Rural | 57.7 | - | 66.7 | - | 67.9 |

See notes at end of table.

Table 6. Percentage of total vocational/technical credits earned by public high school graduates that are occupational credits, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 66.8 | 67.1 |
| High (greater than 50 percent in NSLP) | - | - | - | 67.2 | 68.2 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 68.6 | 66.4 |  |
| Low (5 percent or less in NSLP) | - | - | - | 65.9 | 72.1 |
| Not reported | - | - |  |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 7. Percentage of vocational/technical credits earned by public high school graduates that were earned in the 9 th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 17.0 | 18.1 | 19.3 | 19.7 | 20.7 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 16.6 | 15.9 | 23.3 | 20.7 | 23.7 |
| Asian/Pacific Islander | 20.0 | 20.8 | 21.8 | 22.4 | 21.0 |
| Black, non-Hispanic | 17.9 | 18.7 | 18.4 | 17.0 | 19.3 |
| Hispanic | 16.7 | 19.5 | 17.4 | 16.9 | 20.0 |
| White, non-Hispanic | 16.8 | 17.7 | 19.5 | 20.5 | 21.0 |
| Sex |  |  |  |  |  |
| Male | 17.6 | 18.8 | 20.2 | 20.5 | 20.8 |
| Female | 16.4 | 17.4 | 18.4 | 18.9 | 20.1 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 17.7 | 15.8 | - | 15.4 | 18.6 |
| No indicated disability | 16.9 | 18.2 | - | 19.9 | 20.8 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 16.1 | - | 15.1 | 20.3 |
| Proficient | - | 18.1 | - | 19.7 | 20.7 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 20.4 | 21.9 | 22.9 | 24.4 | 25.9 |
| Mid-level (2.0 to 3.5) | 16.7 | 17.8 | 19.3 | 19.1 | 19.7 |
| Low (less than 2.0) | 16.2 | 17.1 | 16.6 | 18.3 | 18.9 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 20.3 | 22.9 | 22.3 | 23.4 | 24.8 |
| Mid-level or mixed ${ }^{2}$ | 17.0 | 17.7 | 18.9 | 19.2 | 20.2 |
| All low ${ }^{3}$ | 16.3 | 14.5 | 16.9 | 15.4 | 14.9 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 18.5 | 21.9 | 22.1 | 20.7 | 22.9 |
| Mid-level (prealgebra or algebra 1) | 17.8 | 18.5 | 19.5 | 20.6 | 20.7 |
| Low (no or low mathematics) ${ }^{5}$ | 15.6 | 15.8 | 17.2 | 16.6 | 18.0 |
| School urbanicity |  |  |  |  |  |
| Urban | 17.0 | - | 18.9 | - | 20.9 |
| Suburban | 16.9 | - | 18.3 | - | 20.0 |
| Rural | 17.1 | - | 20.8 | - | 21.3 |

See notes at end of table.

| Table 7.Percentage of vocational/technical credits earned by public high school graduates that were <br> earned in the 9th grade, by selected characteristics, including special and protected populations <br> status: Various years, $\mathbf{1 9 8 2 - 9 8}-$ Continued |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | 1982 | 1990 | 1992 | 1994 | 1998 |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 19.7 | 19.4 |
| High (greater than 50 percent in NSLP) | - | - | - | 19.8 | 20.1 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 19.1 | 21.5 |
| Low (5 percent or less in NSLP) | - | - | - | 19.7 | 23.1 |
| Not reported |  |  |  |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 8. Percentage of vocational/technical credits earned by public high school graduates that were earned in the 10th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 19.9 | 18.7 | 19.7 | 19.1 | 19.5 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 22.6 | 20.4 | 18.8 | 21.1 | 16.9 |
| Asian/Pacific Islander | 21.7 | 18.2 | 19.3 | 19.9 | 21.0 |
| Black, non-Hispanic | 19.3 | 19.7 | 19.2 | 20.1 | 19.8 |
| Hispanic | 19.6 | 17.0 | 16.8 | 17.7 | 18.7 |
| White, non-Hispanic | 20.0 | 18.8 | 20.2 | 19.2 | 19.6 |
| Sex |  |  |  |  |  |
| Male | 20.0 | 19.0 | 19.1 | 19.4 | 20.2 |
| Female | 19.8 | 18.5 | 20.4 | 18.8 | 19.0 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 20.1 | 19.2 | - | 19.3 | 18.1 |
| No indicated disability | 19.9 | 18.7 | - | 19.1 | 19.6 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 19.6 | - | 18.2 | 19.8 |
| Proficient | - | 18.7 | - | 19.1 | 19.5 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 21.5 | 20.6 | 21.3 | 20.4 | 21.9 |
| Mid-level (2.0 to 3.5) | 19.8 | 18.5 | 19.8 | 18.9 | 19.0 |
| Low (less than 2.0) | 19.4 | 18.5 | 18.1 | 19.2 | 19.4 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 20.4 | 20.1 | 22.0 | 21.5 | 21.5 |
| Mid-level or mixed ${ }^{2}$ | 19.8 | 18.5 | 19.4 | 18.8 | 19.2 |
| All low ${ }^{3}$ | 20.4 | 18.9 | 18.1 | 17.7 | 19.1 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 19.4 | 19.4 | 21.4 | 22.3 | 20.9 |
| Mid-level (prealgebra or algebra 1) | 19.7 | 18.2 | 19.8 | 18.3 | 19.3 |
| Low (no or low mathematics) ${ }^{5}$ | 20.2 | 19.5 | 18.7 | 19.3 | 18.8 |
| School urbanicity |  |  |  |  |  |
| Urban | 19.1 | - | 19.5 | - | 19.9 |
| Suburban | 20.0 | - | 19.8 | - | 19.1 |
| Rural | 20.1 | - | 19.7 | - | 19.7 |

See notes at end of table.

Table 8. Percentage of vocational/technical credits earned by public high school graduates that were earned in the 10th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

| 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :--- | :--- | :--- | :--- |


| School poverty level |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | ---: |
| High (greater than 50 percent in NSLP) | - | - | - | 18.3 | 20.4 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 18.6 | 19.4 |
| Low (5 percent or less in NSLP) | - | - | - | 22.2 | 20.1 |
| Not reported | - | - | - | 18.7 | 18.8 |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 9. Percentage of vocational/technical credits earned by public high school graduates that were earned in the 11th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 28.8 | 24.9 | 24.4 | 23.9 | 23.6 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 30.1 | 26.8 | 24.6 | 21.4 | 25.5 |
| Asian/Pacific Islander | 30.3 | 27.6 | 23.4 | 24.7 | 25.7 |
| Black, non-Hispanic | 28.1 | 23.4 | 24.7 | 24.4 | 24.4 |
| Hispanic | 28.8 | 24.5 | 26.7 | 25.0 | 25.0 |
| White, non-Hispanic | 28.8 | 25.2 | 24.1 | 23.6 | 23.1 |
| Sex |  |  |  |  |  |
| Male | 28.2 | 24.9 | 25.0 | 24.1 | 23.6 |
| Female | 29.3 | 24.9 | 23.9 | 23.7 | 23.6 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 27.6 | 27.8 | - | 27.9 | 27.7 |
| No indicated disability | 28.9 | 24.8 | - | 23.8 | 23.5 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 25.0 | - | 27.3 | 28.2 |
| Proficient | - | 24.9 | - | 23.9 | 23.6 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 26.1 | 23.2 | 23.5 | 22.5 | 21.7 |
| Mid-level (2.0 to 3.5) | 28.8 | 24.8 | 24.3 | 24.0 | 23.9 |
| Low (less than 2.0) | 29.8 | 26.2 | 25.9 | 24.7 | 24.7 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 25.8 | 23.4 | 22.6 | 22.1 | 23.3 |
| Mid-level or mixed ${ }^{2}$ | 28.8 | 24.9 | 24.6 | 24.1 | 23.5 |
| All low ${ }^{3}$ | 29.6 | 28.7 | 27.8 | 28.2 | 27.3 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 25.8 | 22.8 | 22.4 | 23.0 | 22.3 |
| Mid-level (prealgebra or algebra 1) | 28.3 | 24.0 | 24.0 | 23.4 | 23.4 |
| Low (no or low mathematics) ${ }^{5}$ | 29.9 | 27.7 | 26.6 | 25.8 | 26.0 |
| School urbanicity |  |  |  |  |  |
| Urban | 29.0 | - | 24.4 | - | 23.4 |
| Suburban | 28.6 | - | 24.4 | - | 23.9 |
| Rural | 28.9 | - | 24.5 | - | 23.5 |

See notes at end of table.

Table 9. Percentage of vocational/technical credits earned by public high school graduates that were earned in the 11th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

| 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :--- | :--- | :--- | :--- |

School poverty level
High (greater than 50 percent in NSLP) - - - $25.8 \quad 24.7$
Middle (greater than 5 to 50 percent in NSLP) - - $\quad 24.1$
Low (5 percent or less in NSLP) - $\quad$ - $\quad 23.0$

Not reported $\quad-\quad$ - $\quad-\quad$| 23.1 | 22.0 |
| :--- | :--- | :--- | :--- | :--- |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 10. Percentage of vocational/technical credits earned by public high school graduates that were earned in the 12th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 34.4 | 38.3 | 36.6 | 37.3 | 36.2 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 30.8 | 36.9 | 33.4 | 36.8 | 33.9 |
| Asian/Pacific Islander | 28.0 | 33.4 | 35.5 | 33.0 | 32.4 |
| Black, non-Hispanic | 34.7 | 38.3 | 37.6 | 38.5 | 36.4 |
| Hispanic | 34.9 | 38.9 | 39.0 | 40.5 | 36.4 |
| White, non-Hispanic | 34.5 | 38.3 | 36.2 | 36.8 | 36.3 |
| Sex |  |  |  |  |  |
| Male | 34.2 | 37.4 | 35.8 | 36.0 | 35.4 |
| Female | 34.6 | 39.1 | 37.3 | 38.5 | 37.3 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 34.6 | 37.2 | - | 37.4 | 35.6 |
| No indicated disability | 34.4 | 38.3 | - | 37.3 | 36.2 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 39.3 | - | 39.4 | 31.7 |
| Proficient | - | 38.3 | - | 37.3 | 36.2 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 32.1 | 34.3 | 32.3 | 32.7 | 30.5 |
| Mid-level (2.0 to 3.5) | 34.7 | 38.8 | 36.6 | 38.0 | 37.3 |
| Low (less than 2.0) | 34.6 | 38.2 | 39.4 | 37.8 | 37.0 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 33.6 | 33.6 | 33.1 | 33.0 | 30.4 |
| Mid-level or mixed ${ }^{2}$ | 34.4 | 38.9 | 37.1 | 38.0 | 37.1 |
| All low ${ }^{3}$ | 33.8 | 37.9 | 37.1 | 38.7 | 38.7 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 36.4 | 35.9 | 34.2 | 34.0 | 33.9 |
| Mid-level (prealgebra or algebra 1) | 34.2 | 39.3 | 36.7 | 37.6 | 36.6 |
| Low (no or low mathematics) ${ }^{5}$ | 34.3 | 37.0 | 37.4 | 38.3 | 37.1 |
| School urbanicity |  |  |  |  |  |
| Urban | 34.9 | - | 37.1 | - | 35.7 |
| Suburban | 34.6 | - | 37.5 | - | 37.0 |
| Rural | 33.8 | - | 34.9 | - | 35.5 |

See notes at end of table.

Table 10. Percentage of vocational/technical credits earned by public high school graduates that were earned in the 12 th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98—Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 36.2 | 35.5 |
| High (greater than 50 percent in NSLP) | - | - | - | 37.6 | 36.5 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 35.5 | 35.4 |
| Low (5 percent or less in NSLP) | - | - | - | 38.5 | 36.1 |
| Not reported |  |  |  |  |  |

—Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 11. Percentage of public high school graduates earning 3.0 or more vocational/technical credits, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 71.3 | 63.7 | 61.9 | 61.1 | 61.5 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 79.0 | 76.8 | 75.4 | 69.1 | 67.6 |
| Asian/Pacific Islander | 51.4 | 47.7 | 53.2 | 46.4 | 50.9 |
| Black, non-Hispanic | 76.6 | 70.8 | 68.0 | 68.6 | 68.4 |
| Hispanic | 78.9 | 65.7 | 64.8 | 62.5 | 64.3 |
| White, non-Hispanic | 69.6 | 63.0 | 60.8 | 60.5 | 60.3 |
| Sex |  |  |  |  |  |
| Male | 70.7 | 65.3 | 65.1 | 62.9 | 65.0 |
| Female | 71.9 | 62.3 | 58.8 | 59.4 | 58.7 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 74.7 | 86.7 | - | 83.7 | 83.0 |
| No indicated disability | 71.1 | 63.1 | - | 60.2 | 60.9 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 41.7 | - | 49.2 | 52.2 |
| Proficient | - | 63.8 | - | 61.2 | 61.6 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 47.8 | 37.5 | 35.4 | 39.5 | 43.2 |
| Mid-level (2.0 to 3.5) | 71.3 | 63.5 | 62.5 | 62.4 | 64.4 |
| Low (less than 2.0) | 82.7 | 79.7 | 79.3 | 76.1 | 75.2 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 43.1 | 29.5 | 30.7 | 30.2 | 38.0 |
| Mid-level or mixed ${ }^{2}$ | 71.0 | 66.4 | 65.9 | 65.6 | 64.9 |
| All low ${ }^{3}$ | 88.3 | 91.4 | 90.0 | 88.9 | 86.5 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 45.4 | 38.6 | 37.7 | 38.2 | 46.1 |
| Mid-level (prealgebra or algebra 1) | 67.8 | 61.1 | 60.8 | 60.9 | 63.5 |
| Low (no or low mathematics) ${ }^{5}$ | 81.1 | 79.0 | 77.8 | 76.6 | 72.6 |
| School urbanicity |  |  |  |  |  |
| Urban | 66.4 | - | 58.0 | - | 52.6 |
| Suburban | 67.7 | - | 55.4 | - | 56.2 |
| Rural | 79.6 | - | 73.0 | - | 75.7 |

See notes at end of table.

Table 11. Percentage of public high school graduates earning 3.0 or more vocational/technical credits, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| School poverty level |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | - | - | - | 69.2 | 74.2 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 63.8 | 64.2 |
| Low (5 percent or less in NSLP) | - | - | - | 45.3 | 46.4 |
| Not reported | - | - | - | 62.6 | 59.4 |

—Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 12. Percentage of public high school graduates earning $\mathbf{3 . 0}$ or more occupational credits, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 46.2 | 43.0 | 42.2 | 42.0 | 43.8 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 61.0 | 52.5 | 57.8 | 42.9 | 43.4 |
| Asian/Pacific Islander | 30.7 | 31.6 | 38.5 | 31.0 | 33.5 |
| Black, non-Hispanic | 44.5 | 43.5 | 41.7 | 45.9 | 47.2 |
| Hispanic | 52.0 | 42.9 | 44.1 | 42.5 | 44.1 |
| White, non-Hispanic | 45.6 | 43.6 | 42.0 | 41.9 | 43.7 |
| Sex |  |  |  |  |  |
| Male | 52.7 | 49.3 | 47.9 | 46.5 | 50.3 |
| Female | 40.2 | 37.2 | 36.6 | 37.7 | 38.2 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 43.8 | 58.7 | - | 57.5 | 58.4 |
| No indicated disability | 46.4 | 42.5 | - | 41.4 | 43.4 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 19.6 | - | 30.6 | 27.2 |
| Proficient | - | 43.1 | - | 42.1 | 44.0 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 27.3 | 21.9 | 22.6 | 23.7 | 28.8 |
| Mid-level (2.0 to 3.5) | 46.8 | 43.0 | 42.6 | 43.1 | 46.1 |
| Low (less than 2.0) | 53.7 | 55.2 | 55.6 | 54.3 | 56.7 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 23.7 | 15.9 | 18.3 | 18.4 | 26.5 |
| Mid-level or mixed ${ }^{2}$ | 45.9 | 45.0 | 44.8 | 45.4 | 46.3 |
| All low ${ }^{3}$ | 61.6 | 66.8 | 73.6 | 65.4 | 65.8 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 29.1 | 22.3 | 24.4 | 23.0 | 33.2 |
| Mid-level (prealgebra or algebra 1) | 43.1 | 40.9 | 40.9 | 41.8 | 45.7 |
| Low (no or low mathematics) ${ }^{5}$ | 53.9 | 55.5 | 55.1 | 54.9 | 49.6 |
| School urbanicity |  |  |  |  |  |
| Urban | 42.6 | - | 39.2 | - | 38.3 |
| Suburban | 44.1 | - | 37.2 | - | 39.6 |
| Rural | 51.6 | - | 50.9 | - | 53.9 |

See notes at end of table.

Table 12. Percentage of public high school graduates earning $\mathbf{3 . 0}$ or more occupational credits, by selected characteristics, including special and protected populations status: Various years, 1982-98 -Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 45.1 | 53.9 |
| High (greater than 50 percent in NSLP) | - | - | - | 44.1 | 45.8 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 29.8 | 30.0 |  |
| Low (5 percent or less in NSLP) | - | - | - | 44.2 | 45.1 |
| Not reported | - |  |  |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 13. Percentage of public high school graduates concentrating in occupational education, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 33.7 | 27.8 | 24.9 | 25.4 | 25.0 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 46.6 | 38.0 | 34.3 | 20.9 | 25.5 |
| Asian/Pacific Islander | 17.6 | 16.6 | 20.4 | 14.2 | 16.8 |
| Black, non-Hispanic | 32.7 | 27.3 | 24.8 | 29.0 | 27.2 |
| Hispanic | 37.8 | 27.9 | 24.4 | 24.9 | 22.9 |
| White, non-Hispanic | 33.2 | 28.5 | 25.1 | 25.3 | 25.3 |
| Sex |  |  |  |  |  |
| Male | 39.0 | 32.3 | 29.1 | 28.8 | 30.7 |
| Female | 28.7 | 23.6 | 20.9 | 22.3 | 19.9 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 31.4 | 42.2 | - | 41.3 | 37.5 |
| No indicated disability | 33.8 | 27.4 | - | 24.8 | 24.6 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 12.4 | - | 17.5 | 8.7 |
| Proficient | - | 27.8 | - | 25.5 | 25.1 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 18.0 | 11.1 | 10.9 | 12.7 | 15.0 |
| Mid-level (2.0 to 3.5) | 34.4 | 27.9 | 25.3 | 26.6 | 26.3 |
| Low (less than 2.0) | 38.9 | 36.9 | 34.2 | 31.8 | 35.2 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 18.2 | 7.4 | 8.1 | 8.6 | 14.2 |
| Mid-level or mixed ${ }^{2}$ | 33.4 | 29.0 | 26.4 | 27.7 | 26.4 |
| All low ${ }^{3}$ | 46.2 | 50.1 | 54.0 | 43.8 | 41.3 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 18.2 | 12.0 | 12.1 | 12.1 | 17.5 |
| Mid-level (prealgebra or algebra 1) | 30.4 | 25.3 | 23.1 | 24.4 | 26.2 |
| Low (no or low mathematics) ${ }^{5}$ | 41.1 | 39.3 | 36.7 | 37.0 | 29.6 |
| School urbanicity |  |  |  |  |  |
| Urban | 30.8 | - | 21.4 | - | 23.1 |
| Suburban | 31.8 | - | 21.9 | - | 21.5 |
| Rural | 38.2 | - | 31.3 | - | 31.0 |

See notes at end of table.

Table 13. Percentage of public high school graduates concentrating in occupational education, by selected characteristics, including special and protected populations status: Various years, 1982-98 -Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 30.1 | 29.2 |
| High (greater than 50 percent in NSLP) | - | - | - | 27.0 | 26.8 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 17.0 | 15.7 |  |
| Low (5 percent or less in NSLP) | - | - | - | 25.6 | 25.2 |
| Not reported | - | - | - |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.

NOTE: Occupational concentrators earned 3.0 or more credits in one of the following 10 broad occupational program areas: agriculture, business, marketing, health care, protective services, technology, trade and industry, food service and hospitality, child care and education, and personal and other services. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 14. Percentage of public high school graduates earning 3.0 or more occupational credits who concentrated in occupational education, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 72.8 | 64.6 | 59.1 | 60.6 | 57.0 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 76.4 | 72.4 | 59.3 | 48.7 | 58.8 |
| Asian/Pacific Islander | 57.4 | 52.7 | 52.9 | 45.7 | 50.2 |
| Black, non-Hispanic | 73.5 | 62.8 | 59.4 | 63.1 | 57.6 |
| Hispanic | 72.6 | 65.0 | 55.3 | 58.7 | 52.0 |
| White, non-Hispanic | 72.8 | 65.4 | 59.8 | 60.5 | 58.0 |
| Sex |  |  |  |  |  |
| Male | 74.0 | 65.6 | 60.7 | 61.9 | 61.0 |
| Female | 71.4 | 63.5 | 57.0 | 59.1 | 52.0 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 71.7 | 71.9 | - | 71.7 | 64.2 |
| No indicated disability | 72.8 | 64.4 | - | 60.0 | 56.7 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | - | - | 57.3 | 32.0 |
| Proficient | - | 64.7 | - | 60.6 | 57.1 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 66.1 | 50.8 | 48.3 | 53.8 | 52.1 |
| Mid-level (2.0 to 3.5) | 73.5 | 65.0 | 59.4 | 61.8 | 57.1 |
| Low (less than 2.0) | 72.6 | 66.8 | 61.5 | 58.5 | 62.0 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 77.1 | 46.5 | 44.2 | 46.8 | 53.8 |
| Mid-level or mixed ${ }^{2}$ | 72.6 | 64.5 | 58.9 | 61.1 | 57.0 |
| All low ${ }^{3}$ | 75.0 | 75.0 | 73.3 | 66.9 | 62.7 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 62.5 | 53.8 | 49.6 | 52.4 | 52.6 |
| Mid-level (prealgebra or algebra 1) | 70.6 | 62.0 | 56.4 | 58.4 | 57.3 |
| Low (no or low mathematics) ${ }^{5}$ | 76.3 | 70.7 | 66.5 | 67.3 | 59.6 |
| School urbanicity |  |  |  |  |  |
| Urban | 72.2 | - | 54.7 | - | 60.3 |
| Suburban | 72.1 | - | 58.8 | - | 54.2 |
| Rural | 74.1 | - | 61.6 | - | 57.5 |

See notes at end of table.

Table 14. Percentage of public high school graduates earning $\mathbf{3 . 0}$ or more occupational credits who concentrated in occupational education, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 66.8 | 54.2 |
| High (greater than 50 percent in NSLP) | - | - | - | 61.1 | 58.6 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 57.0 | 52.3 |
| Low (5 percent or less in NSLP) | - | - | - | 57.9 | 55.9 |
| Not reported |  |  |  |  |  |

—Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.

NOTE: Occupational concentrators earned 3.0 or more credits in one of the following 10 broad occupational program areas: agriculture, business, marketing, health care, protective services, technology, trade and industry, food service and hospitality, child care and education, and personal and other services. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 15. Percentage of public high school graduates completing an advanced concentration in occupational education, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 24.0 | 16.1 | 16.2 | 14.5 | 14.4 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 25.9 | 22.7 | 26.2 | 10.5 | 13.2 |
| Asian/Pacific Islander | 11.3 | 8.8 | 15.5 | 8.7 | 9.5 |
| Black, non-Hispanic | 21.4 | 16.3 | 13.4 | 15.2 | 17.6 |
| Hispanic | 25.1 | 15.3 | 16.0 | 13.2 | 12.9 |
| White, non-Hispanic | 24.3 | 16.7 | 16.6 | 14.9 | 14.4 |
| Sex |  |  |  |  |  |
| Male | 26.8 | 19.0 | 19.6 | 16.5 | 18.5 |
| Female | 21.5 | 13.5 | 12.9 | 12.7 | 10.9 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 20.9 | 17.7 | - | 22.8 | 18.1 |
| No indicated disability | 24.3 | 16.1 | - | 14.2 | 14.3 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 6.4 | - | 9.3 | 6.3 |
| Proficient | - | 16.2 | - | 14.6 | 14.5 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 14.0 | 6.6 | 6.7 | 6.7 | 8.0 |
| Mid-level (2.0 to 3.5) | 25.1 | 16.2 | 16.8 | 15.5 | 15.6 |
| Low (less than 2.0) | 25.2 | 21.6 | 20.9 | 17.1 | 18.2 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 12.4 | 4.9 | 5.5 | 4.7 | 9.0 |
| Mid-level or mixed ${ }^{2}$ | 23.8 | 16.9 | 17.0 | 15.9 | 15.2 |
| All low ${ }^{3}$ | 33.9 | 29.3 | 37.6 | 27.1 | 23.9 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 12.7 | 7.6 | 8.4 | 7.1 | 10.7 |
| Mid-level (prealgebra or algebra 1) | 21.6 | 15.3 | 14.9 | 14.0 | 15.2 |
| Low (no or low mathematics) ${ }^{5}$ | 29.5 | 21.2 | 23.9 | 20.8 | 16.2 |
| School urbanicity |  |  |  |  |  |
| Urban | 20.9 | - | 14.9 | - | 13.8 |
| Suburban | 23.7 | - | 13.5 | - | 13.0 |
| Rural | 26.3 | - | 20.7 | - | 16.8 |

See notes at end of table.

Table 15. Percentage of public high school graduates completing an advanced concentration in occupational education, by selected characteristics, including special and protected populations status: Various years, 1982-98—Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :--- | :--- | :--- | :--- | ---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 14.7 | 18.4 |
| High (greater than 50 percent in NSLP) | - | - | - | 14.8 | 15.0 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 10.3 | 9.2 |  |
| Low (5 percent or less in NSLP) | - | - | - | 17.3 | 15.3 |
| Not reported | - | - | - |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.

NOTE: An advanced occupational concentration includes 3.0 or more credits in one of the 10 broad occupational program areas listed in figure 1, with at least 1.0 credit in second- or higher-level and cooperative education courses in the area. NSLP is the National School Lunch Program.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 16. Percentage of public high school graduates concentrating in agriculture, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 2.8 | 2.5 | 2.3 | 3.2 | 2.6 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 1.6 | 4.6 | 3.4 | 4.6 | 2.5 |
| Asian/Pacific Islander | 0.5 | \# | 0.5 | 1.6 | 0.8 |
| Black, non-Hispanic | 0.9 | 0.5 | 1.1 | 1.3 | 0.8 |
| Hispanic | 2.8 | 1.9 | 0.9 | 1.4 | 1.5 |
| White, non-Hispanic | 3.1 | 3.1 | 2.8 | 3.7 | 3.2 |
| Sex |  |  |  |  |  |
| Male | 5.0 | 4.1 | 3.8 | 5.0 | 3.5 |
| Female | 0.7 | 1.1 | 0.8 | 1.4 | 1.8 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 2.2 | 7.0 | - | 7.9 | 6.9 |
| No indicated disability | 2.8 | 2.4 | - | 3.0 | 2.4 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | 2.1 | $\ddagger$ |
| Proficient | - | 2.6 | - | 3.2 | 2.6 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 2.3 | 1.1 | 1.1 | 2.5 | 2.5 |
| Mid-level (2.0 to 3.5) | 2.7 | 2.8 | 2.5 | 3.4 | 2.7 |
| Low (less than 2.0) | 3.3 | 2.5 | 2.1 | 2.8 | 1.1 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 0.6 | 0.4 | 0.3 | 0.8 | 0.4 |
| Mid-level or mixed ${ }^{2}$ | 2.8 | 2.6 | 2.4 | 3.5 | 2.9 |
| All low ${ }^{3}$ | 3.4 | 5.8 | 4.9 | 3.4 | 2.3 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 0.8 | 0.5 | 0.7 | 0.9 | 1.2 |
| Mid-level (prealgebra or algebra 1) | 2.4 | 2.1 | 1.7 | 3.1 | 2.9 |
| Low (no or low mathematics) ${ }^{5}$ | 3.6 | 4.4 | 4.5 | 4.8 | 2.8 |
| School urbanicity |  |  |  |  |  |
| Urban | 0.5 | - | 0.2 | - | 0.4 |
| Suburban | 1.7 | - | 1.1 | - | 1.2 |
| Rural | 5.8 | - | 5.2 | - | 6.1 |

See notes at end of table.

Table 16. Percentage of public high school graduates concentrating in agriculture, by selected characteristics, including special and protected populations status: Various years, 1982-98 -Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 4.4 | 4.0 |
| High (greater than 50 percent in NSLP) | - | - | - | 3.5 | 2.9 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 0.9 | 1.1 |  |
| Low (5 percent or less in NSLP) | - | - | - | 3.6 | 1.8 |
| Not reported | - | - |  |  |  |

-Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Agriculture concentrators earned 3.0 or more credits in the agriculture program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 17. Percentage of public high school graduates concentrating in business, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 11.6 | 8.4 | 7.5 | 7.7 | 4.8 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 6.4 | 10.8 | 2.7 | 7.6 | 3.6 |
| Asian/Pacific Islander | 4.1 | 5.7 | 5.7 | 5.3 | 3.7 |
| Black, non-Hispanic | 11.3 | 11.5 | 7.8 | 10.5 | 7.0 |
| Hispanic | 10.2 | 10.3 | 8.6 | 8.3 | 4.3 |
| White, non-Hispanic | 12.0 | 7.8 | 7.4 | 7.2 | 4.6 |
| Sex |  |  |  |  |  |
| Male | 2.1 | 3.2 | 3.5 | 4.0 | 3.2 |
| Female | 20.3 | 13.3 | 11.4 | 11.2 | 6.3 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 7.5 | 1.9 | - | 5.5 | 4.0 |
| No indicated disability | 11.9 | 8.6 | - | 7.8 | 4.9 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | 8.3 | 2.2 |
| Proficient | - | 8.5 | - | 7.7 | 4.9 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 11.7 | 4.9 | 4.9 | 5.1 | 4.2 |
| Mid-level (2.0 to 3.5) | 12.6 | 9.1 | 7.8 | 8.3 | 5.1 |
| Low (less than 2.0) | 7.8 | 8.0 | 7.6 | 7.2 | 3.7 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 7.0 | 3.0 | 3.1 | 3.5 | 3.6 |
| Mid-level or mixed ${ }^{2}$ | 11.7 | 9.3 | 8.4 | 8.5 | 5.0 |
| All low ${ }^{3}$ | 10.2 | 6.7 | 5.0 | 8.2 | 6.5 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 9.8 | 3.8 | 5.1 | 4.2 | 3.4 |
| Mid-level (prealgebra or algebra 1) | 11.4 | 8.9 | 8.2 | 8.3 | 5.4 |
| Low (no or low mathematics) ${ }^{5}$ | 12.1 | 9.2 | 6.8 | 8.3 | 4.6 |
| School urbanicity |  |  |  |  |  |
| Urban | 10.9 | 11.3 | 6.9 | 7.6 | 4.7 |
| Suburban | 10.8 | 6.9 | 6.4 | 6.7 | 3.7 |
| Rural | 13.0 | 8.9 | 9.3 | 8.6 | 6.4 |

See notes at end of table.

Table 17. Percentage of public high school graduates concentrating in business, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| School poverty level |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | - | - | 4.9 | 8.5 | 6.5 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 8.1 | 7.8 | 4.8 |
| Low (5 percent or less in NSLP) | - | - | 9.9 | 5.0 | 3.2 |
| Not reported | - | - | 7.0 | 9.2 | 5.7 |

-Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Business concentrators earned 3.0 or more credits in the broad business program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 18. Percentage of public high school graduates concentrating in business services, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 9.3 | 6.5 | 4.8 | 5.4 | 3.3 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 4.7 | 8.6 | 1.4 | 6.2 | 1.8 |
| Asian/Pacific Islander | 2.6 | 3.5 | 3.9 | 3.7 | 3.1 |
| Black, non-Hispanic | 8.9 | 9.0 | 5.4 | 7.8 | 4.6 |
| Hispanic | 8.0 | 8.7 | 6.3 | 7.2 | 3.2 |
| White, non-Hispanic | 9.7 | 6.0 | 4.6 | 4.9 | 3.0 |
| Sex |  |  |  |  |  |
| Male | 0.9 | 1.8 | 1.5 | 2.3 | 2.2 |
| Female | 17.1 | 10.8 | 8.1 | 8.3 | 4.2 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 6.0 | 1.7 | - | 3.8 | 3.2 |
| No indicated disability | 9.5 | 6.7 | - | 5.4 | 3.3 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | 7.5 | 2.0 |
| Proficient | - | 6.5 | - | 5.4 | 3.3 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 8.9 | 3.5 | 3.0 | 3.7 | 2.8 |
| Mid-level (2.0 to 3.5) | 10.5 | 7.1 | 5.2 | 5.9 | 3.5 |
| Low (less than 2.0) | 5.2 | 5.8 | 4.2 | 4.4 | 2.4 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 6.2 | 1.9 | 1.8 | 2.3 | 2.7 |
| Mid-level or mixed ${ }^{2}$ | 9.3 | 7.2 | 5.5 | 6.0 | 3.3 |
| All low ${ }^{3}$ | 9.2 | 5.5 | 2.7 | 5.4 | 4.7 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 8.7 | 2.3 | 2.8 | 2.8 | 2.1 |
| Mid-level (prealgebra or algebra 1) | 8.9 | 6.9 | 5.2 | 5.8 | 3.7 |
| Low (no or low mathematics) ${ }^{5}$ | 9.9 | 7.4 | 4.9 | 5.8 | 3.2 |
| School urbanicity |  |  |  |  |  |
| Urban | 8.6 | - | 4.9 | - | 3.4 |
| Suburban | 9.2 | - |  | - | 2.3 |
| Rural | 9.9 | - | 5.6 | - | 4.4 |

See notes at end of table.

Table 18. Percentage of public high school graduates concentrating in business services, by selected characteristics, including special and protected populations status: Various years, 1982-98 -Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 7.0 | 4.6 |
| High (greater than 50 percent in NSLP) | - | - | - | 5.4 | 3.2 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 3.1 | 2.0 |  |
| Low (5 percent or less in NSLP) | - | - | - | 6.5 | 4.2 |
| Not reported | - | - | - |  |  |

-Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Business services concentrators earned 3.0 or more credits in the business services program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 19. Percentage of public high school graduates concentrating in business management, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander | 0.3 | $\ddagger$ | 0.1 | $\ddagger$ | $\ddagger$ |
| Black, non-Hispanic | 0.3 | $\ddagger$ | 0.1 | 0.5 | 0.4 |
| Hispanic | \$ | $\ddagger$ | 0.5 | 0.3 | 0.5 |
| White, non-Hispanic | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 |
| Sex |  |  |  |  |  |
| Male | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 |
| Female | 0.2 | 0.3 | 0.5 | 0.4 | 0.6 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 0.1 | $\ddagger$ | - | 0.9 | 0.4 |
| No indicated disability | 0.2 | 0.2 | - | 0.3 | 0.4 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | $\ddagger$ | $\ddagger$ |
| Proficient | - | 0.2 | - | 0.3 | 0.4 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 0.4 | $\ddagger$ | $\ddagger$ | 0.1 | 0.2 |
| Mid-level (2.0 to 3.5) | 0.1 | 0.2 | 0.3 | 0.3 | 0.5 |
| Low (less than 2.0) | 0.2 | 0.2 | 0.3 | 0.4 | 0.2 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | $\ddagger$ | $\ddagger$ | 0.2 | 0.1 | 0.2 |
| Mid-level or mixed ${ }^{2}$ | 0.2 | 0.2 | 0.3 | 0.3 | 0.5 |
| All low ${ }^{3}$ | $\ddagger$ | $\ddagger$ | 0.3 | 0.6 | 0.7 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 0.1 | $\ddagger$ | 0.2 | 0.1 | 0.4 |
| Mid-level (prealgebra or algebra 1) | 0.1 | 0.1 | 0.3 | 0.2 | 0.5 |
| Low (no or low mathematics) ${ }^{5}$ | 0.3 | 0.3 | 0.2 | 0.6 | 0.3 |
| School urbanicity |  |  |  |  |  |
| Urban | 0.2 | - | 0.4 | - | 0.3 |
| Suburban | $\ddagger$ | - | 0.2 | - | 0.4 |
| Rural | 0.3 | - | 0.3 | - | 0.6 |

See notes at end of table.

Table 19. Percentage of public high school graduates concentrating in business management, by selected characteristics, including special and protected populations status: Various years, 1982-98 -Continued

| 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :--- | :--- | :--- | :--- |

School poverty level
High (greater than 50 percent in NSLP) - - - $\quad 0.6$
Middle (greater than 5 to 50 percent in NSLP) - - 0.3


| Not repor |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

—Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Business management concentrators earned 3.0 or more credits in the business management program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 20. Percentage of public high school graduates concentrating in marketing, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 1.8 | 2.1 | 1.3 | 2.2 | 1.8 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 1.0 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander | 0.4 | $\ddagger$ | 0.3 | 0.4 | 0.9 |
| Black, non-Hispanic | 2.6 | 2.3 | 2.0 | 2.6 | 2.4 |
| Hispanic | 1.8 | 2.6 | 1.0 | 2.0 | 2.2 |
| White, non-Hispanic | 1.7 | 2.2 | 1.3 | 2.3 | 1.7 |
| Sex |  |  |  |  |  |
| Male | 1.6 | 1.8 | 1.1 | 1.5 | 1.7 |
| Female | 2.0 | 2.4 | 1.4 | 2.8 | 2.0 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 1.9 | 1.4 | - | 1.5 | 1.0 |
| No indicated disability | 1.8 | 2.1 | - | 2.2 | 1.8 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | 1.6 | $\ddagger$ |
| Proficient | - | 2.1 | - | 2.2 | 1.8 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 0.3 | 0.9 | 0.1 | 0.8 | 0.7 |
| Mid-level (2.0 to 3.5) | 1.7 | 2.1 | 1.2 | 2.4 | 2.0 |
| Low (less than 2.0) | 2.9 | 2.9 | 2.4 | 2.5 | 2.6 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 1.4 | 0.3 | 0.3 | 0.7 | 0.8 |
| Mid-level or mixed ${ }^{2}$ | 1.8 | 2.4 | 1.4 | 2.4 | 2.0 |
| All low ${ }^{3}$ | 1.5 | 1.5 | 1.4 | 2.0 | 1.6 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 0.3 | 0.9 | 0.4 | 1.1 | 1.3 |
| Mid-level (prealgebra or algebra 1) | 1.9 | 2.2 | 1.3 | 2.2 | 2.0 |
| Low (no or low mathematics) ${ }^{5}$ | 1.9 | 2.4 | 1.8 | 2.6 | 1.7 |
| School urbanicity |  |  |  |  |  |
| Urban | 2.2 | - | 2.0 | - | 2.4 |
| Suburban | 1.9 | - | 1.1 | - | 2.3 |
| Rural | 1.4 | - | 1.0 | - | 0.7 |

See notes at end of table.

Table 20. Percentage of public high school graduates concentrating in marketing, by selected characteristics, including special and protected populations status: Various years, 1982-98 —Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 2.3 | 1.3 |
| High (greater than 50 percent in NSLP) | - | - | - | 2.4 | 2.1 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 1.6 | 0.9 |  |
| Low (5 percent or less in NSLP) | - | - | - | 1.6 | 1.8 |
| Not reported | - | - |  |  |  |

—Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1 , and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Marketing concentrators earned 3.0 or more credits in the marketing program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 21. Percentage of public high school graduates concentrating in health care, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 0.6 | 0.6 | 0.6 | 1.0 | 1.9 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 0.9 | $\ddagger$ | 0.5 | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander | $\ddagger$ | $\ddagger$ | 1.3 | 0.7 | 2.1 |
| Black, non-Hispanic | 1.5 | 0.5 | 0.9 | 1.3 | 4.7 |
| Hispanic | 1.1 | 0.2 | 0.6 | 0.9 | 2.1 |
| White, non-Hispanic | 0.4 | 0.7 | 0.5 | 0.9 | 1.3 |
| Sex |  |  |  |  |  |
| Male | 0.2 | 0.2 | 0.2 | 0.3 | 0.7 |
| Female | 1.0 | 0.9 | 1.1 | 1.6 | 3.0 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 0.7 | 2.6 | - | 0.6 | 1.4 |
| No indicated disability | 0.6 | 0.5 | - | 1.0 | 1.9 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | $\ddagger$ | $\ddagger$ |
| Proficient | - | 0.6 | - | 1.0 | 1.9 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 0.1 | 0.2 | 0.2 | 0.5 | 1.3 |
| Mid-level (2.0 to 3.5) | 0.7 | 0.6 | 0.7 | 1.1 | 2.0 |
| Low (less than 2.0) | 0.7 | 0.8 | 0.7 | 0.9 | 2.2 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 0.9 | $\ddagger$ | 0.2 | 0.4 | 2.3 |
| Mid-level or mixed ${ }^{2}$ | 0.6 | 0.6 | 0.7 | 1.1 | 1.8 |
| All low ${ }^{3}$ | 1.0 | 1.1 | 1.0 | 1.6 | 1.2 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 0.1 | 0.3 | $\ddagger$ | 0.5 | 3.3 |
| Mid-level (prealgebra or algebra 1) | 0.3 | 0.5 | 0.4 | 1.0 | 1.6 |
| Low (no or low mathematics) ${ }^{5}$ | 1.1 | 0.8 | 1.4 | 1.2 | 1.3 |
| School urbanicity |  |  |  |  |  |
| Urban | 0.4 | - | 0.5 | - | 3.4 |
| Suburban | 0.5 | - | 0.6 | - | 1.1 |
| Rural | 0.8 | - | 0.7 | - | 1.4 |

See notes at end of table.

Table 21. Percentage of public high school graduates concentrating in health care, by selected characteristics, including special and protected populations status: Various years, 1982-98 —Continued

| 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :--- | :--- | :--- | :--- |

School poverty level
High (greater than 50 percent in NSLP) - - - $\quad 1.0 \quad 3.6$
Middle (greater than 5 to 50 percent in NSLP) - $\quad$ - $\quad 1.1 \quad 1.9$
Low (5 percent or less in NSLP) - $\quad$ - $\quad$ - $\quad 0.8 \quad 1.3$
Not reported $\quad-\quad-\quad-\quad-\quad 0.8 \quad 1.2$
—Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Health care concentrators earned 3.0 or more credits in the health care program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 22. Percentage of public high school graduates concentrating in protective services, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | $\ddagger$ | $\ddagger$ | 0.1 | 0.1 | 0.1 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander | $\ddagger$ | $\ddagger$ | 0.1 | $\ddagger$ | $\ddagger$ |
| Black, non-Hispanic | 0.1 | $\ddagger$ | 0.1 | 0.1 | 0.2 |
| Hispanic | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| White, non-Hispanic | $\ddagger$ | $\ddagger$ | 0.1 | $\ddagger$ | 0.1 |
| Sex |  |  |  |  |  |
| Male | $\ddagger$ | $\ddagger$ | 0.1 | 0.1 | 0.1 |
| Female | 0.1 | $\ddagger$ | 0.1 | $\ddagger$ | $\ddagger$ |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 0.1 | $\ddagger$ | - | 0.3 | $\ddagger$ |
| No indicated disability | $\ddagger$ | $\ddagger$ | - | $\ddagger$ | 0.1 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | $\ddagger$ | $\ddagger$ |
| Proficient | - | $\ddagger$ | - | 0.1 | 0.1 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Mid-level (2.0 to 3.5) | $\ddagger$ | $\ddagger$ | 0.1 | $\ddagger$ | 0.1 |
| Low (less than 2.0) | $\ddagger$ | $\ddagger$ | $\ddagger$ | 0.2 | $\ddagger$ |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Mid-level or mixed ${ }^{2}$ | $\ddagger$ | $\ddagger$ | 0.1 | 0.1 | 0.1 |
| All low ${ }^{3}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | 0.6 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | $\ddagger$ | $\ddagger$ | 0.1 | $\ddagger$ | $\ddagger$ |
| Mid-level (prealgebra or algebra 1) | $\ddagger$ | $\ddagger$ | 0.1 | $\ddagger$ | 0.1 |
| Low (no or low mathematics) ${ }^{5}$ | $\ddagger$ | $\ddagger$ | 0.1 | 0.1 | 0.2 |
| School urbanicity |  |  |  |  |  |
| Urban | $\ddagger$ | - | 0.1 | - | 0.1 |
| Suburban | $\ddagger$ | - | $\ddagger$ | - | 0.1 |
| Rural | 0.1 | - | 0.1 | - | $\ddagger$ |

See notes at end of table.

Table 22. Percentage of public high school graduates concentrating in protective services, by selected characteristics, including special and protected populations status: Various years, 1982-98 -Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | - | - | - | 0.2 | 0.1 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 0.1 | 0.1 |
| Low (5 percent or less in NSLP) | - | - | - | $\ddagger$ | 0.1 |
| Not reported | - | - | - | $\ddagger$ | $\ddagger$ |

—Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Protective services concentrators earned 3.0 or more credits in the protective services program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 23. Percentage of public high school graduates concentrating in trade and industry program areas, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 14.8 | 11.3 | 9.9 | 8.5 | 9.8 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 34.8 | 15.5 | 23.4 | 5.4 | 13.6 |
| Asian/Pacific Islander | 11.3 | 9.7 | 12.0 | 4.8 | 6.7 |
| Black, non-Hispanic | 14.0 | 7.9 | 7.1 | 7.8 | 7.2 |
| Hispanic | 19.7 | 9.1 | 9.4 | 8.1 | 9.1 |
| White, non-Hispanic | 13.8 | 12.2 | 10.1 | 8.7 | 10.6 |
| Sex |  |  |  |  |  |
| Male | 29.0 | 21.5 | 18.3 | 16.2 | 18.5 |
| Female | 1.6 | 2.0 | 1.8 | 1.2 | 1.7 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 16.3 | 23.1 | - | 20.2 | 18.7 |
| No indicated disability | 14.6 | 10.9 | - | 8.1 | 9.5 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 3.2 | - | 2.3 | 5.2 |
| Proficient | - | 11.3 | - | 8.6 | 9.8 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 3.3 | 2.6 | 2.3 | 2.1 | 3.0 |
| Mid-level (2.0 to 3.5) | 14.5 | 10.6 | 9.8 | 8.6 | 10.3 |
| Low (less than 2.0) | 21.5 | 19.3 | 16.8 | 14.6 | 20.8 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 8.3 | 2.2 | 2.2 | 1.7 | 3.5 |
| Mid-level or mixed ${ }^{2}$ | 14.4 | 11.3 | 10.2 | 9.2 | 10.5 |
| All low ${ }^{3}$ | 26.2 | 29.6 | 34.1 | 21.8 | 23.2 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 6.3 | 4.2 | 3.7 | 3.1 | 4.6 |
| Mid-level (prealgebra or algebra 1) | 12.2 | 9.5 | 8.4 | 7.3 | 10.2 |
| Low (no or low mathematics) ${ }^{5}$ | 20.0 | 18.0 | 17.3 | 15.4 | 14.4 |
| School urbanicity |  |  |  |  |  |
| Urban | 13.2 | - | 8.2 | - | 8.0 |
| Suburban | 14.7 | - | 9.2 | - | 8.9 |
| Rural | 15.8 | - | 12.1 | - | 12.5 |

See notes at end of table.

Table 23. Percentage of public high school graduates concentrating in trade and industry program areas, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - |  |  | 9.8 | 10.3 |
| High (greater than 50 percent in NSLP) | - | - | - | 9.0 | 10.8 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 6.8 | 5.7 |
| Low (5 percent or less in NSLP) | - | - | - | 8.0 | 9.9 |
| Not reported | - | - | - |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.

NOTE: Trade and industry concentrators earned 3.0 or more credits in the broad trade and industry program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 24. Percentage of public high school graduates concentrating in construction, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 1.5 | 1.1 | 1.2 | 1.0 | 1.3 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 4.2 | $\ddagger$ | 0.9 | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander | 0.3 | $\ddagger$ | 0.4 | 0.4 | 0.3 |
| Black, non-Hispanic | 3.1 | 1.8 | 1.8 | 1.6 | 1.6 |
| Hispanic | 2.0 | 0.4 | 0.6 | 1.0 | 0.6 |
| White, non-Hispanic | 1.2 | 1.1 | 1.3 | 0.9 | 1.4 |
| Sex |  |  |  |  |  |
| Male | 3.0 | 2.3 | 2.2 | 2.0 | 2.6 |
| Female | 0.1 | $\ddagger$ | 0.3 | 0.1 | 0.1 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 2.3 | 3.7 | - | 3.4 | 3.8 |
| No indicated disability | 1.4 | 1.1 | - | 0.9 | 1.2 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | $\ddagger$ | $\ddagger$ |
| Proficient | - | 1.1 | - | 1.0 | 1.3 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 0.1 | $\ddagger$ | 0.2 | 0.2 | 0.2 |
| Mid-level (2.0 to 3.5) | 1.4 | 1.0 | 1.1 | 1.0 | 1.4 |
| Low (less than 2.0) | 2.5 | 2.4 | 2.8 | 2.1 | 2.6 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | 0.3 |
| Mid-level or mixed ${ }^{2}$ | 1.4 | 1.2 | 1.2 | 1.1 | 1.3 |
| All low ${ }^{3}$ | 3.7 | 2.6 | 5.9 | 3.0 | 5.4 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 0.2 | $\ddagger$ | 0.1 | 0.1 | 0.5 |
| Mid-level (prealgebra or algebra 1) | 1.0 | 0.7 | 1.1 | 0.7 | 1.3 |
| Low (no or low mathematics) ${ }^{5}$ | 2.5 | 2.4 | 2.2 | 2.5 | 2.0 |
| School urbanicity |  |  |  |  |  |
| Urban | 1.4 | - | 0.8 | - | 1.0 |
| Suburban | 0.8 | - | 1.0 | - | 0.6 |
| Rural | 2.6 | - | 1.7 | - | 2.4 |

See notes at end of table.

Table 24. Percentage of public high school graduates concentrating in construction, by selected characteristics, including special and protected populations status: Various years, 1982-98 -Continued

| 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :--- | :--- | :--- | :--- |

School poverty level
High (greater than 50 percent in NSLP) - - - $\quad 1.4 \quad 1.6$
Middle (greater than 5 to 50 percent in NSLP) - $\quad$ - $\quad 1.1 \quad 1.4$
Low (5 percent or less in NSLP) $\quad-\quad-\quad-\quad-\quad 0.4 \quad 1.1$

| Not reported | - | - | - | 1.1 | 0.8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

-Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Construction concentrators earned 3.0 or more credits in the construction program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 25. Percentage of public high school graduates concentrating in mechanics and repair, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 3.0 | 2.3 | 1.9 | 1.6 | 1.8 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 1.4 | $\ddagger$ | 7.0 | $\ddagger$ | 3.8 |
| Asian/Pacific Islander | 1.5 | 1.8 | 1.6 | 1.2 | 0.9 |
| Black, non-Hispanic | 2.8 | 1.2 | 1.2 | 1.8 | 1.4 |
| Hispanic | 4.2 | 2.1 | 1.2 | 2.1 | 2.1 |
| White, non-Hispanic | 2.8 | 2.6 | 2.0 | 1.6 | 1.9 |
| Sex |  |  |  |  |  |
| Male | 6.2 | 4.6 | 3.7 | 3.2 | 3.6 |
| Female | 0.1 | 0.2 | $\ddagger$ | 0.1 | 0.2 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 3.1 | 5.7 | - | 4.7 | 4.7 |
| No indicated disability | 3.0 | 2.2 | - | 1.5 | 1.7 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | $\ddagger$ | 1.4 |
| Proficient | - | 2.3 | - | 1.7 | 1.8 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 |
| Mid-level (2.0 to 3.5) | 2.7 | 2.2 | 1.9 | 1.6 | 1.9 |
| Low (less than 2.0) | 5.6 | 4.1 | 3.2 | 3.3 | 4.9 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 2.5 | $\ddagger$ | $\ddagger$ | 0.1 | 0.3 |
| Mid-level or mixed ${ }^{2}$ | 2.9 | 2.3 | 1.8 | 1.8 | 1.9 |
| All low ${ }^{3}$ | 5.8 | 7.4 | 10.1 | 4.8 | 7.7 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 0.4 | 0.4 | 0.7 | 0.3 | 0.6 |
| Mid-level (prealgebra or algebra 1) | 2.0 | 1.7 | 1.2 | 1.3 | 1.9 |
| Low (no or low mathematics) ${ }^{5}$ | 4.9 | 4.4 | 4.3 | 3.5 | 3.0 |
| School urbanicity |  |  |  |  |  |
| Urban | 2.6 | - | 0.9 | - | 1.7 |
| Suburban | 3.0 | - | 1.7 | - | 1.7 |
| Rural | 3.4 | - | 2.7 | - | 2.0 |

See notes at end of table.

Table 25. Percentage of public high school graduates concentrating in mechanics and repair, by selected characteristics, including special and protected populations status: Various years, 1982-98 —Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 1.7 | 1.5 |
| High (greater than 50 percent in NSLP) | - | - | - | 1.9 | 1.9 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 0.7 | 1.6 |  |
| Low (5 percent or less in NSLP) | - | - | - | 1.6 | 1.7 |
| Not reported | - | - |  |  |  |

—Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Mechanics and repair concentrators earned 3.0 or more credits in the mechanics and repair program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 26. Percentage of public high school graduates concentrating in precision production, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 8.0 | 5.9 | 5.1 | 4.2 | 4.9 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 24.9 | 9.9 | 13.3 | 1.9 | 4.9 |
| Asian/Pacific Islander | 7.0 | 4.8 | 8.2 | 2.1 | 3.2 |
| Black, non-Hispanic | 6.7 | 4.1 | 3.2 | 2.9 | 3.1 |
| Hispanic | 10.3 | 4.8 | 4.2 | 3.6 | 4.6 |
| White, non-Hispanic | 7.5 | 6.5 | 5.2 | 4.6 | 5.4 |
| Sex |  |  |  |  |  |
| Male | 15.1 | 10.7 | 8.9 | 7.6 | 8.9 |
| Female | 1.3 | 1.6 | 1.4 | 0.8 | 1.3 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 8.6 | 10.5 | - | 8.3 | 5.9 |
| No indicated disability | 7.9 | 5.8 | - | 4.0 | 4.9 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | 0.9 | 2.1 |
| Proficient | - | 6.0 | - | 4.2 | 4.9 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 2.0 | 1.6 | 1.9 | 1.4 | 2.3 |
| Mid-level (2.0 to 3.5) | 8.6 | 5.7 | 5.1 | 4.4 | 5.1 |
| Low (less than 2.0) | 8.8 | 9.4 | 7.7 | 5.5 | 9.1 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 5.4 | 1.4 | 1.8 | 1.3 | 2.6 |
| Mid-level or mixed ${ }^{2}$ | 7.8 | 5.9 | 5.3 | 4.5 | 5.2 |
| All low ${ }^{3}$ | 12.6 | 16.3 | 12.1 | 9.2 | 6.4 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 4.2 | 2.6 | 2.5 | 2.2 | 2.9 |
| Mid-level (prealgebra or algebra 1) | 7.1 | 5.3 | 4.6 | 3.9 | 5.2 |
| Low (no or low mathematics) ${ }^{5}$ | 9.9 | 8.7 | 7.8 | 6.2 | 6.3 |
| School urbanicity |  |  |  |  |  |
| Urban | 7.9 | 4.4 | 4.4 | 2.6 | 3.9 |
| Suburban | 8.3 | 6.1 | 4.9 | 3.5 | 5.1 |
| Rural | 7.5 | 6.2 | 5.8 | 5.2 | 5.6 |

See notes at end of table.

Table 26. Percentage of public high school graduates concentrating in precision production, by selected characteristics, including special and protected populations status: Various years, 1982-98 —Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - |  |  |  |  |
| High (greater than 50 percent in NSLP) | - | - | 4.4 | 4.8 | 5.9 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 5.3 | 4.2 | 5.3 |
| Low (5 percent or less in NSLP) | - | - | 4.5 | 4.4 | 2.3 |
| Not reported | - | - | 6.6 | 3.6 | 5.7 |

—Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Precision production concentrators earned 3.0 or more credits in the broad precision production program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 27. Percentage of public high school graduates concentrating in print production, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 2.0 | 1.8 | 2.2 | 1.8 | 2.0 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 8.1 | 4.6 | 2.8 | $\ddagger$ | 1.1 |
| Asian/Pacific Islander | 3.4 | 2.0 | 5.2 | 0.8 | 1.6 |
| Black, non-Hispanic | 2.8 | 1.0 | 1.2 | 1.1 | 1.3 |
| Hispanic | 1.9 | 1.1 | 1.6 | 1.2 | 1.3 |
| White, non-Hispanic | 1.8 | 2.0 | 2.2 | 1.9 | 2.3 |
| Sex |  |  |  |  |  |
| Male | 3.3 | 3.1 | 3.3 | 3.0 | 3.3 |
| Female | 0.8 | 0.6 | 1.0 | 0.6 | 0.8 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 1.8 | 2.4 | - | 2.5 | 1.8 |
| No indicated disability | 2.0 | 1.8 | - | 1.7 | 2.0 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | 0.6 | 1.1 |
| Proficient | - | 1.8 | - | 1.8 | 2.0 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 1.1 | 1.1 | 0.9 | 0.9 | 1.4 |
| Mid-level (2.0 to 3.5) | 2.2 | 2.0 | 2.2 | 1.9 | 2.0 |
| Low (less than 2.0) | 1.7 | 1.1 | 3.0 | 1.8 | 3.0 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 0.1 | 1.1 | 1.3 | 1.1 | 1.8 |
| Mid-level or mixed ${ }^{2}$ | 2.1 | 1.9 | 2.3 | 1.9 | 2.0 |
| All low ${ }^{3}$ | $\ddagger$ | 1.5 | 1.0 | 1.3 | 1.7 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 1.1 | 1.3 | 1.3 | 1.4 | 1.7 |
| Mid-level (prealgebra or algebra 1) | 2.4 | 1.9 | 2.3 | 1.9 | 2.2 |
| Low (no or low mathematics) ${ }^{5}$ | 1.6 | 1.6 | 2.4 | 1.7 | 1.6 |
| School urbanicity |  |  |  |  |  |
| Urban | 2.5 | - | 2.1 | - | 1.6 |
| Suburban | 2.2 | - | 2.1 | - | 1.9 |
| Rural | 1.3 | - | 2.3 | - | 2.4 |

See notes at end of table.

Table 27. Percentage of public high school graduates concentrating in print production, by selected characteristics, including special and protected populations status: Various years, 1982-98 -Continued

| 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :--- | :--- | :--- | :--- |

School poverty level
High (greater than 50 percent in NSLP) - - - $\quad 1.4 \quad 3.1$
Middle (greater than 5 to 50 percent in NSLP) - - - $\quad 1.8 \quad 2.2$
Low (5 percent or less in NSLP) $\quad$ - $\quad-\quad-\quad 2.4$

—Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Print production concentrators earned 3.0 or more credits in the print production program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 28. Percentage of public high school graduates concentrating in materials production, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 3.0 | 1.8 | 1.5 | 1.1 | 1.3 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 1.8 | $\ddagger$ | 4.6 | $\ddagger$ | 2.7 |
| Asian/Pacific Islander | 1.4 | 0.8 | 0.9 | 0.6 | 0.6 |
| Black, non-Hispanic | 1.3 | 1.0 | 1.2 | 0.7 | 0.4 |
| Hispanic | 4.8 | 1.0 | 1.0 | 0.9 | 1.4 |
| White, non-Hispanic | 3.1 | 2.1 | 1.5 | 1.3 | 1.5 |
| Sex |  |  |  |  |  |
| Male | 6.3 | 3.6 | 2.8 | 2.3 | 2.6 |
| Female | 0.1 | 0.2 | 0.1 | 0.1 | $\ddagger$ |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 3.5 | 4.9 | - | 3.1 | 2.5 |
| No indicated disability | 3.0 | 1.7 | - | 1.1 | 1.3 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | $\ddagger$ | $\ddagger$ |
| Proficient | - | 1.8 | - | 1.2 | 1.3 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 0.5 | $\ddagger$ | 0.6 | 0.1 | 0.2 |
| Mid-level (2.0 to 3.5) | 3.2 | 1.6 | 1.5 | 1.1 | 1.4 |
| Low (less than 2.0) | 3.8 | 3.9 | 1.8 | 2.2 | 3.0 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 2.1 | $\ddagger$ | 0.1 | $\ddagger$ | 0.3 |
| Mid-level or mixed ${ }^{2}$ | 2.9 | 1.6 | 1.5 | 1.2 | 1.4 |
| All low ${ }^{3}$ | 8.2 | 8.8 | 6.5 | 4.2 | 3.9 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 1.0 | 0.5 | 0.4 | 0.3 | 0.5 |
| Mid-level (prealgebra or algebra 1) | 2.3 | 1.3 | 1.0 | 0.8 | 1.3 |
| Low (no or low mathematics) ${ }^{5}$ | 4.5 | 3.4 | 3.2 | 2.7 | 2.6 |
| School urbanicity |  |  |  |  |  |
| Urban | 3.0 | - | 0.9 | - | 1.0 |
| Suburban | 2.5 | - | 1.4 | - | 1.2 |
| Rural | 3.8 | - | 1.9 | - | 1.7 |

See notes at end of table.

Table 28. Percentage of public high school graduates concentrating in materials production, by selected characteristics, including special and protected populations status: Various years, 1982-98 —Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 2.0 | 1.1 |
| High (greater than 50 percent in NSLP) | - | - | - | 1.2 | 1.4 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 0.6 | 0.6 |  |
| Low (5 percent or less in NSLP) | - | - | - | 1.1 | 2.0 |
| Not reported | - | - |  |  |  |

—Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Materials production concentrators earned 3.0 or more credits in the materials production program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 29. Percentage of public high school graduates concentrating in other precision production, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 0.1 | $\ddagger$ | 2.2 | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander | 0.8 | $\ddagger$ | 0.2 | $\ddagger$ | 0.1 |
| Black, non-Hispanic | 1.2 | 0.4 | 0.1 | 0.2 | 0.3 |
| Hispanic | 0.8 | $\ddagger$ | 0.3 | 0.2 | $\ddagger$ |
| White, non-Hispanic | 0.2 | 0.5 | 0.2 | 0.2 | 0.3 |
| Sex |  |  |  |  |  |
| Male | 0.8 | 0.6 | 0.3 | 0.3 | 0.4 |
| Female | 0.1 | 0.2 | 0.1 | $\ddagger$ | 0.1 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 0.2 | $\ddagger$ | - | 0.8 | $\ddagger$ |
| No indicated disability | 0.4 | 0.4 | - | 0.1 | 0.2 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | $\ddagger$ | $\ddagger$ |
| Proficient | - | 0.4 | - | 0.2 | 0.2 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | $\ddagger$ | $\ddagger$ | 0.1 | $\ddagger$ | 0.3 |
| Mid-level (2.0 to 3.5) | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 |
| Low (less than 2.0) | 0.5 | 0.5 | 0.4 | 0.2 | 0.4 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | $\ddagger$ | $\ddagger$ | 0.1 | $\ddagger$ | 0.2 |
| Mid-level or mixed ${ }^{2}$ | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 |
| All low ${ }^{3}$ | 0.9 | 2.8 | $\ddagger$ | 0.4 | $\ddagger$ |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | $\ddagger$ | $\ddagger$ | 0.2 | $\ddagger$ | 0.1 |
| Mid-level (prealgebra or algebra 1) | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 |
| Low (no or low mathematics) ${ }^{5}$ | 0.6 | 0.7 | 0.3 | 0.3 | 0.4 |
| School urbanicity |  |  |  |  |  |
| Urban | 0.4 | - | 0.3 | - | 0.2 |
| Suburban | 0.6 | - | 0.1 | - | 0.3 |
| Rural | 0.1 | - | 0.3 | - | 0.2 |

See notes at end of table.

Table 29. Percentage of public high school graduates concentrating in other precision production, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | ---: | :--- | ---: | ---: | ---: |
| School poverty level |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | - | - | - | $\ddagger$ | $\ddagger$ |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 0.2 | 0.3 |
| Low (5 percent or less in NSLP) | - | - | - | 0.1 | $\ddagger$ |
| Not reported | - | - | - | 0.1 | 0.3 |

-Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Other precision production concentrators earned 3.0 or more credits in the "other" precision production program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 30. Percentage of public high school graduates concentrating in transportation, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | $\ddagger$ | 0.1 | $\ddagger$ | 0.1 | 0.1 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander | 0.4 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Black, non-Hispanic | 0.1 | $\ddagger$ | $\ddagger$ | 0.2 | $\ddagger$ |
| Hispanic | $\ddagger$ | $\ddagger$ | $\ddagger$ | 0.1 | 0.2 |
| White, non-Hispanic | $\ddagger$ | 0.1 | $\ddagger$ | 0.1 | 0.1 |
| Sex |  |  |  |  |  |
| Male | 0.1 | 0.2 | $\ddagger$ | 0.2 | 0.1 |
| Female | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | $\ddagger$ | $\ddagger$ | - | $\ddagger$ | $\ddagger$ |
| No indicated disability | $\ddagger$ | 0.1 | - | 0.1 | 0.1 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | $\ddagger$ | $\ddagger$ |
| Proficient | - | 0.1 | - | 0.1 | 0.1 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 0.1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Mid-level (2.0 to 3.5) | $\ddagger$ | 0.1 | $\ddagger$ | 0.1 | 0.1 |
| Low (less than 2.0) | $\ddagger$ | $\ddagger$ | $\ddagger$ | 0.1 | $\ddagger$ |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 0.5 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Mid-level or mixed ${ }^{2}$ | $\ddagger$ | 0.1 | $\ddagger$ | 0.1 | 0.1 |
| All low ${ }^{3}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | 0.7 | $\ddagger$ |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Mid-level (prealgebra or algebra 1) | $\ddagger$ | 0.1 | $\ddagger$ | 0.1 | 0.1 |
| Low (no or low mathematics) ${ }^{5}$ | 0.1 | 0.2 | $\ddagger$ | 0.2 | 0.1 |
| School urbanicity |  |  |  |  |  |
| Urban | 0.1 | - | $\ddagger$ | - | $\ddagger$ |
| Suburban | $\ddagger$ | - | $\ddagger$ | - | 0.1 |
| Rural | 0.1 | - | $\ddagger$ | - | 0.1 |

See notes at end of table.

Table 30. Percentage of public high school graduates concentrating in transportation, by selected characteristics, including special and protected populations status: Various years, 1982-98 -Continued

| 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :--- | :--- | :--- | :--- |

School poverty level
High (greater than 50 percent in NSLP) - - - $0.3 \quad \ddagger$
Middle (greater than 5 to 50 percent in NSLP) - - - 0.1
Low (5 percent or less in NSLP) - - - $\quad \ddagger \quad \ddagger$
Not reported - $\quad-\quad-\quad 0.1$
—Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Transportation concentrators earned 3.0 or more credits in the transportation program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 31. Percentage of public high school graduates concentrating in technology program areas, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 0.5 | 0.8 | 1.3 | 0.9 | 2.2 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | $\pm$ | 4.3 | † | $\ddagger$ | 2.3 |
| Asian/Pacific Islander | 1.1 | 0.6 | 0.3 | 0.8 | 2.1 |
| Black, non-Hispanic | 0.4 | 0.8 | 0.5 | 0.7 | 1.7 |
| Hispanic | 0.2 | 0.6 | 1.4 | 0.7 | 1.8 |
| White, non-Hispanic | 0.5 | 0.9 | 1.4 | 0.9 | 2.4 |
| Sex |  |  |  |  |  |
| Male | 0.4 | 0.9 | 1.4 | 0.9 | 2.4 |
| Female | 0.5 | 0.7 | 1.1 | 0.8 | 2.2 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 0.4 | $\ddagger$ | - | 1.1 | 1.5 |
| No indicated disability | 0.5 | 0.8 | - | 0.9 | 2.3 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | $\ddagger$ | + |
| Proficient | - | 0.8 | - | 0.9 | 2.3 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 0.1 | 1.3 | 2.1 | 1.6 | 3.0 |
| Mid-level (2.0 to 3.5) | 0.5 | 0.9 | 1.1 | 0.8 | 2.2 |
| Low (less than 2.0) | 0.6 | 0.4 | 1.2 | 0.5 | 1.3 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | $\ddagger$ | 1.5 | 2.0 | 1.2 | 3.0 |
| Mid-level or mixed ${ }^{2}$ | 0.5 | 0.8 | 1.2 | 0.8 | 2.2 |
| All low ${ }^{3}$ | 0.6 | $\ddagger$ | 0.3 | 0.6 | $\ddagger$ |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 0.3 | 1.9 | 1.8 | 1.6 | 3.1 |
| Mid-level (prealgebra or algebra 1) | 0.4 | 0.8 | 1.3 | 0.8 | 2.1 |
| Low (no or low mathematics) ${ }^{5}$ | 0.6 | 0.4 | 0.8 | 0.5 | 1.9 |
| School urbanicity |  |  |  |  |  |
| Urban | 0.4 | - | 1.7 | - | 1.5 |
| Suburban | 0.7 | - | 1.2 | - | 2.5 |
| Rural | 0.3 | - | 1.0 | - | 2.5 |

See notes at end of table.

Table 31. Percentage of public high school graduates concentrating in technology program areas, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| School poverty level |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | - | - | - | 1.1 | 1.9 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 0.9 | 2.4 |
| Low (5 percent or less in NSLP) | - | - | - | 0.9 | 1.7 |
| Not reported | - | - | - | 0.5 | 2.4 |

-Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Technology concentrators earned 3.0 or more credits in the broad technology and communications program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 32. Percentage of public high school graduates concentrating in computer technology, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 0.3 | 0.3 | 0.4 | 0.3 | 0.6 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | 1.1 |
| Asian/Pacific Islander | 1.1 | 0.5 | 0.2 | $\ddagger$ | 0.5 |
| Black, non-Hispanic | 0.3 | 0.4 | 0.4 | 0.2 | 0.6 |
| Hispanic | $\ddagger$ | $\ddagger$ | 0.9 | 0.1 | 0.4 |
| White, non-Hispanic | 0.3 | 0.3 | 0.4 | 0.3 | 0.7 |
| Sex |  |  |  |  |  |
| Male | 0.3 | 0.4 | 0.5 | 0.4 | 0.7 |
| Female | 0.2 | 0.2 | 0.3 | 0.2 | 0.6 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 0.2 | $\ddagger$ | - | 0.5 | 0.7 |
| No indicated disability | 0.3 | 0.3 | - | 0.3 | 0.6 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | $\ddagger$ | $\ddagger$ |
| Proficient | - | 0.3 | - | 0.3 | 0.6 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 0.1 | 0.3 | 0.6 | 0.3 | 0.8 |
| Mid-level (2.0 to 3.5) | 0.3 | 0.3 | 0.4 | 0.3 | 0.6 |
| Low (less than 2.0) | 0.3 | 0.2 | 0.4 | 0.3 | 0.6 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | $\ddagger$ | 0.5 | 0.4 | 0.3 | 0.7 |
| Mid-level or mixed ${ }^{2}$ | 0.3 | 0.3 | 0.4 | 0.3 | 0.7 |
| All low ${ }^{3}$ | 0.1 | $\ddagger$ | 0.1 | $\ddagger$ | $\ddagger$ |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 0.2 | 0.7 | 0.6 | 0.5 | 1.1 |
| Mid-level (prealgebra or algebra 1) | 0.2 | 0.3 | 0.3 | 0.3 | 0.5 |
| Low (no or low mathematics) ${ }^{5}$ | 0.3 | 0.2 | 0.5 | 0.2 | 0.7 |
| School urbanicity |  |  |  |  |  |
| Urban | 0.1 | - | 0.6 | - | 0.3 |
| Suburban | 0.4 | - | 0.3 | - | 0.6 |
| Rural | 0.2 | - | 0.3 | - | 0.9 |

See notes at end of table.

Table 32. Percentage of public high school graduates concentrating in computer technology, by selected characteristics, including special and protected populations status: Various years, 1982-98 —Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 0.3 | 0.8 |
| High (greater than 50 percent in NSLP) | - | - | - | 0.2 | 0.8 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 0.5 | 0.2 |
| Low (5 percent or less in NSLP) | - | - | - | 0.2 | 0.3 |
| Not reported | - |  |  |  |  |

—Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Computer technology concentrators earned 3.0 or more credits in the computer technology program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 33. Percentage of public high school graduates concentrating in communications technology, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 0.1 | 0.3 | 0.3 | 0.3 | 0.8 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander | $\ddagger$ | $\ddagger$ | $\ddagger$ | 0.3 | 0.8 |
| Black, non-Hispanic | † | 0.1 | 0.1 | 0.3 | 0.4 |
| Hispanic | 0.1 | 0.2 | 0.1 | 0.3 | 0.5 |
| White, non-Hispanic | 0.1 | 0.3 | 0.3 | 0.3 | 1.0 |
| Sex |  |  |  |  |  |
| Male | 0.2 | 0.2 | 0.2 | 0.3 | 0.7 |
| Female | 0.1 | 0.3 | 0.3 | 0.4 | 1.0 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | $\ddagger$ | $\ddagger$ | - | 0.4 | 0.5 |
| No indicated disability | 0.1 | 0.3 | - | 0.3 | 0.9 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | $\ddagger$ | $\ddagger$ |
| Proficient | - | 0.3 | - | 0.3 | 0.9 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 0.1 | 0.3 | 0.4 | 0.8 | 1.7 |
| Mid-level (2.0 to 3.5) | 0.1 | 0.3 | 0.3 | 0.3 | 0.7 |
| Low (less than 2.0) | 0.1 | $\ddagger$ | $\ddagger$ | 0.1 | $\ddagger$ |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | $\ddagger$ | 0.3 | 0.5 | 0.6 | 1.7 |
| Mid-level or mixed ${ }^{2}$ | 0.1 | 0.3 | 0.2 | 0.3 | 0.7 |
| All low ${ }^{3}$ | 0.5 | $\ddagger$ | 0.2 | 中 | $\ddagger$ |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 0.2 | 0.3 | 0.4 | 0.6 | 1.3 |
| Mid-level (prealgebra or algebra 1) | 0.1 | 0.3 | 0.3 | 0.3 | 0.8 |
| Low (no or low mathematics) ${ }^{5}$ | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 |
| School urbanicity |  |  |  |  |  |
| Urban | 0.1 | - | 0.3 | - | 0.6 |
| Suburban | 0.2 | - | 0.3 | - | 1.2 |
| Rural | $\ddagger$ | - | 0.2 | - | 0.6 |

See notes at end of table.

Table 33. Percentage of public high school graduates concentrating in communications technology, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| School poverty level |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | - | - | - | 0.2 | 0.7 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 0.4 | 0.7 |
| Low (5 percent or less in NSLP) | - | - | - | 0.4 | 1.2 |
| Not reported | - | - | - | 0.2 | 1.0 |

-Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Communications technology concentrators earned 3.0 or more credits in the communications technology program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 34. Percentage of public high school graduates concentrating in other technologies, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 0.1 | $\ddagger$ | 0.2 | $\ddagger$ | 0.2 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | 0.4 |
| Black, non-Hispanic | $\ddagger$ | $\ddagger$ | $\ddagger$ | 0.1 | $\ddagger$ |
| Hispanic | 0.1 | $\ddagger$ | 0.2 | $\ddagger$ | 0.2 |
| White, non-Hispanic | 0.1 | \# | 0.2 | $\ddagger$ | 0.1 |
| Sex |  |  |  |  |  |
| Male | 0.2 | 0.1 | 0.3 | 0.1 | 0.3 |
| Female | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 0.2 | $\ddagger$ | - | $\ddagger$ | $\ddagger$ |
| No indicated disability | 0.1 | $\ddagger$ | - | $\ddagger$ | 0.2 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | $\ddagger$ | $\ddagger$ |
| Proficient | - | $\ddagger$ | - | $\ddagger$ | 0.2 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | $\ddagger$ | $\ddagger$ | 0.5 | $\ddagger$ | $\ddagger$ |
| Mid-level (2.0 to 3.5) | 0.1 | \# | 0.1 | $\ddagger$ | 0.2 |
| Low (less than 2.0) | 0.2 | $\ddagger$ | 0.2 | $\ddagger$ | $\ddagger$ |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | $\ddagger$ | $\ddagger$ | 0.6 | $\pm$ | $\ddagger$ |
| Mid-level or mixed ${ }^{2}$ | 0.1 | 0.1 | 0.1 | $\ddagger$ | 0.2 |
| All low ${ }^{3}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | $\ddagger$ | $\ddagger$ | 0.4 | $\ddagger$ | 0.1 |
| Mid-level (prealgebra or algebra 1) | 0.1 | 0.1 | 0.2 | $\ddagger$ | 0.2 |
| Low (no or low mathematics) ${ }^{5}$ | 0.1 | $\ddagger$ | 0.1 | $\ddagger$ | $\ddagger$ |
| School urbanicity |  |  |  |  |  |
| Urban | \# | - | 0.3 | - | 0.2 |
| Suburban | 0.1 | - | 0.2 | - | 0.2 |
| Rural | 0.1 | - | $\ddagger$ | - | $\ddagger$ |

See notes at end of table.

Table 34. Percentage of public high school graduates concentrating in other technologies, by selected characteristics, including special and protected populations status: Various years, 1982-98 —Continued

| 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :--- | :--- | :--- | :--- |

School poverty level
High (greater than 50 percent in NSLP) - - - 0.2
$\begin{array}{llllll}\text { Middle (greater than } 5 \text { to } 50 \text { percent in NSLP) } & - & - & - & \ddagger & 0.1 \\ \text { Low (5 percent or less in NSLP) } & - & - & - & \ddagger & 0.3\end{array}$

-Not available.
\#Rounds to zero.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1 , and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Other technologies concentrators earned 3.0 or more credits in the "other" technologies program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 35. Percentage of public high school graduates concentrating in food service and hospitality, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 0.2 | 0.5 | 0.4 | 0.4 | 0.5 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 1.0 | 中 | 2.7 | † | † |
| Asian/Pacific Islander | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | 0.3 |
| Black, non-Hispanic | 0.3 | 1.3 | 1.5 | 1.0 | 1.4 |
| Hispanic | 0.3 | 0.4 | 0.6 | 0.4 | 0.2 |
| White, non-Hispanic | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 |
| Sex |  |  |  |  |  |
| Male | 0.2 | 0.5 | 0.3 | 0.4 | 0.4 |
| Female | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 0.8 | 2.7 | - | 2.0 | 0.8 |
| No indicated disability | 0.2 | 0.4 | - | 0.3 | 0.5 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | \% | - | $\ddagger$ | \# |
| Proficient | - | 0.5 | - | 0.4 | 0.5 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | \# | $\ddagger$ | 0.0 | 0.1 | $\ddagger$ |
| Mid-level (2.0 to 3.5) | 0.3 | 0.4 | 0.4 | 0.3 | 0.5 |
| Low (less than 2.0) | 0.2 | 1.0 | 0.7 | 0.7 | 1.3 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | † | \# | $\ddagger$ | $\ddagger$ | 0.1 |
| Mid-level or mixed ${ }^{2}$ | 0.2 | 0.4 | 0.3 | 0.3 | 0.4 |
| All low ${ }^{3}$ | 1.2 | 2.2 | 1.4 | 2.5 | 2.7 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | $\ddagger$ | 末 | $\ddagger$ | $\ddagger$ | 0.2 |
| Mid-level (prealgebra or algebra 1) | 0.2 | 0.2 | 0.1 | 0.2 | 0.5 |
| Low (no or low mathematics) ${ }^{5}$ | 0.4 | 1.2 | 1.2 | 1.0 | 0.8 |
| School urbanicity |  |  |  |  |  |
| Urban | 0.4 | - | 0.4 | - | 0.7 |
| Suburban | 0.2 | - | 0.4 | - | 0.5 |
| Rural | 0.2 | - | 0.3 | - | 0.3 |

See notes at end of table.

Table 35. Percentage of public high school graduates concentrating in food service and hospitality, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 0.3 | 0.1 |
| High (greater than 50 percent in NSLP) | - | - | - | 0.4 | 0.5 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 0.2 | 0.3 |  |
| Low (5 percent or less in NSLP) | - | - | - | 0.3 | 0.6 |
| Not reported | - | - |  |  |  |

-Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Food service and hospitality concentrators earned 3.0 or more credits in the food service and hospitality program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 36. Percentage of public high school graduates concentrating in child care and education, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 0.2 | 0.3 | 0.4 | 0.6 | 0.6 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 0.5 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | 0.1 |
| Black, non-Hispanic | 0.4 | 0.4 | 0.6 | 1.5 | 0.6 |
| Hispanic | 0.2 | $\ddagger$ | 0.1 | 0.5 | 0.5 |
| White, non-Hispanic | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 |
| Sex |  |  |  |  |  |
| Male | 0.1 | $\ddagger$ | 0.1 | 0.1 | 0.1 |
| Female | 0.3 | 0.5 | 0.6 | 1.1 | 1.0 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 0.5 | 0.7 | - | 0.8 | 0.7 |
| No indicated disability | 0.2 | 0.3 | - | 0.6 | 0.6 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | $\ddagger$ | $\ddagger$ |
| Proficient | - | 0.3 | - | 0.6 | 0.6 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | $\ddagger$ | $\ddagger$ | 0.2 | 0.1 | 0.1 |
| Mid-level (2.0 to 3.5) | 0.2 | 0.3 | 0.3 | 0.6 | 0.7 |
| Low (less than 2.0) | 0.2 | 0.4 | 0.7 | 1.0 | 0.7 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | 0.1 | 0.2 |
| Mid-level or mixed ${ }^{2}$ | 0.2 | 0.3 | 0.3 | 0.6 | 0.7 |
| All low ${ }^{3}$ | 0.7 | 0.3 | 2.0 | 2.3 | $\ddagger$ |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | $\ddagger$ | 0.1 | 0.1 | 0.2 | 0.3 |
| Mid-level (prealgebra or algebra 1) | 0.2 | 0.2 | 0.3 | 0.5 | 0.7 |
| Low (no or low mathematics) ${ }^{5}$ | 0.3 | 0.6 | 0.6 | 0.9 | 0.6 |
| School urbanicity |  |  |  |  |  |
| Urban | 0.3 | - | 0.2 | - | 0.8 |
| Suburban | 0.2 | - | 0.3 | - | 0.6 |
| Rural | 0.2 | - | 0.5 | - | 0.4 |

See notes at end of table.

Table 36. Percentage of public high school graduates concentrating in child care and education, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| School poverty level |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | - | - | - | 1.0 | 0.3 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 0.5 | 0.6 |
| Low (5 percent or less in NSLP) | - | - | - | 0.4 | 0.6 |
| Not reported | - | - | - | 0.7 | 0.8 |

-Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Child care and education concentrators earned 3.0 or more credits in the child care and education program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 37. Percentage of public high school graduates concentrating in personal and other services, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 1.3 | 1.3 | 1.3 | 1.1 | 0.8 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 0.4 | $\ddagger$ | 1.6 | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander | 0.2 | $\ddagger$ | 0.1 | 0.3 | $\ddagger$ |
| Black, non-Hispanic | 1.2 | 2.2 | 3.4 | 2.3 | 1.3 |
| Hispanic | 1.5 | 2.7 | 1.8 | 2.5 | 1.3 |
| White, non-Hispanic | 1.3 | 1.0 | 1.0 | 0.8 | 0.7 |
| Sex |  |  |  |  |  |
| Male | 0.3 | 0.2 | 0.4 | 0.3 | 0.2 |
| Female | 2.2 | 2.3 | 2.2 | 1.8 | 1.4 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 1.1 | 2.4 | - | 1.5 | 2.4 |
| No indicated disability | 1.3 | 1.3 | - | 1.1 | 0.8 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 3.9 | - | 2.4 | $\ddagger$ |
| Proficient | - | 1.3 | - | 1.1 | 0.8 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 0.3 | 0.1 | $\ddagger$ | 0.1 | 0.3 |
| Mid-level (2.0 to 3.5) | 1.3 | 1.4 | 1.4 | 1.2 | 0.9 |
| Low (less than 2.0) | 1.8 | 1.7 | 2.1 | 1.3 | 1.5 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | $\ddagger$ | $\pm$ | $\ddagger$ | 0.2 | 0.4 |
| Mid-level or mixed ${ }^{2}$ | 1.3 | 1.4 | 1.4 | 1.2 | 0.8 |
| All low ${ }^{3}$ | 1.5 | 2.7 | 3.9 | 1.5 | 2.3 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 0.6 | 0.3 | 0.4 | 0.5 | 0.2 |
| Mid-level (prealgebra or algebra 1) | 1.4 | 1.0 | 1.2 | 0.9 | 0.9 |
| Low (no or low mathematics) ${ }^{5}$ | 1.2 | 2.3 | 2.1 | 2.0 | 1.2 |
| School urbanicity |  |  |  |  |  |
| Urban | 2.4 | - | 1.2 | - | 1.1 |
| Suburban | 1.2 | - | 1.5 | - | 0.8 |
| Rural | 0.8 | - | 1.2 | - | 0.6 |

See notes at end of table.

Table 37. Percentage of public high school graduates concentrating in personal and other services, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 1.5 | 1.1 |
| High (greater than 50 percent in NSLP) | - | - | - | 1.3 | 0.7 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 0.4 | 0.7 |  |
| Low (5 percent or less in NSLP) | - | - | - | 0.9 | 1.0 |
| Not reported | - | - |  |  |  |

-Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Personal and other services concentrators earned 3.0 or more credits in the personal and other services program area. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 38. Percentage distribution of public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 1.2 | 0.5 | 1.0 | 0.8 | 0.5 |
| Asian/Pacific Islander | 1.5 | 3.6 | 4.1 | 3.6 | 3.5 |
| Black, non-Hispanic | 11.4 | 14.3 | 11.7 | 12.6 | 13.6 |
| Hispanic | 11.9 | 8.0 | 9.6 | 8.0 | 11.4 |
| White, non-Hispanic | 74.1 | 73.6 | 73.6 | 75.0 | 70.8 |
| Other | - | - | - | - | 0.2 |
| Sex |  |  |  |  |  |
| Male | 48.2 | 47.7 | 49.4 | 49.0 | 47.8 |
| Female | 51.8 | 52.3 | 50.6 | 51.0 | 52.2 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 8.7 | 2.6 | - | 3.7 | 2.8 |
| No indicated disability | 91.3 | 97.4 | - | 96.3 | 97.2 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 0.5 | - | 0.9 | 0.7 |
| Proficient | - | 99.5 | - | 99.1 | 99.3 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 10.0 | 10.3 | 10.7 | 13.9 | 17.4 |
| Mid-level (2.0 to 3.5) | 69.5 | 72.2 | 75.7 | 72.3 | 75.5 |
| Low (less than 2.0) | 20.5 | 17.5 | 13.6 | 13.8 | 7.1 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 4.4 | 11.0 | 14.2 | 15.0 | 14.9 |
| Mid-level or mixed ${ }^{2}$ | 92.3 | 84.3 | 82.3 | 82.5 | 82.8 |
| All low ${ }^{3}$ | 3.3 | 4.7 | 3.5 | 2.5 | 2.2 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 7.9 | 10.6 | 12.9 | 14.9 | 20.4 |
| Mid-level (prealgebra or algebra 1) | 52.7 | 61.7 | 63.0 | 62.4 | 62.5 |
| Low (no or low mathematics) ${ }^{5}$ | 39.4 | 27.6 | 24.2 | 22.8 | 17.1 |
| School urbanicity |  |  |  |  |  |
| Urban | 19.2 | - | 22.2 | - | 28.4 |
| Suburban | 48.4 | - | 44.2 | - | 39.3 |
| Rural | 32.4 | - | 33.5 | - | 32.3 |

See notes at end of table.

Table 38. Percentage distribution of public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | ---: | :--- | ---: | ---: | ---: |
| School poverty level |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | - | - | - | 8.4 | 9.2 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 58.6 | 59.8 |
| Low (5 percent or less in NSLP) | - | - | - | 15.9 | 16.2 |
| Not reported | - | - | - | 17.2 | 14.8 |

## -Not available.

${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 39. Percentage distribution of occupational concentrators, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 1.6 | 0.7 | 1.4 | 0.7 | 0.5 |
| Asian/Pacific Islander | 0.8 | 2.1 | 3.3 | 2.0 | 2.4 |
| Black, non-Hispanic | 11.1 | 14.1 | 11.7 | 14.4 | 14.8 |
| Hispanic | 13.4 | 8.0 | 9.3 | 7.9 | 10.5 |
| White, non-Hispanic | 73.2 | 75.2 | 74.3 | 75.0 | 71.7 |
| Sex |  |  |  |  |  |
| Male | 55.8 | 55.5 | 57.6 | 55.4 | 58.6 |
| Female | 44.2 | 44.5 | 42.4 | 44.6 | 41.4 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 8.2 | 3.9 | - | 6.0 | 4.2 |
| No indicated disability | 91.8 | 96.1 | - | 94.0 | 95.8 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 0.2 | - | 0.6 | 0.2 |
| Proficient | - | 99.8 | - | 99.4 | 99.8 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 5.3 | 4.1 | 4.7 | 7.0 | 10.5 |
| Mid-level (2.0 to 3.5) | 71.0 | 72.7 | 76.7 | 75.8 | 79.5 |
| Low (less than 2.0) | 23.7 | 23.2 | 18.6 | 17.3 | 10.0 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 0.7 | 2.9 | 4.7 | 5.1 | 8.5 |
| Mid-level or mixed ${ }^{2}$ | 94.7 | 88.5 | 87.8 | 90.5 | 87.8 |
| All low ${ }^{3}$ | 4.5 | 8.5 | 7.6 | 4.3 | 3.7 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 4.2 | 4.6 | 6.2 | 7.0 | 14.3 |
| Mid-level (prealgebra or algebra 1) | 47.6 | 56.3 | 58.2 | 59.9 | 65.5 |
| Low (no or low mathematics) ${ }^{5}$ | 48.2 | 39.1 | 35.5 | 33.1 | 20.2 |
| School urbanicity |  |  |  |  |  |
| Urban | 17.6 | - | 19.1 | - | 26.2 |
| Suburban | 45.6 | - | 38.8 | - | 33.8 |
| Rural | 36.8 | - | 42.1 | - | 40.1 |

See notes at end of table.

Table 39. Percentage distribution of occupational concentrators, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| School poverty level |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | - | - | - | 9.9 | 10.7 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 62.2 | 64.2 |
| Low (5 percent or less in NSLP) | - | - | - | 10.6 | 10.2 |
| Not reported | - | - | - | 17.3 | 14.9 |

## -Not available.

${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.

NOTE: Occupational concentrators earned 3.0 or more credits in one of the following 10 broad occupational program areas: agriculture, business, marketing, health care, protective services, technology, trade and industry, food service and hospitality, child care and education, and personal and other services. NSLP is the National School Lunch Program. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 40. Percentage distribution of public high school graduates earning 3.0 or more occupational credits, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 1.5 | 0.6 | 1.4 | 0.8 | 0.5 |
| Asian/Pacific Islander | 1.0 | 2.6 | 3.7 | 2.6 | 2.7 |
| Black, non-Hispanic | 10.9 | 14.5 | 11.6 | 13.8 | 14.7 |
| Hispanic | 13.4 | 8.0 | 10.0 | 8.1 | 11.5 |
| White, non-Hispanic | 73.1 | 74.4 | 73.3 | 74.6 | 70.5 |
| Sex |  |  |  |  |  |
| Male | 54.9 | 54.7 | 56.1 | 54.3 | 54.6 |
| Female | 45.1 | 45.3 | 43.9 | 45.7 | 45.4 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 8.3 | 3.5 | - | 5.1 | 3.8 |
| No indicated disability | 91.7 | 96.5 | - | 94.9 | 96.2 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 0.2 | - | 0.6 | 0.4 |
| Proficient | - | 99.8 | - | 99.4 | 99.6 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 5.9 | 5.2 | 5.7 | 7.8 | 11.4 |
| Mid-level (2.0 to 3.5) | 70.3 | 72.3 | 76.4 | 74.3 | 79.4 |
| Low (less than 2.0) | 23.8 | 22.5 | 17.9 | 17.9 | 9.2 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 1.2 | 4.1 | 6.2 | 6.6 | 9.0 |
| Mid-level or mixed ${ }^{2}$ | 94.4 | 88.6 | 87.7 | 89.5 | 87.6 |
| All low ${ }^{3}$ | 4.4 | 7.3 | 6.1 | 3.9 | 3.3 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 4.9 | 5.5 | 7.4 | 29.8 | 15.5 |
| Mid-level (prealgebra or algebra 1) | 49.1 | 58.8 | 61.0 | 62.1 | 65.2 |
| Low (no or low mathematics) ${ }^{5}$ | 46.0 | 35.7 | 31.6 | 8.2 | 19.3 |
| School urbanicity |  |  |  |  |  |
| Urban | 17.7 | - | 20.6 | - | 24.8 |
| Suburban | 46.1 | - | 39.0 | - | 35.5 |
| Rural | 36.2 | - | 40.4 | - | 39.7 |

See notes at end of table.

Table 40. Percentage distribution of public high school graduates earning 3.0 or more occupational credits, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 9.0 | 11.3 |
| High (greater than 50 percent in NSLP) | - | - | - | 61.6 | 62.4 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 11.3 | 11.1 |  |
| Low (5 percent or less in NSLP) | - | - | - | 18.1 | 15.2 |
| Not reported | - |  |  |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.

NOTE: NSLP is the National School Lunch Program. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 41. Average number of computer-related credits earned by public high school graduates in computer-related areas, by selected characteristics, including special and protected populations status: 1998

|  | Basic type-writing/key- |  | Technology education | Business services | Computer technology |  |  |  |  |  | Drafting/ graphics |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total |  | Applications | Programming | Data processing | Science/ systems | Mathematics |  |
| Total | 1.05 | 0.29 |  | 0.06 | 0.33 | 0.31 | 0.16 | 0.04 | 0.01 | 0.09 | 0.01 | 0.06 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |
| American Indian/ |  |  |  |  |  |  |  |  |  |  |  |
| Alaska Native | 0.95 | 0.25 | 0.04 | 0.28 | 0.34 | 0.16 | 0.05 | 0.02 | 0.09 | 0.02 | 0.04 |
| Asian/Pacific Islander | 0.97 | 0.28 | 0.03 | 0.33 | 0.30 | 0.13 | 0.05 | 0.02 | 0.08 | 0.01 | 0.03 |
| Black, non-Hispanic | 1.20 | 0.34 | 0.09 | 0.40 | 0.34 | 0.19 | 0.04 | 0.01 | 0.08 | 0.02 | 0.04 |
| Hispanic | 1.06 | 0.33 | 0.05 | 0.32 | 0.33 | 0.16 | 0.05 | 0.01 | 0.10 | 0.02 | 0.04 |
| White, non-Hispanic | 1.02 | 0.28 | 0.06 | 0.32 | 0.30 | 0.15 | 0.04 | 0.01 | 0.09 | 0.01 | 0.06 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |
| Male | 1.05 | 0.26 | 0.10 | 0.29 | 0.32 | 0.15 | 0.06 | 0.01 | 0.09 | 0.01 | 0.09 |
| Female | 1.06 | 0.33 | 0.03 | 0.37 | 0.30 | 0.16 | 0.03 | 0.01 | 0.08 | 0.01 | 0.03 |
| Disability status (grade 12) |  |  |  |  |  |  |  |  |  |  |  |
| Has disability | 0.86 | 0.23 | 0.07 | 0.27 | 0.25 | 0.13 | 0.02 | 0.03 | 0.07 | 0.01 | 0.03 |
| No indicated disability | 1.06 | 0.29 | 0.06 | 0.34 | 0.31 | 0.16 | 0.04 | 0.01 | 0.09 | 0.01 | 0.06 |
| English proficiency (grade 12) |  |  |  |  |  |  |  |  |  |  |  |
| Limited | 0.99 | 0.35 | 0.08 | 0.27 | 0.27 | 0.11 | 0.04 | $\ddagger$ | 0.11 | 0.01 | 0.03 |
| Proficient | 1.05 | 0.29 | 0.06 | 0.33 | 0.31 | 0.16 | 0.04 | 0.01 | 0.09 | 0.01 | 0.06 |
| Grade-point average (GPA) |  |  |  |  |  |  |  |  |  |  |  |
| High (greater than 3.5) | 0.99 | 0.28 | 0.03 | 0.30 | 0.33 | 0.18 | 0.05 | 0.01 | 0.08 | 0.02 | 0.04 |
| Mid-level (2.0 to 3.5) | 1.07 | 0.30 | 0.07 | 0.34 | 0.31 | 0.16 | 0.04 | 0.01 | 0.09 | 0.01 | 0.06 |
| Low (less than 2.0) | 0.94 | 0.24 | 0.06 | 0.31 | 0.23 | 0.11 | 0.02 | 0.01 | 0.09 | 0.01 | 0.09 |
| Academic coursework completed |  |  |  |  |  |  |  |  |  |  |  |
| All high ${ }^{1}$ | 1.01 | 0.25 | 0.02 | 0.37 | 0.33 | 0.16 | 0.06 | 0.01 | 0.09 | 0.02 | 0.04 |
| Mid-level or mixed ${ }^{2}$ | 1.07 | 0.30 | 0.07 | 0.33 | 0.31 | 0.16 | 0.04 | 0.01 | 0.09 | 0.01 | 0.06 |
| All low ${ }^{3}$ | 0.85 | 0.26 | 0.03 | 0.32 | 0.19 | 0.07 | 0.01 | $\ddagger$ | 0.10 | 0.01 | 0.04 |

[^0]Table 41. Average number of computer-related credits earned by public high school graduates in computer-related areas, by selected characteristics, including special and protected populations status: 1998-Continued

$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Transcript Study (HSTS), 1998.

Table 42. Average number of computer-related credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | $1982^{1}$ | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | $\dagger$ | 1.04 | 1.03 | 1.04 | 1.05 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | $\dagger$ | 1.06 | 0.91 | 1.21 | 0.95 |
| Asian/Pacific Islander | $\dagger$ | 1.00 | 1.03 | 0.99 | 0.97 |
| Black, non-Hispanic | $\dagger$ | 1.16 | 1.01 | 1.09 | 1.20 |
| Hispanic | $\dagger$ | 1.10 | 1.18 | 1.08 | 1.06 |
| White, non-Hispanic | $\dagger$ | 1.02 | 1.01 | 1.04 | 1.02 |
| Sex |  |  |  |  |  |
| Male | $\dagger$ | 0.85 | 0.88 | 0.95 | 1.05 |
| Female | $\dagger$ | 1.20 | 1.17 | 1.12 | 1.06 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | $\dagger$ | 0.51 | - | 0.78 | 0.86 |
| No indicated disability | $\dagger$ | 1.05 | - | 1.05 | 1.06 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | $\dagger$ | 0.97 | - | 1.03 | 0.99 |
| Proficient | $\dagger$ | 1.04 | - | 1.04 | 1.05 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | $\dagger$ | 1.08 | 1.09 | 1.05 | 0.99 |
| Mid-level (2.0 to 3.5) | $\dagger$ | 1.08 | 1.05 | 1.06 | 1.07 |
| Low (less than 2.0) | $\dagger$ | 0.84 | 0.87 | 0.89 | 0.94 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{2}$ | $\dagger$ | 1.03 | 1.02 | 0.96 | 1.01 |
| Mid-level or mixed ${ }^{3}$ | $\dagger$ | 1.06 | 1.05 | 1.06 | 1.07 |
| All low ${ }^{4}$ | $\dagger$ | 0.66 | 0.53 | 0.75 | 0.85 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{5}$ | $\dagger$ | 1.05 | 1.08 | 1.01 | 1.01 |
| Mid-level (prealgebra or algebra 1) | $\dagger$ | 1.10 | 1.07 | 1.10 | 1.08 |
| Low (no or low mathematics) ${ }^{6}$ | $\dagger$ | 0.89 | 0.88 | 0.87 | 0.98 |
| School urbanicity |  |  |  |  |  |
| Urban | $\dagger$ | - | 1.00 | - | 0.91 |
| Suburban | $\dagger$ | - | 0.94 | - | 0.97 |
| Rural | $\dagger$ | - | 1.16 | - | 1.27 |

[^1]Table 42. Average number of computer-related credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98 -Continued

|  | $1982^{1}$ | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| School poverty level |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | $\dagger$ | - | - | 1.25 | 1.27 |
| Middle (greater than 5 to 50 percent in NSLP) | $\dagger$ | - | - | 1.05 | 1.07 |
| Low (5 percent or less in NSLP) | $\dagger$ | - | - | 0.93 | 0.83 |
| Not reported | $\dagger$ | - | - | 0.97 | 1.07 |

-Not available.
$\dagger$ Not applicable.
${ }^{1}$ In 1982, all basic typewriting/keyboarding courses were assumed not to be computer-related, while in subsequent years all of these courses were classified as computer-related. Therefore, 1982 estimates for basic typewriting/keyboarding, total computer-related general labor market preparation and total noncomputer-related general labor market preparation courses are not comparable with other years.
${ }^{2}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{3}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{4}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{5}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{6}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.

NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 43. Average number of typewriting/keyboarding credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | $1982^{1}$ | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | $\dagger$ | 0.45 | 0.34 | 0.37 | 0.29 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | $\dagger$ | 0.40 | 0.31 | 0.41 | 0.25 |
| Asian/Pacific Islander | $\dagger$ | 0.40 | 0.26 | 0.26 | 0.28 |
| Black, non-Hispanic | $\dagger$ | 0.50 | 0.33 | 0.42 | 0.34 |
| Hispanic | $\dagger$ | 0.47 | 0.39 | 0.30 | 0.33 |
| White, non-Hispanic | $\dagger$ | 0.44 | 0.34 | 0.37 | 0.28 |
| Sex |  |  |  |  |  |
| Male | $\dagger$ | 0.33 | 0.27 | 0.31 | 0.26 |
| Female | $\dagger$ | 0.55 | 0.41 | 0.43 | 0.33 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | $\dagger$ | 0.27 | - | 0.27 | 0.23 |
| No indicated disability | $\dagger$ | 0.45 | - | 0.37 | 0.29 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | $\dagger$ | 0.45 | - | 0.45 | 0.35 |
| Proficient | $\dagger$ | 0.45 | - | 0.37 | 0.29 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | $\dagger$ | 0.43 | 0.34 | 0.36 | 0.28 |
| Mid-level (2.0 to 3.5) | $\dagger$ | 0.47 | 0.35 | 0.38 | 0.30 |
| Low (less than 2.0) | $\dagger$ | 0.38 | 0.31 | 0.34 | 0.24 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{2}$ | $\dagger$ | 0.37 | 0.29 | 0.30 | 0.25 |
| Mid-level or mixed ${ }^{3}$ | $\dagger$ | 0.47 | 0.36 | 0.39 | 0.30 |
| All low ${ }^{4}$ | $\dagger$ | 0.30 | 0.22 | 0.27 | 0.26 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{5}$ | $\dagger$ | 0.40 | 0.30 | 0.31 | 0.26 |
| Mid-level (prealgebra or algebra 1) | $\dagger$ | 0.47 | 0.36 | 0.39 | 0.31 |
| Low (no or low mathematics) ${ }^{6}$ | $\dagger$ | 0.41 | 0.31 | 0.34 | 0.28 |
| School urbanicity |  |  |  |  |  |
| Urban | $\dagger$ | - | 0.29 | - | 0.25 |
| Suburban | $\dagger$ | - | 0.31 | - | 0.25 |
| Rural | $\dagger$ | - | 0.42 | - | 0.38 |

[^2]Table 43. Average number of typewriting/keyboarding credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | $1982^{1}$ | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| School poverty level |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | $\dagger$ | - | - | 0.41 | 0.34 |
| Middle (greater than 5 to 50 percent in NSLP) | $\dagger$ | - | - | 0.37 | 0.32 |
| Low (5 percent or less in NSLP) | $\dagger$ | - | - | 0.31 | 0.21 |
| Not reported | $\dagger$ | - | - | 0.38 | 0.26 |

-Not available.
${ }^{1}$ In 1982, all basic typewriting/keyboarding courses were assumed not to be computer-related, while in subsequent years all of these courses were classified as computer-related. Therefore, 1982 estimates for basic typewriting/keyboarding, total computer-related general labor market preparation and total noncomputer-related general labor market preparation courses are not comparable with other years.
${ }^{2}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{3}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{4}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{5}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{6}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.

NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 44. Average number of computer-related business services credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 0.01 | 0.28 | 0.29 | 0.38 | 0.33 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 0.01 | 0.34 | 0.25 | 0.46 | 0.28 |
| Asian/Pacific Islander | 0.01 | 0.22 | 0.30 | 0.36 | 0.33 |
| Black, non-Hispanic | 0.03 | 0.32 | 0.33 | 0.42 | 0.40 |
| Hispanic | 0.01 | 0.33 | 0.31 | 0.49 | 0.32 |
| White, non-Hispanic | 0.01 | 0.26 | 0.29 | 0.37 | 0.32 |
| Sex |  |  |  |  |  |
| Male | 0.01 | 0.18 | 0.20 | 0.30 | 0.29 |
| Female | 0.02 | 0.37 | 0.38 | 0.46 | 0.37 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 0.01 | 0.11 | - | 0.28 | 0.27 |
| No indicated disability | 0.01 | 0.28 | - | 0.38 | 0.34 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 0.28 | - | 0.37 | 0.27 |
| Proficient | - | 0.28 | - | 0.38 | 0.33 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 0.02 | 0.22 | 0.25 | 0.37 | 0.30 |
| Mid-level (2.0 to 3.5) | 0.01 | 0.29 | 0.30 | 0.40 | 0.34 |
| Low (less than 2.0) | 0.01 | 0.25 | 0.27 | 0.31 | 0.31 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 0.03 | 0.19 | 0.26 | 0.34 | 0.37 |
| Mid-level or mixed ${ }^{2}$ | 0.01 | 0.30 | 0.31 | 0.39 | 0.33 |
| All low ${ }^{3}$ | 0.02 | 0.19 | 0.15 | 0.30 | 0.32 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 0.01 | 0.21 | 0.26 | 0.34 | 0.31 |
| Mid-level (prealgebra or algebra 1) | 0.01 | 0.30 | 0.30 | 0.41 | 0.35 |
| Low (no or low mathematics) ${ }^{5}$ | 0.01 | 0.26 | 0.29 | 0.33 | 0.31 |
| School urbanicity |  |  |  |  |  |
| Urban | 0.02 | - | 0.26 | - | 0.29 |
| Suburban | 0.01 | - | 0.29 | - | 0.34 |
| Rural | 0.01 | - | 0.32 | - | 0.37 |

[^3]Table 44. Average number of computer-related business services credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98—Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 0.45 | 0.41 |
| High (greater than 50 percent in NSLP) | - | - | - | 0.39 | 0.32 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 0.30 | 0.31 |
| Low (5 percent or less in NSLP) | - | - | - | 0.39 | 0.38 |
| Not reported | - | - |  |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.

NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 45. Average number of computer technology credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 0.11 | 0.30 | 0.37 | 0.23 | 0.31 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 0.05 | 0.31 | 0.35 | 0.26 | 0.34 |
| Asian/Pacific Islander | 0.18 | 0.38 | 0.45 | 0.35 | 0.30 |
| Black, non-Hispanic | 0.10 | 0.34 | 0.34 | 0.21 | 0.34 |
| Hispanic | 0.06 | 0.30 | 0.46 | 0.27 | 0.33 |
| White, non-Hispanic | 0.12 | 0.30 | 0.36 | 0.23 | 0.30 |
| Sex |  |  |  |  |  |
| Male | 0.13 | 0.33 | 0.38 | 0.25 | 0.32 |
| Female | 0.09 | 0.28 | 0.37 | 0.21 | 0.30 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 0.08 | 0.13 | - | 0.15 | 0.25 |
| No indicated disability | 0.12 | 0.31 | - | 0.24 | 0.31 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 0.23 | - | 0.20 | 0.27 |
| Proficient | - | 0.30 | - | 0.23 | 0.31 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 0.20 | 0.43 | 0.48 | 0.30 | 0.33 |
| Mid-level (2.0 to 3.5) | 0.11 | 0.31 | 0.38 | 0.23 | 0.31 |
| Low (less than 2.0) | 0.07 | 0.20 | 0.26 | 0.17 | 0.23 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 0.04 | 0.46 | 0.45 | 0.30 | 0.33 |
| Mid-level or mixed ${ }^{2}$ | 0.12 | 0.29 | 0.37 | 0.23 | 0.31 |
| All low ${ }^{3}$ | 0.04 | 0.16 | 0.15 | 0.11 | 0.19 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 0.19 | 0.44 | 0.49 | 0.33 | 0.35 |
| Mid-level (prealgebra or algebra 1) | 0.13 | 0.32 | 0.39 | 0.24 | 0.30 |
| Low (no or low mathematics) ${ }^{5}$ | 0.07 | 0.22 | 0.26 | 0.15 | 0.27 |
| School urbanicity |  |  |  |  |  |
| Urban | 0.12 | - | 0.44 | - | 0.28 |
| Suburban | 0.13 | - | 0.31 | - | 0.26 |
| Rural | 0.08 | - | 0.40 | - | 0.39 |

[^4]Table 45. Average number of computer technology credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| School poverty level |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | - | - | - | 0.31 | 0.40 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 0.24 | 0.32 |
| Low (5 percent or less in NSLP) | - | - | - | 0.26 | 0.20 |
| Not reported | - | - | - | 0.16 | 0.31 |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.

NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 46. Average number of total credits earned in high school by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 21.60 | 23.53 | 23.86 | 24.17 | 25.14 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 21.43 | 22.64 | 23.55 | 24.23 | 24.44 |
| Asian/Pacific Islander | 22.30 | 24.07 | 24.49 | 24.47 | 25.23 |
| Black, non-Hispanic | 21.18 | 23.40 | 23.48 | 23.59 | 24.83 |
| Hispanic | 21.27 | 23.83 | 23.84 | 24.06 | 25.09 |
| White, non-Hispanic | 21.71 | 23.54 | 23.89 | 24.33 | 25.21 |
| Sex |  |  |  |  |  |
| Male | 21.43 | 23.35 | 23.69 | 23.99 | 24.94 |
| Female | 21.75 | 23.69 | 24.01 | 24.34 | 25.37 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 21.32 | 22.81 | - | 24.00 | 24.73 |
| No indicated disability | 21.63 | 23.54 | - | 24.18 | 25.15 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 24.22 | - | 24.63 | 25.00 |
| Proficient | - | 23.52 | - | 24.17 | 25.14 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 23.17 | 24.76 | 25.39 | 25.45 | 26.59 |
| Mid-level (2.0 to 3.5) | 21.80 | 23.70 | 23.94 | 24.27 | 25.02 |
| Low (less than 2.0) | 20.15 | 22.09 | 22.21 | 22.38 | 22.88 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 22.28 | 24.94 | 25.19 | 25.28 | 26.77 |
| Mid-level or mixed ${ }^{2}$ | 21.63 | 23.39 | 23.67 | 24.00 | 24.90 |
| All low ${ }^{3}$ | 20.30 | 22.65 | 22.98 | 23.32 | 23.62 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 22.50 | 24.53 | 24.99 | 24.88 | 26.24 |
| Mid-level (prealgebra or algebra 1) | 21.97 | 23.68 | 24.02 | 24.32 | 25.12 |
| Low (no or low mathematics) ${ }^{5}$ | 20.91 | 22.78 | 22.83 | 23.31 | 23.91 |
| School urbanicity |  |  |  |  |  |
| Urban | 21.26 | - | 23.84 | - | 25.04 |
| Suburban | 21.68 | - | 23.73 | - | 24.97 |
| Rural | 21.67 | - | 24.03 | - | 25.44 |

See notes at end of table.

Table 46. Average number of total credits earned in high school by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 23.84 | 25.50 |
| High (greater than 50 percent in NSLP) | - | - | - | 24.29 | 25.17 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 23.85 | 24.66 |  |
| Low (5 percent or less in NSLP) | - | - | - | 24.22 | 25.32 |
| Not reported | - |  |  |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 47. Average number of core academic credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 11.87 | 13.57 | 13.88 | 14.21 | 14.51 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 11.51 | 12.94 | 13.49 | 13.90 | 13.63 |
| Asian/Pacific Islander | 12.88 | 14.68 | 14.61 | 15.27 | 15.33 |
| Black, non-Hispanic | 11.77 | 13.71 | 13.83 | 13.90 | 14.41 |
| Hispanic | 11.08 | 13.56 | 13.46 | 14.03 | 14.20 |
| White, non-Hispanic | 12.00 | 13.51 | 13.91 | 14.27 | 14.55 |
| Sex |  |  |  |  |  |
| Male | 11.94 | 13.53 | 13.78 | 14.11 | 14.33 |
| Female | 11.79 | 13.61 | 13.98 | 14.31 | 14.70 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 11.64 | 11.95 | - | 12.69 | 12.97 |
| No indicated disability | 11.89 | 13.61 | - | 14.27 | 14.56 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 15.59 | - | 15.37 | 15.45 |
| Proficient | - | 13.56 | - | 14.20 | 14.51 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 13.82 | 15.22 | 15.47 | 15.84 | 15.96 |
| Mid-level (2.0 to 3.5) | 11.88 | 13.63 | 13.84 | 14.17 | 14.30 |
| Low (less than 2.0) | 10.87 | 12.36 | 12.86 | 12.82 | 13.20 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 13.74 | 15.61 | 15.72 | 16.05 | 16.31 |
| Mid-level or mixed ${ }^{2}$ | 11.91 | 13.42 | 13.66 | 13.95 | 14.27 |
| All low ${ }^{3}$ | 10.04 | 11.82 | 12.08 | 12.52 | 12.22 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 13.39 | 14.93 | 15.32 | 15.46 | 15.66 |
| Mid-level (prealgebra or algebra 1) | 12.26 | 13.81 | 14.05 | 14.35 | 14.44 |
| Low (no or low mathematics) ${ }^{5}$ | 11.03 | 12.51 | 12.67 | 13.03 | 13.39 |
| School urbanicity |  |  |  |  |  |
| Urban | 11.89 | - | 13.88 | - | 14.70 |
| Suburban | 11.96 | - | 13.99 | - | 14.49 |
| Rural | 11.72 | - | 13.74 | - | 14.38 |

See notes at end of table.

Table 47. Average number of core academic credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98 -Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 13.98 | 14.49 |
| High (greater than 50 percent in NSLP) | - | - | - | 14.24 | 14.48 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 14.48 | 14.49 |  |
| Low (5 percent or less in NSLP) | - | - | - | 13.98 | 14.69 |
| Not reported | - | - | - |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: The core academic subjects include English, mathematics, science, and social studies. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 48. Average number of core academic credits earned by occupational concentrators, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 10.78 | 12.28 | 12.73 | 13.06 | 13.68 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 11.03 | 12.53 | 12.61 | 13.48 | 12.92 |
| Asian/Pacific Islander | 11.44 | 13.56 | 13.37 | 13.45 | 14.71 |
| Black, non-Hispanic | 10.95 | 12.68 | 13.08 | 13.00 | 14.09 |
| Hispanic | 10.38 | 12.54 | 12.62 | 13.22 | 13.75 |
| White, non-Hispanic | 10.83 | 12.15 | 12.66 | 13.08 | 13.56 |
| Sex |  |  |  |  |  |
| Male | 10.77 | 12.22 | 12.69 | 12.93 | 13.44 |
| Female | 10.80 | 12.34 | 12.78 | 13.21 | 14.05 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 10.93 | 11.29 | - | 12.25 | 12.44 |
| No indicated disability | 10.78 | 12.32 | - | 13.11 | 13.74 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | 14.38 | $\ddagger$ |
| Proficient | - | 12.28 | - | 13.05 | 13.68 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 12.77 | 13.84 | 14.79 | 14.94 | 15.50 |
| Mid-level (2.0 to 3.5) | 10.79 | 12.40 | 12.71 | 13.07 | 13.59 |
| Low (less than 2.0) | 10.31 | 11.62 | 12.25 | 12.23 | 12.51 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | - | 15.06 | 15.29 | 15.54 | 15.97 |
| Mid-level or mixed ${ }^{2}$ | 10.82 | 12.30 | 12.69 | 12.98 | 13.57 |
| All low ${ }^{3}$ | 9.70 | 11.28 | 11.89 | 12.35 | 11.74 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 12.02 | 13.59 | 14.50 | 14.27 | 15.25 |
| Mid-level (prealgebra or algebra 1) | 11.07 | 12.53 | 12.99 | 13.33 | 13.69 |
| Low (no or low mathematics) ${ }^{5}$ | 10.39 | 11.77 | 11.98 | 12.30 | 12.55 |
| School urbanicity |  |  |  |  |  |
| Urban | 10.66 | - | 12.96 | - | 14.02 |
| Suburban | 10.95 | - | 12.64 | - | 13.65 |
| Rural | 10.63 | - | 12.69 | - | 13.49 |

See notes at end of table.

Table 48. Average number of core academic credits earned by occupational concentrators, by selected characteristics, including special and protected populations status: Various years, 1982-98 -Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 13.01 | 14.08 |
| High (greater than 50 percent in NSLP) | - | - | - | 13.10 | 13.68 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 13.06 | 13.00 |  |
| Low (5 percent or less in NSLP) | - | - | - | 12.91 | 13.87 |
| Not reported | - | - |  |  |  |

-Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: Occupational concentrators earned 3.0 or more credits in one of the following 10 broad occupational program areas: agriculture, business, marketing, health care, protective services, technology, trade and industry, food service and hospitality, child care and education, and personal and other services. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 49. Percentage distribution of public high school graduates who completed both an occupational concentration and college-preparatory coursework, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 0.6 | 0.5 | 0.2 | 0.1 | 0.2 |
| Asian/Pacific Islander | 5.4 | 4.8 | 7.6 | 2.9 | 2.7 |
| Black, non-Hispanic | 16.5 | 12.9 | 12.9 | 11.8 | 16.3 |
| Hispanic | 13.8 | 7.7 | 10.0 | 8.4 | 9.1 |
| White, non-Hispanic | 63.7 | 74.2 | 69.3 | 76.7 | 71.5 |
| Sex |  |  |  |  |  |
| Male | 41.7 | 50.0 | 48.6 | 46.0 | 45.2 |
| Female | 58.3 | 50.0 | 51.4 | 54.0 | 54.8 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 1.9 | 0.1 | - | 0.3 | 0.4 |
| No indicated disability | 98.1 | 99.9 | - | 99.7 | 99.6 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 0.0 | - | 0.4 | 0.1 |
| Proficient | - | 100.0 | - | 99.6 | 99.9 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 18.0 | 16.6 | 17.4 | 21.9 | 27.0 |
| Mid-level (2.0 to 3.5) | 79.0 | 81.8 | 76.9 | 76.0 | 71.5 |
| Low (less than 2.0) | 3.1 | 1.6 | 5.7 | 2.2 | 1.6 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 14.0 | 23.0 | 23.1 | 22.5 | 25.4 |
| Mid-level or mixed ${ }^{2}$ | 86.0 | 77.0 | 76.9 | 77.5 | 74.6 |
| All low ${ }^{3}$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 22.2 | 18.0 | 24.3 | 21.3 | 31.8 |
| Mid-level (prealgebra or algebra 1) | 76.8 | 77.2 | 73.1 | 75.8 | 65.7 |
| Low (no or low mathematics) ${ }^{5}$ | 1.1 | 4.9 | 2.6 | 3.0 | 2.5 |
| School urbanicity |  |  |  |  |  |
| Urban | 24.3 | - | 29.8 | - | 29.8 |
| Suburban | 44.9 | - | 38.4 | - | 36.3 |
| Rural | 30.9 | - | 31.8 | - | 33.9 |

[^5]Table 49. Percentage distribution of public high school graduates who completed both an occupational concentration and college-preparatory coursework, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | ---: | :--- | ---: | ---: | ---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 8.0 | 10.1 |
| High (greater than 50 percent in NSLP) | - | - | - | 59.9 | 62.9 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 14.1 | 9.9 |  |
| Low (5 percent or less in NSLP) | - | - | - | 18.0 | 17.1 |
| Not reported | - | - | - |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.

NOTE: Occupational concentrators earned 3.0 or more credits in one of the following 10 broad occupational program areas: agriculture, business, marketing, health care, protective services, technology, trade and industry, food service and hospitality, child care and education, and personal and other services. College-preparatory coursework is defined as earning 4.0 or more credits in English; 3.0 or more credits in mathematics at the algebra 1 or higher level; 2.0 or more credits in biology, chemistry, or physics; 2.0 or more credits in social studies with at least 1.0 credit in U.S. or world history; and 2.0 or more credits in a single foreign language. NSLP is the National School Lunch Program. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 50. Percentage of public high school graduates who completed high-level mathematics courses in grade 9, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 7.9 | 10.6 | 12.9 | 14.9 | 20.4 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 4.0 | 10.9 | 2.7 | 8.0 | 18.1 |
| Asian/Pacific Islander | 18.8 | 23.5 | 21.3 | 23.7 | 30.3 |
| Black, non-Hispanic | 3.3 | 6.1 | 8.0 | 7.8 | 15.2 |
| Hispanic | 2.8 | 5.8 | 8.5 | 10.2 | 13.5 |
| White, non-Hispanic | 9.2 | 11.5 | 13.9 | 16.5 | 22.0 |
| Sex |  |  |  |  |  |
| Male | 7.4 | 10.6 | 11.1 | 14.2 | 19.0 |
| Female | 8.3 | 10.7 | 14.5 | 15.5 | 21.0 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 5.9 | 0.6 | - | 3.1 | 3.5 |
| No indicated disability | 8.1 | 10.9 | - | 15.3 | 20.9 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | 4.7 | - | 6.4 | 5.3 |
| Proficient | - | 10.7 | - | 14.9 | 20.5 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 27.0 | 33.8 | 44.0 | 41.3 | 49.9 |
| Mid-level (2.0 to 3.5) | 6.8 | 9.3 | 10.6 | 12.1 | 15.1 |
| Low (less than 2.0) | 2.1 | 2.4 | 1.1 | 2.8 | 3.9 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 38.9 | 45.6 | 52.8 | 51.3 | 57.8 |
| Mid-level or mixed ${ }^{2}$ | 6.7 | 6.8 | 6.6 | 8.8 | 14.3 |
| All low ${ }^{3}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Mid-level (prealgebra or algebra 1) | 0 | 0 | 0 | 0 | 0 |
| Low (no or low mathematics) ${ }^{5}$ | 0 | 0 | 0 | 0 | 0 |
| School urbanicity |  |  |  |  |  |
| Urban | 7.4 | - | 16.4 | - | 25.5 |
| Suburban | 9.6 | - | 13.3 | - | 21.5 |
| Rural | 5.6 | - | 9.9 | - | 14.6 |

[^6]Table 50. Percentage of public high school graduates who completed high-level mathematics courses in grade 9, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 12.6 | 13.0 |
| High (greater than 50 percent in NSLP) | - | - | - | 15.5 | 18.4 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 17.6 | 27.8 |  |
| Low (5 percent or less in NSLP) | - | - | - | 11.2 | 24.8 |
| Not reported | - | - | - |  |  |

—Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.

NOTE: High-level grade 9 mathematics courses include geometry, algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. NSLP is the National School Lunch Program.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 51. Percentage of occupational concentrators who completed high-level mathematics courses in grade 9, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 4.2 | 4.6 | 6.2 | 7.0 | 14.3 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | 14.2 |
| Asian/Pacific Islander | 14.9 | 13.1 | 7.0 | 12.0 | 26.2 |
| Black, non-Hispanic | 1.8 | 4.9 | 4.6 | 5.1 | 15.5 |
| Hispanic | 2.0 | 3.5 | 6.3 | 5.3 | 13.5 |
| White, non-Hispanic | 4.9 | 4.6 | 6.6 | 7.8 | 13.7 |
| Sex |  |  |  |  |  |
| Male | 3.3 | 4.6 | 6.4 | 7.0 | 12.4 |
| Female | 5.4 | 4.6 | 6.0 | 7.2 | 17.0 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 3.3 | 1.1 | - | 2.7 | 4.1 |
| No indicated disability | 4.3 | 4.7 | - | 7.3 | 14.7 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | $\ddagger$ | - | 中 | $\ddagger$ |
| Proficient | - | 4.6 | - | 7.1 | 14.3 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 19.8 | 22.5 | 35.2 | 23.6 | 46.0 |
| Mid-level (2.0 to 3.5) | 3.9 | 4.6 | 5.6 | 6.7 | 11.5 |
| Low (less than 2.0) | 1.8 | 1.5 | 1.5 | 2.1 | 3.1 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | $\ddagger$ | 42.2 | 47.8 | 45.9 | 56.3 |
| Mid-level or mixed ${ }^{2}$ | 4.2 | 3.8 | 4.7 | 5.3 | 10.8 |
| All low ${ }^{3}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Mid-level (prealgebra or algebra 1) | $\ddagger$ | $\ddagger$ | $\ddagger$ | \$ | $\ddagger$ |
| Low (no or low mathematics) ${ }^{5}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| School urbanicity |  |  |  |  |  |
| Urban | 3.8 | - | 6.8 | - | 20.3 |
| Suburban | 5.4 | - | 6.5 | - | 13.9 |
| Rural | 3.0 | - | 5.7 | - | 10.7 |

[^7]Table 51. Percentage of occupational concentrators who completed high-level mathematics courses in grade 9, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | ---: | :--- | ---: | ---: | ---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 5.4 | 10.5 |
| High (greater than 50 percent in NSLP) | - | - | - | 7.1 | 14.1 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | 12.0 | 14.4 |  |
| Low (5 percent or less in NSLP) | - | - | - | 4.6 | 17.7 |
| Not reported | - | - | - |  |  |

—Not available.
$\ddagger$ Reporting standards not met. (Too few cases.)
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.

NOTE: Occupational concentrators earned 3.0 or more credits in one of the following 10 broad occupational program areas: agriculture, business, marketing, health care, protective services, technology, trade and industry, food service and hospitality, child care and education, and personal and other services. High-level grade 9 mathematics includes geometry, algebra 2 and 3 , trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table 52. Percentage of public high school graduates earning 3.0 or more occupational credits who met the New Basics core academic requirements, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 6.0 | 22.4 | 29.0 | 37.1 | 48.1 |
| Race/ethnicity |  |  |  |  |  |
| American Indian/Alaska Native | 5.9 | 15.4 | 21.3 | 40.5 | 30.1 |
| Asian/Pacific Islander | 10.3 | 38.7 | 33.9 | 45.9 | 57.5 |
| Black, non-Hispanic | 5.1 | 27.7 | 30.8 | 35.6 | 58.2 |
| Hispanic | 3.5 | 19.0 | 26.6 | 31.3 | 37.6 |
| White, non-Hispanic | 6.6 | 21.8 | 28.9 | 39.2 | 47.4 |
| Sex |  |  |  |  |  |
| Male | 6.7 | 22.9 | 28.7 | 35.3 | 45.3 |
| Female | 5.2 | 21.9 | 29.3 | 39.3 | 52.3 |
| Disability status (grade 12) |  |  |  |  |  |
| Has disability | 5.5 | 5.9 | - | 16.0 | 25.5 |
| No indicated disability | 6.1 | 23.0 | - | 38.3 | 49.0 |
| English proficiency (grade 12) |  |  |  |  |  |
| Limited | - | - | - | 29.4 | 34.9 |
| Proficient | - | 22.5 | - | 37.2 | 48.1 |
| Grade-point average (GPA) |  |  |  |  |  |
| High (greater than 3.5) | 18.3 | 55.3 | 59.6 | 73.0 | 77.1 |
| Mid-level (2.0 to 3.5) | 6.2 | 23.7 | 29.1 | 38.1 | 46.4 |
| Low (less than 2.0) | 2.5 | 10.7 | 18.7 | 17.4 | 26.6 |
| Academic coursework completed |  |  |  |  |  |
| All high ${ }^{1}$ | 27.1 | 77.0 | 77.7 | 81.5 | 84.2 |
| Mid-level or mixed ${ }^{2}$ | 6.0 | 21.6 | 27.6 | 35.5 | 46.2 |
| All low ${ }^{3}$ | 0.0 | 3.9 | 3.5 | 9.1 | 9.8 |
| Grade 9 mathematics |  |  |  |  |  |
| High (geometry or higher) ${ }^{4}$ | 14.4 | 49.3 | 64.1 | 60.7 | 68.6 |
| Mid-level (prealgebra or algebra 1) | 7.8 | 26.6 | 33.1 | 43.2 | 50.3 |
| Low (no or low mathematics) ${ }^{5}$ | 3.2 | 11.5 | 12.8 | 18.0 | 24.1 |
| School urbanicity |  |  |  |  |  |
| Urban | 4.3 | - | 33.4 | - | 55.0 |
| Suburban | 7.0 | - | 29.2 | - | 47.3 |
| Rural | 5.5 | - | 26.5 | - | 44.4 |

See notes at end of table.

Table 52. Percentage of public high school graduates earning $\mathbf{3 . 0}$ or more occupational credits who met the New Basics core academic requirements, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| School poverty level | - | - | - | 36.1 | 53.6 |
| High (greater than 50 percent in NSLP) | - | - | - | 38.5 | 46.4 |
| Middle (greater than 5 to 50 percent in NSLP) | - | - | - | 36.9 | 46.0 |
| Low (5 percent or less in NSLP) | - | - | - | 33.0 | 52.4 |
| Not reported | - |  |  |  |  |

-Not available.
${ }^{1}$ Graduates completed at least some high-level coursework in each of mathematics, science, and English. High-level mathematics includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus. High-level science includes chemistry 1 and 2 and physics 1 and 2. High-level English includes at least some honors-level English courses.
${ }^{2}$ Graduates either completed no high-level and no low-level mathematics, science, and English coursework or completed some high- or some low-level coursework but not in all three subject areas.
${ }^{3}$ Graduates completed only low-level mathematics, science, and English coursework. Low-level mathematics includes no mathematics; remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; prealgebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics. Low-level science includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science. Low-level English includes at least some below-grade or low academic level English courses.
${ }^{4}$ Higher grade 9 mathematics includes algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.
${ }^{5}$ Low grade 9 mathematics includes remedial mathematics; general, basic, or consumer mathematics; technical or vocational mathematics; but no higher mathematics.
NOTE: The New Basics core academic requirements include 4 years of English and 3 years each of mathematics, science, and social studies. NSLP is the National School Lunch Program.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

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## Appendix A-Standard Error Tables

Table A1. Standard errors for table 1: Percentage of public high school graduates taking vocational/ technical education courses, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.19 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.24 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.27 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.32 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.48 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.88 \\ 30 \end{array}$ | $\begin{array}{r} 1.54 \\ 12 \end{array}$ | $\begin{array}{r} 1.13 \\ 22 \end{array}$ | $\begin{array}{r} 0.82 \\ 17 \end{array}$ | 1.16 12 |
| Asian/Pacific Islander | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.92 \\ 38 \end{array}$ | $\begin{array}{r} 0.987 \\ 86 \end{array}$ | $\begin{array}{r} 0.567 \\ 88 \end{array}$ | $\begin{array}{r} 0.747 \\ 74 \end{array}$ | $\begin{array}{r} 1.752 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.20 \\ 293 \end{array}$ | $\begin{array}{r} 0.29 \\ 347 \end{array}$ | $\begin{array}{r} 1.39 \\ 254 \end{array}$ | $\begin{array}{r} 0.34 \\ 263 \end{array}$ | $\begin{array}{r} 0.31 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.23 \\ 307 \end{array}$ | $\begin{array}{r} 0.29 \\ 194 \end{array}$ | $\begin{array}{r} 0.43 \\ 207 \end{array}$ | $\begin{array}{r} 0.36 \\ 168 \end{array}$ | $\begin{array}{r} 0.43 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.25 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.29 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.28 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.39 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.57 \\ 1,852 \end{array}$ |
| Sex |  |  |  |  |  |  |
| Male | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.27 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.23 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.25 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.32 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.43 \\ 1,232 \end{array}$ |
| Female | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.24 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.32 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.44 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.39 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.57 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.27 \\ 226 \end{array}$ | $\begin{array}{r} 0.16 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.36 \\ 82 \end{array}$ | $\begin{array}{r} 0.41 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.21 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.24 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.32 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.49 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000 s) | - | $\begin{array}{r} 2.00 \\ 13 \end{array}$ | - | $\begin{array}{r} 1.78 \\ 19 \end{array}$ | $\begin{array}{r} 1.64 \\ 19 \end{array}$ |
| Proficient | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.24 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.32 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.48 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.88 \\ 260 \end{array}$ | $\begin{array}{r} 0.90 \\ 258 \end{array}$ | $\begin{array}{r} 0.67 \\ 233 \end{array}$ | $\begin{array}{r} 0.76 \\ 307 \end{array}$ | $\begin{array}{r} 1.20 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.23 \\ 1,812 \\ \hline \end{array}$ | $\begin{array}{r} 0.24 \\ 1,809 \end{array}$ | $\begin{array}{r} 0.32 \\ 1,644 \end{array}$ | $\begin{array}{r} 0.34 \\ 1,600 \end{array}$ | $\begin{array}{r} 0.39 \\ 1,975 \end{array}$ |

[^8]Table A1. Standard errors for table 1: Percentage of public high school graduates taking vocational/ technical education courses, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.18 \\ 534 \end{array}$ | $\begin{array}{r} 0.12 \\ 438 \end{array}$ | $\begin{array}{r} 0.32 \\ 295 \end{array}$ | $\begin{array}{r} 0.21 \\ 306 \end{array}$ | $\begin{array}{r} 0.51 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 2.10 \\ 31 \end{array}$ | $\begin{array}{r} 0.90 \\ 273 \end{array}$ | $\begin{array}{r} 0.94 \\ 308 \end{array}$ | $\begin{array}{r} 1.07 \\ 330 \end{array}$ | $\begin{array}{r} 1.23 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.19 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.20 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.27 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.25 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.45 \\ 2,141 \end{array}$ |
| All low | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.00 \\ 86 \end{array}$ | $\begin{array}{r} 0.14 \\ 117 \end{array}$ | $\begin{array}{r} 0.80 \\ 75 \end{array}$ | $\begin{array}{r} 0.12 \\ 55 \end{array}$ | $\begin{array}{r} 0.26 \\ 58 \end{array}$ |
| Grade 9 mathematics High (geometry or higher) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.97 \\ 205 \end{array}$ | $\begin{array}{r} 0.69 \\ 266 \end{array}$ | $\begin{aligned} & 1.02 \\ & 280 \end{aligned}$ | $\begin{array}{r} 0.88 \\ 329 \end{array}$ | $\begin{gathered} 1.01 \\ 534 \end{gathered}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.26 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.28 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.34 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.34 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.56 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.24 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.19 \\ 692 \end{array}$ | $\begin{array}{r} 0.21 \\ 526 \end{array}$ | $\begin{array}{r} 0.40 \\ 504 \end{array}$ | $\begin{array}{r} 0.37 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.49 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.81 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.85 \\ 743 \end{array}$ |
| Suburban | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.29 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.32 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.67 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.27 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.40 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.55 \\ 846 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.50 \\ 185 \end{array}$ | $\begin{array}{r} 0.48 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted $n$ (in 1,000s) | - | - | - | $\begin{array}{r} 0.29 \\ 1,296 \end{array}$ | 0.59 1,565 |
| Low (5 percent or less in NSLP) | s.e. weighted n (in 1,000s) | - | - | - | 1.53 351 | 1.42 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 0.53 380 | $\begin{array}{r}0.80 \\ 386 \\ \hline\end{array}$ |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A2. Standard errors for table 2: Percentage of public high school graduates taking occupational courses, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.47 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.68 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.48 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.66 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.80 \\ 2,617 \end{array}$ |
| Race/ethnicity <br> American Indian/Alaska Native | s.e. weighted n (in 1,000s) | $\begin{array}{r} 2.21 \\ 30 \end{array}$ | $\begin{array}{r} 1.82 \\ 12 \end{array}$ | $\begin{array}{r} 2.09 \\ 22 \end{array}$ | 1.76 17 | 1.57 12 |
| Asian/Pacific Islander | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 3.07 \\ 38 \end{array}$ | $\begin{array}{r} 1.98 \\ 86 \end{array}$ | $\begin{array}{r} 1.36 \\ 88 \end{array}$ | 1.14 74 | 1.06 92 |
| Black, non-Hispanic | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 1.25 \\ 293 \end{array}$ | $\begin{array}{r} 1.50 \\ 347 \end{array}$ | $\begin{aligned} & 1.64 \\ & 254 \end{aligned}$ | $\begin{gathered} 0.80 \\ 263 \end{gathered}$ | $\begin{gathered} 0.80 \\ 356 \end{gathered}$ |
| Hispanic | s.e. weighted n (in 1,000 s) | $\begin{aligned} & 1.01 \\ & 307 \end{aligned}$ | $\begin{aligned} & 1.10 \\ & 194 \end{aligned}$ | $\begin{gathered} 1.97 \\ 207 \end{gathered}$ | $\begin{array}{r} 0.95 \\ 168 \end{array}$ | $\begin{gathered} 0.81 \\ 299 \end{gathered}$ |
| White, non-Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.55 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.72 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.52 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.76 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.98 \\ 1,852 \end{array}$ |
| Sex Male | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.58 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.59 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.58 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.55 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.70 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.67 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.87 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.71 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.85 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.96 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted n (in 1,000s) | $\begin{array}{r} 1.35 \\ 226 \end{array}$ | $\begin{array}{r} 2.23 \\ 64 \end{array}$ |  | 1.33 82 | 1.40 74 |
| No indicated disability | s.e. <br> weighted n (in 1,000 s) | $\begin{array}{r} 0.49 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.66 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.66 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.81 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted n (in 1,000 s) | - | $\begin{array}{r} 3.64 \\ 13 \end{array}$ | - | 3.59 19 | 2.72 19 |
| Proficient | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.69 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.66 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.80 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 1.76 \\ & 260 \end{aligned}$ | $\begin{aligned} & 1.67 \\ & 258 \end{aligned}$ | $\begin{aligned} & 1.30 \\ & 233 \end{aligned}$ | $\begin{array}{r} 1.41 \\ 307 \end{array}$ | $\begin{aligned} & 1.77 \\ & 456 \end{aligned}$ |
| Mid-level (2.0 to 3.5) | s.e. <br> weighted n (in 1,000 s) | $\begin{array}{r} 0.56 \\ 1,812 \end{array}$ | $\begin{array}{r} 0.71 \\ 1,809 \\ \hline \end{array}$ | $\begin{array}{r} 0.56 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.66 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.68 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A2. Standard errors for table 2: Percentage of public high school graduates taking occupational courses, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. | 0.93 | 0.81 | 0.70 | 0.55 | 1.07 |
|  | weighted n (in 1,000s) | 534 | 438 | 295 | 306 | 186 |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | 6.51 | 1.62 | 1.56 | 1.64 | 1.88 |
|  | weighted n (in 1,000s) | 31 | 273 | 308 | 330 | 386 |
| Mid-level or mixed | s.e. | 0.48 | 0.66 | 0.49 | 0.63 | 0.76 |
|  | weighted n (in 1,000s) | 2,485 | 2,098 | 1,781 | 1,810 | 2,141 |
| All low | s.e. | 1.44 | 1.10 | 1.04 | 0.92 | 1.54 |
|  | weighted n (in 1,000s) | 86 | 117 | 75 | 55 | 58 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 1.86 | 1.32 | 1.32 | 1.53 | 1.64 |
|  | weighted n (in 1,000s) | 205 | 266 | 280 | 329 | 534 |
| Mid-level (prealgebra or algebra 1) | s.e. | 0.68 | 0.74 | 0.53 | 0.74 | 0.79 |
|  | weighted n (in 1,000s) | 1,374 | 1,546 | 1,369 | 1,380 | 1,635 |
| Low (no or low mathematics) | s.e. | 0.63 | 0.85 | 1.04 | 0.84 | 0.72 |
|  | weighted n (in 1,000s) | 1,028 | 692 | 526 | 504 | 447 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 1.20 | - | 1.27 | - | 1.51 |
|  | weighted n (in 1,000s) | 501 | - | 484 | - | 743 |
| Suburban | s.e. | 0.65 | - | 0.68 | - | 1.14 |
|  | weighted n (in 1,000s) | 1,261 | - | 961 | - | 1,028 |
| Rural | s.e. | 0.82 | - | 0.76 | - | 0.83 |
|  | weighted n (in 1,000s) | 845 | - | 729 | - | 846 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 1.29 | 1.24 |
|  | weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 185 | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 0.73 | 0.88 |
|  | weighted n (in 1,000s) | - | - | - | 1,296 | 1,565 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 2.23 | 1.88 |
|  | weighted n (in 1,000s) | - | - | - | 351 | 425 |
| Not reported | s.e. | - | - | - | 1.14 | 1.78 |
|  | weighted n (in 1,000s) | - | - | - | 380 | 386 |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A3. Standard errors for table 3: Average number of vocational/technical credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. | 0.059 | 0.079 | 0.063 | 0.068 | 0.098 |
|  | weighted n (in 1,000s) | 2,607 | 2,505 | 2,174 | 2,213 | 2,617 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaska | s.e. | 0.221 | 0.190 | 0.374 | 0.256 | 0.164 |
| Native | weighted n (in 1,000s) | 30 | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. | 0.202 | 0.337 | 0.199 | 0.236 | 0.222 |
|  | weighted n (in 1,000s) | 38 | 86 | 88 | 74 | 92 |
| Black, non-Hispanic | s.e. | 0.140 | 0.166 | 0.164 | 0.121 | 0.149 |
|  | weighted n (in 1,000s) | 293 | 347 | 254 | 263 | 356 |
| Hispanic | s.e. | 0.106 | 0.150 | 0.148 | 0.124 | 0.121 |
|  | weighted n (in 1,000s) | 307 | 194 | 207 | 168 | 299 |
| White, non-Hispanic | s.e. | 0.067 | 0.085 | 0.072 | 0.080 | 0.114 |
|  | weighted n (in 1,000s) | 1,913 | 1,778 | 1,596 | 1,564 | 1,852 |
| Sex |  |  |  |  |  |  |
| Male | s.e. | 0.075 | 0.084 | 0.087 | 0.074 | 0.099 |
|  | weighted n (in 1,000s) | 1,257 | 1,194 | 1,074 | 1,083 | 1,232 |
| Female | s.e. | 0.067 | 0.087 | 0.074 | 0.074 | 0.114 |
|  | weighted n (in 1,000s) | 1,350 | 1,309 | 1,100 | 1,126 | 1,347 |
| Disability status (grade 12) |  |  |  |  |  |  |
| Has disability | s.e. | 0.120 | 0.269 | - | 0.190 | 0.288 |
|  | weighted n (in 1,000s) | 226 | 64 | - | 82 | 74 |
| No indicated disability | s.e. | 0.061 | 0.076 | - | 0.067 | 0.098 |
|  | weighted n (in 1,000s) | 2,361 | 2,441 | - | 2,130 | 2,543 |
| English proficiency (grade 12) |  |  |  |  |  |  |
| Limited | s.e. | - | 0.378 | - | 0.277 | 0.163 |
|  | weighted n (in 1,000s) | - | 13 | - | 19 | 19 |
| Proficient | s.e. | - | 0.079 | - | 0.068 | 0.098 |
|  | weighted n (in 1,000s) | - | 2,492 | - | 2,194 | 2,598 |
| Grade-point average (GPA) |  |  |  |  |  |  |
| High (greater than 3.5) | s.e. | 0.154 | 0.103 | 0.077 | 0.097 | 0.124 |
|  | weighted n (in 1,000s) | 260 | 258 | 233 | 307 | 456 |
| Mid-level (2.0 to 3.5) | s.e. | 0.064 | 0.081 | 0.069 | 0.073 | 0.105 |
|  | weighted n (in 1,000s) | 1,812 | 1,809 | 1,644 | 1,600 | 1,975 |

See notes at end of table.

Table A3. Standard errors for table 3: Average number of vocational/technical credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.097 \\ 534 \end{array}$ | $\begin{array}{r} 0.100 \\ 438 \end{array}$ | $\begin{array}{r} 0.125 \\ 295 \end{array}$ | $\begin{array}{r} 0.073 \\ 306 \end{array}$ | $\begin{array}{r} 0.200 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.213 \\ 31 \end{array}$ | $\begin{array}{r} 0.096 \\ 273 \end{array}$ | $\begin{array}{r} 0.068 \\ 308 \end{array}$ | $\begin{array}{r} 0.075 \\ 330 \end{array}$ | $\begin{array}{r} 0.135 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.060 \\ & 2,485 \end{aligned}$ | $\begin{aligned} & 0.076 \\ & 2,098 \end{aligned}$ | $\begin{aligned} & 0.065 \\ & 1,781 \end{aligned}$ | $\begin{aligned} & 0.073 \\ & 1,810 \end{aligned}$ | $\begin{aligned} & 0.104 \\ & 2,141 \end{aligned}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.210 \\ 86 \end{array}$ | $\begin{array}{r} 0.205 \\ 117 \end{array}$ | $\begin{array}{r} 0.348 \\ 75 \end{array}$ | $\begin{array}{r} 0.236 \\ 55 \end{array}$ | $\begin{array}{r} 0.389 \\ 58 \end{array}$ |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.132 \\ 205 \end{array}$ | $\begin{array}{r} 0.123 \\ 266 \end{array}$ | $\begin{array}{r} 0.082 \\ 280 \end{array}$ | $\begin{array}{r} 0.098 \\ 329 \end{array}$ | $\begin{array}{r} 0.146 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.078 \\ & 1,374 \end{aligned}$ | $\begin{aligned} & 0.082 \\ & 1,546 \end{aligned}$ | $\begin{array}{r} 0.072 \\ 1369 \end{array}$ | $\begin{aligned} & 0.078 \\ & 1,380 \end{aligned}$ | $\begin{aligned} & 0.114 \\ & 1,635 \end{aligned}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.076 \\ & 1,028 \end{aligned}$ | $\begin{array}{r} 0.118 \\ 692 \end{array}$ | $\begin{array}{r} 0.115 \\ 526 \end{array}$ | $\begin{array}{r} 0.110 \\ 504 \end{array}$ | $\begin{array}{r} 0.144 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.130 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.113 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.197 \\ 743 \end{array}$ |
| Suburban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.082 \\ & 1,261 \end{aligned}$ | - | $\begin{array}{r} 0.078 \\ 961 \end{array}$ | - | $\begin{aligned} & 0.131 \\ & 1,028 \end{aligned}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.107 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.110 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.161 \\ 846 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.181 \\ 185 \end{array}$ | $\begin{array}{r} 0.251 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{aligned} & 0.089 \\ & 1,296 \end{aligned}$ | $\begin{aligned} & 0.128 \\ & 1,565 \end{aligned}$ |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in 1,000s) | - | - | - | $\begin{array}{r} 0.202 \\ 351 \end{array}$ | $\begin{array}{r} 0.254 \\ 425 \end{array}$ |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.157 \\ 380 \end{array}$ | $\begin{array}{r} 0.152 \\ 386 \\ \hline \end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A4. Standard errors for table 4: Average number of occupational credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. | 0.053 | 0.065 | 0.050 | 0.057 | 0.074 |
|  | weighted n (in 1,000s) | 2,607 | 2,505 | 2,174 | 2,213 | 2,617 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaska | s.e. | 0.232 | 0.157 | 0.347 | 0.183 | 0.162 |
| Native | weighted n (in 1,000s) | 30 | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. | 0.140 | 0.201 | 0.190 | 0.151 | 0.119 |
|  | weighted n (in 1,000s) | 38 | 86 | 88 | 74 | 92 |
| Black, non-Hispanic | s.e. | 0.140 | 0.135 | 0.134 | 0.097 | 0.115 |
|  | weighted n (in 1,000s) | 293 | 347 | 254 | 263 | 356 |
| Hispanic | s.e. | 0.100 | 0.126 | 0.122 | 0.123 | 0.104 |
|  | weighted n (in 1,000s) | 307 | 194 | 207 | 168 | 299 |
| White, non-Hispanic | s.e. | 0.059 | 0.075 | 0.057 | 0.067 | 0.087 |
|  | weighted n (in 1,000s) | 1,913 | 1,778 | 1,596 | 1,564 | 1,852 |
| Sex |  |  |  |  |  |  |
| Male | s.e. | 0.074 | 0.074 | 0.076 | 0.063 | 0.085 |
|  | weighted n (in 1,000s) | 1,257 | 1,194 | 1,074 | 1,083 | 1,232 |
| Female | s.e. | 0.053 | 0.073 | 0.059 | 0.061 | 0.080 |
|  | weighted n (in 1,000s) | 1,350 | 1,309 | 1,100 | 1,126 | 1,347 |
| Disability status (grade 12) |  |  |  |  |  |  |
| Has disability | s.e. | 0.112 | 0.279 | - | 0.171 | 0.206 |
|  | weighted n (in 1,000s) | 226 | 64 | - | 82 | 74 |
| No indicated disability | s.e. | 0.055 | 0.063 | - | 0.056 | 0.074 |
|  | weighted n (in 1,000s) | 2,361 | 2,441 | - | 2,130 | 2,543 |
| English proficiency (grade 12) |  |  |  |  |  |  |
| Limited | s.e. | - | 0.343 | - | 0.235 | 0.157 |
|  | weighted n (in 1,000s) | - | 13 | - | 19 | 19 |
| Proficient | s.e. | - | 0.066 | - | 0.057 | 0.075 |
|  | weighted n (in 1,000s) | - | 2,492 | - | 2,194 | 2,598 |
| Grade-point average (GPA) |  |  |  |  |  |  |
| High (greater than 3.5) | s.e. | 0.129 | 0.078 | 0.060 | 0.077 | 0.093 |
|  | weighted n (in 1,000s) | 260 | 258 | 233 | 307 | 456 |
| Mid-level (2.0 to 3.5) | s.e. | 0.056 | 0.066 | 0.055 | 0.060 | 0.076 |
|  | weighted n (in 1,000s) | 1,812 | 1,809 | 1,644 | 1,600 | 1,975 |

See notes at end of table.

Table A4. Standard errors for table 4: Average number of occupational credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.095 \\ 534 \end{array}$ | $\begin{array}{r} 0.101 \\ 438 \end{array}$ | $\begin{array}{r} 0.117 \\ 295 \end{array}$ | $\begin{array}{r} 0.072 \\ 306 \end{array}$ | $\begin{array}{r} 0.171 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.194 \\ 31 \end{array}$ | $\begin{array}{r} 0.075 \\ 273 \end{array}$ | $\begin{array}{r} 0.067 \\ 308 \end{array}$ | $\begin{array}{r} 0.057 \\ 330 \end{array}$ | $\begin{array}{r} 0.110 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.054 \\ & 2,485 \end{aligned}$ | $\begin{aligned} & 0.063 \\ & 2,098 \end{aligned}$ | $\begin{aligned} & 0.053 \\ & 1,781 \end{aligned}$ | $\begin{aligned} & 0.064 \\ & 1,810 \end{aligned}$ | $\begin{aligned} & 0.081 \\ & 2,141 \end{aligned}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.197 \\ 86 \end{array}$ | $\begin{array}{r} 0.235 \\ 117 \end{array}$ | $\begin{array}{r} 0.296 \\ 75 \end{array}$ | $\begin{array}{r} 0.201 \\ 55 \end{array}$ | $\begin{array}{r} 0.328 \\ 58 \end{array}$ |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.110 \\ 205 \end{array}$ | $\begin{array}{r} 0.090 \\ 266 \end{array}$ | $\begin{array}{r} 0.076 \\ 280 \end{array}$ | $\begin{array}{r} 0.069 \\ 329 \end{array}$ | $\begin{array}{r} 0.141 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.070 \\ & 1,374 \end{aligned}$ | $\begin{aligned} & 0.069 \\ & 1,546 \end{aligned}$ | $\begin{aligned} & 0.057 \\ & 1,369 \end{aligned}$ | $\begin{aligned} & 0.063 \\ & 1,380 \end{aligned}$ | $\begin{aligned} & 0.088 \\ & 1,635 \end{aligned}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in 1,000s) | $\begin{aligned} & 0.069 \\ & 1,028 \end{aligned}$ | $\begin{array}{r} 0.096 \\ 692 \end{array}$ | $\begin{array}{r} 0.105 \\ 526 \end{array}$ | $\begin{array}{r} 0.091 \\ 504 \end{array}$ | $\begin{array}{r} 0.092 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.115 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.093 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.164 \\ 743 \end{array}$ |
| Suburban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.069 \\ & 1,261 \end{aligned}$ | - | $\begin{array}{r} 0.068 \\ 961 \end{array}$ | - | $\begin{aligned} & 0.097 \\ & 1,028 \end{aligned}$ |
| Rural | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.103 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.087 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.079 \\ 846 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.173 \\ 185 \end{array}$ | $\begin{array}{r} 0.211 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{aligned} & 0.070 \\ & 1,296 \end{aligned}$ | $\begin{aligned} & 0.087 \\ & 1,565 \end{aligned}$ |
| Low (5 percent or less in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.166 \\ 351 \end{array}$ | 0.175 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.115 \\ 380 \\ \hline \end{array}$ | $\begin{array}{r} 0.140 \\ 386 \\ \hline \end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A5. Standard errors for table 5: Percentage of total credits earned by public high school graduates that are vocational/technical credits, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. | 0.24 | 0.32 | 0.24 | 0.27 | 0.34 |
|  | weighted n (in 1,000s) | 2607 | 2505 | 2174 | 2213 | 2617 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaska | s.e. | 1.00 | 0.85 | 1.56 | 1.10 | 0.67 |
| Native | weighted n (in 1,000s) | 30 | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. | 0.80 | 1.55 | 0.82 | 1.14 | 0.94 |
|  | weighted n (in 1,000s) | 38 | 86 | 88 | 74 | 92 |
| Black, non-Hispanic | s.e. | 0.62 | 0.71 | 0.57 | 0.51 | 0.51 |
|  | weighted n (in 1,000s) | 293 | 347 | 254 | 263 | 356 |
| Hispanic | s.e. | 0.46 | 0.66 | 0.65 | 0.51 | 0.41 |
|  | weighted n (in 1,000s) | 307 | 194 | 207 | 168 | 299 |
| White, non-Hispanic | s.e. | 0.28 | 0.35 | 0.29 | 0.32 | 0.41 |
|  | weighted n (in 1,000s) | 1,913 | 1,778 | 1,596 | 1,564 | 1,852 |
| Sex |  |  |  |  |  |  |
| Male | s.e. | 0.31 | 0.35 | 0.31 | 0.29 | 0.37 |
|  | weighted n (in 1,000s) | 1,257 | 1,194 | 1,074 | 1,083 | 1,232 |
| Female | s.e. | 0.29 | 0.35 | 0.30 | 0.30 | 0.39 |
|  | weighted n (in 1,000s) | 1,350 | 1,309 | 1,100 | 1,126 | 1,347 |
| Disability status (grade 12) |  |  |  |  |  |  |
| Has disability | s.e. | 0.55 | 1.14 | - | 0.80 | 0.97 |
|  | weighted n (in 1,000s) | 226 | 64 | - | 82 | 74 |
| No indicated disability | s.e. | 0.25 | 0.31 | - | 0.27 | 0.34 |
|  | weighted n (in 1,000s) | 2,361 | 2,441 | - | 2,130 | 2,543 |
| English proficiency (grade 12) |  |  |  |  |  |  |
| Limited | s.e. | - | 1.68 | - | 1.11 | 0.62 |
|  | weighted n (in 1,000s) | - | 13 | - | 19 | 19 |
| Proficient | s.e. | - | 0.32 | - | 0.28 | 0.34 |
|  | weighted n (in 1,000s) | - | 2,492 | - | 2,194 | 2,598 |
| Grade-point average (GPA) |  |  |  |  |  |  |
| High (greater than 3.5) | s.e. | 0.55 | 0.43 | 0.29 | 0.36 | 0.41 |
|  | weighted n (in 1,000s) | 260 | 258 | 233 | 307 | 456 |
| Mid-level (2.0 to 3.5) | s.e. | 0.27 | 0.33 | 0.28 | 0.30 | 0.36 |
|  | weighted n (in 1,000s) | 1,812 | 1,809 | 1,644 | 1,600 | 1,975 |

See notes at end of table.

Table A5. Standard errors for table 5: Percentage of total credits earned by public high school graduates that are vocational/technical credits, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.46 \\ 534 \end{array}$ | $\begin{array}{r} 0.41 \\ 438 \end{array}$ | $\begin{array}{r} 0.42 \\ 295 \end{array}$ | $\begin{array}{r} 0.36 \\ 306 \end{array}$ | $\begin{array}{r} 0.76 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.95 \\ 31 \end{array}$ | $\begin{array}{r} 0.37 \\ 273 \end{array}$ | $\begin{array}{r} 0.27 \\ 308 \end{array}$ | $\begin{array}{r} 0.28 \\ 330 \end{array}$ | $\begin{array}{r} 0.47 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.25 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.30 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.26 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.31 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.36 \\ 2,141 \end{array}$ |
| All low | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.99 \\ 86 \end{array}$ | $\begin{array}{r} 0.77 \\ 117 \end{array}$ | $\begin{array}{r} 0.88 \\ 75 \end{array}$ | $\begin{array}{r} 0.95 \\ 55 \end{array}$ | $\begin{array}{r} 1.38 \\ 58 \end{array}$ |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.56 \\ 205 \end{array}$ | $\begin{array}{r} 0.51 \\ 266 \end{array}$ | $\begin{array}{r} 0.32 \\ 280 \end{array}$ | $\begin{array}{r} 0.40 \\ 329 \end{array}$ | $\begin{array}{r} 0.45 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.31 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.33 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.29 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.31 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.39 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.34 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.42 \\ 692 \end{array}$ | $\begin{array}{r} 0.44 \\ 526 \end{array}$ | $\begin{array}{r} 0.46 \\ 504 \end{array}$ | $\begin{array}{r} 0.55 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.59 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.50 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.62 \\ 743 \end{array}$ |
| Suburban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.34 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.34 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.52 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.43 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.37 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.51 \\ 846 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.67 \\ 185 \end{array}$ | $\begin{array}{r} 0.87 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 0.37 1,296 | 0.41 1,565 |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in 1,000s) | - | - | - | $\begin{array}{r} 0.76 \\ 351 \end{array}$ | 1.17 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.57 \\ 380 \end{array}$ | $\begin{array}{r} 0.48 \\ 386 \\ \hline \end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A6. Standard errors for table 6: Percentage of total vocational/technical credits earned by public high school graduates that are occupational credits, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.50 \\ 2559 \end{array}$ | $\begin{array}{r} 0.88 \\ 2454 \end{array}$ | $\begin{array}{r} 0.62 \\ 2125 \end{array}$ | $\begin{array}{r} 0.85 \\ 2150 \end{array}$ | $\begin{array}{r} 1.02 \\ 2526 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 3.32 \\ 29 \end{array}$ | $\begin{array}{r} 2.73 \\ 11 \end{array}$ | $\begin{array}{r} 2.74 \\ 21 \end{array}$ | 2.91 17 | 2.86 12 |
| Asian/Pacific Islander | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 2.72 \\ 37 \end{array}$ | $\begin{array}{r} 1.39 \\ 84 \end{array}$ | $\begin{array}{r} 1.79 \\ 86 \end{array}$ | $\begin{array}{r} 1.48 \\ 72 \end{array}$ | $\begin{array}{r} 3.33 \\ 87 \end{array}$ |
| Black, non-Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.44 \\ 291 \end{array}$ | $\begin{array}{r} 1.61 \\ 343 \end{array}$ | $\begin{array}{r} 1.59 \\ 247 \end{array}$ | $\begin{array}{r} 1.16 \\ 258 \end{array}$ | $\begin{array}{r} 1.15 \\ 351 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.05 \\ 305 \end{array}$ | $\begin{array}{r} 1.77 \\ 191 \end{array}$ | $\begin{array}{r} 1.74 \\ 204 \end{array}$ | $\begin{array}{r} 1.30 \\ 165 \end{array}$ | $\begin{array}{r} 1.26 \\ 292 \end{array}$ |
| White, non-Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.58 \\ 1,871 \end{array}$ | $\begin{array}{r} 1.09 \\ 1,737 \end{array}$ | $\begin{array}{r} 0.73 \\ 1,558 \end{array}$ | $\begin{array}{r} 0.73 \\ 1,516 \end{array}$ | $\begin{array}{r} 1.18 \\ 1,780 \end{array}$ |
| Sex Male | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.67 \\ 1,232 \end{array}$ | $\begin{array}{r} 0.76 \\ 1,172 \end{array}$ | $\begin{array}{r} 0.88 \\ 1,051 \end{array}$ | $\begin{array}{r} 0.82 \\ 1,056 \end{array}$ | $\begin{array}{r} 0.96 \\ 1,195 \end{array}$ |
| Female | s.e. <br> weighted $n$ (in 1,000s) | $\begin{array}{r} 0.61 \\ 1,328 \end{array}$ | $\begin{array}{r} 1.11 \\ 1,279 \end{array}$ | $\begin{array}{r} 0.81 \\ 1,073 \end{array}$ | $\begin{array}{r} 0.80 \\ 1,090 \end{array}$ | $\begin{array}{r} 1.10 \\ 1,293 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.31 \\ 225 \end{array}$ | $\begin{array}{r} 2.46 \\ 64 \end{array}$ | - | $\begin{array}{r} 1.70 \\ 82 \end{array}$ | $\begin{array}{r} 1.94 \\ 73 \end{array}$ |
| No indicated disability | s.e. <br> weighted $n$ (in 1,000s) | $\begin{array}{r} 0.52 \\ 2,315 \end{array}$ | $\begin{array}{r} 0.88 \\ 2,390 \end{array}$ | - | $\begin{array}{r} 0.87 \\ 2,068 \end{array}$ | $\begin{array}{r} 1.02 \\ 2,453 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000 s) | - | $\begin{array}{r} 3.80 \\ 12 \end{array}$ | - | $\begin{array}{r} 3.59 \\ 18 \end{array}$ | $\begin{array}{r} 4.24 \\ 18 \end{array}$ |
| Proficient | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.88 \\ 2,442 \end{array}$ | - | $\begin{array}{r} 0.85 \\ 2,132 \end{array}$ | $\begin{array}{r} 1.02 \\ 2,508 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{gathered} 1.40 \\ 248 \end{gathered}$ | $\begin{array}{r} 1.69 \\ 242 \end{array}$ | $\begin{aligned} & 1.27 \\ & 224 \end{aligned}$ | $\begin{array}{r} 1.49 \\ 290 \end{array}$ | $\begin{array}{r} 1.59 \\ 422 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.55 \\ 1,779 \\ \hline \end{array}$ | $\begin{array}{r} 0.89 \\ 1,775 \\ \hline \end{array}$ | $\begin{array}{r} 0.67 \\ 1,607 \end{array}$ | $\begin{array}{r} 0.83 \\ 1,557 \\ \hline \end{array}$ | $\begin{array}{r} 1.01 \\ 1,921 \\ \hline \end{array}$ |

See notes at end of table.

Table A6. Standard errors for table 6: Percentage of total vocational/technical credits earned by public high school graduates that are occupational credits, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. | 1.12 | 1.04 | 1.37 | 1.03 | 1.29 |
|  | weighted n (in 1,000s) | 532 | 437 | 292 | 303 | 183 |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | 4.57 | 1.52 | 1.39 | 1.39 | 1.75 |
|  | weighted n (in 1,000s) | 30 | 257 | 293 | 303 | 356 |
| Mid-level or mixed | s.e. | 0.51 | 0.88 | 0.67 | 0.87 | 1.04 |
|  | weighted n (in 1,000s) | 2,439 | 2,064 | 1,748 | 1,775 | 2,084 |
| All low | s.e. | 2.08 | 2.02 | 1.97 | 1.53 | 1.91 |
|  | weighted n (in 1,000s) | 86 | 117 | 74 | 55 | 57 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 1.59 | 1.25 | 1.19 | 1.59 | 1.61 |
|  | weighted n (in 1,000s) | 195 | 253 | 267 | 308 | 504 |
| Mid-level (prealgebra or | s.e. | 0.68 | 0.96 | 0.71 | 0.92 | 1.01 |
| algebra 1) | weighted n (in 1,000s) | 1,347 | 1,514 | 1,337 | 1,345 | 1,583 |
| Low (no or low mathematics) | s.e. | 0.70 | 1.03 | 1.28 | 0.83 | 1.22 |
|  | weighted n (in 1,000s) | 1,017 | 687 | 521 | 497 | 439 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 1.28 | - | 1.31 | - | 1.64 |
|  | weighted n (in 1,000s) | 489 | - | 471 | - | 706 |
| Suburban | s.e. | 0.72 | - | 1.08 | - | 1.17 |
|  | weighted n (in 1,000s) | 1,235 | - | 938 | - | 988 |
| Rural | s.e. | 0.87 | - | 0.82 | - | 1.79 |
|  | weighted n (in 1,000s) | 836 | - | 715 | - | 832 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 2.82 | 1.50 |
|  | weighted n (in 1,000s) | - | - | - | 182 | 237 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 1.09 | 1.44 |
|  | weighted n (in 1,000s) | - | - | - | 1,268 | 1,514 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 2.24 | 1.99 |
|  | weighted n (in 1,000s) | - | - | - | 330 | 401 |
| Not reported | s.e. | - | - | - | 1.82 | 2.36 |
|  | weighted n (in 1,000s) | - | - | - | 370 | 374 |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A7. Standard errors for table 7: Percentage of vocational/technical credits earned by public high school graduates that were earned in the 9 th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.38 \\ 2,554 \end{array}$ | $\begin{array}{r} 0.67 \\ 2,454 \end{array}$ | $\begin{array}{r} 0.56 \\ 2,123 \end{array}$ | $\begin{array}{r} 0.56 \\ 2,150 \end{array}$ | $\begin{array}{r} 0.72 \\ 2,526 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.75 \\ 29 \end{array}$ | $\begin{array}{r} 1.94 \\ 11 \end{array}$ | $\begin{array}{r} 4.50 \\ 21 \end{array}$ | 1.88 17 | 2.08 12 |
| Asian/Pacific Islander | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 1.54 \\ 37 \end{array}$ | $\begin{array}{r} 1.94 \\ 84 \end{array}$ | $\begin{array}{r} 1.36 \\ 86 \end{array}$ | $\begin{array}{r} 1.13 \\ 72 \end{array}$ | $\begin{array}{r} 1.80 \\ 87 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.94 \\ 290 \end{array}$ | $\begin{array}{r} 1.04 \\ 343 \end{array}$ | $\begin{array}{r} 1.37 \\ 246 \end{array}$ | $\begin{array}{r} 0.62 \\ 258 \end{array}$ | $\begin{array}{r} 0.97 \\ 351 \end{array}$ |
| Hispanic | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.66 \\ 305 \end{array}$ | $\begin{array}{r} 1.38 \\ 191 \end{array}$ | $\begin{array}{r} 0.90 \\ 204 \end{array}$ | $\begin{array}{r} 1.14 \\ 165 \end{array}$ | $\begin{array}{r} 0.95 \\ 292 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.42 \\ 1,868 \end{array}$ | $\begin{array}{r} 0.80 \\ 1,737 \end{array}$ | $\begin{array}{r} 0.68 \\ 1,558 \end{array}$ | $\begin{array}{r} 0.69 \\ 1,516 \end{array}$ | $\begin{array}{r} 0.87 \\ 1,780 \end{array}$ |
| Sex Male | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.46 \\ 1,228 \end{array}$ | $\begin{array}{r} 0.63 \\ 1,172 \end{array}$ | $\begin{array}{r} 0.72 \\ 1,051 \end{array}$ | $\begin{array}{r} 0.63 \\ 1,056 \end{array}$ | $\begin{array}{r} 0.68 \\ 1,195 \end{array}$ |
| Female | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.47 \\ 1,327 \end{array}$ | $\begin{array}{r} 0.74 \\ 1,279 \end{array}$ | $\begin{array}{r} 0.71 \\ 1,072 \end{array}$ | $\begin{array}{r} 0.59 \\ 1,090 \end{array}$ | $\begin{array}{r} 0.80 \\ 1,293 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.94 \\ 223 \end{array}$ | $\begin{array}{r} 1.16 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.67 \\ 82 \end{array}$ | $\begin{array}{r} 1.29 \\ 73 \end{array}$ |
| No indicated disability | s.e. <br> weighted $n$ (in 1,000s) | $\begin{array}{r} 0.39 \\ 2,311 \end{array}$ | $\begin{array}{r} 0.68 \\ 2,390 \end{array}$ | - | $\begin{array}{r} 0.57 \\ 2,068 \end{array}$ | $\begin{array}{r} 0.73 \\ 2,453 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 1.80 \\ 12 \end{array}$ | - | $\begin{array}{r} 2.16 \\ 18 \end{array}$ | 1.51 18 |
| Proficient | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.67 \\ 2,442 \end{array}$ | - | $\begin{array}{r} 0.57 \\ 2,132 \end{array}$ | $\begin{array}{r} 0.73 \\ 2,508 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.09 \\ 248 \end{array}$ | $\begin{array}{r} 1.41 \\ 242 \end{array}$ | $\begin{aligned} & 1.22 \\ & 224 \end{aligned}$ | $\begin{aligned} & 1.03 \\ & 290 \end{aligned}$ | $\begin{array}{r} 1.64 \\ 422 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.42 \\ 1,775 \\ \hline \end{array}$ | $\begin{array}{r} 0.71 \\ 1,775 \end{array}$ | $\begin{array}{r} 0.65 \\ 1,606 \end{array}$ | $\begin{array}{r} 0.56 \\ 1,557 \\ \hline \end{array}$ | $\begin{array}{r} 0.60 \\ 1,921 \\ \hline \end{array}$ |

See notes at end of table.

Table A7. Standard errors for table 7: Percentage of vocational/technical credits earned by public high school graduates that were earned in the 9 th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.56 \\ 530 \end{array}$ | $\begin{array}{r} 0.57 \\ 437 \end{array}$ | $\begin{array}{r} 0.88 \\ 292 \end{array}$ | $\begin{array}{r} 0.60 \\ 303 \end{array}$ | $\begin{array}{r} 0.97 \\ 183 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 3.50 \\ 30 \end{array}$ | $\begin{array}{r} 1.71 \\ 257 \end{array}$ | $\begin{gathered} 1.19 \\ 293 \end{gathered}$ | $\begin{array}{r} 1.04 \\ 303 \end{array}$ | $\begin{array}{r} 1.75 \\ 356 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.38 \\ 2,433 \end{array}$ | $\begin{array}{r} 0.63 \\ 2,064 \end{array}$ | $\begin{array}{r} 0.58 \\ 1,746 \end{array}$ | $\begin{array}{r} 0.58 \\ 1,775 \end{array}$ | $\begin{array}{r} 0.69 \\ 2,084 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.13 \\ 86 \end{array}$ | $\begin{array}{r} 0.91 \\ 117 \end{array}$ | $\begin{array}{r} 1.28 \\ 74 \end{array}$ | $\begin{array}{r} 0.92 \\ 55 \end{array}$ | $\begin{array}{r} 0.88 \\ 57 \end{array}$ |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.24 \\ 195 \end{array}$ | $\begin{array}{r} 1.39 \\ 253 \end{array}$ | $\begin{array}{r} 1.19 \\ 267 \end{array}$ | $\begin{array}{r} 1.19 \\ 308 \end{array}$ | $\begin{array}{r} 1.16 \\ 504 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.50 \\ 1,346 \end{array}$ | $\begin{array}{r} 0.77 \\ 1,514 \end{array}$ | $\begin{array}{r} 0.67 \\ 1,337 \end{array}$ | $\begin{array}{r} 0.60 \\ 1,345 \end{array}$ | $\begin{array}{r} 0.87 \\ 1,583 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.45 \\ 1,014 \end{array}$ | $\begin{array}{r} 0.89 \\ 687 \end{array}$ | $\begin{array}{r} 0.86 \\ 519 \end{array}$ | $\begin{array}{r} 0.58 \\ 497 \end{array}$ | $\begin{array}{r} 0.63 \\ 439 \end{array}$ |
| School urbanicity Urban | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.91 \\ 488 \end{array}$ | - | $\begin{array}{r} 1.03 \\ 470 \end{array}$ | - | $\begin{array}{r} 1.40 \\ 706 \end{array}$ |
| Suburban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.52 \\ 1,235 \end{array}$ | - | $\begin{array}{r} 0.87 \\ 938 \end{array}$ | - | $\begin{array}{r} 1.03 \\ 988 \end{array}$ |
| Rural | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.66 \\ 832 \end{array}$ | - | $\begin{array}{r} 0.91 \\ 714 \end{array}$ | - | $\begin{array}{r} 1.22 \\ 832 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 1.54 \\ 182 \end{array}$ | $\begin{array}{r} 1.22 \\ 237 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.78 \\ 1,268 \end{array}$ | 0.92 1,514 |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in 1,000s) | - | - | - | $\begin{array}{r} 1.49 \\ 330 \end{array}$ | 2.29 401 |
| Not reported | s.e. weighted n (in 1,000s) | - | - | - | $\begin{array}{r} 1.15 \\ 370 \end{array}$ | $\begin{array}{r} 1.76 \\ 374 \\ \hline \end{array}$ |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A8. Standard errors for table 8: Percentage of vocational/technical credits earned by public high school graduates that were earned in the 10 th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.34 \\ 2,554 \end{array}$ | $\begin{array}{r} 0.58 \\ 2,454 \end{array}$ | $\begin{array}{r} 0.57 \\ 2,123 \end{array}$ | $\begin{array}{r} 0.49 \\ 2,150 \end{array}$ | $\begin{array}{r} 0.54 \\ 2,526 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 2.23 \\ 29 \end{array}$ | $\begin{array}{r} 2.47 \\ 11 \end{array}$ | $\begin{array}{r} 1.57 \\ 21 \end{array}$ | $\begin{array}{r} 1.45 \\ 17 \end{array}$ | 1.68 12 |
| Asian/Pacific Islander | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.83 \\ 37 \end{array}$ | $\begin{array}{r} 2.49 \\ 84 \end{array}$ | $\begin{array}{r} 1.26 \\ 86 \end{array}$ | $\begin{array}{r} 0.88 \\ 72 \end{array}$ | $\begin{array}{r} 0.84 \\ 87 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.79 \\ 290 \end{array}$ | $\begin{array}{r} 0.88 \\ 343 \end{array}$ | $\begin{array}{r} 1.04 \\ 246 \end{array}$ | $\begin{array}{r} 0.76 \\ 258 \end{array}$ | $\begin{array}{r} 0.75 \\ 351 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.55 \\ 305 \end{array}$ | $\begin{array}{r} 1.01 \\ 191 \end{array}$ | $\begin{array}{r} 0.95 \\ 204 \end{array}$ | $\begin{array}{r} 1.46 \\ 165 \end{array}$ | $\begin{array}{r} 0.53 \\ 292 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.39 \\ 1,868 \end{array}$ | $\begin{array}{r} 0.67 \\ 1,737 \end{array}$ | $\begin{array}{r} 0.72 \\ 1,558 \end{array}$ | $\begin{array}{r} 0.61 \\ 1,516 \end{array}$ | $\begin{array}{r} 0.65 \\ 1,780 \end{array}$ |
| Sex <br> Male | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.42 \\ 1,228 \end{array}$ | $\begin{array}{r} 0.58 \\ 1,172 \end{array}$ | $\begin{array}{r} 0.53 \\ 1,051 \end{array}$ | $\begin{array}{r} 0.44 \\ 1,056 \end{array}$ | $\begin{array}{r} 0.54 \\ 1,195 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.44 \\ 1,327 \end{array}$ | $\begin{array}{r} 0.63 \\ 1,279 \end{array}$ | $\begin{array}{r} 0.96 \\ 1,072 \end{array}$ | $\begin{array}{r} 0.59 \\ 1,090 \end{array}$ | $\begin{array}{r} 0.60 \\ 1,293 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{gathered} 0.88 \\ 223 \end{gathered}$ | $\begin{array}{r} 0.78 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.63 \\ 82 \end{array}$ | $\begin{array}{r} 0.85 \\ 73 \end{array}$ |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.36 \\ 2,311 \end{array}$ | $\begin{array}{r} 0.59 \\ 2,390 \end{array}$ | - | $\begin{array}{r} 0.50 \\ 2,068 \end{array}$ | $\begin{array}{r} 0.55 \\ 2,453 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 2.99 \\ 12 \end{array}$ | - | $\begin{array}{r} 2.77 \\ 18 \end{array}$ | $\begin{array}{r} 1.56 \\ 18 \end{array}$ |
| Proficient | s.e. weighted $n$ (in 1,000s) | - | $\begin{array}{r} 0.58 \\ 2,442 \end{array}$ | - | $\begin{array}{r} 0.49 \\ 2,132 \end{array}$ | $\begin{array}{r} 0.54 \\ 2,508 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted $n$ (in 1,000 s) | $\begin{gathered} 1.02 \\ 248 \end{gathered}$ | $\begin{array}{r} 1.41 \\ 242 \end{array}$ | $\begin{gathered} 0.92 \\ 224 \end{gathered}$ | $\begin{gathered} 1.11 \\ 290 \end{gathered}$ | $\begin{array}{r} 0.97 \\ 422 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.38 \\ 1,775 \\ \hline \end{array}$ | $\begin{array}{r} 0.60 \\ 1,775 \\ \hline \end{array}$ | $\begin{array}{r} 0.70 \\ 1,606 \\ \hline \end{array}$ | $\begin{array}{r} 0.48 \\ 1,557 \\ \hline \end{array}$ | $\begin{array}{r} 0.50 \\ 1,921 \\ \hline \end{array}$ |

See notes at end of table.

Table A8. Standard errors for table 8: Percentage of vocational/technical credits earned by public high school graduates that were earned in the 10th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.55 \\ 530 \end{array}$ | $\begin{array}{r} 0.62 \\ 437 \end{array}$ | $\begin{array}{r} 0.93 \\ 292 \end{array}$ | $\begin{array}{r} 0.53 \\ 303 \end{array}$ | $\begin{array}{r} 0.78 \\ 183 \end{array}$ |
| Academic coursework complet All high | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 2.67 \\ 30 \end{array}$ | $\begin{array}{r} 1.45 \\ 257 \end{array}$ | $\begin{array}{r} 1.02 \\ 293 \end{array}$ | $\begin{array}{r} 1.21 \\ 303 \end{array}$ | $\begin{array}{r} 1.01 \\ 356 \end{array}$ |
| Mid-level or mixed | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 0.35 \\ 2,433 \end{array}$ | $\begin{array}{r} 0.56 \\ 2,064 \end{array}$ | $\begin{array}{r} 0.65 \\ 1,746 \end{array}$ | $\begin{array}{r} 0.42 \\ 1,775 \end{array}$ | $\begin{array}{r} 0.52 \\ 2,084 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.15 \\ 86 \end{array}$ | $\begin{array}{r} 0.95 \\ 117 \end{array}$ | $\begin{array}{r} 1.41 \\ 74 \end{array}$ | $\begin{array}{r} 0.74 \\ 55 \end{array}$ | $\begin{array}{r} 1.24 \\ 57 \end{array}$ |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.38 \\ 195 \end{array}$ | $\begin{array}{r} 1.26 \\ 253 \end{array}$ | $\begin{array}{r} 1.00 \\ 267 \end{array}$ | $\begin{array}{r} 1.29 \\ 308 \end{array}$ | $\begin{array}{r} 1.11 \\ 504 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 0.43 \\ 1,346 \end{array}$ | $\begin{array}{r} 0.61 \\ 1,514 \end{array}$ | $\begin{array}{r} 0.81 \\ 1,337 \end{array}$ | $\begin{array}{r} 0.52 \\ 1,345 \end{array}$ | $\begin{array}{r} 0.53 \\ 1,583 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.42 \\ 1,014 \end{array}$ | $\begin{array}{r} 0.65 \\ 687 \end{array}$ | $\begin{array}{r} 0.60 \\ 519 \end{array}$ | $\begin{array}{r} 0.40 \\ 497 \end{array}$ | $\begin{array}{r} 0.66 \\ 439 \end{array}$ |
| School urbanicity Urban | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 0.98 \\ 488 \end{array}$ | - | $\begin{array}{r} 0.84 \\ 470 \end{array}$ | - | $\begin{array}{r} 0.88 \\ 706 \end{array}$ |
| Suburban | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.45 \\ 1,235 \end{array}$ | - | $\begin{array}{r} 1.13 \\ 938 \end{array}$ | - | $\begin{array}{r} 1.10 \\ 988 \end{array}$ |
| Rural | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 0.58 \\ 832 \end{array}$ | - | $\begin{array}{r} 0.59 \\ 714 \end{array}$ | - | $\begin{array}{r} 0.65 \\ 832 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 1.17 \\ 182 \end{array}$ | 0.99 237 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.55 \\ 1,268 \end{array}$ | 0.53 1,514 |
| Low (5 percent or less in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 1.54 330 | 2.48 401 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 1.11 \\ 370 \\ \hline \end{array}$ | $\begin{array}{r}1.48 \\ 374 \\ \hline\end{array}$ |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A9. Standard errors for table 9: Percentage of vocational/technical credits earned by public high school graduates that were earned in the 11th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.35 \\ 2,554 \end{array}$ | $\begin{array}{r} 0.41 \\ 2,454 \end{array}$ | $\begin{array}{r} 0.42 \\ 2,123 \end{array}$ | $\begin{array}{r} 0.40 \\ 2,150 \end{array}$ | $\begin{array}{r} 0.50 \\ 2,526 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.93 \\ 29 \end{array}$ | $\begin{array}{r} 1.68 \\ 11 \end{array}$ | $\begin{array}{r} 2.30 \\ 21 \end{array}$ | $\begin{array}{r} 1.97 \\ 17 \end{array}$ | 1.64 12 |
| Asian/Pacific Islander | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.86 \\ 37 \end{array}$ | $\begin{array}{r} 1.62 \\ 84 \end{array}$ | $\begin{array}{r} 1.03 \\ 86 \end{array}$ | $\begin{array}{r} 0.94 \\ 72 \end{array}$ | $\begin{array}{r} 0.86 \\ 87 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.79 \\ 290 \end{array}$ | $\begin{array}{r} 0.76 \\ 343 \end{array}$ | $\begin{array}{r} 1.41 \\ 246 \end{array}$ | $\begin{array}{r} 0.62 \\ 258 \end{array}$ | $\begin{array}{r} 0.77 \\ 351 \end{array}$ |
| Hispanic | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.65 \\ 305 \end{array}$ | $\begin{array}{r} 0.85 \\ 191 \end{array}$ | $\begin{array}{r} 1.53 \\ 204 \end{array}$ | $\begin{array}{r} 1.84 \\ 165 \end{array}$ | $\begin{array}{r} 0.86 \\ 292 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.43 \\ 1,868 \end{array}$ | $\begin{array}{r} 0.49 \\ 1,737 \end{array}$ | $\begin{array}{r} 0.47 \\ 1,558 \end{array}$ | $\begin{array}{r} 0.42 \\ 1,516 \end{array}$ | $\begin{array}{r} 0.59 \\ 1,780 \end{array}$ |
| Sex Male | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.51 \\ 1,228 \end{array}$ | $\begin{array}{r} 0.42 \\ 1,172 \end{array}$ | $\begin{array}{r} 0.64 \\ 1,051 \end{array}$ | $\begin{array}{r} 0.41 \\ 1,056 \end{array}$ | $\begin{array}{r} 0.48 \\ 1,195 \end{array}$ |
| Female | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.43 \\ 1,327 \end{array}$ | $\begin{array}{r} 0.49 \\ 1,279 \end{array}$ | $\begin{array}{r} 0.53 \\ 1,072 \end{array}$ | $\begin{array}{r} 0.45 \\ 1,090 \end{array}$ | $\begin{array}{r} 0.60 \\ 1,293 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.87 \\ 223 \end{array}$ | $\begin{array}{r} 1.19 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.78 \\ 82 \end{array}$ | $\begin{array}{r} 1.02 \\ 73 \end{array}$ |
| No indicated disability | s.e. <br> weighted $n$ (in 1,000s) | $\begin{array}{r} 0.38 \\ 2,311 \end{array}$ | $\begin{array}{r} 0.41 \\ 2,390 \end{array}$ | - | $\begin{array}{r} 0.41 \\ 2,068 \end{array}$ | $\begin{array}{r} 0.51 \\ 2,453 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 2.76 \\ 12 \end{array}$ | - | $\begin{array}{r} 2.10 \\ 18 \end{array}$ | 1.50 18 |
| Proficient | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.41 \\ 2,442 \end{array}$ | - | $\begin{array}{r} 0.40 \\ 2,132 \end{array}$ | $\begin{array}{r} 0.51 \\ 2,508 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.16 \\ 248.00 \end{array}$ | $\begin{array}{r} 1.20 \\ 242.00 \end{array}$ | $\begin{array}{r} 1.03 \\ 224.00 \end{array}$ | $\begin{array}{r} 0.86 \\ 290.00 \end{array}$ | $\begin{array}{r} 1.17 \\ 422.00 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.40 \\ 1,775 \\ \hline \end{array}$ | $\begin{array}{r} 0.42 \\ 1,775 \\ \hline \end{array}$ | $\begin{array}{r} 0.48 \\ 1,606 \\ \hline \end{array}$ | $\begin{array}{r} 0.42 \\ 1,557 \\ \hline \end{array}$ | $\begin{array}{r} 0.40 \\ 1,921 \\ \hline \end{array}$ |

See notes at end of table.

Table A9. Standard errors for table 9: Percentage of vocational/technical credits earned by public high school graduates that were earned in the 11th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.61 \\ 530 \end{array}$ | $\begin{array}{r} 0.64 \\ 437 \end{array}$ | $\begin{array}{r} 1.12 \\ 292 \end{array}$ | $\begin{array}{r} 0.48 \\ 303 \end{array}$ | $\begin{array}{r} 0.74 \\ 183 \end{array}$ |
| Academic coursework complet All high | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 3.36 \\ 30 \end{array}$ | $\begin{array}{r} 0.95 \\ 257 \end{array}$ | $\begin{array}{r} 1.11 \\ 293 \end{array}$ | $\begin{array}{r} 0.76 \\ 303 \end{array}$ | $\begin{array}{r} 1.19 \\ 356 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.36 \\ 2,433 \end{array}$ | $\begin{array}{r} 0.42 \\ 2,064 \end{array}$ | $\begin{array}{r} 0.44 \\ 1,746 \end{array}$ | $\begin{array}{r} 0.40 \\ 1,775 \end{array}$ | $\begin{array}{r} 0.48 \\ 2,084 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.22 \\ 86 \end{array}$ | $\begin{array}{r} 1.11 \\ 117 \end{array}$ | $\begin{array}{r} 1.84 \\ 74 \end{array}$ | $\begin{array}{r} 0.96 \\ 55 \end{array}$ | $\begin{array}{r} 1.15 \\ 57 \end{array}$ |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.41 \\ 195 \end{array}$ | $\begin{array}{r} 0.84 \\ 253 \end{array}$ | $\begin{gathered} 1.07 \\ 267 \end{gathered}$ | $\begin{array}{r} 1.05 \\ 308 \end{array}$ | $\begin{array}{r} 0.80 \\ 504 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.50 \\ 1,346 \end{array}$ | $\begin{array}{r} 0.43 \\ 1,514 \end{array}$ | $\begin{array}{r} 0.49 \\ 1,337 \end{array}$ | $\begin{array}{r} 0.40 \\ 1,345 \end{array}$ | $\begin{array}{r} 0.58 \\ 1,583 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.43 \\ 1,014 \end{array}$ | $\begin{array}{r} 0.71 \\ 687 \end{array}$ | $\begin{array}{r} 0.96 \\ 519 \end{array}$ | $\begin{array}{r} 0.53 \\ 497 \end{array}$ | $\begin{array}{r} 0.42 \\ 439 \end{array}$ |
| School urbanicity Urban | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 0.83 \\ 488 \end{array}$ | - | $\begin{array}{r} 1.02 \\ 470 \end{array}$ | - | $\begin{array}{r} 1.05 \\ 706 \end{array}$ |
| Suburban | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.51 \\ 1,235 \end{array}$ | - | $\begin{array}{r} 0.71 \\ 938 \end{array}$ | - | $\begin{array}{r} 0.63 \\ 988 \end{array}$ |
| Rural | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 0.62 \\ 832 \end{array}$ | - | $\begin{array}{r} 0.54 \\ 714 \end{array}$ | - | $\begin{array}{r} 0.82 \\ 832 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 1.43 \\ 182 \end{array}$ | $\begin{array}{r} 0.82 \\ 237 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.54 \\ 1,268 \end{array}$ | 0.59 1,514 |
| Low (5 percent or less in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 0.79 330 | 1.53 401 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.75 \\ 370 \\ \hline \end{array}$ | $\begin{array}{r} 0.84 \\ 374 \\ \hline \end{array}$ |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A10. Standard errors for table 10: Percentage of vocational/technical credits earned by public high school graduates that were earned in the 12 th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. | 0.41 | 0.57 | 0.52 | 0.48 | 0.61 |
|  | weighted n (in 1,000s) | 2,554 | 2,454 | 2,123 | 2,150 | 2,526 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaska | s.e. | 1.97 | 2.31 | 2.63 | 2.50 | 2.25 |
| Native | weighted n (in 1,000s) | 29 | 11 | 21 | 17 | 12 |
| Asian/Pacific Islander | s.e. | 1.81 | 2.19 | 1.51 | 1.23 | 1.40 |
|  | weighted n (in 1,000s) | 37 | 84 | 86 | 72 | 87 |
| Black, non-Hispanic | s.e. | 1.08 | 1.11 | 1.57 | 1.00 | 0.79 |
|  | weighted n (in 1,000s) | 290 | 343 | 246 | 258 | 351 |
| Hispanic | s.e. | 0.78 | 1.21 | 1.52 | 0.85 | 0.97 |
|  | weighted n (in 1,000s) | 305 | 191 | 204 | 165 | 292 |
| White, non-Hispanic | s.e. | 0.49 | 0.66 | 0.60 | 0.60 | 0.73 |
|  | weighted n (in 1,000s) | 1,868 | 1,737 | 1,558 | 1,516 | 1,780 |
| Sex |  |  |  |  |  |  |
| Male | s.e. | 0.55 | 0.60 | 0.64 | 0.56 | 0.64 |
|  | weighted n (in 1,000s) | 1,228 | 1,172 | 1,051 | 1,056 | 1,195 |
| Female | s.e. | 0.49 | 0.65 | 0.70 | 0.53 | 0.68 |
|  | weighted n (in 1,000s) | 1,327 | 1,279 | 1,072 | 1,090 | 1,293 |
| Disability status (grade 12) |  |  |  |  |  |  |
| Has disability | s.e. | 1.08 | 1.25 | - | 0.79 | 1.13 |
|  | weighted n (in 1,000s) | 223 | 64 | - | 82 | 73 |
| No indicated disability | s.e. | 0.43 | 0.58 | - | 0.49 | 0.61 |
|  | weighted n (in 1,000s) | 2,311 | 2,390 | - | 2,068 | 2,453 |
| English proficiency (grade 12) |  |  |  |  |  |  |
| Limited | s.e. | - | 2.46 | - | 3.08 | 2.02 |
|  | weighted n (in 1,000s) | - | 12 | - | 18 | 18 |
| Proficient | s.e. | - | 0.57 | - | 0.49 | 0.61 |
|  | weighted n (in 1,000s) | - | 2,442 | - | 2,132 | 2,508 |
| Grade-point average (GPA) |  |  |  |  |  |  |
| High (greater than 3.5) | s.e. | 1.23 | 1.38 | 1.25 | 1.20 | 0.75 |
|  | weighted n (in 1,000s) | 248 | 242 | 224 | 290 | 422 |
| Mid-level (2.0 to 3.5) | s.e. | 0.44 | 0.62 | 0.58 | 0.50 | 0.61 |
|  | weighted n (in 1,000s) | 1,775 | 1,775 | 1,606 | 1,557 | 1,921 |

See notes at end of table.

Table A10. Standard errors for table 10: Percentage of vocational/technical credits earned by public high school graduates that were earned in the 12 th grade, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.87 \\ 530 \end{array}$ | $\begin{array}{r} 0.86 \\ 437 \end{array}$ | $\begin{array}{r} 1.25 \\ 292 \end{array}$ | $\begin{gathered} 0.69 \\ 303 \end{gathered}$ | $\begin{array}{r} 0.97 \\ 183 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 3.77 \\ 30 \end{array}$ | $\begin{array}{r} 1.48 \\ 257 \end{array}$ | $\begin{array}{r} 1.10 \\ 293 \end{array}$ | $\begin{array}{r} 1.17 \\ 303 \end{array}$ | $\begin{array}{r} 1.04 \\ 356 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.42 \\ 2,433 \end{array}$ | $\begin{array}{r} 0.56 \\ 2,064 \end{array}$ | $\begin{array}{r} 0.58 \\ 1,746 \end{array}$ | $\begin{array}{r} 0.48 \\ 1,775 \end{array}$ | $\begin{array}{r} 0.62 \\ 2,084 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.49 \\ 86 \end{array}$ | $\begin{array}{r} 1.00 \\ 117 \end{array}$ | $\begin{array}{r} 1.70 \\ 74 \end{array}$ | $\begin{array}{r} 1.11 \\ 55 \end{array}$ | $\begin{array}{r} 1.75 \\ 57 \end{array}$ |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.63 \\ 195 \end{array}$ | $\begin{array}{r} 1.25 \\ 253 \end{array}$ | $\begin{array}{r} 1.09 \\ 267 \end{array}$ | $\begin{array}{r} 1.21 \\ 308 \end{array}$ | $\begin{array}{r} 1.04 \\ 504 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.53 \\ 1,346 \end{array}$ | $\begin{array}{r} 0.65 \\ 1,514 \end{array}$ | $\begin{array}{r} 0.62 \\ 1,337 \end{array}$ | $\begin{array}{r} 0.54 \\ 1,345 \end{array}$ | $\begin{array}{r} 0.71 \\ 1,583 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.54 \\ 1,014 \end{array}$ | $\begin{array}{r} 0.82 \\ 687 \end{array}$ | $\begin{array}{r} 1.00 \\ 519 \end{array}$ | $\begin{array}{r} 0.73 \\ 497 \end{array}$ | $\begin{array}{r} 0.82 \\ 439 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.11 \\ 488 \end{array}$ | - | $\begin{array}{r} 1.11 \\ 470 \end{array}$ | - | $\begin{array}{r} 1.17 \\ 706 \end{array}$ |
| Suburban | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.55 \\ 1,235 \end{array}$ | - | $\begin{array}{r} 0.88 \\ 938 \end{array}$ | - | $\begin{array}{r} 0.99 \\ 988 \end{array}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.73 \\ 832 \end{array}$ | - | $\begin{array}{r} 0.66 \\ 714 \end{array}$ | - | $\begin{array}{r} 1.15 \\ 832 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 2.04 \\ 182 \end{array}$ | $\begin{array}{r} 1.20 \\ 237 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.65 \\ 1,268 \end{array}$ | 0.79 1,514 |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in 1,000s) | - | - | - | $\begin{array}{r} 1.73 \\ 330 \end{array}$ | 1.95 401 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 1.19 \\ 370 \\ \hline \end{array}$ | $\begin{array}{r} 1.49 \\ 374 \\ \hline \end{array}$ |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A11. Standard errors for table 11: Percentage of public high school graduates earning 3.0 or more vocational/technical credits, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.79 \\ 2,607 \end{array}$ | $\begin{array}{r} 1.29 \\ 2,505 \end{array}$ | $\begin{array}{r} 1.12 \\ 2,174 \end{array}$ | $\begin{array}{r} 1.19 \\ 2,213 \end{array}$ | $\begin{array}{r} 1.48 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 4.31 \\ 30 \end{array}$ | $\begin{array}{r} 4.83 \\ 12 \end{array}$ | 5.43 22 | 4.72 17 | 3.90 12 |
| Asian/Pacific Islander | s.e. weighted n (in 1,000s) | $\begin{array}{r} 4.02 \\ 38 \end{array}$ | $\begin{array}{r} 7.83 \\ 86 \end{array}$ | $\begin{array}{r} 3.31 \\ 88 \end{array}$ | $\begin{array}{r} 4.55 \\ 74 \end{array}$ | $\begin{array}{r} 5.21 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 2.17 \\ 293 \end{array}$ | $\begin{array}{r} 2.63 \\ 347 \end{array}$ | $\begin{array}{r} 2.89 \\ 254 \end{array}$ | $\begin{array}{r} 2.00 \\ 263 \end{array}$ | $\begin{array}{r} 2.45 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.30 \\ 307 \end{array}$ | $\begin{array}{r} 2.99 \\ 194 \end{array}$ | $\begin{array}{r} 3.09 \\ 207 \end{array}$ | $\begin{array}{r} 2.42 \\ 168 \end{array}$ | $\begin{array}{r} 1.90 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.93 \\ 1,913 \end{array}$ | $\begin{array}{r} 1.30 \\ 1,778 \end{array}$ | $\begin{array}{r} 1.33 \\ 1,596 \end{array}$ | $\begin{array}{r} 1.35 \\ 1,564 \end{array}$ | $\begin{array}{r} 1.72 \\ 1,852 \end{array}$ |
| Sex Male | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.94 \\ 1,257 \end{array}$ | $\begin{array}{r} 1.40 \\ 1,194 \end{array}$ | $\begin{array}{r} 1.49 \\ 1,074 \end{array}$ | $\begin{array}{r} 1.24 \\ 1,083 \end{array}$ | $\begin{array}{r} 1.40 \\ 1,232 \end{array}$ |
| Female | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.02 \\ 1,350 \end{array}$ | $\begin{array}{r} 1.37 \\ 1,309 \end{array}$ | $\begin{array}{r} 1.37 \\ 1,100 \end{array}$ | $\begin{array}{r} 1.27 \\ 1,126 \end{array}$ | $\begin{array}{r} 1.75 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 2.03 \\ 226 \end{array}$ | $\begin{array}{r} 2.99 \\ 64 \end{array}$ | - | $\begin{array}{r} 1.92 \\ 82 \end{array}$ | $\begin{array}{r} 2.51 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.83 \\ 2,361 \end{array}$ | $\begin{array}{r} 1.28 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 1.20 \\ 2,130 \end{array}$ | $\begin{array}{r} 1.50 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000 s) | - | $\begin{array}{r} 8.39 \\ 13 \end{array}$ | - | $\begin{array}{r} 7.01 \\ 19 \end{array}$ | $\begin{array}{r} 3.92 \\ 19 \end{array}$ |
| Proficient | s.e. weighted $n$ (in 1,000s) | - | $\begin{array}{r} 1.30 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 1.19 \\ 2,194 \end{array}$ | $\begin{array}{r} 1.49 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 2.44 \\ 260 \end{array}$ | $\begin{array}{r} 2.39 \\ 258 \end{array}$ | $\begin{array}{r} 2.10 \\ 233 \end{array}$ | $\begin{array}{r} 2.22 \\ 307 \end{array}$ | $\begin{array}{r} 2.43 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.88 \\ 1,812 \end{array}$ | $\begin{array}{r} 1.35 \\ 1,809 \end{array}$ | $\begin{array}{r} 1.29 \\ 1,644 \end{array}$ | $\begin{array}{r} 1.19 \\ 1,600 \end{array}$ | $\begin{array}{r} 1.58 \\ 1,975 \end{array}$ |

See notes at end of table.

Table A11. Standard errors for table 11: Percentage of public high school graduates earning 3.0 or more vocational/technical credits, by selected characteristics, including special and protected populations status: Various years, 1982-98—Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. | 1.57 | 1.14 | 1.66 | 1.30 | 2.28 |
|  | weighted n (in 1,000s) | 534 | 438 | 295 | 306 | 186 |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | 5.66 | 2.53 | 2.02 | 1.91 | 2.96 |
|  | weighted n (in 1,000s) | 31 | 273 | 308 | 330 | 386 |
| Mid-level or mixed | s.e. | 0.81 | 1.22 | 1.23 | 1.22 | 1.48 |
|  | weighted n (in 1,000s) | 2,485 | 2,098 | 1,781 | 1,810 | 2,141 |
| All low | s.e. | 2.60 | 1.03 | 2.21 | 1.81 | 2.38 |
|  | weighted n (in 1,000s) | 86 | 117 | 75 | 55 | 58 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 2.51 | 2.69 | 2.23 | 2.33 | 2.45 |
|  | weighted n (in 1,000s) | 205 | 266 | 280 | 329 | 534 |
| Mid-level (prealgebra or algebra 1) | s.e. | 1.08 | 1.45 | 1.42 | 1.39 | 1.71 |
|  | weighted n (in 1,000s) | 1,374 | 1,546 | 1,369 | 1,380 | 1,635 |
| Low (no or low mathematics) | s.e. | 0.98 | 1.42 | 1.47 | 1.50 | 1.75 |
|  | weighted n (in 1,000s) | 1,028 | 692 | 526 | 504 | 447 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 2.21 | - | 2.25 | - | 2.87 |
|  | weighted n (in 1,000s) | 501 | - | 484 | - | 743 |
| Suburban | s.e. | 1.12 | - | 1.81 | - | 2.44 |
|  | weighted n (in 1,000s) | 1,261 | - | 961 | - | 1,028 |
| Rural | s.e. | 1.19 | - | 1.33 | - | 2.55 |
|  | weighted n (in 1,000s) | 845 | - | 729 | - | 846 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 2.61 | 3.50 |
|  | weighted n (in 1,000s) | - | - | - | 185 | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 1.38 | 1.96 |
|  | weighted n (in 1,000s) | - | - | - | 1,296 | 1,565 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 3.46 | 3.91 |
|  | weighted n (in 1,000s) | - | - | - | 351 | 425 |
| Not reported | s.e. | - | - | - | 2.58 | 2.46 |
|  | weighted n (in 1,000s) | - | - | - | 380 | 386 |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A12. Standard errors for table 12: Percentage of public high school graduates earning 3.0 or more occupational credits, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.85 \\ 2,607 \end{array}$ | $\begin{array}{r} 1.25 \\ 2,505 \end{array}$ | $\begin{array}{r} 1.02 \\ 2,174 \end{array}$ | $\begin{array}{r} 1.06 \\ 2,213 \end{array}$ | $\begin{array}{r} 1.24 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 6.10 \\ 30 \end{array}$ | $\begin{array}{r} 3.89 \\ 12 \end{array}$ | $\begin{array}{r} 5.07 \\ 22 \end{array}$ | 4.78 17 | 4.09 12 |
| Asian/Pacific Islander | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 3.56 \\ 38 \end{array}$ | $\begin{array}{r} 6.43 \\ 86 \end{array}$ | $\begin{array}{r} 3.69 \\ 88 \end{array}$ | $\begin{array}{r} 3.55 \\ 74 \end{array}$ | $\begin{array}{r} 3.01 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 2.33 \\ 293 \end{array}$ | $\begin{array}{r} 2.87 \\ 347 \end{array}$ | $\begin{array}{r} 2.50 \\ 254 \end{array}$ | $\begin{array}{r} 2.04 \\ 263 \end{array}$ | $\begin{array}{r} 2.21 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.69 \\ 307 \end{array}$ | $\begin{array}{r} 2.51 \\ 194 \end{array}$ | $\begin{array}{r} 3.01 \\ 207 \end{array}$ | $\begin{array}{r} 2.95 \\ 168 \end{array}$ | $\begin{array}{r} 2.07 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.99 \\ 1,913 \end{array}$ | $\begin{array}{r} 1.38 \\ 1,778 \end{array}$ | $\begin{array}{r} 1.19 \\ 1,596 \end{array}$ | $\begin{array}{r} 1.23 \\ 1,564 \end{array}$ | $\begin{array}{r} 1.43 \\ 1,852 \end{array}$ |
| Sex Male | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.12 \\ 1,257 \end{array}$ | $\begin{array}{r} 1.44 \\ 1,194 \end{array}$ | $\begin{array}{r} 1.47 \\ 1,074 \end{array}$ | $\begin{array}{r} 1.12 \\ 1,083 \end{array}$ | $\begin{array}{r} 1.38 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.08 \\ 1,350 \end{array}$ | $\begin{array}{r} 1.42 \\ 1,309 \end{array}$ | $\begin{array}{r} 1.22 \\ 1,100 \end{array}$ | $\begin{array}{r} 1.19 \\ 1,126 \end{array}$ | $\begin{array}{r} 1.41 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 2.20 \\ 226 \end{array}$ | $\begin{array}{r} 3.66 \\ 64 \end{array}$ | - | $\begin{array}{r} 2.73 \\ 82 \end{array}$ | $\begin{array}{r} 3.23 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.88 \\ 2,361 \end{array}$ | $\begin{array}{r} 1.24 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 1.06 \\ 2,130 \end{array}$ | $\begin{array}{r} 1.24 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 5.60 \\ 13 \end{array}$ | - | $\begin{array}{r} 5.04 \\ 19 \end{array}$ | $\begin{array}{r} 4.32 \\ 19 \end{array}$ |
| Proficient | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 1.26 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 1.07 \\ 2,194 \end{array}$ | $\begin{array}{r} 1.24 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) <br> High (greater than 3.5) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 2.01 \\ 260 \end{array}$ | $\begin{gathered} 1.80 \\ 258 \end{gathered}$ | $\begin{aligned} & 1.60 \\ & 233 \end{aligned}$ | $\begin{array}{r} 1.92 \\ 307 \end{array}$ | $\begin{array}{r} 1.92 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.96 \\ 1,812 \end{array}$ | $\begin{array}{r} 1.28 \\ 1,809 \end{array}$ | $\begin{array}{r} 1.14 \\ 1,644 \end{array}$ | $\begin{array}{r} 1.07 \\ 1,600 \end{array}$ | $\begin{array}{r} 1.28 \\ 1,975 \end{array}$ |

See notes at end of table.

Table A12. Standard errors for table 12: Percentage of public high school graduates earning $\mathbf{3 . 0}$ or more occupational credits, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. | 1.76 | 1.86 | 2.48 | 1.34 | 1.86 |
|  | weighted n (in 1,000s) | 534 | 438 | 295 | 306 | 186 |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | 4.48 | 1.88 | 1.63 | 1.20 | 2.38 |
|  | weighted n (in 1,000s) | 31 | 273 | 308 | 330 | 386 |
| Mid-level or mixed | s.e. | 0.87 | 1.24 | 1.13 | 1.20 | 1.34 |
|  | weighted n (in 1,000s) | 2,485 | 2,098 | 1,781 | 1,810 | 2,141 |
| All low | s.e. | 3.60 | 2.89 | 3.55 | 2.85 | 4.30 |
|  | weighted n (in 1,000s) | 86 | 117 | 75 | 55 | 58 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 2.36 | 2.00 | 1.77 | 1.44 | 2.24 |
|  | weighted n (in 1,000s) | 205 | 266 | 280 | 329 | 534 |
| Mid-level (prealgebra or algebra 1) | s.e. | 1.14 | 1.34 | 1.27 | 1.26 | 1.48 |
|  | weighted n (in 1,000s) | 1,374 | 1,546 | 1,369 | 1,380 | 1,635 |
| Low (no or low mathematics) | s.e. | 1.21 | 1.69 | 1.81 | 1.48 | 1.73 |
|  | weighted n (in 1,000s) | 1,028 | 692 | 526 | 504 | 447 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 1.95 | - | 2.13 | - | 2.56 |
|  | weighted n (in 1,000s) | 501 | - | 484 | - | 743 |
| Suburban | s.e. | 1.24 | - | 1.55 | - | 1.93 |
|  | weighted n (in 1,000s) | 1,261 | - | 961 | - | 1,028 |
| Rural | s.e. | 1.45 | - | 1.48 | - | 1.55 |
|  | weighted n (in 1,000s) | 845 | - | 729 | - | 846 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 3.54 | 3.36 |
|  | weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 185 | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 1.28 | 1.51 |
|  | weighted n (in 1,000s) | - | - | - | 1,296 | 1,565 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 2.72 | 3.40 |
|  | weighted n (in 1,000s) | - | - | - | 351 | 425 |
| Not reported | s.e. | - | - | - | 2.11 | 2.73 |
|  | weighted n (in 1,000s) | - | - | - | 380 | 386 |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A13. Standard errors for table 13: Percentage of public high school graduates concentrating in occupational education, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.83 \\ 2,607 \end{array}$ | $\begin{array}{r} 1.01 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.79 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.95 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.87 \\ 2,617 \end{array}$ |
| Race/ethnicity <br> American Indian/Alaska Native | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} 7.63 \\ 30 \end{array}$ | 3.96 12 | 5.32 22 | 3.38 17 | 4.19 12 |
| Asian/Pacific Islander | s.e. <br> weighted $n$ (in 1,000s) | $\begin{array}{r} 2.74 \\ 38 \end{array}$ | $\begin{array}{r} 4.55 \\ 86 \end{array}$ | $\begin{array}{r} 3.65 \\ 88 \end{array}$ | $\begin{array}{r} 2.44 \\ 74 \end{array}$ | $\begin{array}{r} 2.64 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 2.21 \\ & 293 \end{aligned}$ | $\begin{gathered} 2.31 \\ 347 \end{gathered}$ | $\begin{gathered} 2.14 \\ 254 \end{gathered}$ | $\begin{array}{r} 1.79 \\ 263 \end{array}$ | $\begin{array}{r} 1.52 \\ 356 \end{array}$ |
| Hispanic | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{gathered} 1.75 \\ 307 \end{gathered}$ | $\begin{gathered} 2.30 \\ 194 \end{gathered}$ | $\begin{array}{r} 2.13 \\ 207 \end{array}$ | $\begin{array}{r} 2.84 \\ 168 \end{array}$ | $\begin{array}{r} 1.80 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.96 \\ 1,913 \end{array}$ | $\begin{array}{r} 1.12 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.92 \\ 1,596 \end{array}$ | $\begin{array}{r} 1.14 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.97 \\ 1,852 \end{array}$ |
| Sex Male | s.e. <br> weighted n (in 1,000 s) | $\begin{array}{r} 1.17 \\ 1,257 \end{array}$ | $\begin{array}{r} 1.21 \\ 1,194 \end{array}$ | $\begin{array}{r} 1.17 \\ 1,074 \end{array}$ | $\begin{array}{r} 1.09 \\ 1,083 \end{array}$ | $\begin{array}{r} 1.16 \\ 1,232 \end{array}$ |
| Female | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.00 \\ 1,350 \end{array}$ | $\begin{array}{r} 1.20 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.96 \\ 1,100 \end{array}$ | $\begin{array}{r} 1.04 \\ 1,126 \end{array}$ | $\begin{array}{r} 1.07 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted n (in 1,000s) | $\begin{gathered} 2.04 \\ 226 \end{gathered}$ | $\begin{array}{r} 4.33 \\ 64 \end{array}$ | - | $\begin{array}{r} 2.89 \\ 82 \end{array}$ | $\begin{array}{r} 2.23 \\ 74 \end{array}$ |
| No indicated disability | s.e. <br> weighted $n$ (in 1,000s) | $\begin{array}{r} 0.84 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.98 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.93 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.86 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. <br> weighted n (in 1,000s) | - | $\begin{array}{r} 5.03 \\ 13 \end{array}$ | - | $\begin{array}{r} 4.99 \\ 19 \end{array}$ | 1.93 19 |
| Proficient | s.e. <br> weighted $n$ (in 1,000s) | - | $\begin{array}{r} 1.01 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.95 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.87 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 1.72 \\ & 260 \end{aligned}$ | $\begin{aligned} & 1.03 \\ & 258 \end{aligned}$ | $\begin{aligned} & 1.05 \\ & 233 \end{aligned}$ | $\begin{aligned} & 1.31 \\ & 307 \end{aligned}$ | $\begin{array}{r} 1.23 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 0.92 \\ 1,812 \\ \hline \end{array}$ | $\begin{array}{r} 1.02 \\ 1,809 \\ \hline \end{array}$ | $\begin{array}{r} 0.88 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.96 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.90 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A13. Standard errors for table 13: Percentage of public high school graduates concentrating in occupational education, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. | 1.76 | 1.85 | 2.18 | 1.64 | 1.72 |
|  | weighted n (in 1,000s) | 534 | 438 | 295 | 306 | 186 |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | 4.07 | 1.07 | 0.86 | 0.77 | 1.52 |
|  | weighted n (in 1,000s) | 31 | 273 | 308 | 330 | 386 |
| Mid-level or mixed | s.e. | 0.85 | 0.97 | 0.88 | 1.10 | 0.90 |
|  | weighted n (in 1,000s) | 2,485 | 2,098 | 1,781 | 1,810 | 2,141 |
| All low | s.e. | 3.72 | 3.27 | 4.16 | 3.36 | 4.31 |
|  | weighted n (in 1,000s) | 86 | 117 | 75 | 55 | 58 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 1.98 | 1.40 | 1.20 | 0.93 | 2.10 |
|  | weighted n (in 1,000s) | 205 | 266 | 280 | 329 | 534 |
| Mid-level (prealgebra or | s.e. | 1.07 | 1.04 | 0.93 | 0.99 | 1.03 |
| algebra 1) | weighted n (in 1,000s) | 1,374 | 1,546 | 1,369 | 1,380 | 1,635 |
| Low (no or low mathematics) | s.e. | 1.19 | 1.89 | 1.59 | 1.72 | 1.34 |
|  | weighted n (in 1,000s) | 1,028 | 692 | 526 | 504 | 447 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 1.96 | - | 1.53 | - | 2.03 |
|  | weighted n (in 1,000s) | 501 | - | 484 | - | 743 |
| Suburban | s.e. | 1.17 | - | 1.18 | - | 1.36 |
|  | weighted n (in 1,000s) | 1,261 | - | 961 | - | 1,028 |
| Rural | s.e. | 1.44 | - | 1.25 | - | 1.08 |
|  | weighted n (in 1,000s) | 845 | - | 729 | - | 846 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 2.72 | 2.33 |
|  | weighted n (in 1,000s) | - | - | - | 185 | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 1.15 | 1.07 |
|  | weighted n (in 1,000s) | - | - | - | 1,296 | 1,565 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 1.92 | 2.62 |
|  | weighted n (in 1,000s) | - | - | - | 351 | 425 |
| Not reported | s.e. | - | - | - | 1.93 | 2.29 |
|  | weighted n (in 1,000s) | - | - | - | 380 | 386 |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A14. Standard errors for table 14: Percentage of public high school graduates earning 3.0 or more occupational credits who concentrated in occupational education, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. | 1.03 | 1.35 | 1.20 | 1.48 | 1.10 |
|  | weighted n (in 1,000s) | 1,205 | 1,076 | 918 | 928 | 1,147 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaska | s.e. | 6.88 | 4.79 | 7.20 | 8.21 | 6.43 |
| Native | weighted n (in 1,000s) | 18 | 6 | 13 | 7 | 5 |
| Asian/Pacific Islander | s.e. | 7.70 | 5.33 | 6.49 | 3.33 | 3.92 |
|  | weighted n (in 1,000s) | 12 | 27 | 34 | 23 | 31 |
| Black, non-Hispanic | s.e. | 2.61 | 2.88 | 3.43 | 1.86 | 2.18 |
|  | weighted n (in 1,000s) | 130 | 151 | 106 | 121 | 168 |
| Hispanic | s.e. | 2.32 | 3.06 | 3.68 | 3.04 | 2.28 |
|  | weighted n (in 1,000s) | 160 | 83 | 91 | 71 | 132 |
| White, non-Hispanic | s.e. | 1.21 | 1.55 | 1.40 | 1.90 | 1.27 |
|  | weighted n (in 1,000s) | 872 | 774 | 671 | 655 | 809 |
| Sex |  |  |  |  |  |  |
| Male | s.e. | 1.32 | 1.24 | 1.66 | 1.48 | 1.31 |
|  | weighted n (in 1,000s) | 662 | 589 | 515 | 503 | 619 |
| Female | s.e. | 1.50 | 1.96 | 1.68 | 1.88 | 1.73 |
|  | weighted n (in 1,000s) | 543 | 487 | 403 | 424 | 514 |
| Disability status (grade 12) |  |  |  |  |  |  |
| Has disability | s.e. | 3.32 | 4.28 | - | 2.99 | 3.07 |
|  | weighted n (in 1,000s) | 99 | 38 | - | 47 | 43 |
| No indicated disability | s.e. | 1.05 | 1.37 | - | 1.46 | 1.10 |
|  | weighted n (in 1,000s) | 1,097 | 1,038 | - | 881 | 1,104 |
| English proficiency (grade 12) 8 |  |  |  |  |  |  |
| Limited | s.e. | - | - | - | 8.37 | 6.83 |
|  | weighted n (in 1,000s) | - | - | - | 6 | 5 |
| Proficient | s.e. | - | 1.34 | - | 1.49 | 1.11 |
|  | weighted n (in 1,000s) | - | 1,074 | - | 922 | 1,142 |
| Grade-point average (GPA) |  |  |  |  |  |  |
| High (greater than 3.5) | s.e. | 3.97 | 3.62 | 3.19 | 2.94 | 2.25 |
|  | weighted n (in 1,000s) | 71 | 56 | 53 | 73 | 131 |
| Mid-level (2.0 to 3.5) | s.e. | 1.17 | 1.35 | 1.32 | 1.52 | 1.15 |
|  | weighted n (in 1,000s) | 847 | 778 | 701 | 689 | 911 |

See notes at end of table.

Table A14. Standard errors for table 14: Percentage of public high school graduates earning 3.0 or more occupational credits who concentrated in occupational education, by selected characteristics, including special and protected populations status: Various years, 1982-98 -Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 1.99 \\ 287 \end{array}$ | $\begin{array}{r} 2.15 \\ 242 \end{array}$ | $\begin{array}{r} 3.33 \\ 164 \end{array}$ | $\begin{array}{r} 2.06 \\ 166 \end{array}$ | $\begin{array}{r} 2.19 \\ 105 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 8.96 \\ 7 \end{array}$ | $\begin{array}{r} 5.01 \\ 43 \end{array}$ | $\begin{array}{r} 4.26 \\ 56 \end{array}$ | $\begin{array}{r} 2.31 \\ 61 \end{array}$ | $\begin{array}{r} 2.85 \\ 102 \end{array}$ |
| Mid-level or mixed | s.e. weighted n (in 1,000s) | $\begin{array}{r} 1.05 \\ 1,142 \end{array}$ | $\begin{array}{r} 1.23 \\ 944 \end{array}$ | $\begin{array}{r} 1.30 \\ 798 \end{array}$ | $\begin{array}{r} 1.58 \\ 821 \end{array}$ | $\begin{array}{r} 1.11 \\ 992 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 3.67 \\ 53 \end{array}$ | $\begin{array}{r} 3.29 \\ 78 \end{array}$ | $\begin{array}{r} 4.87 \\ 55 \end{array}$ | $\begin{array}{r} 3.70 \\ 36 \end{array}$ | $\begin{array}{r} 4.74 \\ 38 \end{array}$ |
| Grade 9 mathematics High (geometry or higher) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 4.55 \\ 60 \end{array}$ | $\begin{array}{r} 3.10 \\ 59 \end{array}$ | $\begin{array}{r} 4.15 \\ 68 \end{array}$ | $\begin{array}{r} 2.44 \\ 76 \end{array}$ | $\begin{array}{r} 3.45 \\ 177 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.40 \\ 591 \end{array}$ | $\begin{array}{r} 1.52 \\ 632 \end{array}$ | $\begin{array}{r} 1.54 \\ 560 \end{array}$ | $\begin{array}{r} 1.42 \\ 576 \end{array}$ | $\begin{aligned} & 1.20 \\ & 748 \end{aligned}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.36 \\ 554 \end{array}$ | $\begin{array}{r} 1.89 \\ 384 \end{array}$ | $\begin{array}{r} 1.86 \\ 290 \end{array}$ | $\begin{array}{r} 2.19 \\ 276 \end{array}$ | $\begin{array}{r} 1.66 \\ 222 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 2.75 \\ 213 \end{array}$ | - | $\begin{array}{r} 2.65 \\ 189 \end{array}$ | - | $\begin{array}{r} 2.47 \\ 284 \end{array}$ |
| Suburban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.46 \\ 556 \end{array}$ | - | $\begin{array}{r} 1.93 \\ 358 \end{array}$ | - | $\begin{array}{r} 1.47 \\ 407 \end{array}$ |
| Rural | s.e. weighted n (in 1,000s) | $\begin{array}{r} 1.62 \\ 436 \end{array}$ | - | $\begin{array}{r} 1.89 \\ 371 \end{array}$ | - | $\begin{array}{r} 2.12 \\ 456 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | 3.13 84 | $\begin{array}{r} 3.33 \\ 129 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 1.75 \\ 572 \end{array}$ | 1.62 716 |
| Low (5 percent or less in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 2.63 \\ 105 \end{array}$ | $\begin{array}{r} 4.34 \\ 127 \end{array}$ |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 3.20 \\ 168 \\ \hline \end{array}$ | $\begin{array}{r}2.52 \\ 174 \\ \hline\end{array}$ |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A15. Standard errors for table 15: Percentage of public high school graduates completing an advanced concentration in occupational education, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.71 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.64 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.63 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.72 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.81 \\ 2,617 \end{array}$ |
| Race/ethnicity <br> American Indian/Alaska Native | s.e. weighted n (in 1,000s) | $\begin{array}{r} 9.13 \\ 30 \end{array}$ | $\begin{array}{r} 3.59 \\ 12 \end{array}$ | 4.95 22 | 2.94 17 | 3.13 12 |
| Asian/Pacific Islander | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 2.29 \\ 38 \end{array}$ | $\begin{array}{r} 2.33 \\ 86 \end{array}$ | $\begin{array}{r} 3.50 \\ 88 \end{array}$ | $\begin{array}{r} 1.95 \\ 74 \end{array}$ | $\begin{array}{r} 2.16 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.86 \\ 293 \end{array}$ | $\begin{array}{r} 1.67 \\ 347 \end{array}$ | $\begin{array}{r} 1.36 \\ 254 \end{array}$ | $\begin{aligned} & 1.28 \\ & 263 \end{aligned}$ | $\begin{gathered} 1.62 \\ 356 \end{gathered}$ |
| Hispanic | s.e. <br> weighted $n$ (in 1,000s) | $\begin{array}{r} 1.53 \\ 307 \end{array}$ | $\begin{array}{r} 1.59 \\ 194 \end{array}$ | $\begin{array}{r} 1.68 \\ 207 \end{array}$ | $\begin{array}{r} 1.81 \\ 168 \end{array}$ | $\begin{array}{r} 1.36 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.83 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.72 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.76 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.89 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.89 \\ 1,852 \end{array}$ |
| Sex <br> Male | s.e. weighted n (in 1,000s) | $\begin{array}{r} 1.05 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.87 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.94 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.90 \\ 1,083 \end{array}$ | $\begin{array}{r} 1.17 \\ 1,232 \end{array}$ |
| Female | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.87 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.91 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.78 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.81 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.87 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 1.74 \\ 226 \end{array}$ | $\begin{array}{r} 3.46 \\ 64 \end{array}$ | - | $\begin{array}{r} 2.16 \\ 82 \end{array}$ | 2.19 74 |
| No indicated disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.73 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.64 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.71 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.82 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. <br> weighted n (in 1,000s) | - | $\begin{array}{r} 4.50 \\ 13 \end{array}$ | - | $\begin{array}{r} 2.55 \\ 19 \end{array}$ | 1.96 19 |
| Proficient | s.e. <br> weighted $n$ (in 1,000s) | - | $\begin{array}{r} 0.65 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.73 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.82 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted n (in 1,000s) | $\begin{aligned} & 1.63 \\ & 260 \end{aligned}$ | $\begin{array}{r} 0.80 \\ 258 \end{array}$ | $\begin{gathered} 0.74 \\ 233 \end{gathered}$ | $\begin{array}{r} 0.95 \\ 307 \end{array}$ | $\begin{gathered} 0.77 \\ 456 \end{gathered}$ |
| Mid-level (2.0 to 3.5) | s.e. <br> weighted n (in 1,000 s) | $\begin{array}{r} 0.81 \\ 1,812 \\ \hline \end{array}$ | $\begin{array}{r} 0.65 \\ 1,809 \\ \hline \end{array}$ | $\begin{array}{r} 0.72 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.71 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.87 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A15. Standard errors for table 15: Percentage of public high school graduates completing an advanced concentration in occupational education, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. | 1.46 | 1.19 | 1.69 | 1.39 | 1.60 |
|  | weighted n (in 1,000s) | 534 | 438 | 295 | 306 | 186 |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | 3.20 | 0.78 | 0.68 | 0.63 | 1.24 |
|  | weighted n (in 1,000s) | 31 | 273 | 308 | 330 | 386 |
| Mid-level or mixed | s.e. | 0.74 | 0.64 | 0.71 | 0.84 | 0.88 |
|  | weighted n (in 1,000s) | 2,485 | 2,098 | 1,781 | 1,810 | 2,141 |
| All low | s.e. | 3.08 | 2.97 | 3.93 | 2.60 | 3.62 |
|  | weighted n (in 1,000s) | 86 | 117 | 75 | 55 | 58 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 1.65 | 1.10 | 0.92 | 0.72 | 2.07 |
|  | weighted n (in 1,000s) | 205 | 266 | 280 | 329 | 534 |
| Mid-level (prealgebra or algebra 1) | s.e. | 0.91 | 0.66 | 0.76 | 0.72 | 0.98 |
|  | weighted n (in 1,000s) | 1,374 | 1,546 | 1,369 | 1,380 | 1,635 |
| Low (no or low mathematics) | s.e. | 1.09 | 1.23 | 1.35 | 1.29 | 1.20 |
|  | weighted n (in 1,000s) | 1,028 | 692 | 526 | 504 | 447 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 1.53 | - | 1.33 | - | 1.73 |
|  | weighted n (in 1,000s) | 501 | - | 484 | - | 743 |
| Suburban | s.e. | 1.04 | - | 0.87 | - | 0.94 |
|  | weighted n (in 1,000s) | 1,261 | - | 961 | - | 1,028 |
| Rural | s.e. | 1.28 | - | 1.07 | - | 1.55 |
|  | weighted n (in 1,000s) | 845 | - | 729 | - | 846 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 2.53 | 2.18 |
|  | weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 185 | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 0.86 | 1.14 |
|  | weighted n (in 1,000s) | - | - | - | 1,296 | 1,565 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 1.91 | 1.30 |
|  | weighted n (in 1,000s) | - | - | - | 351 | 425 |
| Not reported | s.e. | - | - | - | 1.60 | 1.66 |
|  | weighted n (in 1,000s) | - | - | - | 380 | 386 |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A16. Standard errors for table 16: Percentage of public high school graduates concentrating in agriculture, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.29 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.35 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.26 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.37 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.54 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.90 \\ 30 \end{array}$ | $\begin{array}{r} 2.04 \\ 12 \end{array}$ | $\begin{array}{r} 1.98 \\ 22 \end{array}$ | $\begin{array}{r} 2.09 \\ 17 \end{array}$ | 0.87 12 |
| Asian/Pacific Islander | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.36 \\ 38 \end{array}$ | $\overline{86}$ | $\begin{array}{r} 0.31 \\ 88 \end{array}$ | $\begin{array}{r} 0.81 \\ 74 \end{array}$ | $\begin{array}{r} 0.32 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.35 \\ 293 \end{array}$ | $\begin{array}{r} 0.16 \\ 347 \end{array}$ | $\begin{array}{r} 0.38 \\ 254 \end{array}$ | $\begin{array}{r} 0.40 \\ 263 \end{array}$ | $\begin{array}{r} 0.24 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.58 \\ 307 \end{array}$ | $\begin{array}{r} 0.67 \\ 194 \end{array}$ | $\begin{array}{r} 0.24 \\ 207 \end{array}$ | $\begin{array}{r} 0.30 \\ 168 \end{array}$ | $\begin{array}{r} 0.57 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.35 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.44 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.34 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.51 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.68 \\ 1,852 \end{array}$ |
| Sex <br> Male | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.54 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.65 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.49 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.57 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.68 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.16 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.23 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.16 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.25 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.46 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.58 \\ 226 \end{array}$ | $\begin{array}{r} 1.68 \\ 64 \end{array}$ | - | $\begin{array}{r} 1.36 \\ 82 \end{array}$ | $\begin{array}{r} 1.87 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.30 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.33 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.37 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.51 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000 s) | - | 13 | - | $\begin{array}{r} 1.26 \\ 19 \end{array}$ | 19 |
| Proficient | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.35 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.37 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.54 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.84 \\ 260 \end{array}$ | $\begin{array}{r} 0.29 \\ 258 \end{array}$ | $\begin{array}{r} 0.32 \\ 233 \end{array}$ | $\begin{array}{r} 0.62 \\ 307 \end{array}$ | $\begin{array}{r} 0.89 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.30 \\ 1,812 \end{array}$ | $\begin{array}{r} 0.39 \\ 1,809 \end{array}$ | $\begin{array}{r} 0.31 \\ 1,644 \end{array}$ | $\begin{array}{r} 0.42 \\ 1,600 \end{array}$ | $\begin{array}{r} 0.52 \\ 1,975 \end{array}$ |

See notes at end of table.

Table A16. Standard errors for table 16: Percentage of public high school graduates concentrating in agriculture, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.56 \\ 534 \end{array}$ | $\begin{array}{r} 0.45 \\ 438 \end{array}$ | $\begin{array}{r} 0.43 \\ 295 \end{array}$ | $\begin{array}{r} 0.35 \\ 306 \end{array}$ | $\begin{array}{r} 0.33 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.59 \\ 31 \end{array}$ | $\begin{array}{r} 0.15 \\ 273 \end{array}$ | $\begin{array}{r} 0.14 \\ 308 \end{array}$ | $\begin{array}{r} 0.21 \\ 330 \end{array}$ | $\begin{array}{r} 0.10 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.29 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.36 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.30 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.45 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.64 \\ 2,141 \end{array}$ |
| All low | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.22 \\ 86 \end{array}$ | $\begin{array}{r} 1.46 \\ 117 \end{array}$ | $\begin{array}{r} 1.27 \\ 75 \end{array}$ | $\begin{array}{r} 0.92 \\ 55 \end{array}$ | $\begin{array}{r} 0.88 \\ 58 \end{array}$ |
| Grade 9 mathematics High (geometry or higher) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.48 \\ 205 \end{array}$ | $\begin{gathered} 0.17 \\ 266 \end{gathered}$ | $\begin{array}{r} 0.26 \\ 280 \end{array}$ | $\begin{array}{r} 0.33 \\ 329 \end{array}$ | $\begin{array}{r} 0.26 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.38 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.31 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.28 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.43 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.71 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.47 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.68 \\ 692 \end{array}$ | $\begin{array}{r} 0.61 \\ 526 \end{array}$ | $\begin{array}{r} 0.54 \\ 504 \end{array}$ | $\begin{array}{r} 0.53 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.20 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.08 \\ 484 \end{array}$ | - | $\begin{gathered} 0.12 \\ 743 \end{gathered}$ |
| Suburban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.35 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.27 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.24 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.69 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.67 \\ 729 \end{array}$ | - | $\begin{array}{r} 1.66 \\ 846 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 1.70 \\ 185 \end{array}$ | $\begin{gathered} 1.00 \\ 240 \end{gathered}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 0.41 1,296 | 0.80 1,565 |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in 1,000s) | - | - | - | $\begin{array}{r} 0.40 \\ 351 \end{array}$ | 0.35 425 |
| Not reported | s.e. weighted n (in 1,000s) | - | - | - | 0.94 380 | $\begin{array}{r}0.49 \\ 386 \\ \hline\end{array}$ |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A17. Standard errors for table 17: Percentage of public high school graduates concentrating in business, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.46 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.60 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.42 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.45 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.43 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted $n$ (in 1,000s) | $\begin{array}{r} 2.15 \\ 30 \end{array}$ | $\begin{array}{r} 2.00 \\ 12 \end{array}$ | $\begin{array}{r} 1.39 \\ 22 \end{array}$ | $\begin{array}{r} 3.17 \\ 17 \end{array}$ | $\begin{array}{r} 1.17 \\ 12 \end{array}$ |
| Asian/Pacific Islander | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.41 \\ 38 \end{array}$ | $\begin{array}{r} 1.60 \\ 86 \end{array}$ | $\begin{array}{r} 2.35 \\ 88 \end{array}$ | $\begin{array}{r} 1.11 \\ 74 \end{array}$ | $\begin{array}{r} 0.56 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.33 \\ 293 \end{array}$ | $\begin{array}{r} 1.72 \\ 347 \end{array}$ | $\begin{array}{r} 0.99 \\ 254 \end{array}$ | $\begin{array}{r} 1.02 \\ 263 \end{array}$ | $\begin{array}{r} 1.04 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.96 \\ 307 \end{array}$ | $\begin{array}{r} 2.01 \\ 194 \end{array}$ | $\begin{array}{r} 1.41 \\ 207 \end{array}$ | $\begin{array}{r} 1.31 \\ 168 \end{array}$ | $\begin{array}{r} 0.77 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.56 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.50 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.49 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.49 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.50 \\ 1,852 \end{array}$ |
| Sex <br> Male | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.28 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.39 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.42 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.36 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.36 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.82 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.93 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.69 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.67 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.59 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted $n$ (in 1,000 s) | $\begin{gathered} 1.04 \\ 226 \end{gathered}$ | $\begin{array}{r} 0.69 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.99 \\ 82 \end{array}$ | $\begin{array}{r} 0.64 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.48 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.60 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.46 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.45 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000 s) | - | 13 | - | $\begin{array}{r} 3.10 \\ 19 \end{array}$ | $\begin{array}{r} 0.96 \\ 19 \end{array}$ |
| Proficient | s.e. weighted $n$ (in 1,000s) | - | $\begin{array}{r} 0.59 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.45 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.44 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{aligned} & 1.25 \\ & 260 \end{aligned}$ | $\begin{gathered} 0.63 \\ 258 \end{gathered}$ | $\begin{array}{r} 0.70 \\ 233 \end{array}$ | $\begin{array}{r} 0.69 \\ 307 \end{array}$ | $\begin{array}{r} 0.59 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.57 \\ 1,812 \\ \hline \end{array}$ | $\begin{array}{r} 0.60 \\ 1,809 \\ \hline \end{array}$ | $\begin{array}{r} 0.48 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.47 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.50 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A17. Standard errors for table 17: Percentage of public high school graduates concentrating in business, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. | 0.86 | 1.09 | 1.16 | 0.81 | 0.67 |
|  | weighted n (in 1,000s) | 534 | 438 | 295 | 306 | 186 |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | 2.65 | 0.59 | 0.51 | 0.49 | 0.73 |
|  | weighted n (in 1,000s) | 31 | 273 | 308 | 330 | 386 |
| Mid-level or mixed | s.e. | 0.48 | 0.61 | 0.50 | 0.49 | 0.46 |
|  | weighted n (in 1,000s) | 2,485 | 2,098 | 1,781 | 1,810 | 2,141 |
| All low | s.e. | 2.05 | 1.55 | 1.09 | 1.60 | 1.15 |
|  | weighted n (in 1,000s) | 86 | 117 | 75 | 55 | 58 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 1.39 | 0.70 | 0.70 | 0.54 | 0.40 |
|  | weighted n (in 1,000s) | 205 | 266 | 280 | 329 | 534 |
| Mid-level (prealgebra or algebra 1) | s.e. | 0.61 | 0.58 | 0.59 | 0.53 | 0.54 |
|  | weighted n (in 1,000s) | 1,374 | 1,546 | 1,369 | 1,380 | 1,635 |
| Low (no or low mathematics) | s.e. | 0.75 | 1.22 | 0.61 | 0.60 | 0.64 |
|  | weighted n (in $1,000 \mathrm{~s}$ ) | 1,028 | 692 | 526 | 504 | 447 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 0.98 | 3.14 | 0.92 | 1.09 | 0.88 |
|  | weighted n (in 1,000s) | 501 | 312 | 484 | 303 | 743 |
| Suburban | s.e. | 0.63 | 0.58 | 0.55 | 0.77 | 0.52 |
|  | weighted n (in 1,000s) | 1,261 | 949 | 961 | 918 | 1,028 |
| Rural | s.e. | 0.91 | 0.70 | 0.79 | 0.57 | 0.77 |
|  | weighted n (in 1,000s) | 845 | 1,245 | 729 | 991 | 846 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | 0.75 | 0.97 | 1.49 |
|  | weighted n (in 1,000s) | - | - | 516 | 185 | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | 0.55 | 0.50 | 0.53 |
|  | weighted n (in 1,000s) | - | - | 1,339 | 1,296 | 1,565 |
| Low (5 percent or less in NSLP) | s.e. | - | - | 1.71 | 1.03 | 0.72 |
|  | weighted n (in 1,000s) | - | - | 210 | 351 | 425 |
| Not reported | s.e. | - | - | 1.48 | 1.39 | 1.15 |
|  | weighted n (in 1,000s) | - | - | 109 | 380 | 386 |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A18. Standard errors for table 18: Percentage of public high school graduates concentrating in business services, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.41 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.52 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.32 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.35 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.35 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.86 \\ 30 \end{array}$ | $\begin{array}{r} 1.71 \\ 12 \end{array}$ | $\begin{array}{r} 0.94 \\ 22 \end{array}$ | 2.73 17 | 0.67 12 |
| Asian/Pacific Islander | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.15 \\ 38 \end{array}$ | $\begin{array}{r} 0.94 \\ 86 \end{array}$ | $\begin{array}{r} 1.95 \\ 88 \end{array}$ | $\begin{array}{r} 0.89 \\ 74 \end{array}$ | $\begin{array}{r} 0.61 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.23 \\ 293 \end{array}$ | $\begin{array}{r} 1.43 \\ 347 \end{array}$ | $\begin{array}{r} 0.84 \\ 254 \end{array}$ | $\begin{array}{r} 1.02 \\ 263 \end{array}$ | $\begin{array}{r} 0.67 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.91 \\ 307 \end{array}$ | $\begin{array}{r} 1.81 \\ 194 \end{array}$ | $\begin{array}{r} 1.34 \\ 207 \end{array}$ | $\begin{array}{r} 1.44 \\ 168 \end{array}$ | $\begin{array}{r} 0.66 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.48 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.41 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.36 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.34 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.42 \\ 1,852 \end{array}$ |
| Sex Male | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.19 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.27 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.21 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.27 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.30 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.76 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.81 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.58 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.59 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.46 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.94 \\ 226 \end{array}$ | $\begin{array}{r} 0.65 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.83 \\ 82 \end{array}$ | $\begin{array}{r} 0.66 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.43 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.53 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.35 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.36 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000 s) | - | 13 | - | $\begin{array}{r} 2.70 \\ 19 \end{array}$ | $\begin{array}{r} 0.97 \\ 19 \end{array}$ |
| Proficient | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.51 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.35 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.35 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 1.11 \\ & 260 \end{aligned}$ | $\begin{gathered} 0.61 \\ 258 \end{gathered}$ | $\begin{array}{r} 0.52 \\ 233 \end{array}$ | $\begin{array}{r} 0.52 \\ 307 \end{array}$ | $\begin{array}{r} 0.55 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.52 \\ 1,812 \\ \hline \end{array}$ | $\begin{array}{r} 0.51 \\ 1,809 \\ \hline \end{array}$ | $\begin{array}{r} 0.39 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.36 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.39 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A18. Standard errors for table 18: Percentage of public high school graduates concentrating in business services, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.66 \\ 534 \end{array}$ | $\begin{array}{r} 0.90 \\ 438 \end{array}$ | $\begin{array}{r} 0.66 \\ 295 \end{array}$ | $\begin{array}{r} 0.70 \\ 306 \end{array}$ | $\begin{array}{r} 0.59 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 2.58 \\ 31 \end{array}$ | $\begin{array}{r} 0.51 \\ 273 \end{array}$ | $\begin{array}{r} 0.36 \\ 308 \end{array}$ | $\begin{gathered} 0.42 \\ 330 \end{gathered}$ | $\begin{array}{r} 0.63 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.42 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.54 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.39 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.39 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.37 \\ 2,141 \end{array}$ |
| All low | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 1.99 \\ 86 \end{array}$ | $\begin{array}{r} 1.31 \\ 117 \end{array}$ | $\begin{array}{r} 0.81 \\ 75 \end{array}$ | $\begin{array}{r} 1.19 \\ 55 \end{array}$ | $\begin{array}{r} 1.01 \\ 58 \end{array}$ |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.32 \\ 205 \end{array}$ | $\begin{array}{r} 0.49 \\ 266 \end{array}$ | $\begin{array}{r} 0.50 \\ 280 \end{array}$ | $\begin{array}{r} 0.45 \\ 329 \end{array}$ | $\begin{array}{r} 0.37 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.54 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.49 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.45 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.41 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.40 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.68 \\ 1,028 \end{array}$ | $\begin{array}{r} 1.09 \\ 692 \end{array}$ | $\begin{array}{r} 0.53 \\ 526 \end{array}$ | $\begin{array}{r} 0.50 \\ 504 \end{array}$ | $\begin{array}{r} 0.61 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.84 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.83 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.68 \\ 743 \end{array}$ |
| Suburban | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.60 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.41 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.34 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.74 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.58 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.71 \\ 846 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.99 \\ 185 \end{array}$ | $\begin{gathered} 1.08 \\ 240 \end{gathered}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 0.34 1,296 | 0.47 1,565 |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in 1,000s) | - | - | - | $\begin{gathered} 0.90 \\ 351 \end{gathered}$ | 0.51 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 1.16 \\ 380 \end{array}$ | $\begin{array}{r} 0.88 \\ 386 \\ \hline \end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A19. Standard errors for table 19: Percentage of public high school graduates concentrating in business management, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.06 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.06 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.07 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.10 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.13 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. weighted $n$ (in 1,000s) | $30$ | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.35 \\ 38 \end{array}$ | 86 | $\begin{array}{r} 0.06 \\ 88 \end{array}$ | 74 | 92 |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.17 \\ 293 \end{array}$ | $\overline{347}$ | $\begin{array}{r} 0.07 \\ 254 \end{array}$ | $\begin{array}{r} 0.26 \\ 263 \end{array}$ | $\begin{array}{r} 0.15 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.02 \\ 307 \end{array}$ | $\overline{194}$ | $\begin{array}{r} 0.21 \\ 207 \end{array}$ | $\begin{array}{r} 0.15 \\ 168 \end{array}$ | $\begin{array}{r} 0.27 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} 0.08 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.15 \\ 1,852 \end{array}$ |
| Sex |  |  |  |  |  |  |
| Male | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.03 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.03 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.12 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.15 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.22 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.09 \\ 226 \end{array}$ | 64 | - | $\begin{array}{r} 0.41 \\ 82 \end{array}$ | $\begin{array}{r} 0.20 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.06 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.09 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.13 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | 13 | - | 19 | 19 |
| Proficient | s.e. weighted n (in 1,000s) | - | $\begin{array}{r} 0.06 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.10 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.13 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted n (in 1,000s) | $\begin{gathered} 0.26 \\ 260 \end{gathered}$ | 258 | $\begin{array}{r} 0.02 \\ 233 \end{array}$ | $\begin{gathered} 0.08 \\ 307 \end{gathered}$ | $\begin{array}{r} 0.13 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.05 \\ 1812 \end{array}$ | $\begin{array}{r} 0.07 \\ 1,809 \\ \hline \end{array}$ | $\begin{array}{r} 0.08 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.10 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.15 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A19. Standard errors for table 19: Percentage of public high school graduates concentrating in business management, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.15 \\ 534 \end{array}$ | $\begin{array}{r} 0.09 \\ 438 \end{array}$ | $\begin{array}{r} 0.13 \\ 295 \end{array}$ | $\begin{array}{r} 0.18 \\ 306 \end{array}$ | $\begin{array}{r} 0.12 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $31$ | $\overline{273}$ | $\begin{gathered} 0.08 \\ 308 \end{gathered}$ | $\begin{array}{r} 0.05 \\ 330 \end{array}$ | $\begin{array}{r} 0.09 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.07 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.07 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.14 \\ 2,141 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.00 \\ 86 \end{array}$ | $\overline{117}$ | $\begin{array}{r} 0.25 \\ 75 \end{array}$ | $\begin{array}{r} 0.39 \\ 55 \end{array}$ | $\begin{array}{r} 0.44 \\ 58 \end{array}$ |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.06 \\ 205 \end{array}$ | $\overline{266}$ | $\begin{gathered} 0.11 \\ 280 \end{gathered}$ | $\begin{array}{r} 0.05 \\ 329 \end{array}$ | $\begin{array}{r} 0.13 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.03 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.17 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.15 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.17 \\ 692 \end{array}$ | $\begin{array}{r} 0.09 \\ 526 \end{array}$ | $\begin{array}{r} 0.20 \\ 504 \end{array}$ | $\begin{array}{r} 0.12 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.11 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.12 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.10 \\ 743 \end{array}$ |
| Suburban | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.01 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.08 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.14 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.18 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.14 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.37 \\ 846 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | 185 | $\begin{array}{r} 0.42 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.09 \\ 1,296 \end{array}$ | 0.08 1,565 |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.20 \\ 351 \end{array}$ | 0.18 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.41 \\ 380 \end{array}$ | $\begin{array}{r} 0.64 \\ 386 \end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A20. Standard errors for table 20: Percentage of public high school graduates concentrating in marketing, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.19 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.29 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.18 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.23 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.22 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.74 \\ 30 \end{array}$ | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.41 \\ 38 \end{array}$ | 86 | $\begin{array}{r} 0.11 \\ 88 \end{array}$ | $\begin{array}{r} 0.27 \\ 74 \end{array}$ | $\begin{array}{r} 0.24 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.56 \\ 293 \end{array}$ | $\begin{array}{r} 0.42 \\ 347 \end{array}$ | $\begin{array}{r} 0.53 \\ 254 \end{array}$ | $\begin{array}{r} 0.61 \\ 263 \end{array}$ | $\begin{array}{r} 0.56 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.34 \\ 307 \end{array}$ | $\begin{array}{r} 0.71 \\ 194 \end{array}$ | $\begin{array}{r} 0.24 \\ 207 \end{array}$ | $\begin{array}{r} 0.49 \\ 168 \end{array}$ | $\begin{array}{r} 0.59 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.23 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.33 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.22 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.28 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.26 \\ 1,852 \end{array}$ |
| Sex <br> Male | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.25 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.29 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.18 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.20 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.20 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.28 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.35 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.28 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.30 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.30 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.58 \\ 226 \end{array}$ | $\begin{array}{r} 0.71 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.47 \\ 82 \end{array}$ | $\begin{array}{r} 0.58 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.20 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.29 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.24 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.23 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000s) | - | 13 | - | $\begin{array}{r} 0.78 \\ 19 \end{array}$ | 19 |
| Proficient | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.29 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.23 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.23 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.17 \\ 260 \end{array}$ | $\begin{gathered} 0.32 \\ 258 \end{gathered}$ | $\begin{array}{r} 0.06 \\ 233 \end{array}$ | $\begin{array}{r} 0.21 \\ 307 \end{array}$ | $\begin{array}{r} 0.13 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.21 \\ 1,812 \end{array}$ | $\begin{array}{r} 0.31 \\ 1,809 \\ \hline \end{array}$ | $\begin{array}{r} 0.16 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.27 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.24 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A20. Standard errors for table 20: Percentage of public high school graduates concentrating in marketing, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.51 \\ 534 \end{array}$ | $\begin{array}{r} 0.56 \\ 438 \end{array}$ | $\begin{array}{r} 0.86 \\ 295 \end{array}$ | $\begin{array}{r} 0.47 \\ 306 \end{array}$ | $\begin{array}{r} 0.67 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.82 \\ 31 \end{array}$ | $\begin{array}{r} 0.12 \\ 273 \end{array}$ | $\begin{array}{r} 0.12 \\ 308 \end{array}$ | $\begin{array}{r} 0.18 \\ 330 \end{array}$ | $\begin{array}{r} 0.16 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.20 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.33 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.21 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.27 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.27 \\ 2,141 \end{array}$ |
| All low | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.71 \\ 86 \end{array}$ | $\begin{array}{r} 0.58 \\ 117 \end{array}$ | $\begin{array}{r} 0.59 \\ 75 \end{array}$ | $\begin{array}{r} 0.69 \\ 55 \end{array}$ | $\begin{array}{r} 0.65 \\ 58 \end{array}$ |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.14 \\ 205 \end{array}$ | $\begin{array}{r} 0.31 \\ 266 \end{array}$ | $\begin{array}{r} 0.14 \\ 280 \end{array}$ | $\begin{array}{r} 0.27 \\ 329 \end{array}$ | $\begin{gathered} 0.29 \\ 534 \end{gathered}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.29 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.31 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.15 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.26 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.24 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.28 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.57 \\ 692 \end{array}$ | $\begin{array}{r} 0.54 \\ 526 \end{array}$ | $\begin{array}{r} 0.42 \\ 504 \end{array}$ | $\begin{array}{r} 0.34 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.52 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.57 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.42 \\ 743 \end{array}$ |
| Suburban | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{gathered} 0.28 \\ 1261 \end{gathered}$ | - | $\begin{array}{r} 0.19 \\ 961 \end{array}$ | - | $\begin{gathered} 0.47 \\ 1028 \end{gathered}$ |
| Rural | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.28 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.23 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.40 \\ 846 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.77 \\ 185 \end{array}$ | $\begin{array}{r} 0.64 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.31 \\ 1296 \end{array}$ | 0.31 1565 |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in 1,000s) | - | - | - | $\begin{gathered} 0.63 \\ 351 \end{gathered}$ | 0.31 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.42 \\ 380 \\ \hline \end{array}$ | $\begin{array}{r} 0.76 \\ 386 \\ \hline \end{array}$ |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A21. Standard errors for table 21: Percentage of public high school graduates concentrating in health care, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.10 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.09 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.10 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.11 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.46 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} 0.60 \\ 30 \end{array}$ | 12 | $\begin{array}{r} 0.45 \\ 22 \end{array}$ | 17 | 12 |
| Asian/Pacific Islander | s.e. weighted $n$ (in 1,000s) | $\overline{38}$ | 86 | $\begin{array}{r} 0.85 \\ 88 \end{array}$ | $\begin{array}{r} 0.38 \\ 74 \end{array}$ | $\begin{array}{r} 1.39 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.42 \\ 293 \end{array}$ | $\begin{array}{r} 0.21 \\ 347 \end{array}$ | $\begin{array}{r} 0.35 \\ 254 \end{array}$ | $\begin{array}{r} 0.34 \\ 263 \end{array}$ | $\begin{array}{r} 1.65 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.55 \\ 307 \end{array}$ | $\begin{array}{r} 0.10 \\ 194 \end{array}$ | $\begin{array}{r} 0.24 \\ 207 \end{array}$ | $\begin{gathered} 0.11 \\ 168 \end{gathered}$ | $\begin{array}{r} 1.12 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.08 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.14 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.17 \\ 1,852 \end{array}$ |
| Sex <br> Male | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.06 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.32 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.19 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.16 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.16 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.20 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.64 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.27 \\ 226 \end{array}$ | $\begin{array}{r} 1.16 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.28 \\ 82 \end{array}$ | $\begin{array}{r} 0.65 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.11 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.09 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.12 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.48 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000s) | - | 13 | - | 19 | 19 |
| Proficient | s.e. weighted $n$ (in 1,000s) | - | $\begin{array}{r} 0.09 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.11 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.47 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.06 \\ 260 \end{array}$ | $\begin{array}{r} 0.11 \\ 258 \end{array}$ | $\begin{gathered} 0.12 \\ 233 \end{gathered}$ | $\begin{array}{r} 0.14 \\ 307 \end{array}$ | $\begin{array}{r} 0.50 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.14 \\ 1,812 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,809 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.13 \\ 1,600 \end{array}$ | $\begin{array}{r} 0.50 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A21. Standard errors for table 21: Percentage of public high school graduates concentrating in health care, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.18 \\ 534 \end{array}$ | $\begin{array}{r} 0.22 \\ 438 \end{array}$ | $\begin{array}{r} 0.19 \\ 295 \end{array}$ | $\begin{array}{r} 0.23 \\ 306 \end{array}$ | $\begin{array}{r} 0.47 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.88 \\ 31 \end{array}$ | $2 \overline{273}$ | $\begin{array}{r} 0.09 \\ 308 \end{array}$ | $\begin{array}{r} 0.15 \\ 330 \end{array}$ | $\begin{array}{r} 0.93 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.11 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.11 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.41 \\ 2,141 \end{array}$ |
| All low | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.62 \\ 86 \end{array}$ | $\begin{array}{r} 0.76 \\ 117 \end{array}$ | $\begin{array}{r} 0.64 \\ 75 \end{array}$ | $\begin{array}{r} 0.68 \\ 55 \end{array}$ | $\begin{array}{r} 0.40 \\ 58 \end{array}$ |
| Grade 9 mathematics High (geometry or higher) | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.07 \\ 205 \end{array}$ | $\begin{array}{r} 0.14 \\ 266 \end{array}$ | $\begin{gathered} 0.00 \\ 280 \end{gathered}$ | $\begin{array}{r} 0.16 \\ 329 \end{array}$ | $\begin{array}{r} 2.06 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.09 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.14 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.21 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.24 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.17 \\ 692 \end{array}$ | $\begin{array}{r} 0.33 \\ 526 \end{array}$ | $\begin{array}{r} 0.19 \\ 504 \end{array}$ | $\begin{array}{r} 0.22 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.16 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.19 \\ 484 \end{array}$ | - | $\begin{aligned} & 1.58 \\ & 743 \end{aligned}$ |
| Suburban | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.12 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.13 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.24 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.25 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.20 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.28 \\ 846 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.48 \\ 185 \end{array}$ | 1.00 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted $n$ (in 1,000s) | - | - | - | $\begin{array}{r} 0.16 \\ 1,296 \end{array}$ | 0.74 1,565 |
| Low (5 percent or less in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.18 \\ 351 \end{array}$ | 0.50 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.24 \\ 380 \end{array}$ | $\begin{array}{r}0.47 \\ 386 \\ \hline\end{array}$ |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A22. Standard errors for table 22: Percentage of public high school graduates concentrating in protective services, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.02 \\ 2,607 \end{array}$ | $2, \overline{505}$ | $\begin{array}{r} 0.04 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.02 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.03 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\overline{30}$ | $\overline{12}$ | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $38$ | $\overline{86}$ | $\begin{array}{r} 0.05 \\ 88 \end{array}$ | 74 | 92 |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 293 \end{array}$ | $347$ | $\begin{array}{r} 0.13 \\ 254 \end{array}$ | $\begin{array}{r} 0.04 \\ 263 \end{array}$ | $\begin{array}{r} 0.08 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000 s) | $3 \overline{307}$ | $\overline{194}$ | $207$ | 168 | 299 |
| White, non-Hispanic | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.03 \\ 1,913 \end{array}$ | $1,7 \overline{-}$ | $\begin{array}{r} 0.04 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.02 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.03 \\ 1,852 \end{array}$ |
| Sex <br> Male | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $1,257$ | $1, \overline{194}$ | $\begin{array}{r} 0.04 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.04 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.04 \\ 1,350 \end{array}$ | $1, \overline{-}$ | $\begin{array}{r} 0.06 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.01 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.01 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{gathered} 0.07 \\ 226 \end{gathered}$ | $\overline{64}$ | - | $\begin{array}{r} 0.23 \\ 82 \end{array}$ | 74 |
| No indicated disability | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.02 \\ 2,361 \end{array}$ |  | - | $\begin{array}{r} 0.02 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.03 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | 13 | - | 19 | 19 |
| Proficient | s.e. weighted $n$ (in 1,000s) | - | 2,492 | - | $\begin{array}{r} 0.02 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.03 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) <br> High (greater than 3.5) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $2 \overline{260}$ | 258 | 233 | 307 | 456 |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.03 \\ 1,812 \\ \hline \end{array}$ | $1,809$ | $\begin{array}{r} 0.05 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.02 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.04 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A22. Standard errors for table 22: Percentage of public high school graduates concentrating in protective services, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted $n$ (in 1,000 s) | $\overline{534}$ | $\overline{438}$ | 295 | $\begin{array}{r} 0.09 \\ 306 \end{array}$ | 186 |
| Academic coursework complet All high | s.e. weighted $n$ (in 1,000 s) | $31$ | $2 \overline{273}$ | 308 | 330 | 386 |
| Mid-level or mixed | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.02 \\ 2,485 \end{array}$ | $2, \overline{-}$ | $\begin{array}{r} 0.04 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.02 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.03 \\ 2,141 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\overline{86}$ | $\overline{117}$ | $\overline{75}$ | 55 | $\begin{array}{r} 0.47 \\ 58 \end{array}$ |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $205$ | $\overline{266}$ | $\begin{array}{r} 0.12 \\ 280 \end{array}$ | 329 | 534 |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.03 \\ 1,374 \end{array}$ | $1,546$ | $\begin{array}{r} 0.05 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.02 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.03 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.02 \\ 1,028 \end{array}$ | $692$ | $\begin{array}{r} 0.03 \\ 526 \end{array}$ | $\begin{array}{r} 0.09 \\ 504 \end{array}$ | $\begin{array}{r} 0.08 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\overline{501}$ | - | $\begin{array}{r} 0.07 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.08 \\ 743 \end{array}$ |
| Suburban | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.02 \\ 1,261 \end{array}$ | — | $\begin{array}{r} 0.02 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.05 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.05 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.09 \\ 729 \end{array}$ | - | 846 |
| School poverty level High (greater than 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.15 \\ 185 \end{array}$ | $\begin{array}{r} 0.07 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.03 \\ 1,296 \end{array}$ | $\begin{array}{r} 0.03 \\ 1,565 \end{array}$ |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | 351 | 0.11 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 380 | 386 |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A23. Standard errors for table 23: Percentage of public high school graduates concentrating in trade and industry program areas, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.58 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.65 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.48 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.44 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.72 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 9.27 \\ 30 \end{array}$ | $\begin{array}{r} 3.42 \\ 12 \end{array}$ | $\begin{array}{r} 4.72 \\ 22 \end{array}$ | $\begin{array}{r} 2.03 \\ 17 \end{array}$ | $\begin{array}{r} 3.01 \\ 12 \end{array}$ |
| Asian/Pacific Islander | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 2.11 \\ 38 \end{array}$ | $\begin{array}{r} 3.52 \\ 86 \end{array}$ | $\begin{array}{r} 3.21 \\ 88 \end{array}$ | $\begin{array}{r} 1.01 \\ 74 \end{array}$ | $\begin{array}{r} 1.86 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.53 \\ 293 \end{array}$ | $\begin{array}{r} 0.94 \\ 347 \end{array}$ | $\begin{array}{r} 1.03 \\ 254 \end{array}$ | $\begin{array}{r} 1.02 \\ 263 \end{array}$ | $\begin{array}{r} 0.72 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.39 \\ 307 \end{array}$ | $\begin{array}{r} 1.11 \\ 194 \end{array}$ | $\begin{array}{r} 1.42 \\ 207 \end{array}$ | $\begin{array}{r} 1.51 \\ 168 \end{array}$ | $\begin{array}{r} 0.81 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.64 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.72 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.56 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.51 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.90 \\ 1,852 \end{array}$ |
| Sex Male | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.10 \\ 1,257 \end{array}$ | $\begin{array}{r} 1.11 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.90 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.86 \\ 1,083 \end{array}$ | $\begin{array}{r} 1.38 \\ 1,232 \end{array}$ |
| Female | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.23 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.30 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.40 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.14 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.17 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 1.62 \\ & 226 \end{aligned}$ | $\begin{array}{r} 3.63 \\ 64 \end{array}$ | — | $\begin{array}{r} 1.94 \\ 82 \end{array}$ | $\begin{array}{r} 2.09 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.60 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.61 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.44 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.70 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 1.25 \\ 13 \end{array}$ | - | $\begin{array}{r} 0.77 \\ 19 \end{array}$ | $\begin{array}{r} 1.57 \\ 19 \end{array}$ |
| Proficient | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.65 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.44 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.72 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.75 \\ 260 \end{array}$ | $\begin{array}{r} 0.52 \\ 258 \end{array}$ | $\begin{array}{r} 0.47 \\ 233 \end{array}$ | $\begin{array}{r} 0.37 \\ 307 \end{array}$ | $\begin{array}{r} 0.70 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.63 \\ 1,812 \end{array}$ | $\begin{array}{r} 0.62 \\ 1,809 \end{array}$ | $\begin{array}{r} 0.53 \\ 1,644 \end{array}$ | $\begin{array}{r} 0.45 \\ 1,600 \end{array}$ | $\begin{array}{r} 0.68 \\ 1,975 \end{array}$ |
| Low (less than 2.0) | s.e. weighted n (in 1,000s) | $\begin{array}{r} 1.45 \\ 534 \end{array}$ | $\begin{array}{r} 1.38 \\ 438 \end{array}$ | $\begin{array}{r} 1.51 \\ 295 \end{array}$ | $\begin{array}{r} 1.17 \\ 306 \\ \hline \end{array}$ | $\begin{array}{r} 1.84 \\ 186 \end{array}$ |

See notes at end of table.

Table A23. Standard errors for table 23: Percentage of public high school graduates concentrating in trade and industry program areas, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | 3.14 | 0.55 | 0.44 | 0.30 | 0.51 |
|  | weighted n (in 1,000s) | 31 | 273 | 308 | 330 | 386 |
| Mid-level or mixed | s.e. | 0.59 | 0.62 | 0.53 | 0.50 | 0.74 |
|  | weighted n (in 1,000s) | 2,485 | 2,098 | 1,781 | 1,810 | 2,141 |
| All low | s.e. | 3.54 | 3.39 | 3.78 | 2.27 | 3.93 |
|  | weighted n (in 1,000s) | 86 | 117 | 75 | 55 | 58 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 1.29 | 0.64 | 0.58 | 0.39 | 0.55 |
|  | weighted n (in 1,000s) | 205 | 266 | 280 | 329 | 534 |
| Mid-level (prealgebra or algebra 1) | s.e. | 0.70 | 0.61 | 0.56 | 0.43 | 0.80 |
|  | weighted n (in 1,000s) | 1,374 | 1,546 | 1,369 | 1,380 | 1,635 |
| Low (no or low mathematics) | s.e. | 0.96 | 1.30 | 1.17 | 0.95 | 1.25 |
|  | weighted n (in 1,000s) | 1,028 | 692 | 526 | 504 | 447 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 1.39 | - | 1.06 | - | 0.78 |
|  | weighted n (in 1,000s) | 501 | - | 484 | - | 743 |
| Suburban | s.e. | 0.81 | - | 0.62 | - | 1.06 |
|  | weighted n (in 1,000s) | 1,261 | - | 961 | - | 1,028 |
| Rural | s.e. | 1.04 | - | 0.91 | - | 1.61 |
|  | weighted n (in 1,000s) | 845 | - | 729 | - | 846 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 1.64 | 1.52 |
|  | weighted n (in 1,000s) | - | - | - | 185 | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 0.56 | 0.89 |
|  | weighted n (in 1,000s) | - | - | - | 1,296 | 1,565 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 0.97 | 0.85 |
|  | weighted $n$ (in 1,000s) | - | - | - | 351 | 425 |
| Not reported | s.e. | - | - | - | 0.88 | 1.59 |
|  | weighted n (in 1,000s) | - | - | - | 380 | 386 |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A24. Standard errors for table 24: Percentage of public high school graduates concentrating in construction, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.16 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.14 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.18 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.13 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.16 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 2.24 \\ 30 \end{array}$ | 12 | $\begin{array}{r} 0.89 \\ 22 \end{array}$ | 17 | 12 |
| Asian/Pacific Islander | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.34 \\ 38 \end{array}$ | $\overline{86}$ | $\begin{array}{r} 0.28 \\ 88 \end{array}$ | $\begin{array}{r} 0.22 \\ 74 \end{array}$ | $\begin{array}{r} 0.16 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.69 \\ 293 \end{array}$ | $\begin{array}{r} 0.59 \\ 347 \end{array}$ | $\begin{array}{r} 0.59 \\ 254 \end{array}$ | $\begin{array}{r} 0.38 \\ 263 \end{array}$ | $\begin{array}{r} 0.24 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.45 \\ 307 \end{array}$ | $\begin{array}{r} 0.20 \\ 194 \end{array}$ | $\begin{array}{r} 0.28 \\ 207 \end{array}$ | $\begin{array}{r} 0.32 \\ 168 \end{array}$ | $\begin{array}{r} 0.21 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.17 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.14 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.21 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.17 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.20 \\ 1,852 \end{array}$ |
| Sex <br> Male | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.33 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.29 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.30 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.28 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.32 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.03 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.19 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.04 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.57 \\ 226 \end{array}$ | $\begin{array}{r} 0.86 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.60 \\ 82 \end{array}$ | $\begin{array}{r} 1.22 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.17 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.14 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.13 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.15 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000 s) | - | 13 | - | 19 | 19 |
| Proficient | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.14 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.14 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.16 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.07 \\ 260 \end{array}$ | $\overline{258}$ | $\begin{array}{r} 0.10 \\ 233 \end{array}$ | $\begin{array}{r} 0.10 \\ 307 \end{array}$ | $\begin{array}{r} 0.10 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.19 \\ 1,812 \end{array}$ | $\begin{array}{r} 0.14 \\ 1,809 \end{array}$ | $\begin{array}{r} 0.20 \\ 1,644 \end{array}$ | $\begin{array}{r} 0.14 \\ 1,600 \end{array}$ | $\begin{array}{r} 0.19 \\ 1,975 \end{array}$ |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.43 \\ 534 \end{array}$ | $\begin{array}{r} 0.39 \\ 438 \end{array}$ | $\begin{array}{r} 0.55 \\ 295 \end{array}$ | $\begin{array}{r} 0.37 \\ 306 \end{array}$ | $\begin{array}{r}0.54 \\ 186 \\ \hline\end{array}$ |

See notes at end of table.

Table A24. Standard errors for table 24: Percentage of public high school graduates concentrating in construction, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | - | - | 0.04 | - | 0.12 |
|  | weighted n (in 1,000s) | 31 | 273 | 308 | 330 | 386 |
| Mid-level or mixed | s.e. | 0.16 | 0.15 | 0.19 | 0.15 | 0.17 |
|  | weighted n (in 1,000s) | 2,485 | 2,098 | 1,781 | 1,810 | 2,141 |
| All low | s.e. | 1.24 | 0.66 | 1.55 | 0.76 | 2.01 |
|  | weighted n (in 1,000s) | 86 | 117 | 75 | 55 | 58 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 0.14 | - | 0.05 | 0.06 | 0.16 |
|  | weighted n (in 1,000s) | 205 | 266 | 280 | 329 | 534 |
| Mid-level (prealgebra or algebra 1) | s.e. | 0.16 | 0.11 | 0.22 | 0.12 | 0.16 |
|  | weighted n (in 1,000s) | 1,374 | 1,546 | 1,369 | 1,380 | 1,635 |
| Low (no or low mathematics) | s.e. | 0.33 | 0.35 | 0.38 | 0.33 | 0.39 |
|  | weighted n (in 1,000s) | 1,028 | 692 | 526 | 504 | 447 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 0.34 | - | 0.45 | - | 0.16 |
|  | weighted n (in 1,000s) | 501 | - | 484 | - | 743 |
| Suburban | s.e. | 0.16 | - | 0.21 | - | 0.17 |
|  | weighted n (in 1,000s) | 1,261 | - | 961 | - | 1,028 |
| Rural | s.e. | 0.39 | - | 0.33 | - | 0.39 |
|  | weighted n (in 1,000s) | 845 | - | 729 | - | 846 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 0.46 | 0.56 |
|  | weighted n (in 1,000s) | - | - | - | 185 | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 0.15 | 0.18 |
|  | weighted n (in 1,000s) | - | - | - | 1,296 | 1,565 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 0.27 | 0.55 |
|  | weighted n (in 1,000s) | - | - | - | 351 | 425 |
| Not reported | s.e. | - | - | - | 0.53 | 0.33 |
|  | weighted n (in 1,000s) | - | - | - | 380 | 386 |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A25. Standard errors for table 25: Percentage of public high school graduates concentrating in mechanics and repair, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. | 0.26 | 0.25 | 0.20 | 0.16 | 0.18 |
|  | weighted n (in 1,000s) | 2,607 | 2,505 | 2,174 | 2,213 | 2,617 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaska | s.e. | 0.78 | - | 2.91 | - | 1.37 |
| Native | weighted n (in 1,000s) | 30 | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. | 1.44 | 0.65 | 0.64 | 0.37 | 0.32 |
|  | weighted n (in 1,000s) | 38 | 86 | 88 | 74 | 92 |
| Black, non-Hispanic | s.e. | 0.64 | 0.36 | 0.42 | 0.35 | 0.31 |
|  | weighted n (in 1,000s) | 293 | 347 | 254 | 263 | 356 |
| Hispanic | s.e. | 0.82 | 0.72 | 0.36 | 0.44 | 0.61 |
|  | weighted n (in 1,000s) | 307 | 194 | 207 | 168 | 299 |
| White, non-Hispanic | s.e. | 0.30 | 0.33 | 0.25 | 0.18 | 0.21 |
|  | weighted n (in 1,000s) | 1,913 | 1,778 | 1,596 | 1,564 | 1,852 |
| Sex |  |  |  |  |  |  |
| Male | s.e. | 0.53 | 0.48 | 0.41 | 0.32 | 0.35 |
|  | weighted n (in 1,000s) | 1,257 | 1,194 | 1,074 | 1,083 | 1,232 |
| Female | s.e. | 0.06 | 0.07 | 0.02 | 0.04 | 0.04 |
|  | weighted n (in 1,000s) | 1,350 | 1,309 | 1,100 | 1,126 | 1,347 |
| Disability status (grade 12) |  |  |  |  |  |  |
| Has disability | s.e. | 0.68 | 1.69 | - | 0.83 | 0.88 |
|  | weighted n (in 1,000s) | 226 | 64 | - | 82 | 74 |
| No indicated disability | s.e. | 0.27 | 0.24 | - | 0.16 | 0.18 |
|  | weighted n (in 1,000s) | 2,361 | 2,441 | - | 2,130 | 2,543 |
| English proficiency (grade 12) |  |  |  |  |  |  |
| Limited | s.e. | - | - | - | - | 0.38 |
|  | weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | 13 | - | 19 | 19 |
| Proficient | s.e. | - | 0.25 | - | 0.16 | 0.18 |
|  | weighted n (in 1,000s) | - | 2,492 | - | 2,194 | 2,598 |
| Grade-point average (GPA) |  |  |  |  |  |  |
| High (greater than 3.5) | s.e. | 0.26 | 0.14 | 0.07 | 0.04 | 0.04 |
|  | weighted n (in 1,000s) | 260 | 258 | 233 | 307 | 456 |
| Mid-level (2.0 to 3.5) | s.e. | 0.27 | 0.25 | 0.22 | 0.16 | 0.22 |
|  | weighted n (in 1,000s) | 1,812 | 1,809 | 1,644 | 1,600 | 1,975 |

See notes at end of table.

Table A25. Standard errors for table 25: Percentage of public high school graduates concentrating in mechanics and repair, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.83 \\ 534 \end{array}$ | $\begin{array}{r} 0.58 \\ 438 \end{array}$ | $\begin{array}{r} 0.69 \\ 295 \end{array}$ | $\begin{array}{r} 0.44 \\ 306 \end{array}$ | $\begin{array}{r} 0.73 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 2.43 \\ 31 \end{array}$ | $273$ | $308$ | $\begin{array}{r} 0.06 \\ 330 \end{array}$ | $\begin{array}{r} 0.13 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.27 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.27 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.22 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.18 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.20 \\ 2,141 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.47 \\ 86 \end{array}$ | $\begin{array}{r} 1.59 \\ 117 \end{array}$ | $\begin{array}{r} 2.45 \\ 75 \end{array}$ | $\begin{array}{r} 1.04 \\ 55 \end{array}$ | $\begin{array}{r} 2.08 \\ 58 \end{array}$ |
| Grade 9 mathematics High (geometry or higher) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.25 \\ 205 \end{array}$ | $\begin{array}{r} 0.14 \\ 266 \end{array}$ | $\begin{array}{r} 0.31 \\ 280 \end{array}$ | $\begin{array}{r} 0.12 \\ 329 \end{array}$ | $\begin{gathered} 0.14 \\ 534 \end{gathered}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.31 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.25 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.19 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.15 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.23 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n($ in $1,000 \mathrm{~s})$ | $\begin{array}{r} 0.50 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.59 \\ 692 \end{array}$ | $\begin{array}{r} 0.55 \\ 526 \end{array}$ | $\begin{array}{r} 0.41 \\ 504 \end{array}$ | $\begin{array}{r} 0.37 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.52 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.19 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.33 \\ 743 \end{array}$ |
| Suburban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.41 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.25 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.23 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.43 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.46 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.36 \\ 846 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.46 \\ 185 \end{array}$ | $\begin{array}{r} 0.47 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.21 \\ 1,296 \end{array}$ | 0.23 1,565 |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.22 \\ 351 \end{array}$ | 0.50 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.32 \\ 380 \\ \hline \end{array}$ | $\begin{array}{r}0.40 \\ 386 \\ \hline\end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A26. Standard errors for table 26: Percentage of public high school graduates concentrating in precision production, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. | 0.45 | 0.46 | 0.35 | 0.28 | 0.58 |
|  | weighted n (in 1,000s) | 2,607 | 2,505 | 2,174 | 2,213 | 2,617 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaska | s.e. | 10.57 | 4.25 | 4.22 | 1.03 | 2.07 |
| Native | weighted n (in 1,000s) | 30 | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. | 1.49 | 1.66 | 2.86 | 0.37 | 0.72 |
|  | weighted n (in 1,000s) | 38 | 86 | 88 | 74 | 92 |
| Black, non-Hispanic | s.e. | 1.09 | 0.72 | 0.68 | 0.41 | 0.53 |
|  | weighted n (in 1,000s) | 293 | 347 | 254 | 263 | 356 |
| Hispanic | s.e. | 0.98 | 0.84 | 0.80 | 0.94 | 0.86 |
|  | weighted n (in 1,000s) | 307 | 194 | 207 | 168 | 299 |
| White, non-Hispanic | s.e. | 0.48 | 0.52 | 0.41 | 0.35 | 0.75 |
|  | weighted n (in 1,000s) | 1,913 | 1,778 | 1,596 | 1,564 | 1,852 |
| Sex |  |  |  |  |  |  |
| Male | s.e. | 0.86 | 0.78 | 0.62 | 0.55 | 1.13 |
|  | weighted n (in 1,000s) | 1,257 | 1,194 | 1,074 | 1,083 | 1,232 |
| Female | s.e. | 0.21 | 0.28 | 0.35 | 0.10 | 0.15 |
|  | weighted n (in 1,000s) | 1,350 | 1,309 | 1,100 | 1,126 | 1,347 |
| Disability status (grade 12) |  |  |  |  |  |  |
| Has disability | s.e. | 1.15 | 2.65 | - | 1.34 | 1.04 |
|  | weighted n (in 1,000s) | 226 | 64 | - | 82 | 74 |
| No indicated disability | s.e. | 0.47 | 0.42 | - | 0.27 | 0.59 |
|  | weighted n (in 1,000s) | 2,361 | 2,441 | - | 2,130 | 2,543 |
| English proficiency (grade 12) |  |  |  |  |  |  |
| Limited | s.e. | - | - | - | 0.49 | 1.02 |
|  | weighted n (in 1,000s) | - | 13 | - | 19 | 19 |
| Proficient | s.e. | - | 0.46 | - | 0.28 | 0.59 |
|  | weighted n (in 1,000s) | - | 2,492 | - | 2,194 | 2,598 |
| Grade-point average (GPA) |  |  |  |  |  |  |
| High (greater than 3.5) | s.e. | 0.53 | 0.34 | 0.43 | 0.30 | 0.66 |
|  | weighted n (in 1,000s) | 260 | 258 | 233 | 307 | 456 |
| Mid-level (2.0 to 3.5) | s.e. | 0.52 | 0.42 | 0.38 | 0.30 | 0.54 |
|  | weighted n (in 1,000s) | 1,812 | 1,809 | 1,644 | 1,600 | 1,975 |

See notes at end of table.

Table A26. Standard errors for table 26: Percentage of public high school graduates concentrating in precision production, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.90 \\ 534 \end{array}$ | $\begin{array}{r} 1.10 \\ 438 \end{array}$ | $\begin{array}{r} 1.12 \\ 295 \end{array}$ | $\begin{array}{r} 0.56 \\ 306 \end{array}$ | $\begin{array}{r} 1.53 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 2.24 \\ 31 \end{array}$ | $\begin{array}{r} 0.33 \\ 273 \end{array}$ | $\begin{array}{r} 0.41 \\ 308 \end{array}$ | $\begin{array}{r} 0.26 \\ 330 \end{array}$ | $\begin{array}{r} 0.45 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.45 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.39 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.40 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.32 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.65 \\ 2,141 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 2.82 \\ 86 \end{array}$ | $\begin{array}{r} 3.53 \\ 117 \end{array}$ | $\begin{array}{r} 2.53 \\ 75 \end{array}$ | $\begin{array}{r} 1.57 \\ 55 \end{array}$ | $\begin{array}{r} 1.56 \\ 58 \end{array}$ |
| Grade 9 mathematics High (geometry or higher) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{gathered} 0.95 \\ 205 \end{gathered}$ | $\begin{gathered} 0.51 \\ 266 \end{gathered}$ | $\begin{array}{r} 0.49 \\ 280 \end{array}$ | $\begin{array}{r} 0.32 \\ 329 \end{array}$ | $\begin{gathered} 0.42 \\ 534 \end{gathered}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.55 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.36 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.42 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.34 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.65 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n($ in $1,000 \mathrm{~s})$ | $\begin{array}{r} 0.73 \\ 1,028 \end{array}$ | $\begin{array}{r} 1.07 \\ 692 \end{array}$ | $\begin{array}{r} 0.89 \\ 526 \end{array}$ | $\begin{array}{r} 0.49 \\ 504 \end{array}$ | $\begin{array}{r} 0.97 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.10 \\ 501 \end{array}$ | $\begin{array}{r} 0.97 \\ 312 \end{array}$ | $\begin{array}{r} 0.78 \\ 484 \end{array}$ | $\begin{array}{r} 0.55 \\ 303 \end{array}$ | $\begin{array}{r} 0.66 \\ 743 \end{array}$ |
| Suburban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.67 \\ 1,261 \end{array}$ | $\begin{array}{r} 0.83 \\ 949 \end{array}$ | $\begin{array}{r} 0.46 \\ 961 \end{array}$ | $\begin{array}{r} 0.31 \\ 918 \end{array}$ | $\begin{array}{r} 0.83 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.74 \\ 845 \end{array}$ | $\begin{array}{r} 0.68 \\ 1,245 \end{array}$ | $\begin{array}{r} 0.69 \\ 729 \end{array}$ | $\begin{array}{r} 0.54 \\ 991 \end{array}$ | $\begin{array}{r} 1.40 \\ 846 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | $\begin{array}{r} 0.69 \\ 516 \end{array}$ | $\begin{array}{r} 1.25 \\ 185 \end{array}$ | $\begin{array}{r} 1.28 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | $\begin{array}{r} 0.47 \\ 1,339 \end{array}$ | $\begin{array}{r} 0.37 \\ 1,296 \end{array}$ | 0.71 1,565 |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | $\begin{array}{r} 0.82 \\ 210 \end{array}$ | $\begin{array}{r} 0.74 \\ 351 \end{array}$ | 0.42 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | $\begin{array}{r} 1.68 \\ 109 \end{array}$ | $\begin{array}{r} 0.68 \\ 380 \\ \hline \end{array}$ | $\begin{array}{r} 1.47 \\ 386 \\ \hline \end{array}$ |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A27. Standard errors for table 27: Percentage of public high school graduates concentrating in print production, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.21 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.19 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.26 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.17 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.27 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 5.95 \\ 30 \end{array}$ | $\begin{array}{r} 3.16 \\ 12 \end{array}$ | $\begin{array}{r} 1.86 \\ 22 \end{array}$ | 17 | 0.68 12 |
| Asian/Pacific Islander | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.24 \\ 38 \end{array}$ | $\begin{array}{r} 0.73 \\ 86 \end{array}$ | $\begin{array}{r} 2.79 \\ 88 \end{array}$ | $\begin{array}{r} 0.31 \\ 74 \end{array}$ | $\begin{array}{r} 0.47 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 0.69 \\ 293 \end{array}$ | $\begin{array}{r} 0.26 \\ 347 \end{array}$ | $\begin{array}{r} 0.48 \\ 254 \end{array}$ | $\begin{array}{r} 0.25 \\ 263 \end{array}$ | $\begin{array}{r} 0.27 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.35 \\ 307 \end{array}$ | $\begin{array}{r} 0.40 \\ 194 \end{array}$ | $\begin{array}{r} 0.51 \\ 207 \end{array}$ | $\begin{array}{r} 0.28 \\ 168 \end{array}$ | $\begin{array}{r} 0.21 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.22 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.26 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.30 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.22 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.36 \\ 1,852 \end{array}$ |
| Sex Male | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.36 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.32 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.40 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.31 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.48 \\ 1,232 \end{array}$ |
| Female | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.16 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.33 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.51 \\ 226 \end{array}$ | $\begin{array}{r} 0.84 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.77 \\ 82 \end{array}$ | $\begin{array}{r} 0.53 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.22 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.19 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.18 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.27 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\overline{13}$ | - | $\begin{array}{r} 0.44 \\ 19 \end{array}$ | $\begin{array}{r} 0.60 \\ 19 \end{array}$ |
| Proficient | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.19 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.17 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.27 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.36 \\ 260 \end{array}$ | $\begin{array}{r} 0.29 \\ 258 \end{array}$ | $\begin{array}{r} 0.26 \\ 233 \end{array}$ | $\begin{array}{r} 0.18 \\ 307 \end{array}$ | $\begin{array}{r} 0.44 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.25 \\ 1,812 \\ \hline \end{array}$ | $\begin{array}{r} 0.22 \\ 1,809 \end{array}$ | $\begin{array}{r} 0.30 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.21 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.26 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A27. Standard errors for table 27: Percentage of public high school graduates concentrating in print production, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} 0.36 \\ 534 \end{array}$ | $\begin{array}{r} 0.18 \\ 438 \end{array}$ | $\begin{array}{r} 0.89 \\ 295 \end{array}$ | $\begin{array}{r} 0.27 \\ 306 \end{array}$ | $\begin{array}{r} 0.52 \\ 186 \end{array}$ |
| Academic coursework complete All high |  | $\begin{array}{r} 0.10 \\ 31 \end{array}$ | $\begin{array}{r} 0.28 \\ 273 \end{array}$ | $\begin{array}{r} 0.38 \\ 308 \end{array}$ | $\begin{array}{r} 0.25 \\ 330 \end{array}$ | $\begin{array}{r} 0.43 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.22 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.21 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.31 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.20 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.27 \\ 2,141 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\overline{86}$ | $\begin{array}{r} 0.71 \\ 117 \end{array}$ | $\begin{array}{r} 0.63 \\ 75 \end{array}$ | $\begin{array}{r} 0.57 \\ 55 \end{array}$ | $\begin{array}{r} 0.67 \\ 58 \end{array}$ |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.41 \\ 205 \end{array}$ | $\begin{array}{r} 0.25 \\ 266 \end{array}$ | $\begin{array}{r} 0.31 \\ 280 \end{array}$ | $\begin{array}{r} 0.20 \\ 329 \end{array}$ | $\begin{array}{r} 0.31 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.31 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.26 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.34 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.23 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.31 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.26 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.27 \\ 692 \end{array}$ | $\begin{array}{r} 0.59 \\ 526 \end{array}$ | $\begin{array}{r} 0.20 \\ 504 \end{array}$ | $\begin{array}{r} 0.27 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.57 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.62 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.35 \\ 743 \end{array}$ |
| Suburban | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.29 \\ 1,261 \end{array}$ | — | $\begin{array}{r} 0.30 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.35 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.32 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.54 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.64 \\ 846 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.31 \\ 185 \end{array}$ | $\begin{array}{r} 0.88 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.22 \\ 1,296 \end{array}$ | $\begin{array}{r} 0.29 \\ 1,565 \end{array}$ |
| Low (5 percent or less in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.68 \\ 351 \end{array}$ | 0.17 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.31 \\ 380 \end{array}$ | $\begin{array}{r} 0.66 \\ 386 \end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A28. Standard errors for table 28: Percentage of public high school graduates concentrating in materials production, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. | 0.26 | 0.24 | 0.16 | 0.14 | 0.22 |
|  | weighted n (in 1,000s) | 2,607 | 2,505 | 2,174 | 2,213 | 2,617 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaska | s.e. | 1.44 | - | 2.91 | - | 1.75 |
| Native | weighted n (in 1,000s) | 30 | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. | 0.68 | 0.47 | 0.50 | 0.18 | 0.33 |
|  | weighted n (in 1,000s) | 38 | 86 | 88 | 74 | 92 |
| Black, non-Hispanic | s.e. | 0.35 | 0.40 | 0.33 | 0.22 | 0.08 |
|  | weighted n (in 1,000s) | 293 | 347 | 254 | 263 | 356 |
| Hispanic | s.e. | 0.71 | 0.36 | 0.37 | 0.41 | 0.32 |
|  | weighted n (in 1,000s) | 307 | 194 | 207 | 168 | 299 |
| White, non-Hispanic | s.e. | 0.31 | 0.29 | 0.20 | 0.20 | 0.30 |
|  | weighted n (in 1,000s) | 1,913 | 1,778 | 1,596 | 1,564 | 1,852 |
| Sex |  |  |  |  |  |  |
| Male | s.e. | 0.54 | 0.51 | 0.32 | 0.29 | 0.47 |
|  | weighted n (in 1,000s) | 1,257 | 1,194 | 1,074 | 1,083 | 1,232 |
| Female | s.e. | 0.04 | 0.06 | 0.06 | 0.02 | 0.02 |
|  | weighted n (in 1,000s) | 1,350 | 1,309 | 1,100 | 1,126 | 1,347 |
| Disability status (grade 12) |  |  |  |  |  |  |
| Has disability | s.e. | 0.76 | 1.59 | - | 0.74 | 0.55 |
|  | weighted n (in 1,000s) | 226 | 64 | - | 82 | 74 |
| No indicated disability | s.e. | 0.28 | 0.24 | - | 0.14 | 0.23 |
|  | weighted n (in 1,000s) | 2,361 | 2,441 | - | 2,130 | 2,543 |
| English proficiency (grade 12) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Limited | weighted n (in 1,000s) | - | 13 | - | 19 | 19 |
| Proficient | s.e. | - | 0.24 | - | 0.15 | 0.23 |
|  | weighted n (in 1,000s) | - | 2,492 | - | 2,194 | 2,598 |
| Grade-point average (GPA) |  |  |  |  |  |  |
| High (greater than 3.5) | s.e. | 0.29 | - | 0.29 | 0.07 | 0.08 |
|  | weighted n (in 1,000s) | 260 | 258 | 233 | 307 | 456 |
| Mid-level (2.0 to 3.5) | s.e. | 0.31 | 0.23 | 0.20 | 0.15 | 0.23 |
|  | weighted n (in 1,000s) | 1,812 | 1,809 | 1,644 | 1,600 | 1,975 |

See notes at end of table.

Table A28. Standard errors for table 28: Percentage of public high school graduates concentrating in materials production, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.58 \\ 534 \end{array}$ | $\begin{array}{r} 0.60 \\ 438 \end{array}$ | $\begin{array}{r} 0.38 \\ 295 \end{array}$ | $\begin{array}{r} 0.38 \\ 306 \end{array}$ | $\begin{array}{r} 0.91 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.37 \\ 31 \end{array}$ | $\overline{273}$ | $\begin{array}{r} 0.06 \\ 308 \end{array}$ | $330$ | $\begin{array}{r} 0.17 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.26 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.21 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.18 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.16 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.26 \\ 2,141 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 2.31 \\ 86 \end{array}$ | $\begin{array}{r} 1.97 \\ 117 \end{array}$ | $\begin{array}{r} 1.81 \\ 75 \end{array}$ | $\begin{array}{r} 0.98 \\ 55 \end{array}$ | $\begin{array}{r} 1.41 \\ 58 \end{array}$ |
| Grade 9 mathematics High (geometry or higher) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.42 \\ 205 \end{array}$ | $\begin{array}{r} 0.29 \\ 266 \end{array}$ | $\begin{array}{r} 0.17 \\ 280 \end{array}$ | $\begin{array}{r} 0.11 \\ 329 \end{array}$ | $\begin{array}{r} 0.13 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.30 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.21 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.15 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.15 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.26 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n($ in $1,000 \mathrm{~s})$ | $\begin{array}{r} 0.50 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.55 \\ 692 \end{array}$ | $\begin{array}{r} 0.51 \\ 526 \end{array}$ | $\begin{array}{r} 0.33 \\ 504 \end{array}$ | $\begin{array}{r} 0.47 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.58 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.34 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.39 \\ 743 \end{array}$ |
| Suburban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.37 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.21 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.21 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.47 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.31 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.56 \\ 846 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.61 \\ 185 \end{array}$ | $\begin{array}{r} 0.44 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.19 \\ 1,296 \end{array}$ | 0.32 1,565 |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.15 \\ 351 \end{array}$ | 0.26 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.34 \\ 380 \\ \hline \end{array}$ | $\begin{array}{r} 0.65 \\ 386 \\ \hline \end{array}$ |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A29. Standard errors for table 29: Percentage of public high school graduates concentrating in other precision production, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.08 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.15 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.05 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.04 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.07 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.13 \\ 30 \end{array}$ | $12$ | $\begin{array}{r} 1.53 \\ 22 \end{array}$ | 17 | 12 |
| Asian/Pacific Islander | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.55 \\ 38 \end{array}$ | $\overline{86}$ | $\begin{array}{r} 0.13 \\ 88 \end{array}$ | $74$ | $\begin{array}{r} 0.07 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.41 \\ 293 \end{array}$ | $\begin{array}{r} 0.21 \\ 347 \end{array}$ | $\begin{array}{r} 0.07 \\ 254 \end{array}$ | $\begin{gathered} 0.10 \\ 263 \end{gathered}$ | $\begin{array}{r} 0.18 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.29 \\ 307 \end{array}$ | $\overline{194}$ | $\begin{array}{r} 0.12 \\ 207 \end{array}$ | $\begin{array}{r} 0.09 \\ 168 \end{array}$ | 299 |
| White, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.18 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,852 \end{array}$ |
| Sex <br> Male | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.15 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.19 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.14 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.05 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.17 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.03 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.01 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.03 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{gathered} 0.12 \\ 226 \end{gathered}$ | 64 | - | $\begin{array}{r} 0.36 \\ 82 \end{array}$ | 74 |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.08 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.14 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.04 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.08 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | 13 | - | 19 | 19 |
| Proficient | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.15 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.04 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.07 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted $n$ (in 1,000s) | $\begin{array}{r} 0.04 \\ 260 \end{array}$ | 258 | $\begin{array}{r} 0.07 \\ 233 \end{array}$ | $\overline{307}$ | $\begin{array}{r} 0.15 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.09 \\ 1,812 \end{array}$ | $\begin{array}{r} 0.16 \\ 1,809 \\ \hline \end{array}$ | $\begin{array}{r} 0.05 \\ 1,644 \end{array}$ | $\begin{array}{r} 0.04 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.06 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A29. Standard errors for table 29: Percentage of public high school graduates concentrating in other precision production, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} 0.19 \\ 534 \end{array}$ | $\begin{array}{r} 0.21 \\ 438 \end{array}$ | $\begin{array}{r} 0.22 \\ 295 \end{array}$ | $\begin{array}{r} 0.11 \\ 306 \end{array}$ | $\begin{array}{r} 0.17 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\overline{31}$ | $2 \overline{273}$ | $\begin{array}{r} 0.07 \\ 308 \end{array}$ | 330 | $\begin{array}{r} 0.14 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.08 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.10 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.04 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.08 \\ 2,141 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.61 \\ 86 \end{array}$ | $\begin{array}{r} 1.96 \\ 117 \end{array}$ | $\begin{array}{r} 0.00 \\ 75 \end{array}$ | $\begin{array}{r} 0.23 \\ 55 \end{array}$ | 58 |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.04 \\ 205 \end{array}$ | $2 \overline{266}$ | $\begin{array}{r} 0.13 \\ 280 \end{array}$ | 329 | $\begin{array}{r} 0.08 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.09 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.04 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.16 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.31 \\ 692 \end{array}$ | $\begin{array}{r} 0.12 \\ 526 \end{array}$ | $\begin{array}{r} 0.09 \\ 504 \end{array}$ | $\begin{array}{r} 0.16 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.14 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.09 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.09 \\ 743 \end{array}$ |
| Suburban | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.14 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.03 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.13 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.06 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.13 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.14 \\ 846 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | 185 | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.06 \\ 1,296 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,565 \end{array}$ |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{gathered} 0.06 \\ 351 \end{gathered}$ | 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.05 \\ 380 \\ \hline \end{array}$ | $\begin{array}{r} 0.18 \\ 386 \\ \hline \end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A30. Standard errors for table 30: Percentage of public high school graduates concentrating in transportation, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.02 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.05 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.01 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.04 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.04 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. weighted $n$ (in 1,000 s) | - | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.41 \\ 38 \end{array}$ | $\overline{86}$ | $\overline{88}$ | $\overline{74}$ | 92 |
| Black, non-Hispanic | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 0.14 \\ 293 \end{array}$ | $\overline{347}$ | $\overline{254}$ | $\begin{gathered} 0.13 \\ 263 \end{gathered}$ | 356 |
| Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.02 \\ 307 \end{array}$ | $\overline{194}$ | $2 \overline{207}$ | $\begin{array}{r} 0.06 \\ 168 \end{array}$ | $\begin{array}{r} 0.11 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.01 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.07 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.02 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.04 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.04 \\ 1,852 \end{array}$ |
| Sex <br> Male | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.04 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.02 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.07 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $1,350$ | $1, \overline{309}$ | $\begin{array}{r} 0.01 \\ 1,100 \end{array}$ | $1, \overline{126}$ | 1,347 |
| Disability status (grade 12) Has disability | s.e. weighted $n$ (in 1,000 s) | $226$ | $\overline{64}$ | - | 82 | 74 |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.02 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.05 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.04 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.04 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000s) | - | 13 | - | 19 | 19 |
| Proficient | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.05 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.04 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.04 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.06 \\ 260 \end{array}$ | $\overline{258}$ | 233 | $\overline{307}$ | 456 |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.02 \\ 1,812 \\ \hline \end{array}$ | $\begin{array}{r} 0.08 \\ 1,809 \\ \hline \end{array}$ | $\begin{array}{r} 0.02 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.04 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.04 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A30. Standard errors for table 30: Percentage of public high school graduates concentrating in transportation, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.04 \\ 534 \end{array}$ | $\overline{438}$ | $\overline{295}$ | $\begin{array}{r} 0.10 \\ 306 \end{array}$ | 186 |
| Academic coursework complet All high | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.50 \\ 31 \end{array}$ | $\overline{273}$ | $308$ | $\overline{330}$ | 386 |
| Mid-level or mixed | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.02 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.06 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.02 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.04 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.05 \\ 2,141 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\overline{86}$ | $\overline{117}$ | 75 | $\begin{array}{r} 0.49 \\ 55 \end{array}$ | 58 |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. weighted $n$ (in 1,000 s) | $205$ | $\overline{266}$ | $\overline{280}$ | 329 | 534 |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.01 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.07 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.01 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.03 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.05 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.03 \\ 692 \end{array}$ | $\begin{array}{r} 0.04 \\ 526 \end{array}$ | $\begin{array}{r} 0.11 \\ 504 \end{array}$ | $\begin{array}{r} 0.07 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.06 \\ 501 \end{array}$ | — | $\begin{gathered} 0.02 \\ 484 \end{gathered}$ | - | 743 |
| Suburban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.00 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.02 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.06 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.05 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.02 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.08 \\ 846 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.24 \\ 185 \end{array}$ | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.04 \\ 1,296 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,565 \end{array}$ |
| Low (5 percent or less in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 351 | 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.04 \\ 380 \end{array}$ | 386 |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A31. Standard errors for table 31: Percentage of public high school graduates concentrating in technology program areas, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.09 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.12 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.15 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.10 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.29 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\overline{30}$ | $\begin{array}{r} 2.27 \\ 12 \end{array}$ | 22 | 17 | 1.17 12 |
| Asian/Pacific Islander | s.e. weighted n (in 1,000s) | $\begin{array}{r} 1.13 \\ 38 \end{array}$ | $\begin{array}{r} 0.38 \\ 86 \end{array}$ | $\begin{array}{r} 0.13 \\ 88 \end{array}$ | $\begin{array}{r} 0.27 \\ 74 \end{array}$ | $\begin{array}{r} 0.36 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.14 \\ 293 \end{array}$ | $\begin{array}{r} 0.22 \\ 347 \end{array}$ | $\begin{array}{r} 0.26 \\ 254 \end{array}$ | $\begin{array}{r} 0.18 \\ 263 \end{array}$ | $\begin{array}{r} 0.49 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 0.09 \\ 307 \end{array}$ | $\begin{array}{r} 0.27 \\ 194 \end{array}$ | $\begin{array}{r} 0.38 \\ 207 \end{array}$ | $\begin{array}{r} 0.16 \\ 168 \end{array}$ | $\begin{array}{r} 0.42 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.11 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.14 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.19 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.35 \\ 1,852 \end{array}$ |
| Sex Male | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.25 \\ 226 \end{array}$ | $\begin{array}{r} 0.17 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.21 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.13 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.34 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 0.09 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.14 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.17 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.11 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.32 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.25 \\ 226 \end{array}$ | $\overline{64}$ | - | $\begin{array}{r} 0.41 \\ 82 \end{array}$ | $\begin{array}{r} 0.40 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.09 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.12 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.10 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.30 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | 13 | - | 19 | 19 |
| Proficient | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.12 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.10 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.29 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{gathered} 0.07 \\ 260 \end{gathered}$ | $\begin{array}{r} 0.39 \\ 258 \end{array}$ | $\begin{array}{r} 0.48 \\ 233 \end{array}$ | $\begin{array}{r} 0.28 \\ 307 \end{array}$ | $\begin{array}{r} 0.49 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.10 \\ 1,812 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,809 \end{array}$ | $\begin{array}{r} 0.13 \\ 1,644 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,600 \end{array}$ | $\begin{array}{r} 0.29 \\ 1,975 \end{array}$ |
| Low (less than 2.0) | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 0.19 \\ 534 \end{array}$ | $\begin{array}{r} 0.17 \\ 438 \\ \hline \end{array}$ | $\begin{array}{r} 0.46 \\ 295 \\ \hline \end{array}$ | $\begin{array}{r} 0.16 \\ 306 \end{array}$ | $\begin{array}{r} 0.32 \\ 186 \\ \hline \end{array}$ |

See notes at end of table.

Table A31. Standard errors for table 31: Percentage of public high school graduates concentrating in technology program areas, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | 0.00 | 0.44 | 0.46 | 0.24 | 0.51 |
|  | weighted n (in 1,000s) | 31 | 273 | 308 | 330 | 386 |
| Mid-level or mixed | s.e. | 0.09 | 0.12 | 0.16 | 0.10 | 0.31 |
|  | weighted n (in 1,000s) | 2,485 | 2,098 | 1,781 | 1,810 | 2,141 |
| All low | s.e. | 0.48 | - | 0.20 | 0.37 | - |
|  | weighted n (in 1,000s) | 86 | 117 | 75 | 55 | 58 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 0.22 | 0.37 | 0.42 | 0.29 | 0.52 |
|  | weighted n (in 1,000s) | 205 | 266 | 280 | 329 | 534 |
| Mid-level (prealgebra or | s.e. | 0.10 | 0.14 | 0.19 | 0.12 | 0.28 |
| algebra 1) | weighted n (in 1,000s) | 1,374 | 1,546 | 1,369 | 1,380 | 1,635 |
| Low (no or low mathematics) | s.e. | 0.15 | 0.14 | 0.19 | 0.12 | 0.31 |
|  | weighted n (in 1,000s) | 1,028 | 692 | 526 | 504 | 447 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 0.12 | - | 0.41 | - | 0.37 |
|  | weighted n (in 1,000s) | 501 | - | 484 | - | 743 |
| Suburban | s.e. | 0.16 | - | 0.21 | - | 0.44 |
|  | weighted n (in 1,000s) | 1,261 | - | 961 | - | 1,028 |
| Rural | s.e. | 0.10 | - | 0.19 | - | 0.54 |
|  | weighted n (in 1,000s) | 845 | - | 729 | - | 846 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 0.31 | 0.62 |
|  | weighted n (in 1,000s) | - | - | - | 185 | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 0.10 | 0.34 |
|  | weighted n (in 1,000s) | - | - | - | 1,296 | 1,565 |
| Low ( 5 percent or less in NSLP) | s.e. | - | - | - | 0.32 | 0.85 |
|  | weighted n (in 1,000s) | - | - | - | 351 | 425 |
| Not reported | s.e. | - | - | - | 0.16 | 0.41 |
|  | weighted n (in 1,000s) | - | - | - | 380 | 386 |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A32. Standard errors for table 32: Percentage of public high school graduates concentrating in computer technology, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.06 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.08 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.06 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.18 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\overline{30}$ | $\overline{12}$ | 22 | 17 | $\begin{array}{r} 0.76 \\ 12 \end{array}$ |
| Asian/Pacific Islander | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.13 \\ 38 \end{array}$ | $\begin{array}{r} 0.36 \\ 86 \end{array}$ | $\begin{array}{r} 0.11 \\ 88 \end{array}$ | $\overline{74}$ | $\begin{array}{r} 0.23 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.13 \\ 293 \end{array}$ | $\begin{array}{r} 0.17 \\ 347 \end{array}$ | $\begin{array}{r} 0.26 \\ 254 \end{array}$ | $\begin{array}{r} 0.09 \\ 263 \end{array}$ | $\begin{array}{r} 0.23 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.03 \\ 307 \end{array}$ | $\overline{194}$ | $\begin{array}{r} 0.35 \\ 207 \end{array}$ | $\begin{array}{r} 0.04 \\ 168 \end{array}$ | $\begin{array}{r} 0.17 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.08 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.25 \\ 1,852 \end{array}$ |
| Sex <br> Male | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.12 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.14 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.24 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.13 \\ 226 \end{array}$ | $\overline{64}$ | - | $\begin{array}{r} 0.27 \\ 82 \end{array}$ | $\begin{array}{r} 0.35 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.06 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.06 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.18 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | 13 | - | 19 | 19 |
| Proficient | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.06 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.06 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.18 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) <br> High (greater than 3.5) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.05 \\ 260 \end{array}$ | $\begin{array}{r} 0.13 \\ 258 \end{array}$ | $\begin{gathered} 0.22 \\ 233 \end{gathered}$ | $\begin{array}{r} 0.11 \\ 307 \end{array}$ | $\begin{array}{r} 0.27 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 1,812 \\ \hline \end{array}$ | $\begin{array}{r} 0.07 \\ 1,809 \\ \hline \end{array}$ | $\begin{array}{r} 0.08 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.08 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.18 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A32. Standard errors for table 32: Percentage of public high school graduates concentrating in computer technology, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.14 \\ 534 \end{array}$ | $\begin{array}{r} 0.11 \\ 438 \end{array}$ | $\begin{array}{r} 0.17 \\ 295 \end{array}$ | $\begin{array}{r} 0.10 \\ 306 \end{array}$ | $\begin{array}{r} 0.22 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.00 \\ 31 \end{array}$ | $\begin{array}{r} 0.15 \\ 273 \end{array}$ | $\begin{array}{r} 0.15 \\ 308 \end{array}$ | $\begin{array}{r} 0.10 \\ 330 \end{array}$ | $\begin{array}{r} 0.22 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.07 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.07 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.21 \\ 2,141 \end{array}$ |
| All low | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.14 \\ 86 \end{array}$ | $\overline{117}$ | $\begin{array}{r} 0.11 \\ 75 \end{array}$ | 55 | 58 |
| Grade 9 mathematics High (geometry or higher) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.19 \\ 205 \end{array}$ | $\begin{array}{r} 0.29 \\ 266 \end{array}$ | $\begin{array}{r} 0.26 \\ 280 \end{array}$ | $\begin{array}{r} 0.14 \\ 329 \end{array}$ | $\begin{gathered} 0.38 \\ 534 \end{gathered}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.08 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.07 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.13 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.10 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.09 \\ 692 \end{array}$ | $\begin{array}{r} 0.15 \\ 526 \end{array}$ | $\begin{array}{r} 0.06 \\ 504 \end{array}$ | $\begin{array}{r} 0.23 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.06 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.17 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.09 \\ 743 \end{array}$ |
| Suburban | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.12 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.11 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.17 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.09 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.13 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.49 \\ 846 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.11 \\ 185 \end{array}$ | $\begin{array}{r} 0.30 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.04 \\ 1,296 \end{array}$ | 0.30 1,565 |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in 1,000s) | - | - | - | $\begin{array}{r} 0.31 \\ 351 \end{array}$ | 0.09 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{gathered} 0.08 \\ 380 \end{gathered}$ | $\begin{array}{r} 0.13 \\ 386 \\ \hline \end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A33. Standard errors for table 33: Percentage of public high school graduates concentrating in communications technology, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.04 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.05 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.05 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.06 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.12 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\overline{30}$ | $\overline{12}$ | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. weighted n (in 1,000s) | $\overline{38}$ | $\overline{86}$ | $\begin{array}{r} 0.04 \\ 88 \end{array}$ | $\begin{array}{r} 0.15 \\ 74 \end{array}$ | $\begin{array}{r} 0.22 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.04 \\ 293 \end{array}$ | $\begin{array}{r} 0.09 \\ 347 \end{array}$ | $\begin{array}{r} 0.07 \\ 254 \end{array}$ | $\begin{array}{r} 0.10 \\ 263 \end{array}$ | $\begin{array}{r} 0.14 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{gathered} 0.07 \\ 307 \end{gathered}$ | $\begin{array}{r} 0.12 \\ 194 \end{array}$ | $\begin{array}{r} 0.06 \\ 207 \end{array}$ | $\begin{array}{r} 0.10 \\ 168 \end{array}$ | $\begin{array}{r} 0.12 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.05 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.07 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.16 \\ 1,852 \end{array}$ |
| Sex <br> Male | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.14 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.03 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.07 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.15 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $226$ | 64 | - | $\begin{array}{r} 0.21 \\ 82 \end{array}$ | $\begin{array}{r} 0.24 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.04 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.05 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.06 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.12 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000 s) | - | 13 | - | 19 | 19 |
| Proficient | s.e. weighted n (in 1,000s) | - | $\begin{array}{r} 0.05 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.06 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.12 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) <br> High (greater than 3.5) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{gathered} 0.05 \\ 260 \end{gathered}$ | $\begin{array}{r} 0.12 \\ 258 \end{array}$ | $\begin{array}{r} 0.15 \\ 233 \end{array}$ | $\begin{array}{r} 0.20 \\ 307 \end{array}$ | $\begin{array}{r} 0.29 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.05 \\ 1,812 \\ \hline \end{array}$ | $\begin{array}{r} 0.07 \\ 1,809 \\ \hline \end{array}$ | $\begin{array}{r} 0.06 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.06 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.12 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A33. Standard errors for table 33: Percentage of public high school graduates concentrating in communications technology, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.05 \\ 534 \end{array}$ | $\overline{438}$ | $\begin{array}{r} 0 \\ 295 \end{array}$ | $\begin{array}{r} 0.06 \\ 306 \end{array}$ | 186 |
| Academic coursework complet All high | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | 31 | $\begin{array}{r} 0.13 \\ 273 \end{array}$ | $\begin{array}{r} 0.16 \\ 308 \end{array}$ | $\begin{array}{r} 0.21 \\ 330 \end{array}$ | $\begin{array}{r} 0.31 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.04 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.05 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.11 \\ 2,141 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.46 \\ 86 \end{array}$ | $\overline{117}$ | $\begin{array}{r} 0.17 \\ 75 \end{array}$ | $55$ | 58 |
| Grade 9 mathematics High (geometry or higher) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.10 \\ 205 \end{array}$ | $\begin{gathered} 0.17 \\ 266 \end{gathered}$ | $\begin{array}{r} 0.14 \\ 280 \end{array}$ | $\begin{array}{r} 0.20 \\ 329 \end{array}$ | $\begin{array}{r} 0.25 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.06 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.13 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.06 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.06 \\ 692 \end{array}$ | $\begin{gathered} 0.07 \\ 526 \end{gathered}$ | $\begin{array}{r} 0.09 \\ 504 \end{array}$ | $\begin{array}{r} 0.13 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.06 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.11 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.19 \\ 743 \end{array}$ |
| Suburban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.07 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.25 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.04 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.07 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.19 \\ 846 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.10 \\ 185 \end{array}$ | $\begin{array}{r} 0.30 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.09 \\ 1,296 \end{array}$ | 0.11 1,565 |
| Low (5 percent or less in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.13 \\ 351 \end{array}$ | 0.51 425 |
| Not reported | s.e. weighted n (in 1,000s) | - | - | - | $\begin{array}{r} 0.10 \\ 380 \end{array}$ | $\begin{array}{r}0.21 \\ 386 \\ \hline\end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A34. Standard errors for table 34: Percentage of public high school graduates concentrating in other technologies, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.03 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.02 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.06 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.02 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.06 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\overline{30}$ | $\overline{12}$ | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. weighted $n$ (in 1,000s) | $38$ | $\overline{86}$ | 88 | 74 | $\begin{array}{r} 0.25 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $293$ | $347$ | $254$ | $\begin{array}{r} 0.10 \\ 263 \end{array}$ | 356 |
| Hispanic | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.05 \\ 307 \end{array}$ | $\overline{194}$ | $\begin{array}{r} 0.14 \\ 207 \end{array}$ | 168 | $\begin{array}{r} 0.14 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.04 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.03 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.02 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.07 \\ 1,852 \end{array}$ |
| Sex <br> Male | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.06 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.04 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.03 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.13 \\ 1,232 \end{array}$ |
| Female | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $1, \overline{550}$ | $1, \overline{309}$ | $\begin{array}{r} 0.04 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.02 \\ 1,126 \end{array}$ | 1,347 |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{gathered} 0.22 \\ 226 \end{gathered}$ | $\overline{64}$ | - | 82 | 74 |
| No indicated disability | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.03 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.02 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.02 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.06 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | 13 | - | 19 | 19 |
| Proficient | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.02 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.02 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.06 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) <br> High (greater than 3.5) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | 260 | $\overline{258}$ | $\begin{array}{r} 0.27 \\ 233 \end{array}$ | 307 | 456 |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.03 \\ 1,812 \\ \hline \end{array}$ | $\begin{array}{r} 0.02 \\ 1,809 \\ \hline \end{array}$ | $\begin{array}{r} 0.04 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.03 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.08 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A34. Standard errors for table 34: Percentage of public high school graduates concentrating in other technologies, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.12 \\ 534 \end{array}$ | $\overline{438}$ | $\begin{array}{r} 0.12 \\ 295 \end{array}$ | 306 | 186 |
| Academic coursework complete All high | s.e. weighted $n$ (in 1,000 s) | $31$ | $2 \overline{273}$ | $\begin{array}{r} 0.37 \\ 308 \end{array}$ | 330 | 386 |
| Mid-level or mixed | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.03 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.03 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.04 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.02 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.07 \\ 2,141 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\overline{86}$ | $\overline{117}$ | $\overline{75}$ | 55 | 58 |
| Grade 9 mathematics <br> High (geometry or higher) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $205$ | $\overline{266}$ | $\begin{array}{r} 0.25 \\ 280 \end{array}$ | 329 | $\begin{array}{r} 0.04 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.03 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.04 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.03 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.07 \\ 1,028 \end{array}$ | $\overline{692}$ | $\begin{array}{r} 0.05 \\ 526 \end{array}$ | 504 | 447 |
| School urbanicity Urban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.03 \\ 501 \end{array}$ |  | $\begin{array}{r} 0.15 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.12 \\ 743 \end{array}$ |
| Suburban | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.05 \\ 1,261 \end{array}$ | — | $\begin{array}{r} 0.11 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.13 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.05 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.01 \\ 729 \end{array}$ | - | 846 |
| School poverty level High (greater than 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.23 \\ 185 \end{array}$ | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.02 \\ 1,296 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,565 \end{array}$ |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | 351 | 0.28 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 380 | $\begin{array}{r} 0.17 \\ 386 \\ \hline \end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A35. Standard errors for table 35: Percentage of public high school graduates concentrating in food service and hospitality, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.06 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.12 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.10 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.07 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.10 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.81 \\ 30 \end{array}$ | 12 | $\begin{array}{r} 2.07 \\ 22 \end{array}$ | 17 | 12 |
| Asian/Pacific Islander | s.e. weighted n (in 1,000s) | $38$ | 86 | $\begin{array}{r} 0.05 \\ 88 \end{array}$ | 74 | $\begin{array}{r} 0.12 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.22 \\ 293 \end{array}$ | $\begin{array}{r} 0.59 \\ 347 \end{array}$ | $\begin{array}{r} 0.64 \\ 254 \end{array}$ | $\begin{array}{r} 0.24 \\ 263 \end{array}$ | $\begin{array}{r} 0.47 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.16 \\ 307 \end{array}$ | $\begin{array}{r} 0.23 \\ 194 \end{array}$ | $\begin{array}{r} 0.46 \\ 207 \end{array}$ | $\begin{array}{r} 0.23 \\ 168 \end{array}$ | $\begin{array}{r} 0.09 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.06 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,852 \end{array}$ |
| Sex Male | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.08 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.19 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.14 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,232 \end{array}$ |
| Female | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.09 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.13 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.13 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.39 \\ 226 \end{array}$ | $\begin{array}{r} 1.17 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.58 \\ 82 \end{array}$ | $\begin{array}{r} 0.46 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.05 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.11 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.06 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.10 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | 13 | - | 19 | 19 |
| Proficient | s.e. weighted $n$ (in 1,000s) | - | $\begin{array}{r} 0.12 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.07 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.10 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $2 \overline{60}$ | 258 | 233 | $\begin{array}{r} 0.05 \\ 307 \end{array}$ | 456 |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.08 \\ 1,812 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,809 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,644 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,600 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A35. Standard errors for table 35: Percentage of public high school graduates concentrating in food service and hospitality, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.09 \\ 534 \end{array}$ | $\begin{array}{r} 0.43 \\ 438 \end{array}$ | $\begin{array}{r} 0.45 \\ 295 \end{array}$ | $\begin{array}{r} 0.22 \\ 306 \end{array}$ | $\begin{array}{r} 0.44 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. weighted $n$ (in 1,000 s) | $31$ | $273$ | $308$ | $330$ | $\begin{array}{r} 0.09 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.06 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.09 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.11 \\ 2,141 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.81 \\ 86 \end{array}$ | $\begin{array}{r} 1.13 \\ 117 \end{array}$ | $\begin{array}{r} 0.82 \\ 75 \end{array}$ | $\begin{array}{r} 0.88 \\ 55 \end{array}$ | $\begin{array}{r} 1.14 \\ 58 \end{array}$ |
| Grade 9 mathematics High (geometry or higher) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\overline{205}$ | $2 \overline{266}$ | $\overline{280}$ | $\overline{329}$ | $\begin{array}{r} 0.10 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.12 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.37 \\ 692 \end{array}$ | $\begin{array}{r} 0.36 \\ 526 \end{array}$ | $\begin{array}{r} 0.23 \\ 504 \end{array}$ | $\begin{array}{r} 0.18 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.20 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.20 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.21 \\ 743 \end{array}$ |
| Suburban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.18 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.16 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.09 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.12 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.10 \\ 846 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. <br> weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.12 \\ 185 \end{array}$ | $\begin{array}{r} 0.06 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted $n$ (in 1,000s) | - | - | - | $\begin{array}{r} 0.10 \\ 1,296 \end{array}$ | 0.13 1,565 |
| Low (5 percent or less in NSLP) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.21 \\ 351 \end{array}$ | 0.20 425 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.20 \\ 380 \\ \hline \end{array}$ | $\begin{array}{r}0.29 \\ 386 \\ \hline\end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A36. Standard errors for table 36: Percentage of public high school graduates concentrating in child care and education, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.05 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.05 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.07 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.11 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.10 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.48 \\ 30 \end{array}$ | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $38$ | 86 | 88 | 74 | $\begin{array}{r} 0.05 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.16 \\ 293 \end{array}$ | $\begin{array}{r} 0.18 \\ 347 \end{array}$ | $\begin{array}{r} 0.21 \\ 254 \end{array}$ | $\begin{array}{r} 0.45 \\ 263 \end{array}$ | $\begin{array}{r} 0.13 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.09 \\ 307 \end{array}$ | 194 | $\begin{array}{r} 0.10 \\ 207 \end{array}$ | $\begin{array}{r} 0.20 \\ 168 \end{array}$ | $\begin{array}{r} 0.16 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} 0.06 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,852 \end{array}$ |
| Sex <br> Male | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.03 \\ 1,257 \end{array}$ | $1, \overline{194}$ | $\begin{array}{r} 0.05 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.02 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.03 \\ 1,232 \end{array}$ |
| Female | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.09 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.10 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.11 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.20 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.19 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.27 \\ 226 \end{array}$ | $\begin{array}{r} 0.45 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.34 \\ 82 \end{array}$ | $\begin{array}{r} 0.43 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.05 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.05 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.11 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.10 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | 13 | - | 19 | 19 |
| Proficient | s.e. weighted n (in 1,000s) | - | $\begin{array}{r} 0.05 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.11 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.10 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted n (in 1,000s) | $\begin{gathered} 0.02 \\ 260 \end{gathered}$ | 258 | $\begin{array}{r} 0.13 \\ 233 \end{array}$ | $\begin{array}{r} 0.07 \\ 307 \end{array}$ | $\begin{array}{r} 0.06 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.06 \\ 1,812 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,809 \\ \hline \end{array}$ | $\begin{array}{r} 0.08 \\ 1,644 \\ \hline \end{array}$ | $\begin{array}{r} 0.11 \\ 1,600 \\ \hline \end{array}$ | $\begin{array}{r} 0.12 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A36. Standard errors for table 36: Percentage of public high school graduates concentrating in child care and education, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.12 \\ 534 \end{array}$ | $\begin{array}{r} 0.10 \\ 438 \end{array}$ | $\begin{array}{r} 0.20 \\ 295 \end{array}$ | $\begin{array}{r} 0.29 \\ 306 \end{array}$ | $\begin{array}{r} 0.23 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. <br> weighted $n$ (in 1,000 s) | 31 | $273$ | $308$ | $\begin{array}{r} 0.05 \\ 330 \end{array}$ | $\begin{array}{r} 0.09 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.05 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.06 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.08 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.13 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.12 \\ 2,141 \end{array}$ |
| All low | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.64 \\ 86 \end{array}$ | $\begin{array}{r} 0.16 \\ 117 \end{array}$ | $\begin{array}{r} 0.77 \\ 75 \end{array}$ | $\begin{array}{r} 0.79 \\ 55 \end{array}$ | 58 |
| Grade 9 mathematics High (geometry or higher) | s.e. weighted $n$ (in 1,000 s) | $205$ | $\begin{gathered} 0.07 \\ 266 \end{gathered}$ | $\begin{gathered} 0.06 \\ 280 \end{gathered}$ | $\begin{array}{r} 0.05 \\ 329 \end{array}$ | $\begin{array}{r} 0.13 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.07 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.13 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.15 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.09 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.12 \\ 692 \end{array}$ | $\begin{array}{r} 0.15 \\ 526 \end{array}$ | $\begin{array}{r} 0.20 \\ 504 \end{array}$ | $\begin{array}{r} 0.16 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.17 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.10 \\ 484 \end{array}$ | - | $\begin{gathered} 0.20 \\ 743 \end{gathered}$ |
| Suburban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.06 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.12 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.13 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.09 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.11 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.17 \\ 846 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.69 \\ 185 \end{array}$ | $\begin{array}{r} 0.16 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 0.12 1,296 | 0.12 1,565 |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in 1,000s) | - | - | - | 0.25 351 | 0.25 425 |
| Not reported | s.e. weighted n (in 1,000s) | - | - | - | 0.24 380 | $\begin{array}{r}0.36 \\ 386 \\ \hline\end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A37. Standard errors for table 37: Percentage of public high school graduates concentrating in personal and other services, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.20 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.17 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.25 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.15 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.11 \\ 2,617 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.44 \\ 30 \end{array}$ | 12 | $\begin{array}{r} 1.28 \\ 22 \end{array}$ | 17 | 12 |
| Asian/Pacific Islander | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.23 \\ 38 \end{array}$ | $\overline{86}$ | $\begin{array}{r} 0.05 \\ 88 \end{array}$ | $\begin{array}{r} 0.14 \\ 74 \end{array}$ | 92 |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.47 \\ 293 \end{array}$ | $\begin{array}{r} 0.47 \\ 347 \end{array}$ | $\begin{array}{r} 1.12 \\ 254 \end{array}$ | $\begin{array}{r} 0.34 \\ 263 \end{array}$ | $\begin{array}{r} 0.33 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.37 \\ 307 \end{array}$ | $\begin{array}{r} 0.74 \\ 194 \end{array}$ | $\begin{array}{r} 0.86 \\ 207 \end{array}$ | $\begin{array}{r} 0.51 \\ 168 \end{array}$ | $\begin{array}{r} 0.39 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.26 \\ 1,913 \end{array}$ | $\begin{array}{r} 0.19 \\ 1,778 \end{array}$ | $\begin{array}{r} 0.26 \\ 1,596 \end{array}$ | $\begin{array}{r} 0.18 \\ 1,564 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,852 \end{array}$ |
| Sex Male | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.20 \\ 1,257 \end{array}$ | $\begin{array}{r} 0.05 \\ 1,194 \end{array}$ | $\begin{array}{r} 0.19 \\ 1,074 \end{array}$ | $\begin{array}{r} 0.07 \\ 1,083 \end{array}$ | $\begin{array}{r} 0.06 \\ 1,232 \end{array}$ |
| Female | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.35 \\ 1,350 \end{array}$ | $\begin{array}{r} 0.30 \\ 1,309 \end{array}$ | $\begin{array}{r} 0.39 \\ 1,100 \end{array}$ | $\begin{array}{r} 0.25 \\ 1,126 \end{array}$ | $\begin{array}{r} 0.21 \\ 1,347 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{gathered} 0.40 \\ 226 \end{gathered}$ | $\begin{array}{r} 1.06 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.52 \\ 82 \end{array}$ | $\begin{array}{r} 0.92 \\ 74 \end{array}$ |
| No indicated disability | s.e. <br> weighted $n$ (in 1,000s) | $\begin{array}{r} 0.22 \\ 2,361 \end{array}$ | $\begin{array}{r} 0.16 \\ 2,441 \end{array}$ | - | $\begin{array}{r} 0.14 \\ 2,130 \end{array}$ | $\begin{array}{r} 0.12 \\ 2,543 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 2.51 \\ 13 \end{array}$ | - | $\begin{array}{r} 1.58 \\ 19 \end{array}$ | 19 |
| Proficient | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.16 \\ 2,492 \end{array}$ | - | $\begin{array}{r} 0.15 \\ 2,194 \end{array}$ | $\begin{array}{r} 0.11 \\ 2,598 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{gathered} 0.17 \\ 260 \end{gathered}$ | $\begin{array}{r} 0.11 \\ 258 \end{array}$ | 233 | $\begin{array}{r} 0.06 \\ 307 \end{array}$ | $\begin{array}{r} 0.15 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.22 \\ 1,812 \end{array}$ | $\begin{array}{r} 0.19 \\ 1,809 \end{array}$ | $\begin{array}{r} 0.31 \\ 1,644 \end{array}$ | $\begin{array}{r} 0.17 \\ 1,600 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,975 \\ \hline \end{array}$ |

See notes at end of table.

Table A37. Standard errors for table 37: Percentage of public high school graduates concentrating in personal and other services, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.69 \\ 534 \end{array}$ | $\begin{array}{r} 0.34 \\ 438 \end{array}$ | $\begin{array}{r} 0.47 \\ 295 \end{array}$ | $\begin{array}{r} 0.29 \\ 306 \end{array}$ | $\begin{array}{r} 0.31 \\ 186 \end{array}$ |
| Academic coursework complet All high | s.e. <br> weighted $n$ (in 1,000 s) | 31 | $273$ | $308$ | $\begin{array}{r} 0.12 \\ 330 \end{array}$ | $\begin{array}{r} 0.31 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.21 \\ 2,485 \end{array}$ | $\begin{array}{r} 0.19 \\ 2,098 \end{array}$ | $\begin{array}{r} 0.29 \\ 1,781 \end{array}$ | $\begin{array}{r} 0.18 \\ 1,810 \end{array}$ | $\begin{array}{r} 0.11 \\ 2,141 \end{array}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.69 \\ 86 \end{array}$ | $\begin{array}{r} 0.78 \\ 117 \end{array}$ | $\begin{array}{r} 1.63 \\ 75 \end{array}$ | $\begin{array}{r} 0.48 \\ 55 \end{array}$ | $\begin{array}{r} 1.12 \\ 58 \end{array}$ |
| Grade 9 mathematics High (geometry or higher) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.32 \\ 205 \end{array}$ | $\begin{gathered} 0.13 \\ 266 \end{gathered}$ | $\begin{gathered} 0.29 \\ 280 \end{gathered}$ | $\begin{array}{r} 0.14 \\ 329 \end{array}$ | $\begin{array}{r} 0.09 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.35 \\ 1,374 \end{array}$ | $\begin{array}{r} 0.21 \\ 1,546 \end{array}$ | $\begin{array}{r} 0.33 \\ 1,369 \end{array}$ | $\begin{array}{r} 0.11 \\ 1,380 \end{array}$ | $\begin{array}{r} 0.15 \\ 1,635 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.23 \\ 1,028 \end{array}$ | $\begin{array}{r} 0.31 \\ 692 \end{array}$ | $\begin{array}{r} 0.37 \\ 526 \end{array}$ | $\begin{array}{r} 0.48 \\ 504 \end{array}$ | $\begin{array}{r} 0.32 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.76 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.29 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.24 \\ 743 \end{array}$ |
| Suburban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.26 \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.45 \\ 961 \end{array}$ | - | $\begin{array}{r} 0.20 \\ 1,028 \end{array}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.21 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.40 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.11 \\ 846 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.49 \\ 185 \end{array}$ | $\begin{array}{r} 0.69 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 0.23 1,296 | 0.13 1,565 |
| Low (5 percent or less in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.16 \\ 351 \end{array}$ | 0.34 425 |
| Not reported | s.e. weighted n (in 1,000s) | - | - | - | 0.33 380 | $\begin{array}{r}0.34 \\ 386 \\ \hline\end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A38. Standard errors for table 38: Percentage distribution of public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} \dagger \\ 2,607 \end{array}$ | $2,505$ | $2,174^{\dagger}$ | $2,{ }^{\dagger}{ }^{\dagger}$ | $2,617$ |
| Race/ethnicity American Indian/Alaska Native | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.21 \\ 2,581 \end{array}$ | $\begin{array}{r} 0.17 \\ 2,415 \end{array}$ | $\begin{array}{r} 0.20 \\ 2,167 \end{array}$ | $\begin{array}{r} 0.25 \\ 2,085 \end{array}$ | $\begin{array}{r} 0.12 \\ 2,617 \end{array}$ |
| Asian/Pacific Islander | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.16 \\ 2,581 \end{array}$ | $\begin{array}{r} 0.21 \\ 2,415 \end{array}$ | $\begin{array}{r} 0.32 \\ 2,167 \end{array}$ | $\begin{array}{r} 0.19 \\ 2,085 \end{array}$ | $\begin{array}{r} 0.23 \\ 2,617 \end{array}$ |
| Black, non-Hispanic | s.e. <br> weighted $n$ (in 1,000s) | $\begin{array}{r} 0.65 \\ 2,581 \end{array}$ | $\begin{array}{r} 0.40 \\ 2,415 \end{array}$ | $\begin{array}{r} 0.87 \\ 2,167 \end{array}$ | $\begin{array}{r} 0.37 \\ 2,085 \end{array}$ | $\begin{array}{r} 0.34 \\ 2,617 \end{array}$ |
| Hispanic | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.43 \\ 2,581 \end{array}$ | $\begin{array}{r} 0.24 \\ 2,415 \end{array}$ | $\begin{array}{r} 0.83 \\ 2,167 \end{array}$ | $\begin{array}{r} 0.58 \\ 2,085 \end{array}$ | $\begin{array}{r} 0.30 \\ 2,617 \end{array}$ |
| White, non-Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.84 \\ 2,581 \end{array}$ | $\begin{array}{r} 0.51 \\ 2,415 \end{array}$ | $\begin{array}{r} 1.24 \\ 2,167 \end{array}$ | $\begin{array}{r} 0.63 \\ 2,085 \end{array}$ | $\begin{array}{r} 0.50 \\ 2,617 \end{array}$ |
| Other | s.e. weighted $n$ (in 1,000s) |  | - | - | - | $\begin{array}{r} 0.10 \\ 2,617 \end{array}$ |
| Sex Male | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} 0.53 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.53 \\ 2,503 \end{array}$ | $\begin{array}{r} 0.89 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.42 \\ 2,209 \end{array}$ | $\begin{array}{r} 0.44 \\ 2,579 \end{array}$ |
| Female | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.53 \\ 2,607 \end{array}$ | $\begin{array}{r} 0.53 \\ 2,503 \end{array}$ | $\begin{array}{r} 0.89 \\ 2,174 \end{array}$ | $\begin{array}{r} 0.42 \\ 2,209 \end{array}$ | $\begin{array}{r} 0.44 \\ 2,579 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.39 \\ 2,587 \end{array}$ | $\begin{array}{r} 0.25 \\ 2,505 \end{array}$ | - | $\begin{array}{r} 0.22 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.21 \\ 2,617 \end{array}$ |
| No indicated disability | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.39 \\ 2,587 \end{array}$ | $\begin{array}{r} 0.25 \\ 2,505 \end{array}$ | - | $\begin{array}{r} 0.22 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.21 \\ 2,617 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted n (in 1,000s) | - | $\begin{array}{r} 0.11 \\ 2,505 \end{array}$ | - | $\begin{array}{r} 0.20 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.10 \\ 2,617 \end{array}$ |
| Proficient | s.e. weighted n (in 1,000s) | - | $\begin{array}{r} 0.11 \\ 2,505 \end{array}$ | - | $\begin{array}{r} 0.20 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.10 \\ 2,617 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.45 \\ 2,606 \end{array}$ | $\begin{array}{r} 0.36 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.49 \\ 2,173 \end{array}$ | $\begin{array}{r} 0.56 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.52 \\ 2,617 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.69 \\ 2,606 \end{array}$ | $\begin{array}{r} 0.47 \\ 2,505 \end{array}$ | $\begin{array}{r} 0.72 \\ 2,173 \end{array}$ | $\begin{array}{r} 0.51 \\ 2,213 \end{array}$ | $\begin{array}{r} 0.93 \\ 2,617 \end{array}$ |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.65 \\ 2,606 \\ \hline \end{array}$ | $\begin{array}{r} 0.58 \\ 2,505 \\ \hline \end{array}$ | $\begin{array}{r} 0.65 \\ 2,173 \\ \hline \end{array}$ | $\begin{array}{r} 0.52 \\ 2,213 \\ \hline \end{array}$ | $\begin{array}{r} 0.97 \\ 2,617 \\ \hline \end{array}$ |

See notes at end of table.

Table A38. Standard errors for table 38: Percentage distribution of public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | 0.32 | 0.75 | 0.68 | 0.76 | 0.93 |
|  | weighted n (in 1,000s) | 2,602 | 2,489 | 2,164 | 2,195 | 2,585 |
| Mid-level or mixed | s.e. | 0.42 | 0.84 | 0.72 | 0.77 | 0.93 |
|  | weighted n (in 1,000s) | 2,602 | 2,489 | 2,164 | 2,195 | 2,585 |
| All low | s.e. | 0.29 | 0.56 | 0.31 | 0.19 | 0.36 |
|  | weighted n (in 1,000s) | 2,602 | 2,489 | 2,164 | 2,195 | 2,585 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 0.48 | 0.78 | 0.69 | 0.96 | 1.14 |
|  | weighted n (in 1,000s) | 2,607 | 2,505 | 2,174 | 2,213 | 2,617 |
| Mid-level (prealgebra or algebra 1) | s.e. | 0.95 | 1.32 | 0.95 | 1.30 | 1.32 |
|  | weighted n (in 1,000s) | 2,607 | 2,505 | 2,174 | 2,213 | 2,617 |
| Low (no or low mathematics) | s.e. | 0.93 | 1.42 | 0.85 | 0.94 | 0.96 |
|  | weighted n (in 1,000s) | 2,607 | 2,505 | 2,174 | 2,213 | 2,617 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 1.35 | - | 1.56 | - | 2.37 |
|  | weighted n (in 1,000s) | 2,607 | - | 2,174 | - | 2,617 |
| Suburban | s.e. | 1.69 | - | 1.94 | - | 2.71 |
|  | weighted n (in 1,000s) | 2,607 | - | 2,174 | - | 2,617 |
| Rural | s.e. | 1.45 | - | 1.86 | - | 2.23 |
|  | weighted n (in 1,000s) | 2,607 | - | 2,174 | - | 2,617 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 1.44 | 1.72 |
|  | weighted n (in 1,000s) | - | - | - | 2,213 | 2,617 |
| Middle (greater than 5 to 50 percent in NSLP) |  | - | - | - | 3.46 | 3.83 |
|  | weighted n (in 1,000s) | - | - | - | 2,213 | 2,617 |
| Low ( 5 percent or less in NSLP) | s.e. | - | - | - | 2.88 | 2.75 |
|  | weighted n (in 1,000s) | - | - | - | 2,213 | 2,617 |
| Not reported |  | - | - | - | 2.68 | 2.57 |
|  | weighted n (in 1,000s) | - | - | - | 2,213 | 2,617 |

-Not available.
$\dagger$ Not applicable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A39. Standard errors for table 39: Percentage distribution of occupational concentrators, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} \dagger \\ 878 \end{array}$ | $\begin{array}{r} \dagger \\ 696 \end{array}$ | $\begin{array}{r} \dagger \\ 542 \end{array}$ | $\begin{array}{r} \dagger \\ 562 \end{array}$ | $\begin{array}{r} \dagger \\ 654 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.47 \\ 867 \end{array}$ | $\begin{array}{r} 0.22 \\ 674 \end{array}$ | $\begin{array}{r} 0.33 \\ 540 \end{array}$ | $\begin{array}{r} 0.26 \\ 528 \end{array}$ | $\begin{array}{r} 0.14 \\ 654 \end{array}$ |
| Asian/Pacific Islander | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.16 \\ 867 \end{array}$ | $\begin{array}{r} 0.55 \\ 674 \end{array}$ | $\begin{array}{r} 0.72 \\ 540 \end{array}$ | $\begin{array}{r} 0.41 \\ 528 \end{array}$ | $\begin{array}{r} 0.29 \\ 654 \end{array}$ |
| Black, non-Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.91 \\ 867 \end{array}$ | $\begin{array}{r} 1.32 \\ 674 \end{array}$ | $\begin{array}{r} 1.09 \\ 540 \end{array}$ | $\begin{array}{r} 1.01 \\ 528 \end{array}$ | $\begin{array}{r} 0.80 \\ 654 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.76 \\ 867 \end{array}$ | $\begin{array}{r} 0.72 \\ 674 \end{array}$ | $\begin{array}{r} 1.15 \\ 540 \end{array}$ | $\begin{array}{r} 1.30 \\ 528 \end{array}$ | $\begin{array}{r} 0.74 \\ 654 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in 1,000s) | $\begin{array}{r} 1.24 \\ 867 \end{array}$ | $\begin{array}{r} 1.63 \\ 674 \end{array}$ | $\begin{array}{r} 1.70 \\ 540 \end{array}$ | $\begin{array}{r} 1.60 \\ 528 \end{array}$ | $\begin{array}{r} 1.27 \\ 654 \end{array}$ |
| Sex <br> Male | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.16 \\ 878 \end{array}$ | $\begin{array}{r} 1.37 \\ 695 \end{array}$ | $\begin{array}{r} 1.44 \\ 542 \end{array}$ | $\begin{array}{r} 1.07 \\ 562 \end{array}$ | $\begin{array}{r} 1.51 \\ 645 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.16 \\ 878 \end{array}$ | $\begin{array}{r} 1.37 \\ 695 \end{array}$ | $\begin{array}{r} 1.44 \\ 542 \end{array}$ | $\begin{array}{r} 1.07 \\ 562 \end{array}$ | $\begin{array}{r} 1.51 \\ 645 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.56 \\ 869 \end{array}$ | $\begin{array}{r} 0.53 \\ 696 \end{array}$ | - | $\begin{array}{r} 0.51 \\ 562 \end{array}$ | $\begin{array}{r} 0.33 \\ 654 \end{array}$ |
| No indicated disability | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.56 \\ 869 \end{array}$ | $\begin{array}{r} 0.53 \\ 696 \end{array}$ | - | $\begin{array}{r} 0.51 \\ 562 \end{array}$ | $\begin{array}{r} 0.33 \\ 654 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000 s) | - | $\begin{array}{r} 0.10 \\ 696 \end{array}$ | - | $\begin{array}{r} 0.26 \\ 562 \end{array}$ | $\begin{array}{r} 0.07 \\ 654 \end{array}$ |
| Proficient | s.e. weighted $n$ (in 1,000s) | - | $\begin{array}{r} 0.10 \\ 696 \end{array}$ | - | $\begin{array}{r} 0.26 \\ 562 \end{array}$ | $\begin{array}{r} 0.07 \\ 654 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.55 \\ 878 \end{array}$ | $\begin{array}{r} 0.37 \\ 696 \end{array}$ | $\begin{array}{r} 0.44 \\ 542 \end{array}$ | $\begin{gathered} 1.02 \\ 562 \end{gathered}$ | $\begin{array}{r} 0.85 \\ 654 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 1.13 \\ 878 \end{array}$ | $\begin{array}{r} 0.95 \\ 696 \end{array}$ | $\begin{array}{r} 1.17 \\ 542 \end{array}$ | $\begin{array}{r} 0.98 \\ 562 \end{array}$ | $\begin{array}{r} 1.00 \\ 654 \end{array}$ |
| Low (less than 2.0) | s.e. weighted n (in 1,000s) | $\begin{array}{r} 1.07 \\ 878 \end{array}$ | $\begin{array}{r} 1.05 \\ 696 \end{array}$ | $\begin{array}{r} 1.18 \\ 542 \\ \hline \end{array}$ | $\begin{array}{r} 0.75 \\ 562 \end{array}$ | $\begin{array}{r} 0.87 \\ 654 \\ \hline \end{array}$ |

See notes at end of table.

Table A39. Standard errors for table 39: Percentage distribution of occupational concentrators, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | 0.18 | 0.46 | 0.50 | 0.52 | 1.03 |
|  | weighted n (in 1,000s) | 875 | 688 | 535 | 554 | 644 |
| Mid-level or mixed | s.e. | 0.56 | 1.31 | 0.90 | 0.74 | 1.06 |
|  | weighted n (in 1,000s) | 875 | 688 | 535 | 554 | 644 |
| All low | s.e. | 0.54 | 1.27 | 0.80 | 0.50 | 0.68 |
|  | weighted n (in 1,000s) | 875 | 688 | 535 | 554 | 644 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 0.52 | 0.69 | 0.64 | 0.62 | 1.78 |
|  | weighted n (in 1,000s) | 878 | 696 | 542 | 562 | 654 |
| Mid-level (prealgebra or algebra 1) | s.e. | 1.37 | 1.84 | 1.46 | 1.63 | 1.77 |
|  | weighted n (in 1,000s) | 878 | 696 | 542 | 562 | 654 |
| Low (no or low mathematics) | s.e. | 1.36 | 2.04 | 1.50 | 1.62 | 1.32 |
|  | weighted n (in 1,000s) | 878 | 696 | 542 | 562 | 654 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 1.59 | - | 1.76 | - | 3.02 |
|  | weighted n (in 1,000s) | 878 | - | 542 | - | 654 |
| Suburban | s.e. | 2.07 | - | 2.39 | - | 3.23 |
|  | weighted n (in 1,000s) | 878 | - | 542 | - | 654 |
| Rural | s.e. | 1.91 | - | 2.52 | - | 3.06 |
|  | weighted n (in $1,000 \mathrm{~s}$ ) | 878 | - | 542 | - | 654 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 1.85 | 2.26 |
|  | weighted n (in 1,000s) | - | - | - | 562 | 654 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 3.73 | 4.51 |
|  | weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 562 | 654 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 2.45 | 2.95 |
|  | weighted n (in 1,000s) | - | - | - | 562 | 654 |
| Not reported | s.e. | - | - | - | 3.14 | 3.07 |
|  | weighted n (in 1,000s) | - | - | - | 562 | 654 |

-Not available.
$\dagger$ Not applicable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A40. Standard errors for table 40: Percentage distribution of public high school graduates earning 3.0 or more occupational credits, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | ${ }_{1,205}^{\dagger}$ | $\begin{array}{r} \dagger \\ 1,076 \end{array}$ | $\begin{array}{r} \dagger \\ 918 \end{array}$ | $\begin{array}{r} \dagger \\ 928 \end{array}$ | $\begin{array}{r} \dagger \\ 1,147 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.37 \\ 1,192 \end{array}$ | $\begin{array}{r} 0.20 \\ 1,042 \end{array}$ | $\begin{array}{r} 0.27 \\ 914 \end{array}$ | $\begin{array}{r} 0.31 \\ 877 \end{array}$ | $\begin{array}{r} 0.12 \\ 1,147 \end{array}$ |
| Asian/Pacific Islander | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.18 \\ 1,192 \end{array}$ | $\begin{array}{r} 0.51 \\ 1,042 \end{array}$ | $\begin{array}{r} 0.53 \\ 914 \end{array}$ | $\begin{array}{r} 0.39 \\ 877 \end{array}$ | $\begin{array}{r} 0.17 \\ 1,147 \end{array}$ |
| Black, non-Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.82 \\ 1,192 \end{array}$ | $\begin{array}{r} 1.15 \\ 1,042 \end{array}$ | $\begin{array}{r} 0.90 \\ 914 \end{array}$ | $\begin{array}{r} 0.80 \\ 877 \end{array}$ | $\begin{array}{r} 0.72 \\ 1,147 \end{array}$ |
| Hispanic | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.62 \\ 1,192 \end{array}$ | $\begin{array}{r} 0.49 \\ 1,042 \end{array}$ | $\begin{array}{r} 1.06 \\ 914 \end{array}$ | $\begin{array}{r} 1.00 \\ 877 \end{array}$ | $\begin{array}{r} 0.58 \\ 1,147 \end{array}$ |
| White, non-Hispanic | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.11 \\ 1,192 \end{array}$ | $\begin{array}{r} 1.26 \\ 1,042 \end{array}$ | $\begin{array}{r} 1.54 \\ 914 \end{array}$ | $\begin{array}{r} 1.17 \\ 877 \end{array}$ | $\begin{array}{r} 0.99 \\ 1,147 \end{array}$ |
| Sex <br> Male | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.94 \\ 1,205 \end{array}$ | $\begin{array}{r} 1.00 \\ 1,076 \end{array}$ | $\begin{array}{r} 1.11 \\ 918 \end{array}$ | $\begin{array}{r} 0.68 \\ 927 \end{array}$ | $\begin{array}{r} 0.97 \\ 1,134 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.94 \\ 1,205 \end{array}$ | $\begin{array}{r} 1.00 \\ 1,076 \end{array}$ | $\begin{array}{r} 1.11 \\ 918 \end{array}$ | $\begin{array}{r} 0.68 \\ 927 \end{array}$ | $\begin{array}{r} 0.97 \\ 1,134 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.53 \\ 1,196 \end{array}$ | $\begin{array}{r} 0.39 \\ 1,076 \end{array}$ | - | $\begin{array}{r} 0.37 \\ 928 \end{array}$ | $\begin{array}{r} 0.31 \\ 1,147 \end{array}$ |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.53 \\ 1,196 \end{array}$ | $\begin{array}{r} 0.39 \\ 1,076 \end{array}$ | - | $\begin{array}{r} 0.37 \\ 928 \end{array}$ | $\begin{array}{r} 0.31 \\ 1,147 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000 s) | - | $\begin{array}{r} 0.08 \\ 1,076 \end{array}$ | - | $\begin{array}{r} 0.21 \\ 928 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,147 \end{array}$ |
| Proficient | s.e. weighted n (in 1,000s) | - | $\begin{array}{r} 0.08 \\ 1,076 \end{array}$ | - | $\begin{array}{r} 0.21 \\ 928 \end{array}$ | $\begin{array}{r} 0.09 \\ 1,147 \end{array}$ |
| Grade-point average (GPA) <br> High (greater than 3.5) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.50 \\ 1,205 \end{array}$ | $\begin{array}{r} 0.42 \\ 1,076 \end{array}$ | $\begin{array}{r} 0.40 \\ 917 \end{array}$ | $\begin{array}{r} 0.84 \\ 928 \end{array}$ | $\begin{array}{r} 0.68 \\ 1,147 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 0.96 \\ 1,205 \\ \hline \end{array}$ | $\begin{array}{r} 0.78 \\ 1,076 \\ \hline \end{array}$ | $\begin{array}{r} 0.97 \\ 917 \\ \hline \end{array}$ | $\begin{array}{r} 0.74 \\ 928 \\ \hline \end{array}$ | $\begin{array}{r} 0.95 \\ 1,147 \\ \hline \end{array}$ |

See notes at end of table.

Table A40. Standard errors for table 40: Percentage distribution of public high school graduates earning 3.0 or more occupational credits, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.91 \\ 1,205 \end{array}$ | $\begin{array}{r} 0.86 \\ 1,076 \end{array}$ | $\begin{aligned} & 1.00 \\ & 917 \end{aligned}$ | $\begin{gathered} 0.66 \\ 928 \end{gathered}$ | $\begin{array}{r} 0.92 \\ 1,147 \end{array}$ |
| Academic coursework complete All high | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.24 \\ 1,202 \end{array}$ | $\begin{array}{r} 0.56 \\ 1,066 \end{array}$ | $\begin{array}{r} 0.59 \\ 910 \end{array}$ | $\begin{array}{r} 0.53 \\ 918 \end{array}$ | $\begin{array}{r} 1.03 \\ 1,132 \end{array}$ |
| Mid-level or mixed | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.53 \\ 1,202 \end{array}$ | $\begin{array}{r} 1.10 \\ 1,066 \end{array}$ | $\begin{array}{r} 0.80 \\ 910 \end{array}$ | $\begin{array}{r} 0.63 \\ 918 \end{array}$ | $\begin{array}{r} 1.07 \\ 1,132 \end{array}$ |
| All low | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.47 \\ 1,202 \end{array}$ | $\begin{array}{r} 1.00 \\ 1,066 \end{array}$ | $\begin{gathered} 0.59 \\ 910 \end{gathered}$ | $\begin{array}{r} 0.38 \\ 918 \end{array}$ | $\begin{array}{r} 0.55 \\ 1,132 \end{array}$ |
| Grade 9 mathematics High (geometry or higher) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.50 \\ 1,205 \end{array}$ | $\begin{array}{r} 0.63 \\ 1,076 \end{array}$ | $\begin{array}{r} 0.61 \\ 918 \end{array}$ | $\begin{array}{r} 0.69 \\ 928 \end{array}$ | $\begin{array}{r} 1.23 \\ 1,147 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 1.22 \\ 1,205 \end{array}$ | $\begin{array}{r} 1.58 \\ 1,076 \end{array}$ | $\begin{gathered} 1.20 \\ 918 \end{gathered}$ | $\begin{aligned} & 1.40 \\ & 928 \end{aligned}$ | $\begin{array}{r} 1.33 \\ 1,147 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted n (in 1,000 s) | $\begin{array}{r} 1.21 \\ 1,205 \end{array}$ | $\begin{array}{r} 1.71 \\ 1,076 \end{array}$ | $\begin{array}{r} 1.17 \\ 918 \end{array}$ | $\begin{array}{r} 1.30 \\ 928 \end{array}$ | $\begin{array}{r} 1.17 \\ 1,147 \end{array}$ |
| School urbanicity Urban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.46 \\ 1,205 \end{array}$ | - | $\begin{array}{r} 1.71 \\ 918 \end{array}$ | - | $\begin{array}{r} 2.71 \\ 1,147 \end{array}$ |
| Suburban | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.93 \\ 1,205 \end{array}$ | - | $\begin{array}{r} 2.18 \\ 918 \end{array}$ | - | $\begin{array}{r} 3.08 \\ 1,147 \end{array}$ |
| Rural | s.e. weighted n (in 1,000s) | $\begin{array}{r} 1.76 \\ 1,205 \end{array}$ | - | $\begin{aligned} & 2.27 \\ & 918 \end{aligned}$ | - | $\begin{array}{r} 2.93 \\ 1,147 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 1.69 928 | $\begin{array}{r} 2.46 \\ 1,147 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in 1,000 s) | - | - | - | 3.55 928 | 4.14 1,147 |
| Low (5 percent or less in NSLP) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | 2.49 928 | $\begin{array}{r} 2.70 \\ 1,147 \end{array}$ |
| Not reported | s.e. weighted n (in 1,000s) | 二 | 二 | - | $\begin{gathered} 3.07 \\ 928 \end{gathered}$ | $\begin{array}{r} 2.91 \\ 1,147 \\ \hline \end{array}$ |

-Not available.
$\dagger$ Not applicable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A41. Standard errors for table 41: Average number of computer-related credits earned by public high school graduates in computerrelated areas, by selected characteristics, including special and protected populations status: 1998


[^9]Table A41. Standard errors for table 41: Average number of computer-related credits earned by public high school graduates in computerrelated areas, by selected characteristics, including special and protected populations status: 1998-Continued


[^10]Table A41. Standard errors for table 41: Average number of computer-related credits earned by public high school graduates in computerrelated areas, by selected characteristics, including special and protected populations status: 1998-Continued

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Transcript Study (HSTS), 1998.

Table A42. Standard errors for table 42: Average number of computer-related credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. | $\dagger$ | 0.027 | 0.019 | 0.025 | 0.029 |
|  | weighted n (in 1,000s) | 2,607 | 2,505 | 2,174 | 2,213 | 2,617 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaska | s.e. | $\dagger$ | 0.111 | 0.082 | 0.172 | 0.067 |
| Native | weighted n (in 1,000s) | 30 | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. | $\dagger$ | 0.046 | 0.049 | 0.049 | 0.041 |
|  | weighted n (in 1,000s) | 38 | 86 | 88 | 74 | 92 |
| Black, non-Hispanic | s.e. | $\dagger$ | 0.062 | 0.048 | 0.045 | 0.064 |
|  | weighted n (in 1,000s) | 293 | 347 | 254 | 263 | 356 |
| Hispanic | s.e. | $\dagger$ | 0.060 | 0.067 | 0.050 | 0.039 |
|  | weighted n (in 1,000s) | 307 | 194 | 207 | 168 | 299 |
| White, non-Hispanic | s.e. | $\dagger$ | 0.026 | 0.021 | 0.027 | 0.033 |
|  | weighted n (in 1,000s) | 1,913 | 1,778 | 1,596 | 1,564 | 1,852 |
| Sex |  |  |  |  |  |  |
| Male | s.e. | $\dagger$ | 0.024 | 0.024 | 0.030 | 0.028 |
|  | weighted n (in 1,000s) | 1,257 | 1,194 | 1,074 | 1,083 | 1,232 |
| Female | s.e. | $\dagger$ | 0.035 | 0.024 | 0.026 | 0.034 |
|  | weighted n (in 1,000s) | 1,350 | 1,309 | 1,100 | 1,126 | 1,347 |
| Disability status (grade 12) |  |  |  |  |  |  |
| Has disability | s.e. | $\dagger$ | 0.048 | - | 0.055 | 0.037 |
|  | weighted n (in 1,000s) | 226 | 64 | - | 82 | 74 |
| No indicated disability | s.e. | $\dagger$ | 0.027 | - | 0.025 | 0.029 |
|  | weighted n (in 1,000s) | 2,361 | 2,441 | - | 2,130 | 2,543 |
| English proficiency (grade 12) |  |  |  |  |  |  |
| Limited | s.e. | - | 0.156 | - | 0.108 | 0.067 |
|  | weighted n (in 1,000s) | - | 13 | - | 19 | 19 |
| Proficient | s.e. | - | 0.027 | - | 0.025 | 0.029 |
|  | weighted n (in 1,000s) | - | 2,492 | - | 2,194 | 2,598 |
| Grade-point average (GPA) |  |  |  |  |  |  |
| High (greater than 3.5) | s.e. | $\dagger$ | 0.038 | 0.039 | 0.028 | 0.048 |
|  | weighted n (in 1,000s) | 260 | 258 | 233 | 307 | 456 |
| Mid-level (2.0 to 3.5) | s.e. | $\dagger$ | 0.028 | 0.021 | 0.026 | 0.029 |
|  | weighted n (in 1,000s) | 1,812 | 1,809 | 1,644 | 1,600 | 1,975 |

See notes at end of table.

Table A42. Standard errors for table 42: Average number of computer-related credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} \dagger \\ 534 \end{array}$ | $\begin{array}{r} 0.030 \\ 438 \end{array}$ | $\begin{array}{r} 0.037 \\ 295 \end{array}$ | $\begin{array}{r} 0.031 \\ 306 \end{array}$ | $\begin{array}{r} 0.039 \\ 186 \end{array}$ |
| Academic coursework completed All high | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} \dagger \\ 31 \end{array}$ | $\begin{array}{r} 0.047 \\ 273 \end{array}$ | $\begin{array}{r} 0.040 \\ 308 \end{array}$ | $\begin{array}{r} 0.031 \\ 330 \end{array}$ | $\begin{array}{r} 0.055 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} \dagger \\ 2,485 \end{array}$ | $\begin{aligned} & 0.027 \\ & 2,098 \end{aligned}$ | $\begin{aligned} & 0.020 \\ & 1,781 \end{aligned}$ | $\begin{aligned} & 0.027 \\ & 1,810 \end{aligned}$ | $\begin{aligned} & 0.029 \\ & 2,141 \end{aligned}$ |
| All low | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} \dagger \\ 86 \end{array}$ | $\begin{array}{r} 0.044 \\ 117 \end{array}$ | $\begin{array}{r} 0.055 \\ 75 \end{array}$ | $\begin{array}{r} 0.060 \\ 55 \end{array}$ | $\begin{array}{r} 0.060 \\ 58 \end{array}$ |
| Grade 9 mathematics High (geometry or higher) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} \dagger \\ 205 \end{array}$ | $\begin{array}{r} 0.049 \\ 266 \end{array}$ | $\begin{array}{r} 0.046 \\ 280 \end{array}$ | $\begin{array}{r} 0.036 \\ 329 \end{array}$ | $\begin{array}{r} 0.045 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} \dagger \\ 1,374 \end{array}$ | $\begin{aligned} & 0.031 \\ & 1,546 \end{aligned}$ | $\begin{aligned} & 0.022 \\ & 1,369 \end{aligned}$ | $\begin{aligned} & 0.027 \\ & 1,380 \end{aligned}$ | $\begin{aligned} & 0.031 \\ & 1,635 \end{aligned}$ |
| Low (no or low mathematics) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} \dagger \\ 1,028 \end{array}$ | $\begin{array}{r} 0.029 \\ 692 \end{array}$ | $\begin{array}{r} 0.030 \\ 526 \end{array}$ | $\begin{array}{r} 0.028 \\ 504 \end{array}$ | $\begin{array}{r} 0.033 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} \dagger \\ 501 \end{array}$ | - | $\begin{array}{r} 0.039 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.053 \\ 743 \end{array}$ |
| Suburban | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} \dagger \\ 1,261 \end{array}$ | - | $\begin{array}{r} 0.026 \\ 961 \end{array}$ | - | $\begin{aligned} & 0.044 \\ & 1,028 \end{aligned}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} \dagger \\ 845 \end{array}$ | - | $\begin{array}{r} 0.031 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.047 \\ 846 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.074 \\ 185 \end{array}$ | $\begin{array}{r} 0.083 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{aligned} & 0.032 \\ & 1,296 \end{aligned}$ | $\begin{aligned} & 0.039 \\ & 1,565 \end{aligned}$ |
| Low (5 percent or less in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.074 \\ 351 \end{array}$ | $\begin{array}{r} 0.044 \\ 425 \end{array}$ |
| Not reported | s.e. weighted n (in 1,000s) | - | - | - | $\begin{array}{r} 0.049 \\ 380 \end{array}$ | $\begin{array}{r} 0.079 \\ 386 \end{array}$ |

-Not available.
$\dagger$ Not applicable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A43. Standard errors for table 43: Average number of typewriting/keyboarding credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. |  | 0.016 | 0.011 | 0.016 | 0.018 |
|  | weighted n (in 1,000s) | 2,607 | 2,505 | 2,174 | 2,213 | 2,617 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaska | s.e. | $\dagger$ | 0.074 | 0.047 | 0.101 | 0.026 |
| Native | weighted n (in 1,000s) | 30 | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. | $\dagger$ | 0.019 | 0.024 | 0.032 | 0.048 |
|  | weighted n (in 1,000s) | 38 | 86 | 88 | 74 | 92 |
| Black, non-Hispanic | s.e. | $\dagger$ | 0.029 | 0.024 | 0.039 | 0.033 |
|  | weighted n (in 1,000s) | 293 | 347 | 254 | 263 | 356 |
| Hispanic | s.e. | $\dagger$ | 0.037 | 0.036 | 0.030 | 0.031 |
|  | weighted n (in 1,000s) | 307 | 194 | 207 | 168 | 299 |
| White, non-Hispanic | s.e. | $\dagger$ | 0.018 | 0.013 | 0.018 | 0.019 |
|  | weighted n (in 1,000s) | 1,913 | 1,778 | 1,596 | 1,564 | 1,852 |
| Sex |  |  |  |  |  |  |
| Male | s.e. | $\dagger$ | 0.014 | 0.014 | 0.014 | 0.016 |
|  | weighted n (in 1,000s) | 1,257 | 1,194 | 1,074 | 1,083 | 1,232 |
| Female | s.e. | $\dagger$ | 0.019 | 0.014 | 0.019 | 0.020 |
|  | weighted n (in 1,000s) | 1,350 | 1,309 | 1,100 | 1,126 | 1,347 |
| Disability status (grade 12) |  |  |  |  |  |  |
| Has disability | s.e. | $\dagger$ | 0.030 | - | 0.023 | 0.022 |
|  | weighted n (in 1,000s) | 226 | 64 | - | 82 | 74 |
| No indicated disability | s.e. | $\dagger$ | 0.016 | - | 0.016 | 0.018 |
|  | weighted n (in 1,000s) | 2,361 | 2,441 | - | 2,130 | 2,543 |
| English proficiency (grade 12) |  |  |  |  |  |  |
| Limited | s.e. | - | 0.093 | - | 0.062 | 0.051 |
|  | weighted n (in 1,000s) | - | 13 | - | 19 | 19 |
| Proficient | s.e. | - | 0.016 | - | 0.016 | 0.018 |
|  | weighted n (in 1,000s) | - | 2,492 | - | 2,194 | 2,598 |
| Grade-point average (GPA) |  |  |  |  |  |  |
| High (greater than 3.5) | s.e. | $\dagger$ | 0.023 | 0.021 | 0.018 | 0.022 |
|  | weighted n (in 1,000s) | 260 | 258 | 233 | 307 | 456 |
| Mid-level (2.0 to 3.5) | s.e. | $\dagger$ | 0.017 | 0.012 | 0.017 | 0.019 |
|  | weighted n (in 1,000s) | 1,812 | 1,809 | 1,644 | 1,600 | 1,975 |
| Low (less than 2.0) | s.e. | $\dagger$ | 0.016 | 0.019 | 0.019 | 0.022 |
|  | weighted n (in 1,000s) | 534 | 438 | 295 | 306 | 186 |

See notes at end of table.

Table A43. Standard errors for table 43: Average number of typewriting/keyboarding credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98—Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | $\dagger$ | 0.022 | 0.021 | 0.020 | 0.023 |
|  | weighted n (in 1,000s) | 31 | 273 | 308 | 330 | 386 |
| Mid-level or mixed | s.e. | $\dagger$ | 0.017 | 0.012 | 0.017 | 0.019 |
|  | weighted n (in 1,000s) | 2,485 | 2,098 | 1,781 | 1,810 | 2,141 |
| All low | s.e. | $\dagger$ | 0.018 | 0.038 | 0.038 | 0.042 |
|  | weighted n (in 1,000s) | 86 | 117 | 75 | 55 | 58 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | $\dagger$ | 0.022 | 0.023 | 0.022 | 0.021 |
|  | weighted n (in 1,000s) | 205 | 266 | 280 | 329 | 534 |
| Mid-level (prealgebra or algebra 1) | s.e. | $\dagger$ | 0.018 | 0.014 | 0.018 | 0.020 |
|  | weighted n (in 1,000s) | 1,374 | 1,546 | 1,369 | 1,380 | 1,635 |
| Low (no or low mathematics) | s.e. | $\dagger$ | 0.020 | 0.015 | 0.017 | 0.018 |
|  | weighted n (in 1,000s) | 1,028 | 692 | 526 | 504 | 447 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | $\dagger$ | - | 0.021 | - | 0.028 |
|  | weighted n (in 1,000s) | 501 | - | 484 | - | 743 |
| Suburban | s.e. | $\dagger$ | - | 0.018 | - | 0.025 |
|  | weighted n (in 1,000s) | 1,261 | - | 961 | - | 1,028 |
| Rural | s.e. | $\dagger$ | - | 0.019 | - | 0.041 |
|  | weighted n (in 1,000s) | 845 | - | 729 | - | 846 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 0.067 | 0.041 |
|  | weighted n (in 1,000s) | - | - | - | 185 | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 0.023 | 0.025 |
|  | weighted n (in 1,000s) | - | - | - | 1,296 | 1,565 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 0.038 | 0.045 |
|  | weighted n (in 1,000s) | - | - | - | 351 | 425 |
| Not reported | s.e. | - | - | - | 0.045 | 0.045 |
|  | weighted n (in 1,000s) | - | - | - | 380 | 386 |

-Not available.
$\dagger$ Not applicable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A44. Standard errors for table 44: Average number of computer-related business services credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.002 \\ & 2,607 \end{aligned}$ | $\begin{aligned} & 0.016 \\ & 2,505 \end{aligned}$ | $\begin{aligned} & 0.012 \\ & 2,174 \end{aligned}$ | $\begin{aligned} & 0.019 \\ & 2,213 \end{aligned}$ | $\begin{aligned} & 0.024 \\ & 2,617 \end{aligned}$ |
| Race/ethnicity <br> American Indian/Alaska Native | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.007 \\ 30 \end{array}$ | $\begin{array}{r} 0.093 \\ 12 \end{array}$ | $\begin{array}{r} 0.050 \\ 22 \end{array}$ | $\begin{array}{r} 0.149 \\ 17 \end{array}$ | 0.039 12 |
| Asian/Pacific Islander | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.007 \\ 38 \end{array}$ | $\begin{array}{r} 0.025 \\ 86 \end{array}$ | $\begin{array}{r} 0.046 \\ 88 \end{array}$ | $\begin{array}{r} 0.030 \\ 74 \end{array}$ | $\begin{array}{r} 0.026 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.008 \\ 293 \end{array}$ | $\begin{array}{r} 0.035 \\ 347 \end{array}$ | $\begin{array}{r} 0.023 \\ 254 \end{array}$ | $\begin{array}{r} 0.040 \\ 263 \end{array}$ | $\begin{array}{r} 0.056 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.003 \\ 307 \end{array}$ | $\begin{array}{r} 0.040 \\ 194 \end{array}$ | $\begin{array}{r} 0.038 \\ 207 \end{array}$ | $\begin{array}{r} 0.046 \\ 168 \end{array}$ | $\begin{array}{r} 0.030 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.002 \\ & 1,913 \end{aligned}$ | $\begin{aligned} & 0.017 \\ & 1,778 \end{aligned}$ | $\begin{aligned} & 0.013 \\ & 1,596 \end{aligned}$ | $\begin{aligned} & 0.021 \\ & 1,564 \end{aligned}$ | $\begin{aligned} & 0.025 \\ & 1,852 \end{aligned}$ |
| Sex |  |  |  |  |  |  |
| Male | s.e. weighted $n$ (in 1,000s) | $\begin{aligned} & 0.003 \\ & 1,257 \end{aligned}$ | $\begin{aligned} & 0.015 \\ & 1,194 \end{aligned}$ | $\begin{aligned} & 0.013 \\ & 1,074 \end{aligned}$ | $\begin{aligned} & 0.016 \\ & 1,083 \end{aligned}$ | $\begin{aligned} & 0.022 \\ & 1,232 \end{aligned}$ |
| Female | s.e. weighted $n$ (in 1,000s) | $\begin{aligned} & 0.003 \\ & 1,350 \end{aligned}$ | $\begin{aligned} & 0.021 \\ & 1,309 \end{aligned}$ | $\begin{aligned} & 0.016 \\ & 1,100 \end{aligned}$ | $\begin{aligned} & 0.024 \\ & 1,126 \end{aligned}$ | $\begin{aligned} & 0.026 \\ & 1,347 \end{aligned}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} 0.005 \\ 226 \end{array}$ | $\begin{array}{r} 0.019 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.025 \\ 82 \end{array}$ | $\begin{array}{r} 0.028 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted n (in 1,000s) | $\begin{aligned} & 0.002 \\ & 2,361 \end{aligned}$ | $\begin{aligned} & 0.016 \\ & 2,441 \end{aligned}$ | - | $\begin{aligned} & 0.019 \\ & 2,130 \end{aligned}$ | $\begin{aligned} & 0.024 \\ & 2,543 \end{aligned}$ |
| English proficiency (grade 12) Limited | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.102 \\ 13 \end{array}$ | - | $\begin{array}{r} 0.038 \\ 19 \end{array}$ | $\begin{array}{r} 0.042 \\ 19 \end{array}$ |
| Proficient | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | $\begin{aligned} & 0.016 \\ & 2,492 \end{aligned}$ | - | $\begin{aligned} & 0.019 \\ & 2,194 \end{aligned}$ | $\begin{aligned} & 0.024 \\ & 2,598 \end{aligned}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.012 \\ 260 \end{array}$ | $\begin{array}{r} 0.017 \\ 258 \end{array}$ | $\begin{array}{r} 0.019 \\ 233 \end{array}$ | $\begin{array}{r} 0.025 \\ 307 \end{array}$ | $\begin{array}{r} 0.031 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.002 \\ & 1,812 \end{aligned}$ | $\begin{aligned} & 0.017 \\ & 1,809 \end{aligned}$ | $\begin{aligned} & 0.013 \\ & 1,644 \end{aligned}$ | $\begin{aligned} & 0.020 \\ & 1,600 \end{aligned}$ | $\begin{aligned} & 0.024 \\ & 1,975 \end{aligned}$ |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.003 \\ 534 \end{array}$ | $\begin{array}{r} 0.022 \\ 438 \\ \hline \end{array}$ | $\begin{array}{r} 0.029 \\ 295 \\ \hline \end{array}$ | $\begin{array}{r} 0.023 \\ 306 \\ \hline \end{array}$ | $\begin{array}{r} 0.034 \\ 186 \end{array}$ |

See notes at end of table.

Table A44. Standard errors for table 44: Average number of computer-related business services credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98—Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic coursework completed |  |  |  |  |  |  |
| All high |  | 0.023 | 0.024 | 0.025 | 0.034 | 0.042 |
|  | weighted n (in 1,000s) | 31 | 273 | 308 | 330 | 386 |
| Mid-level or mixed | s.e. | 0.002 | 0.017 | 0.012 | 0.018 | 0.023 |
|  | weighted n (in 1,000s) | 2,485 | 2,098 | 1,781 | 1,810 | 2,141 |
| All low | s.e. | 0.009 | 0.037 | 0.026 | 0.037 | 0.051 |
|  | weighted n (in 1,000s) | 86 | 117 | 75 | 55 | 58 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 0.004 | 0.022 | 0.028 | 0.031 | 0.033 |
|  | weighted n (in 1,000s) | 205 | 266 | 280 | 329 | 534 |
| Mid-level (prealgebra or algebra 1) | s.e. | 0.003 | 0.019 | 0.013 | 0.021 | 0.026 |
|  | weighted n (in 1,000s) | 1,374 | 1,546 | 1,369 | 1,380 | 1,635 |
| Low (no or low mathematics) | s.e. | 0.003 | 0.021 | 0.021 | 0.020 | 0.017 |
|  | weighted n (in 1,000s) | 1,028 | 692 | 526 | 504 | 447 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 0.006 | - | 0.022 | - | 0.051 |
|  | weighted n (in 1,000s) | 501 | - | 484 | - | 743 |
| Suburban | s.e. | 0.002 | - | 0.016 | - | 0.028 |
|  | weighted n (in 1,000s) | 1,261 | - | 961 | - | 1,028 |
| Rural | s.e. | 0.004 | - | 0.021 | - | 0.039 |
|  | weighted n (in 1,000s) | 845 | - | 729 | - | 846 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 0.046 | 0.059 |
|  | weighted n (in 1,000s) | - | - | - | 185 | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 0.024 | 0.029 |
|  | weighted n (in 1,000s) | - | - | - | 1,296 | 1,565 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 0.071 | 0.059 |
|  | weighted n (in 1,000s) | - | - | - | 351 | 425 |
| Not reported | s.e. | - | - | - | 0.050 | 0.054 |
|  | weighted n (in 1,000s) | - | - | - | 380 | 386 |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A45. Standard errors for table 45: Average number of computer technology credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. | 0.007 | 0.013 | 0.011 | 0.013 | 0.027 |
|  | weighted n (in 1,000s) | 2,607 | 2,505 | 2,174 | 2,213 | 2,617 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaska | s.e. | 0.019 | 0.078 | 0.051 | 0.071 | 0.059 |
| Native | weighted n (in 1,000s) | 30 | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. | 0.050 | 0.035 | 0.037 | 0.033 | 0.059 |
|  | weighted n (in 1,000s) | 38 | 86 | 88 | 74 | 92 |
| Black, non-Hispanic | s.e. | 0.013 | 0.035 | 0.037 | 0.020 | 0.032 |
|  | weighted n (in 1,000s) | 293 | 347 | 254 | 263 | 356 |
| Hispanic | s.e. | 0.007 | 0.036 | 0.035 | 0.026 | 0.040 |
|  | weighted n (in 1,000s) | 307 | 194 | 207 | 168 | 299 |
| White, non-Hispanic | s.e. | 0.009 | 0.014 | 0.012 | 0.016 | 0.033 |
|  | weighted n (in 1,000s) | 1,913 | 1,778 | 1,596 | 1,564 | 1,852 |
| Sex |  |  |  |  |  |  |
| Male | s.e. | 0.011 | 0.015 | 0.015 | 0.015 | 0.026 |
|  | weighted n (in 1,000s) | 1,257 | 1,194 | 1,074 | 1,083 | 1,232 |
| Female | s.e. | 0.007 | 0.012 | 0.014 | 0.012 | 0.030 |
|  | weighted n (in 1,000s) | 1,350 | 1,309 | 1,100 | 1,126 | 1,347 |
| Disability status (grade 12) |  |  |  |  |  |  |
| Has disability | s.e. | 0.013 | 0.026 | - | 0.020 | 0.031 |
|  | weighted n (in 1,000s) | 226 | 64 | - | 82 | 74 |
| No indicated disability | s.e. | 0.007 | 0.013 | - | 0.013 | 0.027 |
|  | weighted n (in 1,000s) | 2,361 | 2,441 | - | 2,130 | 2,543 |
| English proficiency (grade 12) |  |  |  |  |  |  |
| Limited | s.e. | - | 0.056 | - | 0.040 | 0.054 |
|  | weighted n (in 1,000s) | - | 13 | - | 19 | 19 |
| Proficient | s.e. | - | 0.013 | - | 0.013 | 0.027 |
|  | weighted n (in 1,000s) | - | 2,492 | - | 2,194 | 2,598 |
| Grade-point average (GPA) |  |  |  |  |  |  |
| High (greater than 3.5) | s.e. | 0.023 | 0.027 | 0.025 | 0.018 | 0.038 |
|  | weighted n (in 1,000s) | 260 | 258 | 233 | 307 | 456 |
| Mid-level (2.0 to 3.5) | s.e. | 0.008 | 0.014 | 0.012 | 0.013 | 0.027 |
|  | weighted n (in 1,000s) | 1,812 | 1,809 | 1,644 | 1,600 | 1,975 |
| Low (less than 2.0) | s.e. | 0.010 | 0.012 | 0.023 | 0.015 | 0.029 |
|  | weighted n (in 1,000s) | 534 | 438 | 295 | 306 | 186 |

See notes at end of table.

Table A45. Standard errors for table 45: Average number of computer technology credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | 0.013 | 0.031 | 0.027 | 0.019 | 0.031 |
|  | weighted n (in 1,000s) | 31 | 273 | 308 | 330 | 386 |
| Mid-level or mixed | s.e. | 0.007 | 0.012 | 0.012 | 0.014 | 0.030 |
|  | weighted n (in 1,000s) | 2,485 | 2,098 | 1,781 | 1,810 | 2,141 |
| All low | s.e. | 0.014 | 0.030 | 0.025 | 0.018 | 0.034 |
|  | weighted n (in 1,000s) | 86 | 117 | 75 | 55 | 58 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 0.024 | 0.028 | 0.031 | 0.023 | 0.043 |
|  | weighted n (in 1,000s) | 205 | 266 | 280 | 329 | 534 |
| Mid-level (prealgebra or algebra 1) | s.e. | 0.010 | 0.015 | 0.013 | 0.015 | 0.026 |
|  | weighted n (in 1,000s) | 1,374 | 1,546 | 1,369 | 1,380 | 1,635 |
| Low (no or low mathematics) | s.e. | 0.007 | 0.016 | 0.015 | 0.011 | 0.030 |
|  | weighted n (in 1,000s) | 1,028 | 692 | 526 | 504 | 447 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 0.014 | 0.041 | 0.024 | 0.023 | 0.041 |
|  | weighted n (in 1,000s) | 501 | 312 | 484 | 303 | 743 |
| Suburban | s.e. | 0.010 | 0.024 | 0.016 | 0.021 | 0.023 |
|  | weighted n (in 1,000s) | 1,261 | 949 | 961 | 918 | 1,028 |
| Rural | s.e. | 0.013 | 0.018 | 0.019 | 0.022 | 0.062 |
|  | weighted n (in 1,000s) | 845 | 1,245 | 729 | 991 | 846 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 0.033 | 0.058 |
|  | weighted n (in 1,000s) | - | - | - | 185 | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 0.019 | 0.037 |
|  | weighted n (in 1,000s) | - | - | - | 1,296 | 1,565 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 0.040 | 0.020 |
|  | weighted n (in 1,000s) | - | - | - | 351 | 425 |
| Not reported | s.e. | - | - | - | 0.021 | 0.045 |
|  | weighted n (in 1,000s) | - | - | - | 380 | 386 |

[^11]SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A46. Standard errors for table 46: Average number of total credits earned in high school by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. | 0.080 | 0.127 | 0.094 | 0.144 | 0.162 |
|  | weighted n (in 1,000s) | 2,607 | 2,505 | 2,174 | 2,213 | 2,617 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaska | s.e. | 0.302 | 0.267 | 0.341 | 0.541 | 0.350 |
| Native | weighted n (in 1,000s) | 30 | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. | 0.215 | 0.236 | 0.202 | 0.256 | 0.195 |
|  | weighted n (in 1,000s) | 38 | 86 | 88 | 74 | 92 |
| Black, non-Hispanic | s.e. | 0.159 | 0.255 | 0.312 | 0.132 | 0.250 |
|  | weighted n (in 1,000s) | 293 | 347 | 254 | 263 | 356 |
| Hispanic | s.e. | 0.121 | 0.210 | 0.229 | 0.131 | 0.222 |
|  | weighted n (in 1,000s) | 307 | 194 | 207 | 168 | 299 |
| White, non-Hispanic | s.e. | 0.094 | 0.133 | 0.102 | 0.183 | 0.178 |
|  | weighted n (in 1,000s) | 1,913 | 1,778 | 1,596 | 1,564 | 1,852 |
| Sex |  |  |  |  |  |  |
| Male | s.e. | 0.098 | 0.130 | 0.121 | 0.146 | 0.163 |
|  | weighted n (in 1,000s) | 1,257 | 1,194 | 1,074 | 1,083 | 1,232 |
| Female | s.e. | 0.089 | 0.132 | 0.100 | 0.147 | 0.166 |
|  | weighted n (in 1,000s) | 1,350 | 1,309 | 1,100 | 1,126 | 1,347 |
| Disability status (grade 12) |  |  |  |  |  |  |
| Has disability | s.e. | 0.130 | 0.228 | - | 0.265 | 0.269 |
|  | weighted n (in 1,000s) | 226 | 64 | - | 82 | 74 |
| No indicated disability | s.e. | 0.083 | 0.128 | - | 0.143 | 0.162 |
|  | weighted n (in 1,000s) | 2,361 | 2,441 | - | 2,130 | 2,543 |
| English proficiency (grade 12) |  |  |  |  |  |  |
| Limited | s.e. | - | 0.400 | - | 0.452 | 0.344 |
|  | weighted n (in 1,000s) | - | 13 | - | 19 | 19 |
| Proficient | s.e. | - | 0.127 | - | 0.145 | 0.162 |
|  | weighted n (in 1,000s) | - | 2,492 | - | 2,194 | 2,598 |
| Grade-point average (GPA) |  |  |  |  |  |  |
| High (greater than 3.5) | s.e. | 0.288 | 0.137 | 0.110 | 0.191 | 0.183 |
|  | weighted n (in 1,000s) | 260 | 258 | 233 | 307 | 456 |
| Mid-level (2.0 to 3.5) | s.e. | 0.084 | 0.127 | 0.103 | 0.142 | 0.157 |
|  | weighted n (in 1,000s) | 1,812 | 1,809 | 1,644 | 1,600 | 1,975 |

See notes at end of table.

Table A46. Standard errors for table 46: Average number of total credits earned in high school by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98—Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.120 \\ 534 \end{array}$ | $\begin{array}{r} 0.167 \\ 438 \end{array}$ | $\begin{array}{r} 0.163 \\ 295 \end{array}$ | $\begin{array}{r} 0.169 \\ 306 \end{array}$ | $\begin{array}{r} 0.167 \\ 186 \end{array}$ |
| Academic coursework completed All high | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.351 \\ 31 \end{array}$ | $\begin{array}{r} 0.172 \\ 273 \end{array}$ | $\begin{array}{r} 0.151 \\ 308 \end{array}$ | $\begin{array}{r} 0.153 \\ 330 \end{array}$ | $\begin{array}{r} 0.249 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.081 \\ & 2,485 \end{aligned}$ | $\begin{aligned} & 0.121 \\ & 2,098 \end{aligned}$ | $\begin{aligned} & 0.093 \\ & 1,781 \end{aligned}$ | $\begin{aligned} & 0.156 \\ & 1,810 \end{aligned}$ | $\begin{aligned} & 0.161 \\ & 2,141 \end{aligned}$ |
| All low | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.188 \\ 86 \end{array}$ | $\begin{array}{r} 0.267 \\ 117 \end{array}$ | $\begin{array}{r} 0.466 \\ 75 \end{array}$ | $\begin{array}{r} 0.203 \\ 55 \end{array}$ | $\begin{array}{r} 0.362 \\ 58 \end{array}$ |
| Grade 9 mathematics High (geometry or higher) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.148 \\ 205 \end{array}$ | $\begin{array}{r} 0.177 \\ 266 \end{array}$ | $\begin{array}{r} 0.183 \\ 280 \end{array}$ | $\begin{array}{r} 0.185 \\ 329 \end{array}$ | $\begin{array}{r} 0.238 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted $n$ (in 1,000s) | $\begin{aligned} & 0.104 \\ & 1,374 \end{aligned}$ | $\begin{aligned} & 0.120 \\ & 1,546 \end{aligned}$ | $\begin{aligned} & 0.093 \\ & 1,369 \end{aligned}$ | $\begin{aligned} & 0.153 \\ & 1,380 \end{aligned}$ | $\begin{aligned} & 0.177 \\ & 1,635 \end{aligned}$ |
| Low (no or low mathematics) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.106 \\ & 1,028 \end{aligned}$ | $\begin{array}{r} 0.218 \\ 692 \end{array}$ | $\begin{array}{r} 0.154 \\ 526 \end{array}$ | $\begin{array}{r} 0.171 \\ 504 \end{array}$ | $\begin{array}{r} 0.175 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.157 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.196 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.356 \\ 743 \end{array}$ |
| Suburban | s.e. weighted $n$ (in 1,000s) | $\begin{aligned} & 0.121 \\ & 1,261 \end{aligned}$ | - | $\begin{array}{r} 0.110 \\ 961 \end{array}$ | - | $\begin{aligned} & 0.175 \\ & 1,028 \end{aligned}$ |
| Rural | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.158 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.206 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.327 \\ 846 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.258 \\ 185 \end{array}$ | $\begin{array}{r} 0.369 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | 0.168 1,296 | 0.238 1,565 |
| Low (5 percent or less in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.435 \\ 351 \end{array}$ | $\begin{array}{r} 0.454 \\ 425 \end{array}$ |
| Not reported | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.348 \\ 380 \\ \hline \end{array}$ | $\begin{array}{r} 0.359 \\ 386 \\ \hline \end{array}$ |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A47. Standard errors for table 47: Average number of core academic credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted $n$ (in 1,000s) | $\begin{aligned} & 0.055 \\ & 2,607 \end{aligned}$ | $\begin{aligned} & 0.010 \\ & 2,505 \end{aligned}$ | $\begin{aligned} & 0.056 \\ & 2,174 \end{aligned}$ | $\begin{aligned} & 0.008 \\ & 2,213 \end{aligned}$ | $\begin{aligned} & 0.010 \\ & 2,617 \end{aligned}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.218 \\ 30 \end{array}$ | $\begin{array}{r} 0.335 \\ 12 \end{array}$ | $\begin{array}{r} 0.424 \\ 22 \end{array}$ | $\begin{array}{r} 0.193 \\ 17 \end{array}$ | $\begin{array}{r} 0.144 \\ 12 \end{array}$ |
| Asian/Pacific Islander | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.158 \\ 38 \end{array}$ | $\begin{array}{r} 0.150 \\ 86 \end{array}$ | $\begin{array}{r} 0.190 \\ 88 \end{array}$ | $\begin{array}{r} 0.210 \\ 74 \end{array}$ | $\begin{array}{r} 0.112 \\ 92 \end{array}$ |
| Black, non-Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.123 \\ 293 \end{array}$ | $\begin{array}{r} 0.140 \\ 347 \end{array}$ | $\begin{array}{r} 0.172 \\ 254 \end{array}$ | $\begin{array}{r} 0.082 \\ 263 \end{array}$ | $\begin{array}{r} 0.137 \\ 356 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.089 \\ 307 \end{array}$ | $\begin{array}{r} 0.212 \\ 194 \end{array}$ | $\begin{array}{r} 0.099 \\ 207 \end{array}$ | $\begin{array}{r} 0.132 \\ 168 \end{array}$ | $\begin{array}{r} 0.140 \\ 299 \end{array}$ |
| White, non-Hispanic | s.e. weighted $n$ (in 1,000 s) | $\begin{aligned} & 0.065 \\ & 1,913 \end{aligned}$ | $\begin{aligned} & 0.091 \\ & 1,778 \end{aligned}$ | $\begin{aligned} & 0.064 \\ & 1,596 \end{aligned}$ | $\begin{aligned} & 0.076 \\ & 1,564 \end{aligned}$ | $\begin{aligned} & 0.094 \\ & 1,852 \end{aligned}$ |
| Sex Male | s.e. weighted n (in 1,000s) | $\begin{aligned} & 0.072 \\ & 1,257 \end{aligned}$ | $\begin{aligned} & 0.083 \\ & 1,194 \end{aligned}$ | $\begin{aligned} & 0.069 \\ & 1,074 \end{aligned}$ | $\begin{aligned} & 0.062 \\ & 1,083 \end{aligned}$ | $\begin{aligned} & 0.081 \\ & 1,232 \end{aligned}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.062 \\ & 1,350 \end{aligned}$ | $\begin{aligned} & 0.081 \\ & 1,309 \end{aligned}$ | $\begin{aligned} & 0.065 \\ & 1,100 \end{aligned}$ | $\begin{aligned} & 0.069 \\ & 1,126 \end{aligned}$ | $\begin{aligned} & 0.082 \\ & 1,347 \end{aligned}$ |
| Disability status (grade 12) Has disability | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.124 \\ 226 \end{array}$ | $\begin{array}{r} 0.201 \\ 64 \end{array}$ | - | $\begin{array}{r} 0.123 \\ 82 \end{array}$ | $\begin{array}{r} 0.193 \\ 74 \end{array}$ |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.058 \\ & 2,361 \end{aligned}$ | $\begin{aligned} & 0.076 \\ & 2,441 \end{aligned}$ | - | $\begin{aligned} & 0.064 \\ & 2,130 \end{aligned}$ | $\begin{aligned} & 0.080 \\ & 2,543 \end{aligned}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000 s) | - | $\begin{array}{r} 0.422 \\ 13 \end{array}$ | - | $\begin{array}{r} 0.293 \\ 19 \end{array}$ | $\begin{array}{r} 0.261 \\ 19 \end{array}$ |
| Proficient | s.e. weighted $n$ (in 1,000s) | - | $\begin{aligned} & 0.078 \\ & 2,492 \end{aligned}$ | - | $\begin{aligned} & 0.063 \\ & 2,194 \end{aligned}$ | $\begin{aligned} & 0.080 \\ & 2,598 \end{aligned}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.201 \\ 260 \end{array}$ | $\begin{array}{r} 0.114 \\ 258 \end{array}$ | $\begin{array}{r} 0.081 \\ 233 \end{array}$ | $\begin{array}{r} 0.084 \\ 307 \end{array}$ | $\begin{array}{r} 0.100 \\ 456 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in 1,000 s) | $\begin{aligned} & 0.060 \\ & 1,812 \end{aligned}$ | $\begin{aligned} & 0.087 \\ & 1,809 \end{aligned}$ | $\begin{aligned} & 0.064 \\ & 1,644 \end{aligned}$ | $\begin{aligned} & 0.063 \\ & 1,600 \end{aligned}$ | $\begin{aligned} & 0.082 \\ & 1,975 \end{aligned}$ |

See notes at end of table.

Table A47. Standard errors for table 47: Average number of core academic credits earned by public high school graduates, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.098 \\ 534 \end{array}$ | $\begin{array}{r} 0.078 \\ 438 \end{array}$ | $\begin{array}{r} 0.098 \\ 295 \end{array}$ | $\begin{array}{r} 0.095 \\ 306 \end{array}$ | $\begin{array}{r} 0.128 \\ 186 \end{array}$ |
| Academic coursework completed All high | s.e. <br> weighted $n$ (in 1,000s) | $\begin{array}{r} 0.241 \\ 31 \end{array}$ | $\begin{array}{r} 0.094 \\ 273 \end{array}$ | $\begin{array}{r} 0.100 \\ 308 \end{array}$ | $\begin{array}{r} 0.072 \\ 330 \end{array}$ | $\begin{array}{r} 0.099 \\ 386 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in 1,000s) | $\begin{aligned} & 0.056 \\ & 2,485 \end{aligned}$ | $\begin{aligned} & 0.075 \\ & 2,098 \end{aligned}$ | $\begin{aligned} & 0.055 \\ & 1,781 \end{aligned}$ | $\begin{aligned} & 0.069 \\ & 1,810 \end{aligned}$ | $\begin{aligned} & 0.080 \\ & 2,141 \end{aligned}$ |
| All low | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.142 \\ 86 \end{array}$ | $\begin{array}{r} 0.154 \\ 117 \end{array}$ | $\begin{array}{r} 0.244 \\ 75 \end{array}$ | $\begin{array}{r} 0.131 \\ 55 \end{array}$ | $\begin{array}{r} 0.266 \\ 58 \end{array}$ |
| Grade 9 mathematics High (geometry or higher) | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} 0.133 \\ 205 \end{array}$ | $\begin{array}{r} 0.110 \\ 266 \end{array}$ | $\begin{array}{r} 0.118 \\ 280 \end{array}$ | $\begin{array}{r} 0.094 \\ 329 \end{array}$ | $\begin{array}{r} 0.121 \\ 534 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in 1,000s) | $\begin{aligned} & 0.074 \\ & 1,374 \end{aligned}$ | $\begin{aligned} & 0.063 \\ & 1,546 \end{aligned}$ | $\begin{aligned} & 0.059 \\ & 1,369 \end{aligned}$ | $\begin{aligned} & 0.066 \\ & 1,380 \end{aligned}$ | $\begin{aligned} & 0.079 \\ & 1,635 \end{aligned}$ |
| Low (no or low mathematics) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{aligned} & 0.076 \\ & 1,028 \end{aligned}$ | $\begin{array}{r} 0.134 \\ 692 \end{array}$ | $\begin{array}{r} 0.082 \\ 526 \end{array}$ | $\begin{array}{r} 0.091 \\ 504 \end{array}$ | $\begin{array}{r} 0.120 \\ 447 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.132 \\ 501 \end{array}$ | - | $\begin{array}{r} 0.112 \\ 484 \end{array}$ | - | $\begin{array}{r} 0.147 \\ 743 \end{array}$ |
| Suburban | s.e. weighted $n$ (in 1,000s) | $\begin{aligned} & 0.081 \\ & 1,261 \end{aligned}$ | - | $\begin{array}{r} 0.079 \\ 961 \end{array}$ | - | $\begin{aligned} & 0.087 \\ & 1,028 \end{aligned}$ |
| Rural | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.101 \\ 845 \end{array}$ | - | $\begin{array}{r} 0.118 \\ 729 \end{array}$ | - | $\begin{array}{r} 0.158 \\ 846 \end{array}$ |
| School poverty level <br> High (greater than 50 percent in NSLP) | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.123 \\ 185 \end{array}$ | $\begin{array}{r} 0.182 \\ 240 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{aligned} & 0.092 \\ & 1,296 \end{aligned}$ | $\begin{aligned} & 0.099 \\ & 1,565 \end{aligned}$ |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 0.206 \\ 351 \end{array}$ | $\begin{array}{r} 0.262 \\ 425 \end{array}$ |
| Not reported | s.e. weighted n (in 1,000s) | - | - | - | $\begin{array}{r} 0.169 \\ 380 \end{array}$ | $\begin{array}{r} 0.184 \\ 386 \\ \hline \end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A48. Standard errors for table 48: Average number of core academic credits earned by occupational concentrators, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.096 \\ 878 \end{array}$ | $\begin{array}{r} 0.081 \\ 696 \end{array}$ | $\begin{array}{r} 0.092 \\ 542 \end{array}$ | $\begin{array}{r} 0.083 \\ 562 \end{array}$ | $\begin{array}{r} 0.132 \\ 654 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.253 \\ 14 \end{array}$ | $\begin{array}{r} 0.270 \\ 4 \end{array}$ | $\begin{array}{r} 0.346 \\ 7 \end{array}$ | $\begin{array}{r} 0.355 \\ 4 \end{array}$ | $\begin{array}{r} 0.239 \\ 3 \end{array}$ |
| Asian/Pacific Islander | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.369 \\ 7 \end{array}$ | $\begin{array}{r} 0.272 \\ 14 \end{array}$ | $\begin{array}{r} 0.568 \\ 18 \end{array}$ | $\begin{array}{r} 0.253 \\ 11 \end{array}$ | $\begin{array}{r} 0.251 \\ 15 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.149 \\ 96 \end{array}$ | $\begin{array}{r} 0.155 \\ 95 \end{array}$ | $\begin{array}{r} 0.319 \\ 63 \end{array}$ | $\begin{array}{r} 0.130 \\ 76 \end{array}$ | $\begin{array}{r} 0.286 \\ 97 \end{array}$ |
| Hispanic | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.139 \\ 116 \end{array}$ | $\begin{array}{r} 0.180 \\ 54 \end{array}$ | $\begin{array}{r} 0.165 \\ 50 \end{array}$ | $\begin{array}{r} 0.213 \\ 42 \end{array}$ | $\begin{array}{r} 0.211 \\ 68 \end{array}$ |
| White, non-Hispanic | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.120 \\ 634 \end{array}$ | $\begin{array}{r} 0.098 \\ 506 \end{array}$ | $\begin{array}{r} 0.090 \\ 401 \end{array}$ | $\begin{array}{r} 0.100 \\ 396 \end{array}$ | $\begin{array}{r} 0.128 \\ 469 \end{array}$ |
| Sex |  |  |  |  |  |  |
| Male | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.128 \\ 490 \end{array}$ | $\begin{array}{r} 0.096 \\ 386 \end{array}$ | $\begin{array}{r} 0.133 \\ 313 \end{array}$ | $\begin{array}{r} 0.084 \\ 312 \end{array}$ | $\begin{array}{r} 0.112 \\ 378 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.116 \\ 388 \end{array}$ | $\begin{array}{r} 0.087 \\ 309 \end{array}$ | $\begin{array}{r} 0.091 \\ 230 \end{array}$ | $\begin{array}{r} 0.107 \\ 251 \end{array}$ | $\begin{array}{r} 0.178 \\ 267 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.176 \\ 71 \end{array}$ | $\begin{array}{r} 0.198 \\ 27 \end{array}$ | - | $\begin{array}{r} 0.170 \\ 34 \end{array}$ | $\begin{array}{r} 0.272 \\ 28 \end{array}$ |
| No indicated disability | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.103 \\ 798 \end{array}$ | $\begin{array}{r} 0.080 \\ 669 \end{array}$ | - | $\begin{array}{r} 0.083 \\ 528 \end{array}$ | $\begin{array}{r} 0.132 \\ 626 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. weighted $n$ (in 1,000s) | - | 2 | - | $\begin{array}{r} 0.292 \\ 3 \end{array}$ | 2 |
| Proficient | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.081 \\ 694 \end{array}$ | - | $\begin{array}{r} 0.083 \\ 559 \end{array}$ | $\begin{array}{r} 0.132 \\ 652 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 1.023 \\ 47 \end{array}$ | $\begin{array}{r} 0.181 \\ 29 \end{array}$ | $\begin{array}{r} 0.235 \\ 25 \end{array}$ | $\begin{array}{r} 0.165 \\ 39 \end{array}$ | $\begin{array}{r} 0.133 \\ 68 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.088 \\ 623 \end{array}$ | $\begin{array}{r} 0.088 \\ 505 \end{array}$ | $\begin{array}{r} 0.087 \\ 416 \end{array}$ | $\begin{array}{r} 0.085 \\ 426 \end{array}$ | $\begin{array}{r} 0.136 \\ 520 \\ \hline \end{array}$ |

[^12]Table A48. Standard errors for table 48: Average number of core academic credits earned by occupational concentrators, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.131 \\ 208 \end{array}$ | $\begin{array}{r} 0.104 \\ 162 \end{array}$ | $\begin{array}{r} 0.185 \\ 101 \end{array}$ | $\begin{array}{r} 0.135 \\ 97 \end{array}$ | $\begin{array}{r} 0.138 \\ 65 \end{array}$ |
| Academic coursework completed All high | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.152 \\ 20 \end{array}$ | $\begin{array}{r} 0.159 \\ 25 \end{array}$ | $\begin{array}{r} 0.142 \\ 28 \end{array}$ | $\begin{array}{r} 0.169 \\ 55 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.098 \\ 828 \end{array}$ | $\begin{array}{r} 0.076 \\ 609 \end{array}$ | $\begin{array}{r} 0.081 \\ 470 \end{array}$ | $\begin{array}{r} 0.086 \\ 502 \end{array}$ | $\begin{array}{r} 0.117 \\ 565 \end{array}$ |
| All low | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.183 \\ 40 \end{array}$ | $\begin{array}{r} 0.205 \\ 59 \end{array}$ | $\begin{array}{r} 0.404 \\ 41 \end{array}$ | $\begin{array}{r} 0.164 \\ 24 \end{array}$ | $\begin{array}{r} 0.280 \\ 24 \end{array}$ |
| Grade 9 mathematics High (geometry or higher) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.298 \\ 37 \end{array}$ | $\begin{array}{r} 0.277 \\ 32 \end{array}$ | $\begin{array}{r} 0.194 \\ 34 \end{array}$ | $\begin{array}{r} 0.194 \\ 40 \end{array}$ | $\begin{array}{r} 0.319 \\ 93 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.156 \\ 417 \end{array}$ | $\begin{array}{r} 0.086 \\ 392 \end{array}$ | $\begin{array}{r} 0.102 \\ 316 \end{array}$ | $\begin{array}{r} 0.080 \\ 337 \end{array}$ | $\begin{array}{r} 0.123 \\ 428 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.102 \\ 423 \end{array}$ | $\begin{array}{r} 0.108 \\ 272 \end{array}$ | $\begin{array}{r} 0.114 \\ 193 \end{array}$ | $\begin{array}{r} 0.117 \\ 186 \end{array}$ | $\begin{array}{r} 0.177 \\ 132 \end{array}$ |
| School urbanicity Urban | s.e. <br> weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.163 \\ 154 \end{array}$ | - | $\begin{array}{r} 0.170 \\ 104 \end{array}$ | - | $\begin{array}{r} 0.322 \\ 171 \end{array}$ |
| Suburban | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.144 \\ 401 \end{array}$ | - | $\begin{array}{r} 0.107 \\ 210 \end{array}$ | - | $\begin{array}{r} 0.112 \\ 221 \end{array}$ |
| Rural | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.179 \\ 323 \end{array}$ | - | $\begin{array}{r} 0.185 \\ 228 \end{array}$ | - | $\begin{array}{r} 0.185 \\ 262 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.164 \\ 56 \end{array}$ | $\begin{array}{r} 0.217 \\ 70 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.124 \\ 350 \end{array}$ | 0.173 420 |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 0.243 \\ 60 \end{array}$ | $\begin{array}{r} 0.496 \\ 67 \end{array}$ |
| Not reported | s.e. weighted n (in 1,000s) | - | - | - | $\begin{array}{r} 0.157 \\ 97 \end{array}$ | $\begin{array}{r} 0.181 \\ 97 \end{array}$ |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A49. Standard errors for table 49: Percentage distribution of public high school graduates who completed both an occupational concentration and college-preparatory coursework, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} \dagger \\ 2,607 \end{array}$ | $\begin{array}{r} \dagger \\ 2,505 \end{array}$ | $\begin{array}{r} \dagger \\ 2,174 \end{array}$ |  | 2,617 |
| Race/ethnicity <br> American Indian/Alaska Native | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} 0.58 \\ 15 \end{array}$ | $\begin{array}{r} 0.34 \\ 69 \end{array}$ | 0.19 73 | 0.07 96 | 0.10 169 |
| Asian/Pacific Islander | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 2.37 \\ 15 \end{array}$ | $\begin{array}{r} 1.97 \\ 69 \end{array}$ | $\begin{array}{r} 2.99 \\ 73 \end{array}$ | $\begin{array}{r} 0.57 \\ 96 \end{array}$ | $\begin{array}{r} 0.59 \\ 169 \end{array}$ |
| Black, non-Hispanic | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 6.80 \\ 15 \end{array}$ | $\begin{array}{r} 2.27 \\ 69 \end{array}$ | $\begin{array}{r} 2.81 \\ 73 \end{array}$ | $\begin{array}{r} 1.73 \\ 96 \end{array}$ | $\begin{array}{r} 2.31 \\ 169 \end{array}$ |
| Hispanic | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 5.09 \\ 15 \end{array}$ | $\begin{array}{r} 1.70 \\ 69 \end{array}$ | $\begin{array}{r} 3.48 \\ 73 \end{array}$ | $\begin{array}{r} 2.68 \\ 96 \end{array}$ | $\begin{array}{r} 1.95 \\ 169 \end{array}$ |
| White, non-Hispanic | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 8.47 \\ 15 \end{array}$ | $\begin{array}{r} 3.67 \\ 69 \end{array}$ | $\begin{array}{r} 4.59 \\ 73 \end{array}$ | $\begin{array}{r} 2.73 \\ 96 \end{array}$ | $\begin{array}{r} 3.58 \\ 169 \end{array}$ |
| Sex Male | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} 8.04 \\ 15 \end{array}$ | $\begin{array}{r} 3.39 \\ 70 \end{array}$ | $\begin{array}{r} 3.69 \\ 73 \end{array}$ | $\begin{array}{r} 2.03 \\ 100 \end{array}$ | $\begin{array}{r} 1.68 \\ 169 \end{array}$ |
| Female | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 8.04 \\ 15 \end{array}$ | $\begin{array}{r} 3.39 \\ 70 \end{array}$ | $\begin{array}{r} 3.69 \\ 73 \end{array}$ | $\begin{array}{r} 2.03 \\ 100 \end{array}$ | $\begin{array}{r} 1.68 \\ 169 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} 1.26 \\ 14 \end{array}$ | $\begin{array}{r} 0.13 \\ 70 \end{array}$ | - | $\begin{gathered} 0.18 \\ 100 \end{gathered}$ | $\begin{array}{r} 0.18 \\ 169 \end{array}$ |
| No indicated disability | s.e. <br> weighted $n$ (in 1,000s) | $\begin{array}{r} 1.26 \\ 14 \end{array}$ | $\begin{array}{r} 0.13 \\ 70 \end{array}$ | - | $\begin{array}{r} 0.18 \\ 100 \end{array}$ | $\begin{array}{r} 0.18 \\ 169 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. <br> weighted n (in 1,000s) | - | 70 | - | $\begin{gathered} 0.19 \\ 100 \end{gathered}$ | $\begin{array}{r} 0.09 \\ 169 \end{array}$ |
| Proficient | s.e. weighted n (in 1,000s) | - | $70$ | - | $\begin{array}{r} 0.19 \\ 100 \end{array}$ | $\begin{gathered} 0.09 \\ 169 \end{gathered}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} 5.91 \\ 15 \end{array}$ | $\begin{array}{r} 2.01 \\ 70 \end{array}$ | 2.26 73 | $\begin{gathered} 0.38 \\ 100 \end{gathered}$ | $\begin{array}{r} 0.45 \\ 169 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. <br> weighted n (in 1,000s) | $\begin{array}{r} 6.37 \\ 15 \end{array}$ | $\begin{array}{r} 1.97 \\ 70 \end{array}$ | $\begin{array}{r} 2.74 \\ 73 \end{array}$ | $\begin{array}{r} 1.76 \\ 100 \end{array}$ | $\begin{array}{r} 2.59 \\ 169 \end{array}$ |
| Low (less than 2.0) | s.e. weighted n (in 1,000s) | $\begin{array}{r} 2.79 \\ \quad 15 \end{array}$ | $\begin{array}{r} 0.66 \\ 70 \end{array}$ | 1.94 73 | $\begin{array}{r} 1.86 \\ 100 \end{array}$ | $\begin{array}{r}2.61 \\ 169 \\ \hline\end{array}$ |

See notes at end of table.

Table A49. Standard errors for table 49: Percentage distribution of public high school graduates who completed both an occupational concentration and college-preparatory coursework, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | 5.31 | 2.90 | 2.84 | 2.07 | 2.53 |
|  | weighted n (in 1,000s) | 15 | 70 | 73 | 100 | 169 |
| Mid-level or mixed | s.e. | 5.31 | 2.90 | 2.84 | 2.07 | 2.53 |
|  | weighted n (in 1,000s) | 15 | 70 | 73 | 100 | 169 |
| All low | s.e. | - | - | - | - | - |
|  | weighted n (in 1,000s) | 15 | 70 | 73 | 100 | 169 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | 6.51 | 2.49 | 2.89 | 1.73 | 4.62 |
|  | weighted n (in 1,000s) | 15 | 70 | 73 | 100 | 169 |
| Mid-level (prealgebra or |  | 6.58 | 2.68 | 3.08 | 1.72 | 4.44 |
| algebra 1) | weighted n (in 1,000s) | 15 | 70 | 73 | 100 | 169 |
| Low (no or low mathematics) | s.e. | 1.09 | 1.79 | 1.01 | 0.60 | 0.48 |
|  | weighted n (in 1,000s) | 15 | 70 | 73 | 100 | 169 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 7.60 | 4.27 | 4.81 | 2.67 | 5.30 |
|  | weighted n (in 1,000s) | 15 | 70 | 73 | 100 | 169 |
| Suburban | s.e. | 9.39 | 6.37 | 4.31 | 4.59 | 4.61 |
|  | weighted n (in 1,000s) | 15 | 70 | 73 | 100 | 169 |
| Rural | s.e. | 8.37 | 6.04 | 3.92 | 3.84 | 5.34 |
|  | weighted n (in 1,000s) | 15 | 70 | 73 | 100 | 169 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 2.29 | 2.48 |
|  | weighted n (in 1,000s) | - | - | - | 100 | 169 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 5.21 | 5.14 |
|  | weighted n (in 1,000s) | - | - | - | 100 | 169 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 4.88 | 3.24 |
|  | weighted n (in 1,000s) | - | - | - | 100 | 169 |
| Not reported | s.e. | - | - | - | 3.84 | 3.98 |
|  | weighted n (in 1,000s) | - | - | - | 100 | 169 |

—Not available.
$\dagger$ Not applicable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B)
Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A50. Standard errors for table 50: Percentage of public high school graduates who completed high-level mathematics courses in grade 9 , by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. | 0.48 | 0.78 | 0.69 | 0.96 | 1.14 |
|  | weighted n (in 1,000s) | 2,607 | 2,505 | 2,174 | 2,213 | 2,617 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaska | s.e. | 2.19 | 4.56 | 1.35 | 3.04 | 4.38 |
| Native | weighted n (in 1,000s) | 30 | 12 | 22 | 17 | 12 |
| Asian/Pacific Islander | s.e. | 2.60 | 2.63 | 2.21 | 2.74 | 3.88 |
|  | weighted n (in 1,000s) | 38 | 86 | 88 | 74 | 92 |
| Black, non-Hispanic | s.e. | 0.55 | 1.09 | 1.74 | 0.75 | 1.93 |
|  | weighted n (in 1,000s) | 293 | 347 | 254 | 263 | 356 |
| Hispanic | s.e. | 0.47 | 1.17 | 1.89 | 1.56 | 1.32 |
|  | weighted n (in 1,000s) | 307 | 194 | 207 | 168 | 299 |
| White, non-Hispanic | s.e. | 0.59 | 0.86 | 0.83 | 1.12 | 1.33 |
|  | weighted n (in 1,000s) | 1,913 | 1,778 | 1,596 | 1,564 | 1,852 |
| Sex |  |  |  |  |  |  |
| Male | s.e. | 0.58 | 0.84 | 0.70 | 1.00 | 0.99 |
|  | weighted n (in 1,000s) | 1,257 | 1,194 | 1,074 | 1,083 | 1,232 |
| Female | s.e. | 0.59 | 0.81 | 1.00 | 1.01 | 1.23 |
|  | weighted n (in 1,000s) | 1,350 | 1,309 | 1,100 | 1,126 | 1,347 |
| Disability status (grade 12) |  |  |  |  |  |  |
| Has disability | s.e. | 1.09 | 0.42 | - | 1.28 | 0.93 |
|  | weighted n (in 1,000s) | 226 | 64 | - | 82 | 74 |
| No indicated disability | s.e. | 0.51 | 0.79 | - | 0.99 | 1.16 |
|  | weighted n (in 1,000s) | 2,361 | 2,441 | - | 2,130 | 2,543 |
| English proficiency (grade 12) |  |  |  |  |  |  |
| Limited | s.e. | - | 2.77 | - | 2.00 | 1.33 |
|  | weighted n (in 1,000s) | - | 13 | - | 19 | 19 |
| Proficient | s.e. | - | 0.78 | - | 0.97 | 1.15 |
|  | weighted n (in 1,000s) | - | 2,492 | - | 2,194 | 2,598 |
| Grade-point average (GPA) |  |  |  |  |  |  |
| High (greater than 3.5) | s.e. | 2.10 | 3.34 | 2.50 | 2.22 | 2.32 |
|  | weighted n (in 1,000s) | 260 | 258 | 233 | 307 | 456 |
| Mid-level (2.0 to 3.5) | s.e. | 0.51 | 0.67 | 0.74 | 0.97 | 1.06 |
|  | weighted n (in 1,000s) | 1,812 | 1,809 | 1,644 | 1,600 | 1,975 |
| Low (less than 2.0) | s.e. | 0.52 | 0.68 | 0.33 | 0.45 | 0.80 |
|  | weighted n (in 1,000s) | 534 | 438 | 295 | 306 | 186 |

See notes at end of table.

Table A50. Standard errors for table 50: Percentage of public high school graduates who completed high-level mathematics courses in grade 9 , by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | 3.42 | 2.86 | 2.42 | 2.10 | 3.35 |
|  | weighted n (in 1,000s) | 114 | 273 | 308 | 330 | 386 |
| Mid-level or mixed | s.e. | 0.46 | 0.82 | 0.47 | 0.87 | 1.00 |
|  | weighted n (in 1,000s) | 2,403 | 2,098 | 1,781 | 1,810 | 2,141 |
| All low | s.e. | - | - | - | - | 1.99 |
|  | weighted n (in 1,000s) | 86 | 117 | 75 | 55 | 58 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | - | - | - | - | - |
|  | weighted n (in 1,000s) | 205 | 266 | 280 | 329 | 534 |
| Mid-level (prealgebra or algebra 1) | s.e. | - | - | - | - | - |
|  | weighted n (in 1,000s) | 1,374 | 1,546 | 1,369 | 1,380 | 1,635 |
| Low (no or low mathematics) | s.e. | - | - | - | - | - |
|  | weighted $n$ (in 1,000s) | 1,028 | 692 | 526 | 504 | 447 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 1.03 | 2.94 | 1.83 | 0.93 | 2.17 |
|  | weighted n (in 1,000s) | 501 | 312 | 484 | 303 | 743 |
| Suburban | s.e. | 0.76 | 0.91 | 0.98 | 1.90 | 1.40 |
|  | weighted n (in 1,000s) | 1,261 | 949 | 961 | 918 | 1,028 |
| Rural | s.e. | 0.72 | 1.16 | 1.00 | 1.06 | 1.65 |
|  | weighted n (in 1,000s) | 845 | 1,245 | 729 | 991 | 846 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 2.04 | 1.81 |
|  | weighted $n$ (in 1,000s) | - | - | - | 185 | 240 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 1.17 | 1.48 |
|  | weighted n (in 1,000s) | - | - | - | 1,296 | 1,565 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 3.33 | 1.81 |
|  | weighted n (in 1,000s) | - | - | - | 351 | 425 |
| Not reported | s.e. | - | - | - | 1.68 | 3.96 |
|  | weighted n (in 1,000s) | - | - | - | 380 | 386 |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A51. Standard errors for table 51: Percentage of occupational concentrators who completed highlevel mathematics courses in grade 9 , by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.52 \\ 878 \end{array}$ | $\begin{array}{r} 0.69 \\ 696 \end{array}$ | $\begin{array}{r} 0.64 \\ 542 \end{array}$ | $\begin{array}{r} 0.62 \\ 562 \end{array}$ | $\begin{array}{r} 1.78 \\ 654 \end{array}$ |
| Race/ethnicity American Indian/Alaska Native | s.e. <br> weighted $n$ (in 1,000 s) | $14$ | $\begin{array}{r} 4.22 \\ 4 \end{array}$ | 7 | 1.26 4 | 5.93 3 |
| Asian/Pacific Islander | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 5.23 \\ 7 \end{array}$ | $\begin{array}{r} 3.04 \\ 14 \end{array}$ | $\begin{array}{r} 2.91 \\ 18 \end{array}$ | $\begin{array}{r} 3.24 \\ 11 \end{array}$ | $\begin{array}{r} 6.40 \\ 15 \end{array}$ |
| Black, non-Hispanic | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.65 \\ 96 \end{array}$ | $\begin{array}{r} 1.78 \\ 95 \end{array}$ | $\begin{array}{r} 1.62 \\ 63 \end{array}$ | $\begin{array}{r} 1.24 \\ 76 \end{array}$ | $\begin{array}{r} 5.26 \\ 97 \end{array}$ |
| Hispanic | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.67 \\ 116 \end{array}$ | $\begin{array}{r} 1.22 \\ 54 \end{array}$ | $\begin{array}{r} 1.58 \\ 50 \end{array}$ | $\begin{array}{r} 0.97 \\ 42 \end{array}$ | $\begin{array}{r} 4.01 \\ 68 \end{array}$ |
| White, non-Hispanic | s.e. weighted n (in 1,000s) | $\begin{array}{r} 0.66 \\ 634 \end{array}$ | $\begin{array}{r} 0.72 \\ 506 \end{array}$ | $\begin{array}{r} 0.78 \\ 401 \end{array}$ | $\begin{array}{r} 0.71 \\ 396 \end{array}$ | $\begin{array}{r} 1.25 \\ 469 \end{array}$ |
| Sex <br> Male | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.64 \\ 490 \end{array}$ | $\begin{array}{r} 0.71 \\ 386 \end{array}$ | $\begin{array}{r} 0.88 \\ 313 \end{array}$ | $\begin{array}{r} 0.89 \\ 312 \end{array}$ | $\begin{array}{r} 1.27 \\ 378 \end{array}$ |
| Female | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.79 \\ 388 \end{array}$ | $\begin{array}{r} 0.84 \\ 309 \end{array}$ | $\begin{array}{r} 0.82 \\ 230 \end{array}$ | $\begin{array}{r} 0.68 \\ 251 \end{array}$ | $\begin{array}{r} 2.74 \\ 267 \end{array}$ |
| Disability status (grade 12) Has disability | s.e. <br> weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 1.74 \\ 71 \end{array}$ | $\begin{array}{r} 0.81 \\ 27 \end{array}$ | - | $\begin{array}{r} 1.53 \\ 34 \end{array}$ | $\begin{array}{r} 1.58 \\ 28 \end{array}$ |
| No indicated disability | s.e. weighted $n$ (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.53 \\ 798 \end{array}$ | $\begin{array}{r} 0.69 \\ 669 \end{array}$ | - | $\begin{array}{r} 0.63 \\ 528 \end{array}$ | $\begin{array}{r} 1.86 \\ 626 \end{array}$ |
| English proficiency (grade 12) Limited | s.e. <br> weighted $n$ (in $1,000 \mathrm{~s}$ ) | - | 2 | - | $\begin{array}{r} 1.30 \\ 3 \end{array}$ | 2 |
| Proficient | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | $\begin{array}{r} 0.69 \\ 694 \end{array}$ | - | $\begin{array}{r} 0.62 \\ 559 \end{array}$ | $\begin{array}{r} 1.79 \\ 652 \end{array}$ |
| Grade-point average (GPA) High (greater than 3.5) | s.e. weighted n (in 1,000s) | $\begin{array}{r} 4.06 \\ 47 \end{array}$ | $\begin{array}{r} 5.05 \\ 29 \end{array}$ | $\begin{array}{r} 4.59 \\ 25 \end{array}$ | $\begin{array}{r} 3.20 \\ 39 \end{array}$ | $\begin{array}{r} 4.08 \\ 68 \end{array}$ |
| Mid-level (2.0 to 3.5) | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.56 \\ 623 \end{array}$ | $\begin{array}{r} 0.72 \\ 505 \end{array}$ | $\begin{array}{r} 0.71 \\ 416 \end{array}$ | $\begin{array}{r} 0.73 \\ 426 \end{array}$ | $\begin{array}{r} 1.82 \\ 520 \end{array}$ |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.65 \\ 208 \\ \hline \end{array}$ | $\begin{array}{r} 0.66 \\ 162 \\ \hline \end{array}$ | $\begin{array}{r} 0.74 \\ 101 \\ \hline \end{array}$ | $\begin{array}{r} 0.49 \\ 97 \\ \hline \end{array}$ | $\begin{array}{r} 1.19 \\ 65 \\ \hline \end{array}$ |

See notes at end of table.

Table A51. Standard errors for table 51: Percentage of occupational concentrators who completed highlevel mathematics courses in grade 9 , by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic coursework completed |  |  |  |  |  |  |
| All high | s.e. | - | 6.95 | 5.02 | 4.56 | 5.03 |
|  | weighted n (in 1,000s) | 7 | 20 | 25 | 28 | 55 |
| Mid-level or mixed | s.e. | 0.54 | 0.75 | 0.66 | 0.58 | 1.56 |
|  | weighted n (in 1,000s) | 828 | 609 | 470 | 502 | 565 |
| All low | s.e. | - | - | - | - | 3.42 |
|  | weighted n (in 1,000s) | 40 | 59 | 41 | 24 | 24 |
| Grade 9 mathematics |  |  |  |  |  |  |
| High (geometry or higher) | s.e. | - | - | - | - | - |
|  | weighted n (in 1,000s) | 37 | 32 | 34 | 40 | 93 |
| Mid-level (prealgebra or algebra 1) | s.e. | - | - | - | - | - |
|  | weighted n (in 1,000s) | 417 | 392 | 316 | 337 | 428 |
| Low (no or low mathematics) | s.e. | - | - | - | - |  |
|  | weighted n (in 1,000s) | 423 | 272 | 193 | 186 | 132 |
| School urbanicity |  |  |  |  |  |  |
| Urban | s.e. | 1.20 | 2.69 | 1.29 | 1.20 | 5.31 |
|  | weighted n (in 1,000s) | 154 | 81 | 104 | 63 | 171 |
| Suburban | s.e. | 0.84 | 1.16 | 1.00 | 1.21 | 1.96 |
|  | weighted n (in 1,000s) | 401 | 214 | 210 | 183 | 221 |
| Rural | s.e. | 0.78 | 0.99 | 1.06 | 0.76 | 1.28 |
|  | weighted n (in 1,000s) | 323 | 400 | 228 | 316 | 262 |
| School poverty level |  |  |  |  |  |  |
| High (greater than 50 percent in NSLP) | s.e. | - | - | - | 1.49 | 1.97 |
|  | weighted n (in 1,000s) | - | - | - | 56 | 70 |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. | - | - | - | 0.85 | 2.50 |
|  | weighted n (in 1,000s) | - | - | - | 350 | 420 |
| Low (5 percent or less in NSLP) | s.e. | - | - | - | 3.13 | 1.97 |
|  | weighted $n$ (in 1,000 s) | - | - | - | 60 | 67 |
| Not reported | s.e. | - | - | - | 1.03 | 4.49 |
|  | weighted n (in 1,000 s) | - | - | - | 97 | 97 |

-Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

Table A52. Standard errors for table 52: Percentage of high school graduates earning 3.0 or more occupational credits who met the New Basics core academic requirements, by selected characteristics, including special and protected populations status: Various years, 1982-98

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | s.e. | 0.58 | 1.86 | 1.28 | 1.84 | 3.13 |
|  | weighted n (in 1,000s) | 1,205 | 1,076 | 918 | 928 | 1,147 |
| Race/ethnicity |  |  |  |  |  |  |
| American Indian/Alaska | s.e. | 3.84 | 6.00 | 5.94 | 6.45 | 5.92 |
| Native | weighted n (in 1,000s) | 18 | 6 | 13 | 7 | 5 |
| Asian/Pacific Islander | s.e. | 3.63 | 4.50 | 5.89 | 4.19 | 5.23 |
|  | weighted n (in 1,000s) | 12 | 27 | 34 | 23 | 31 |
| Black, non-Hispanic | s.e. | 1.45 | 4.40 | 3.29 | 3.07 | 6.27 |
|  | weighted n (in 1,000s) | 130 | 151 | 106 | 121 | 168 |
| Hispanic | s.e. | 0.84 | 3.13 | 3.60 | 5.89 | 3.35 |
|  | weighted n (in 1,000s) | 160 | 83 | 91 | 71 | 132 |
| White, non-Hispanic | s.e. | 0.72 | 1.91 | 1.50 | 2.10 | 3.34 |
|  | weighted n (in 1,000s) | 872 | 774 | 671 | 655 | 809 |
| Sex |  |  |  |  |  |  |
| Male | s.e. | 0.76 | 1.99 | 1.61 | 1.96 | 3.12 |
|  | weighted n (in 1,000s) | 662 | 589 | 515 | 503 | 619 |
| Female | s.e. | 0.77 | 1.91 | 1.66 | 1.97 | 3.37 |
|  | weighted n (in 1,000s) | 543 | 487 | 403 | 424 | 514 |
| Disability status (grade 12) |  |  |  |  |  |  |
| Has disability | s.e. | 1.56 | 2.41 | - | 2.48 | 4.92 |
|  | weighted n (in 1,000s) | 99 | 38 | - | 47 | 43 |
| No indicated disability | s.e. | 0.62 | 1.87 | - | 1.90 | 3.14 |
|  | weighted n (in 1,000s) | 1,097 | 1,038 | - | 881 | 1,104 |
| English proficiency (grade 12) |  |  |  |  |  |  |
| Limited | s.e. | - | - | - | 9.61 | 8.68 |
|  | weighted n (in 1,000s) | - | - | - | 6 | 5 |
| Proficient | s.e. | - | 1.86 | - | 1.85 | 3.14 |
|  | weighted n (in 1,000s) | - | 1,074 | - | 922 | 1,142 |
| Grade-point average (GPA) |  |  |  |  |  |  |
| High (greater than 3.5) | s.e. | 3.43 | 4.02 | 3.25 | 3.46 | 2.93 |
|  | weighted n (in 1,000s) | 71 | 56 | 53 | 73 | 131 |
| Mid-level (2.0 to 3.5) | s.e. | 0.66 | 1.90 | 1.36 | 1.95 | 3.15 |
|  | weighted n (in 1,000s) | 847 | 778 | 701 | 689 | 911 |

[^13]Table A52. Standard errors for table 52: Percentage of high school graduates earning 3.0 or more occupational credits who met the New Basics core academic requirements, by selected characteristics, including special and protected populations status: Various years, 1982-98-Continued

|  |  | 1982 | 1990 | 1992 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low (less than 2.0) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.81 \\ 287 \end{array}$ | $\begin{array}{r} 1.99 \\ 242 \end{array}$ | $\begin{array}{r} 2.57 \\ 164 \end{array}$ | $\begin{array}{r} 2.15 \\ 166 \end{array}$ | $\begin{array}{r} 4.55 \\ 105 \end{array}$ |
| Academic coursework completed All high | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 8.06 \\ 15 \end{array}$ | $\begin{array}{r} 3.31 \\ 43 \end{array}$ | $\begin{array}{r} 3.41 \\ 56 \end{array}$ | $\begin{array}{r} 2.10 \\ 61 \end{array}$ | $\begin{array}{r} 3.19 \\ 102 \end{array}$ |
| Mid-level or mixed | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.60 \\ 1,134 \end{array}$ | $\begin{array}{r} 1.84 \\ 944 \end{array}$ | $\begin{array}{r} 1.35 \\ 798 \end{array}$ | $\begin{array}{r} 1.86 \\ 821 \end{array}$ | $\begin{array}{r} 3.17 \\ 992 \end{array}$ |
| All low | s.e. weighted $n$ (in 1,000s) | $\overline{53}$ | $\begin{array}{r} 1.46 \\ 78 \end{array}$ | $\begin{array}{r} 1.82 \\ 55 \end{array}$ | $\begin{array}{r} 2.18 \\ 36 \end{array}$ | 2.61 38 |
| Grade 9 mathematics High (geometry or higher) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 3.37 \\ 60 \end{array}$ | $\begin{array}{r} 4.76 \\ 59 \end{array}$ | $\begin{array}{r} 3.48 \\ 68 \end{array}$ | $\begin{array}{r} 3.22 \\ 76 \end{array}$ | $\begin{array}{r} 3.90 \\ 177 \end{array}$ |
| Mid-level (prealgebra or algebra 1) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.85 \\ 591 \end{array}$ | $\begin{array}{r} 2.00 \\ 632 \end{array}$ | $\begin{array}{r} 1.59 \\ 560 \end{array}$ | $\begin{array}{r} 1.93 \\ 576 \end{array}$ | $\begin{array}{r} 3.37 \\ 748 \end{array}$ |
| Low (no or low mathematics) | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{array}{r} 0.64 \\ 554 \end{array}$ | $\begin{array}{r} 1.97 \\ 384 \end{array}$ | $\begin{array}{r} 1.23 \\ 290 \end{array}$ | $\begin{array}{r} 2.15 \\ 276 \end{array}$ | $\begin{array}{r} 2.95 \\ 222 \end{array}$ |
| School urbanicity Urban | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | $\begin{gathered} 1.07 \\ 213 \end{gathered}$ | $\begin{array}{r} 4.55 \\ 122 \end{array}$ | $\begin{array}{r} 2.82 \\ 189 \end{array}$ | $\begin{array}{r} 5.49 \\ 101 \end{array}$ | $\begin{array}{r} 5.43 \\ 284 \end{array}$ |
| Suburban | s.e. weighted $n$ (in 1,000s) | $\begin{array}{r} 0.98 \\ 556 \end{array}$ | $\begin{array}{r} 2.45 \\ 343 \end{array}$ | $\begin{array}{r} 2.04 \\ 358 \end{array}$ | $\begin{array}{r} 2.52 \\ 325 \end{array}$ | $\begin{aligned} & 2.89 \\ & 407 \end{aligned}$ |
| Rural | s.e. weighted $n$ (in 1,000 s) | $\begin{array}{r} 0.88 \\ 436 \end{array}$ | $\begin{array}{r} 2.49 \\ 611 \end{array}$ | $\begin{array}{r} 2.11 \\ 371 \end{array}$ | $\begin{array}{r} 2.73 \\ 502 \end{array}$ | $\begin{array}{r} 5.84 \\ 456 \end{array}$ |
| School poverty level High (greater than 50 percent in NSLP) | s.e. weighted $n$ (in 1,000 s) | - | - | - | $\begin{array}{r} 4.40 \\ 84 \end{array}$ | $\begin{array}{r} 7.46 \\ 129 \end{array}$ |
| Middle (greater than 5 to 50 percent in NSLP) | s.e. weighted $n$ (in 1,000s) | - | - | - | $\begin{array}{r} 2.60 \\ 572 \end{array}$ | 3.95 716 |
| Low (5 percent or less in NSLP) | s.e. weighted $n$ (in 1,000s) | - | - | - | $\begin{gathered} 4.96 \\ 105 \end{gathered}$ | 9.32 127 |
| Not reported | s.e. weighted n (in $1,000 \mathrm{~s}$ ) | - | - | - | $\begin{array}{r} 3.34 \\ 168 \\ \hline \end{array}$ | $\begin{array}{r}5.77 \\ 174 \\ \hline\end{array}$ |

—Not available.
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond (HS\&B) Sophomore Cohort, First Follow-up Survey and High School Transcript Study, 1982; National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and High School Transcript Studies (HSTS), 1990, 1994, and 1998.

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## Appendix B-Glossary

Academic subjects: The high school academic curriculum is divided into the main subject areas listed below, corresponding to the 1998 revised Secondary School Taxonomy categories (Bradby and Hoachlander 1999). The examples given are not exhaustive of the courses included in each subject area.

Mathematics: Includes courses in general mathematics, consumer mathematics, prealgebra, algebra 1, geometry, algebra 2 and 3, trigonometry, analytical geometry, mathematical analysis, precalculus, calculus, Advanced Placement (AP) calculus, International Baccalaureate (IB) mathematics, probability and statistics, unified mathematics (an integrated course sequence usually taught over 2 or 3 years), and occupationally related mathematics.

Science: Includes courses in survey science, biological science (including biology and some specialized courses such as botany, zoology, and anatomy and physiology), chemistry, physics, earth science, physical science, and engineering.

English: Includes survey courses (including language skills courses and English 9-12), as well as courses in literature, composition and writing, speech, and English as a Second Language.

Social studies: Includes courses in U.S. history, world history, government and politics, economics, behavioral sciences (including psychology and sociology), geography, social studies, American studies, area studies, women's studies, law, anthropology, and philosophy.

Fine arts: Includes courses in visual arts, music, dance, and theater arts.

Foreign (non-English) languages: Includes courses in Spanish, French, German, Latin, Italian, and other non-English languages and literatures.

Academic coursework completed: This variable describes whether students completed all lowor all high-level mathematics, science, and English coursework in high school, or some other combination of coursework (either mid-level or mixed coursework) in these subjects, according to the following definitions.

Low-level mathematics: Includes no mathematics; remedial mathematics; general, basic or consumer mathematics; technical or vocational mathematics; pre-algebra; algebra 1 taught over the course of 2 academic years; and informal geometry; but no higher mathematics.

Low-level science: Includes no science, remedial science, physical science, earth science, unified science, astronomy, geology, environmental science, oceanography, general physics, basic biology 1, and consumer or introductory chemistry, but no higher science.

Low-level English: Includes at least some below-grade or low academic level English courses.

High-level mathematics: Includes algebra 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.

High-level science: Includes chemistry 1 and 2 and physics 1 and 2.

High-level English: Includes at least some honors-level English courses.
Advanced concentrator: Graduate earning 3.0 or more credits in high school in one of the 10 broad occupational program areas listed under occupational programs, with at least 1.0 credit in a second- or higher-level or cooperative education course in that program area.

Carnegie unit: A standard of measurement used for secondary or high school education that represents the completion of a course that meets one period per day for 1 year. See credit.

College-preparatory coursework: Public high school graduates were classified as completing college-preparatory coursework if they completed 4.0 credits in English; 3.0 credits in mathematics at the algebra 1 level or higher; 2.0 credits in biology, chemistry, and/or physics; 2.0 credits in social studies with at least 1.0 credit in U.S. or world history; and 2.0 credits in a single foreign (non-English) language during high school.

Core academic subjects: Includes coursework in mathematics, science, English and social studies, as defined under academic subjects.

Credit: Term used in place of a "Carnegie unit" to represent the completion of a course that meets one period per day for 1 year. See Carnegie unit.

Disability status (grade 12): Indicates whether or not a student was reported (by the student in 1982 and by school staff in 1990, 1994, and 1998) to have a physical or educational disability in grade 12 .

English proficiency (grade 12): Indicates whether a student was reported by school staff to be limited English proficient or English proficient in grade 12.

Family and consumer sciences education: Consists of courses intended to prepare students for roles outside the paid labor market, including home economics, child development, foods and nutrition, and clothing. Home economics-related courses that prepare students for the paid labor market are included under occupational education, in the child care and education, food service and hospitality, and personal and other services program areas.

General labor market preparation: Consists of courses that teach general employment skills but do not have as their primary objective preparing students for paid employment in a specific field. These courses include typewriting, word processing, industrial arts, career exploration, general work experience, and technology education.

Grade 9 mathematics: Students were classified into the following three categories according to the highest-level mathematics course they took in grade 9 .

High: Includes geometry, algebra 2 and 3, trigonometry, analytical geometry, linear algebra, probability, statistics, precalculus, introduction to analysis, and calculus.

Mid-level: Includes prealgebra and algebra 1.
Low: Includes no mathematics, remedial mathematics; general, basic, or consumer mathematics; and technical or vocational mathematics; but no higher mathematics.

Grade-point average (GPA): GPA was calculated for all courses that graduates took during high school and was based on the grades recorded on student transcripts.

National School Lunch Program (NSLP): A federal program that provides free or reducedprice lunches to students based on household income.

New Basics core academic requirements: The publication, A Nation at Risk (National Commission on Excellence in Education 1983), recommended that high school graduation requirements be strengthened, and that, at a minimum, all students take 4 years of English; 3 years each of mathematics, science, social studies; and one-half year of computer science. The "core aca-
demic requirements" referred to in this report include the recommendations for English, mathematics, science, and social studies.

Occupational concentrator: Graduate earning 3.0 or more credits in high school in one of the 10 broad occupational program areas listed under occupational programs. In some cases, the report also examines trends in concentrating (earning 3.0 or more credits) in the 18 narrow occupational program areas listed under occupational programs.

Occupational education: Also called specific labor market preparation, consists of courses that teach skills and provide information required in a particular occupation or cluster of occupations. Courses are organized into 10 broad and 18 narrow occupational program areas. See occupational programs.

Occupational programs: The 1998 Secondary School Taxonomy organizes high school occupational programs into the following 10 broad and 18 narrow program areas. The examples given are not exhaustive of the courses offered in each area. See also figure 1.

Agriculture (and renewable resources): Includes courses in agricultural mechanics, horticulture, animal sciences, and environmental management.

Business: Includes the following two narrow program areas of business services and business management:

Business services: Includes courses in bookkeeping, accounting, data entry, secretarial administration, and office procedures.

Business management: Includes courses in business and management and in banking and finance.

Marketing: Includes courses related to the selling and distribution of goods and services, including distributive education, distribution and marketing, fashion merchandising, and entrepreneurship.

Health care: Includes courses intended to prepare students for careers in the health professions, such as health occupations, dental assistant, medical laboratory technologies, and practical nursing.

Protective services (and public services): Includes courses in criminal justice, fire protection, public administration, and social work.

Technology: Includes the following three narrow program areas of computer technology, communications technology, and other technology:

Computer technology: Includes coursework in computer applications, computer programming, data processing, computer science and systems, and computer mathematics.

Communications technology: Includes coursework in broadcast management, film making, and radio and television production.

Other technology: Includes coursework in electronic technology, industrial production technology, chemical technology, and engineering technologies.

Trade and industry: Includes the following four narrow program areas of construction, mechanics and repair, precision production, and transportation:

Construction: Includes coursework in electricity, masonry, carpentry, plumbing, and building construction.

Mechanics and repair: Includes coursework in industrial mechanics, radio and TV repair, air conditioning and heating, power mechanics, auto mechanics, and aviation powerplant.

Precision production: Includes the following three narrow program areas of print production, materials production, and other precision production:

Print production: Includes coursework in drafting, graphics, and printing.
Materials production: Includes coursework in metals, plastics, and woodworking.

Other precision production: Includes coursework in electronics, leatherwork, meatcutting, and commercial photography.

Transportation: Includes coursework in aeronautics, aviation technology, marine mechanics, transportation technology, and vehicle and equipment operation.

Food service and hospitality: Includes coursework in food marketing/distribution, hospitality, culinary arts, and hotel management.

Child care and education: Includes coursework in child care services, child development, education, and library science.

Personal and other services: Includes coursework in cosmetology, building and grounds maintenance, clothing and textiles, housing and interior design, and home economics occupations.

Race/ethnicity: Classification indicating general racial or ethnic heritage based on selfidentification:

American Indian/Alaska Native: A person having origins in any of the peoples of North America and maintaining cultural identification through tribal affiliation or community recognition.

Asian/Pacific Islander: A person having origins in any of the peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands including, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.

Hispanic: A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

Non-Hispanic Black: A person having origins in any of the black racial groups in Africa, excluding persons of Hispanic origin. For simplicity's sake, persons in this group are referred to as Blacks in this report.

Non-Hispanic White: A person having origins in any of the peoples of Europe, North Africa, or the Middle East, excluding persons of Hispanic origin. For simplicity's sake, persons in this group are referred to as Whites in this report.

School poverty: Students were classified into the following categories according to the percentage of students who participated in the National School Lunch Program (NSLP) at their 12thgrade school.

High: Greater than 50 percent of students participated in the NSLP at the 12th-grade school.

Middle: Greater than 5 to 50 percent of students participated in the NSLP at the 12thgrade school.

Low: 5 percent or fewer of students participated in the NSLP at the 12th-grade school.

Not reported: The 12th-grade school did not report the percentage of students who participated in the NSLP.

School urbanicity: Students were classified according to the location of their 12th-grade school, based on the following definitions derived from U.S. Census Bureau classifications.

Urban: A school was located in the central city of a Consolidated Metropolitan Statistical Area (CMSA) or Metropolitan Statistical Area (MSA), regardless of the size of the city.

Suburban: A school was located in a CMSA or MSA or a large or mid-size city and defined as urban fringe by the Census Bureau; or in an incorporated place or Censusdesignated place with a population greater than 25,000 and located outside a CMSA or MSA.

Rural: A school was located in an incorporated place or Census-designated place with a population less than 25,000 and located outside a CMSA or MSA; or in a "non-place" territory outside a CMSA or MSA and defined as rural by the Census Bureau.

Specific labor market preparation: Also called occupational education, consists of courses that teach skills and provide information required in a particular occupation or cluster of occupations. Courses are organized into 10 broad and 18 narrow occupational program areas. See occupational programs.

Vocational/technical education: Organized educational programs, services, and activities that are directly related to the preparation of individuals for paid or unpaid employment or for additional preparation for a career that requires other than a bachelor's or an advanced degree. This publication refers to the following three types of vocational education at the high school level: family and consumer sciences education, general labor market preparation, and specific labor market preparation or occupational education.

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## Appendix C-Technical Notes and Methodology

## Sources of Data

The data for this report came from five studies conducted by NCES between 1982 and 1998. These studies include the High School and Beyond (HS\&B) Sophomore Cohort, First Fol-low-up Survey and High School Transcript Study, 1982; the National Education Longitudinal Study of 1988 (NELS:88), Second Follow-up Survey and High School Transcript Study, 1992; and the High School Transcript Studies (HSTS) of 1990, 1994, and 1998 that were conducted as part of the National Assessment of Educational Progress (NAEP).

For all transcripts and samples used in this report, a course identification code number, based on the Classification of Secondary School Courses (CSSC), was assigned to each course taken by a student. The 1998 Revision of the Secondary Schools Taxonomy (Bradby and Hoachlander 1999) further classified these CSSC codes. This taxonomy served to standardize all transcript data included in the analysis.

The analysis sample from each transcript study was restricted to the subset of students who were public high school graduates and who had a complete set of transcripts. A complete transcript was defined as one that recorded 16 or more total credits (Carnegie units), with a positive, non-zero number of credits completed in English.

One additional step was taken to ensure that the analysis samples were comparable across the five trend years. This was necessary because the HS\&B and NELS studies excluded students with the most severe disabilities, where it was determined by school staff that these students were unable to complete the lengthy student questionnaires that were a part of these longitudinal studies. In order to ensure comparability, graduates with special education diplomas were excluded from the HSTS samples. This procedure was first determined by Gifford et al. (1989) and then again by Tuma (1996) to produce comparable samples across HS\&B, NELS, and HSTS. Thus, the samples used for this trend analysis were consistent with the population of public high graduates, including students with disabilities, who earned regular or honors diplomas in each of the study years. This restriction is consistent with NCES reports on high school vocational/technical coursetaking published over the last decade and is consistent with NCES procedures for transcript studies (Alt and Bradby 1999).

In addition, there may be some minor coding differences between NELS and the other transcript data that may affect the data for 1992. NCES plans to study this issue. The following section provides a brief description of each study.

## High School and Beyond

The High School and Beyond (HS\&B) longitudinal survey was first administered in 1980 to a stratified, nationally representative sample of approximately 30,000 high school sophomores and 28,000 high school seniors from more than 1,000 high schools. Follow-up surveys were administered in 1982, 1984, 1986, and 1992. This report focused on the sophomore cohort from the First Follow-up Survey conducted in 1982. For purposes of this report, the analysis sample was limited to public high school students using the variable HSTYPE. This group was reduced further by including only high school graduates, defined by using a composite of graduation status variables RESNLEFT, FUSTTYPE, and SY12 from the Transcript, First Follow-up and Second Follow-up surveys, respectively.

The First Follow-up and High School Transcript Study were used to examine coursetaking patterns. The analysis sample included 9,598 public high school sophomores who graduated in 1982 and had complete transcripts available. Standard errors were computed using the Taylor series approximation method. More information on the First Follow-up and Transcript data files can be found in High School and Beyond, 1980 Sophomore Cohort, First Follow-Up (1982), Data File User's Manual (Jones et al. 1983) and High School and Beyond Transcripts Survey (1982), Data File User's Manual (Jones et al. 1984).

## National Education Longitudinal Study of 1988

The National Education Longitudinal Study of 1988 (NELS:88) is another major longitudinal study sponsored by NCES. The Base Year Survey was administered to about 24,000 8thgraders in more than 1,000 schools with an 8th-grade class. The First, Second, Third, and Fourth Follow-ups revisited the same sample of students in 1990, 1992, 1994, and 2000, when most of the 1988 8th-graders were in the 10th grade, 12th grade, and then 2 and 6 years after they graduated from high school. Unlike HS\&B, for each in-school follow-up (that is, 1990 and 1992), the student sample was "freshened" to obtain a representative, cross-sectional grade-cohort sample (that is, 10th graders in 1990 and 12th graders in 1992). In addition, as a part of the Second Fol-low-up Survey, high school transcripts were collected for the members of the 12th-grade cohort in the fall of 1992.

The report used the Second Follow-up Survey and High School Transcript Study to examine coursetaking patterns. Transcript data were available for about 17,200 students. For purposes of this report, the analysis sample was limited to public high school students using G12CTRL2. This group was reduced further by including only high school graduates using the variable F2RREAS1. The analysis sample included 11,788 public high school students who graduated in 1992 and had complete transcripts available. Standard errors were computed using the Taylor series approximation method. For more information on the Second Follow-up Survey of NELS:88, see Second Follow-up: Transcript Component Data File User's Manual (Ingels et al. 1995).

## High School Transcript Studies of 1990, 1994, and 1998

This report used three national transcript studies conducted in 1990, 1994, and 1998 as part of the congressionally mandated NAEP, funded by the Office of Educational Research and Improvement (OERI), U.S. Department of Education, and conducted by NCES. The overall goal of NAEP is to determine the nation's progress in education. Conducted in association with NAEP, the High School Transcript Studies (HSTS) provided coursetaking and demographic information for a stratified, nationally representative sample of high school seniors. The 1990 transcript file included the high school transcripts of 21,531 seniors from about 330 schools, while the 1994 transcript file included the high school transcripts of 24,844 seniors from 340 schools. The 1998 HSTS collected transcript data from 25,422 seniors in 264 high schools. Like HS\&B and NELS:88, the availability of complete high school transcripts and students' graduation status defined the NAEP student samples included in this report. The analysis sample was limited to public high school students using the variable STYPE. This group was reduced further by including only high school graduates with regular or honors diplomas using the variable EXSTAT.

The final analysis samples were 16,507 for $1990 ; 23,706$ for 1994 ; and 23,176 for 1998. Standard errors were computed using the jackknife replication method. For further information about NAEP High School Transcript Studies, see The 1998 High School Transcript Study User's Guide and Technical Report (Roey et al. 2001a); and The 1998 High School Transcript Study Tabulations: Comparative Data on Credits Earned and Demographics for 1998, 1994, 1990, 1987, and 1982 High School Graduates (Roey et al. 2001b).

## Description of Key Population Variables

For each data set described above, variables were constructed to classify graduates according to their special and protected population status. When a comparable variable could not be constructed for a particular data set, the variable was not reported for the data set and "not avail-
able" was inserted in the tables in the appropriate places. Procedures used to construct each key population variable are described below.

Racelethnicity—Variables used included RACE (HS\&B); F2RACE1 (NELS:88); and DRVDRACE (HSTS 1990, 1994, 1998).

Sex—Variables used included SEX (HS\&B); F2SEX (NELS:88); and SEX (HSTS 1990, 1994, 1998).

Disability status (grade 12)—For HS\&B, disability status was constructed from a number of student-reported items. Construction of a disability status variable for NELS:88 based on similar parent-reported items produced a noncomparable variable, which was dropped from the analysis. For the HSTS data sets, HCFLAG was used, which was derived from schoolreported information.

English proficiency (grade 12)—Variables used included LEP (HSTS 1990); QLEP (HSTS 1994); and Q02 (HSTS 1998), which were based on school-reported information. Comparable variables were not available for HS\&B and NELS:88.

Grade-point average (GPA)—This variable indicates the GPA for all courses that graduates took during high school. It was calculated directly from transcript grades for HS\&B and NELS. The variable GPA_C was used for the HSTS data sets.

Academic coursework completed-This variable was constructed based on the mathematics, science, and English courses with greater than 0.0 credits listed on students' transcripts. The "low" and "high" categories described in the glossary under "academic coursework completed" were based on variables constructed to place students in different levels of an academic "pipeline." These pipelines organize courses in each subject based on the normal progression and difficulty of courses within that subject area (see Levesque 2003).

Grade 9 mathematics-As described in the glossary, this variable was constructed based on the highest mathematics course for which a student received greater than 0.0 credits in grade 9 .

School urbanicity—Variables used included SCHURB (HS\&B); G12URBAN3 (NELS:88); and URBAN (HSTS 1998). Comparable variables were not available for HSTS 1990 and 1994.

Percent in school lunch program-Variables used to construct this measure of school poverty included Q29 (HSTS 1994) and Q46 (HSTS 1998). Comparable variables were not available for HS\&B, NELS:88, and HSTS 1990.

## Accuracy of Estimates

The estimates in this report are derived from a sample and subject to two broad classes of error-nonsampling errors and sampling errors. Nonsampling errors occur not only in sample surveys but also in complete censuses of entire populations. Nonsampling errors can be attributed to a number of factors: inability to obtain complete information about all students in all institutions in the sample (some students or institutions refused to participate, or students or school staff participated but answered only certain items); ambiguous definitions; differences in interpreting questions; inability or unwillingness to give correct information; mistakes in recording or coding data; and other errors of collecting, processing, and sampling data. Although nonsampling errors due to questionnaire and item nonresponse can be reduced somewhat by adjusting sample weights, correcting all the forms of nonsampling errors that may be operating, or gauging the effects of these errors, is usually difficult.

Sampling errors occur because observations are made only on samples of students, not on entire populations. Surveys of population universes are not subject to sampling errors. Estimates based on a sample will differ somewhat from those that would have been obtained by a complete census of the relevant population using the same survey instruments, instructions, and procedures. The standard error is a measure of the variability due to sampling when estimating statistics. Standard errors can be used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. In addition, the standard errors for two sample statistics can be used to estimate the precision of the estimate of the difference between the two statistics and to help determine whether the difference based on the sample is large enough so that it can be assumed to represent a difference in the population.

Because HS\&B, NELS:88, and NAEP data were collected using complex sampling designs, the standard errors of the estimates from these surveys are typically different than would be expected if the sample had been a simple random sample and the observations were independent and identically distributed random variables. Not taking the complex sample design into account can lead to an underestimate of the sampling variance associated with an estimate. In order to generate accurate standard errors for the statistics reported in this study, the Taylor series approximation method and jackknife replication methods were used. In particular, standard errors
of estimates from the HS\&B and NELS:88 data were computed using the Taylor series approximation and standard errors of estimates from the HSTS 1990, 1994, and 1998 data were computed using the jackknife replication method. For more information about these methods see Wolter (1985).

## Statistical Procedures

The comparisons in the text have all been tested for statistical significance to ensure that differences are larger than those that might be expected due to sampling variance. Two types of statistical tests have been used and reported in the text.

Testing the difference between two means or percentages. The Student's $t$ statistic was used to test the likelihood that the differences between two independent percentages were larger than would be expected due to sampling error. The Student's $t$ values can be computed for comparisons using the estimates in the report's tables with the following formula:

$$
\begin{equation*}
t=\frac{E_{1}-E_{2}}{\sqrt{\left(s e_{1}\right)^{2}+\left(s e_{2}\right)^{2}}} \tag{1}
\end{equation*}
$$

where $\mathrm{E}_{1}$ and $\mathrm{E}_{2}$ are the estimates to be compared and $\mathrm{se}_{1}$ and $\mathrm{se}_{2}$ are their corresponding standard errors. This formula is valid only for independent estimates. When the estimates are not independent (for example, when comparing estimates that are parts of a percentage distribution), a covariance term must be added to the denominator of the $t$-test formula. Because the actual covariances were not known, it was assumed that the estimates were perfectly negatively correlated. Consequently, $2 *\left(\mathrm{se}_{1} * \mathrm{se}_{2}\right)$ was added within the square root of the denominator of the $t$-test formula for dependent estimates.

Testing the difference between differences. Another statistical test used in this report assessed the difference between two difference estimates. For example, to test whether the gap between males and females in a specific year (for example, 1982) differed significantly from the gap between these two groups in another year (for example, 1998), a test of the difference between differences was performed using the following formula:

$$
\begin{equation*}
t=\left(E_{11}-E_{21}\right)-\left(E_{12}-E_{22}\right) / \operatorname{sqrt}\left\{\left(\operatorname{se}_{11}{ }^{2}+\operatorname{se}_{21}{ }^{2}\right)+\left(\operatorname{se}_{12}{ }^{2}+\operatorname{se}_{22}{ }^{2}\right)\right\} \tag{2}
\end{equation*}
$$

where $\mathrm{E}_{11}$ and $\mathrm{E}_{21}$ are the estimates for the two comparison groups at time 1 (e.g., $\mathrm{E}_{11}-\mathrm{E}_{21}$ is the difference between males and females at time 1), $\mathrm{E}_{12}$ and $\mathrm{E}_{22}$ are the estimates for the two comparison groups at time 2 (e.g., $\mathrm{E}_{12}-\mathrm{E}_{22}$ is the difference between males and females at time 2), and $\mathrm{se}_{11}, \mathrm{se}_{21}, \mathrm{se}_{12}$, and $\mathrm{se}_{22}$ are their corresponding standard errors.
$\boldsymbol{T}$ values and alpha levels. Generally, whether a difference is considered statistically significant is determined by calculating a $t$ value for the difference, and comparing this value to published tables of values at certain critical levels, called alpha levels. The alpha level is an a priori statement of the probability of inferring that a difference exists when, in fact, it does not. The alpha level used in this report is .05 ; differences discussed in the text have been tested and found significant at this level. Two-tailed tests were performed.

In order to make proper inferences and interpretations from the statistics, several points must be kept in mind. First, comparisons resulting in large $t$ statistics may appear to merit special consideration. However, this is not always the case because the size of the $t$ statistic depends not only on the observed differences between the two estimates being compared but also on the standard error of the difference. Thus, a small difference between two groups with a much smaller standard error could result in a large $t$ statistic, but this small difference is not necessarily noteworthy.

Second, when multiple statistical comparisons are made, it becomes increasingly likely that a finding of a statistically significant difference is erroneous. Even when there is no difference in the population, at an alpha level of .05 , there is still a 5 percent chance of concluding that an observed $t$ value representing one comparison in the sample is large enough to be statistically significant. As the number of comparisons increases, so does the risk of making such an error in inference.

To guard against errors of inference based upon multiple comparisons, the Bonferroni procedure to correct significance tests for multiple contrasts was used. This method corrects the significance (or alpha) level for the total number of contrasts made with a particular classification variable. For each classification variable, there are K possible contrasts (or nonredundant pairwise comparisons), where $\mathrm{K}=\left(\mathrm{N}^{*}(\mathrm{~N}-1) / 2\right)$ and N is the number of categories in the variable (e.g., because the school urbanicity variable has 3 categories $(\mathrm{N}=3)$, there are $(3 * 2) / 2=3$ possible comparisons among the categories). The Bonferroni procedure divides the alpha level for a single $t$ test (for example, .05) by the number of possible pairwise comparisons in order to provide a new alpha that adjusts for all possible multiple comparisons.


[^0]:    See notes at end of table.

[^1]:    See notes at end of table.

[^2]:    See notes at end of table.

[^3]:    See notes at end of table.

[^4]:    See notes at end of table.

[^5]:    See notes at end of table.

[^6]:    See notes at end of table.

[^7]:    See notes at end of table.

[^8]:    See notes at end of table.

[^9]:    See notes at end of table.

[^10]:    See notes at end of table.

[^11]:    -Not available.
    \#Rounds to zero.

[^12]:    See notes at end of table.

[^13]:    See notes at end of table.

