

the condition of education 2002



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NATIONAL CENTER FOR EDUCATION STATISTICS

U.S. Department of Education ■ Office of Educational Research and Improvement ■ NCES 2002-025

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June 2002

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Suggested Citation:

U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2002*, NCES 2002-025, Washington, DC: U.S. Government Printing Office, 2002.

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Commissioner's Statement

INTRODUCTION

Reliable data are critical in guiding efforts to improve education in America. When the original U.S. Department of Education was created in 1867, the law stated that it should “gather statistics and facts on the condition and progress of education in the United States and Territories.” The National Center for Education Statistics (NCES) currently carries out this mission for the U.S. Department of Education through such work as *The Condition of Education*, a mandated report submitted to Congress on June 1st every year.

Drawing on numerous data sources, this annual report presents indicators of important developments and trends in American education. Recurrent themes underscored by the indicators include participation and persistence in education, student performance and other outcomes, the environment for learning, and societal support for education. In addition, this year's special analyses focus on private elementary and secondary schools and on nontraditional undergraduates (such as those who are financially independent or attend part time).

PARTICIPATION IN EDUCATION

Enrollments in the United States are growing at all levels of education, but for different reasons. At the early childhood level, growth is due to higher rates of enrollment; that is, larger percentages of 3- to 5-year-old children are enrolling in preschool, nursery school, or other early childhood education programs. At the elementary and secondary levels, growth is due to demographic changes, which are also making the student body more diverse. At the postsecondary level, high enrollment rates and population growth are combining to swell enrollments.

- Enrollment rates for 3- to 5-year-olds in early childhood education programs were higher in 2001 than in 1991. Black

and White children enroll in early childhood education programs at higher rates than Hispanic children (*indicator 1*).

- Public elementary and secondary enrollment is projected to reach 47.4 million in 2002, and to increase through 2005, before decreasing slowly. The West will experience most of this increase (*indicator 2*).
- Hispanic students are the fastest growing student group in the nation's elementary and secondary schools (*indicator 3*).
- The school-age poverty rate decreased between 1994 and 2001 (*indicator 4*).
- In a change from the enrollment patterns of the 1980s and 1990s, undergraduate enrollment during this decade is projected to increase at a faster rate in 4-year institutions than in 2-year institutions. Women's undergraduate enrollment is expected to continue increasing at a faster rate than men's (*indicator 5*).
- Graduate and first-professional enrollments grew rapidly during the 1970s, slowed or declined in the 1980s, and then began to increase again in the 1990s (*indicator 6*).

LEARNER OUTCOMES

At the elementary and secondary levels, students are performing better in some areas, but their performance has not changed or has declined in others. Students' performance in mathematics has improved somewhat over the past decade. Students' reading performance, on the other hand, remains unchanged. In addition, issues of equal educational opportunity and international competitiveness remain.

- Fourth-grade reading performance did not change significantly between 1992 and 2000. In each assessment year, female stu-

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- dents scored higher than their male peers (*indicator 7*).
- The average reading scores of White students are higher than those of Black students at ages 9, 13, and 17. While differences in performance decreased between the early 1970s and the late 1980s, the gaps have remained relatively stable or increased slightly since then (*indicator 8*).
 - U.S. 15-year-olds performed at the international average of 27 Organization for Economic Cooperation and Development (OECD) countries in reading literacy in 2000, scoring below the average of 3 countries (Canada, Finland, and New Zealand) and above the average of 4 OECD countries (Greece, Portugal, Luxembourg, and Mexico) (*indicator 9*).
 - The mathematics performance of 4th- and 8th-graders increased steadily from 1990 to 2000, while the performance of 12th-graders increased from 1990 to 1996 but then declined between 1996 and 2000 (*indicator 10*).
 - Compared with students in low-poverty public schools, students in high-poverty public schools had lower achievement scores in 4th-grade mathematics in 2000 (*indicator 11*).
 - The scores of both 4th- and 8th-graders in science did not change significantly between 1996 and 2000, while 12th-graders' scores declined slightly (*indicator 12*).
 - In 1999, U.S. 8th-graders exceeded the international average of 38 countries in mathematics and science, but performed lower than their peers in 14 countries (*indicator 13*).
 - In 1999, U.S. 9th-graders scored significantly higher than the international average of 28 countries in overall civic knowledge and outperformed students in all other participating countries in civic skills (*indicator 15*).
 - The better educated a person is, the more likely that person is to report being in "very good" or "excellent" health, regardless of income (*indicator 14*).
 - The median earnings of young adults with at least a bachelor's degree increased over the past 20 years relative to their counterparts who have no more than a high school diploma (*indicator 16*).

STUDENT EFFORT AND EDUCATIONAL PROGRESS

The effort students devote to their studies and the choices they make as they proceed through the educational system contribute to their academic success. Students' attendance, interest, and attention to their studies affect how well they perform at each level and their access to and success at the next level.

- More than half of students in the 8th, 10th, and 12th grades missed 1 or more days of school in a 4-week period in spring 2000 due to illness, skipping school, or other reasons. Moreover, about 13–14 percent of 8th- and 10th-graders were absent more than 5 days—or one-fourth of all school days—in this period (*indicator 17*).
- Over the past two decades, 12th-graders have reported a declining interest in school, while the effort they apply to their schoolwork has generally shown no measurable change over the past decade (*indicator 18*).
- One indicator of the failure to persist in school is the "status dropout rate" (i.e., the percentage of young people who have

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not completed high school and are not enrolled in school). Status dropout rates for Whites and Blacks ages 16–24 have declined since 1972, but have remained relatively stable since the early 1990s. The rates for Hispanic youths have not decreased and remain higher than those for other racial/ethnic groups (*indicator 19*).

- Rates of immediate college enrollment upon completing high school have increased since 1972. Rates of immediate enrollment for females have increased faster than those for males (*indicator 20*).
- College enrollment rates of high school graduates vary with family income, but among those who were college qualified and took the steps necessary for admission, low-income students were as likely as middle-income students to enroll in a 4-year institution (*indicator 21*).
- About one-third of young people at risk for low educational attainment enrolled in a 4-year college within 2 years of their high school graduation despite being at risk (*indicator 22*).
- Rigorous academic preparation in high school narrowed the gap in postsecondary persistence between students whose parents did not go to college and their peers who have at least one parent with a bachelor's degree (*indicator 23*).
- Among low- and middle-income students at public 2- and 4-year postsecondary institutions, recipients of Pell Grants persisted at the same rate as nonrecipients despite being less prepared academically and more likely to have certain risk factors (*indicator 24*).
- The percentages of 25- to 29-year-olds who have completed high school, some college, or a bachelor's degree or higher have increased since 1971, but disparities in attainment among racial/ethnic groups remain (*indicator 25*).

CONTEXTS OF ELEMENTARY AND SECONDARY EDUCATION

Student performance in elementary and secondary schools is shaped by student coursework, the quality of the teaching staff, and the climate for learning within schools.

- The percentage of high school graduates who completed advanced coursework in science and mathematics in high school increased between 1982 and 1998 (*indicator 26*).
- Asian/Pacific Islanders and Whites completed advanced levels of science and mathematics coursework in high school at higher rates than did their peers in other racial/ethnic groups. Private school graduates also completed such coursework at higher rates than did public school graduates (*indicator 27*).
- The rates at which students of almost all disability types are being served in regular classrooms have increased over the past decade (*indicator 28*).
- Both the proportion of children enrolled in public schools chosen by their parents and the proportion enrolled in private, not church-related schools increased between 1993 and 1999. Differences in parental choice of schools are related to race/ethnicity, household income, and region. The percentage of children in grades 3–12 with parents who reported they were “very satisfied” with their children’s school decreased from 56 percent to 53 percent in 1999 (*indicator 29*).
- In 2000–2001, there were 1,993 public charter schools. Public charter schools

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were more likely than traditional public schools to be located in urban settings, to enroll a higher proportion of Black and Hispanic students, and to employ teachers with fewer years of teaching experience (*indicator 30*).

- College students with low college entrance examination scores are more likely than students with high scores to prepare to become teachers and to become teachers upon graduation. They are also more likely than their high-scoring peers to remain in the teaching profession (*indicator 31*).
- About half of secondary school teachers majored in an academic subject, and about 4 out of 10 majored in an academic subject area in education (*indicator 32*).
- Teachers who participated in more than 8 hours of professional development activity in a single area of development per year were more likely than teachers who participated in 1–8 hours to report that the activity improved their teaching “a lot.” However, most teachers participated in such an activity only 1–8 hours (*indicator 33*).
- Victimization affects all types of students. However, students who reported gangs or guns at their schools were more likely to report victimization than students who did not report these conditions (*indicator 34*).

SPECIAL FOCUS ON PRIVATE SCHOOLS

One of this year's special analyses examines private schools, how they differ by type, and how they differ from public schools (*Private Schools: A Brief Portrait*).

Comparisons between the public and private sectors—and within the private sector—of el-

ementary, secondary, and combined schools suggest that these schools vary greatly in their size, composition, climate, and goals. In 1999–2000, private schools accounted for 24 percent of all K–12 schools, 10 percent of all students, and 12 percent of all full-time-equivalent teachers. Private schools have maintained their share of total school enrollments throughout recent decades at roughly 10–11 percent.

- Private schools are smaller and the sector as a whole has lower proportions of Black and Hispanic students than the public school sector. The proportion of Asian/Pacific Islander students in the public sector is not measurably different from that in the private sector. Catholic schools tend to be larger and to enroll more minority students than other private schools.
- Principals at the three main types of private schools (Catholic, other religious, and nonsectarian) differed in their top priorities for their school; overall, however, private school principals most often included academic excellence and religious development, as well as basic literacy skills in core areas like reading and mathematics, and self-discipline. Public school principals most often cited basic literacy skills and academic excellence, as well as self-discipline.
- Teachers in private schools reported that they have wide latitude in deciding how and what to teach, as well as a fairly strong influence on many school policies. Nonsectarian schools, in particular, may give teachers considerable authority to shape their course content and materials. In contrast to their counterparts in public schools, the majority of teachers in the three types of private schools—particularly teachers in non-Catholic religious schools—strongly agreed with positive statements

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about staff cooperation and school management.

- Private high schools require more academic courses for graduation, and their graduates are more likely than graduates of public schools to have completed advanced courses in mathematics, science, and foreign language.
- Private school students also score higher, on average, on achievement tests in reading, mathematics, and science than do their public school counterparts.
- Students who attended private schools in the 8th grade in 1988 were twice as likely as those who attended public schools to have completed a bachelor's degree or higher by their mid-20s.

CONTEXTS OF POSTSECONDARY EDUCATION

The postsecondary education system encompasses various types of institutions, both public and private. Although issues of student access, persistence, and attainment have been predominant concerns in postsecondary education, the contexts in which postsecondary education takes place matter as well. The diversity of the undergraduate and graduate populations, the various educational missions and learning environments of colleges and universities, the courses that students take, and the ways in which colleges and universities use faculty and other resources all are important aspects of the contexts of postsecondary education.

- Undergraduates are diverse in their demographic, enrollment, and employment characteristics. Minority students represented nearly a third of all undergraduates in 1999–2000, up from about a quarter in 1989–90. The percentage of students working full time during the school

year rose 7 percentage points during this period, and the percentage not working rose 2 points (*indicator 35*).

- Undergraduates who worked but identified themselves primarily as students were more likely to report that working negatively affected their academic performance as the number of hours worked per week increased (*indicator 37*).
- Despite the proliferation of distance education offerings during the 1990s, only 8 percent of undergraduates and 12 percent of master's students enrolled in these classes in 1999–2000 (*indicator 38*).
- Over the past decade, the number of associate's degrees awarded has increased at a faster rate than the number of bachelor's degrees (*indicator 36*).
- During the 1990s, women advanced in their status as faculty members in several areas, including salary. At the end of the decade, however, a gap in salary between male and female faculty remained (*indicator 39*).

SPECIAL FOCUS ON NONTRADITIONAL UNDERGRADUATES

A second special analysis this year examines the enrollment of nontraditional students in postsecondary education in contrast to “traditional” students (*Nontraditional Undergraduates*).

The undergraduate population today is quite different than it was over a generation ago in 1970. Indeed, the “traditional” postsecondary student—one who is dependent, attends full time until completing a bachelor's degree, and works no more than part time while enrolled—is no longer typical.

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- Fully three-quarters of all undergraduates in 1999–2000 had at least one “nontraditional” characteristic (i.e., they delayed their enrollment in postsecondary education, attended part time for at least part of the academic year, worked full time while enrolled, were considered financially independent for purposes of determining financial aid eligibility, had dependents other than a spouse, were single parents, or did not have a high school diploma).
 - The most highly nontraditional students (those with four or more nontraditional characteristics) were concentrated in public 2-year institutions, with about two-thirds enrolled in such institutions.
 - Two-thirds of highly nontraditional students perceived their primary role to be that of an employee, suggesting that school did not have first claim on their time and energy. Among highly nontraditional students who considered themselves primarily students, many found that work limited their class and scheduling options.
 - Among beginning postsecondary students seeking associate’s and bachelor’s degrees, those with any nontraditional characteristics were more likely than traditional students to leave without earning a degree. They were at greater risk than traditional students of dropping out in their first year.
- were “very satisfied” with their child’s school, their child’s teachers, the school’s academic standards, and the school’s order and discipline (*indicator 40*).
 - In 1998, U.S. expenditures on primary and secondary education ranked high compared with the expenditures of other countries. U.S. spending on postsecondary education ranked highest among advanced industrialized countries (*indicator 41*).
 - At the elementary and secondary levels, public revenue raised for education per student has increased since the mid-1970s, while total public revenue expended as a percentage of total personal income has generally decreased. At the postsecondary level, public revenue per student has fluctuated within a narrow band since the mid-1970s, while total public revenue as a percentage of total personal income has generally declined (*indicator 42*).
 - Traditional differences in the proportion of local funding to state and federal funding generally persist across the United States, though a substantial decrease in local funding occurred in the Midwest, where local funding dropped from 55 percent in 1993–94 to 48 percent in 1994–95. This decrease was offset by a large increase in state funding (*indicator 43*).
 - The “net price” of college attendance—the amount that students pay with their own or borrowed funds after taking grants received into account—varies by the type of institution that students attend and by family income. In 1999–2000, the average net price of college attendance ranged from \$7,600 at public 2-year institutions to \$17,800 at private not-for-profit 4-year institutions (*indicator 44*).

SOCIETAL SUPPORT FOR LEARNING

Society and its members—families, individuals, employers, and governmental and private organizations—provide support for education in various ways, such as spending time on learning activities, providing encouragement to learners, and investing money in education.

- In 1999, half of all children in grades 3–12 had parents who reported that they

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CONCLUSION

Trends in the condition of American education show a mixed picture. While high school graduates have increased their enrollment in more advanced courses since the early 1980s, the performance of 12th-graders in mathematics and science has stagnated in recent years. International comparisons suggest that U.S. 9th-graders have relatively good civic knowledge, and even better civic skills, but that the reading literacy scores of U.S. 15-year-olds are similar to the international average among advanced industrialized countries. International comparisons in mathematics and science also show mixed results, with U.S. 8th-graders performing above the international average of 38 countries but below the average of their counterparts in 14 countries.

In addition, gaps persist in academic performance and educational participation among different racial/ethnic groups, socioeconomic groups, and school sectors. The gaps between the average reading scores of White and Black students ages 9, 13, and 17 have remained stable or increased since the late 1980s. In mathematics, high poverty levels in schools are associated with low student achievement in the 4th grade. While the percentages of dropouts in the population of White and Black young adults have declined, the percentage for Hispanics has remained higher than that of other groups and remains high. Finally, private school students in general scored higher than public school students in reading, mathematics, and science.

A growing and increasingly diverse population of elementary and secondary students continues to heighten the challenge of providing high-quality instruction and equal educational opportunities. In addition, school absence among middle and high school students and the declining academic interest of high school seniors are just a few of the challenges that educators face. At the postsecondary level, institutions must prepare for the record numbers of enrollments expected over the next decades.

NCES produces an array of reports each month on findings about the U.S. education system. *The Condition of Education* represents the culmination of a yearlong project. In the coming months, many other reports and surveys informing us about education will be released, including studies of elementary and secondary school staffing, the participation of children in before- and after-school programs, a follow-up look at the status of the 8th-grade class of 1988 14 years later, school crime, early childhood education, full- and half-day kindergarten, children's computer use at home and at school, and adult learning. As with the indicators presented in this volume, these surveys and reports will continue to inform Americans about the condition of education.



Gary W. Phillips
Deputy Commissioner of Education Statistics

Reader's Guide

The Condition of Education is available in two forms: this print volume for 2002 and a Web version on the NCES Web Site (<http://nces.ed.gov/programs/coe>). The Web version includes special analyses, essays, and indicators from the 2000, 2001, and 2002 print volumes of *The Condition of Education*. (See page xx for a list of all the indicators that appear on *The Condition of Education* Web Site.)

Each section of this print volume of *The Condition of Education* begins with a summary that presents the key points in the indicators to follow. All indicators contain a discussion, a single graph or table on the main indicator page, and one or more supplemental tables. All use the most recent national data available from the National Center for Education Statistics (NCES) or other sources. The icon to the side of the graph or table directs readers to supplemental tables, supplemental notes, or another source for more information.

When the source is an NCES publication, such as *The Digest of Education Statistics 2001* (NCES 2002-130), that publication can be viewed at the NCES Web Site (<http://nces.ed.gov>).

Supplemental notes provide information on the sources of data used, describe how an analysis was conducted, or provide explanations of categories used in an indicator. Supplemental tables provide more detailed breakouts for an indicator, such as household income, students' race/ethnicity, or parents' education. Tables of standard errors (see below) are also included for applicable indicators. A glossary of terms and a comprehensive bibliography of items cited in *The Condition of Education* appear at the end of the volume.

DATA SOURCES

Data reported in this volume are primarily from two types of sources. Some indicators report data from entire populations, such as *indicator 6* (graduate and first-professional enrollments). With these kinds of data, information is collected from every member of the population surveyed. This "universe" could be all colleges and universities in the country, every school district, or all secondary school teachers. Other indicators report data from a statistical sample of the entire population. When a sample is used, the effects of having information from a portion of the entire population must be considered in reporting estimates and making comparisons.

When data on the entire population are available, comparisons among different groups within that population can be made by calculating a total for each group and comparing the group totals. It is not necessary to consider the effects of collecting information on a sample of the population when comparing estimates from a universe survey. Although estimates derived from universe surveys are not affected by sampling, they are affected by a wide range of potential data collection errors such as coverage errors, response errors, coding errors, and data entry errors. These errors may be larger than the error due to collecting data on a sample rather than the entire population.

A universe survey is typically expensive and time consuming, so researchers often collect data from a small sample of the population of interest. Through random sampling and other methods, researchers seek to ensure that this sample accurately represents the larger population to which they wish to generalize. The National Education Longitudinal Study of 1988, for example, surveyed a representative sample of nearly 25,000 8th-graders from among

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all 8th-graders across the country. Based on this sample, conclusions can be drawn about all 8th-graders, such as their family background, characteristics of the schools they attend, their mathematical achievement (as measured with a test administered as part of the survey), and their activities outside of school (NCES 90–458).

Most indicators in *The Condition of Education* summarize data from sample surveys conducted by NCES or the Bureau of the Census with support from NCES. Detailed explanations of NCES surveys can be obtained at the Web site noted above, under “Survey and Program Areas.” Information about the Current Population Survey, another frequent source of survey data used in *The Condition of Education*, can be obtained at <http://www.bls.census.gov/cps/cpsmain.htm> (and also in *Supplemental Note 2*).

DATA ANALYSIS AND INTERPRETATION

Once data from a census or a sample survey are collected, it is necessary to summarize them in a meaningful way. Estimating the true population average, or mean, is a common way of summarizing data. The mean is obtained by adding together the values for all members of the sample population and dividing the sum by the sample size. An example of this would be the annual mean salaries of professors at 4-year universities. A second kind of estimate is the median, which is the “middle” value among all members of a sample or population. Half of all values in the population are above the median, and half are below. As an illustration, *indicator 16* discusses the median annual earnings of people ages 25–34. The percentage of the population having a certain characteristic, such as the percentage of graduates who are female, provides still another kind of estimate.

Analysis of data from a sample of a population requires consideration of several factors before the analysis becomes meaningful. For example, however conscientious an organization may be in collecting data from a sample of a population, there will always be some margin of error in estimating the population mean, median, or any other such statistic from the data. Consequently, data from samples can provide only an estimate of the true or actual value. The margin of error or the range of the estimate depends on several factors, such as the amount of variation in the responses, the size and representativeness of the sample, and the size of the subgroup for which the estimate is computed.*

When data from samples are reported, as is the case with most of the indicators in *The Condition of Education*, the magnitude of this margin of error is measured by what statisticians call the “standard error” of an estimate. The standard errors for all the estimated means, medians, or percentages reported in the graphs and text tables of *The Condition of Education* can be found in appendix 3, Standard Error Tables. The corresponding standard errors for the supplemental tables can be viewed at the NCES Web Site (<http://nces.ed.gov>).

As an illustration, *indicator 7* reports on the reading performance of students in 4th grade in 2000. For Hispanic students, the average scale score was 197; for American Indian/Alaska Native students, the average scale score was 196 (see supplemental table 7-2). In contrast to the similarity in these scale scores, the standard errors were considerably different: 1.7 for Hispanics and 4.7 for American Indian/Alaska Natives.

The percentage or mean score with the smaller standard error provides a more reliable estimate of the true value than does the percent-

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age or mean score with a higher standard error. Standard errors tend to diminish in size as the size of the sample (or subsample) increases. Consequently, for the same kinds of data, such as enrollment rates in postsecondary education sample surveys (like the National Postsecondary Student Aid Study) or scores on the National Assessment of Educational Progress, standard errors will almost always be larger for Blacks and Hispanics than for Whites, who represent a larger proportion of the population.

When data from samples are reported, some caution is warranted in making comparisons. Although one mean or percentage may be larger than another, a statistical test may find that there is no difference between estimates due to the precision of the estimates.

Whether differences in means or percentages are statistically significant can be determined using the standard errors of the estimates. When differences are statistically significant, the probability that the difference occurred by chance is usually small, occurring about 5 times out of 100. The method primarily used here for determining whether the difference between two means is statistically significant is described in the introduction to appendix 3, Standard Error Tables.

For all indicators in *The Condition of Education* based on samples, differences between means or percentages (including increases or decreases) are stated only when they are statistically significant. To determine whether differences reported are statistically significant, two-tailed *t*-tests, at the .05 level, are used. Bonferroni adjustments are typically used when more than two groups are compared simultaneously (e.g., Blacks, Whites, and Hispanics). The formula for determining statistical significance is also adjusted when the samples being compared are dependent. Some comparisons

were also made using ANOVA trend analysis, which tests for specific relationships (e.g., linear, quadratic, or cubic) between variables.

Discussion of several indicators illustrates the consequences of these considerations. *Indicator 38* reports that 9 percent of female undergraduates and 7 percent of male undergraduates participated in distance education programs in 1999–2000. Although the difference of 2 percentage points is relatively small, as are the standard errors associated with each estimate (0.4 in each instance), the difference is statistically significant and supports the conclusion that females were more likely to participate in distance education programs than males. In contrast, *indicator 2* discusses enrollment in preprimary education. The data in supplemental table 2-1 indicate that 59 percent of Black children and 47 percent of White children living below poverty were enrolled in preprimary education programs in 2001. The difference of 12 percentage points is larger than in the previous example, but the standard errors are also larger (5.4 and 4.1, respectively). The difference is not statistically significant; the data do not support a conclusion that Black children living in poverty were more likely than their White peers to be enrolled in these programs. *Indicator 13* provides a similar example. The average score of U.S. 8th-grade students on an international test of achievement in science was 515 in 1999, which was 20 points lower than the score in Finland and 12 points higher than that in Latvia. Again, however, the differences are not statistically significant; it is thus proper to indicate that the average scores of U.S., Finnish, and Latvian students are similar.

Although values reported in the supplemental tables are often rounded to one decimal place (e.g., 76.5 percent), values reported in each indicator are typically rounded to whole numbers (with any value of 0.5 or above

rounded to the next highest whole number). Due to rounding, cumulative percentages may sometimes equal 99 or 101 percent, rather than 100.

*If there are five racial/ethnic groups in a sample of 1,500, the researcher would have less confidence in the results for each group individually than in those for the entire sample because there are fewer people in the subgroup.

STANDARD ERROR TABLES

The standard errors for each graph or table on the main indicator page can be found in appendix 3 of this volume. The standard errors for the supplemental tables can be found in the Web version of *The Condition of Education* on the NCES Web Site (<http://nces.ed.gov>).

Acknowledgments

This volume of *The Condition of Education* was authored by a team of analysts under the general direction of John Wirt and Tom Snyder with technical review by Marilyn McMillen (Chief Statistician of NCES), Shelley Burns and William Hussar (Technical Advisors), and many others. Val Plisko (Associate Commissioner of NCES) provided overall guidance in the development of the volume and reviewed the indicators. Barbara Kridl of MPR Associates, Inc. (MPR) was the managing editor of the publication. Richard Tobin of the American Institutes for Research's (AIR) Education Statistics Services Institute (ESSI) helped in reviewing indicators as they were developed.

The key contributors to *The Condition of Education* are the authors of the individual indicators. As a matter of practice, the authorship of individual indicators is not given in the volume because each indicator reflects the joint effort of many analysts. Nonetheless, substantial expertise and analytical ability are required to craft an indicator from data to tell an important story in a compelling manner using text, graphs, and tables economically. Many indicators in this volume were originally conceived for *The Condition of Education* and involved extensive analyses of data. Others were adapted from existing NCES reports or analyses authored by others.

A section leader oversaw the content of each section and prepared the introductory essay: Debra Gerald (NCES) served as the section leader for Section 1, Patrick Rooney (NCES) and Dawn Nelson (NCES) for Section 2, Susan Choy (MPR) for Sections 3 and 5, Stephen Provasnik (AIR) for Section 4, and Satoshi Watanabe (AIR) for Section 6. Martha Alt and Katharin Peter of MPR authored the portrait of private schools and Susan Choy authored the analysis of nontraditional undergraduates. Richard Tobin (AIR) compiled and organized the supplemental notes and revised the Reader's Guide.

A large team of analysts authored individual indicators, including Debra Gerald, William Sonnenberg, and Patrick Rooney of NCES; Susan Choy, Martha Alt, Xianglei Chen, Robert Fitzgerald, Phil Kaufman, Lawrence Kojaku, Katharin Peter, Anna Sikora, and Edward Warburton of MPR; Stephen Provasnik, Satoshi Watanabe, Christina Stearns, Corinne Calfee, Gray King, Charmaine Llagas, and Ben Young of AIR; and Kathryn Hoffman, and Anindita Sen of ESSI.

Programming, technical review, and other analytical assistance was provided by Ellen Bradburn, Laura Horn, Ellen Liebman, Stephen Lew, Kathryn Rooney, and Kathleen Mullen of MPR; Ben Young, Naoko Kataoka of AIR; Stacey Bielick, Ben Cohen, Linda Hamilton, Dan McGrath, and Yann-Yann Sheih of ESSI; Bruce Daniel of Pinkerton Computer Consultants, Inc. (PCCI); Laura Jerry and David Freund of the Educational Testing Service (ETS); Lynn Addington of SUNY-Albany; and Basmat Parsad of Westat. Alexandra Tan and Hannah Goble of ESSI helped with planning, developed the production schedule, coordinated with the authors and reviews, and circulated the indicator drafts and reviews. Cecelia Marsh and Courtney Quish helped to track reviewer comments. Paul Bailey and Alexandra Tan updated the computerized tracking system.

Barbara Kridl of MPR coordinated with the authors of the various indicators and sections, prepared the bibliography, and managed all tasks related to the editing and desktop production of the volume. Andrea Livingston of MPR edited all the indicators, essays, and supporting materials. Wendy Bell of MPR proofread all the text and checked the numbers against their original sources. Wes Nations of MPR did the desktop publishing of the publication, with assistance from Leslie Retallick and Patti Gildersleeve, and prepared it for print-

Acknowledgments

Continued

ing. Helen Jang of MPR headed the team responsible for updating and revising the Web version of *The Condition of Education*. She was assisted by Leslie Retallick, Shirley He, John Vavricka, and Melanie Allred of MPR. These Web materials were reviewed by a team of reviewers that included Jerry Malitz of NCES, Alexandra Tan, Adnan Khan, and Hannah Goble of ESSI. Julia Marshall of ESSI prepared the index.

The design and format of the volume were developed 2 years ago for *The Condition of Education 2000* by Mark Ricks, Allison Pinckney, and Rebecca Pratt of PCCI, with suggestions by Leslie Retallick and Barbara Kridl of MPR and many others. This year's cover and title page were designed by Leslie Retallick of MPR.

The efforts of many people who reviewed individual indicators and the entire volume, often under tight deadlines, are greatly appreciated. Each indicator was assigned to at least two NCES staff members, who followed it through all phases of development from initial plans to final review. Stephen

Broughman, Susan Broyles, Dennis Carroll, Kathryn Chandler, Chris Chapman, William Fowler, Bernard Greene, Arnold Goldstein, Patrick Gonzales, Lisa Hudson, Steven Kaufman, Paula Knepper, Mariann Lemke, Edith McArthur, Andrew Malizio, Karen O'Connor, Jeffrey Owings, Michael Ross, Jerry West, Susan Wiley, Beth Young, and Linda Zimble of NCES provided detailed and helpful reviews of the indicators, special analyses, or others parts of the volume. Leslie Scott of ESSI shared these responsibilities with those from NCES.

Individuals outside of NCES but within the Department of Education who provided reviews were Joseph Esposito, Daniel Goldenberg, Judith Holt, Jack Klenk, Carolyn Lee, Diane Magarity, Michael Petrilli, Jeffery Rodamar, and Mary Schifferli.

A number of individuals from academia and elsewhere served as external reviewers: Philip Altbach, Alisa F. Cunningham, Margaret Goertz, Kati Haycock, Jacqueline King, Joseph McTighe, and Gerry Shiel.

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Private Schools: A Brief Portrait

Martha Naomi Alt and Katharin Peter

INTRODUCTION

Private schools are owned and governed by entities that are independent of any government—typically, religious bodies or independent boards of trustees. Private schools also receive funding primarily from nonpublic sources: tuition payments and often other private sources, such as foundations, religious bodies, alumni, or other private donors. In contrast, state and local education agencies (districts) and publicly elected or appointed school boards govern public schools. At some schools, parent/teacher organizations or similar groups also play a role. Public schools receive nearly all their funding from local, state, and federal governments, supplemented occasionally by grants/donations from corporations and foundations, and parent- or student-initiated fundraising activities.

Choice is another defining characteristic of private schools: families choose private education, and private schools may choose which students to accept. In contrast, public school districts generally assign students to particular schools, and those schools usually accept all students assigned. However, public school systems are expanding school choice options through magnet and charter schools, open enrollment, and similar offerings, and, in a few instances, through publicly funded vouchers. Families with sufficient financial resources have always been able to choose a public school by choosing where to live, but school choice options are also increasingly available for others. Thus, public school districts are sometimes selective about who attends specific schools, and families may have some choice within the public sector as well. The proportion of public school children attending a chosen school (rather than the school assigned by residence location) has increased in recent years (*indicator 29*). In 1999, for example, 16 percent of public school students in grades 1–12 attended a school the family had chosen, up from 12 percent in 1993.

Nonpublic governance and enrollment choice are features that all private schools share, but there is wide variation within the private sector on many measures. This analysis highlights some elements of diversity among private schools (detailing some differences among three broad groups of private schools: Catholic, other religious, and nonsectarian) and notes several aspects that differ between the public and private sectors overall. More detail about the types and affiliations of private schools and their staffs, as well as additional comparisons between the public and private sectors, can be found in Broughman and Colaciello (2001); Baker, Han, and Keil (1996); Henke et al. (1996, 1997); McLaughlin (1997); and in a forthcoming NCES report on private schools.

Although this analysis compares *averages* for the private and public sectors (and for three private school types), no inferences can be drawn from these data about causality. Any number of variables distinct from school sector and type may contribute to inputs and outcomes. For example, student characteristics such as socioeconomic status (SES), prior achievement and support for learning at home, and motivation level may influence student outcomes, independent of the sector of school attended. Characteristics of schools such as enrollment size, community type, and student body composition may also affect outcomes, regardless of school sector. Further research may attempt to identify which variables contribute to certain outcomes—for example, a study may compare achievement of private and public school students while controlling for characteristics like SES—but that is beyond the scope of this brief analysis.

The data presented are from the NCES Schools and Staffing Survey (SASS:1999–2000), the National Assessment of Educational Progress High School Transcript Study of 1998 (NAEP:1998), the NAEP:2000 student achievement tests, and

Private Schools: A Brief Portrait

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the National Education Longitudinal Study of 1988, “Fourth Follow-up” (NELS:1988/2000). Further information on these surveys can be found at <http://nces.ed.gov/surveys/>.

SCHOOLS AND STUDENTS

In 1999–2000, approximately 27,000 private schools, with 404,000 full-time-equivalent (FTE) teachers, enrolled 5.3 million students (table 1). These schools accounted for 24 percent of all schools in the United States, 10 percent of all students, and 12 percent of all FTE teachers.¹ Private schools have maintained their share of total school enrollments throughout recent decades at roughly 10–11 percent, with growth rates parallel to those of public schools (U.S. Department of Education 2001b). Schools that had some of grades 1–12, or equivalent ungraded classes, are included in the SASS:1999–2000 data and discussion that follow; these schools may or may not also offer kindergarten or preschool grades. Analysis of public sector SASS:1999–2000 data includes traditional public and public charter schools and their staffs (and excludes Bureau of Indian Affairs-funded schools and their staffs).²

Seventy-nine percent of all private schools had a religious affiliation in 1999–2000: 30 percent were affiliated with the Roman Catholic Church, and 49 percent with other religious groups (figure 1). The remaining 22 percent were nonsectarian. Although Catholic schools accounted for 30 percent of the total number of schools, they enrolled 48 percent of all private school students. Each of these three types of private schools can be further disaggregated into three more specific types. In addition, private schools may belong to one or more associations, reflecting either a particular religious affiliation, a special program or pedagogical emphasis, or some other element of the school. Broughman and Colaciello (2001) show in table 15 the numbers of schools that belong to a wide range of associations.

School location and level

Private schools in 1999–2000 were located primarily in central cities (42 percent) and the urban fringe or large towns (40 percent) (table 2). About 18 percent of private schools were found in rural areas. In contrast, 24 percent of all public schools were in central city locations, 45 per-

Table 1.—Percentage and number of schools, students, and full-time-equivalent (FTE) teachers in each sector and in each of three private school types: 1999–2000

| Sector | Percentage of total: | | | Number: | | |
|---------------------|----------------------------|----------|----------------|---------|------------|----------------|
| | Schools | Students | Teachers (FTE) | Schools | Students | Teachers (FTE) |
| Public | 75.7 | 89.6 | 87.8 | 84,735 | 45,366,227 | 2,905,658 |
| Private | 24.3 | 10.4 | 12.2 | 27,223 | 5,262,849 | 404,066 |
| Private school type | Percentage of all private: | | | Schools | Students | Teachers (FTE) |
| Catholic | 29.8 | 48.4 | 37.6 | 8,102 | 2,548,710 | 152,102 |
| Other religious | 48.7 | 35.6 | 37.9 | 13,268 | 1,871,851 | 153,071 |
| Nonsectarian | 21.5 | 16.0 | 24.5 | 5,853 | 842,288 | 98,893 |

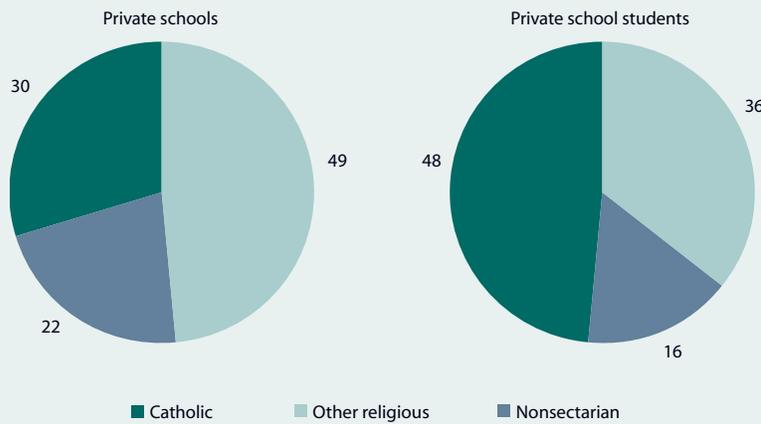
NOTE: Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), “Public, Public Charter, and Private School Surveys,” 1999–2000.

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Continued

Figure 1.—Percentage distribution of private schools and students enrolled, by private school type: 1999–2000



NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School Surveys," 1999–2000.

Table 2.—Percentage distribution of schools according to community type and level, by sector and private school type: 1999–2000

| Sector and type | Community type | | | Level | | |
|---------------------|----------------|--------------------------|-------------------|------------|-----------|----------|
| | Central city | Urban fringe/ large town | Rural/ small town | Elementary | Secondary | Combined |
| Public | 24.1 | 44.6 | 31.3 | 71.4 | 24.6 | 4.0 |
| Private | 42.4 | 39.9 | 17.7 | 60.8 | 9.5 | 29.7 |
| Private school type | | | | | | |
| Catholic | 46.5 | 41.3 | 12.2 | 82.1 | 13.9 | 4.1 |
| Other religious | 37.6 | 38.6 | 23.8 | 52.9 | 6.0 | 41.2 |
| Nonsectarian | 47.4 | 40.9 | 11.7 | 49.5 | 11.4 | 39.1 |

NOTE: Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School Surveys," 1999–2000.

cent in the urban fringe or large towns, and 31 percent in rural areas. Most schools—61 percent of private and 71 percent of public—were elementary, but 10 percent of private schools and 25 percent of public schools were secondary. Fi-

nally, a much higher proportion of private schools (30 percent) were combined schools (usually grades K–12 or 1–12), compared with only 4 percent of public schools.

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School and class sizes

Some research suggests that small/intermediate-sized schools and relatively small classes can have advantages, including possibly leading to higher achievement (Klonsky 1995; Raywid 1995; Lee and Smith 1997), although some of the findings are debated.³ This research has found that placing students in small groups tends to foster close working relationships between teachers and students, thus enhancing learning (Lee and Smith 1993) particularly among at-risk students and those in the early grades (Lee and Smith 1995; Krueger and Whitmore 2001). Fairly small schools are also believed to promote teachers' commitment to collaborative work and to support the development of a "professional community of learners" that Newmann and Wehlage (1995) consider useful for high student achievement. In addition to the possible advantages of small schools, they may have some disadvantages as well, such as providing a narrower set of programs and services. The smallest high schools may not be able to offer advanced courses because they have too few students, a shortage of qualified teachers, or both. The data in *indicator 27*, which examines the proportions of

students who completed advanced science and mathematics courses in high schools of different sizes, shows that moderate-sized high schools may provide advantages.

■ *On average, private schools have smaller enrollments, smaller average class sizes, and lower student/teacher ratios than public schools.*

School size is typically related to the population density of the local area and its age distribution of children; for private schools, local demand for a school's instructional philosophy also contributes to size of enrollment. The average private school had 193 students in 1999–2000, while the average public school had 535 students (table 3). Among private schools, 80 percent had enrollments of fewer than 300, compared with 29 percent of public schools. Within the private sector, Catholic schools had larger enrollments than other types of schools. About 43 percent of Catholic schools had 150–299 students in 1999–2000 (a higher proportion than in the other two school types), and another 38 percent had 300 or more students. In comparison, 11–12 percent of other religious schools and nonsectarian schools had

Table 3.—Average number of students enrolled and percentage distribution of schools according to enrollment size, by sector and private school type: 1999–2000

| Sector and type | Average school enrollment | Percentage distribution of schools by size | | | | |
|---------------------|---------------------------|--------------------------------------------|----------------|------------------|------------------|----------------------|
| | | Fewer than 50 students | 50–99 students | 100–149 students | 150–299 students | 300 or more students |
| Public | 535 | 4.0 | 4.3 | 4.6 | 16.2 | 70.9 |
| Private | 193 | 26.1 | 16.4 | 12.1 | 25.8 | 19.6 |
| Private school type | | | | | | |
| Catholic | 315 | 1.1 | 7.4 | 10.3 | 42.7 | 38.4 |
| Other religious | 141 | 36.8 | 19.9 | 11.0 | 20.6 | 11.7 |
| Nonsectarian | 144 | 36.4 | 20.8 | 17.1 | 14.3 | 11.4 |

NOTE: Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School Surveys," 1999–2000.

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300 or more students. About 36–37 percent of other religious and nonsectarian schools had fewer than 50 students. Such small schools were rare, however, among Catholic schools (1 percent) and in the public sector as a whole (4 percent).

The average class size reported by teachers was larger in public schools than in private schools for both self-contained (the norm for elementary grades) and departmentalized classes (typical in middle and upper grades). Teachers in Catholic schools had an average of 23 students in their departmentalized classes, and in public schools the figure was 24 students (table 4). In both Catholic and public schools, however, departmentalized classes were larger than in other religious and nonsectarian schools, where the average class sizes were 17 and 15 students, respectively.

The schoolwide student/teacher ratio tends to be smaller than the average size of self-contained or departmentalized classes (shown in table 4) mainly because the student/teacher ratio includes any pull-out, enrichment, and other special classes. Private schools had an average of 13 students per FTE teacher, compared with an average of 16 students per teacher in public schools. Furthermore, 36 percent of private

schools had a student/teacher ratio lower than 10:1, compared with 10 percent of public schools.

Special instructional approaches and programs

Private schools may be established specifically to implement a particular instructional approach, such as Montessori, or a specific curricular focus. Some public schools have adopted special approaches as well, but the public sector included a smaller proportion of such schools than did the private sector in 1999–2000 (20 versus 28 percent) (figure 2). However, public schools were more likely than private schools to offer many specialized programs and courses—for example, gifted/talented programs; Advanced Placement (AP) and college credit courses; and career academies, vocational courses, and work-based learning. About 13–14 percent of schools in each sector offered a foreign language immersion program. (Figure 2 shows the percentages of all schools that had a specific instructional approach, a gifted program, and foreign language immersion, while the other measures in figure 2 are restricted to schools with grades 9–12.)

Among private schools, nonsectarian ones were the most likely to use a specific instructional ap-

Table 4.—Average class size, student/teacher ratios, and percentage of schools with a student/teacher ratio less than 10:1, by sector and private school type: 1999–2000

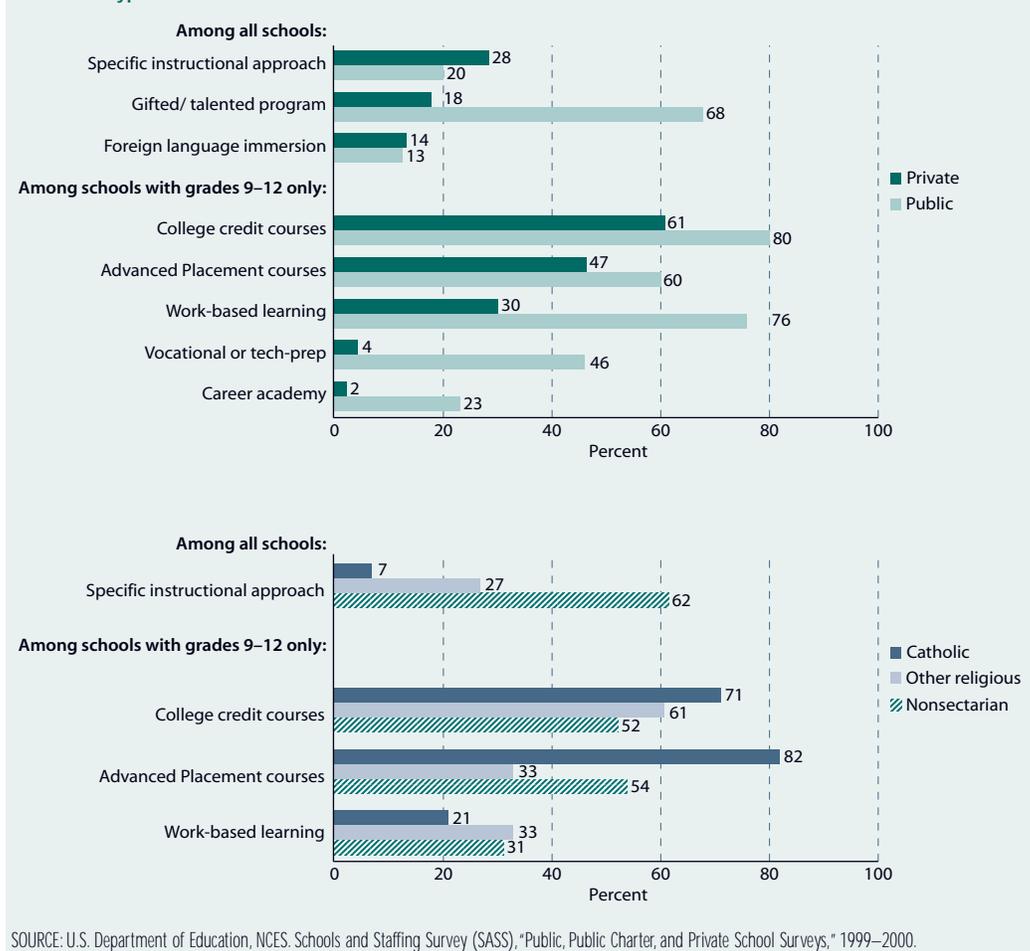
| Sector and type | Average class size | | Student/teacher ratio | Percent of schools with a student/teacher ratio less than 10:1 |
|---------------------|--------------------|------------------|-----------------------|----------------------------------------------------------------|
| | Self-contained | Departmentalized | | |
| Public | 20.9 | 23.6 | 15.6 | 9.7 |
| Private | 18.9 | 18.8 | 13.2 | 35.8 |
| Private school type | | | | |
| Catholic | 23.6 | 23.2 | 17.2 | 8.4 |
| Other religious | 17.1 | 16.8 | 12.5 | 38.5 |
| Nonsectarian | 15.4 | 14.8 | 9.1 | 67.5 |

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School and Teacher Surveys," 1999–2000.

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Figure 2.—Percentage of schools offering particular instructional approaches or special programs, by sector and private school type: 1999–2000



proach (62 percent), compared with other religious (27 percent) and Catholic schools (7 percent). Large proportions of Catholic high (or combined) schools provided AP and college credit courses (82 and 71 percent, respectively), higher percentages than those in either other religious or nonsectarian schools. Catholic schools with grades 9–12 were less likely than other religious schools to have work-based learning programs.

Demographic characteristics of students

Racial/ethnic and socioeconomic diversity in schools offer academic and social benefits in a society where students need to work well in heterogeneous groups in school, jobs, and social settings (e.g., Coleman et al. 1966; Eaton 2001; Schofield 2001). In addition, research suggests that diversity in a school's enrollment can help low-income and minority students increase their

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achievement and attainment, reduce dropout rates, and improve critical thinking skills and the ability to understand opposing viewpoints. (Syntheses of research on these topics can be found in St. John 1975; Cook 1984; Wells and Crain 1994; and Schofield 1995.) Student populations in private and public schools and in different types of private schools vary on some basic demographic measures, including race/ethnicity, limited-English proficiency (LEP) status, and the family's socioeconomic background.

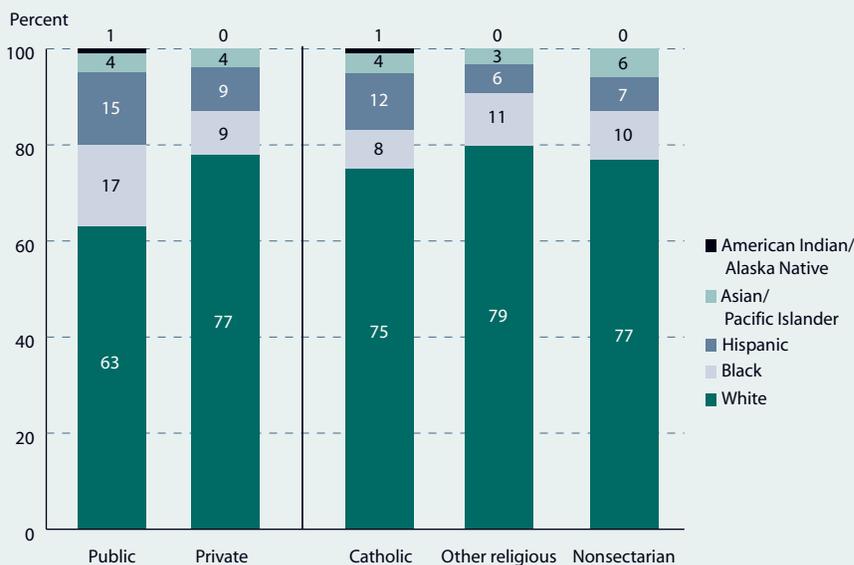
■ *There are differences in the racial and ethnic diversity in public and private schools.*

In 1999–2000, 77 percent of all private school students were White, compared with 63 percent of all public school students (figure 3). The private school sector as a whole had lower propor-

tions of Black and Hispanic students than the public school sector as a whole, and no difference was detected between the sectors in the proportion of Asian/Pacific Islander students. Some earlier research (Greene 2001) found that individual private school students were more likely than those in public schools to be in racially mixed classrooms. Enrollment patterns in public schools more closely replicated neighborhood segregation in housing. In Catholic schools, 12 percent of students were Hispanic, a higher proportion than in the other types of private schools.

Public schools were more likely than private schools to have any minority students in 1999–2000, as well as to have high concentrations of minority students (more than 30 percent) (table 5). Although many private schools had a racially diverse student body, about 14 percent had no minority students, compared with only 4 percent

Figure 3.—Percentage distribution of students according to race/ethnicity, by sector and private school type: 1999–2000



NOTE: Percentages may not add to 100 due to rounding. Estimates of 0 are less than 0.5 percent.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School Surveys," 1999–2000.

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Table 5.—Percentage distribution of schools according to concentration of minority students, by sector and private school type: 1999–2000

| Sector and type | None | 1–10 percent | 11–30 percent | 31–50 percent | 51 percent or more |
|---------------------|------|--------------|---------------|---------------|--------------------|
| Public | 3.9 | 35.8 | 20.2 | 12.8 | 27.3 |
| Private | 13.9 | 36.1 | 23.3 | 7.9 | 18.7 |
| Private school type | | | | | |
| Catholic | 4.7 | 49.5 | 19.2 | 5.3 | 21.4 |
| Other religious | 24.0 | 30.4 | 21.4 | 9.1 | 15.0 |
| Nonsectarian | 3.8 | 30.7 | 33.4 | 8.9 | 23.2 |

NOTE: Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES, Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School Surveys," 1999–2000.

of public schools. Catholic and nonsectarian schools were about as likely as public schools to have some minority students (95–96 percent of each group did), contrasted with 76 percent of other religious schools. Relatively few other religious schools had 51 percent or more minority students (15 percent), compared with Catholic (21 percent), nonsectarian (23 percent), and public schools (27 percent).

■ *Private schools are less likely than public schools to enroll LEP students or students who are eligible for the National School Lunch Program.*

Limited-English proficient students may introduce other students to different cultures and languages and help native English speakers learn foreign languages. Nonetheless, teaching LEP students also adds complexity to educators' tasks and creates new staffing and training challenges for schools. In 1999–2000, 13 percent of private schools had any LEP students, who accounted for an average of 7 percent of total enrollment in these schools (figure 4). In contrast, 54 percent of public schools had any LEP students, and they accounted for 10 percent of the student population on average in these schools. Private schools do not participate directly in federally funded LEP programs and so they may be less likely than pub-

lic schools to identify and count the number of LEP students enrolled.

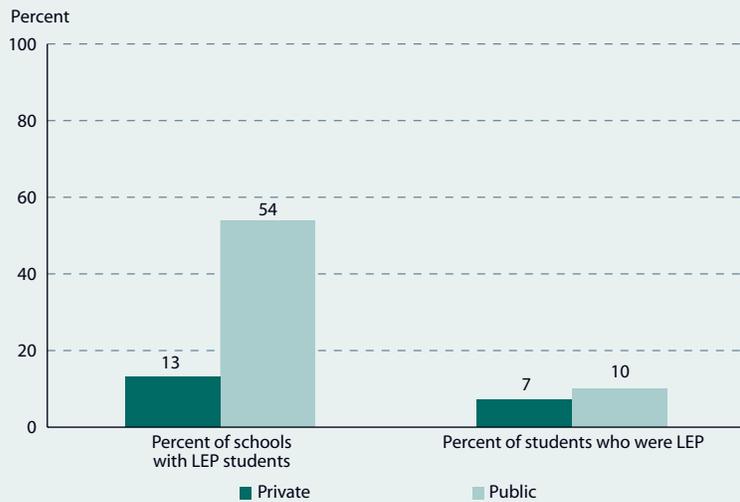
Although direct measures of SES are not readily available, the Schools and Staffing Survey collects information on the proportion of students eligible for free or reduced-price lunches. (The eligibility rate for the National School Lunch Program is a reasonable proxy for the incidence of school poverty in public schools but a less reliable measure in private schools. Approximately 25 percent of private school respondents in 1999–2000 did not know whether any of their students were eligible.⁴) Virtually all public schools (99 percent) had students eligible for subsidized lunches, about twice the percentage for private schools (49 percent) (table 6). Among schools participating in the subsidized lunch program, 42 percent of students at public schools and 10 percent at private schools, on average, were eligible.

Catholic schools were much more likely than the other two types of private schools to have any students eligible for subsidized lunches (69 percent versus 38–40 percent). Among private schools that participated in the program, nonsectarian schools had a higher average proportion of students eligible for free lunches than did Catholic and other religious schools (30, 7, and 6 percent, respectively).

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Figure 4.—Percentage of schools serving LEP students and, in those, percentage of students who were LEP, by sector: 1999–2000



SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School Surveys," 1999–2000.

Table 6.—Percentage of schools that had any students eligible for free or reduced-price lunches and, in participating schools, the average percentage of students who were eligible, by sector and private school type: 1999–2000

| Sector and type | Percentage of schools with any eligible students | Percentage of students eligible |
|---------------------|--------------------------------------------------|---------------------------------|
| Public | 98.8 | 42.5 |
| Private* | 49.5 | 10.4 |
| Private school type | | |
| Catholic | 68.9 | 6.9 |
| Other religious | 38.3 | 6.3 |
| Nonsectarian | 39.7 | 29.5 |

*About 25 percent of private school respondents did not know whether any students enrolled would be eligible for the National School Lunch Program.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School Surveys," 1999–2000.

SCHOOL CLIMATE AND STAFF PERCEPTIONS

Research has examined the links between teachers' perceptions of a school's professional climate, on the one hand, and teachers' effectiveness and job satisfaction on the other (for example, see Mitchell, Ortiz, and Mitchell 1987; Rosenholtz

1991). In one extensive study of Catholic high schools, a range of attributes were found to contribute to school effectiveness, including the staff's communal organization to advance shared goals; principals having primary decisionmaking authority for most school management matters; teachers' commitment to the academic, spiritual,

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and social development of students (which encompassed providing extra help when needed and supporting extracurricular activities); and an atmosphere of mutual respect among everyone in the school (Bryk, Lee, and Holland 1993). Elements of staff opinion and school climate discussed here include teachers' sense of shared purpose, collegiality, and cooperative efforts; teachers' evaluations of principals' leadership and support; and principals' top goals for the school.

Teachers' control over teaching practices and influence on school policies

- *Private school teachers are more likely than public school teachers to report having a lot of influence on several teaching practices and school policies.*

For most teaching practices—selecting teaching techniques, evaluating and grading students, disciplining students, choosing course content and skills to teach, and selecting textbooks and materials—private school teachers were more likely than public school teachers to report having a lot of influence on school policymaking (table 7). (Public schools are often required to follow the decisions of state and/or district offi-

cially regarding curricular content and textbooks.) However, though differences between the sectors were found, some of these policies were common in both types of schools: more than 85 percent of teachers in public and private schools thought that they had a lot of control over selecting teaching techniques, evaluating and grading students, and determining homework quantity. Few differences were detected among the three private school types on most measures in table 7, but nonsectarian school teachers were more likely than Catholic or other religious school teachers to report having a lot of control over the content and skills to teach and selecting textbooks and materials.

In four areas of school policy linked closely with teaching—establishing curriculum, setting student performance standards, setting discipline policy, and evaluating teachers—the sector differences were substantial (table 8 and figure 5). For example, 68 percent of private school teachers said they had a lot of influence on establishing curriculum, compared with 44 percent of public school teachers. In addition, private school teachers were more likely than public school teachers to say that they had a lot of influence on setting student performance standards (63

Table 7.—Percentage of teachers who thought they had a lot of control over various teaching practices, by sector and private school type: 1999–2000

| Sector and type | Selecting teaching techniques | Evaluating and grading students | Determining homework quantity | Disciplining students | Choosing content and skills to teach | Selecting textbooks, materials |
|---------------------|-------------------------------|---------------------------------|-------------------------------|-----------------------|--------------------------------------|--------------------------------|
| Public | 87.4 | 89.1 | 87.9 | 73.3 | 56.7 | 54.1 |
| Private | 92.5 | 92.4 | 87.3 | 85.5 | 75.0 | 70.6 |
| Private school type | | | | | | |
| Catholic | 93.8 | 93.7 | 89.7 | 86.8 | 73.1 | 69.4 |
| Other religious | 91.5 | 91.5 | 84.8 | 85.8 | 70.4 | 64.5 |
| Nonsectarian | 92.3 | 91.7 | 87.5 | 83.0 | 85.0 | 81.8 |

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School Teacher Surveys," 1999–2000.

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Table 8.—Percentage of teachers who thought they had a lot of influence on various school policies, by sector and private school type: 1999–2000

| Sector and type | Establishing curriculum | Setting student performance standards | Setting discipline policy | Inservice training content | Evaluating teachers | Hiring full-time teachers | School budget decisions |
|---------------------|-------------------------|---------------------------------------|---------------------------|----------------------------|---------------------|---------------------------|-------------------------|
| Public | 44.3 | 37.6 | 30.4 | 32.5 | 8.2 | 14.5 | 14.0 |
| Private | 67.5 | 62.5 | 47.9 | 35.5 | 18.6 | 14.1 | 9.9 |
| Private school type | | | | | | | |
| Catholic | 59.0 | 56.2 | 45.1 | 33.5 | 13.7 | 9.8 | 6.9 |
| Other religious | 68.0 | 65.3 | 50.7 | 35.0 | 17.0 | 11.4 | 11.0 |
| Nonsectarian | 79.4 | 67.6 | 47.6 | 39.3 | 28.4 | 24.6 | 12.6 |

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School Teacher Surveys," 1999–2000.

versus 38 percent) and on student discipline policy (48 versus 30 percent). In contrast, no difference was detected between the two sectors for teachers' reported influence on teacher hiring decisions (about 14 percent for each). In addition to hiring decisions, teachers in both sectors were unlikely to think they had a lot of influence on the content of inservice training, school budget decisions, or evaluating teachers. (However, the sectors did differ on these matters; for example, 19 percent of teachers in private schools versus 8 percent in public schools thought they had a lot of influence on teacher evaluation.)

Teachers in nonsectarian schools were more likely than Catholic or other religious school teachers to say they had a lot of influence on establishing curriculum, evaluating teachers, and hiring full-time teachers (table 8 and figure 6). In addition, nonsectarian school teachers were more likely than Catholic school teachers to report having a lot of influence on setting student performance standards and on deciding teachers' inservice training content.

Teachers' ratings of school climate and management

A school's professional climate, in particular the existence of a strong shared purpose among staff members and cooperative interactions among people at the school, is likely to contribute to its effectiveness. As an illustration, Newmann and Wehlage (1995) found that when teachers feel a sense of community at their schools, they can better communicate consistent goals to students and collaborate more effectively on raising student achievement. Similarly, another study (Bryk and Driscoll 1988) found that teachers who work toward shared goals express higher job satisfaction and have lower absentee rates than do other teachers. Among the elements that shape a school's climate are several examined in this section: the extent to which the staff shares a commitment to the school's central mission, teachers collaborate and share ideas, parents support teachers' work, the principal provides clear direction and priorities to the staff, and the administrators communicate expectations clearly and enforce rules of student conduct.

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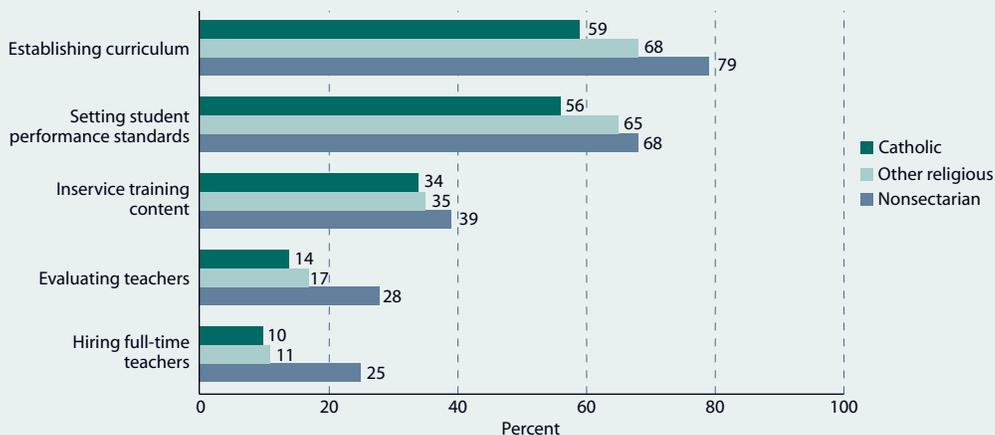
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Figure 5.—Percentage of teachers who thought they had a lot of influence on various school policies, by sector: 1999–2000



SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School Teacher Surveys," 1999–2000.

Figure 6.—Percentage of teachers who thought they had a lot of influence on various school policies, by private school type: 1999–2000



SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School Teacher Surveys," 1999–2000.

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- *Private school teachers are more likely than public school teachers to report being satisfied with teaching at their school.*

Schools and Staffing Survey (SASS:1999–2000) data indicate that teachers in private schools for the most part have positive views about their jobs and the extent of staff cooperation and collegiality at their school. For example, private school teachers were more likely than public school teachers to “strongly agree”⁵ that they were generally satisfied with teaching at their school (66 versus 54 percent) and with their class size (60 versus 36 percent) (table 9). In addition, greater proportions of private school than public school teachers agreed that teachers consistently enforce rules of behavior, that most colleagues shared their beliefs about the school’s central mission, and that cooperative effort among the staff was high. Moreover, teachers at private schools (42 percent) were much more likely than teachers at public schools (16 percent) to state that they received a great deal of support from parents for their work. No differences were detected between sectors or among private school types in the percentage who agreed that they con-

sciously coordinated course content with other teachers.

Teachers at other religious schools agreed with five positive statements about their school’s professional climate and working conditions at higher rates than those of teachers at Catholic and nonsectarian schools. Topics of these statements concerned satisfaction with teaching at the school in general, colleagues’ shared beliefs about the school’s mission, staff cooperative effort, support from parents, and teachers’ consistent enforcement of rules.

- *A majority of private school teachers express positive opinions about their principal and their school’s management.*

Most private school teachers agreed that their principal enforced school rules, expressed expectations for staff, and clearly communicated the kind of school he or she wanted (table 10). A majority of private school teachers also agreed that the administration was supportive and encouraging and that necessary materials were available. For each of these aspects, as well as thinking that staff members were recognized for

Table 9.—Percentage of teachers who strongly agreed with various statements about the school’s professional climate and working conditions, by sector and private school type: 1999–2000

| Sector and type | I am satisfied with teaching at this school | I am satisfied with my class size | Most colleagues share school’s mission | Staff cooperative effort is high | I receive lots of parent support for my work | I consciously coordinate courses with other teachers | Rules are consistently enforced by teachers |
|---------------------|---------------------------------------------|-----------------------------------|----------------------------------------|----------------------------------|----------------------------------------------|------------------------------------------------------|---------------------------------------------|
| Public | 53.7 | 35.8 | 33.2 | 33.9 | 15.6 | 38.0 | 22.8 |
| Private | 66.4 | 60.0 | 59.9 | 56.0 | 42.4 | 39.3 | 37.8 |
| Private school type | | | | | | | |
| Catholic | 62.9 | 46.5 | 55.3 | 50.2 | 40.0 | 37.4 | 36.8 |
| Other religious | 71.3 | 67.7 | 72.3 | 63.5 | 48.1 | 41.4 | 41.9 |
| Nonsectarian | 64.1 | 68.0 | 47.4 | 53.1 | 37.1 | 38.8 | 33.0 |

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), “Public, Public Charter, and Private School Teacher Surveys,” 1999–2000.

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Table 10.—Percentage of teachers who strongly agreed with various statements about the school's principal and management, by sector and private school type: 1999–2000

| Sector and type | Principal enforces school rules | School goals are communicated clearly | Administration is supportive and encouraging | Necessary materials are available | Principal expresses expectations for staff | Staff are recognized for good work | Principal often discusses instructional practices |
|---------------------|---------------------------------|---------------------------------------|----------------------------------------------|-----------------------------------|--------------------------------------------|------------------------------------|---------------------------------------------------|
| Public | 47.4 | 48.1 | 41.8 | 37.2 | 49.7 | 25.7 | 11.0 |
| Private | 62.7 | 61.3 | 59.8 | 60.2 | 56.5 | 39.8 | 15.4 |
| Private school type | | | | | | | |
| Catholic | 59.2 | 59.1 | 56.1 | 53.2 | 55.9 | 36.5 | 14.1 |
| Other religious | 68.3 | 66.4 | 67.3 | 64.0 | 60.5 | 45.7 | 18.1 |
| Nonsectarian | 59.4 | 56.5 | 53.6 | 64.5 | 51.1 | 35.7 | 12.9 |

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School Teacher Surveys," 1999–2000.

doing a good job, public school teachers were less likely than private school teachers to agree with the positive statement. Indeed, no more than 50 percent of teachers in public schools agreed with any of these statements.

Within the private sector, teachers at other religious schools were more likely than those at the other two private school types to agree with several statements regarding school management: that the administration was supportive and encouraging, that their principal enforced school rules, that school goals were communicated clearly, and that staff members were recognized for doing a good job. Forty-six percent of other religious school teachers agreed with the last statement, compared with about 36 percent of teachers in the two other school types.

Principals and school leadership

Principals' instructional leadership can include observing teachers in the classroom and providing constructive evaluations, requiring teachers to work collaboratively, providing substantive training in teaching methods, and working directly with teachers to develop new curricula or

teaching techniques. In one study (Larsen 1987), high-achieving schools had principals who visited classrooms and talked to teachers frequently about instructional methods and content. These principals also explained the school's goals clearly to staff and learned from other schools' notable curricula and methods. Despite the presumed usefulness of strong instructional leadership (Louis and Miles 1990; Leithwood 1992), principals for the most part are not discussing instructional practices often with teachers (table 10, last column), perhaps because of overwhelming demands for their time (Pierce 2000). Elmore (1999–2000) found from his observations that "few administrators of any kind or at any level are directly involved in instruction. Principals who develop the skills and knowledge required to become instructional leaders do so because of their own preferences and values—and often at some cost to their own careers."

■ *Most principals are not engaging teachers on instructional practices on a frequent basis—in either sector.*

Most private school teachers thought their principal performed well in enforcing rules, commu-

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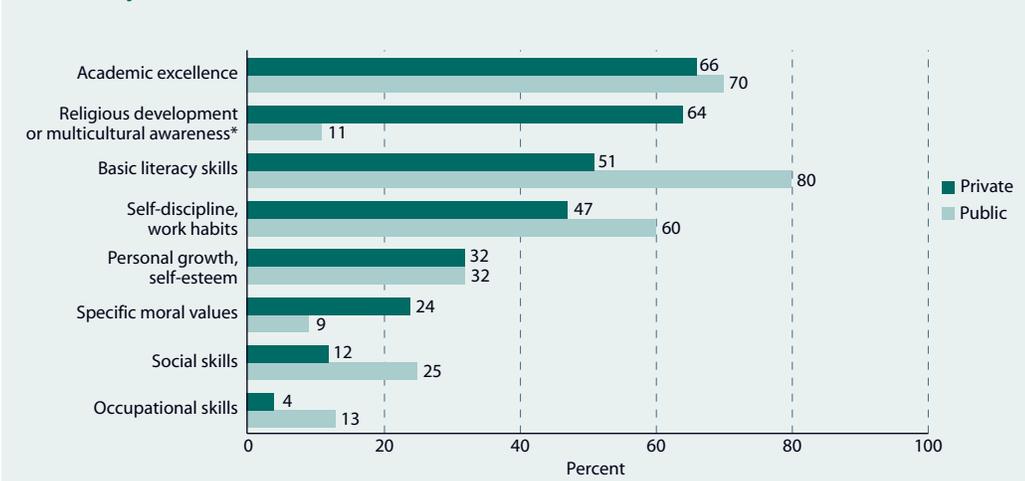
nicating expectations and goals, and supporting teachers, as discussed above. However, SASS:1999–2000 data indicate that private schools did not show much of an advantage in principals’ leadership on instruction. Teachers in both sectors were unlikely to report that the principal often discussed instructional matters with them: 15 percent in the private sector and 11 percent in the public sector agreed that their principals did so (table 10).⁶ Teachers in other religious schools were more likely to say that their principals frequently discussed instruction than those in either Catholic or nonsectarian schools.

The principal’s top-priority goals, if communicated effectively to teachers and other staff, can influence both daily practices and the professional climate at the school. Public school principals in 1999–2000 were most likely to name among their top three goals building basic literacy skills in core areas like reading, writing, and mathematics (80 percent) (figure 7). Other goals cited fre-

quently by public school principals were encouraging academic excellence (70 percent) and developing self-discipline and good work habits (60 percent). Principals in private schools were about equally likely to include academic excellence (66 percent) and fostering religious/spiritual development⁷ (64 percent) among their highest three goals. Literacy skills (51 percent) and developing self-discipline (47 percent) were also included often as top three goals in private schools.

The percentage of all private school principals who included religious development as a top goal disguises the large differences across school types for this measure: principals in Catholic and other religious schools cited religious development more often than any other goal (80–82 percent of these principals cited it), while hardly any nonsectarian school principals did so (1 percent) (figure 8). At both types of religious schools, academic excellence was included as a high-priority goal by 66–69 percent of the principals (second after religious development), followed by two other

Figure 7.—Percentage of principals who rated each of eight educational goals among the three most important for their school, by sector: 1999–2000



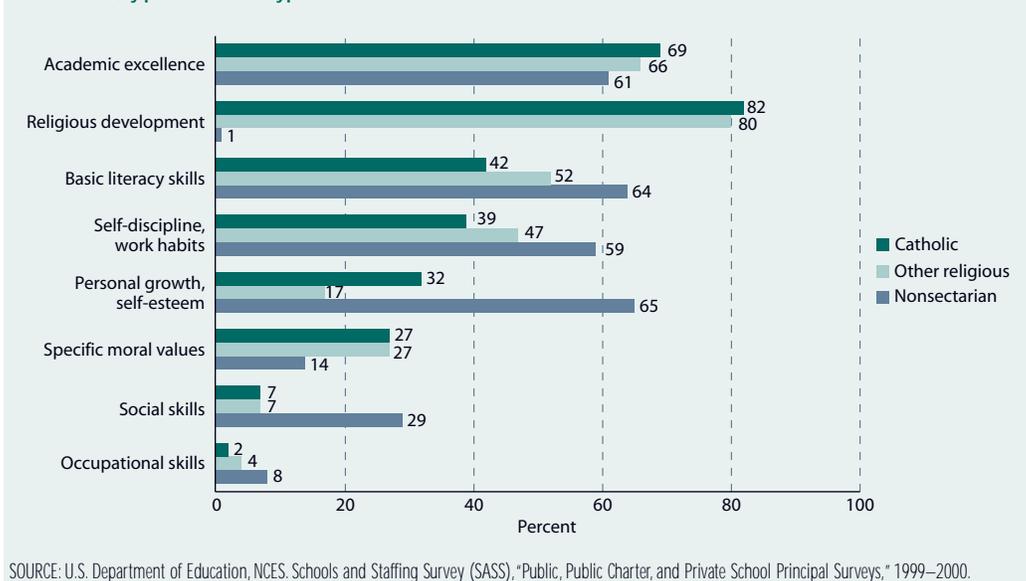
*Private school principals were given “religious or spiritual development” to rate, while public school principals were given “multicultural awareness” instead.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), “Public, Public Charter, and Private School Principal Surveys,” 1999–2000.

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Figure 8.—Percentage of principals who rated each of eight educational goals among the three most important for their school, by private school type: 1999–2000



SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School Principal Surveys," 1999–2000.

goals: building literacy skills (42–52 percent) and developing self-discipline (39–47 percent). Promoting self-discipline was included more frequently than teaching specific moral values by Catholic and other religious school principals.

Nonsectarian school principals had a somewhat different pattern of priorities: between 59 and 65 percent included developing personal growth/self-esteem, literacy skills, academic excellence, and promoting self-discipline among their top three goals. In addition, nonsectarian school principals were more likely than those at the other two school types to include social skills development (29 versus 7 percent at Catholic and other religious schools). About 59 percent of nonsectarian school principals included developing self-discipline among their top three goals, more than the 47 percent at other religious schools, which in turn was more than the 39 percent at Catholic schools. Principals' ratings for teaching basic literacy skills followed a similar pattern by school type. About 27 percent of both Catholic and other

religious school principals included teaching specific moral values, roughly twice the 14 percent for principals of nonsectarian schools.

ACADEMIC COURSETAKING AND STUDENT OUTCOMES

Student achievement, high school graduation requirements, and courses completed

■ *Private school students generally perform higher than their public school counterparts on standardized achievement tests.*

As with earlier results from the National Assessment of Educational Progress (NAEP), private school students performed higher than public school students on the NAEP:2000 tests.⁸ Their average scores were above those of public school students on the 4th-grade reading test and on the 4th-, 8th-, and 12th-grade science and mathematics proficiency tests (table 11). See *indicators 7, 10, 11, and 12* for detailed data on student performance, including differences by many variables beyond school sector.

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Table 11.—Average science, mathematics, and reading scale scores for 4th-, 8th-, and 12th-graders, by sector: 2000

| Sector | Scale score | | |
|--------------------|-------------|---------|----------|
| | Grade 4 | Grade 8 | Grade 12 |
| Science | | | |
| Public | 148 | 149 | 145 |
| Private | 163 | 166 | 161 |
| Mathematics | | | |
| Public | 226 | 274 | 300 |
| Private | 238 | 287 | 315 |
| Reading | | | |
| Public | 215 | — | — |
| Private | 234 | — | — |

—Not applicable.

SOURCE: U.S. Department of Education, NCES. (2002). *The Nations Report Card: Science 2000* (NCES 2002–451); (2001) *The Nations Report Card: Mathematics 2000* (NCES 2001–517); (2001) *The Nations Report Card: Reading 2000* (NCES 2001–499).

Applying high academic standards—both requiring students to complete high-level, challenging courses and pushing students to strive and excel in their work—is a central schooling component that many experts recommend (Newmann 1992; Bryk, Lee, and Holland 1993; Gamoran et al. 1997). Earlier research has found not only that private high school students take more advanced mathematics courses than those in public high schools but also that the type of private school may matter (Lee et al. 1998). Students at Catholic high schools in that study completed more advanced mathematics than students in “independent, selective” private schools, even after adjusting for measures including prior achievement in mathematics, school selectivity, and family SES. (The independent, selective schools cited are a subset of the nonsectarian group discussed here; one difference is that the latter includes special education schools. Students in Catholic schools in the study varied more in academic skill and family SES than did students in the more selective independent schools.)

■ *Private high schools typically have more demanding graduation requirements than do public high schools.*

Compared with public schools, private schools required more coursework (in 4-year high school programs) in 1999–2000 in social studies, mathematics, science, foreign language, and computer science (table 12).⁹ Private schools required on average 3.1 years of mathematics, while public schools required 2.7 years, for example. The figures for foreign language study also differed: 1.5 years at private schools but 0.5 years at public schools. In addition, about 40 percent of private schools required some form of community service for high school graduation, four times the rate for public schools (10 percent). Nonsectarian schools required an average of 3.3 years of mathematics, compared with 3.0–3.1 years for the other two types of private schools. Catholic schools were quite likely (73 percent) to require some community service for graduation, more so than the other two types.

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Table 12.—Average years of high school study required for graduation in selected subjects, and percentage of public and private schools* that had a community service requirement, by sector and private school type: 1999–2000

| Sector and type | Average years of study required | | | | | | Percent that require community service |
|---------------------|---------------------------------|----------------|-------------|---------|------------------|------------------|----------------------------------------|
| | English | Social studies | Mathematics | Science | Foreign language | Computer science | |
| Public | 3.90 | 3.10 | 2.73 | 2.41 | 0.46 | 0.52 | 9.9 |
| Private | 3.94 | 3.33 | 3.13 | 2.67 | 1.51 | 0.88 | 39.8 |
| Private school type | | | | | | | |
| Catholic | 3.96 | 3.15 | 3.05 | 2.59 | 1.81 | 0.87 | 73.1 |
| Other religious | 3.92 | 3.39 | 3.09 | 2.68 | 1.35 | 0.92 | 30.7 |
| Nonsectarian | 4.02 | 3.28 | 3.32 | 2.71 | 1.79 | 0.74 | 41.9 |

*Restricted to schools that grant high school diplomas (district data on requirements were applied to public schools). Columns 1–4 were further restricted to schools reporting for 3- or 4-year high school programs, and columns 5 and 6 to schools reporting for 4-year high school programs.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public School District, and Public, Public Charter, and Private School Surveys," 1999–2000.

- *Private school graduates are more likely than their peers from public schools to have completed advanced-level courses in three academic subject areas.*

Findings from the NAEP High School Transcript Study of 1998 (*indicator 27*) show that 1998 private high school graduates were more likely than public high school graduates to have completed advanced courses in science and mathematics (figure 9). Advanced science courses include chemistry, physics, and advanced biology; advanced mathematics courses include trigonometry, precalculus, and calculus. In a parallel pattern, private school graduates were about twice as likely as their public school counterparts to have completed the third (or higher) year of study in a foreign language (55 versus 28 percent) (*indicator 34*, U.S. Department of Education 2001a). Completing intermediate-level and even advanced courses is often required for admission to selective colleges and universities.

Educational attainment

- *Private school students are more likely than public school students to complete a bachelor's or advanced degree by their mid-20s.*

Data from the National Education Longitudinal Study of 1988, "Fourth Follow-up" (NELS:1988/2000) show that students who had attended private school in 8th grade were twice as likely as those who had attended public school to have completed a bachelor's or higher degree by their mid-20s (52 versus 26 percent) and far less likely to have had no post-secondary education (figure 10). Even students from low-SES backgrounds attained higher levels if they had been private school students in 1988. Specifically, 7 percent of students in the lowest SES quartile who had attended public school in 1988 had earned a bachelor's degree by 2000, whereas 24 percent of their private school peers had done so (table 13). In addition, for students whose mother's expectation (in 8th grade) was for them to attain an associate's degree or less, those who had at-

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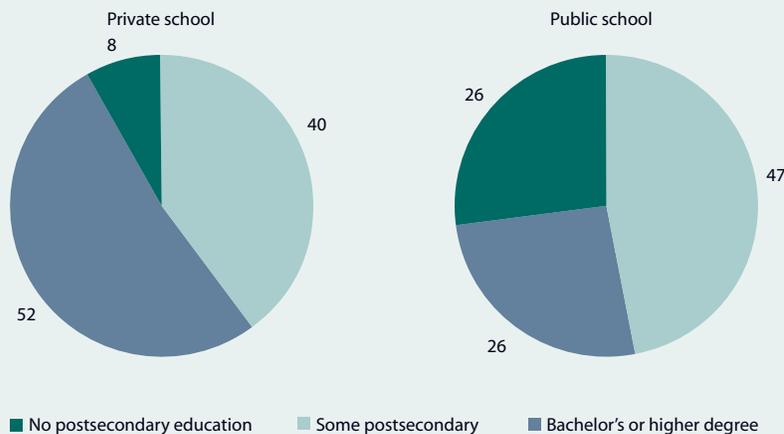
Figure 9.—Percentage distribution of 1998 high school graduates according to highest level of science and mathematics courses completed in high school, by sector



NOTE: Percentages may not add to 100 due to rounding. Estimate of 0 is less than 0.5 percent.

SOURCE: U.S. Department of Education, NCES. National Assessment of Educational Progress (NAEP) High School Transcript Study, 1998.

Figure 10.—Percentage distribution of 1988 8th-graders according to their educational attainment, by sector of 8th-grade school: 2000



NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, NCES. National Education Longitudinal Study of 1988, "Fourth Follow-up" (NELS:1988/2000).

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Table 13.—Percentage of 1988 8th-graders with various backgrounds who had completed a bachelor's or higher degree by 2000

| Student characteristics | Sector of 8 th -grade school | | Studied calculus by 12 th grade | |
|-----------------------------------------------|-----------------------------------------|-------------|--------------------------------------------|-------------|
| | Private | Public | Yes | No |
| Total | 52.2 | 26.1 | 81.9 | 25.4 |
| Family socioeconomic status | | | | |
| Lowest quartile | 24.4 | 6.6 | 70.9 | 6.1 |
| Middle two quartiles | 38.6 | 22.3 | 68.5 | 21.8 |
| Highest quartile | 69.1 | 56.9 | 91.0 | 53.9 |
| Mother's expectation for student's attainment | | | | |
| Less than bachelor's degree | 29.5 | 7.2 | 56.7 | 8.1 |
| Bachelor's degree or higher | 56.1 | 34.6 | 83.8 | 33.0 |

NOTE: The number in row 2, column 1 shows that, among students whose family SES was in the lowest quartile, 24.4 percent of those who had attended private school in the 8th grade had completed a bachelor's or higher degree by 2000.

SOURCE: U.S. Department of Education, NCES. National Education Longitudinal Study of 1988, "Fourth Follow-up" (NELS:1988/2000).

tended private school completed a bachelor's or higher degree at a rate about four times that of public school students (30 versus 7 percent). Furthermore, students who came from a low-SES family but had completed a calculus course in high school were much more likely than those who had not studied calculus to earn a degree by their mid-20s (71 versus 6 percent). Students in private schools are more likely than those in public schools to take challenging courses like calculus, and private schools are more likely to require them, as discussed in the preceding section.

CONCLUSION

In addition to differences between schools in the private and public sectors, within each sector, schools vary in size, level, community type, and student populations. Differences in internal management practices, staff cohesiveness, top-priority goals, and professional climate also appear between and within each sector. Some characteristics of private schools vary widely according to the type of school, while others do not.

Private schools overall have fewer students than public schools, and minorities are a lower percentage of the student population. Catholic schools tend to be larger and have greater diversity in enrollment than other types of private schools. Teachers in private schools report that they have wide latitude in deciding how and what to teach, as well as a fairly strong influence on many school policies. Nonsectarian schools, in particular, may give teachers greater influence in shaping their school's activities. In contrast, though the majority of teachers in each private school type agreed with positive statements about staff cooperation and the school's management, teachers at other religious schools were more likely than other private school teachers to agree strongly with many of these statements. Teachers at other religious schools were particularly likely to give their administrators high marks, and to report that their colleagues shared similar beliefs about their school's central mission and that rules were enforced consistently. Principals at the three types of private schools had different top priorities for their schools, but at least 60 percent in each school type included academic

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excellence. Public school principals most often cited teaching basic literacy skills as one of their top three goals (80 percent included it), while 51 percent of private school principals did so.

Achievement tests in reading, mathematics, and science show higher average scores for private school students. In addition, private schools tend to require more years of core academic subjects for high school graduation than do public schools, with some variation across school types. Graduates of private high schools have on average completed more advanced courses than public school graduates in science, mathematics, and foreign language. Finally, students who had attended private school in 8th grade were twice as likely as those who had attended public school to have completed a bachelor's or higher degree by their mid-20s, and far less likely to have had no postsecondary education.

Private schools have advantages from the outset that many public schools cannot match, stemming from the choice by students and their families to participate in private education. However, requiring students to tackle difficult course material, developing consistent commitment from staff to meet clearly communicated goals, and maintaining a school climate that extols learning may well contribute to better achievement at schools in either sector.

NOTES

¹An additional number of students are schooled at home, outside of the private and public school sectors. In 1999, the estimated number of home-schooled students was 850,000 (Bielick, Chandler, and Broughman 2001).

²A public charter school is a public school that, in accordance with an enabling statute, has been granted a charter exempting it from selected state or local rules and regulations. A public charter school may be a newly created school or it may previously have been a public or private school. Traditional public schools include all public schools except public charter schools and Bureau of Indian Affairs-funded schools that are operated by local public school districts. Traditional public schools include regular, special education, vocational/technical, and alternative schools. They also include schools in juvenile detention centers, and schools located on military bases and operated by the Department of Defense.

³Some other research has questioned the value of decreasing class sizes in raising achievement, particularly in light of the often high costs of implementing such changes. Hanushek (2000) argues that the quality of additional teachers hired to reduce class sizes is the important variable, rather than smaller class sizes per se. O'Connell and Smith (2000) and Finn and Achilles (1999) found that smaller class size does not substantively change how teachers teach, although the evidence on that question is mixed; see Holloway (2002) for a summary of research on the topic.

⁴Schools that do not participate in federally funded programs like the school lunch program are less likely to know how many students would be eligible because the school's funding is not affected by tracking eligibility.

⁵"Agree" and "agreed" are used hereafter for brevity, but all the data discussed in this section reflect the percentage of teachers who said they strongly agreed with the statement mentioned.

⁶These two percentages do differ but also indicate that principals in both sectors were unlikely to engage teachers on instructional practices often.

⁷Private school principals rated "fostering religious or spiritual development" as one of the eight goals, while public school principals instead rated "promoting multicultural awareness or understanding."

⁸For earlier data about several subjects, see previous editions of two recurring NCES publications: *The Condition of Education* and *The Nation's Report Card*.

⁹Differences for some of the subjects were small but nevertheless statistically significant.

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Nontraditional Undergraduates

Susan P. Choy

Today's undergraduate population is different than it was a generation ago. In addition to being 72 percent larger in 1999 than in 1970 (with fall enrollment growing from 7.4 to 12.7 million), proportionately more students are enrolled part time (39 versus 28 percent) and at 2-year colleges (44 versus 31 percent), and women have replaced men as the majority (representing 56 percent of the total instead of 42 percent) (*indicator 5*). There are proportionately more older students on campus as well: 39 percent of all postsecondary students were 25 years or older in 1999, compared with 28 percent in 1970 (U.S. Department of Education 2002b).

The “traditional” undergraduate—characterized here as one who earns a high school diploma, enrolls full time immediately after finishing high school, depends on parents for financial support, and either does not work during the school year or works part time—is the exception rather than the rule. In 1999–2000, just 27 percent of undergraduates met all of these criteria.¹ Thus, 73 percent of all undergraduates were in some way “nontraditional.”² Comparable data for a generation ago are not available, but the fact that much of the change in demographic characteristics and enrollment patterns described above occurred in the 1970s (U.S. Department of Education 2002b) suggests that this is not a recent phenomenon.

While traditional undergraduates are generally able to direct most of their energy toward their studies, older students, parents (especially single parents), and students who work full time have family and work responsibilities competing with school for their time, energy, and financial resources. Difficulties in obtaining child care and class schedules that do not mesh with work schedules are just two of the barriers that nontraditional students may encounter. In addition, some of the older students who did not

pursue a postsecondary education when they were younger may have made this decision because they were not prepared academically. Consequently, they may struggle when they enroll later. Nontraditional students who enter postsecondary education seeking a degree are, in fact, less likely than traditional students to attain a degree or remain enrolled after 5 years (Horn 1996). To design effective programs and services to help nontraditional students reach their degree goals, policymakers and postsecondary administrators need information on how many students are affected, the details of their enrollment patterns, and the nature of their persistence problems.

The first part of this discussion of nontraditional students uses the National Postsecondary Student Aid Study (NPSAS:2000) to describe their demographic characteristics, enrollment patterns, how they combine school and work, and their participation in distance education. The second part examines the relationship between nontraditional status and persistence using the Beginning Postsecondary Students Longitudinal Studies (BPS), which followed cohorts of students enrolling in postsecondary education for the first time in 1989–90 and in 1995–96. Unless a specific type of institution is specified, the data refer to students at all types of postsecondary institutions (less-than-2-year, 2-year, and 4-year).

DEFINITION OF NONTRADITIONAL STATUS

The term “nontraditional student” is not a precise one, although age and part-time status (which often go together) are common defining characteristics (Bean and Metzner 1985). An NCES study examining the relationship between nontraditional status and persistence in postsecondary education identified nontraditional students using information on their enrollment patterns, financial dependency status, family situation, and high school graduation status (Horn 1996). Specifically, in this study, a

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nontraditional student is one who has any of the following characteristics:

- Delays enrollment (does not enter post-secondary education in the same calendar year that he or she finished high school);
- Attends part time for at least part of the academic year;
- Works full time (35 hours or more per week) while enrolled;
- Is considered financially independent for purposes of determining eligibility for financial aid;³
- Has dependents other than a spouse (usually children, but sometimes others);
- Is a single parent (either not married or married but separated and has dependents); or
- Does not have a high school diploma (completed high school with a GED or other high

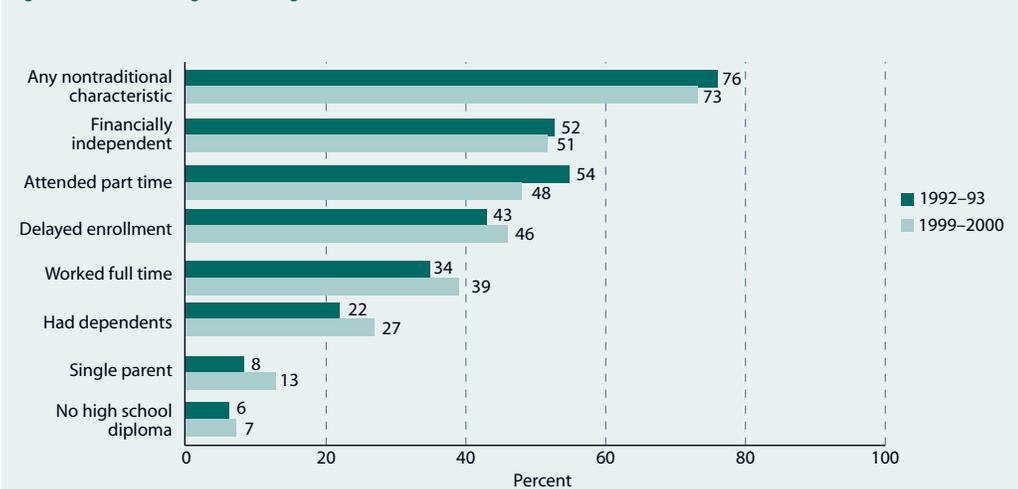
school completion certificate or did not finish high school).

Horn (1996) defined “nontraditional” on a continuum based on the number of these characteristics present. Students are considered to be “minimally nontraditional” if they have only one nontraditional characteristic, “moderately nontraditional” if they have two or three, and “highly nontraditional” if they have four or more.

■ *Almost three-quarters of undergraduates are in some way “nontraditional.”*

As indicated earlier, 73 percent of all undergraduates in 1999–2000 had one or more of these characteristics. Figure 1 shows the percentage of undergraduates with each nontraditional characteristic. In 1999–2000, financial independence was the most common nontraditional characteristic (51 percent), followed by part-time attendance (48 percent), and then delayed enrollment (46 percent).

Figure 1.—Percentage of undergraduates with nontraditional characteristics: 1992–93 and 1999–2000



SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

Nontraditional Undergraduates

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- *In the undergraduate population, there are about as many highly nontraditional students as there are traditional students.*

In 1999–2000, 27 percent of all undergraduates were traditional, and 28 percent were highly nontraditional (table 1). Another 28 percent were moderately nontraditional and 17 percent were minimally nontraditional. The character of the undergraduate population varied markedly by type of institution. Public 2-year and private for-profit institutions have much larger proportions of moderately and highly nontraditional students than 4-year institutions, and much smaller proportions of traditional students. At both public 2-year and private for-profit institutions, 89 percent of the students were at least minimally nontraditional, compared with 58 percent at public 4-year institutions and 50 percent at private not-for-profit 4-year institutions.

- *The percentages of students with some nontraditional characteristics have changed in recent years.*

Between 1992–93 and 1999–2000, the percentages of students who delayed enrollment, worked full time, had dependents, and were single parents all increased (figure 1). The percentage of

undergraduates attending part time decreased, a trend that is projected to continue.⁴ There were no measurable changes between the 2 years in the percentages who were financially independent or did not have a high school diploma.

INTERRELATIONSHIPS AMONG NONTRADITIONAL CHARACTERISTICS

Table 2 shows the percentages of all undergraduates with each nontraditional characteristic by type of institution and how the characteristics identified as nontraditional are interrelated. Some of the characteristics occur together by definition; for example, a single parent always has dependents and, at least for purposes of assessing eligibility for financial aid, is always considered to be financially independent. Therefore, a single parent will always have at least three nontraditional characteristics. Other nontraditional characteristics, such as full-time employment and part-time enrollment, occur together frequently, but not always: among students who worked full time, 73 percent attended part time.

Among students who were minimally nontraditional (had only one nontraditional characteristic), part-time attendance was the most common

Table 1.—Percentage distribution of undergraduates according to their student status, by type of institution: 1999–2000

| Type of institution | Traditional | Minimally nontraditional | Moderately nontraditional | Highly nontraditional |
|-------------------------------|-------------|--------------------------|---------------------------|-----------------------|
| Total | 27.4 | 16.6 | 28.3 | 27.7 |
| Public 2-year | 10.5 | 14.3 | 35.0 | 40.2 |
| Public 4-year | 42.5 | 20.0 | 23.1 | 14.4 |
| Private not-for-profit 4-year | 50.0 | 14.7 | 16.4 | 19.0 |
| Private for-profit | 11.3 | 14.7 | 38.5 | 35.4 |

NOTE: Total row includes students at types of institutions not shown here. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

Nontraditional Undergraduates

Continued

Table 2.—Percentage of all undergraduates with each nontraditional characteristic, by type of institution, and percentage of nontraditional undergraduates with each nontraditional characteristic, by nontraditional characteristic and status: 1999–2000

| Type of institution, non-traditional characteristic, and nontraditional status | Financially independent | Attended part time | Delayed enrollment | Worked full time | Had dependents | Single parent | No high school diploma* |
|--------------------------------------------------------------------------------|-------------------------|--------------------|--------------------|------------------|----------------|---------------|-------------------------|
| All undergraduates | | | | | | | |
| Total | 50.9 | 47.9 | 45.5 | 39.3 | 26.9 | 13.3 | 6.5 |
| Type of institution | | | | | | | |
| Public 2-year | 63.7 | 69.5 | 58.7 | 53.8 | 34.5 | 16.4 | 9.8 |
| Public 4-year | 37.6 | 33.3 | 31.5 | 25.5 | 17.6 | 9.2 | 2.4 |
| Private not-for-profit 4-year | 36.7 | 27.6 | 34.0 | 28.5 | 18.8 | 8.6 | 3.2 |
| Private for-profit | 72.9 | 21.5 | 67.8 | 40.8 | 44.3 | 26.6 | 15.6 |
| Nontraditional undergraduates | | | | | | | |
| Nontraditional characteristic | | | | | | | |
| Any nontraditional characteristic | 67.8 | 63.8 | 60.9 | 54.0 | 35.8 | 17.7 | 8.7 |
| Financially independent | 100 | 66.2 | 66.4 | 57.3 | 52.8 | 26.1 | 10.1 |
| Attended part time | 70.3 | 100 | 58.8 | 62.0 | 36.2 | 15.7 | 8.0 |
| Delayed enrollment | 74.1 | 61.7 | 100 | 52.0 | 39.7 | 19.6 | 9.2 |
| Worked full time | 72.0 | 73.3 | 48.4 | 100 | 40.7 | 16.6 | 7.1 |
| Had dependents | 100 | 64.5 | 67.6 | 58.2 | 100 | 49.4 | 11.6 |
| Single parent | 100 | 56.6 | 68.0 | 55.4 | 100 | 100 | 14.1 |
| No high school diploma | 78.7 | 58.6 | 76.1 | 46.2 | 47.6 | 28.7 | 100 |
| Nontraditional status | | | | | | | |
| Minimally nontraditional | 15.2 | 36.2 | 22.8 | 22.8 | 0 | 0 | 2.2 |
| Moderately nontraditional | 68.0 | 63.8 | 42.2 | 51.5 | 18.7 | 3.8 | 5.2 |
| Highly nontraditional | 99.4 | 80.4 | 76.3 | 75.0 | 79.6 | 38.6 | 15.1 |

*Student did not finish high school or completed with a GED or certificate of completion.

NOTE: Total row and nontraditional characteristic and status rows include students at types of institutions not shown here. Students may appear in more than one column. Percentages in the “minimally nontraditional” row (only one nontraditional characteristic) do not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

reason for being in this category (36 percent). Delayed enrollment (23 percent) and working full time (23 percent) were next. Most of the minimally nontraditional students were 24 years or younger (otherwise they would be financially independent, a characteristic of only 15 percent of minimally nontraditional students).

Among moderately nontraditional students (two or three nontraditional characteristics), 68 percent were financially independent, 64 percent

attended part time, 52 percent worked full time, and 42 percent delayed enrollment. Relatively fewer had dependents (19 percent).

A large majority of highly nontraditional students (80 percent) had dependents. In addition, three-quarters or more were financially independent (as they would be automatically if they had dependents), attended part time, worked full time, and had delayed enrollment in postsecondary education.

Nontraditional Undergraduates

Continued

ENROLLMENT PATTERNS

■ *Nontraditional students are particularly likely to choose 2-year institutions.*

Among traditional students, 52 percent enrolled in a public 4-year institution, and another 27 percent enrolled in a private not-for-profit 4-year institution (table 3). Relatively few (17 percent) chose a public 2-year institution. The enrollment pattern of nontraditional students is different. Students who were even minimally nontraditional were much more likely than traditional students to attend a 2-year institution (39 percent), and the more nontraditional they were, the more likely they were to do so. Among highly nontraditional students, 64 percent attended a public 2-year institution.

COMBINING SCHOOL AND WORK

■ *Two-thirds of highly nontraditional students consider themselves primarily employees.*

Among traditional students, 30 percent did not work while enrolled, and another 67 percent worked but still considered themselves to be primarily students (figure 2). The remaining 3

percent considered themselves primarily employees who enrolled in school. In sharp contrast, 67 percent of highly nontraditional students and 37 percent of moderately nontraditional students considered themselves primarily employees. Even minimally nontraditional students were more likely than traditional students to consider themselves primarily employees (10 versus 3 percent).

■ *Working while enrolled has both benefits and limitations.*

Working while enrolled can have benefits. Among employed undergraduates who considered themselves primarily students, 26 percent thought that working helped them with their coursework, and 55 percent thought it helped prepare them for a career (table 4). There were generally no measurable differences between traditional and nontraditional students, with the exception that highly nontraditional students were slightly more likely than traditional or minimally nontraditional students to find that working helped them with their coursework.

Working can interfere with school as well as provide benefits. Undergraduates who worked but considered themselves primarily students

Table 3.—Percentage distribution of undergraduates according to the type of institution attended, by student status: 1999–2000

| Student status | Public less-than-2-year | Public 2-year | Public 4-year | Private not-for-profit less-than-4-year | Private not-for-profit 4-year | Private for-profit |
|---------------------------|-------------------------|---------------|---------------|-----------------------------------------|-------------------------------|--------------------|
| Total | 0.7 | 44.9 | 33.4 | 0.8 | 14.9 | 5.2 |
| Traditional | 0.2 | 17.3 | 52.1 | 1.0 | 27.3 | 2.2 |
| Minimally nontraditional | 0.5 | 39.3 | 41.0 | 0.9 | 13.5 | 4.7 |
| Moderately nontraditional | 0.9 | 55.5 | 27.2 | 0.6 | 8.6 | 7.1 |
| Highly nontraditional | 1.2 | 64.2 | 17.2 | 0.8 | 10.1 | 6.6 |

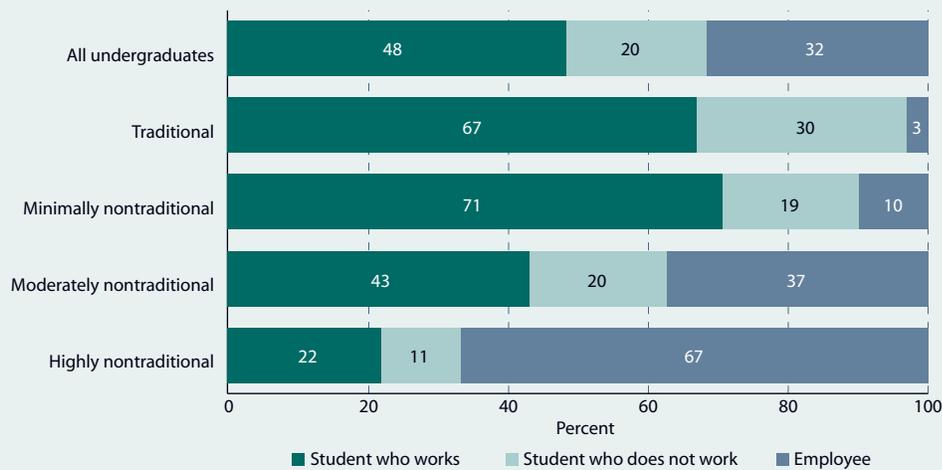
NOTE: Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

Nontraditional Undergraduates

Continued

Figure 2.—Percentage distribution of undergraduates according to their primary role, by student status: 1999–2000



SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

Table 4.—Percentage of undergraduates working while enrolled but considering themselves primarily students who reported various effects of working, by student status: 1999–2000

| Student status | Helped with | | Limited | | | | Had negative effect on grades |
|---------------------------|-------------|--------------------|----------------|-------------------|---------------|-------------------|-------------------------------|
| | Coursework | Career preparation | Class schedule | Number of classes | Class choices | Access to library | |
| Total | 25.7 | 54.8 | 46.1 | 38.6 | 32.9 | 30.1 | 34.6 |
| Traditional | 24.7 | 53.9 | 29.0 | 19.6 | 19.0 | 18.3 | 24.7 |
| Minimally nontraditional | 24.4 | 56.3 | 47.4 | 37.6 | 31.8 | 29.8 | 34.8 |
| Moderately nontraditional | 26.4 | 54.8 | 57.9 | 54.2 | 45.0 | 38.2 | 43.4 |
| Highly nontraditional | 29.7 | 54.1 | 72.0 | 67.5 | 53.5 | 50.4 | 47.1 |

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

sometimes found that working limited their class schedule (46 percent), the number of classes they could take (39 percent), their choice of classes (33 percent), or their access to the library (30 percent). Nontraditional students who worked were more likely than their traditional counter-

parts to report each of these limitations, and in each case, the more nontraditional they were, the more likely they were to report these problems. Among highly nontraditional students, the proportions reporting these limitations ranged from about one-half to almost three-quarters.

Nontraditional Undergraduates

Continued

Students sometimes report that working has a negative effect on their grades. Highly and moderately nontraditional students (47 and 43 percent, respectively) were more likely than minimally nontraditional students (35 percent) to report this effect, and traditional students (25 percent) were the least likely to do so.

- *For most nontraditional students, gaining skills, earning a degree, and personal enrichment are important considerations in their decision to enroll.*

Students who considered themselves primarily employees were asked if certain factors were important considerations in their decision to enroll in postsecondary education while working. Regardless of how nontraditional they were, 73 percent or more reported that personal enrichment or interest in the subject, gaining skills to

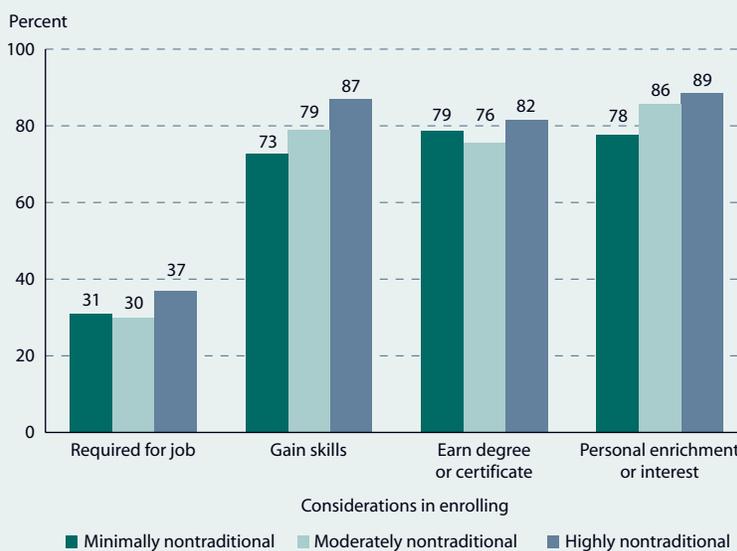
advance in their job or for a new career, and completing a degree or certificate program were important considerations (figure 3). Far fewer (30 to 37 percent) indicated that obtaining additional education required for their job was an important consideration. Too few traditional students considered themselves primarily employees (3 percent) to make comparisons (figure 2).

DISTANCE EDUCATION

Participating in distance education may allow nontraditional students to overcome some of the difficulties they encounter in coordinating their work and school schedules or in obtaining the classes they want.

- *Moderately and highly nontraditional students are more likely than other students to participate in distance education.*

Figure 3.—Among nontraditional undergraduates who considered themselves primarily employees, percentage who reported each factor to be an important consideration in their decision to enroll, by factor and nontraditional status: 1999–2000



SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

Nontraditional Undergraduates

Continued

In 1999–2000, 8 percent of all undergraduates participated in distance education at the institution in which they were enrolled or at both the institution at which they were enrolled and somewhere else (table 5 and *indicator 38*). Among those who participated, 29 percent were enrolled in programs available entirely through distance education. Moderately or highly nontraditional students were more likely than either traditional students or minimally nontraditional students both to participate in distance education and to be in programs available entirely through distance education.

Among all students who participated in distance education, 60 percent participated via the Internet, 39 percent through prerecorded television or audio, and 37 percent through live television or audio. There were no statistically significant differences between traditional and nontraditional students in the mode they used to participate.

PERSISTENCE AFTER 3 YEARS

The seven characteristics associated with nontraditional status—financial independence, part-time attendance, delayed enrollment, full-time work,

dependents, single parenthood, and lack of a high school diploma—have sometimes been called “risk factors” because they are related negatively to persistence (staying in school or earning a degree) (Horn 1996; Horn and Premo 1995). This section uses longitudinal data to examine the relationship between nontraditional characteristics and persistence and attainment after 3 years for students who enrolled in postsecondary education for the first time in 1995–96.⁵

Persistence is best studied in relation to students’ goals. Some students enroll for a limited number of courses without intending to earn a degree or certificate. Without knowing the students’ specific goals, it is impossible to know whether they were achieved. Therefore, only students with a degree or transfer goal are included in this discussion of persistence. However, 88 percent of the 1995–96 beginning postsecondary students were in this category (BPS:1996/1998). Students’ nontraditional status here refers to their status when they first enrolled and does not take into account any subsequent changes such as having children or shifting enrollment or employment status.

Table 5.—Percentage of undergraduates who participated in distance education and among those who did, percentage whose entire program was available through distance education and percentage using each mode of participation, by student status: 1999–2000

| Student status | Among those who participated | | | | |
|-------------------------------------|------------------------------------|------------------------------------------------------|-----------------------------------|-------------------------------------------|---------------------------|
| | Participated in distance education | Entire program was taught through distance education | Participated via live TV or audio | Participated via pre-recorded TV or audio | Participated via Internet |
| Total | 7.6 | 29.0 | 37.3 | 39.3 | 60.1 |
| Traditional | 5.3 | 20.6 | 39.5 | 35.4 | 60.4 |
| Minimally nontraditional | 6.2 | 22.1 | 38.5 | 36.8 | 57.8 |
| Moderately or highly nontraditional | 9.3 | 32.8 | 36.4 | 40.9 | 60.5 |

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

Nontraditional Undergraduates

Continued

One would expect nontraditional students to take longer than traditional students to complete their programs because enrolling part time is one of the most common nontraditional characteristics (table 2). Consequently, comparing their degree attainment rates after only 3 years is not particularly useful. In contrast, comparing the percentages of traditional and nontraditional degree seekers who left postsecondary education without a degree and had not returned (at least within 3 years) is both appropriate and useful.

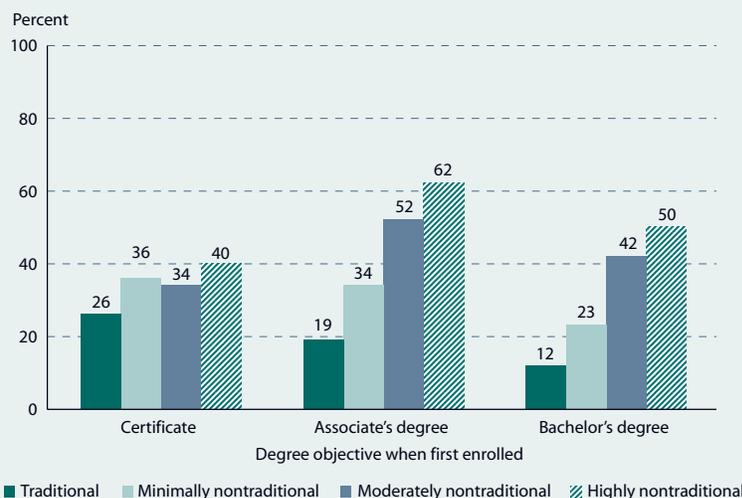
■ *Nontraditional students are much more likely than traditional students to leave postsecondary education without a degree.*

Among students seeking a bachelor's degree, 50 percent of highly nontraditional students were no longer enrolled (for any degree) 3 years later, compared with 12 percent of traditional students

(figure 4). Similarly, among those seeking an associate's degree, 62 percent of highly nontraditional students left without any degree, compared with 19 percent of traditional students. Even minimally nontraditional students seeking a bachelor's or associate's degree were more likely than their traditional counterparts to leave. Apparent differences at the certificate level were not statistically significant.

In addition to being more likely than traditional students to leave postsecondary education without any degree, nontraditional students who had initially planned to earn a bachelor's degree (including those who started at a less-than-4-year institution) were less likely than their traditional counterparts to be still enrolled at a 4-year institution 3 years later (table 6). While 76 percent of traditional students were still enrolled in 4-year institutions, the percentage dropped to 51 percent for minimally nontraditional students and

Figure 4.—Percentage of 1995–96 beginning postsecondary degree seekers who had not attained any degree and were not enrolled in 1998, by initial degree objective and student status



SOURCE: Berkner, Horn, and Clune (2000), tables 5.1d, 5.2d, and 5.3d. Data from U.S. Department of Education, NCES. Beginning Postsecondary Students Longitudinal Study, "First Follow-up" (BPS:1996/1998).

Nontraditional Undergraduates

Continued

Table 6.—Percentage distribution of 1995–96 beginning postsecondary students with a bachelor’s degree objective when they first enrolled according to their status in 1998, by student status

| Student status | Highest degree attained | | | No degree | | |
|---------------------------|-------------------------|-------------|------------|--------------------------------------------|----------------------------------|--------------|
| | Certificate | Associate’s | Bachelor’s | Enrolled at a less-than-4-year institution | Enrolled at a 4-year institution | Not enrolled |
| Total | 1.5 | 2.7 | 0.7 | 12.5 | 63.2 | 19.4 |
| Traditional | 0.8 | 2.1 | 0.6 | 8.2 | 76.4 | 12.0 |
| Minimally nontraditional | 1.9 | 3.6 | 1.8 | 19.6 | 50.5 | 22.6 |
| Moderately nontraditional | 3.6 | 3.6 | 0.5 | 21.8 | 28.3 | 42.1 |
| Highly nontraditional | 4.8 | 3.9 | (#) | 15.4 | 25.6 | 50.4 |

#Estimate less than 0.05.

NOTE: Percentages may not add to 100.0 due to rounding.

SOURCE: Berkner, Horn, and Clune (2000), table 5.3d. Data from U.S. Department of Education, NCES, Beginning Postsecondary Students Longitudinal Study “First Follow-up” (BPS:1996/1998).

even lower percentages for moderately and highly nontraditional students (28 and 26 percent, respectively).

PERSISTENCE AND ATTAINMENT AFTER 5 YEARS

While a 3-year follow-up is useful for examining persistence, a longer interval is needed to assess attainment. For this purpose, 1989–90 beginning postsecondary students were studied using the 1994 follow-up, which occurred approximately 5 years after they had first enrolled.

Persistence and attainment by degree goal

Students who began their postsecondary education in 1989–90 indicated their degree objectives when they first enrolled. Table 7 shows how many had achieved that objective by 1994 and for those who did not, whether they were still working on that degree, had changed their degree objective, or had left without earning the degree. Those who had changed their degree objective may or may not have been enrolled in 1994.

- *Compared with their traditional counterparts, nontraditional students seeking bachelor’s and associate’s degrees are less likely to attain their degree goal within 5 years and more likely to leave postsecondary education.*

Among nontraditional students whose goal was to obtain a bachelor’s degree at any time, 31 percent had earned one by 1994, compared with 54 percent of traditional students. The attainment rate for highly nontraditional students was 11 percent. Because many nontraditional students enroll part time, one would expect them to take longer than traditional students to complete a bachelor’s degree. If time-to-degree were the only issue, one would expect to find more nontraditional than traditional students still enrolled, but there was no statistically significant difference in the percentages still enrolled after 5 years (23 and 20 percent, respectively). Compared with traditional students, nontraditional students were more likely to change their degree objective (13 versus 7 percent) or leave without a degree (33 versus 19 percent).

Nontraditional Undergraduates

Continued

Table 7.—Percentage distribution of 1989–90 beginning postsecondary students with a reported degree objective according to their persistence and attainment of that degree objective by 1994, by student status

| Student status | Attained degree objective | Did not attain degree objective | | |
|-------------------------------------|---------------------------|------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------|
| | | Enrolled toward degree objective in 1994 | Changed degree objective, enrolled in or not enrolled in 1994 | No change in degree objective, not enrolled in 1994 |
| Bachelor's degree objective | | | | |
| Total | 44.5 | 21.2 | 9.6 | 24.7 |
| Traditional | 53.9 | 19.7 | 7.2 | 19.2 |
| Nontraditional | 31.3 | 23.2 | 12.9 | 32.5 |
| Minimally nontraditional | 42.4 | 22.5 | 8.6 | 26.6 |
| Moderately nontraditional | 16.9 | 25.4 | 17.0 | 40.7 |
| Highly nontraditional | 11.2 | 21.7 | 25.0 | 42.1 |
| Associate's degree objective | | | | |
| Total | 35.5 | 8.7 | 17.2 | 38.7 |
| Traditional | 53.4 | 8.4 | 15.8 | 22.4 |
| Nontraditional | 26.7 | 8.8 | 17.8 | 46.6 |
| Minimally nontraditional | 37.2 | 5.8 | 21.7 | 35.3 |
| Moderately nontraditional | 24.5 | 6.4 | 16.5 | 52.6 |
| Highly nontraditional | 15.6 | 16.0 | 14.4 | 54.0 |
| Certificate objective | | | | |
| Total | 55.8 | 4.5 | 8.7 | 31.0 |
| Traditional | 61.3 | 4.8 | 10.7 | 23.2 |
| Nontraditional | 54.0 | 4.4 | 8.1 | 33.5 |
| Minimally nontraditional | 55.4 | 6.3 | 11.3 | 26.9 |
| Moderately nontraditional | 56.6 | 6.4 | 8.4 | 28.7 |
| Highly nontraditional | 50.3 | 1.1 | 5.7 | 42.9 |

NOTE: Degree objective means having ever had the specified degree objective. Therefore, it is possible for a student who changed objectives to appear more than once in the table. For example, a student with an initial objective of a bachelor's degree who changed his or her objective to an associate's degree would appear under "changed degree objective" in the bachelor's degree section of the table and would also appear in the associate's degree section. Percentages may not add to 100.0 due to rounding.

SOURCE: Horn (1996), table 13. Data from U.S. Department of Education, NCES. Beginning Postsecondary Students Longitudinal Study, "Second Follow-up" (BPS:1990/1994).

Similarly, nontraditional students seeking an associate's degree were less likely than their traditional peers to earn the degree (27 versus 53 percent) and more likely to leave without the degree (47 versus 22 percent). Among nontraditional students, those seeking an associate's degree were more likely than those

seeking a bachelor's degree to leave without a degree (47 versus 33 percent). The same was not true for traditional students, who left at approximately the same rate regardless of their degree objective. (The difference between 19 and 22 percent was not statistically significant.)

Nontraditional Undergraduates

Continued

For certificate seekers, differences in persistence and attainment rates were not statistically significant except for those of highly nontraditional students. These students were more likely to leave without a certificate (43 percent) than were other nontraditional students (27 to 29 percent) or traditional students (23 percent).

Timing and type of departure

For postsecondary administrators designing programs to help keep nontraditional students in school, it is important to understand when students most frequently leave postsecondary education. Figure 5 shows the annual attrition rates of students who began their postsecondary education in 1989–90—that is, the percentage who left without returning, transferred downward, or stopped out for more than 4 months.

- *Nontraditional students are most at risk for leaving during their first year, regardless of their degree objective.*

Among nontraditional students seeking bachelor's degrees, 27 percent interrupted their enrollment in their first year, compared with 14 percent of traditional students (figure 5). The annual attrition rate was lower in subsequent years but remained higher than the rate for traditional students until the fourth year. Among those seeking an associate's degree, 46 percent of nontraditional students left in their first year, compared with 23 percent of traditional students. The gap closed somewhat in the second year, but not after that. Among certificate seekers, nontraditional students were more likely than traditional students to leave in their first year (43 versus 23 percent). There was no difference thereafter, but many certificate programs do not require more than a year to complete.

- *Nontraditional students who leave are as likely as their traditional peers to take a break in their enrollment.*

Although one might expect students with family and work responsibilities to be more likely than their traditional peers to take breaks in their enrollment, that was not the case. Among nontraditional and traditional students who left their first institution, the percentages who left but returned later were similar (26 and 28 percent, respectively) (figure 6). The rest of the leavers were different, however. Traditional students who left their first institution were more likely than their nontraditional peers (40 versus 27 percent) to transfer downward (in part because more started at 4-year institutions). In contrast, nontraditional leavers were more likely than traditional ones to leave without returning (47 versus 32 percent).

Influence of individual nontraditional characteristics on persistence and attainment

- *With the exception of single parenthood, each of the nontraditional characteristics has a direct or indirect association with persistence and attainment.*

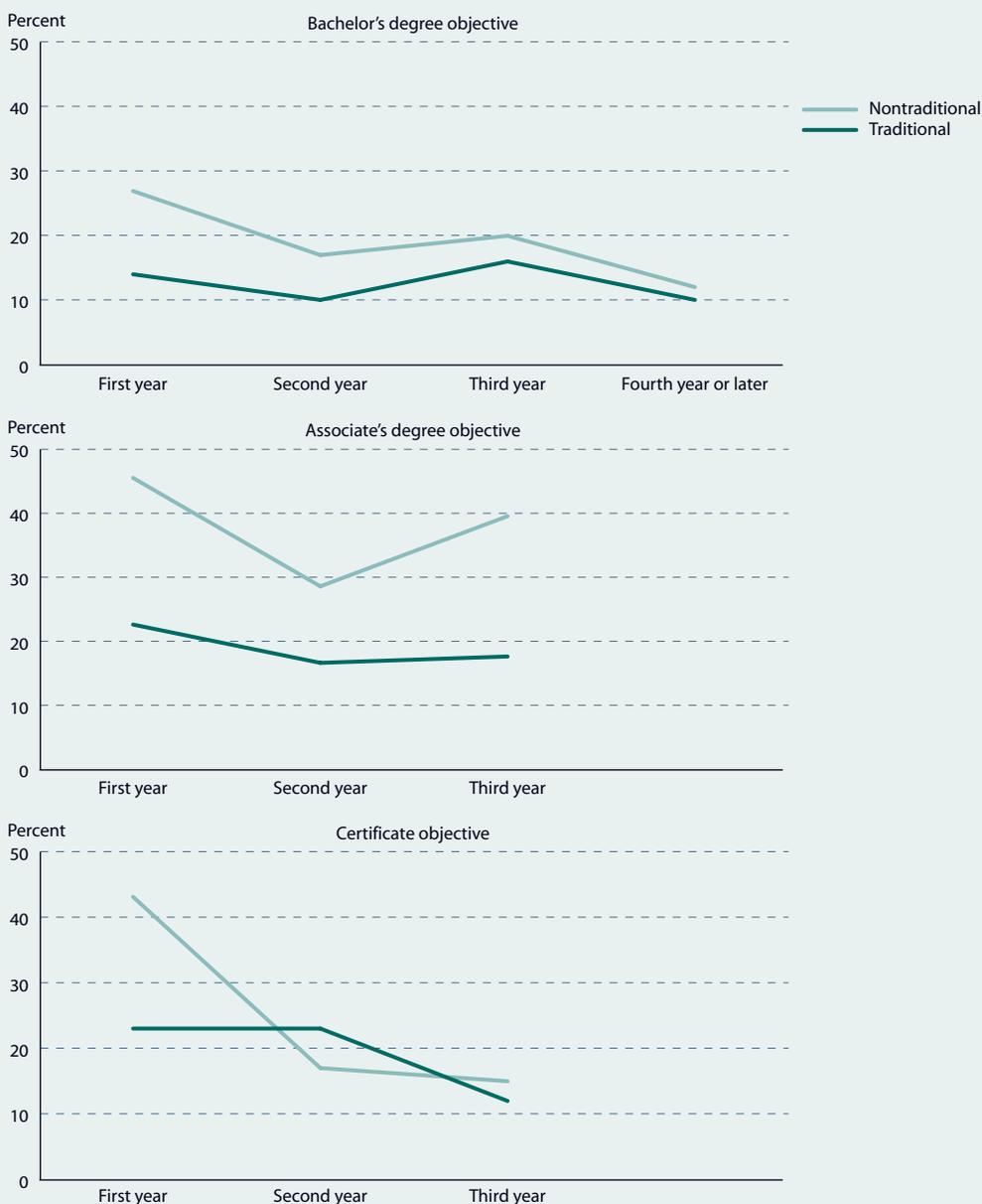
Horn (1996) investigated the relationships between the various nontraditional characteristics and persistence and attainment, taking into account the effect of other variables also likely to affect persistence, including sex, race/ethnicity, socioeconomic status, and the control and level of institution. This analysis showed that, controlling for the covariation of these other factors, the following nontraditional characteristics remained negatively associated with persistence: delaying enrollment, enrolling part time, being financially independent, and having a GED or other certificate of completion.

The remaining three nontraditional characteristics—working full time in the first year of enrollment, having dependents, and being a single parent—did not have an independent association with persistence. Further analysis

Nontraditional Undergraduates

Continued

Figure 5.—Annual attrition rates of 1989–90 beginning postsecondary students, by initial degree objective: 1994



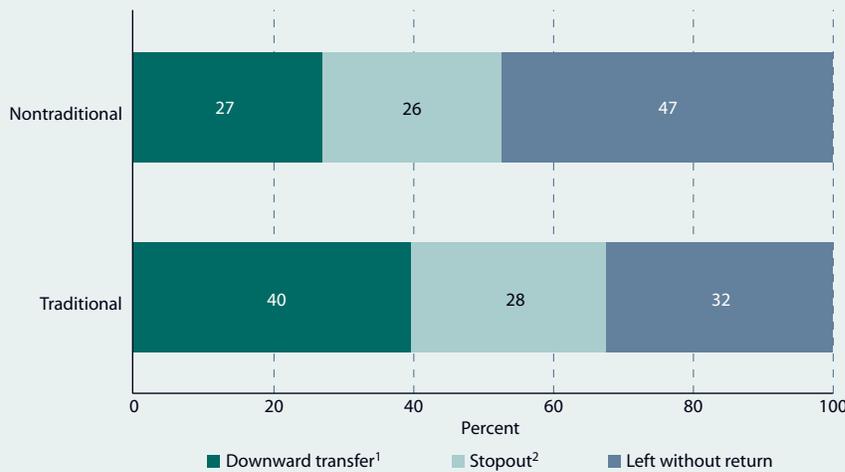
NOTE: Represents the percentage of students who interrupted their enrollment each year based on the number still enrolled at the beginning of that year. An "interruption" means leaving without returning, transferring downward, or stopping out for more than 4 months and then returning to the same or higher level of institution.

SOURCE: Horn (1996), table 14. Data from U.S. Department of Education, NCES. Beginning Postsecondary Students Longitudinal Study, "Second Follow-up" (BPS:1990/1994).

Nontraditional Undergraduates

Continued

Figure 6.—Percentage distribution of beginning postsecondary degree seekers who left their first institution according to the type of leaving, by student status: 1994



¹From a 4-year to 2-year institution, for example (with or without taking time off).

²Left school for a period of 4 or more months and then returned to the same level of institution.

SOURCE: Horn (1996), table 15. Data from U.S. Department of Education, NCES. Beginning Postsecondary Students Longitudinal Study, "Second Follow-up" (BPS:1990/1994).

demonstrated, however, that working full time and having dependents predicted part-time and delayed enrollment and therefore indirectly affected persistence. Only single parenthood did not have a measurable independent direct or indirect effect.

CONCLUSION

The “traditional” student is not typical. Fully three-quarters of all postsecondary students in 1999–2000 had at least one nontraditional characteristic. The most highly nontraditional students (those with four or more nontraditional characteristics) were concentrated in public 2-year institutions, with two-thirds enrolled in this type of institution.

Two-thirds of highly nontraditional students perceived their primary role to be that of an

employee, suggesting that school did not have first claim on their time and energy. Among highly nontraditional students who considered themselves primarily students, many found that work limited their class and scheduling options.

Among beginning postsecondary students seeking bachelor’s and associate’s degrees, nontraditional students were much more likely than traditional students to leave without earning any degree. They were most at risk of dropping out in their first year. Compared with their traditional counterparts, nontraditional beginning students who left their first institution were more likely to leave postsecondary education altogether and less likely to transfer downward. The percentages who interrupted their enrollment were similar for the two groups.

Nontraditional Undergraduates

Continued

NOTES

¹This includes undergraduates at all types of postsecondary institutions (less-than-2-year, 2-year, and 4-year).

²U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

³Undergraduates are normally considered financially dependent unless they are 24 years or older, married, a veteran, have dependents of their own other than a spouse, or are an orphan or ward of the court.

⁴The numbers of both full- and part-time students are projected to increase over the next decade, but full-time enrollment is expected to grow at a faster rate (*indicator 5*).

⁵Among 1995–96 beginning postsecondary students, 45 percent were traditional students, 19 percent were minimally nontraditional, 19 percent were moderately nontraditional, and 16 percent were highly nontraditional (NCES 2000–154).

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Section 1

Participation in Education





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Summary: Participation in Education

This section profiles trends in enrollment at all levels, a basic descriptor of American education and a key indicator of scope and access to educational opportunities. Enrollment rates have increased for people not already in mandatory educational programs. As the size of the population and rates of enrollment in a population group change, so does enrollment. These changes in enrollment have implications for the demand for educational resources such as qualified teachers, physical facilities, and funding levels required to provide a high-quality education for the nation's students. Moreover, differences in enrollments among racial/ethnic or family income groups can provide insight into inequality of access and participation, issues that are of national concern. Poverty also poses a serious challenge to children's access to high-quality learning opportunities and their potential to succeed in school.

Early childhood education programs are intended to prepare children socially and academically for formal schooling. Elementary and secondary education provides knowledge, skills, and habits of minds that prepare students for further learning and productive membership in society. Because

enrollment at the elementary and secondary levels is mandatory, changes in enrollment are driven by shifts in the size of the school-age population. This population fluctuates due to changes in birth rates, immigration, and other factors.

Postsecondary education provides students with opportunities to gain advanced knowledge and skills either immediately after high school or later in life. Because postsecondary education is voluntary, changes in total undergraduate enrollments reflect fluctuations in enrollment rates and the perceived availability and value of postsecondary education as well as the size of the traditional college-age population. Graduate and professional enrollments form an important segment of postsecondary education, allowing students to pursue advanced coursework in a variety of disciplines. In addition, many adults participate in learning activities to upgrade work-related skills, change their careers, or expand their personal interests. Thus, the extent to which individuals and groups have access to educational opportunities and how they progress through various levels are both important to monitor.



Preprimary Education

Enrollment in Early Childhood Education Programs

Enrollment rates for 3- to 5-year-olds in early childhood education programs were higher in 2001 than 1991. Black and White children enroll in early childhood education programs at higher rates than Hispanic children.

Participation in center-based early childhood care and education programs such as Head Start, nursery school, and prekindergarten can help a child prepare for elementary school or serve as child care for working parents (Bredenkamp and Copple 1997). Between 1991 and 2001, the percentage of children ages 3–5 who had not yet entered kindergarten and who attended center-based early childhood care and education programs rose from 53 to 56 percent. For children age 4, the percentage increased from 60 to 66 percent. For children age 5, the percentage increased from 64 to 73 percent (see supplemental table 1-1).

Some groups of children have higher rates of participation in center-based education programs than others. Children living in families that are below poverty are less likely to participate in preschool education than children in families living at or above poverty. The difference in rates of participation between children from poor and nonpoor families was 12 percentage points in 2001 (47 versus 59 percent). No statistically significant change in this difference has occurred since 1991.

Black children are more likely than Hispanic and White children to participate in center-based

early childhood care and education programs, and White children are more likely to participate than Hispanic children. In 2001, 64 percent of Black children ages 3–5 attended such programs, compared with 40 percent of Hispanic children.

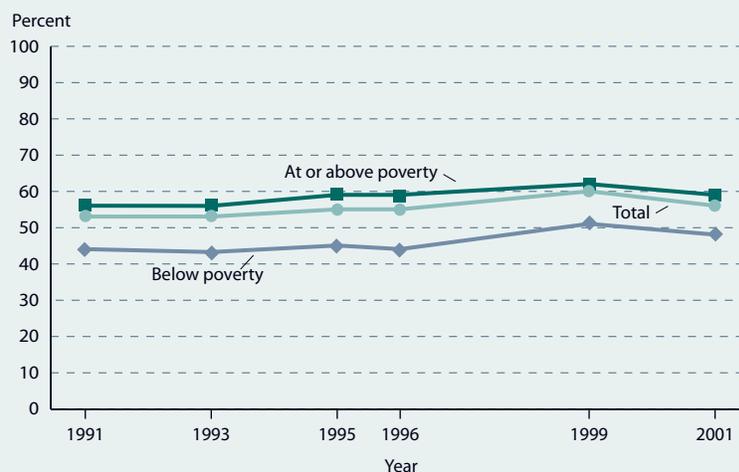
While poor children are less likely than nonpoor children to participate in center-based programs, the differences in participation rates between children from poor and nonpoor families are lower for Black and Hispanic children than for White children.

Children with more highly educated mothers are more likely than other children to participate in center-based early childhood and education programs. Seventy percent of children whose mothers had completed college attended such programs in 2001, compared with 38 percent whose mothers had less than a high school education. This positive relationship between mother's education and participation in a preschool program has diminished since 1991, as the participation rate of children whose mothers have less than a high school education has increased.

NOTE: Estimates are based on children who had not entered kindergarten. Center-based programs include day care centers, Head Start, preschool, nursery school, prekindergarten, and other early childhood programs. Children without mothers in the home are not included in estimates concerning mother's education or mother's employment status.

SOURCE: U.S. Department of Education, NCES. National Household Education Surveys Program (NHES), "Parent Interview" survey, various years.

ENROLLMENT IN PREPRIMARY EDUCATION: Percentage of children ages 3–5 who were enrolled in center-based early childhood care and education programs, by poverty status: Selected years 1991–2001



FOR MORE INFORMATION
Supplemental Note 1
Supplemental Table 1-1
Bredenkamp and Copple 1997

Elementary/Secondary Education

Past and Projected Elementary and Secondary School Enrollments

Public elementary and secondary enrollment is projected to reach 47.4 million in 2002, and to increase through 2005, before decreasing slowly. The West will experience most of this increase.

The baby boom echo—the 25 percent increase in the nation’s number of annual births that began in the mid-1970s and peaked in 1990—and rising immigration have boosted school enrollment. Growing enrollments in public elementary and secondary schools are expected to continue through 2005, before decreasing slowly.

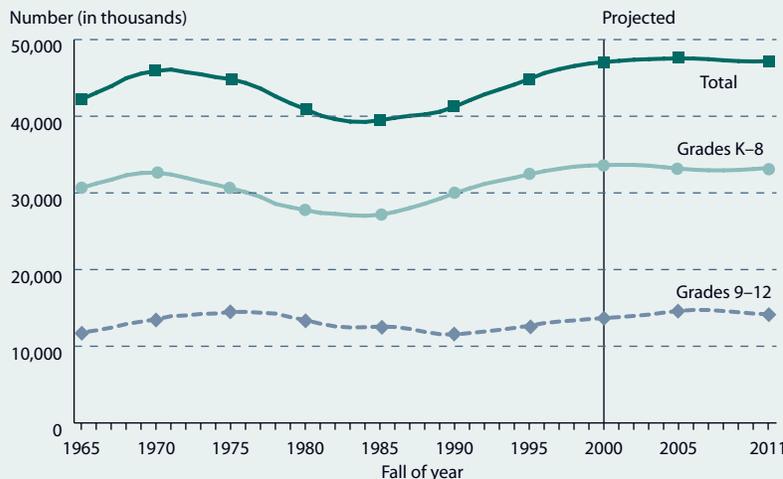
After declining during the 1970s and early 1980s, enrollment in public schools for grades K–12 increased in the latter part of the 1980s and the 1990s, reaching an estimated 47.2 million in 2001. This enrollment is projected to be 47.4 million in 2002. Through the first half of this decade, public enrollment for grades K–12 is projected to continue increasing to an all-time high of 47.5 million in 2005, and then to begin declining slightly. Between 2001 and 2011, public enrollment in grades K–8 is projected to decrease slowly through 2008 and then to increase slowly, whereas

public enrollment in grades 9–12 is projected to increase through 2006 and then to decrease slowly (see supplemental table 2-1).

The regional distribution of students in public schools has changed since the 1970s, with the West increasing its total share of enrollment. Between 2001 and 2011, public enrollment in grades K–12 is expected to decrease in the Northeast and Midwest, remain relatively stable in the South, and increase in the West (see supplemental table 2-2).

In 1999–2000, private school enrollment for grades K–12 was 5.1 million. It was higher in 1999–2000 than in 1989–90. Between these years, enrollments in private schools increased in both the South and West. Despite increases in enrollment in the West, private enrollment for grades K–12 was lowest in the West and highest in the South in 1999–2000 (see supplemental table 2-3).

SCHOOL ENROLLMENT: Public elementary and secondary school enrollment in grades K–12 (in thousands), by grade level, with projections: Fall 1965–2011



NOTE: Includes most kindergarten and some nursery school enrollment.

SOURCE: U.S. Department of Education, NCES, Common Core of Data (CCD), various years, and (2001) *Projections of Education Statistics to 2011* (NCES 2001–083).

FOR MORE INFORMATION:
Supplemental Note 1
Supplemental Tables 2-1, 2-2,
2-3





Elementary/Secondary Education

Racial/Ethnic Distribution of Public School Students

Hispanic students are the fastest growing student group in the nation's elementary and secondary schools.

Changes in the racial/ethnic composition of student enrollments can alter the language and culture in the nation's public schools. Although differences in student backgrounds can offer opportunities to enhance the learning environment, these differences can also raise challenges for schools. Knowledge of the shifting racial/ethnic distribution of public school students in grades K–12 can be helpful to schools in responding to these changing conditions.

In 2000, 39 percent of public school students were considered to be part of a minority group, an increase of 17 percentage points from 1972. This increase was largely due to the growth in the proportion of Hispanic students. In 2000, Hispanic students accounted for 17 percent of the public school enrollment, up by 11 percentage points from 1972. Blacks were 17 percent of the public school enrollment in 2000, up by 2 percentage points from 1972. The percentage of students from other racial/ethnic minority groups also increased, from 1 percent in 1972 to 5 percent in 2000 (see supplemental table 3-1).

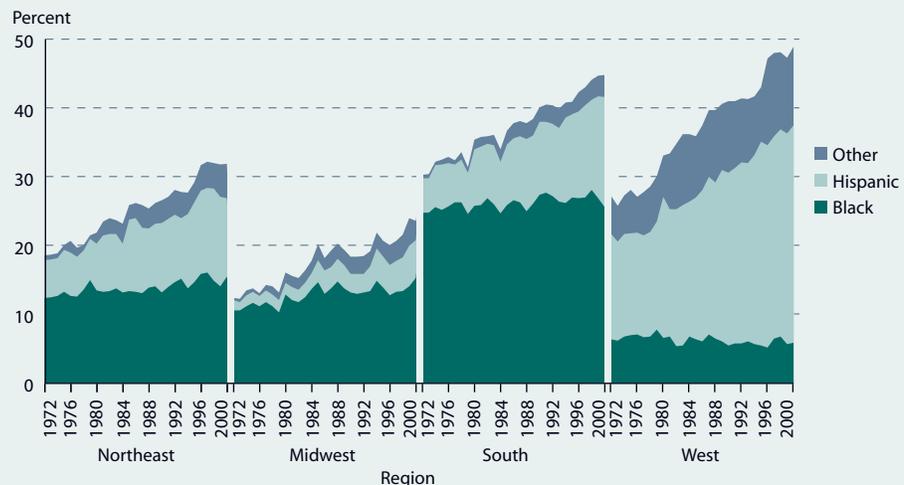
Although minority students comprised 39 percent of the total public school enrollment in 2000, their enrollment differed by region. In that year, there were large concentrations of minority students in the West and South, where 49 and 45 percent of students in public elementary and secondary schools were minority, respectively. The Midwest had the lowest proportion of minority students (24 percent) (see supplemental table 3-2).

Among all public school students in 2000, the South enrolled a higher proportion of Black students (26 percent) than other regions (6 to 16 percent). In the West, Hispanic students accounted for 32 percent of the student body (up from 15 percent in 1972). In contrast, in 2000, Hispanic students represented 6 percent of all students in public elementary and secondary schools in the Midwest (see supplemental table 3-2).

NOTE: See *Supplemental Note 1* for information on the racial/ethnic categories and a list of states that are included in each region.

SOURCE: U.S. Department of Commerce, Bureau of the Census. October Current Population Surveys, 1972–2000.

ENROLLMENT: Percentage of public school students enrolled in grades K–12 who were minorities, by region: October 1972–2000



FOR MORE INFORMATION:
 Supplemental Notes 1, 2
 Supplemental Tables 3-1, 3-2

Elementary/Secondary Education

Poverty Among School-Aged Children

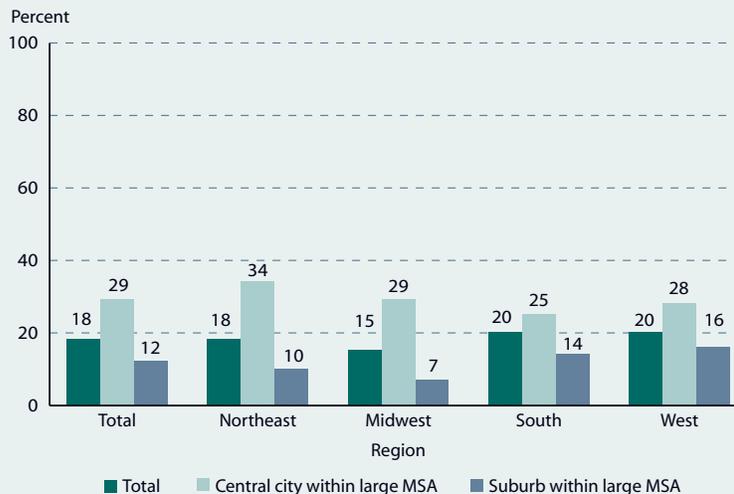
The percentage of school-aged children who lived in poverty decreased between 1994 and 2001.

Poverty poses a serious challenge to children’s access to quality learning opportunities and their potential to succeed in school (NCES 96–184). In 2001, 15 percent of all children 5 to 17 years old lived in households where the annual income in the previous year was below the poverty level. The school-age poverty rate decreased between 1994 and 2001 (see supplemental table 4-1).

Poor children can be found across the United States, but the extent to which they are concentrated in various regions differs appreciably. For example, in 1997 (the latest year for which data are available on family income by public school district), the school-age poverty rate in public school districts ranged from 29 percent on average in U.S. central cities within large metropolitan areas to an average of 13 percent in suburbs within large and small met-

ropolitan areas. School-age poverty rates in rural areas outside of metropolitan areas and in large and small towns were higher than the rate in the suburbs, while the rate in the “exurbs” (rural areas inside metropolitan areas) resembled that of the suburbs. This pattern was found within each region, but differences between U.S. central cities within large metropolitan areas and the rest of their region were most apparent in the Northeast and Midwest. Whereas the suburbs and exurbs in these two regions had rates that were about half the national school-age poverty rate, most of the suburbs and exurbs in the South and West had rates that were similar to the national school-age poverty rate. One-third of all school-aged children in U.S. central cities within large metropolitan areas in the Northeast lived in poverty in 1997 (see supplemental table 4-2).

ELEMENTARY AND SECONDARY EDUCATION: Percentage of related children ages 5 to 17 in poverty, by urbanicity and region: 1997



NOTE: To define poverty, the Bureau of the Census uses a set of money income thresholds that vary by family size and composition to determine who is poor. If a family’s income is less than the family’s threshold, then the family, and every individual in it, is considered poor. The poverty thresholds are updated annually for inflation using the Consumer Price Index (CPI). See *Supplemental Note 1* for a definition of urbanicity and states in each region.

SOURCE: U.S. Department of Education, NCES, Common Core of Data (CCD), “Public School District Universe Survey,” 1997–98 and U.S. Department of Commerce, Current Population Survey, Small Area Income and Poverty estimates, Title I Eligibility Database, 1997.

FOR MORE INFORMATION:

Supplemental Notes 1, 2
Supplemental Tables 4-1, 4-2

NCES 96–184; Lippman et al. 1996; National Academy of Sciences 1999





Undergraduate Education

Past and Projected Undergraduate Enrollments

Unlike the 1980s and 1990s, undergraduate enrollment in 4-year institutions is projected to increase at a faster rate than undergraduate enrollment in 2-year institutions in this decade. Women's undergraduate enrollment is expected to continue increasing at a faster rate than men's.

Total undergraduate enrollments in degree-granting postsecondary institutions generally increased in the past 3 decades and are projected to increase throughout this decade. These increases have been accompanied by changes in the enrollment status of students, the type of institution attended, and the proportion of students who are women.

In the past, more undergraduate students were enrolled full time than part time in degree-granting 2- and 4-year postsecondary institutions. This pattern is expected to continue in the future. In the 1970s, part-time undergraduate enrollment increased at a faster rate than full-time undergraduate enrollment, but the majority of students were still enrolled full time. During the 1980s, growth slowed for both groups. In the 1990s, full-time undergraduate enrollment increased at a faster rate, while part-time undergraduate enrollment decreased. In the present decade, full-time undergraduate enrollment is expected to increase at a faster rate than part-time undergraduate enrollment (see supplemental table 5-1).

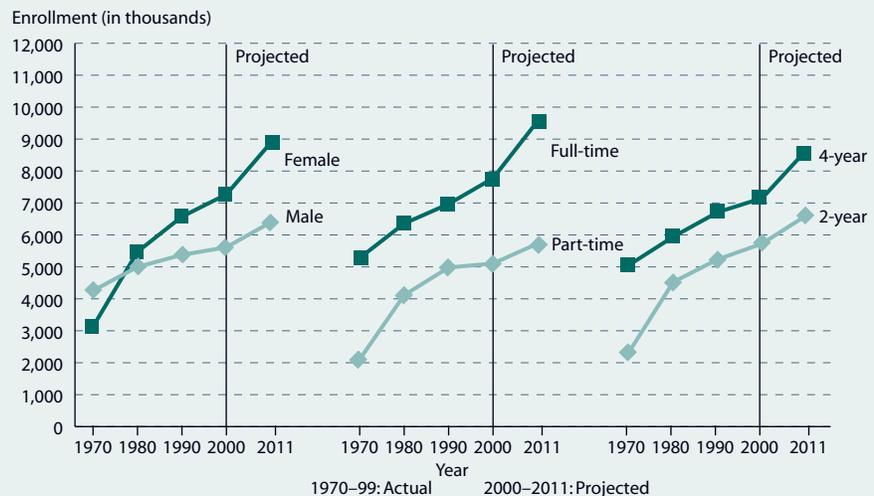
More undergraduate students attend 4-year institutions than 2-year institutions. After strong growth in the 1970s, the rate of increase in undergraduate enrollment at 2-year institutions slowed in the 1980s and slowed still further in the 1990s. However, it is expected to increase again in the present decade. Four-year undergraduate enrollment has increased over the past 3 decades and is expected to increase at a faster rate than undergraduate enrollment in 2-year institutions in the present decade (see supplemental table 5-1).

The number of undergraduate women in degree-granting 2- and 4-year institutions exceeded the number of undergraduate men in 1978. Since the 1970s, women's undergraduate enrollment has increased faster than men's. Men's undergraduate enrollment is projected to increase in the 2000s, but women's undergraduate enrollment is projected to grow at a faster rate. As a result, the number of women undergraduates is projected to reach a new high in this decade.

NOTE: Projections are based on the middle alternative assumptions concerning the economy.

SOURCE: U.S. Department of Education, NCES. (2001). *Digest of Education Statistics 2000* (NCES 2001-034), and *Projections of Education Statistics to 2011* (NCES 2001-083).

UNDERGRADUATE ENROLLMENT: Total undergraduate enrollment in degree-granting 2- and 4-year postsecondary institutions (in thousands), by sex, enrollment status, and type of institution, with projections: Fall 1970–2011



FOR MORE INFORMATION:
Supplemental Note 9
Supplemental Table 5-1

Graduate and Professional Education

Trends in Graduate/First-Professional Enrollments

Graduate and first-professional enrollments grew rapidly in the 1970s, slowed or declined in the 1980s, and then began to increase again in the 1990s.

Total graduate and first-professional enrollments in degree-granting institutions increased over the past 3 decades. These increases were accompanied by changes in the percentage distribution by sex, enrollment status, and race/ethnicity.

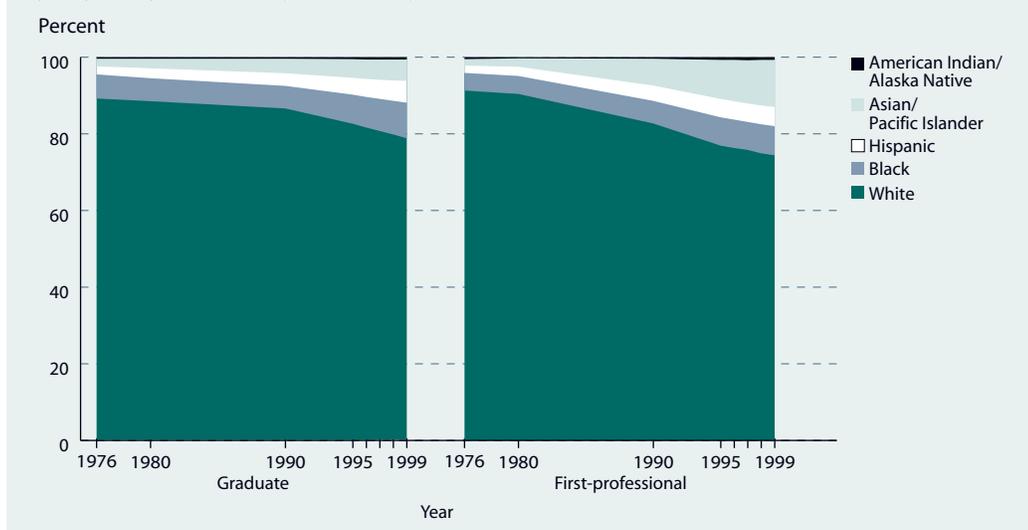
During the 1970s, graduate enrollment increased 27 percent. Women’s enrollment increased faster than men’s (60 versus 6 percent). By the 1980s, growth in graduate enrollment had slowed. During the 1990s, graduate enrollment increased 14 percent. By 1999, women represented 58 percent of graduate enrollment (see supplemental table 6-1).

Between 1976 and 1999, the proportion of graduate students who were minority students increased from 11 to 21 percent. Black students increased from 6 to 9 percent. Hispanic and Asian/Pacific Islander students both increased from 2 to 6 percent. American Indian/Alaska Native students grew from 0.4 to 0.6 percent (see supplemental table 6-2).

During the 1970s, first-professional enrollment increased 52 percent. Women’s enrollment increased faster than men’s (367 versus 21 percent). During the 1980s, first-professional enrollment decreased for full-time students and men and increased for part-time students and women. By 1999, women represented 46 percent of first-professional enrollment (see supplemental table 6-1).

Between 1976 and 1999, the proportion of first-professional students who were minorities increased from 9 to 26 percent. Across racial/ethnic groups, Black first-professional students increased from 5 to 8 percent. Hispanic students increased from 2 to 5 percent. Asian/Pacific Islander students grew from 2 to 12 percent, while American Indian/Alaska Native students increased from 0.5 to 0.7 percent (see supplemental table 6-2).

GRADUATE/FIRST-PROFESSIONAL ENROLLMENT: Percentage distribution of graduate and first-professional enrollment in degree-granting institutions, by race/ethnicity and enrollment status: 1976–99



NOTE: Data include unclassified graduate students. Distribution for U.S. citizens only.

SOURCE: U.S. Department of Education, NCES, Higher Education General Information Survey (HEGIS), "Fall Enrollment in College and Universities" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys, various years.

FOR MORE INFORMATION:
 Supplemental Tables
 6-1, 6-2
 NCES 2002-130



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Section 2

Learner Outcomes



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Summary: Learner Outcomes

This section presents findings on student achievement and outcomes and the progress that is being made in improving student performance and closing achievement gaps.

Children enter school with varying levels of knowledge and skill. Measures of these early childhood competencies represent important indicators of future prospects both inside and outside of the classroom. As students proceed through school, it is essential to measure their progress to ensure they are acquiring the necessary skills and understanding challenging subject matter. Academic outcomes are measured as the change in performance over time, as the percentage of students achieving predetermined standards of competence, and through international comparisons of national averages. Together these measures help create a composite picture of academic achievement.

In addition to academic achievement, an important outcome of education is an educated, capable, and engaged citizenry. The social and cultural outcomes of education, measured by civic knowledge, community volunteerism, and voting participation, among other things, are necessary to ensure a well-rounded and complete education.

Adult learning and economic outcomes also figure prominently among indicators of education results. Adult learning refers to the lifelong learning capacities of adults and the educational opportunities provided to them to continue to meet the changing needs of society. Economic outcomes refer to creating a productive and capable workforce, often measured by the wages employers are willing to pay.

Academic Outcomes

Reading Performance of Students in Grade 4

Fourth-grade reading performance has not changed significantly since 1992. In each assessment year, including the most recent, female students scored higher than their male peers.

The results of the National Assessment of Educational Progress (NAEP) for 4th-graders in 2000 show overall stability in students' reading performance: the average reading scale score for 2000 is not significantly different from the scale scores in 1992, 1994, or 1998. Achievement levels, which specify what students should know and be able to do, provide another measure of student performance. Higher percentages of students were at or above the *Proficient* level and at the *Advanced* level in 2000 than in 1992 (32 and 29 percent and 8 and 6 percent, respectively) (see supplemental table 7-1).

The results from 2000 show female students continuing to outperform their male counterparts in reading. Comparison of male and female performance in 2000 shows higher percentages of female 4th-graders scored at or above *Basic*, at or above *Proficient*, and at the *Advanced* level. Among males, there was no significant change in the percentages of students scoring at or above each achievement level across assessment years. In 2000, however, the percentage of females at or above the *Proficient* level was higher than in 1992.

Without controlling for socioeconomic status, 4th-grade reading achievement varied by differ-

ent school and family characteristics. In 2000, 4th-graders in schools where more than 75 percent of the students were eligible for the National School Lunch Program did not perform as well as 4th-graders in schools with lower percentages of students eligible for the program. As the percentage of students in a school eligible for the program increased, the average score decreased. When comparing differences based on school location, students in central city schools had a lower average reading score than their peers who attended schools in other locations (see supplemental table 7-2).

School-related activities or family behavior were associated with student performance (without controlling for socioeconomic status). Students who discussed their studies at home on a daily, weekly, or monthly basis had higher average reading scores than students who never discussed their studies at home. Practice is important to reading development. Higher numbers of pages read daily in school and for homework were associated with higher average reading scale scores. Fourth-graders who reported reading 11 or more pages daily had the highest average score, outperforming their peers who reported reading fewer pages.

SOURCE: U.S. Department of Education, NCES. (2001). *The Nation's Report Card: Fourth-Grade Reading 2000* (NCES 2001-499).

READING PERFORMANCE: Average reading scale scores for 4th-graders, by sex: 1992, 1994, 1998, and 2000



FOR MORE INFORMATION:
Supplemental Notes 1, 3
Supplemental Tables 7-1, 7-2

Academic Outcomes

Trends in the Achievement Gap in Reading Between White and Black Students

While the average reading scores of White students are higher than those of Black students at ages 9, 13, and 17, the gaps decreased between the early 1970s and the late 1980s. Since then, the gaps have remained relatively stable or increased.

The National Assessment of Educational Progress (NAEP) has assessed trends in students' reading performance since the early 1970s. NAEP thus provides a picture of how student performance in reading has changed over time, specifically the achievement gap between Black and White students. This issue has been the focus of considerable attention among those concerned with equity in the quality of education provided to America's students.

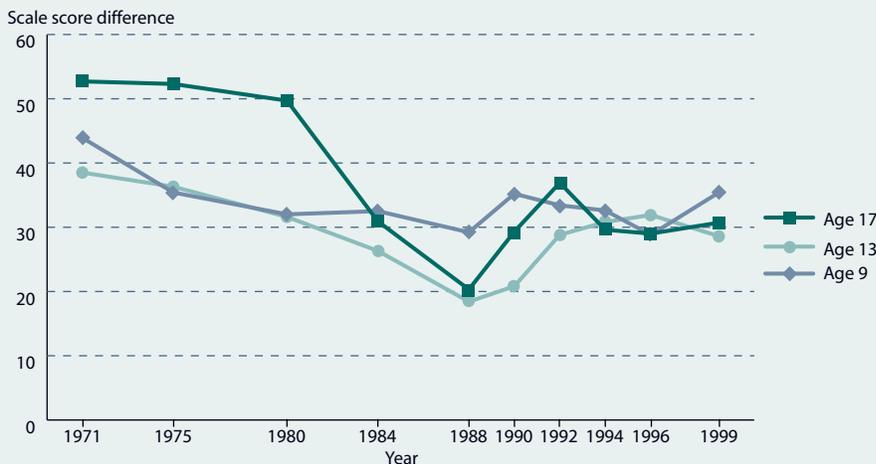
Since 1971, the reading scores of Black 9-, 13-, and 17-year-olds have been lower, on average, than those of their White peers. However, the average difference between Black and White students' scores has changed over time. There has been an overall narrowing in this achievement gap since 1971, most of which is due to decreases that occurred before 1988. For example, between 1971 and 1988, the Black-White score gap decreased for all 13- and 17-year-olds. Between 1988 and 1999, the Black-White score gap increased for 13-year-olds. The appar-

ent increases for 9- and 17-year-olds, however, were not significant (see supplemental table 8-1).

One indication of what these score changes mean for Black students' achievement is that in 1971 the average reading score of Black 17-year-olds (239) was below that of White 13-year-olds (261). By 1988, the average reading score of Black 17-year-olds (274) was between that of White 17-year-olds (295) and White 13-year-olds (261).

The changes in the Black and White achievement gaps can also be examined by looking at the changes that occurred in the achievement scores of Black and White students at the high and the low ends of the score distribution in these two time periods. From 1971 to 1988, the overall reading gap for 17-year-olds decreased because the reading scores of Black students increased more than the scores of White students at all quartile levels. Furthermore, among Black and White students, the gaps between the highest and lowest per-

READING ACHIEVEMENT GAP: Difference in average reading scale scores of 9-, 13-, and 17-year-old White and Black students: 1971–99



NOTE: The gap is determined by subtracting the average Black score from the average White score at each grade for each year assessed.

SOURCE: U.S. Department of Education, NCES. (2000). *NAEP 1999 Trends in Academic Progress: Three Decades of Student Performance* (NCES 2000–469) and National Assessment of Educational Progress (NAEP), 1999 Long-Term Trend Assessment, unpublished data produced by the Educational Testing Service.

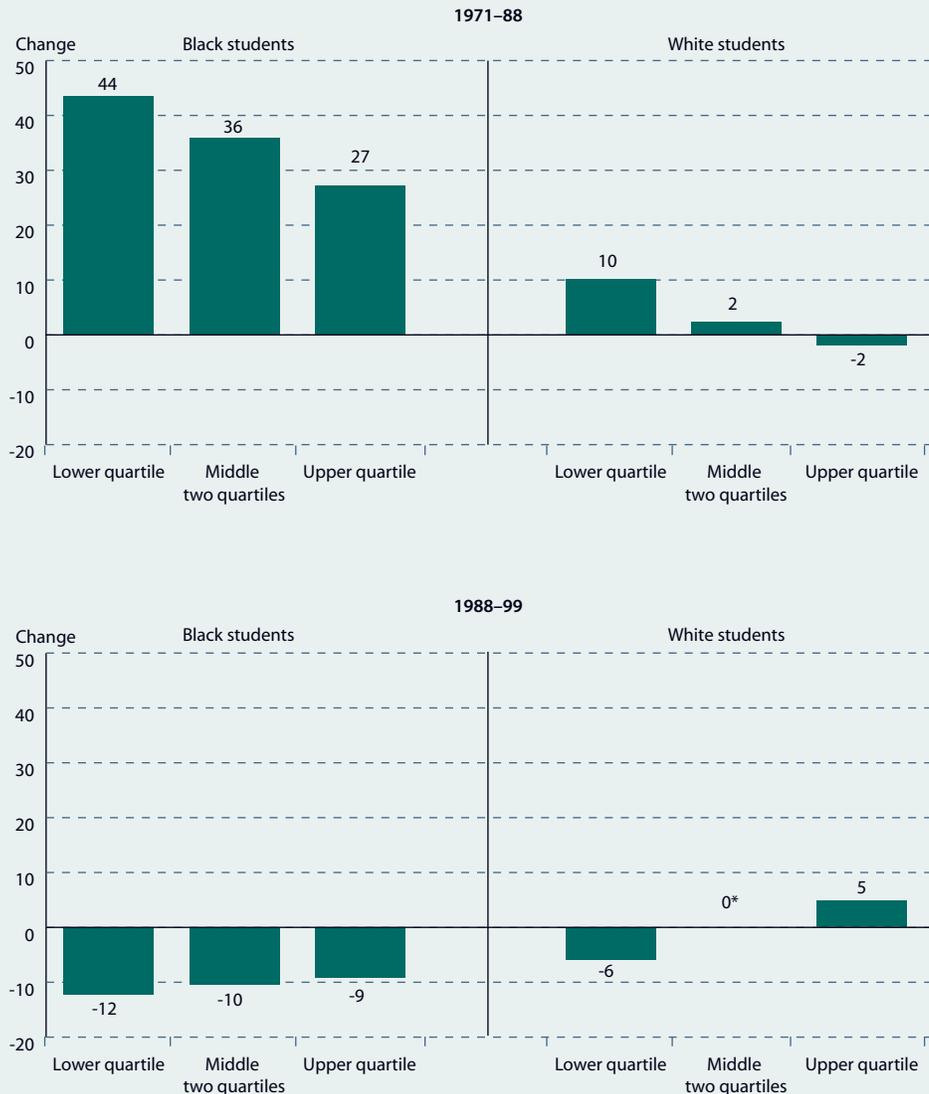
FOR MORE INFORMATION:
Supplemental Notes 1, 3
Supplemental Tables 8-1, 8-2



forming students narrowed: the average scores of those in the lowest quartile increased relative to those in the highest quartile. These trends changed or were reversed between 1988 and 1999, at which time the scores of Blacks at all quartile levels decreased, while the scores of Whites varied by quartile. Among Black students, there were no further

changes in the gaps between the upper and lower quartile scores. Among White students, the average scores of those in the upper quartile increased, while the scores of those in the bottom quartile decreased, widening the difference between them to a level similar to that in 1971.

TRENDS IN READING ACHIEVEMENT: Change in average reading scale scores for 17-year-olds, by race and score quartile: 1971–88 and 1988–99



*Change is greater than 0 but less than .5.
 NOTE: The change for each race is determined by subtracting the average score in the earlier year from the average score in the later year for each quartile.
 SOURCE: U.S. Department of Education, NCES. (2000). *NAEP 1999 Trends in Academic Progress: Three Decades of Student Performance* (NCES 2000–469) and National Assessment of Educational Progress (NAEP), 1999 Long-Term Trend Assessment, unpublished data produced by the Educational Testing Service.



FOR MORE INFORMATION:
 Supplemental Notes 1, 3
 Supplemental Tables 8-1,
 8-2

Academic Outcomes

International Comparisons of Reading Literacy

U.S. 15-year-olds performed at the international average in reading literacy in 2000, scored below the average of 3 countries, and above the average of 4 industrialized countries.

The Program for International Student Assessment (PISA) reports on the reading literacy of 15-year-olds in 27 participating Organization for Economic Cooperation and Development (OECD) industrialized countries and 4 non-OECD countries assessed in 2000. The average U.S. reading literacy score was similar to the international average of the 27 OECD countries. U.S. students had a lower average score than students in 3 countries and a higher average score than students in 4 OECD and 3 non-OECD countries. On specific reading skill areas (retrieving information, interpreting texts, reflecting on texts), U.S. students also scored similarly to the international averages. In each specific skill area, a few countries outperformed the United States (see supplemental table 9-1).

Countries differ in the extent to which students' scores are distributed above and below the national average. The standard deviation of reading literacy scores in each country can be used to determine how much scores vary from the country's average score. Fifteen countries showed less variation from their average score than the United States, no country had more variation, and 15 countries had similar variation.

In almost all countries, students whose parents had a high school diploma or higher outperformed students whose parents had less than a high school diploma. No country had a larger reading literacy point difference between students whose parents had a bachelor's degree or higher and those whose parents had not completed high school than the United States. In addition, females outperformed males in reading literacy in every country (see supplemental table 9-2).

The socioeconomic status of students' parents was positively associated with performance in reading literacy in the United States. Each 1-point increase in the International Socioeconomic Index (ISEI), a measure based on parents' occupation, was associated with an increase in literacy scores on average for each country. The larger the increase in literacy score in a country, the stronger was the relationship between socioeconomic status and reading literacy performance in that country. Each 1-point increase in ISEI led to a 2.1-point difference in reading literacy in the United States, which was similar to the international average point difference.

*The international average is the average of OECD countries only and thus excludes Brazil, Latvia, Liechtenstein, and the Russian Federation.

NOTE: A standard deviation provides information about the distribution of students' combined reading literacy scale scores. In a normal distribution, 68 percent of scores fall within plus or minus one standard deviation of the mean, and 95 percent fall within plus or minus two standard deviations of the mean. For more information on this study, see *Supplemental Note 4*.

SOURCE: U.S. Department of Education, NCES. (2001). *Outcomes of Learning: Results from the 2000 Program for International Student Assessment of 15-Year-Olds in Reading, Mathematics, and Science Literacy* (NCES 2002-115).

FOR MORE INFORMATION:

Supplemental Note 4
Supplemental Tables 9-1, 9-2
OECD 2001



INTERNATIONAL READING LITERACY: Average reading literacy score of 15-year-olds, by country: 2000

| Average score relative to the United States | Country and score | | | | | |
|---------------------------------------------|---------------------|--------|-------------------------------|------------|----------------|--------|
| Significantly higher | Finland | 546 | Canada | 534 | New Zealand | 529 |
| Not significantly different | Australia | 528 | Iceland | 507 | Spain | 493 |
| | Ireland | 527 | France | 505 | Czech Republic | 492 |
| | Korea, Republic of | 525 | Norway | 505 | Italy | 487 |
| | United Kingdom | 523 | United States | 504 | Germany | 484 |
| | Japan | 522 | <i>International average*</i> | <i>500</i> | Liechtenstein | 483 |
| | Sweden | 516 | Denmark | 497 | Hungary | 480 |
| | Austria | 507 | Switzerland | 494 | Poland | 479 |
| | Belgium | 507 | | | | |
| | Significantly lower | Greece | 474 | Latvia | 458 | Mexico |
| | Portugal | 470 | Luxembourg | 441 | Brazil | 396 |
| | Russian Federation | 462 | | | | |

Academic Outcomes

Mathematics Performance of Students in Grades 4, 8, and 12

The mathematics performance of 4th- and 8th-graders increased steadily from 1990 to 2000, while the performance of 12th-graders increased from 1990 to 1996 but then declined between 1996 and 2000.

The National Assessment of Educational Progress (NAEP) has assessed performance in mathematics in grades 4, 8, and 12 since 1990. Students in grades 4 and 8 showed steady growth in mathematics achievement from 1990 to 2000. In contrast, 12th-graders in 2000 scored higher than in 1990 but lower than in 1996. Achievement levels, which identify what students should know and be able to do at each grade, provide another measure of student performance. In 2000, 26 percent of 4th-graders, 27 percent of 8th-graders, and 17 percent of 12th-graders performed at or above the *Proficient* levels for each grade (see supplemental table 10-1).

Did certain subgroups of students outperform other groups in 2000? Males, on average, scored higher than females in grades 8 and 12; however, in grade 4, there was no significant difference between the average scores of boys and girls. Whites at all three grade levels and Asian/Pacific Islanders in grades 8 and 12 scored higher, on average, than their Black, Hispanic, and American Indian counterparts. Asian/Pacific Islanders scored higher than Whites at grade 12. The level of poverty in

the school was associated with student achievement. In all three grades, average scale scores decreased as the percentage of students in the school eligible for a free or reduced-price lunch increased (see supplemental table 10-2).

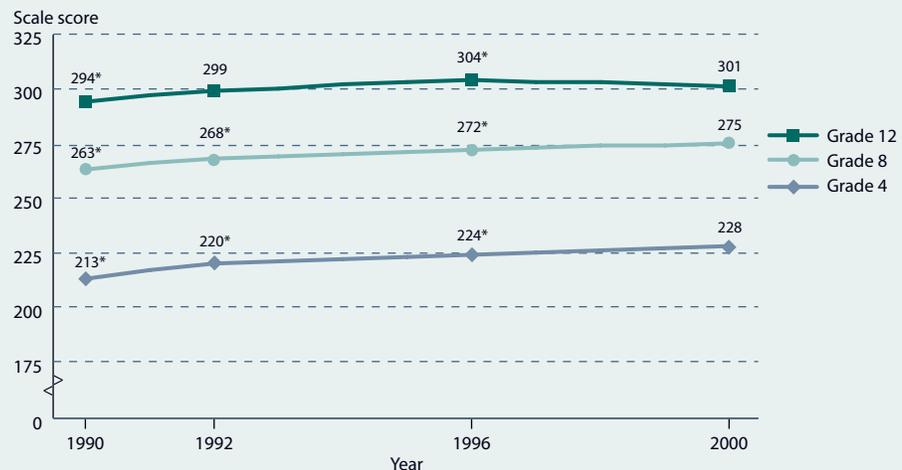
Assessment results were associated with the opportunity to study challenging material and the degree to which students took advantage of these opportunities. Among 8th-grade students in 2000, those taking 8th-grade mathematics or prealgebra scored lower than those taking algebra I or II, geometry, or sequential or integrated mathematics. Twelfth-graders who had taken the most advanced mathematics courses scored higher than students who had taken low- or middle-level courses.

NAEP also provided a state comparison of public schools in grades 4 and 8. Of the 36 jurisdictions that participated in the assessment in 4th grade in 1992 and 2000, 26 had a higher average score and 1 had a lower score in 2000 than in 1992. Thirty-one jurisdictions participated in grade 8 in 1990 and 2000; 27 had a higher average score, and none had a lower score in 2000 than in 1990 (see supplemental table 10-3).

*Significantly different from 2000.

SOURCE: U.S. Department of Education, NCES. (2001). *The Nation's Report Card: Mathematics 2000* (NCES 2001-517).

MATHEMATICS PERFORMANCE: Average mathematics scale scores for 4th-, 8th-, and 12th-graders: 1990, 1992, 1996, and 2000



FOR MORE INFORMATION:
Supplemental Notes 1, 3
Supplemental Tables 10-1,
10-2, 10-3

Academic Outcomes

Poverty and Student Achievement

Compared with students in low-poverty public schools, students in high-poverty public schools have lower achievement scores in 4th-grade mathematics.

The National Assessment of Educational Progress (NAEP) collects background information on students, teachers, and schools, permitting analysis of student achievement relative to the poverty level of public schools, measured as the percentage of students eligible for free or reduced-price lunch. In 2000, higher levels of students eligible for subsidized lunch were generally associated with lower scores on the 4th-grade mathematics assessment. Students in schools with more than 50 percent of their students eligible for free or reduced-price lunch had a lower average score than students in schools with a quarter or fewer of their students eligible for the program (see supplemental table 11-1).

Was there a difference in the mathematics achievement of 4th-graders in 2000 in high and low poverty schools regardless of whether or not the student was personally eligible for subsidized lunch? Among students who were not personally eligible for the school lunch program, students in schools with more than 50 percent of their students eligible for the program had a lower average score than those in schools with a quarter or fewer eligible. Among those eligible for

the school lunch program, the average score of students in schools with more than 75 percent of students eligible was lower than the score for those in schools with 11–50 percent of students eligible.

Certain characteristics of the highest poverty schools (more than 75 percent of students eligible for subsidized lunch) are evident. Relative to the total 4th-grade population, there was a lower percentage of White students and a higher percentage of Black and Hispanic students in the highest poverty schools. The highest poverty schools had higher rates of student absenteeism and a lower percentage of their students with a “very positive” attitude toward academic achievement than schools with the least poverty (i.e., those with 10 percent or fewer eligible). In addition, the highest poverty schools in 2000 reported less parental involvement than schools with the least poverty. For example, the highest poverty schools were more likely to report less than 50 percent parent participation in open houses or back-to-school nights than schools with the least poverty (see supplemental table 11-2).

POVERTY AND ACHIEVEMENT: Average scale score of public school students in 4th-grade mathematics, by the percentage of students in the school eligible for free or reduced-price lunch and whether the student was eligible for free or reduced-price lunch: 2000



*For the eligible student category, there were too few sample cases for a reliable estimate.

SOURCE: U.S. Department of Education, NCES, National Assessment of Educational Progress (NAEP), unpublished data provided by the Educational Testing Service, 2000.

FOR MORE INFORMATION:

Supplemental Notes 1, 3
Supplemental Tables 11-1, 11-2



Academic Outcomes

Science Performance of Students in Grades 4, 8, and 12

The science performance of both 4th- and 8th-graders did not change significantly from 1996 to 2000, while 12th-grade scores declined by 3 points.

The National Assessment of Educational Progress (NAEP) assessed 4th-, 8th-, and 12th-grade student performance in science in 1996 and 2000. The average science scale scores of both 4th- and 8th-graders did not change significantly from 1996 to 2000, while there was a 3-point decline in grade 12 between the 2 years. NAEP also provides achievement levels indicating what students should know and be able to do in each grade. In 2000, 29 percent of 4th-graders, 32 percent of 8th-graders, and 18 percent of 12th-graders performed at or above the *Proficient* level set for each grade. In 8th grade, there was an increase in the percentage of students reaching the *Proficient* level or above between 1996 and 2000 (see supplemental table 12-1).

Student and school characteristics were associated with student performance. Males had a higher average score than females in 2000 at grades 4 and 8, but the two had similar scores in grade 12. Whites in grade 4 and Whites and Asian/Pacific Islanders in grades 8 and 12 had higher average scores than their Black, Hispanic, and American Indian counterparts; in all three grades, American Indians had a higher score than Hispanics and Blacks. The poverty

rate, as measured by the percentage of students in a school eligible for the National School Lunch Program, was also related to achievement. As the percentage of students in a school eligible for the program increased, the average score of students in the school decreased (see supplemental table 12-2).

Coursetaking was also associated with student achievement. Eighth-graders who were not taking science had the lowest average scores of all 8th-graders assessed in 2000. Eighth-graders enrolled in a life science course had a lower average score than their peers enrolled in other science courses. Twelfth-graders who had taken 1st-year biology, chemistry, or physics at some point since grade 8 had higher scores than students who had not taken these courses.

NAEP also collected performance data of public school students by state or jurisdiction in 4th grade in 2000 and in 8th grade in 1996 and 2000. In 8th grade, there was no significant difference in average scores from 1996 to 2000 in 33 jurisdictions, while 3 jurisdictions showed significant score gains and no jurisdiction showed a significant decline (see supplemental table 12-3).

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, NCES. (forthcoming). *The Nation's Report Card: Science 2000* (NCES 2002-451).

SCIENCE PERFORMANCE: Percentage distribution of students performing at each science achievement level, by grade: 2000



FOR MORE INFORMATION:
Supplemental Notes 1, 3
Supplemental Tables 12-1,
12-2, 12-3

Academic Outcomes

International Comparisons of 8th-Graders' Performance in Mathematics and Science

In 1999, U.S. 8th-graders exceeded the international average of 38 countries in mathematics and science but performed lower than their peers in 14 countries.

The Third International Mathematics and Science Study–Repeat (TIMSS-R), which was conducted in 1999, follows the previous TIMSS by 4 years and focuses on the mathematics and science achievement of 8th-graders in 38 countries.

Comparison of 8th-graders in 1999. In TIMSS-R, the international average score for 8th-graders in mathematics of the 38 participating countries was 487, and the average in science was 488. In 1999, U.S. students on average scored higher in both mathematics and science than the international average of the 38 countries. In mathematics, the average U.S. score was higher than the score in 17 countries, similar to the score in 6 countries, and lower than the score in 14 countries. In science, the average U.S. score for 8th-graders was higher than the score in 18 countries, similar to the score in 5 countries, and lower than the score in 14 countries in 1999 (see the figure on the opposite page and supplemental table 13-1).

Comparison of 8th-graders in 1995 and 1999. Both TIMSS and TIMSS-R assessed students in 8th grade, allowing for a comparison of 8th-grade performance at two points in time. Of the 38 countries that participated in TIMSS-R, 23 also participated in the 8th-grade assessment in TIMSS. The international average in 1999 of the 23 countries participating in both studies was 521 in both mathematics and science (see supplemental table 13-2).

Among U.S. 8th-graders, there was no statistically significant change in mathematics or science performance from 1995 to 1999. Of the 23 countries that participated at the 8th-grade level in mathematics in TIMSS 1995 and TIMSS-R 1999, there was no change in achievement in 19 countries during this period, 3 countries experienced an increase in overall mathematics achievement, and 1 country experienced a decrease. In science, there was no change in 18 of the 23 countries from 1995 to 1999, there was an increase in overall science achievement in 4 countries, and a decrease

in 1 country. The international average of 8th-graders in 1999 was similar to that of 8th-graders in 1995 in both mathematics and science for the 23 countries that participated in both assessments (see the top figure on page 62 and supplemental table 13-2).

Comparison of 4th-graders in 1995 and 8th-graders in 1999. The 1995 TIMSS 4th-graders and the 1999 TIMSS-R 8th-graders represented the same cohort of students at two different points in time. These students' performance in 1995 can be compared with their performance in 1999. However, direct comparisons between the 1995 4th-grade TIMSS assessment and the 1999 8th-grade TIMSS-R assessment are complicated by several factors, including differences in the content areas assessed and the questions that could be asked between the two grade levels. Therefore, comparisons between TIMSS 4th-graders and TIMSS-R 8th-graders are based on their performance relative to the international average of the 17 countries that participated in 4th-grade TIMSS in 1995 and 8th-grade TIMSS-R in 1999. The international average in 1999 for the 17 countries was 524 in both 8th-grade mathematics and science in 1999 and it was 517 and 514 in 4th-grade mathematics and science, respectively, in 1995 (see supplemental table 13-3).

The U.S. mathematics score for 4th-graders in 1995 was statistically similar to the international average of the 17 participating countries, but the U.S. mathematics score for 8th-graders in 1999 was below the international average. In science, the U.S. 4th-grade score in 1995 was above the international average of the 17 countries, but the 8th-grade score in 1999 was similar to the international average. As a result, in both mathematics and science, U.S. students' performance decreased relative to the international average of the 17 countries, from the 4th grade in 1995 to the 8th grade in 1999 (see the bottom figure on page 62 and supplemental table 13-3).

MATHEMATICS AND SCIENCE PERFORMANCE: Average mathematics and science performance of 8th-graders for the 38 participating countries: 1999

| Mathematics | Average score relative to the United States | Science |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Australia Belgium-Flemish Canada Chinese Taipei Finland Hong Kong, SAR Hungary Japan Korea, Republic of Netherlands Russian Federation Singapore Slovak Republic Slovenia | Significantly higher | Australia Belgium-Flemish Canada Chinese Taipei Czech Republic England Finland Hungary Japan Korea, Republic of Netherlands Singapore Slovak Republic Slovenia |
| Bulgaria Czech Republic England Latvia-LSS ¹ Malaysia New Zealand | Not significantly different | Bulgaria Hong Kong, SAR Latvia-LSS ¹ New Zealand Russian Federation |
| Chile Cyprus Indonesia <i>International average</i> Iran, Islamic Republic of Israel ² Italy Jordan Lithuania ³ Macedonia, Republic of Moldova Morocco Philippines Romania South Africa Thailand Tunisia Turkey | Significantly lower | Chile Cyprus Indonesia <i>International average</i> Iran, Islamic Republic of Israel ² Italy Jordan Lithuania ³ Macedonia, Republic of Malaysia Moldova Morocco Philippines Romania South Africa Thailand Tunisia Turkey |

¹Only Latvian-speaking schools were tested.

²Israel did not meet the international sampling and/or other guidelines. See *Supplemental Note 4* for details.

³Lithuania tested the same cohort of students as in other countries, but later in 1999, at the beginning of the next school year.

NOTE: Eighth grade in most countries. See *Supplemental Note 4* for details. The international average is the average of the national averages of the 38 countries.

SOURCE: U.S. Department of Education, NCES. (2000). *Pursuing Excellence: Comparisons of International Eighth-Grade Mathematics and Science Achievement from a U.S. Perspective, 1995 and 1999* (NCES 2001–028) (TIMSS-R).



FOR MORE INFORMATION:

Supplemental Note 4
Supplemental Tables 13-1,
13-2, 13-3

NCES 2001–027, NCES 2000–
062, Indicators 18, 19

CHANGE IN MATHEMATICS AND SCIENCE PERFORMANCE : Mathematics and science performance of 8th-graders in 1995 and 1999 for the 23 countries that participated in both assessments

| Mathematics | Average score in 1999 relative to the country's score in 1995 | Science |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Canada Cyprus Latvia-LSS ^{1,2} | Significantly higher | Canada Hungary Latvia-LSS ^{1,2} Lithuania ^{1,3} |
| Australia ¹ Belgium-Flemish Bulgaria ¹ England ¹ Hong Kong, SAR Hungary <i>International average</i> Iran, Islamic Republic of Italy Japan | Not significantly different | Australia ¹ Belgium-Flemish Cyprus Czech Republic England ¹ Hong Kong SAR <i>International average</i> Iran, Islamic Republic of Italy Japan |
| | | Korea, Republic of Netherlands ¹ New Zealand Romania ¹ Russian Federation Singapore Slovak Republic Slovenia ¹ <i>United States</i> |
| Czech Republic | Significantly lower | Bulgaria ¹ |

MATHEMATICS PERFORMANCE: Average mathematics performance of 4th-graders in 1995 and 8th-graders in 1999 for the 17 countries that participated in both assessments

| 4 th -graders in 1995 | Average score relative to the international average | 8 th -graders in 1999 |
|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Czech Republic Japan Hong Kong, SAR Netherlands ¹ Korea, Republic of Singapore | Significantly higher | Hong Kong, SAR Singapore Japan Korea, Republic of |
| Australia ¹ Hungary ¹ Italy ¹ | Not significantly different | Australia Canada Czech Republic Hungary Netherlands Slovenia |
| Canada Latvia-LSS ^{1,2} Cyprus New Zealand England ¹ Iran, Islamic Republic of | Significantly lower | Cyprus Latvia-LSS ² England New Zealand Iran, Islamic Republic of <i>United States</i> Italy |

¹Country did not meet the international sampling and/or other guidelines at 8th-grade level in 1995. See *Supplemental Note 4* for more details.

²Only Latvian-speaking schools were tested.

³Lithuania tested the same cohort of students as in other countries, but later in 1999, at the beginning of the next school year.

NOTE: Eighth grade in most countries. See *Supplemental Note 4* for details. International average is the average of the national averages for the 23 countries that participated in the 8th-grade assessment in both 1995 and 1999.

SOURCE: U.S. Department of Education, NCES. (2000). *Pursuing Excellence: Comparisons of International Eighth-Grade Mathematics and Science Achievement from a U.S. Perspective, 1995 and 1999* (NCES 2001–028) (TIMSS and TIMSS-R).

¹Country did not meet the international sampling and/or other guidelines at 4th-grade level in 1995. See *Supplemental Note 4* for more details.

²Only Latvian-speaking schools were tested.

NOTE: Fourth and 8th grade in most countries. See *Supplemental Note 4* for details. International average is the average of the national averages for the 17 countries that participated in the 4th-grade assessment in 1995 and the 8th-grade assessment in 1999.

SOURCE: U.S. Department of Education, NCES. (2000). *Pursuing Excellence: Comparisons of International Eighth-Grade Mathematics and Science Achievement from a U.S. Perspective, 1995 and 1999* (NCES 2001–028) (TIMSS and TIMSS-R).

FOR MORE INFORMATION:

Supplemental Note 4
Supplemental Tables 13-1,
13-2, 13-3

NCES 2001–027, NCES 2000–
062, Indicators 18, 19



Social and Cultural Outcomes

Education and Health

The better educated a person is, the more likely that person is to report being in “very good” or “excellent” health, regardless of income.

Better education is associated with better health. In the National Health Interview Survey, the National Center for Health Statistics annually surveys people concerning their health. One question asks respondents to rate their own health. In 1997, the better educated a person was, the more likely that person was to report being in “excellent” or “very good” health. People with a bachelor’s degree or higher were twice as likely as those without a high school diploma or equivalent to report being in excellent or very good health (80 versus 39 percent) (see supplemental table 14-1).

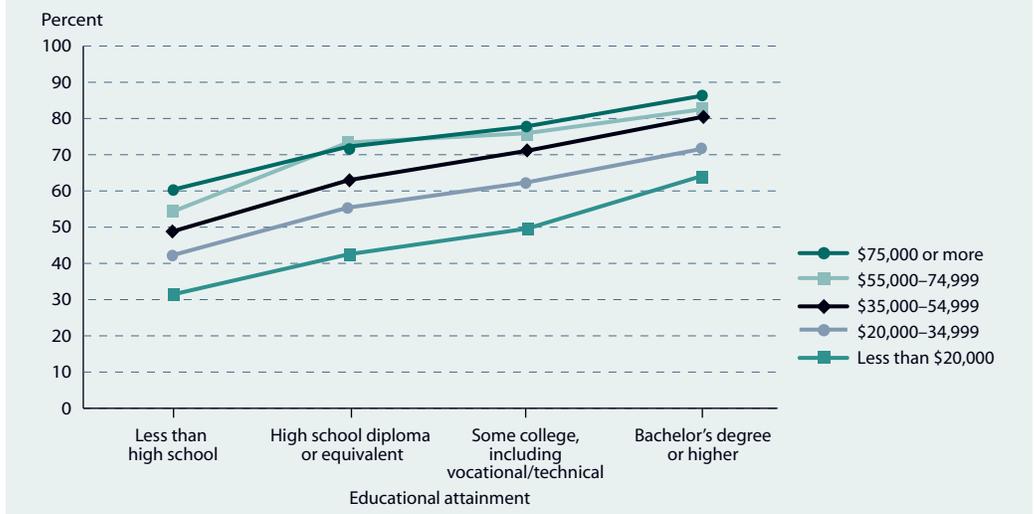
Family income was also related to health. The more family income a person had, the more likely that person was to report being in excellent or very good health. In 1997, those with a family income of \$75,000 or more were nearly twice as likely as people making less than \$20,000 to report being in excellent or very good health (80 versus 41 percent) (see supplemental table 14-1).

In addition to this strong relationship between family income and health, education is positively related to health, independent of income. Within each income range, people with a bachelor’s degree or higher reported being in better health than people with some education beyond high school, who, in turn, reported being in better health than high school completers. High school completers, in turn, reported being in better health than people with less than a high school diploma. For example, for all adults with a family income between \$35,000 and \$54,999 in 1997, those with a bachelor’s degree or higher (80 percent) were more likely than those with some education beyond high school (71 percent) to report being in excellent or very good health. People with some education beyond high school, in turn, were more likely than high school completers (63 percent) to report being in good health. Finally, people with a high school diploma or equivalent reported having better health on average than those who had not completed high school (49 percent).

NOTE: Includes those who responded excellent or very good on a scale of excellent, very good, good, fair, and poor.

SOURCE: U.S. Department of Health and Human Services, Centers for Disease Control, National Center for Health Statistics. National Health Interview Survey, 1997.

EDUCATION AND HEALTH: Percentage of the population age 25 and above who reported being in excellent or very good health, by educational attainment and family income: 1997



FOR MORE INFORMATION:
 Supplemental Note 1
 Supplemental Table 14-1
 Bjorner et al. 1996; Lantz et al. 2001

Social and Cultural Outcomes

Civic Performance of U.S. Students in an International Perspective

U.S. 9th-graders scored significantly higher than the international average in overall civic knowledge and outperformed students in 27 other countries in civic skills.

In 1999, the United States participated with 27 other countries in the Civic Education Study, conducted under the auspices of the International Association for the Evaluation of Educational Achievement (IEA). The study assessed the civic knowledge and skills of 14-year-olds (9th grade in most countries) and their attitudes toward democracy and citizenship. The study was not designed to measure knowledge of a particular country’s government but rather to measure knowledge and understanding of key civic principles that are universal across democracies.

U.S. students performed well when compared with students in the other countries. Civic performance was measured by an overall civic knowledge scale composed of two subscales, civic content and civic skills. On overall civic knowledge, U.S. 9th-graders performed significantly above the international average score. In no other country did students outperform U.S. students. Students in 11 countries performed similarly to U.S. students, and students

in 16 countries scored significantly below U.S. students.

The civic content subscale included content knowledge of civic principles or pivotal ideas, such as the characteristics of democracies. On civic content, the average score of U.S. 9th-graders was similar to the international average. Students in six countries performed better than U.S. students, while U.S. students outperformed students in 11 countries.

The civic skills subscale included the analytical skills needed to understand civic-related information, such as the skills needed to understand a newspaper article. U.S. 9th-graders scored significantly higher than the international mean on civic skills and also outperformed, on average, students in every other participating country. This finding indicates that U.S. students, on average, were able to use analytical skills to process information related to political and social issues.

| INTERNATIONAL CIVIC PERFORMANCE: Average total civic knowledge of 9 th -grade students, by score and country: 1999 | | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|------------------|-----|----------------|-----|
| Average score relative to the United States | Country and score | | | | | |
| Significantly higher | (none) | | | | | |
| Not significantly different | Poland | 111 | Hong Kong (SAR) | 107 | Norway | 103 |
| | Finland | 109 | United States | 106 | Czech Republic | 103 |
| | Cyprus | 108 | Italy | 105 | Hungary | 102 |
| | Greece | 108 | Slovak Republic | 105 | Australia | 102 |
| Significantly lower | Slovenia | 101 | Sweden | 99 | Lithuania | 94 |
| | Denmark | 100 | Switzerland | 98 | Romania | 92 |
| | Germany | 100 | Bulgaria | 98 | Latvia | 92 |
| | Russian Federation | 100 | Portugal | 96 | Chile | 88 |
| | <i>International average</i> | <i>100</i> | Belgium (French) | 95 | Colombia | 86 |
| | England | 99 | Estonia | 94 | | |

NOTE: Countries were instructed to select the grade in which most 14-year-olds were enrolled at the time of the study. In the United States, this was 9th grade.

SOURCE: U.S. Department of Education, NCES. (2001). *What Democracy Means to Ninth-Graders: U.S. Results from the International IEA Civic Education Study* (NCES 2001–096).

FOR MORE INFORMATION:
Supplemental Note 4



INTERNATIONAL CIVIC PERFORMANCE: Average civic content subscale performance of 9th-grade students, by score and country: 1999

| Average score relative to the United States | Country and score | | | | | |
|---------------------------------------------|----------------------|------------|--------------------|-----|------------------------------|-----|
| Significantly higher | Poland | 112 | Finland | 108 | Hong Kong (SAR) | 108 |
| | Greece | 109 | Cyprus | 108 | Slovak Republic | 107 |
| Not significantly different | Italy | 105 | Hungary | 102 | <i>International average</i> | 100 |
| | Norway | 103 | Slovenia | 102 | Australia | 99 |
| | Czech Republic | 103 | Russian Federation | 102 | Germany | 99 |
| | United States | 102 | Denmark | 100 | Bulgaria | 99 |
| | Sweden | 97 | Belgium (French) | 94 | Latvia | 92 |
| Significantly lower | Portugal | 97 | Estonia | 94 | Chile | 89 |
| | England | 96 | Lithuania | 94 | Colombia | 89 |
| | Switzerland | 96 | Romania | 93 | | |
| | | | | | | |

NOTE: Countries were instructed to select the grade in which most 14-year-olds were enrolled at the time of the study. In the United States, this was 9th grade.

SOURCE: U.S. Department of Education, NCES. (2001). *What Democracy Means to Ninth-Graders: U.S. Results from the International IEA Civic Education Study* (NCES 2001–096).

INTERNATIONAL CIVIC PERFORMANCE: Average civic skills subscale performance of 9th-grade students, by score and country: 1999

| Average score relative to the United States | Country and score | | | | | |
|---------------------------------------------|----------------------|------------|------------------------------|-----|-----------|----|
| Significantly higher | (None) | | | | | |
| Not significantly different | United States | 114 | | | | |
| Significantly lower | Finland | 110 | Czech Republic | 102 | Bulgaria | 95 |
| | Cyprus | 108 | Sweden | 102 | Portugal | 95 |
| | Australia | 107 | Switzerland | 102 | Estonia | 95 |
| | Poland | 106 | Hungary | 101 | Lithuania | 93 |
| | Greece | 105 | Germany | 101 | Latvia | 92 |
| | Italy | 105 | Denmark | 100 | Romania | 90 |
| | England | 105 | <i>International average</i> | 100 | Chile | 88 |
| | Hong Kong (SAR) | 104 | Slovenia | 99 | Colombia | 84 |
| | Slovak Republic | 103 | Russian Federation | 96 | | |
| | Norway | 103 | Belgium (French) | 96 | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |



FOR MORE INFORMATION:
Supplemental Note 4

Economic Outcomes

Annual Earnings of Young Adults

The earnings of young adults with at least a bachelor's degree increased over the past 20 years relative to their counterparts who have no more than a high school diploma.

Adults ages 25–34 with at least a bachelor's degree have higher median earnings than those who have less education. For example, in 2000, male and female college graduates earned 60 and 95 percent more, respectively, than those who completed only high school or a General Education Development Certificate (GED). In contrast, males and females ages 25–34 who dropped out of high school earned 27 and 30 percent less, respectively, than their peers who had a high school diploma or GED (see supplemental tables 16-1 and 16-2).

Between 1980 and 2000, the median earnings of young adults who have at least a bachelor's degree increased relative to their counterparts with no more than a high school diploma or GED. This increase occurred for men and women, rising from a difference of 19 percent in 1980 to 60 percent in 2000 for men, and from 52 percent in 1980 to 95 percent in 2000 for women. During the same period, the median earnings of young adults who had not completed high school lagged behind those with a high school diploma or GED. However, the earnings gap between those at these two education levels did not show any consistent increase during 1980–2000 for either male or female wage and salary workers ages 25–34 (see supplemental table 16-2).

Gaps in median earnings between males and females ages 25–34 exist at all levels of educational attainment. The male/female earnings gap is lower for those with at least a bachelor's degree than for their peers with no more than a high school diploma or GED. In addition,

the male/female earnings gap has narrowed between 1971 and 2000, regardless of the level of educational attainment (see supplemental table 16-3).

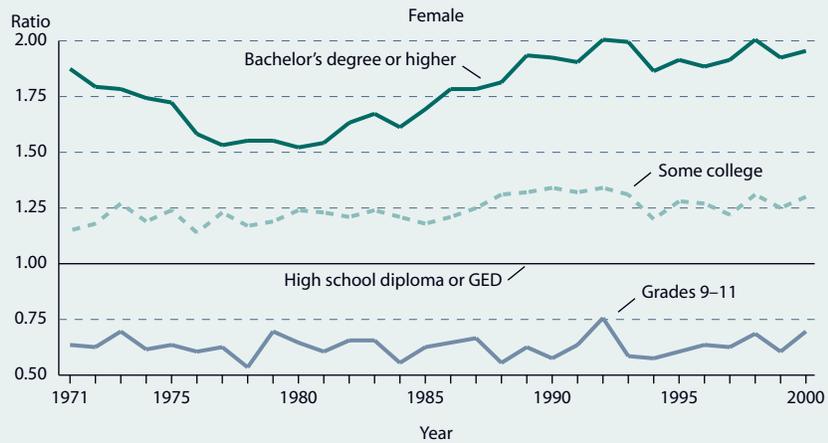
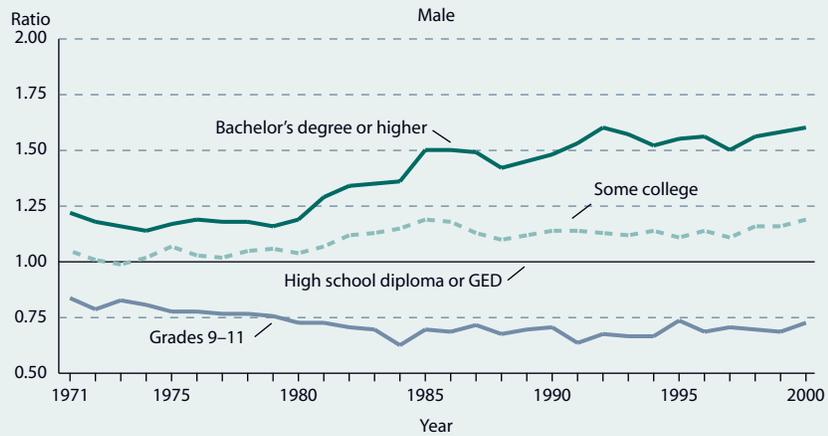
In addition to differences in average earnings by educational attainment, earnings also vary among those with the same level of education. For example, in 2000, a gap of \$39,389 in annual earnings separated males 25–34 with a bachelor's degree or higher in the highest and lowest quartiles of their earnings distribution. The comparable gap for their female counterparts was \$23,566. Between 1971 and 2000, the gap between the highest and the lowest quartile of earnings decreased or remained constant for all groups, except for males with a bachelor's degree or higher, for whom the gap increased markedly between 1997 and 2000 (see supplemental table 16-4).

As a result of these variations in earnings within education groups, the distribution of earnings for different education levels can overlap each other. Due to these overlaps, young adults with less education can earn more than some of their peers with higher levels of educational attainment. For example, in 2000, 16 percent of male adults ages 25–34 with a high school diploma or GED earned more than the median income of their peers with at least a bachelor's degree. However, the percentage of young adults earning more than some of their peers with higher education has generally declined for both males and females between 1971 and 2000 (see supplemental table 16-5).

NOTE: This ratio is most useful when compared with 1.0 (which represents the median annual earnings of those with a high school diploma or GED). For example, the ratio of 1.60 in 2000 for males whose highest education level was a bachelor's degree or higher means that they earned 60 percent more than males who had only a high school diploma or GED. The ratio of 0.73 in 2000 for males whose highest education level was grades 9–11 means that they earned 27 percent less than males who had a high school diploma or GED. The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey methodology for the CPS was changed and weights were adjusted. See *Supplementary Note 2* for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1972–2001.

ANNUAL EARNINGS: Ratio of median annual earnings of all wage and salary workers ages 25–34 whose highest education level was grades 9–11, some college, or a bachelor's degree or higher, compared with those with a high school diploma or GED, by sex: March 1971–2000



ANNUAL EARNINGS: Difference in average annual earnings (in constant 2000 dollars) for all wage and salary workers ages 25–34 between the highest and lowest quartiles, by sex and educational attainment: March 1971–2000



FOR MORE INFORMATION:
 Supplemental Notes 2, 13
 Supplemental Tables 16-1,
 16-2, 16-3, 16-4, 16-5

Section 3

Student Effort and Educational Progress





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Summary: Student Effort and Educational Progress

The indicators in this section focus on students to examine the effort they put into their studies, their progress through the educational pipeline, and their eventual attainment. Particular attention is paid to how various subgroups in the population proceed through school to different levels of educational attainment and what factors contribute to their success along the way.

The effort students put into their studies affects their performance and their access to and success at the next level. Indicators of student effort include how often students are absent from school, how interested they are in their schoolwork, whether they try to do their best, whether they complete their assignments, and how much time they spend on homework and other activities such as work or watching television.

Early school problems can accumulate and may lead eventually to dropping out of school, which has long-term negative consequences. Thus, the indicators in this section track students' progress through elementary and secondary education up to and including high school completion, showing differences by sex, race/ethnicity, socioeconomic status, and urbanicity.

Issues of access, persistence, and attainment have been predominant concerns in postsecondary education. The transition to postsecondary education and persistence are monitored by examining who prepares for college, who enrolls, when and where they enroll, and what factors affect the likelihood of enrolling and staying enrolled. Overall educational attainment levels in the population over time provide an indicator of the success of various population subgroups.



Student Effort

Students' Absence From School

More than half of students in the 8th, 10th, and 12th grades missed 1 or more days of school in a 4-week period in spring 2000 due to illness, skipping school, or other reasons.

Missing school hinders students' learning, as well as that of their classmates when it leads to repetition of material in class. Yet absenteeism for various reasons is widespread, according to students' own reports. More than half of students in 8th, 10th, and 12th grades missed at least 1 day of school in a 4-week period (the reference period used throughout here). Specifically, 55 percent of 8th-graders, 60 percent of 10th-graders, and 72 percent of 12th-graders reported being absent at least 1 day of the 4 weeks in 2000. Moreover, about 13–14 percent of 8th- and 10th-graders were absent more than 5 days—or one-fourth of the school days in this reference period (see supplemental table 17-1).

Illness was the primary reason for absences in 2000, except among the seniors. Nevertheless, even among 10th-graders, fewer than half (45 percent) of absences were due to illness, and 39 percent were for reasons other than illness or skipping. Skipping school also contributed to absenteeism, but it played a smaller role than illness or other reasons. Skipping accounted for 26 percent of all days that 12th-graders were absent in 2000, 16 percent of those that 10th-

graders missed, and 9 percent of those that 8th-graders missed.

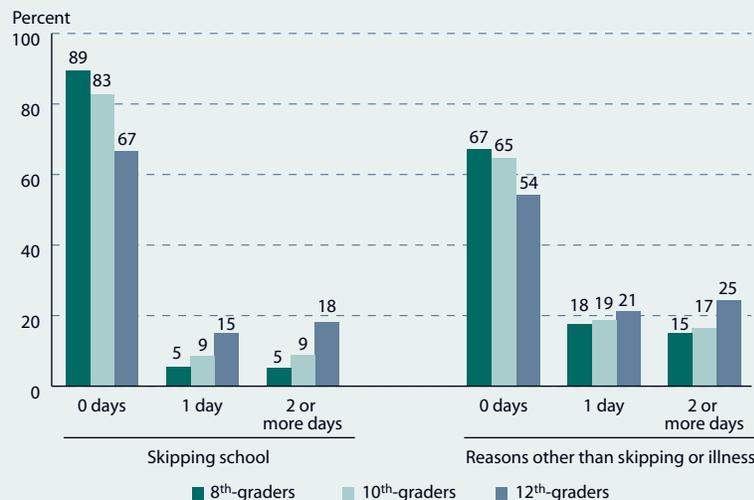
Although absenteeism due to illness did not rise with grade level, the propensity to miss school either by skipping or for other reasons increased notably with grade level. While 11 percent of 8th-graders skipped at least 1 day of school in a 4-week period in 2000, this figure increased to 17 percent for 10th-graders and to 33 percent for 12th-graders. Roughly one-third of students in 8th and 10th grades missed some school for other reasons in 2000, compared with nearly one-half of 12th-graders. Cutting classes—another way that students miss opportunities to learn and share ideas—also increased with grade level in 2000, repeating the pattern for skipping (see supplemental table 17-2).

The percentages of 12th-graders who had no absences and who cut no classes (in the 4-week period) have both decreased between 1983 and 2000 (see supplemental table 17-2). In addition, illness accounted for a decreasing proportion of total days absent for 12th-graders, from 40 percent of absences in 1983 to 34 percent in 2000 (see supplemental table 17-1).

NOTE: The data do not meet NCES standards for response rates. Students absent from the class in which the survey was administered are not included in the data. Percentages may not add to 100 due to rounding.

SOURCE: University of Michigan, Institute for Social Research. *Monitoring the Future 8th-, 10th-, and 12th-Grade Studies, 2000.*

STUDENT ABSENTEEISM: Percentage distributions of 8th-, 10th-, and 12th-grade students by how many school days they missed in a 4-week period from skipping school, and for reasons other than skipping or illness: 2000



FOR MORE INFORMATION:
Supplemental Note 6
Supplemental Tables 17-1,
17-2

Hoachlander, Dykman, and
Godowsky 2001; National
Commission on the Senior
Year 2001.

Student Effort

12th-Graders' Effort and Interest in School

Over the past 2 decades, 12th-graders have reported a declining interest in school, while the effort they apply to their school work has generally shown no measurable change over the past decade.

Many reforms of the past 2 decades have attempted to increase high school students' effort and interest in their education (National Commission on Excellence in Education 1983; Newmann 1992). Despite such attempts, seniors' valuation of their learning activities and self-reports on their efforts do not indicate that higher proportions are more engaged in their school work or trying harder than in years past.

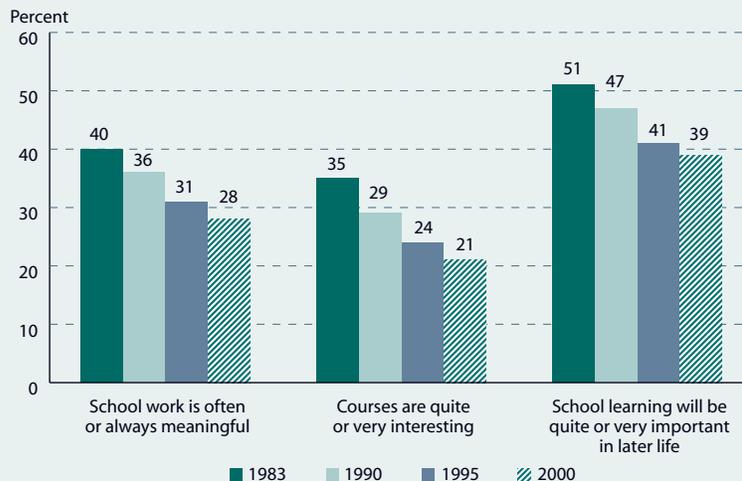
Indeed, 12th-graders' interest in school exhibited a decline from 1983 to 2000. For example, while 40 percent of 1983 seniors said their school work was "often or always meaningful," 28 percent gave this response in 2000. Similarly, the proportion of seniors who said most of their courses were "quite or very interesting" dropped from 35 percent to 21 percent, and the percentage who said what they were learning in school will be "quite or very important later in life" also declined. Even seniors who reported earning mostly A's decreased their ratings of school work's meaningfulness and how important this learning would be later in life. In addition, students became more likely to take a dim view of school courses over this period: 32 percent of seniors in 2000 said that

most of their courses were "very or slightly dull," up from 20 percent in 1983 (see supplemental table 18-1).

In contrast to these changes, three measures related to student effort have generally shown no measurable change since 1990. (Data on these three measures were first collected in 1989.) The proportion of seniors who said they "often or always try to do their best work" remained between 61 and 65 percent. The percentage who reported they "seldom or never fail to complete/hand in school assignments" held steady at roughly 60 percent, and 35–38 percent in 1990, 1995, and 2000 said they "seldom or never fool around in class" (see supplemental table 18-2).

Few notable differences appeared between high school seniors in academic and vocational/technical programs in 2000 on measures related to interest and effort in school. However, while about 70 percent of seniors in an academic program in 2000 said they seldom or never fail to complete school assignments, fewer vocational/technical program seniors (50 percent) responded in this way.

INTEREST IN SCHOOL: Percentage of 12th-graders who expressed various opinions about their school experience: 1983, 1990, 1995, and 2000



NOTE: The data do not meet NCES standards for response rates.

SOURCE: University of Michigan, Institute for Social Research. Monitoring the Future 12th-Grade Study: 1983, 1990, 1995, and 2000.

FOR MORE INFORMATION:

Supplemental Note 6
Supplemental Tables 18-1,
18-2

National Commission on Excellence in Education 1983; Newmann 1992





Elementary/Secondary Persistence and Progress

Status Dropout Rates, by Race/Ethnicity

Status dropout rates for Whites and Blacks ages 16–24 have declined since 1972, but have remained relatively stable since the early 1990s. The rates for Hispanics have not declined and remain higher than those for other racial/ethnic groups.

Young adults who do not finish high school are more likely to be unemployed and earn less when they are employed than those who completed high school (NCES 2001–022). In addition, high school dropouts are more likely to receive public assistance than high school graduates who did not go to college.

The status dropout rate represents the percentage of an age group not enrolled in school and that has not earned a high school diploma, GED, or other certificate of completion. According to this measure, 11 percent of 16- to 24-year-olds were out of school without a high school credential in 2000. Although the status dropout rate remained fairly consistent from 1992 to 2000, it declined for young adults as a group between the early 1970s and 2000. The rate of this decline, however, varied for Whites and Blacks (see supplemental table 19-1).

Between 1972 and 2000, the status dropout rate for Whites was lower each year than the rate for Blacks or Hispanics. During these years, the percentage of Hispanic youths who

were out of school without a high school credential was also higher than that of Whites and Blacks in every year. In addition, during these years, the status dropout rates for Whites and Blacks declined by nearly 40 percent in each group, while the rate for Hispanic young adults remained fairly constant. The gap between Blacks and Whites narrowed during the 1970s and 1980s, but not during the 1990s.

Greater dropout rates among Hispanic immigrants partly account for the persistently high dropout rates for all Hispanic young adults. Among Hispanic 16- to 24-year-olds who were born outside the 50 states and the District of Columbia, the status dropout rate of 44 percent in 2000 was more than double the rates for first- or later-generation Hispanic young adults born in the United States (15 percent and 16 percent, respectively). Nevertheless, Hispanic young adults born in the United States are more likely to be high school dropouts than their peers of other race/ethnicities (see supplemental table 19-2).

NOTE: Due to relatively small sample sizes, American Indians/Alaska Natives and Asians/Pacific Islanders are included in the total but are not shown separately. In addition, the erratic nature of the Hispanic status rates reflects, in part, the small sample size of Hispanics. Data have been reported separately for Asian/Pacific Islanders since 1998. In 2000, they had a dropout rate of 4 percent (NCES 2002–114).

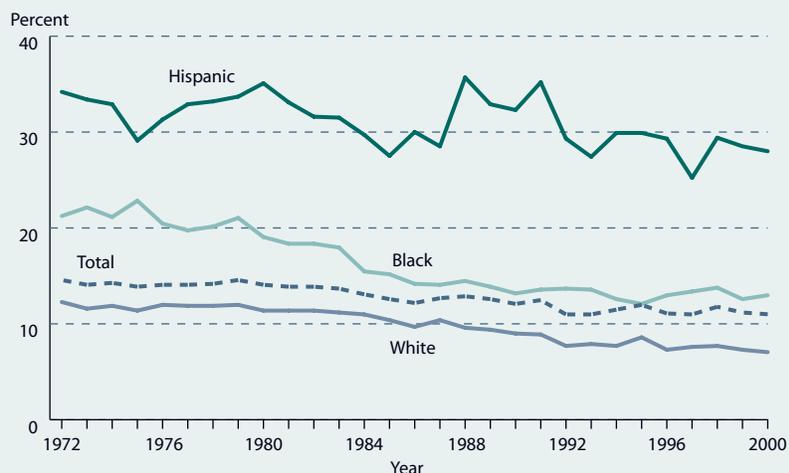
SOURCE: U.S. Department of Commerce, Bureau of the Census. October Current Population Surveys, 1972–2000.



FOR MORE INFORMATION:
Supplemental Notes 1, 2
Supplemental Tables 19-1,
19-2

NCES 98–013; NCES 2001–
022; NCES 2002–114

STATUS DROPOUTS: Dropout rates of 16- to 24-year-olds, by race/ethnicity: October 1972–2000



Transition to College

Immediate Transition to College

Immediate college enrollment upon completing high school has increased since 1972. Rates of immediate enrollment for females have increased faster than those for males.

The percentage of high school completers who enroll in college in the fall immediately after high school reflects the accessibility of higher education and the value high school completers place on college compared with other pursuits. Overall, immediate college enrollment rates of high school completers increased from 49 to 63 percent between 1972 and 2000 (see supplemental table 20-1).

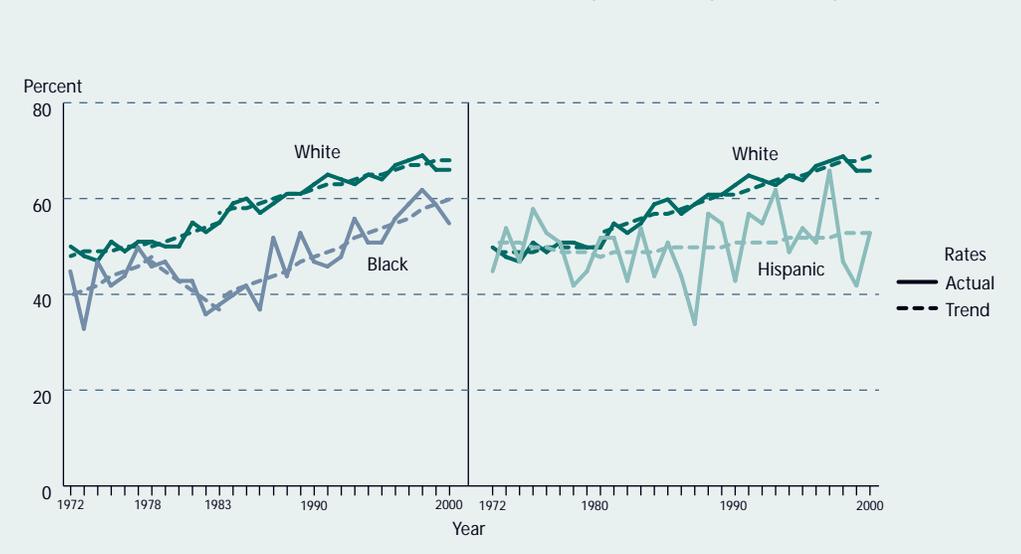
From 1972 to 2000, immediate enrollment rates of female high school completers increased faster than those of male completers. Much of the growth in immediate college enrollment rates between 1984 and 2000 was due to increases in the immediate enrollment rates of females at 4-year institutions. In this period, the rate at which females enrolled at 4-year institutions increased faster than that of males at 4-year institutions and both males and females at 2-year institutions (see supplemental table 20-2).

Immediate enrollment rates for White high school completers increased between 1972 and 2000, from 50 to 66 percent. Among Black high school completers, immediate enrollment

rates remained fairly constant between 1972 and 1978, decreased between 1978 and 1983, and then increased between 1983 and 2000, rising from 38 to 55 percent. Since 1983, immediate enrollment rates for Blacks have increased faster than those for Whites, reducing the gap between the two groups. For Hispanic high school completers, immediate transition rates remained relatively constant between 1972 and 2000. Thus, while White rates rose during the 1980s and 1990s, stagnant Hispanic rates during this time resulted in the gap increasing between Hispanic and White rates (see supplemental table 20-1).

Some differences in immediate enrollment rates among groups of completers have not changed. The gap in rates of those from high- and low-income families persisted for each year between 1990 and 2000. Likewise, completers whose parents had attained a bachelor's degree or higher were more likely than those with parents who had less education to enter college immediately after high school graduation for each year between 1990 and 2000 (see supplemental tables 20-1 and 20-3).

COLLEGE ENROLLMENT RATES: Immediate enrollment in postsecondary education, by race/ethnicity: October 1972–2000



NOTE: Includes those ages 16–24 completing high school in a given year. Actual values are 1-year averages calculated from the Current Population Survey (CPS). The trend values show the linear trend of these average values over the time periods shown. In 1994, the survey instrument for the CPS was changed and weights were adjusted. See Supplemental Note 2 for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census. October Current Population Surveys, 1972–2000.

FOR MORE INFORMATION:

Supplemental Notes 1, 2
Supplemental Tables 20-1, 20-2, 20-3

NCES 1999–022





Transition to College

College Qualifications and College Enrollment

Enrollment rates of high school graduates vary with family income, but among those who are college qualified and take the steps necessary for admission, low-income students are as likely as middle-income students to enroll in a 4-year institution.

The higher the family income of high school graduates, the more likely they are to enroll in postsecondary education. Among 1992 graduates as a whole, the proportion who enrolled in 4-year institutions by 1994 increased at each family income level, from 33 percent of low-income students to 47 percent of middle-income students to 77 percent of high-income students (NCES 98–105).

However, financial resources are not the only obstacle to enrollment for students from low-income families. High school graduates from low-income families are less likely to enroll in college because they tend to be less qualified (NCES 2000–062, *indicator 30*). Nevertheless, even among college-qualified graduates, enrollment rates in 4-year or any postsecondary institutions within 2 years of graduating from high school increased with family income.

In addition to being college qualified, students wanting to enter a 4-year institution need to take additional steps, defined here as taking a college admissions test and applying for admission. Some of the income-related differences in enrollment rates disappeared among those who were both college qualified and took these two steps. College-qualified high school graduates from families with low and middle incomes who took the steps were equally likely to enroll in a 4-year institution (83 and 82 percent, respectively) or in any postsecondary institution within 2 years of high school graduation.

A large majority (83 percent) of low-income high school graduates who were both college qualified and took the two steps toward admission were able to attend a 4-year institution. Financial or other reasons did not deter them from enrolling.

*Took a college admissions test (SAT or ACT) and applied for admission to a 4-year institution.

NOTE: The 4-year College Qualification Index is based on high school GPA, senior class rank, NELS 1992 aptitude test, SAT or ACT scores, and curricular rigor. See *Supplemental Note 11* for further information about the College Qualification Index. Type of institution attended refers to first institution attended.

SOURCE: U.S. Department of Education, NCES, National Education Longitudinal Study of 1988, "Third Follow-up" (NELS: 1988/1994).



FOR MORE INFORMATION:
Supplemental Note 11
NCES 98–105, NCES 2000–062

POSTSECONDARY ENROLLMENT: Percentage of college-qualified 1992 high school graduates who enrolled in postsecondary education by 1994, by type of institution and family income



Transition to College

Enrollment of Students With Risk Factors

About one-third of young people at risk for low educational attainment persist in high school and enroll in a 4-year college despite being at risk.

Some students who enter high school with risk factors associated with dropping out nonetheless graduate from high school and enroll in postsecondary education. About 58 percent of all 1992 high school graduates had at least one factor in their family background or school experiences prior to entering high school that placed them at some risk of lower educational attainment. These risk factors include changing schools two or more times from 1st to 8th grade (except to the next level), being in the lowest socioeconomic status quartile, having average grades of C's or lower from 6th to 8th grade, being in a single-parent household in 8th grade, having one or more older siblings who left high school without completing, and being held back one or more grades from 1st to 8th grade.

However, 35 percent of the graduates with any risk factors not only finished high school but also enrolled in a 4-year college or university within 2 years of their high school graduation (and 68 percent enrolled in some type of postsecondary institution).

Why were some students with risk factors able to make it to college while others were not? Many factors may have contributed to their success, including academic preparation, family background, and support from schools, parents, and friends.

Students with risk factors who aspired in 10th grade to earn at least a bachelor's degree, were at least minimally academically prepared for enrollment in a 4-year college, and got help with college applications from their school were more likely to enroll in a 4-year college than those who did not have these experiences. In addition, those who completed at least one advanced mathematics course and those who participated in two or more extracurricular activities in 10th grade were more likely than others to enroll in a 4-year college. Also, students whose parents discussed school and college matters at least moderately frequently during 12th grade and those with parents who had completed a bachelor's degree were more likely to enroll in a 4-year college than those whose parents were not in these categories. Finally, when most of the friends of a student with risk factors planned to enroll in a 4-year college, the student was more likely than other students with risk factors to do so as well.

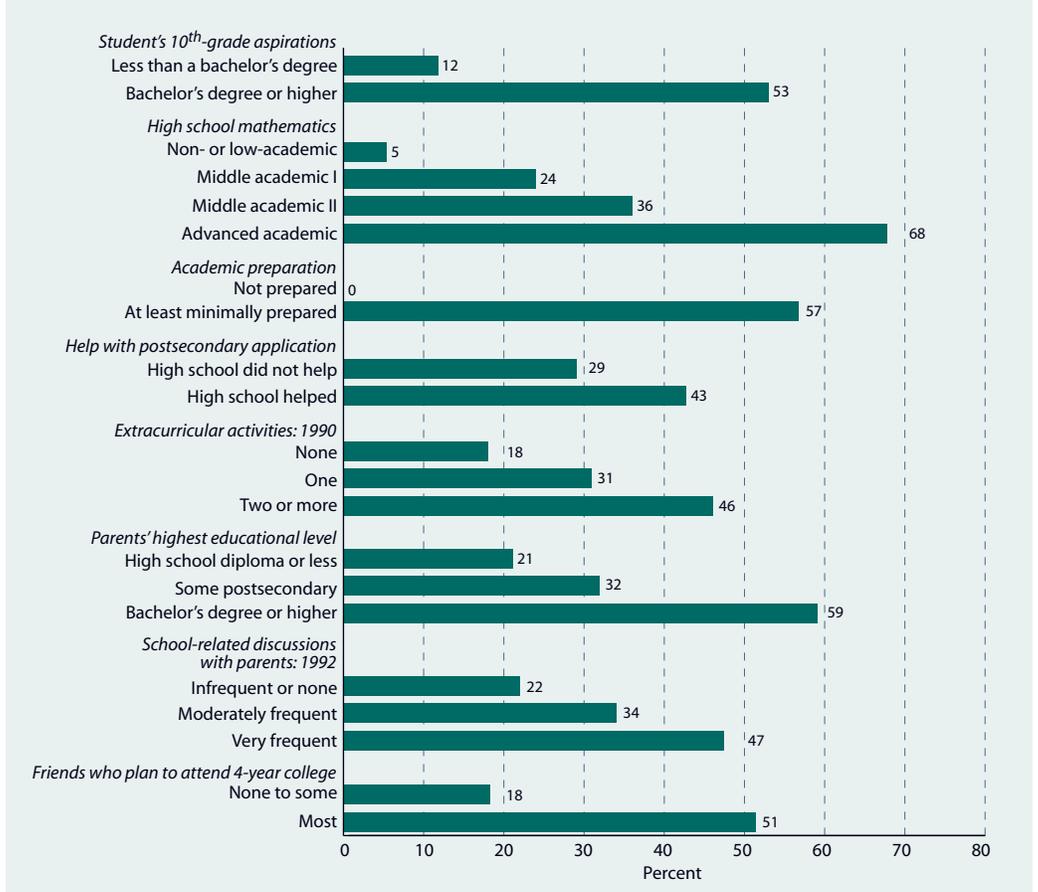
A multivariate analysis confirmed that the positive association between enrolling in a 4-year college and each of these characteristics persists even after controlling for the interrelationships of the characteristics (NCES 98-094).



TRANSITION TO COLLEGE: Percentage of 1992 high school graduates with risk factors for low educational attainment, and percentage distribution according to type of institution in which first enrolled (by 1994)

| Risk factors | Percentage of all students | Type of institution first enrolled | | | |
|--------------------------------------------------------------------------------------------------------|----------------------------|------------------------------------|---------------|------------------------|----------------|
| | | 4-year | Public 2-year | Other less-than-4-year | Never enrolled |
| Number of risk factors | | | | | |
| No risk factors | 42.2 | 63.5 | 21.9 | 2.4 | 12.2 |
| Any risk factors | 57.8 | 35.0 | 27.3 | 5.7 | 32.0 |
| One risk factor | 32.2 | 45.1 | 26.0 | 5.2 | 23.8 |
| Two risk factors | 16.3 | 27.0 | 28.4 | 5.9 | 38.7 |
| Three or more risk factors | 9.3 | 14.0 | 29.7 | 7.1 | 49.2 |
| Risk factors | | | | | |
| Changed schools two or more times from 1 st to 8 th grade (except to next level) | 26.8 | 39.8 | 28.0 | 6.1 | 26.1 |
| Lowest SES quartile | 18.2 | 21.7 | 25.2 | 6.3 | 46.8 |
| Average grades C's or lower from 6 th to 8 th grade | 16.7 | 16.3 | 29.8 | 7.7 | 46.2 |
| Single-parent household in 8 th grade | 15.3 | 38.6 | 28.1 | 4.7 | 28.7 |
| One or more older siblings left high school | 11.2 | 25.7 | 28.7 | 5.5 | 40.1 |
| Held back one or more grades from 1 st to 8 th grade | 11.2 | 20.6 | 30.0 | 5.3 | 44.2 |

TRANSITION TO COLLEGE: Percentage of 1992 high school graduates with risk factors who had enrolled in a 4-year college by 1994, by selected student characteristics



NOTE: High school mathematics levels are described in *Supplemental Note 5*. Academic preparation levels are described in *Supplemental Note 77*. Table percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. National Education Longitudinal Study of 1988, "Third Follow-up" (NELS:1988/1994).



FOR MORE INFORMATION:
Supplemental Notes 1, 5, 11
NCES 98-094

Postsecondary Persistence and Progress

High School Academic Preparation and Postsecondary Progress

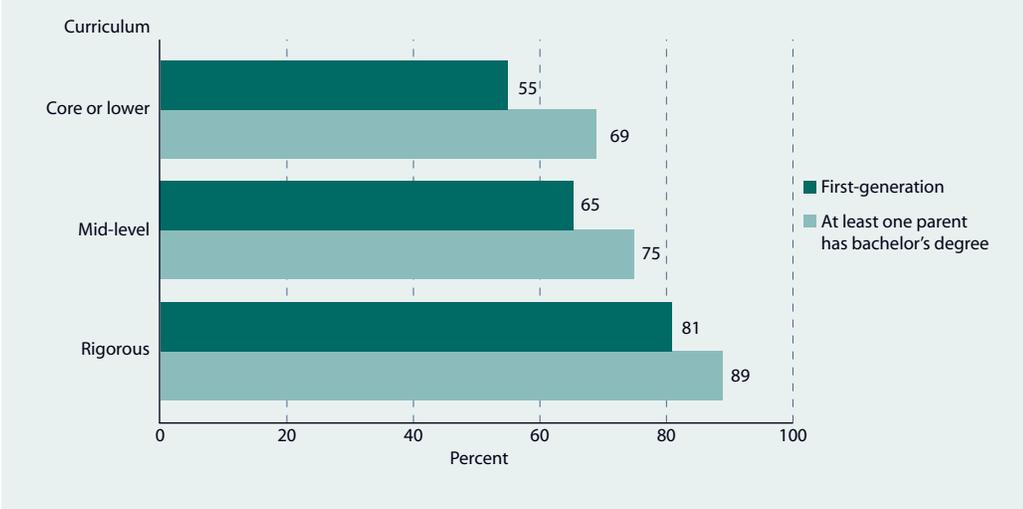
Rigorous academic preparation in high school narrows the gap in postsecondary persistence between first-generation students and their peers with a parent who has a bachelor's degree.

First-generation students are less likely to persist toward a bachelor's degree than other students. Among students who began their postsecondary education in 1995–96, first-generation students—those whose parents have no education beyond high school—were less likely than their peers to enroll in 4-year institutions (30 versus 70 percent) and, if they did, were less likely than other students to persist toward a bachelor's degree 3 years later (13 versus 33 percent) (NCES 98–082). The strongest predictor of eventual completion of a bachelor's degree is the academic rigor of secondary education (Adelman 1999). Three years after entering a 4-year institution, 87 percent of postsecondary students who had taken rigorous coursework in high school had stayed on the persistence track toward a bachelor's degree, compared with 62 percent who had not exceeded the Core curriculum (NCES 2001–153). Students who stayed on the persistence track either remained at the initial 4-year institution in which they enrolled or made a lateral trans-

fer to a new 4-year institution with no break in enrollment.

Parents' level of education is associated with students' persistence in postsecondary education, but rigorous academic preparation in high school narrows the gap in postsecondary persistence between first-generation and other students. Among postsecondary students who had taken no more than the Core curriculum in high school and enrolled in a 4-year institution in 1995–96, first-generation students were less likely to stay on the persistence track toward a bachelor's degree in 1998 than their counterparts with a parent who has a bachelor's degree (55 versus 69 percent). In contrast, the likelihood of students who had taken rigorous coursework in high school staying on the persistence track did not differ meaningfully between first-generation students and their peers with a parent who has a bachelor's degree (81 versus 89 percent).

PERSISTENCE TRACK: Percentage of 1995–96 beginning postsecondary students who persisted toward a bachelor's degree, by the academic rigor of their secondary school curriculum and first-generation status: June 1998



NOTE: First-generation students are those whose parents have no postsecondary education. The Core curriculum includes 4 years of English and 3 years each of mathematics, science, and social science. The "rigorous" curriculum includes at least 4 years of English and mathematics (including precalculus), 3 years each of science (including biology, chemistry, and physics) and social studies, 3 years of foreign language, and 1 honors/AP course or AP test score. Supplemental Note 5 provides more detail.

SOURCE: U.S. Department of Education, NCES. Beginning Postsecondary Students Longitudinal Study, "First Follow-up" (BPS:1996/1998).

FOR MORE INFORMATION:

Supplemental Notes 1, 5
 NCES 98–082, NCES 2001–153
 Adelman 1999





Postsecondary Persistence and Progress

Persistence of Students With Pell Grants

Among low- and middle-income students at public 2- and 4-year institutions, recipients of Pell Grants persist at the same rate as nonrecipients despite being less prepared academically and being more likely to have certain risk factors.

The Pell Grant program is the largest federal need-based education grant program. In 1999–2000, \$7.2 billion in grants were awarded to 3.8 million students (U.S. Department of Education 2000e). Most recipients are from low-income families, but some middle-income students have sufficient financial need—if they have siblings also enrolled in college, for example. Twenty-nine percent of all beginning postsecondary students received a Pell Grant in 1995–96; the average award was about \$1,600 (NCES 2002–169).

Among 1995–96 beginning postsecondary students from low- and middle-income families, recipients of Pell Grants tended to be less well prepared academically than nonrecipients. If recipients attended 4-year institutions, they were more likely than nonrecipients to have SAT/ACT composite scores in the lowest quartile and less likely to have completed a rigorous high school curriculum. If they attended a less-than-4-year institution, they were less likely to have a high school diploma (see supplemental tables 24-1 and 24-2).

Recipients of the Pell Grant have characteristics associated with greater risk of leaving post-

secondary education before earning a degree. In addition to being more likely than nonrecipients not to have graduated from high school, they were more likely to have delayed enrollment in postsecondary education, to be financially independent, to have one or more dependents other than a spouse, or to be a single parent, all of which have been associated with a greater likelihood of leaving without a degree (NCES 97–578) (see supplemental table 24-3).

Given these disadvantages, one might expect recipients of Pell Grants to be less persistent in postsecondary education than other low- and middle-income students (overlooking any impact that the Pell Grant might have on persistence). After 3 years, however, Pell Grant recipients were just as likely as nonrecipients to persist at public 2- and 4-year institutions—that is, to have earned a degree or certificate, still be enrolled, or have transferred to another institution at the same or higher level. Pell Grant recipients were less likely than nonrecipients to persist at private not-for-profit 4-year institutions overall, but they were as likely to persist if they had completed a rigorous high school curriculum.

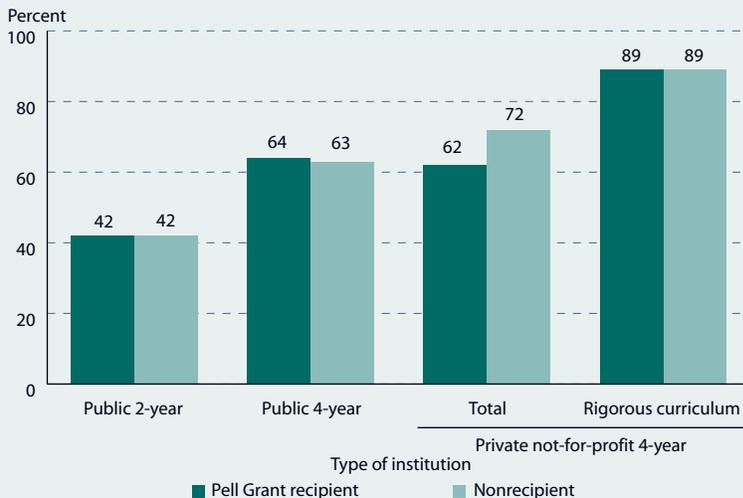
NOTE: Low- and middle-income students include all dependent students whose parents had annual incomes of less than \$70,000 in 1994 and all independent students who, combined with their spouses' earnings, had annual incomes of less than \$25,000 in 1994. "Persistence" is defined as having earned a degree or certificate, being continuously enrolled, or making an immediate lateral or upward transfer to another institution. Curriculum levels are described in *Supplemental Note 5*.

SOURCE: U.S. Department of Education, NCES. Beginning Postsecondary Students Longitudinal Study, "First Follow-up" (BPS:1996/1998).



FOR MORE INFORMATION:
 Supplemental Notes 5, 9
 Supplemental Tables 24-1, 24-2, 24-3
 NCES 97–578,
 NCES 2002–169
 U.S. Department of Education
 2000e

PERSISTENCE IN POSTSECONDARY EDUCATION: Percentage of low- and middle-income 1995–96 beginning postsecondary students who persisted, by receipt of Pell Grant and type of institution: 1998



Completions

Educational Attainment

The percentages of 25- to 29-year-olds who have completed high school, some college, or a bachelor's degree or higher have increased since 1971, but disparities in attainment among racial/ethnic groups remain.

In 2001, 88 percent of all 25- to 29-year-olds had completed high school with a diploma or high school equivalency certificate. Although this represents an increase since 1971, the high school completion rate has been at least 85 percent since the mid-1970s.

In 1971, Blacks were considerably less likely than Whites to have completed high school (59 versus 82 percent). Although Blacks have narrowed the gap, their high school completion rate was still below that of Whites in 2001 (87 versus 93 percent). The high school completion rate for Hispanics also increased between 1971 and 2001 (from 48 to 63 percent), but Hispanics, unlike Blacks, have not made progress in closing the gap with Whites (see supplemental table 25-1).

In 1971, 34 percent of 25- to 29-year-olds had completed some college. The rate for completing some college increased during the 1970s, leveled off during the 1980s, and then increased again. This overall upward trend reflects the increased propensity of high school graduates to enroll in college immediately after high

school (*indicator 20*). By 2001, 58 percent of all 25- to 29-year-olds had completed some college, with Whites (65 percent) more likely than Blacks (51 percent) or Hispanics (32 percent) to have done so. The percentage completing some college increased between 1971 and 2001 for each racial/ethnic group, but less for Hispanics than for Whites or Blacks (see supplemental table 25-2).

Twenty-nine percent of 25- to 29-year-olds had at least a bachelor's degree in 2001, up from 17 percent in 1971. The rate for completing a bachelor's degree or higher was roughly half the rate for completing some college throughout this period. Although the percentage with a bachelor's degree or higher increased for all three racial/ethnic groups, the Black and Hispanic gaps with Whites widened slightly. Until the early 1980s, women aged 25–29 were less likely than their male counterparts to have a bachelor's or higher degree, but that difference has disappeared. In 2001, women were more likely than men to have graduated (see supplemental table 25-3).

HIGH SCHOOL: Percentage of 25- to 29-year-olds who completed high school, by race/ethnicity: March 1971–2001



NOTE: "High school completers" also includes those with higher levels of education, and "some college" also includes those with a bachelor's degree or higher. The questions about educational attainment were reworded in 1992. Before then, "some college" meant 1 or more years; beginning in 1992, it meant any college at all. In 1994, the survey instrument for the Current Population Survey (CPS) was changed and weights for undercounted populations were adjusted. See *Supplemental Note 2* for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1971–2001.

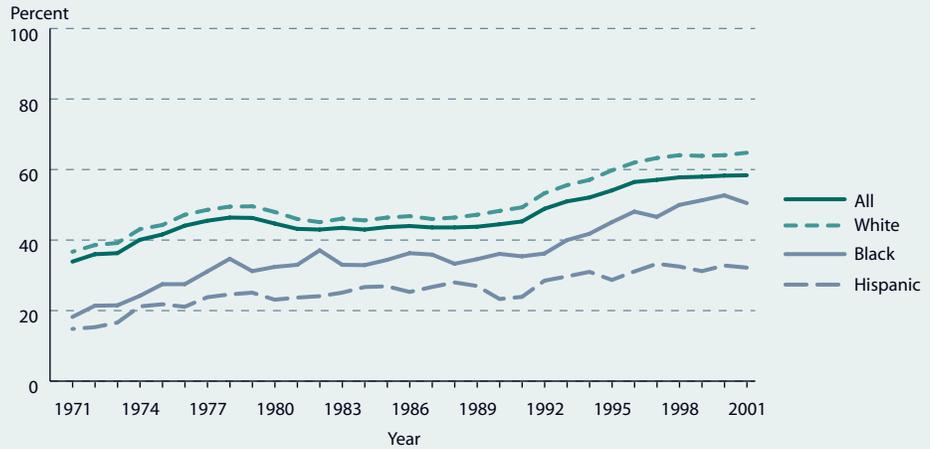
FOR MORE INFORMATION:

Supplemental Notes 1, 2
Supplemental Tables 25-1,
25-2, 25-3





SOME COLLEGE: Percentage of 25- to 29-year-olds with at least some college, by race/ethnicity: March 1971–2001



BACHELOR'S DEGREE OR HIGHER: Percentage of 25- to 29-year-olds with a bachelor's degree or higher, by race/ethnicity: March 1971–2001



NOTE: "High school completers" also includes those with higher levels of education, and "some college" also includes those with a bachelor's degree or higher. The questions about educational attainment were reworded in 1992. Before then, "some college" meant 1 or more years; beginning in 1992, it meant any college at all. In 1994, the survey instrument for the Current Population Survey (CPS) was changed and weights for undercounted populations were adjusted. See *Supplemental Note 2* for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1971–2001.



FOR MORE INFORMATION:
 Supplemental Notes 1, 2
 Supplemental Tables 25-1,
 25-2, 25-3

Section 4

Contexts of Elementary and Secondary Education





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Summary: Contexts of Elementary and Secondary Education

The indicators in this section explore why some schools may be more successful than others at helping students learn. Research indicates that what occurs in classrooms, the training and ability of the teaching force, and the overall culture and atmosphere of the school all affect student learning (NCES 2001–030). This section looks at each of these factors.

To gauge what goes on in the classroom, this section looks at the content of student learning as measured by the academic level of the courses students have taken. It also examines the instructional practices of teachers, the use of technology in schools, classroom size, and extra support for children with special needs, as aspects of the opportunity to learn in schools. Because learning in the classroom takes place within the context of a school, this section looks at various contexts of elementary and secondary schools. Some contextual dimensions considered are the control of the school (public or private); school size; community type (urban, suburban, or rural); and the composition of the student body, which includes such measures as the percentage of enrolled students who are minority students, who come from poor or single-parent families, or whose English proficiency is limited. Some analyses also look at student characteristics (e.g., race/ethnicity or sex) to provide additional perspective on questions of equality in learning opportunities.

To gauge the training and ability of the teaching force, this section examines teacher characteristics that evidence suggests matter for student learning. These characteristics include teachers' academic and professional preparation, the extent to which this preparation matches the subjects they teach, the distribution of new and experienced teachers, and teacher participation in professional development. These indicators compare teachers according to these characteristics, and their perceptions of the teaching environment, in different school contexts. The demography of the teacher workforce and patterns of recruitment and retention are also discussed here.

To gauge aspects of the overall culture and atmosphere of the school, this section looks at the condition of school facilities, rates of underenrollment and overcrowding, school-related violence and student victimization, disciplinary practices, and leadership qualities of principals. These indicators provide additional perspectives on learning environments and their relationships to the different school and classroom-level contexts.

In addition to these three areas, this section looks at school choice programs and charter schools to provide perspective on how school contexts relate to different parental choices and differences in institutional control.

Coursetaking and Standards

Trends in Science and Mathematics Coursetaking

The percentage of high school graduates who completed advanced coursework in science and mathematics increased between 1982 and 1998.

Compared with regular academic courses, advanced courses generally demand greater effort and challenge students more. Trends in high school coursetaking can thus provide an indication of changes in levels of student effort and learning (Chaney, Burgdorf, and Atash 1997). Changes in the rigor of coursetaking can also serve as an indicator of changes in the quality of secondary education that schools deliver. This indicator can only be viewed as a proxy, however, as the academic content of courses varies by state and school district, even when classified at the same level of rigor or with the same title.

Since the 1980s, when states began to make the requirements for a diploma more demanding (NCES 95–029, table 151), the percentage of high school graduates completing some advanced coursework in science and mathematics has increased. In 1982, 35 percent of high school graduates had completed advanced science coursework (i.e., at least one course classified as more challenging than general biology); by 1998, this percentage increased

to 62 percent. Most of this increase is attributable to increases in chemistry I and/or physics I. Between 1982 and 1998, the percentage of students who had completed chemistry I or physics I doubled (from 15 to 30 percent), and the percentage of students who had completed chemistry I and physics I increased from 6 to 16 percent. The percentage of graduates who had completed at least one course of either chemistry II, physics II, or advanced biology coursework did not change significantly (see supplemental table 26-1).

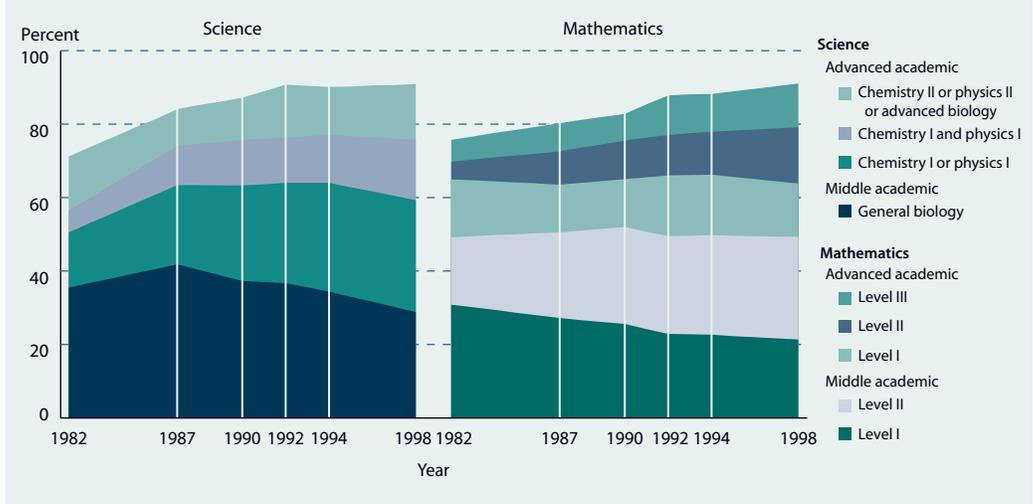
The percentage of high school graduates who had completed courses in advanced academic mathematics (i.e., completed at least one course classified as more challenging than algebra II and geometry I) increased from 26 percent in 1982 to 41 percent by 1998. Moreover, the percentage who had completed advanced level II (i.e., precalculus or an introduction to analysis) tripled (from 5 to 15 percent), while the percentage who had completed advanced level III (i.e., a course in calculus) doubled (from 6 to 12 percent) (see supplemental table 26-2).

SOURCE: U.S. Department of Education, NCES, High School and Beyond Longitudinal Study of 1980 Sophomores, "First Follow-up" (HS&B:1980/1982); National Education Longitudinal Study of 1988, "High School Transcript Study" (NELS:1988/1992); and National Assessment of Education Progress (NAEP) High School Transcript Studies, 1987, 1990, 1994, and 1998.



FOR MORE INFORMATION:
Supplemental Note 5
Supplemental Tables 26-1,
26-2
NCES 95–029; Chaney,
Burgdorf, and Atash 1997;
Lee et al. 1998; Chen et al.
forthcoming

COURSE-TAKING LEVELS: Percentage of high school graduates who completed middle or advanced level science and mathematics courses, by level of highest course completed: Selected years 1982 to 1998



Coursetaking and Standards

Coursetaking in Science and Mathematics

Asian/Pacific Islander and White high school graduates along with private school graduates complete advanced levels of science and mathematics coursework at higher rates than their peers.

Trends in coursetaking since 1982 indicate that a larger proportion of students than in the past are completing advanced level, high school science and mathematics coursework (*indicator 26*). Unlike measures of the quantity of courses taken, these trends suggest a qualitative change in secondary education. These trends, however, do not reveal which students are taking these more academically challenging courses (see *Supplemental Note 5* for a listing of these courses). This indicator highlights differences among 1998 high school graduates who completed some advanced level science and mathematics coursework.

Among these graduates, Asian/Pacific Islanders were more likely than graduates of any other race/ethnicity to have completed advanced science and mathematics courses. Whites were more likely to have completed advanced science and mathematics courses than Blacks, Hispanics, and American Indian/Alaska Natives. This course-taking pattern differs from that for English and foreign languages, where graduates of all races and ethnicities completed advanced courses at comparable rates (NCES 2001–072, *indicator 34*).

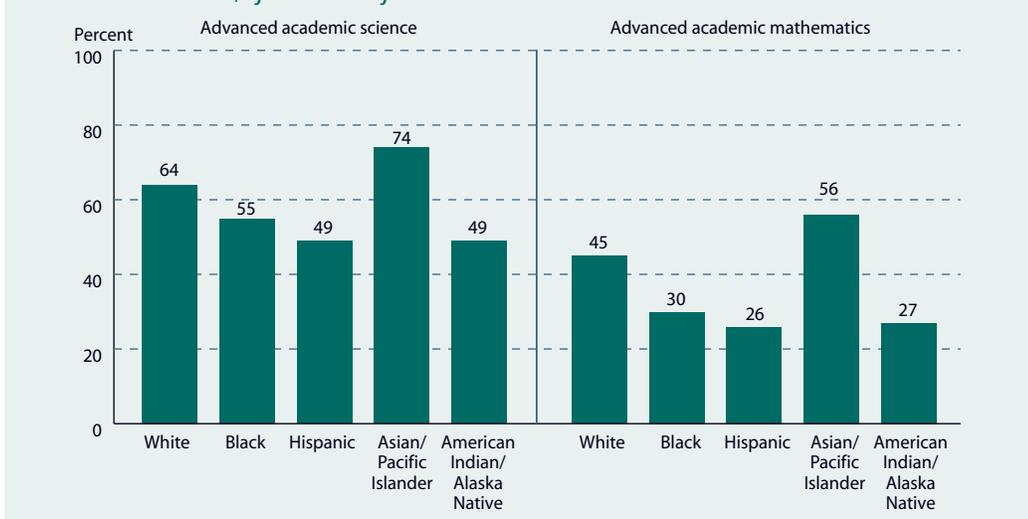
Private school graduates were more likely than public school graduates to have completed ad-

vanced courses in science and mathematics. The same is true for graduates who completed the Core New Basics curriculum—though 12 percent of those who completed this curriculum did not complete any advanced science and 43 percent did not complete any advanced mathematics.

Graduates from moderate-sized schools (i.e., with an enrollment of 300–999) completed more advanced science coursework than graduates from small schools (enrollment less than 300), and more advanced mathematics coursework than graduates from small schools and large schools (enrollment more than 999). (Apparent differences in the rates at which graduates from large and moderate-sized schools completed advanced science coursework are not statistically significant.)

Although there was parity between the completion rates of males and females in advanced mathematics, females were more likely to have completed an advanced science course than males. However, within the top two levels of advanced science coursetaking, the rates at which males and females completed advanced courses were not significantly different from each other.

ADVANCED COURSE-TAKING RATES: Percentage of high school graduates who completed some advanced level coursework in science or mathematics, by race/ethnicity: 1998



NOTE: See notes to the accompanying tables on the various levels of science and mathematics courses. Some of these estimates are revised slightly from those published in NCES 2001–072, *indicator 40*.

SOURCE: U.S. Department of Education, NCES, National Assessment of Educational Progress (NAEP) High School Transcript Study, 1998.

FOR MORE INFORMATION:
Supplemental Note 5
NCES 2001–072



¹Students in this category may have taken some science courses, but these courses are not defined as science courses according to the classification used in this analysis. See *Supplemental Note 5* for more information.

²To meet the requirements of the Core New Basics curriculum, students must complete at least 4 years of English and 3 each of science, mathematics, and social studies.

NOTE: The placement of graduates in the various levels of science courses is determined by the completion of at least one course at that level. Graduates who have completed coursework at more than one level (e.g., Primary physical science and Secondary physical science) were placed into the higher level of coursework completed (i.e., Secondary physical science). Graduates may complete higher levels of coursework (e.g., Chemistry II or physics II) without having taken courses at lower levels (e.g., Primary physical science). See *Supplemental Note 5* for more details on these levels. These levels are slightly revised and the estimates recalculated from those published in NCES 2001–072, *indicator 40*. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES, National Assessment of Educational Progress (NAEP) High School Transcript Study, 1998.

SCIENCE COURSETAKING: Percentage distribution of 1998 high school graduates according to highest level of science courses completed, by student and school characteristics: 1998

| Student and school characteristics | Low academic level | | | | Advanced academic level | | | | |
|----------------------------------------|-------------------------|--------------------------|----------------------------------------------|-------|-------------------------|--------------------------|---------------------------|------------------------------------------------|-------|
| | No science ¹ | Primary physical science | Secondary physical science and basic biology | Total | General biology | Chemistry I or physics I | Chemistry I and physics I | Chemistry II or physics II or advanced biology | Total |
| Total | 0.6 | 3.0 | 6.3 | 9.3 | 28.6 | 30.2 | 16.3 | 15.1 | 61.5 |
| Sex | | | | | | | | | |
| Male | 0.7 | 3.7 | 7.3 | 11.1 | 29.5 | 26.7 | 17.7 | 14.4 | 58.8 |
| Female | 0.5 | 2.3 | 5.5 | 7.8 | 27.7 | 33.2 | 15.2 | 15.6 | 64.0 |
| Race/ethnicity | | | | | | | | | |
| White | 0.6 | 2.7 | 5.6 | 8.3 | 27.0 | 30.3 | 17.9 | 15.9 | 64.1 |
| Black | 0.8 | 1.7 | 7.9 | 9.6 | 34.5 | 32.9 | 12.0 | 10.3 | 55.1 |
| Hispanic | 0.9 | 6.5 | 9.5 | 15.9 | 34.4 | 26.5 | 11.6 | 10.7 | 48.8 |
| Asian/Pacific Islander | 0.2 | 1.8 | 5.3 | 7.1 | 18.5 | 30.1 | 14.6 | 29.5 | 74.2 |
| American Indian/ Alaska Native | 0.0 | 3.8 | 8.7 | 12.5 | 38.9 | 32.4 | 11.2 | 5.1 | 48.6 |
| Met Core New Basics² | | | | | | | | | |
| Yes | 0.0 | 0.0 | 0.6 | 0.6 | 11.1 | 37.1 | 28.5 | 22.6 | 88.2 |
| No | 0.9 | 4.2 | 8.7 | 12.9 | 35.6 | 27.4 | 11.3 | 12.0 | 50.7 |
| Control of school | | | | | | | | | |
| Public | 0.7 | 3.3 | 6.8 | 10.0 | 29.6 | 30.5 | 14.8 | 14.4 | 59.7 |
| Private | 0.0 | 0.3 | 1.7 | 2.0 | 17.4 | 26.4 | 31.8 | 22.4 | 80.6 |
| School enrollment | | | | | | | | | |
| Less than 300 | 0.6 | 2.8 | 6.1 | 8.9 | 34.6 | 30.7 | 14.9 | 10.3 | 55.8 |
| 300–999 | 0.5 | 1.5 | 4.1 | 5.6 | 21.1 | 25.8 | 28.3 | 18.7 | 72.8 |
| 1,000 or more | 0.6 | 3.3 | 6.8 | 10.2 | 27.9 | 30.8 | 14.6 | 16.0 | 61.3 |

MATHEMATICS COURSETAKING: Percentage distribution of 1998 high school graduates according to highest level of mathematics courses completed, by student and school characteristics: 1998

| Student and school characteristics | No math-ematics ¹ | Non-academic | Low academic | Middle academic | | | Advanced academic | | | |
|----------------------------------------|------------------------------|--------------|--------------|-----------------|----------|-------|-------------------|----------|-----------|-------|
| | | | | Level I | Level II | Total | Level I | Level II | Level III | Total |
| Total | 0.8 | 3.6 | 5.3 | 21.2 | 27.7 | 48.9 | 14.4 | 15.2 | 11.8 | 41.4 |
| Sex | | | | | | | | | | |
| Male | 1.1 | 4.1 | 6.2 | 22.1 | 26.4 | 48.5 | 13.2 | 15.0 | 11.9 | 40.1 |
| Female | 0.6 | 3.1 | 4.6 | 20.1 | 28.9 | 49.0 | 15.7 | 15.3 | 11.6 | 42.6 |
| Race/ethnicity | | | | | | | | | | |
| White | 0.8 | 3.2 | 4.6 | 19.0 | 27.4 | 46.3 | 15.7 | 16.5 | 13.0 | 45.1 |
| Black | 0.9 | 3.6 | 8.3 | 26.0 | 30.8 | 56.8 | 14.1 | 9.3 | 7.0 | 30.4 |
| Hispanic | 0.9 | 6.3 | 7.5 | 30.9 | 28.2 | 59.1 | 8.4 | 10.7 | 7.1 | 26.2 |
| Asian/Pacific Islander | 0.2 | 2.8 | 2.6 | 16.0 | 22.8 | 38.8 | 10.3 | 25.3 | 19.9 | 55.5 |
| American Indian/ Alaska Native | 0.7 | 8.6 | 6.3 | 27.5 | 29.9 | 57.4 | 9.3 | 10.8 | 6.7 | 26.9 |
| Met Core New Basics² | | | | | | | | | | |
| Yes | 0.4 | 0.7 | 2.6 | 10.2 | 28.8 | 39.0 | 18.7 | 20.5 | 18.1 | 57.4 |
| No | 1.4 | 7.1 | 8.7 | 34.7 | 26.4 | 61.1 | 9.0 | 8.6 | 4.0 | 21.6 |
| Control of school | | | | | | | | | | |
| Public | 0.9 | 3.9 | 5.8 | 22.2 | 28.6 | 50.8 | 14.2 | 13.4 | 11.0 | 38.7 |
| Private | 0.0 | 0.5 | 0.5 | 9.8 | 18.9 | 28.8 | 16.5 | 33.5 | 20.3 | 70.3 |
| School enrollment | | | | | | | | | | |
| Less than 300 | 0.9 | 2.9 | 5.1 | 23.4 | 32.9 | 56.3 | 13.3 | 13.4 | 8.1 | 34.8 |
| 300–999 | 0.9 | 2.3 | 3.5 | 11.5 | 18.5 | 30.0 | 21.9 | 21.8 | 19.6 | 63.3 |
| 1,000 or more | 0.8 | 4.0 | 5.7 | 22.1 | 27.6 | 49.8 | 13.4 | 14.6 | 11.7 | 39.7 |



FOR MORE INFORMATION:
Supplemental Note 5
NCES 2001–072

Special Programs

Inclusion of Students With Disabilities in Regular Classrooms

Inclusion rates for students of almost all disability types have increased over the past decade.

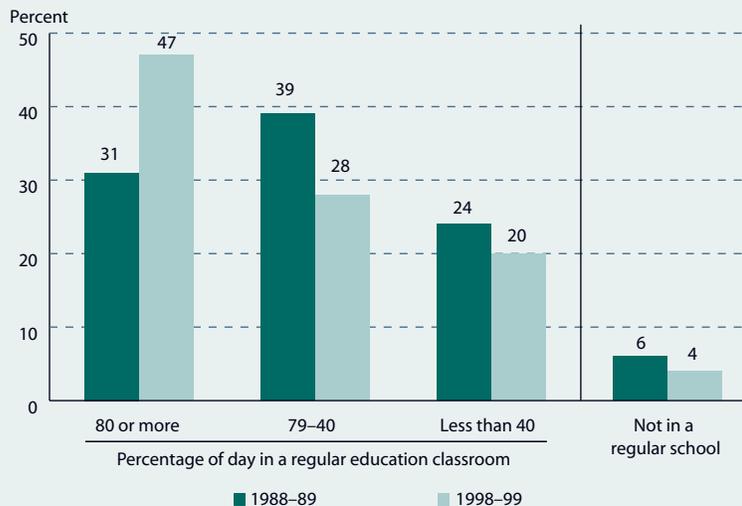
Since 1975, Congress has required that students with disabilities receive an education in the “least restrictive environment.”* Such an environment is determined on a case-by-case basis. Data suggest that, since 1988, U.S. schools have found the regular education classroom to be the “least restrictive environment” for increasing numbers of students with disabilities.

In 1998–99, states reported that 47 percent of students with disabilities spent 80 percent or more of the day in a regular education classroom. In 1988–89, only 31 percent of such students did so. The increase in the percentage of students with disabilities included in regular classrooms is noteworthy because the number of such students has been growing faster than total school enrollments. The ratio of special education students to total K–12 enrollment in

1988–89 was 112 per 1,000 students; in 1998–99, it was 130 per 1,000 students (NCES 2001–034, table 53).

Although the percentage of students with disabilities placed in regular classrooms for at least 80 percent of the day increased between 1988–89 and 1998–99, the size of increase varied by type of disability. The largest increase occurred among students with specific learning disabilities (from 20 to 45 percent). The smallest increases occurred among students with multiple disabilities (from 7 to 11 percent) and those who are both deaf and blind (from 12 to 14 percent). The percentage of students with disabilities educated in separate facilities declined for students of all disability types (for which data exist) except for those with visual impairments (see supplemental table 28-1).

SPECIAL EDUCATION: Percentage distribution of students ages 6–21 with disabilities, by educational environment: 1988–89 and 1998–99



*Congress first required that students with disabilities receive an education in the “least restrictive environment” in the Education of All Handicapped Children Act of 1975 (P.L. 94-142). This requirement is still in effect under section 612(a)(5) of the Individuals with Disabilities Education Act (IDEA) Amendments of 1997 (P.L. 105-17).

NOTE: Students counted as disabled are those students served under Part B of the IDEA in the United States and outlying areas. See *Supplemental Note 10* for definitions of all disability types. Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, Office of Special Education and Rehabilitative Services. (2000). *22nd Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act*; and U.S. Department of Education, Office of Special Education and Rehabilitative Services. (2001). *23rd Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act*.

FOR MORE INFORMATION:
 Supplemental Note 10
 Supplemental Table 28-1
 NCES 2001–034



School Choice

Parental Choice of Schools

The proportion of children enrolled in chosen public schools and in private, not church-related schools increased between 1993 and 1999. Differences in parental choice of schools are related to race/ethnicity, household income, and region.

Public school choice programs* provide parents with additional options as to where to enroll their children. Although such programs are not available everywhere, the percentage of school districts that allow parents to send their children to a public school other than their assigned school (or a “chosen school”) increased between 1993 and 1999 (see supplemental table 29-1). This increase may explain the fact that the percentage of children in grades 1–12 whose parents sent them to their assigned public school declined from 80 to 76 percent over these 6 years. Most of this decline can be attributed to parents enrolling their children in chosen public schools. The percentage of children enrolled in chosen public schools increased from 11 to 14 percent during this period, whereas the percentage enrolled at private, not church-related schools increased from 1.6 to 2.3 percent. The percentage enrolled in private, church-related schools remained about the same (see supplemental table 29-2).

as to where to enroll their children in 1999. Black students were more likely to attend a chosen public school than White or Hispanic students, while White students were more likely to attend a private school than Black or Hispanic students. Such differences, however, may reflect differences in family income, and the availability in the community of private schools, private school scholarships, and public school choice programs rather than differences in racial or ethnic preferences. For example, in 1999, students from higher income households were more likely to attend a private school than students from lower income households, and the reverse was true for chosen public schools.

Data for 1999 suggest that more students attend chosen public schools when more choice is available. In 1999, a greater percentage of school districts in the West offered public school choice programs than districts in the Northeast, Midwest, or South. In the same year, students living in the West were more likely to attend chosen public schools than students living in any other region.

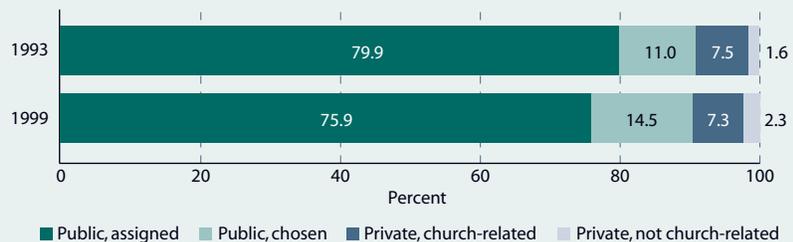
*Public school choice programs “allow public school students to enroll in another school or district outside their attendance area without justification based on special needs” (NCES 98–203). These programs can include within-district or out-of-district school choice options (which can include charter schools and magnet schools).

NOTE: Excludes students who are home schooled and not enrolled in a public or private school for 9 hours or more per week. These students account for 1.7 percent of the population of school-aged children (NCES 2002–039). Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. National Household Education Surveys Program (NHES), “School Readiness” survey, 1993; “School Safety and Discipline” survey, 1993; “Parent and Family Involvement” survey, 1996; and “Parent Interview” survey, 1999.

Among parents who chose not to send their children to their assigned public school, not all were equally likely to make the same choice

DIFFERENCES IN PARENTAL CHOICE: Percentage distribution of students in grades 1–12, by school type: 1993 and 1999



| School type | 1993 | 1999 | Percent difference | Percentage change |
|-----------------------------|------|------|--------------------|-------------------|
| Public, assigned | 79.9 | 75.9 | 3.99 | -4.99 |
| Public, chosen | 11.0 | 14.5 | 3.47 | 31.49 |
| Private, church-related | 7.5 | 7.3 | 0.26 | -3.46 |
| Private, not church-related | 1.6 | 2.3 | 0.77 | 49.36 |



FOR MORE INFORMATION:
 Supplemental Note 1
 Supplemental Tables 29-1,
 29-2
 NCES 97–909

School Choice

Public Charter Schools

Public charter schools are more likely than regular public schools to be located in urban areas, to enroll a higher proportion of Black and Hispanic students, and to employ teachers with fewer years of teaching experience.

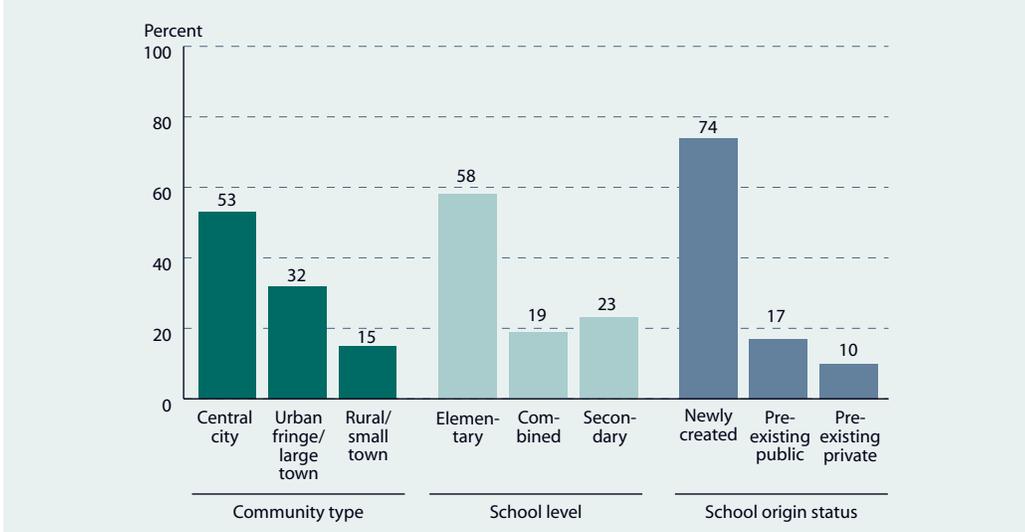
A public charter school is a publicly funded school that is typically governed by a group or organization under a contract or charter with the state, which exempts it from selected state or local rules and regulations. In return for funding and autonomy, the charter school must meet accountability standards. A school's charter is reviewed (typically every 3 to 5 years) and can be revoked if guidelines on curriculum and management are not followed or the standards are not met (U.S. Department of Education 2000e).

In the 2000–01 school year, there were 1,993 public charter schools in the 37 states that allowed charter schools and the District of Columbia (NCES 2002–356). A different survey of the 1,010 public charter schools that were open during the 1998–99 school year and still open during the 1999–2000 school year reveals that these schools served less than 1 percent of public elementary and secondary students and that they were unevenly distributed across the nation: 47 percent were in Arizona, California, and Michigan, and more than half were located in urban areas. More than half of these schools were elementary schools (see supplemental table 30-1).

These charter schools differed from traditional public schools in the characteristics of the students they served. They enrolled higher percentages of Black and Hispanic students as well as lower percentages of White students than traditional public schools. A higher percentage of these charter schools than traditional public schools had more than 75 percent minority enrollment as well as more than 75 percent of students eligible for free or reduced-price lunch (see supplemental table 30-2).

Teachers in these charter schools had less teaching experience than those in traditional public schools. For example, in 1999–2000, a higher percentage of traditional public elementary and secondary school teachers had 10 or more years of experience than teachers in these charter schools. There were also differences between the two groups in the percentage of secondary teachers who had obtained a major in the subject they taught, with traditional public school teachers more likely to have a major in the subject they taught than teachers in this set of charter schools (see supplemental table 30-3).

PUBLIC CHARTER SCHOOLS: Percentage of public charter schools, by community type, school level, and school origin status: 1999–2000



NOTE: Public charter schools include all public charter schools open as of the 1998–99 school year and still operating in the 1999–2000 school year.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public Charter School Survey," 1999–2000.

FOR MORE INFORMATION:
Supplemental Tables 30-1, 30-2, 30-3, 30-4

NCES 2002–356; Geske, Davis, Hingle 1997; Wells 1998; U.S. Department of Education 2000e



Teachers

Academic Background of College Graduates Who Enter and Leave Teaching

College students with low college entrance examination scores are more likely than students with high scores to prepare to become teachers and to enter the teaching profession. They are also more likely than their high-scoring peers to remain in the teaching profession.

Many studies show that students learn more from teachers with strong academic skills than they do from teachers with weak academic skills (Ballou 1996; Ehrenberg and Brewer 1994, 1995; Ferguson and Ladd 1996). However, studies of teachers' academic qualifications reveal that college graduates with the lowest college entrance examination (i.e., SAT or ACT) scores are more inclined to become K–12 teachers than those with the highest scores (NCES 2001–030). Using SAT or ACT scores as a proxy for academic caliber, this indicator compares academically weak and strong 1992–93 college graduates with regard to selected features of their teaching careers.

Graduates who scored in the bottom quartile of SAT or ACT scores were more likely than those in the top quartile to have taught before 1997 (14 versus 10 percent) and about twice as likely to predict that they would be teaching full time by 2000 (10 versus 4 percent). They were also more likely to have majored in education (15 versus 7 percent) as well as have prepared to teach,* regardless of whether they actually taught (12 versus 6 percent) or not (6 versus 3 percent) (see supplemental table 31-1).

Among graduates who became teachers, those who scored in the bottom quartile were more likely than those in the top quartile to have taught only in elementary schools, only in public schools, and in schools where 50 percent or more of children were eligible for free or reduced-price lunch. Those who scored in the top quartile were more likely than those in the bottom quartile to have taught only in secondary schools as well as only in private schools. In fact, the percentage of graduates who taught only in secondary schools and who scored in the top half is not statistically different from the average for all graduates (or 50 percent) (see supplemental table 31-3). Among graduates who became teachers, school location, size, and rates of minority enrollment were not significant factors distinguishing those in the bottom quartile from those in the top quartile (see supplemental table 31-2).

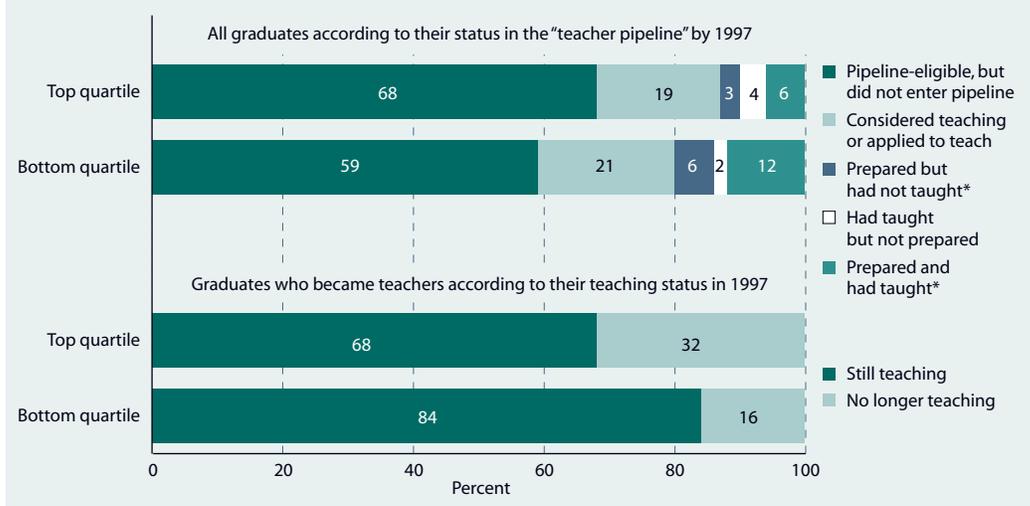
Among graduates who became teachers, those who scored in the bottom quartile were more likely than those in the top quartile to still be teaching in 1997 (84 versus 68 percent) (see supplemental table 31-2).

*Graduates classified as "prepared to teach" had completed a student-teaching assignment or had earned a teaching certificate.

NOTE: The "teacher pipeline" is an analytic framework that organizes graduates by the number of steps they have taken to become teachers. "Pipeline-eligible" refers to all graduates who were not teachers before receiving their bachelor's degree. "Entering the pipeline" refers to taking some steps to become a teacher.

SOURCE: Baccalaureate and Beyond Longitudinal Study, "Second Follow-up" (B&B:1993/1997).

ACADEMIC CALIBER: Percentage distribution of all 1992–93 college graduates and those who became teachers, in the top and bottom quartile of SAT or ACT scores



FOR MORE INFORMATION:
 Supplemental Notes 1, 8
 Supplemental Tables 31-1,
 31-2, 31-3
 NCES 96–899; NCES 2000–
 152; NCES 2001–030
 Marco, Abdel-Fattah, and
 Baron 1992; Ehrenberg and
 Brewer 1994, 1995; Ballou
 1996; Ferguson and Ladd
 1996

Teachers

Educational Background of Teachers

About half of secondary teachers in public schools majored in an academic subject and about 4 out of 10 majored in an academic subject area in education.

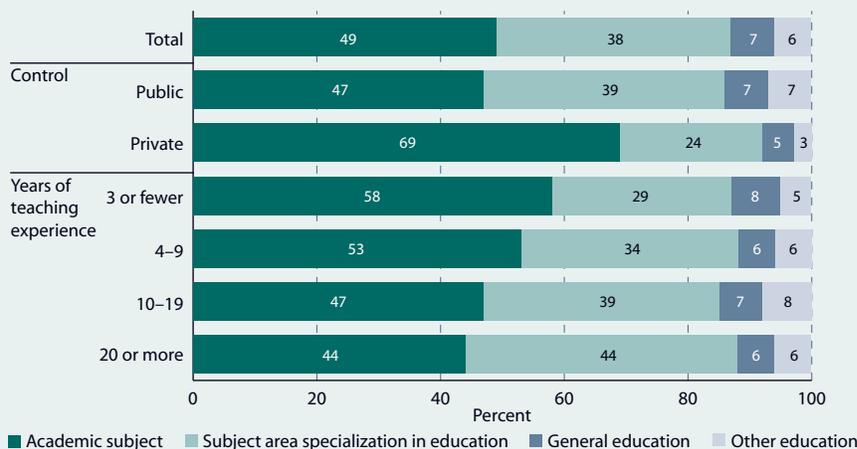
The quality of teachers is an important determinant of school quality but is difficult to measure. One traditional indicator is the level of teachers' educational attainment (NCES 2001-030). The type of degree specialization at the undergraduate and graduate levels is another common measure. This indicator examines the distribution of master's degrees and degree specialization at the undergraduate and graduate levels by various school and teacher characteristics.

Overall, 41 percent of teachers at public schools hold a master's degree, compared with 30 percent at private schools. Public and private school teachers in the Northeast are more likely to hold master's degrees than their peers in other regions. Public schools with low minority enrollments (less than 10 percent) and schools with low percentages of students eligible for free or reduced-price lunch (less than 15 percent) both have higher percentages of teachers with master's degrees than those with

high minority enrollments (50 percent or more) and those with high percentages of students eligible for free or reduced-price lunch (30 percent or more) (see supplemental table 32-1).

Teachers' degree specialization differs for elementary and secondary school teachers. Among all elementary teachers, 24 percent majored in an academic subject, 18 percent in a subject area specialization in education, 45 percent in general education, and 13 percent in some other education specialization (e.g., special education, curriculum and instruction, or educational administration) for their graduate or undergraduate degree (see supplemental table 32-2). Among all secondary teachers, 49 percent majored in an academic subject, 38 percent in a subject area specialization in education, 7 percent in general education, and 6 percent in some other education specialization for their graduate or undergraduate degree (see supplemental table 32-3).

TEACHERS' ACADEMIC MAJORS: Percentage distribution of secondary school teachers according to the type of undergraduate or graduate major, by control of school and years of teaching experience: 1999–2000



NOTE: Teachers with more than one major or degree are counted only once. Majors/degrees were counted in the following order: academic field, subject area specialization in education, other education, and general education. Percentages may not add to 100 due to rounding. SOURCE: U.S. Department of Education, NCES, Schools and Staffing Survey (SASS), "Public, Public Charter, and Private School Teacher Surveys," 1999–2000.

FOR MORE INFORMATION:
Supplemental Note 1
Supplemental Tables 32-1,
32-2, 32-3



NCES 2001-030; Ravitch 1998

Teachers

Participation in Professional Development

Teachers who participate in more than 8 hours of professional development activity in a single area of development per year are more likely than teachers who participate 1–8 hours to report that that activity improved their teaching “a lot.” However, most teachers participate in such an activity only 1–8 hours.

Formal professional development and collaboration with other teachers provide opportunities for teachers to improve their teaching practices (NCES 2000–152; National Commission on Teaching and America’s Future 1996; Sprinthall, Reiman, and Theis-Sprinthall 1996). Research also suggests that “the more extended the professional development, the more it encourages effective classroom practices” (Wenglinsky 2000, p. 30). This indicator examines participation in 10 formal professional development activities (which are typically school or district staff workshops on a particular topic) and 6 collaborative activities with other teachers (nonadministrative teacher meetings, teacher networks, or through team-teaching or mentoring).

In 2000, 99 percent of public school teachers participated in at least one of the professional development activities. Of the selected activities, teachers most commonly attended those addressing state or district curriculum and performance standards; the least attended were those addressing the needs of students with lim-

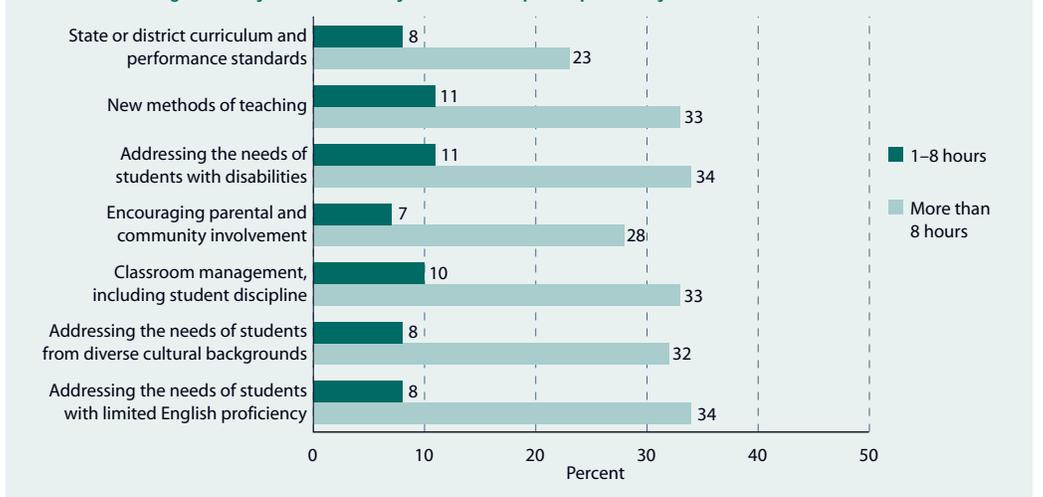
ited English proficiency (see supplemental table 33-1). In general, teachers typically reported spending 1–8 hours in a single area of development during 2000. During the same year, 92 percent of teachers participated in one of the collaborative activities, the most common of which was regularly scheduled collaboration with other teachers (69 percent). Approximately 34 percent of all public school teachers participated in this activity at least two to three times a month (see supplemental table 33-2).

Teachers who participated in any of the professional development activities for more than 8 hours were more likely than those who participated for 1–8 hours to report that that activity improved their teaching “a lot” (see supplemental table 33-3). Among teachers who engaged in the collaborative activities, greater frequency was positively related to teachers’ beliefs about the extent to which the activity improved their classroom teaching; the one exception was mentoring another teacher (see supplemental table 33-4).

NOTE: See supplemental tables 33-1 and 33-2 for the complete list of professional development and collaborative activities.

SOURCE: U.S. Department of Education, NCES. (2001). *Teacher Preparation and Professional Development: 2000* (NCES 2001–088).

PERCEIVED IMPACT OF PROFESSIONAL DEVELOPMENT: Percentage of public elementary and secondary school teachers who participated in professional development during the past 12 months who believed the activity improved their classroom teaching “a lot,” by focus of activity and hours of participation, by selected activities: 2000



FOR MORE INFORMATION:
 Supplemental Tables 33-1, 33-2, 33-3, 33-4
 NCES 2000–152
 National Commission on Teaching and America’s Future 1996; Sprinthall, Reiman, and Theis-Sprinthall 1996; Wenglinsky 2000

School Climate and Discipline

Student Victimization

Victimization affects all types of students. However, students who report gangs or guns at their schools are more likely to report victimization than students who do not report these conditions.

The quality of the educational environment and students' ability to learn both suffer when students are subject to assault, theft, or other forms of victimization at school (Stephens 1997). In 1999, 12 percent of 12- through 18-year-old students reported experiencing "any" form of victimization at school. Four percent reported "violent victimization" (i.e., rape, sexual assault, robbery, or assault, including attempts and threats), and 8 percent reported theft of property or "property victimization" at school (see supplemental table 34-1).

Victimization affects all types of students, but not all students are equally likely to report being victimized. In 1999, public school students were more likely than private school students to report any form of victimization (13 versus 9 percent) as well as violent victimization (4 versus 0.4 percent) and property theft (8 versus 6 percent). Male students were more likely than female students to report violent victimization at school (5 versus 4 percent), while male and female students reported similar lev-

els of property theft as well as any victimization. Overall, Black students were more likely to report having experienced any form of victimization than were White and Hispanic students. Black and Hispanic students reported similar levels of violent victimization (see supplemental table 34-1).

Two factors that generally raise rates of victimization are the presence of gangs and guns at school. Students who reported gangs at school were more likely than other students to say they experienced any victimization (18 versus 11 percent) as well as violent victimization (8 versus 3 percent) and property theft (11 versus 7 percent). Students who said that they knew a student who brought a gun to school were also more likely than other students to report any victimization (20 versus 12 percent). Likewise, students who said they had seen a student with a gun at school were more likely than other students to report any victimization (24 versus 12 percent) (see supplemental table 34-2).

¹"Any victimization" is a combination of "violent victimization" and "property victimization." If the student reported an incident of either, he or she is counted as having experienced any victimization. If the respondent reported having experienced both, he or she is counted once under the any victimization category. Also, any victimization includes those students who reported being victimized but did not provide enough information about the victimization for it to be classified as violent or property.

²Violent victimization includes any physical attack (i.e., rape, sexual assault, robbery, or assault, including attempts and threats) or taking of property directly from a student using force, weapons, or threats at school.

³Property victimization includes theft of a student's property at school.

NOTE: Response rate in parentheses. Percentage of students reporting "do not know" or "not ascertained" not reported in figure. Includes only 12- through 18-year-olds who were in primary or secondary education programs leading to a high school diploma.

SOURCE: U.S. Department of Education, NCES. (forthcoming). *Are America's Schools Safe? Kids Speak Out* (NCES 2002-146).

FOR MORE INFORMATION:

Supplemental Note 1

Supplemental Tables 34-1, 34-2

Stephens 1997



STUDENT VICTIMIZATION: Percentage of students ages 12–18 who reported criminal victimization at school according to type of victimization, by their perception of conditions at school: 1999



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Section 5

Contexts of Postsecondary Education



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Summary: Contexts of Postsecondary Education

The postsecondary education system encompasses various types of institutions, both public and private. These include less-than-2-year institutions providing short-term vocational training, 2-year institutions offering associate's degrees and vocational certificates, and 4-year colleges and universities offering bachelor's or higher degrees. This system serves not only recent high school graduates but also adults of all ages who enroll to fulfill a wide range of personal and career-related goals.

Although issues of student access, persistence, and attainment have been predominant concerns in postsecondary education (see section 3), the context in which postsecondary education is delivered has attracted considerable attention as well. With respect to students, issues of ongoing concern have included, for example, curriculum content,

student access to faculty and courses, the use of technology, and the availability of student support services. All of these issues must be addressed in the context of a diverse student body that varies in terms of age, sex, race/ethnicity, socioeconomic background, academic goals, and work and enrollment patterns. With respect to faculty, issues such as workload, tenure, salaries, allocation of time between teaching and research, and faculty diversity have been prominent.

The indicators in this section describe the undergraduate population, the programs and course of study they take, their learning opportunities, and the special programs in which they participate. They also describe the characteristics of faculty and how colleges and universities use faculty and other resources.



Characteristics of Postsecondary Students

Undergraduate Diversity

Undergraduates display considerable diversity in their demographic, enrollment, and employment characteristics.

Undergraduates who attend our nation's colleges and universities are not a homogeneous group. Many student demographic, enrollment, and employment characteristics are related to the risk of dropping out (NCES 97-578). Consequently, understanding the variation in the undergraduate population has implications for how institutions plan their programs and for meeting students' needs and promoting their success.

More than half of undergraduates were women in 1999-2000 (56 percent), and close to a third were other than White. Although traditional college-age students (23 years or younger) accounted for 57 percent of all undergraduates, 43 percent were age 24 or older. More than a quarter (27 percent) of undergraduates had dependents, 13 percent were single parents, and 80 percent were employed, including 39 percent who were employed full time. Also, 9 percent reported having some type of disability (see supplemental table 35-1).

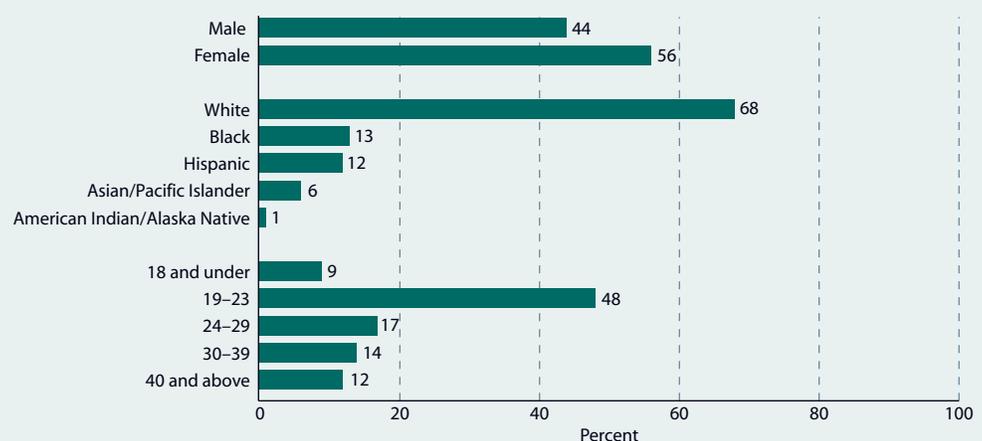
In general, the distribution of students according to the characteristics just mentioned has changed

little over the past 10 years, but two notable differences exist. First, the proportion of students who are White has decreased, while the proportion of students in each other racial/ethnic group has increased. Combined, minority students represented nearly a third of all undergraduates in 1999-2000, up from about a quarter in 1989-90. Second, the percentage of students working full time during the school year rose 7 percentage points during this period, while the percentage working part time fell 9 points. The percentage of students not working rose almost 2 points (see supplemental tables 35-1 and 35-2).

Many of these characteristics are related to the type of institution students attend. Students at public 2-year institutions are more likely to have dependents, work full time, and delay enrollment than those at 4-year institutions. These results are consistent with the fact that students at public 2-year institutions are older than those at 4-year institutions. Conversely, students at 4-year institutions, especially private not-for-profit doctorate-granting institutions, are more likely than those at 2-year institutions to be of traditional age, not work, and attend full time.

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

UNDERGRADUATE DIVERSITY: Percentage of undergraduates with selected student characteristics: 1999-2000



FOR MORE INFORMATION:
Supplemental Notes 1, 9
Supplemental Tables 35-1,
35-2

NCES 97-578,
NCES 2002-168

Programs and Courses

Degrees and Fields of Study

Over the past decade, the number of associate's degrees awarded has increased at a faster rate than the number of bachelor's degrees.

The number of associate's degrees awarded between 1988–89 and 1999–2000 increased by 29 percent, from 437,000 to 565,000. In contrast, the number of bachelor's degrees awarded grew by 22 percent over the same time period, from 1,019,000 to 1,238,000 (see supplemental tables 36-1 and 36-2).

More associate's degrees were awarded in liberal arts/sciences, general studies, and humanities than in any other field in both 1988–89 and 1999–2000. Associate's degrees in these fields increased in both the number awarded (by 54 percent) and in the share of the total (from 28 to 33 percent). Business management/administrative services and health professions/related sciences had similar shares of all associate's degrees in 1999–2000 (16 and 15 percent, respectively). The number of associate's degrees awarded in business was similar in both years, but the number in health grew by 41 percent. In engineering-related technologies, the number of associate's degrees declined by 17 percent: this field accounted for 6 percent of all associate's degrees awarded in 1999–2000, down from 10 percent in 1988–89. The fields of visual/performing arts and computer/information sciences ex-

perienced dramatic growth (increasing by 109 and 159 percent, respectively), but each field accounted for only 3 to 4 percent of all associate's degrees awarded in 1999–2000 (see supplemental table 36-1).

At the bachelor's degree level, degrees awarded in business—the largest field in 1999–2000—increased their share of the total bachelor's degrees awarded between 1970–71 and 1988–89 (from 14 to 24 percent), but decreased their share between 1988–89 and 1999–2000 (from 24 to 21 percent). Conversely, bachelor's degrees awarded between 1970–71 and 1988–89 in education and social sciences/history—the second two largest fields in 1999–2000—decreased their shares between 1970–71 and 1988–89 and then remained relatively stable from 1988–89 to 1999–2000 (accounting for 9 to 11 percent of all degrees in both years, down from 21 and 19 percent in 1970–71). The fields with the next highest shares in 1999–2000, health professions and related sciences, psychology, and biological/life sciences, each accounted for between 4 and 6 percent of all bachelor's degrees awarded in both 1988–89 and 1999–2000 (see supplemental table 36-2).

ASSOCIATE'S DEGREES: Number of associate's degrees conferred by Title IV degree-granting institutions, percentage of total, and percentage change, by field of study: 1988–89 and 1999–2000

| Field of study | 1988–89 | | 1999–2000 | | Percent change |
|------------------------------------------------------------|-------------------|------------------|-------------------|------------------|----------------|
| | Number of degrees | Percent of total | Number of degrees | Percent of total | |
| Total ¹ | 436,764 | 100.0 | 564,933 | 100.0 | 29.3 |
| Liberal arts and sciences, general studies, and humanities | 121,988 | 27.9 | 187,454 | 33.2 | 53.7 |
| Business management and administrative services | 92,481 | 21.2 | 92,274 | 16.3 | -0.2 |
| Health professions and related sciences | 59,535 | 13.6 | 84,081 | 14.9 | 41.2 |
| Engineering-related technologies | 42,593 | 9.8 | 35,395 | 6.3 | -16.9 |
| Marketing operations/marketing and distribution | 14,338 | 3.3 | 5,557 | 1.0 | -61.2 |
| Protective services | 11,682 | 2.7 | 16,298 | 2.9 | 39.5 |
| Other academic ² | 8,194 | 1.9 | 12,930 | 2.3 | 57.8 |
| Visual and performing arts | 8,178 | 1.9 | 17,100 | 3.0 | 109.1 |
| Computer and information sciences | 7,900 | 1.8 | 20,450 | 3.6 | 158.9 |
| Mechanics and repairers | 7,769 | 1.8 | 11,614 | 2.1 | 49.5 |
| Multi/interdisciplinary studies | 7,737 | 1.8 | 11,784 | 2.1 | 52.3 |
| Precision production trades | 7,414 | 1.7 | 11,814 | 2.1 | 59.3 |

¹Total includes other fields not shown.

²Other academic includes area, ethnic, and cultural studies; biological/life sciences; English language and literature/letters; foreign languages and literatures; mathematics; philosophy and religion; physical sciences; psychology; and social sciences and history. Each field accounted for less than 1 percent of the total associate's degrees conferred in each year.

SOURCE: U.S. Department of Education, NCES. (2002). *Digest of Education Statistics 2001* (NCES 2002–130). Data from U.S. Department of Education, NCES. Integrated Postsecondary Education Data System (IPEDS), "Completions" surveys.

FOR MORE INFORMATION:
Supplemental Tables 36-1,
36-2





Learning Opportunities

Perceived Impact of Work on Postsecondary Learning

Undergraduates who work but identify themselves primarily as students are more likely to report that working negatively affects their academic performance as the number of hours worked per week increases.

Eighty percent of undergraduates at 4- and less-than-4-year institutions worked during the 1999–2000 school year: 48 percent of undergraduates identified themselves primarily as students working to meet school expenses and 32 percent as employees who decided to enroll in school. The remaining 20 percent of undergraduates did not work. Students who identified themselves as working to meet expenses worked an average of 26 hours per week, whereas those who considered themselves to be employees worked an average of 40 hours per week (see supplemental table 37-1).

Working can pay for or help offset some costs of schooling, but working can also limit students' opportunities to learn and have a negative effect on their grades. As the number of hours worked per week increased for those who identified themselves as primarily students, so did the likelihood of students indicating that work had a negative impact on their academic performance and that it limited their number of classes, class schedule, access to the library, and class choice. As an illustration, among students working to help pay for school expenses, 16

percent of those working 1 to 15 hours per week in 1999–2000 indicated that working had a negative effect on their grades. Thirty percent of students who worked 16 to 20 hours a week said the same, as did close to half of those who worked 35 or more hours (48 percent).

Of those who considered themselves primarily students, the percentage borrowing to pay for their education decreased as the number of hours worked per week increased. Almost half of students who worked 1 to 15 hours per week borrowed (49 percent), compared with 32 percent of students who worked 35 or more hours. Thus, students appear to be working as a substitute for borrowing.

Other research (NCES 98–088) has found a negative relationship between hours worked and persistence. Consequently, students must find an appropriate balance between working and studying. While borrowing to pay for education can leave students with a large debt, working long hours reduces the amount of time students have for studying and may decrease the likelihood that these students will finish their postsecondary education.

NOTE: Includes students at 4- and less-than-4-year institutions.

SOURCE: U.S. Department of Education, NCES, National Postsecondary Student Aid Study (NPSAS:2000).

EFFECTS OF WORKING: Among undergraduates who considered themselves primarily students but worked to help pay for school expenses, the percentage reporting various effects of work on their schooling and the percentage who borrowed, by average hours worked per week: 1999–2000

| Hours worked per week | Effects of working | | | | | |
|-----------------------|---------------------------|------------------------|---------------------------|----------------------|---------------------------|-------------------------------|
| | Limited number of classes | Limited class schedule | Limited access to library | Reduced class choice | Negative effect on grades | Borrowed to pay for education |
| Total | 38.6 | 46.1 | 30.1 | 32.9 | 34.6 | 39.4 |
| 1–15 | 14.5 | 19.6 | 12.2 | 12.1 | 16.2 | 48.8 |
| 16–20 | 29.0 | 37.4 | 23.3 | 25.6 | 30.2 | 41.3 |
| 21–34 | 41.3 | 50.7 | 32.4 | 35.7 | 39.9 | 37.8 |
| 35 or more | 63.3 | 70.0 | 47.9 | 53.0 | 47.9 | 31.7 |



FOR MORE INFORMATION:
Supplemental Note 1
Supplemental Table 37-1
NCES 98–084,
NCES 98–088

Learning Opportunities

Student Participation in Distance Education

Despite the proliferation of distance education offerings, fewer than one in 10 undergraduates enroll in these classes.

Enrollments, course offerings, and availability of distance education increased rapidly during the 1990s. The percentage of 2- and 4-year institutions offering distance education classes rose from 33 to 44 percent between fall 1995 and 1997, and the number of such classes nearly doubled (NCES 2000–013). One-fifth of the nation's 2- and 4-year institutions also planned to start offering distance education courses between 1998 and 2001.

Despite the expansion of distance education offerings, 8 percent of undergraduates and 12 percent of master's students enrolled in such classes at postsecondary institutions in 1999–2000. A higher percentage of students at public 2-year colleges than at 4-year institutions participated in distance education classes (9 versus 7 percent). Of the undergraduates who participated, more used the Internet (60 percent) than live audio or television (37 percent) or prerecorded audio or television (39 percent). Similarly, more master's students who participated in distance education classes used the Internet than live or prerecorded audio or television (68 percent versus 45 and 29 percent,

respectively). Among students who participated in distance education classes, master's students were more likely than undergraduates to report that their entire program was available through distance education. Finally, among students who participated, a higher proportion of both undergraduate and master's students were less satisfied than more satisfied with the quality of instruction they received in their distance education classes compared with their regular classes (see supplemental tables 38-1 and 38-2).

Among undergraduates, females (9 percent) were more likely than males (7 percent) to participate in distance education, as were students over age 24 than younger students and students who worked part time than students who worked full time (although some of these characteristics may be interrelated). Undergraduates who considered themselves “employees who study” were more likely to participate than students who considered themselves either “students who work” or “students who do not work” (see supplemental table 38-1).

DISTANCE EDUCATION PARTICIPATION: Percentage of undergraduates who participated in distance education classes at postsecondary institutions, and percentage of participants with various experiences with distance education: 1999–2000

| Distance education characteristics | Total | 2-year public | 4-year | | |
|-------------------------------------------------------------------------------------|-------|---------------|--------|--------|------------------------|
| | | | Total | Public | Private not-for-profit |
| Total percentage participating ¹ | 7.6 | 9.0 | 6.6 | 6.9 | 6.1 |
| Percentage of participants ² | | | | | |
| Type of distance education ³ | | | | | |
| Live TV/audio | 37.3 | 39.3 | 34.1 | 36.6 | 27.5 |
| Prerecorded audio/TV | 39.3 | 43.8 | 33.2 | 31.5 | 37.7 |
| Internet | 60.1 | 56.4 | 64.3 | 61.6 | 71.5 |
| Entire program available through distance education | 29.0 | 28.8 | 27.8 | 27.1 | 29.8 |
| Level of satisfaction with distance education classes compared with regular classes | | | | | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| More satisfied | 22.6 | 24.0 | 19.9 | 20.2 | 19.1 |
| Equally satisfied | 47.1 | 45.1 | 51.2 | 51.1 | 51.6 |
| Less satisfied | 29.6 | 30.0 | 28.2 | 28.2 | 28.1 |

¹Denominator is total undergraduate population.

²The denominator in the rows below is the number of undergraduate students who participated in distance education classes.

³Type of distance education categories are not mutually exclusive.

NOTE: Includes students who participated in distance education at either the institution at which they were enrolled or both the institution at which they were enrolled and another institution. Students who participated in distance education only at an institution other than the one at which they were primarily enrolled were excluded. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES, National Postsecondary Student Aid Study (NPSAS:2000).

FOR MORE INFORMATION:
Supplemental Tables 38-1,
38-2

NCES 98–062,
NCES 2000–013





Faculty

Status of Women and Minority Faculty

During the 1990s, women advanced their faculty status, including salary. At the end of the decade, however, a gap in salary between male and female faculty remained.

Between 1992 and 1998, full-time female faculty increased their representation in public doctoral, research, and medical institutions. In addition, greater percentages of full-time female faculty held the rank of full professor and a doctoral or first-professional degree in 1998 than in 1992. The average base salary for full-time female faculty increased from \$45,580 in 1992 (in constant 1998 dollars) to \$48,370 in 1998, whereas the average base salary for full-time male faculty remained about the same.

Despite the improvement for female faculty, a salary gap between male and female faculty remains. Full-time male faculty earned about \$13,000 more than their female colleagues in 1998. This difference may be attributed to the fact that males are more likely than females to have characteristics associated with higher pay. In 1998, males were more likely than females to work at public doctoral, research, and medical institutions, be full professors, have tenure, and hold doctoral or first-professional degrees. Nonetheless, even if these and other salary-related characteristics—including age, field, level of students taught, experience, courseload, time engaged in teaching and research activities, and

number of recent publications—had been the same for males and females, full-time female faculty would have earned about \$5,000 less than their male colleagues in 1998 (see supplemental table 39-1).

With respect to race/ethnicity, there were some apparent changes in faculty status and salaries for some groups between 1992 and 1998, but none of these changes were statistically significant. However, some racial/ethnic differences existed in 1998. Compared with White faculty, Asian/Pacific Islander faculty had higher average salaries, were more likely to hold advanced degrees, and had greater representation at public doctoral, research, and medical institutions. Black faculty had lower average salaries and were less likely to have advanced degrees or attain tenure or full professorship than White faculty.

Some of the salary differences for faculty from various racial/ethnic backgrounds may be explained by differences in the faculty characteristics described above. After controlling for these characteristics, there were no statistically significant differences in average salaries across racial/ethnic groups (see supplemental table 39-1).

¹For more information about the classification of postsecondary institutions, see *Supplemental Note 9*.

²In 1992, respondents did not have the option of selecting more than one racial category, while in 1998 they did. See *Supplemental Note 1* for more information.

NOTE: The analysis includes only full-time instructional faculty and staff at Title IV degree-granting institutions who had some instructional duties for credit. Instructional duties include teaching one or more classes for credit or advising or supervising students' academic activities. Base salary estimates for faculty in 1992 were adjusted to constant 1998 dollars using the Consumer Price Index.

SOURCE: U.S. Department of Education, NCES. National Study of Postsecondary Faculty (NSOPF:1993 and NSOPF:1999).

STATUS OF WOMEN AND MINORITY FACULTY: Percentage of full-time instructional faculty and staff having selected characteristics and their average base salary (in constant 1998 dollars), by sex and race/ethnicity: Fall 1992 and 1998

| Faculty characteristics | Percentage of all full-time instructional faculty and staff who: | | | | | | | | Average base salary of full-time instructional faculty and staff | |
|-----------------------------------|----------------------------------------------------------------------------|------|----------------------------|------|------------|------|----------------------------------------------|------|------------------------------------------------------------------|----------|
| | Taught at public doctoral, research, and medical institutions ¹ | | Ranked as a full professor | | Had tenure | | Had a doctorate or first-professional degree | | 1992 | 1998 |
| | 1992 | 1998 | 1992 | 1998 | 1992 | 1998 | 1992 | 1998 | | |
| Total | 31.9 | 34.9 | 30.4 | 30.7 | 54.2 | 53.1 | 65.1 | 67.0 | \$56,240 | \$56,850 |
| Sex | | | | | | | | | | |
| Male | 35.5 | 38.0 | 37.9 | 38.2 | 61.3 | 59.7 | 72.9 | 74.2 | 61,540 | 61,680 |
| Female | 24.7 | 29.4 | 15.2 | 17.6 | 39.7 | 41.6 | 49.6 | 54.3 | 45,580 | 48,370 |
| Race/ethnicity² | | | | | | | | | | |
| White | 32.1 | 34.8 | 31.5 | 32.2 | 55.6 | 54.3 | 65.2 | 66.6 | 56,450 | 57,000 |
| Black | 20.3 | 23.2 | 19.6 | 17.5 | 43.5 | 43.9 | 53.2 | 57.5 | 48,410 | 50,360 |
| Asian/Pacific Islander | 40.6 | 46.8 | 28.1 | 25.9 | 47.1 | 49.1 | 79.3 | 84.5 | 62,770 | 62,800 |
| Hispanic | 32.3 | 34.8 | 21.7 | 25.3 | 44.9 | 48.5 | 63.2 | 64.0 | 50,120 | 54,370 |
| American Indian/ Alaska Native | 21.7 | 34.2 | 16.1 | 17.8 | 43.0 | 29.4 | 48.1 | 53.2 | 63,990 | 48,090 |



FOR MORE INFORMATION:
Supplemental Notes 1, 9, 14
Supplemental Table 39-1
NCES 2002-170

Section 6

Societal Support for Learning





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Summary: Societal Support for Learning

This section looks at the contributions, both financial and otherwise, that society and its members—individuals, families, employers, and other organizations outside of school—make to support education. Thus, this section explores traditional issues about financial support for education as well as issues about the amount of time and attention parents devote to their children's learning; the degree of support that exists in the community, workplace, and other settings for learning; and the consistency of cultural messages about the value of knowledge and learning.

Traditional issues about financial support focus on the amount of funding for education and use school finance data (in particular school expenditures) as one measure of social support for education. Debate exists among education researchers as to the effect of differences in funding on school performance or student outcomes. There is no debate, however, that there are marked differences in funding—in “how,” “to whom,” “from whom,” and “how many” dollars are distributed among public and private educational institutions. The finance indicators in this section measure these types of differences and look at the relationships between these differences and certain aspects of communities (e.g., region, poverty rates, and types of families residing in the commu-

nity) as well as certain student populations (e.g., children in certain categories of concern, such as minority status, poverty status, and other at-risk factors).

One consideration in the section is how revenues from public and private sources are distributed among public and private institutions in the education system at the elementary/secondary and postsecondary levels. For example, the tuition paid by college students to attend a public college or university is a private investment being made by the student, or the student's family, in education that is delivered by a public institution. The sum of this and many other allocation mechanisms determines the extent to which postsecondary education is publicly or privately funded and delivered by public or private institutions.

The resources and support that children receive outside of school from individuals, families, and other organizations can complement, reinforce, and add to their school or college learning experiences. Unfavorable conditions at home, school, or in the community may hamper children's ability to learn in school. Comparisons by family characteristics, such as the level of family income or parental education, help illustrate the relationship between family background and support for their child's learning.



Community Support

Parents' Attitudes Toward Schools

In 1999, half of all children in grades 3–12 had parents who reported that they were “very satisfied” with their child’s school, their child’s teachers, the school’s academic standards, and the school’s order and discipline.

Parents’ opinions of their children’s schools provide an indicator of the perceived relative health of U.S. education. Examining parents’ level of satisfaction with schools can help to define perceived problems within America’s schools.

The percentage of children in grades 3–12 with parents who reported they were “very satisfied” with their child’s school decreased from 56 percent in 1993 to 53 percent in 1999. In contrast, the percentage of those with parents who reported they were very satisfied with their child’s teachers, the school’s academic standards, and the school’s order and discipline remained similar (see supplemental table 40-1).

In 1993, the percentage of children with parents who were very satisfied with their child’s school, the school’s academic standards, and the school’s order and discipline was higher as household income increased. This relationship was not evident in 1999. The percent-

age of children with parents who were very satisfied with these three areas in 1999 was higher for those with the highest and lowest family income levels than for those at the middle income levels.

In 1993, Black children in grades 3–12 were less likely than their White peers to have parents who reported that they were very satisfied with their child’s school, child’s teachers, the school’s academic standards, and the school’s order and discipline. However, between 1993 and 1999, the percentages of White children with parents who reported being very satisfied decreased, while the percentages of Black children with very satisfied parents remained similar. Due to these changes, the percentages of White and Black children with very satisfied parents were similar in 1999. Among all racial/ethnic groups in 1999, Hispanic children had the highest percentage of parents who were very satisfied with the four areas assessed (see supplemental table 40-1).

NOTE: The categories for family income are current dollars, which have not been adjusted for inflation. Caution should be exercised in comparing satisfaction levels between 1993 and 1999. Data include both public and private school students in grades 3–12.

SOURCE: U.S. Department of Education, NCES, National Household Education Surveys Program (NHES), “School Safety and Discipline” survey, 1993 and “Parent Interview” survey, 1999.

ATTITUDES TOWARD SCHOOL: Percentage of children in grades 3–12 whose parents were very satisfied with their schools, by family income: 1993 and 1999



FOR MORE INFORMATION:
Supplemental Note 1
Supplemental Table 40-1



Public Financial Support

International Comparisons of Expenditures for Education

U.S. expenditures on primary and secondary education rank high compared with the expenditures of other countries. U.S. spending on postsecondary education is the highest of all the OECD countries.

A country's investment in education can be measured by its per student expenditures for education from both public and private sources, expressed in absolute terms. When making international comparisons of expenditures for education from both public and private sources, it is also useful to measure expenditures as a percentage of gross domestic product (GDP). Doing so allows a cross-national comparison of expenditures relative to countries' abilities to finance education.

There is a positive relationship between per student expenditures at all levels of education and GDP per capita (OECD 2001). In 1998, wealthier countries, on average, spent more per student for primary, secondary, and postsecondary education than did less wealthy countries as measured by GDP per capita. Annual expenditures per student at the primary level among members of the OECD ranged from \$863 in Mexico to \$6,713 in Denmark. At the secondary level, the range was from \$1,438 in Poland to \$9,348 in Switzerland. U.S. spending on primary and secondary education ranked high compared with the OECD countries, \$6,043 and \$7,764 at the primary and secondary levels, respectively. Only Austria and Switzerland spent more per student than the United States at both the primary and secondary levels. Denmark also spent more per student than the United States at the primary level (see supplemental table 41-1).

In relative terms, the percentage of GDP spent on primary education ranged from 0.7 percent in Germany to 2.3 percent in Poland. The United States spent 1.7 percent of GDP at the primary level, the same percentage as Mexico and Switzerland and a lower percentage than that of only Denmark, Poland, and Sweden (1.8, 2.3, and 2.1 percent, respectively). At the secondary level, relative expenditures varied as well (from 1.1 percent in Poland to 3.2 percent in Austria). The United States spent 2.0 percent of GDP at this level, a lower percentage than that of 13 OECD countries and a slightly lower percentage than the OECD average (2.2 percent).

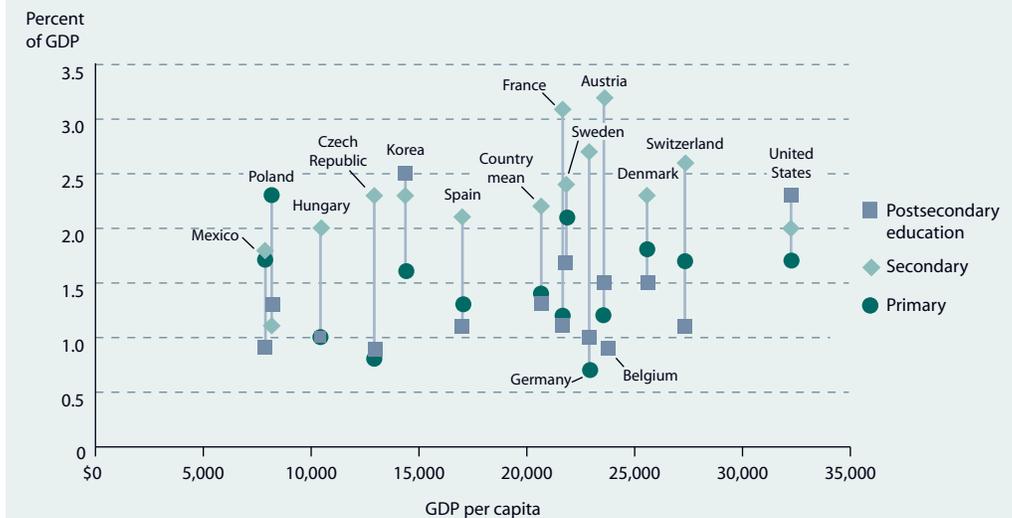
Expenditures per student for postsecondary education varied considerably among the OECD countries in 1998 although variations in the duration and intensity of postsecondary education among countries make comparisons difficult (OECD 2001). At \$19,802 per student, U.S. expenditures were higher than those of any other OECD country and more than twice those of 16 OECD countries. Among other OECD countries, expenditures ranged from \$3,800 in Mexico to \$16,563 in Switzerland. In relative terms, the United States and Korea spent 2.3 and 2.5 percent, respectively, of their GDP on postsecondary education. Canada, Finland, Iceland and Sweden also had high spending levels, with 1.7 percent or more of GDP devoted to postsecondary education.



INTERNATIONAL EXPENDITURES FOR EDUCATION: Educational expenditures per student in relation to GDP per capita, by level of education for selected OECD countries: 1998



INTERNATIONAL EXPENDITURES FOR EDUCATION: Educational expenditures as a percentage of GDP, by GDP per capita and level of education for selected OECD countries: 1998



NOTE: Per student expenditures are calculated based on public and private full-time-equivalent (FTE) enrollment figures and expenditures from both public and private sources where data are available. Purchasing Power Parity (PPP) indices are used to convert other currencies to U.S. dollars. Within-country consumer price indices are used to adjust the PPP indices to account for inflation because the fiscal year has a different starting date in different countries.

SOURCE: Organization for Economic Cooperation and Development, Center for Educational Research and Innovation. (2001). *Education at a Glance: OECD Indicators, 2001*.



FOR MORE INFORMATION:
 Supplemental Note 7
 Supplemental Table 41-1
 OECD 2001



Public Financial Support

Public Effort to Fund Education

At the elementary and secondary education level, public revenue per student has increased since the mid-1970s. At the postsecondary level, public revenue per student has fluctuated within a narrow band without showing a consistent increase since the mid-1970s.

Public support for education can be assessed by measuring the level of public investment per student and the collective effort in the aggregate. This indicator discusses both measures, using public revenue per student as an index of average public resources available to support students, and total public revenue for education as a percentage of total personal income as an index of collective effort. The second index can be interpreted either as a measure of the financial responsibility borne by the public to provide for education or as a measure of *affordability* that gauges how much investment per student the public provides relative to its capacity to make such support available (see *Supplemental Note 13*).

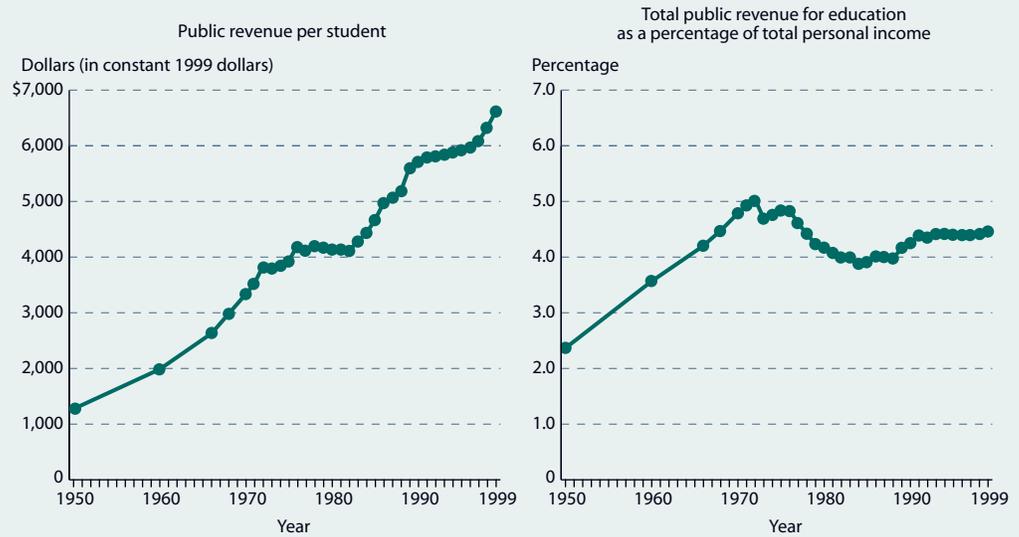
Public revenue per student at the elementary/secondary level has generally increased between 1950 and 1999. This reflects the generally greater increase in total public revenue in inflation-adjusted dollars for elementary/secondary education than in enrollments between 1950 and 1999. These changes in public revenue per student have not coincided with the patterns in the index of collective effort for elementary/secondary education. Public revenue for elementary/secondary education as a percentage of total personal income increased from 1950 until the first half of the 1970s. This percentage then generally declined until the late 1980s, recovered some of its value through the early 1990s, and remained relatively constant through 1999 (see supplemental tables 42-1 and 42-2).

The patterns in public revenue per student for postsecondary education between 1950 and 1996 differ from those for elementary/secondary education. After rising from 1950 to the mid-1970s, public revenue per student has fluctuated within a relatively narrow band of values ranging from \$3,200 to \$4,000 (see supplemental table 42-1). The lack of a consistent increase in public revenues per student since the mid-1970s has coincided in part with a general increase in private effort. Between 1980 and 1996, tuition and fees charged to students by public degree-granting institutions increased their share of total current fund revenues from 13 to 19 percent, while state appropriations as a share of total current fund revenue for public degree-granting institutions decreased from 45 to 33 percent (see supplemental table 42-3).

After showing an increasing trend from 1950 to the mid-1970s, public revenue for postsecondary education as a percentage of total personal income generally declined until 1996. The decrease in the index was mostly brought about by differing growth patterns for its components: between 1976 and 1996, total personal income increased in all but 2 years, while total public revenue for postsecondary education actually declined in 10 of these years. In fact, the latter effect has been more apparent since the 1990s, with public revenue for postsecondary education declining in 5 of the 7 years between 1990 and 1996 (see supplemental tables 42-1 and 42-2).



PUBLIC FINANCIAL SUPPORT: Indicators of public effort to fund elementary and secondary education: Selected years 1950–99



PUBLIC FINANCIAL SUPPORT: Indicators of public effort to fund postsecondary education: Selected years 1950–99



NOTE: Public funds for postsecondary education may be used at many types of institutions, both publicly and privately controlled. Enrollment in both publicly and privately controlled institutions is included. For more information about the calculation of the indexes, see *Supplemental Note 13*. All values for total public revenue for education at both the elementary and secondary and postsecondary levels are in 1999 constant dollars. See *Supplemental Note 13* for information on the Consumer Price Index (CPI).

SOURCE: U.S. Department of Education, NCES. (2002). *Digest of Education Statistics 2001* (NCES 2002-134); (2001) *Digest of Education Statistics 2000* (NCES 2001-034); (various years: 1964–1997) *Digest of Education Statistics*; (1993) *120 Years of American Education: A Statistical Portrait* (NCES 93-442).



FOR MORE INFORMATION:
 Supplemental Note 13
 Supplemental Tables 42-1,
 42-2, 42-3



Public Financial Support

Change in Public School Revenue Sources

Traditional differences in the proportion of local funding to state and federal funding generally persist across the United States, though changes have occurred in the West and Midwest.

Local funding and control of public education may be seen as essential to maintaining public commitment to local schools and ensuring that education reflects community values and aspirations. Moreover, the more local funding a school district receives, the less vulnerable it is to funding shortfalls during economic recessions because local property taxes are relatively stable compared with sales and income taxes, which states generally rely upon to fund school districts (Monk and Brent 1997). However, reliance on local funding can lead to inequities in the financing of education because of differences in local wealth. Over the years, these conflicting factors and concerns have resulted in different proportions of state and local funding among the states.

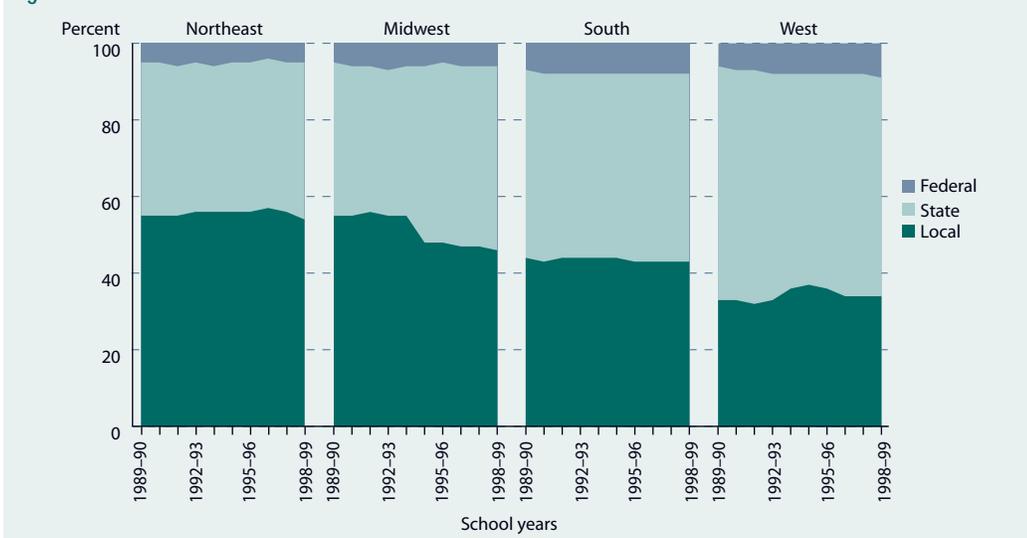
The proportion of total revenue from local sources decreased slightly between 1989–90 and 1998–99 (from 47 to 44 percent) (see supplemental table 43-1). The proportion of revenue from federal and state sources increased slightly during this period (from 6 to 7

percent and from 47 to 49 percent, respectively).

Increases in the proportion of revenue from local sources occurred between 1989–90 and 1998–99 in the West, where schools have historically relied more on state than local funding. The only substantial decrease in local funding occurred in the Midwest, where local funding dropped from 55 percent in 1993–94 to 48 percent in 1994–95 and has remained at the lower level since then. This decrease coincides with a reduction of the local property tax in Michigan. The decrease in local funding in the Midwest was also accompanied by a large increase in state funding.

In the Northeast and South, no shifts in funding were observed. Historic funding differences, whereby the Northeast relied to a greater degree on local funding than the South and West, persisted.

CHANGE IN REVENUE SOURCES: Percentage distribution of total revenues for public elementary and secondary schools, by region and revenue source: 1989–90 to 1998–99



NOTE: Supplemental Note 1 identifies the states in each region and Supplemental Note 13 provides information on the Consumer Price Index (CPI). See Supplemental Note 13 for more information on revenue types.

SOURCE: U.S. Department of Education, NCES, Common Core of Data (CCD), National Public Education Financial Survey Data, 1989–90 to 1998–99.

FOR MORE INFORMATION:
Supplemental Notes 1, 13
Supplemental Table 43-1
NCES 98–210; Monk and
Brent 1997





Private Financial Support

Net Price of College Attendance

One definition of the “net price” of college attendance is the amount that students pay with their own or borrowed funds after taking any grants received into account. Net price varies by the type of institution students attend and by family income.

The price of college attendance, including tuition and fees, room and board, books, and other expenses, can affect a student’s access to college. Some students receive grants from federal, state, institutional, or private sources to help pay these expenses (see supplemental table 44-1). Students are responsible for the difference between the total price of attendance and grants, which is called the “net price.” Students cover this amount with their own financial resources, help from their families, or borrowing.

The price of attendance for dependent, full-time, full-year undergraduates varies by type of institution. In 1999–2000, the average price of attendance was \$24,600 at private not-for-profit 4-year institutions, compared with \$12,500 at public 4-year institutions and \$8,600 at public 2-year institutions. The average net price of attendance—total price reduced by any grant aid—was \$17,800 at private not-

for-profit 4-year institutions, \$10,600 at public 4-year institutions, and \$7,600 at public 2-year institutions. Grants are generally need based, so taking into account total price and family financial resources, the net price of attendance is less for low- and lower middle-income students than for upper middle- and high-income students at public or private 4-year institutions.

Among other strategies, students can use loans and employment to pay the net price. The average amount that students borrowed in 1999–2000 ranged from \$3,600 at private not-for-profit 4-year institutions, \$2,000 at public 4-year institutions, and about \$400 at public 2-year institutions. On average, students from private not-for-profit 4-year institutions and students from public 2-year institutions contributed the most from earnings and students from public 4-year institutions, the least.

NOTE: Limited to students who attended only one institution. Averages include zero values. Table entries are rounded to the nearest \$100. Income categories are described in *Supplemental Note 12*. In 1999–2000, 49 percent of all undergraduates were considered financially dependent for financial aid purposes, and 58 percent of dependent students were enrolled full time, full year.

SOURCE: U.S. Department of Education, NCES, National Postsecondary Student Aid Study (NPSAS:2000).

PRICE OF ATTENDING AND AID: Average price of college attendance and student financial aid for dependent full-time, full-year undergraduates, by type of institution and family income: Academic year 1999–2000

| Type of institution and family income | Tuition/fees | Total price | Grants | Net price | Student loans | Student earnings |
|---------------------------------------|----------------|-----------------|----------------|-----------------|----------------|------------------|
| Total | \$7,100 | \$15,100 | \$3,100 | \$12,000 | \$2,200 | \$3,700 |
| Public 4-year | 4,400 | 12,500 | 1,900 | 10,600 | 2,000 | 3,500 |
| Low income | 3,900 | 11,800 | 3,900 | 7,900 | 2,300 | 3,700 |
| Lower middle | 4,200 | 12,200 | 2,000 | 10,200 | 2,200 | 3,700 |
| Upper middle | 4,500 | 12,700 | 1,200 | 11,500 | 2,200 | 3,800 |
| High income | 4,900 | 13,200 | 1,000 | 12,200 | 1,400 | 3,100 |
| Private not-for-profit 4-year | 16,100 | 24,600 | 6,800 | 17,800 | 3,600 | 5,300 |
| Low income | 13,200 | 20,900 | 8,700 | 12,200 | 4,000 | 4,600 |
| Lower middle | 15,700 | 24,300 | 8,100 | 16,200 | 4,100 | 5,300 |
| Upper middle | 16,400 | 25,000 | 7,000 | 17,900 | 4,000 | 5,900 |
| High income | 18,000 | 26,800 | 4,500 | 22,300 | 2,700 | 6,200 |
| Public 2-year | 1,600 | 8,600 | 1,000 | 7,600 | 400 | 5,700 |
| Low income | 1,600 | 8,400 | 2,300 | 6,100 | 400 | 4,900 |
| Lower middle | 1,800 | 8,700 | 700 | 8,000 | 600 | 6,300 |
| Upper middle | 1,700 | 8,700 | 400 | 8,300 | 300 | 5,200 |
| High income | 1,500 | 8,700 | 300 | 8,400 | 200 | 6,800 |



FOR MORE INFORMATION:
Supplemental Notes 9, 12
Supplemental Table 44-1

Appendix 1

Supplemental Tables





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Enrollment in Early Childhood Education Programs

Table 1-1 Percentage of children ages 3–5 who were enrolled in center-based early childhood care and education programs, by child and family characteristics: Selected years 1991–2001

| Characteristic | 1991 | 1993 | 1995 | 1996 | 1999 | 2001 |
|----------------------------------------------|------|------|------|------|------|------|
| Total* | 52.8 | 52.7 | 55.1 | 55.0 | 59.7 | 56.4 |
| Age | | | | | | |
| 3 | 42.3 | 40.4 | 40.7 | 42.1 | 45.7 | 43.0 |
| 4 | 60.4 | 62.2 | 64.7 | 63.2 | 69.6 | 66.2 |
| 5 | 63.9 | 65.7 | 74.5 | 72.8 | 76.5 | 72.8 |
| Sex | | | | | | |
| Male | 52.4 | 52.5 | 55.0 | 55.0 | 60.8 | 53.6 |
| Female | 53.2 | 52.9 | 55.2 | 54.9 | 58.6 | 59.2 |
| Race/ethnicity | | | | | | |
| White | 54.0 | 53.5 | 56.9 | 57.1 | 60.0 | 59.0 |
| Black | 58.3 | 57.3 | 59.5 | 64.7 | 73.2 | 63.7 |
| Hispanic | 38.8 | 42.8 | 37.4 | 39.4 | 44.2 | 39.8 |
| Poverty status | | | | | | |
| Below poverty | 44.2 | 43.3 | 45.1 | 43.8 | 51.4 | 46.7 |
| At or above poverty | 55.7 | 56.0 | 58.8 | 59.1 | 62.3 | 59.1 |
| Poverty status and race/ethnicity | | | | | | |
| Below poverty | | | | | | |
| White | 41.0 | 39.6 | 43.4 | 39.4 | 43.2 | 46.1 |
| Black | 55.4 | 53.2 | 54.9 | 60.9 | 72.2 | 60.1 |
| Hispanic | 34.4 | 37.2 | 30.1 | 32.6 | 41.2 | 36.2 |
| At or above poverty | | | | | | |
| White | 56.4 | 56.0 | 59.6 | 60.3 | 62.6 | 60.8 |
| Black | 61.8 | 62.6 | 66.1 | 69.0 | 74.1 | 66.2 |
| Hispanic | 42.2 | 48.1 | 43.8 | 45.1 | 46.8 | 42.4 |
| Family type | | | | | | |
| Two parents | 53.7 | 52.1 | 54.9 | 53.8 | 58.8 | 56.5 |
| One or no parent | 49.7 | 54.2 | 55.6 | 57.9 | 61.9 | 56.1 |
| Mother's education | | | | | | |
| Less than high school | 31.5 | 33.1 | 34.8 | 37.3 | 40.3 | 38.3 |
| High school diploma or equivalent | 45.8 | 43.2 | 47.6 | 49.0 | 51.7 | 47.1 |
| Some college, including vocational/technical | 60.2 | 60.3 | 56.8 | 57.8 | 62.9 | 62.0 |
| Bachelor's degree or higher | 71.9 | 73.4 | 74.5 | 73.0 | 73.9 | 69.5 |
| Mother's employment status | | | | | | |
| Worked 35 hours or more per week | 59.3 | 61.3 | 60.2 | 63.1 | 64.8 | 62.9 |
| Worked less than 35 hours per week | 58.0 | 56.7 | 62.1 | 64.4 | 64.0 | 61.4 |
| Looking for work | 43.2 | 48.1 | 51.8 | 46.9 | 54.6 | 46.9 |
| Not in labor force | 45.3 | 44.2 | 46.5 | 43.1 | 52.2 | 46.8 |

*Children from racial/ethnic groups other than White, Black, and Hispanic are included in the totals but not shown separately.

NOTE: Estimates are based on children who had not entered kindergarten. Center-based programs include day care centers, Head Start, preschool, nursery school, prekindergarten, and other early childhood programs. Children without mothers in the home are not included in estimates concerning mother's education or mother's employment status.

SOURCE: U.S. Department of Education, NCES. National Household Education Surveys Program (NHES), "Parent Interview" survey, various years.

Past and Projected Elementary and Secondary School Enrollments

Table 2-1 Public elementary and secondary school enrollment in grades K–12 (in thousands), by grade level, with projections: Fall 1965–2011

| Fall of year | Total | Grades K–8 | Grades 9–12 |
|--------------|--------|------------------|-------------|
| 1965 | 42,173 | 30,563 | 11,610 |
| 1970 | 45,894 | 32,558 | 13,336 |
| 1975 | 44,819 | 30,515 | 14,304 |
| 1980 | 40,877 | 27,647 | 13,231 |
| 1985 | 39,422 | 27,034 | 12,388 |
| 1990 | 41,217 | 29,878 | 11,338 |
| 1991 | 42,047 | 30,506 | 11,541 |
| 1992 | 42,823 | 31,088 | 11,735 |
| 1993 | 43,465 | 31,504 | 11,961 |
| 1994 | 44,111 | 31,898 | 12,213 |
| 1995 | 44,840 | 32,341 | 12,500 |
| 1996 | 45,611 | 32,764 | 12,847 |
| 1997 | 46,127 | 33,073 | 13,054 |
| 1998 | 46,539 | 33,346 | 13,193 |
| 1999 | 46,857 | 33,488 | 13,369 |
| | | Projected | |
| 2000 | 47,051 | 33,545 | 13,506 |
| 2001 | 47,213 | 33,587 | 13,626 |
| 2002 | 47,358 | 33,574 | 13,784 |
| 2003 | 47,432 | 33,475 | 13,957 |
| 2004 | 47,494 | 33,276 | 14,218 |
| 2005 | 47,536 | 33,091 | 14,445 |
| 2006 | 47,515 | 32,947 | 14,569 |
| 2007 | 47,430 | 32,868 | 14,562 |
| 2008 | 47,286 | 32,860 | 14,426 |
| 2009 | 47,178 | 32,913 | 14,265 |
| 2010 | 47,131 | 33,034 | 14,096 |
| 2011 | 47,170 | 33,179 | 13,991 |

NOTE: Includes most kindergarten and some nursery school enrollment. Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, NCES. Common Core of Data (CCD), various years, and (2001) *Projections of Education Statistics to 2011* (NCES 2001–083).

Past and Projected Elementary and Secondary School Enrollments

Table 2-3 Private elementary and secondary school enrollment (in thousands), by grade level and region: School years 1989–90 through 1999–2000

| School year | Total | Northeast | Midwest | South | West |
|--------------------|-------|-----------|---------|-------|------|
| Grades K–12 | | | | | |
| 1989–90 | 4,714 | 1,310 | 1,340 | 1,240 | 824 |
| 1991–92 | 4,783 | 1,280 | 1,335 | 1,276 | 892 |
| 1993–94 | 4,743 | 1,235 | 1,294 | 1,363 | 851 |
| 1995–96 | 4,920 | 1,245 | 1,329 | 1,416 | 930 |
| 1997–98 | 4,962 | 1,241 | 1,328 | 1,479 | 915 |
| 1999–2000 | 5,074 | 1,255 | 1,332 | 1,553 | 934 |
| Grades K–8 | | | | | |
| 1989–90 | 3,588 | 947 | 1,052 | 949 | 639 |
| 1991–92 | 3,657 | 935 | 1,059 | 974 | 689 |
| 1993–94 | 3,641 | 907 | 1,021 | 1,048 | 664 |
| 1995–96 | 3,760 | 911 | 1,042 | 1,086 | 721 |
| 1997–98 | 3,781 | 911 | 1,036 | 1,126 | 708 |
| 1999–2000 | 3,849 | 917 | 1,035 | 1,177 | 720 |
| Grades 9–12 | | | | | |
| 1989–90 | 1,126 | 362 | 288 | 291 | 185 |
| 1991–92 | 1,126 | 346 | 276 | 302 | 203 |
| 1993–94 | 1,102 | 328 | 273 | 315 | 186 |
| 1995–96 | 1,160 | 334 | 286 | 330 | 209 |
| 1997–98 | 1,181 | 330 | 292 | 353 | 206 |
| 1999–2000 | 1,225 | 338 | 297 | 375 | 214 |

NOTE: Estimates exclude ungraded students. Details may not add to totals due to rounding. *Supplemental Note 1* identifies the states in each region.

SOURCE: U.S. Department of Education, NCES. Private School Surveys (PSS), various years.

Racial/Ethnic Distribution of Public School Students

Table 3-1 Percentage distribution of public school students enrolled in grades K–12 who were minorities: October 1972–2000

| October | White | Minority enrollment | | | |
|---------|-------|---------------------|-------|----------|-------|
| | | Total | Black | Hispanic | Other |
| 1972 | 77.8 | 22.2 | 14.8 | 6.0 | 1.4 |
| 1973 | 78.1 | 21.9 | 14.7 | 5.7 | 1.4 |
| 1974 | 76.8 | 23.2 | 15.4 | 6.3 | 1.5 |
| 1975 | 76.2 | 23.8 | 15.4 | 6.7 | 1.7 |
| 1976 | 76.2 | 23.8 | 15.5 | 6.5 | 1.7 |
| 1977 | 76.1 | 23.9 | 15.8 | 6.2 | 1.9 |
| 1978 | 75.5 | 24.5 | 16.0 | 6.5 | 2.1 |
| 1979 | 75.8 | 24.2 | 15.7 | 6.6 | 1.9 |
| 1980 | 72.8 | 27.2 | 16.2 | 8.6 | 2.4 |
| 1981 | 72.4 | 27.6 | 16.0 | 8.7 | 2.9 |
| 1982 | 71.9 | 28.1 | 16.0 | 8.9 | 3.2 |
| 1983 | 71.3 | 28.7 | 16.1 | 9.2 | 3.4 |
| 1984 | 71.7 | 28.3 | 16.1 | 8.5 | 3.6 |
| 1985 | 69.6 | 30.4 | 16.8 | 10.1 | 3.5 |
| 1986 | 69.1 | 30.9 | 16.6 | 10.8 | 3.6 |
| 1987 | 68.5 | 31.5 | 16.6 | 10.8 | 4.0 |
| 1988 | 68.3 | 31.7 | 16.5 | 11.0 | 4.2 |
| 1989 | 68.0 | 32.0 | 16.6 | 11.4 | 4.0 |
| 1990 | 67.6 | 32.4 | 16.5 | 11.7 | 4.2 |
| 1991 | 67.1 | 32.9 | 16.8 | 11.8 | 4.2 |
| 1992 | 66.8 | 33.3 | 16.9 | 12.1 | 4.3 |
| 1993 | 67.0 | 33.0 | 16.6 | 12.1 | 4.3 |
| 1994 | 65.8 | 34.2 | 16.7 | 13.7 | 3.8 |
| 1995 | 65.5 | 34.5 | 16.9 | 14.1 | 3.5 |
| 1996 | 63.7 | 36.3 | 16.6 | 14.5 | 5.3 |
| 1997 | 63.0 | 37.0 | 16.9 | 14.9 | 5.1 |
| 1998 | 62.4 | 37.6 | 17.2 | 15.4 | 5.1 |
| 1999 | 61.9 | 38.1 | 16.5 | 16.2 | 5.5 |
| 2000 | 61.3 | 38.7 | 16.6 | 16.6 | 5.4 |

NOTE: Percentages may not add to 100.0 due to rounding. See *Supplemental Note 1* for information on the racial/ethnic categories.

SOURCE: U.S. Department of Commerce, Bureau of the Census. October Current Population Surveys, 1972–2000.

Racial/Ethnic Distribution of Public School Students

Table 3-2 Percentage distribution of public school students enrolled in grades K–12 who were minorities, by region: October 1972–2000

| October | White | Minority enrollment | | | | White | Total | Minority enrollment | | | |
|---------|-------|---------------------|-------|----------|-------|-------|-------|---------------------|----------|-------|--|
| | | Total | Black | Hispanic | Other | | | Black | Hispanic | Other | |
| | | Northeast | | | | | | Midwest | | | |
| 1972 | 81.4 | 18.6 | 12.4 | 5.5 | 0.7 | 87.5 | 12.5 | 10.6 | 1.5 | 0.3 | |
| 1973 | 81.3 | 18.7 | 12.5 | 5.5 | 0.7 | 87.7 | 12.3 | 10.6 | 1.2 | 0.5 | |
| 1974 | 81.1 | 18.9 | 12.7 | 5.5 | 0.7 | 86.6 | 13.4 | 11.2 | 1.6 | 0.7 | |
| 1975 | 80.0 | 20.0 | 13.3 | 6.1 | 0.7 | 86.2 | 13.8 | 11.7 | 1.6 | 0.5 | |
| 1976 | 79.3 | 20.7 | 12.7 | 6.3 | 1.7 | 86.9 | 13.1 | 11.2 | 1.5 | 0.4 | |
| 1977 | 80.4 | 19.6 | 12.6 | 5.8 | 1.3 | 85.7 | 14.3 | 11.8 | 1.7 | 0.8 | |
| 1978 | 79.9 | 20.1 | 13.6 | 5.7 | 0.8 | 85.9 | 14.1 | 11.2 | 1.7 | 1.2 | |
| 1979 | 78.5 | 21.5 | 15.0 | 6.0 | 0.5 | 86.8 | 13.2 | 10.3 | 1.8 | 1.1 | |
| 1980 | 78.0 | 22.0 | 13.5 | 6.8 | 1.6 | 83.8 | 16.2 | 12.9 | 1.7 | 1.5 | |
| 1981 | 76.5 | 23.5 | 13.3 | 8.2 | 2.0 | 84.4 | 15.6 | 12.1 | 1.9 | 1.6 | |
| 1982 | 76.1 | 23.9 | 13.4 | 8.3 | 2.3 | 84.6 | 15.4 | 11.8 | 1.8 | 1.7 | |
| 1983 | 76.3 | 23.7 | 13.8 | 7.9 | 2.0 | 83.6 | 16.4 | 12.5 | 2.1 | 1.8 | |
| 1984 | 76.8 | 23.2 | 13.2 | 7.1 | 2.9 | 82.2 | 17.8 | 13.7 | 2.3 | 1.8 | |
| 1985 | 74.1 | 25.9 | 13.4 | 10.4 | 2.1 | 79.7 | 20.3 | 14.7 | 3.2 | 2.3 | |
| 1986 | 73.8 | 26.2 | 13.3 | 10.7 | 2.2 | 81.8 | 18.2 | 13.0 | 3.4 | 1.8 | |
| 1987 | 74.2 | 25.8 | 13.1 | 9.5 | 3.3 | 80.7 | 19.3 | 13.8 | 3.1 | 2.4 | |
| 1988 | 74.6 | 25.4 | 13.9 | 8.6 | 2.9 | 79.7 | 20.3 | 14.8 | 3.3 | 2.2 | |
| 1989 | 73.8 | 26.2 | 14.1 | 9.1 | 3.0 | 80.5 | 19.5 | 13.8 | 3.4 | 2.2 | |
| 1990 | 73.3 | 26.7 | 13.2 | 10.1 | 3.3 | 81.7 | 18.4 | 13.2 | 2.7 | 2.5 | |
| 1991 | 72.9 | 27.1 | 14.0 | 9.9 | 3.2 | 81.6 | 18.4 | 13.0 | 2.9 | 2.5 | |
| 1992 | 71.9 | 28.1 | 14.7 | 9.8 | 3.6 | 81.5 | 18.5 | 13.2 | 2.7 | 2.6 | |
| 1993 | 72.2 | 27.8 | 15.2 | 8.8 | 3.8 | 80.8 | 19.2 | 13.4 | 3.6 | 2.2 | |
| 1994 | 72.3 | 27.7 | 13.8 | 10.8 | 3.1 | 78.1 | 21.9 | 14.9 | 4.7 | 2.3 | |
| 1995 | 70.7 | 29.3 | 14.7 | 11.6 | 2.9 | 79.3 | 20.7 | 13.9 | 4.5 | 2.3 | |
| 1996 | 68.2 | 31.8 | 15.9 | 12.1 | 3.7 | 79.9 | 20.1 | 12.8 | 4.4 | 2.9 | |
| 1997 | 67.7 | 32.3 | 16.1 | 12.3 | 3.8 | 79.3 | 20.7 | 13.3 | 4.5 | 2.9 | |
| 1998 | 67.9 | 32.1 | 14.9 | 13.4 | 3.7 | 78.4 | 21.6 | 13.4 | 4.9 | 3.3 | |
| 1999 | 68.2 | 31.8 | 14.1 | 13.0 | 4.7 | 76.0 | 24.0 | 14.1 | 5.9 | 4.0 | |
| 2000 | 68.1 | 31.9 | 15.5 | 11.4 | 5.0 | 76.3 | 23.7 | 15.3 | 5.5 | 2.8 | |

See footnotes at end of table.

Racial/Ethnic Distribution of Public School Students

Table 3-2 Percentage distribution of public school students enrolled in grades K–12 who were minorities, by region: October 1972–2000—Continued

| October | White | Minority enrollment | | | | White | Total | Minority enrollment | | | |
|---------|-------|---------------------|-------|----------|-------|-------|-------|---------------------|----------|-------|--|
| | | Total | Black | Hispanic | Other | | | Black | Hispanic | Other | |
| | | | South | | | | | West | | | |
| 1972 | 69.7 | 30.3 | 24.8 | 5.0 | 0.5 | 72.8 | 27.2 | 6.4 | 15.3 | 5.5 | |
| 1973 | 69.6 | 30.4 | 24.8 | 5.0 | 0.6 | 74.1 | 25.9 | 6.2 | 14.4 | 5.2 | |
| 1974 | 67.8 | 32.2 | 25.6 | 6.1 | 0.5 | 72.7 | 27.3 | 6.8 | 14.9 | 5.6 | |
| 1975 | 67.4 | 32.6 | 25.2 | 6.6 | 0.7 | 72.0 | 28.0 | 7.0 | 14.8 | 6.3 | |
| 1976 | 67.1 | 32.9 | 25.7 | 6.3 | 0.9 | 72.9 | 27.1 | 7.1 | 14.8 | 5.2 | |
| 1977 | 67.5 | 32.5 | 26.3 | 5.5 | 0.6 | 72.2 | 27.8 | 6.7 | 14.8 | 6.3 | |
| 1978 | 66.4 | 33.6 | 26.3 | 6.2 | 1.1 | 71.4 | 28.6 | 6.8 | 15.2 | 6.6 | |
| 1979 | 68.6 | 31.4 | 24.6 | 6.0 | 0.8 | 70.0 | 30.0 | 7.8 | 15.7 | 6.6 | |
| 1980 | 64.6 | 35.4 | 25.8 | 8.2 | 1.4 | 66.9 | 33.1 | 6.6 | 20.5 | 6.0 | |
| 1981 | 64.1 | 35.9 | 25.9 | 8.5 | 1.4 | 66.5 | 33.5 | 6.8 | 18.5 | 8.1 | |
| 1982 | 64.1 | 35.9 | 26.9 | 7.9 | 1.1 | 65.2 | 34.8 | 5.4 | 19.9 | 9.5 | |
| 1983 | 63.9 | 36.1 | 26.0 | 8.6 | 1.5 | 63.9 | 36.1 | 5.5 | 20.4 | 10.3 | |
| 1984 | 66.0 | 34.0 | 24.7 | 7.5 | 1.8 | 63.8 | 36.2 | 6.8 | 19.6 | 9.8 | |
| 1985 | 63.4 | 36.6 | 25.9 | 8.8 | 2.0 | 64.1 | 35.9 | 6.4 | 20.6 | 8.9 | |
| 1986 | 62.2 | 37.8 | 26.6 | 9.0 | 2.2 | 62.5 | 37.5 | 6.1 | 22.0 | 9.4 | |
| 1987 | 61.9 | 38.1 | 26.3 | 9.6 | 2.2 | 60.3 | 39.7 | 7.1 | 22.9 | 9.7 | |
| 1988 | 62.2 | 37.8 | 25.0 | 10.5 | 2.3 | 60.3 | 39.7 | 6.5 | 22.7 | 10.5 | |
| 1989 | 61.7 | 38.3 | 26.1 | 9.9 | 2.4 | 59.4 | 40.6 | 6.1 | 24.9 | 9.6 | |
| 1990 | 59.9 | 40.1 | 27.4 | 10.6 | 2.1 | 59.0 | 41.0 | 5.5 | 25.1 | 10.4 | |
| 1991 | 59.5 | 40.5 | 27.7 | 10.3 | 2.5 | 59.0 | 41.0 | 5.8 | 25.5 | 9.7 | |
| 1992 | 59.5 | 40.5 | 27.2 | 10.5 | 2.7 | 58.5 | 41.5 | 5.8 | 26.3 | 9.3 | |
| 1993 | 60.1 | 39.9 | 26.4 | 10.7 | 2.8 | 58.7 | 41.3 | 6.1 | 25.9 | 9.3 | |
| 1994 | 59.2 | 40.8 | 26.2 | 12.4 | 2.2 | 58.4 | 41.6 | 5.7 | 27.5 | 8.5 | |
| 1995 | 59.0 | 41.0 | 27.0 | 12.1 | 1.8 | 57.0 | 43.0 | 5.5 | 29.6 | 7.9 | |
| 1996 | 57.7 | 42.3 | 26.9 | 12.6 | 2.8 | 52.8 | 47.2 | 5.2 | 29.4 | 12.6 | |
| 1997 | 57.0 | 43.0 | 27.0 | 13.4 | 2.6 | 52.1 | 47.9 | 6.5 | 29.4 | 12.1 | |
| 1998 | 56.0 | 44.0 | 28.1 | 13.1 | 2.9 | 51.9 | 48.1 | 6.8 | 30.1 | 11.2 | |
| 1999 | 55.3 | 44.7 | 26.9 | 14.8 | 3.0 | 52.7 | 47.3 | 5.7 | 30.6 | 11.0 | |
| 2000 | 55.1 | 44.9 | 25.6 | 16.0 | 3.2 | 51.1 | 48.9 | 5.9 | 31.6 | 11.4 | |

NOTE: Percentages may not add to 100.0 due to rounding. See *Supplemental Note 1* for information on the racial/ethnic categories and a list of states that are included in each region. For total enrollment and distribution of total enrollment by region, see table 2-2.

SOURCE: U.S. Department of Commerce, Bureau of the Census. October Current Population Surveys, 1972–2000.

Poverty Among School-Aged Children

Table 4-1 Poverty rates of related children ages 5–17, by region: 1990–2001

| Year | Total | Region | | | |
|------|-------|-----------|---------|-------|------|
| | | Northeast | Midwest | South | West |
| 1990 | 17.9 | 15.2 | 16.6 | 20.6 | 17.7 |
| 1991 | 18.7 | 17.0 | 16.7 | 21.6 | 17.9 |
| 1992 | 20.0 | 18.0 | 17.8 | 22.9 | 19.9 |
| 1993 | 19.7 | 18.3 | 16.9 | 22.9 | 19.0 |
| 1994 | 20.7 | 19.5 | 17.4 | 23.8 | 20.5 |
| 1995 | 20.2 | 18.7 | 17.2 | 22.5 | 21.0 |
| 1996 | 19.2 | 18.1 | 15.2 | 21.9 | 20.4 |
| 1997 | 19.0 | 19.3 | 13.5 | 21.4 | 20.9 |
| 1998 | 18.8 | 19.1 | 14.1 | 20.4 | 21.0 |
| 1999 | 17.9 | 18.7 | 13.4 | 19.3 | 19.8 |
| 2000 | 15.9 | 15.9 | 12.3 | 17.8 | 16.8 |
| 2001 | 15.4 | 13.7 | 13.0 | 16.9 | 16.9 |

NOTE: To define poverty, the Bureau of the Census uses a set of money income thresholds that vary by family size and composition to determine who is poor. If a family's income is less than the family's threshold, then that family, and every individual in it, is considered poor. The poverty thresholds are updated annually for inflation using the Consumer Price Index (CPI). See *Supplemental Note 1* for the states in each region.

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1990–2001.

Poverty Among School-Aged Children

Table 4-2 Number (in thousands) and percentage of related children ages 5–17 in poverty, by urbanicity and region: 1997

| Type of student | Total | Urbanicity | | | | | | | |
|-----------------|--------|--------------------------------|--------------------------------|--------------------------|--------------------------|------------|------------|-----------------------|----------------------------|
| | | Central city, within large MSA | Central city, within small MSA | Suburb, within large MSA | Suburb, within small MSA | Large town | Small town | Rural, not within MSA | Rural, within MSA (exurbs) |
| | | Total | | | | | | | |
| All students | 50,848 | 8,563 | 74,244 | 15,655 | 4,820 | 706 | 5,141 | 4,699 | 3,840 |
| Poor | 9,298 | 2,437 | 16,361 | 1,892 | 718 | 136 | 1,043 | 966 | 470 |
| Nonpoor | 41,550 | 6,126 | 57,883 | 13,762 | 4,102 | 569 | 4,098 | 3,734 | 3,370 |
| Percent poverty | 18.3 | 28.5 | 22.0 | 12.1 | 14.9 | 19.3 | 20.3 | 20.6 | 12.2 |
| | | Northeast | | | | | | | |
| All students | 9,190 | 1,794 | 10,615 | 3,198 | 1,020 | 34 | 528 | 450 | 1,104 |
| Poor | 1,625 | 616 | 3,135 | 327 | 99 | 6 | 85 | 73 | 106 |
| Nonpoor | 7,565 | 1,178 | 7,480 | 2,871 | 921 | 28 | 444 | 378 | 998 |
| Percent poverty | 17.7 | 34.3 | 29.5 | 10.2 | 9.7 | 18.7 | 16.0 | 16.2 | 9.6 |
| | | Midwest | | | | | | | |
| All students | 12,050 | 1,701 | 17,430 | 3,391 | 863 | 219 | 1,558 | 1,515 | 1,061 |
| Poor | 1,742 | 486 | 3,301 | 247 | 82 | 35 | 226 | 242 | 95 |
| Nonpoor | 10,307 | 1,215 | 14,129 | 3,144 | 782 | 184 | 1,332 | 1,273 | 966 |
| Percent poverty | 14.5 | 28.6 | 18.9 | 7.3 | 9.4 | 16.0 | 14.5 | 16.0 | 8.9 |
| | | South | | | | | | | |
| All students | 17,809 | 2,503 | 27,895 | 4,518 | 2,126 | 226 | 2,185 | 2,160 | 1,301 |
| Poor | 3,589 | 619 | 6,231 | 609 | 396 | 52 | 561 | 521 | 207 |
| Nonpoor | 14,219 | 1,884 | 21,664 | 3,909 | 1,730 | 174 | 1,624 | 1,639 | 1,094 |
| Percent poverty | 20.2 | 24.7 | 22.3 | 13.5 | 18.6 | 23.2 | 25.7 | 24.1 | 15.9 |
| | | West | | | | | | | |
| All students | 11,799 | 2,565 | 18,304 | 4,548 | 811 | 227 | 870 | 574 | 374 |
| Poor | 2,341 | 716 | 3,694 | 710 | 141 | 42 | 172 | 130 | 61 |
| Nonpoor | 9,458 | 1,850 | 14,610 | 3,838 | 670 | 184 | 698 | 444 | 313 |
| Percent poverty | 19.8 | 27.9 | 20.2 | 15.6 | 17.4 | 18.6 | 19.7 | 22.6 | 16.3 |

NOTE: MSA denotes metropolitan statistical area. To define poverty, the Bureau of the Census uses a set of money income thresholds that vary by family size and composition to determine who is poor. If a family's income is less than the family's threshold, then that family, and every individual in it, is considered poor. The poverty thresholds are updated annually for inflation using the Consumer Price Index (CPI). See *Supplemental Note 1* for a definition of urbanicity and the states in each region. Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, NCES, Common Core of Data (CCD), "Public School District Universe Survey," 1997–98 and U.S. Department of Commerce, Current Population Survey, Small Area Income and Poverty estimates, Title I Eligibility Database, 1997.

Past and Projected Undergraduate Enrollments

Table 5-1 Total undergraduate enrollment in degree-granting 2- and 4-year postsecondary institutions (in thousands), by sex, enrollment status, and type of institution, with projections: Fall 1970–2011

| Year | Total | Sex | | Enrollment status | | Type of institution | |
|------------|--------|-------|--------|-------------------|-----------|---------------------|--------|
| | | Male | Female | Full-time | Part-time | 4-year | 2-year |
| 1970 | 7,376 | 4,254 | 3,122 | 5,280 | 2,096 | 5,057 | 2,319 |
| 1971 | 7,743 | 4,418 | 3,325 | 5,512 | 2,231 | 5,164 | 2,579 |
| 1972 | 7,941 | 4,429 | 3,512 | 5,488 | 2,453 | 5,185 | 2,756 |
| 1973 | 8,261 | 4,538 | 3,723 | 5,580 | 2,681 | 5,249 | 3,012 |
| 1974 | 8,798 | 4,765 | 4,033 | 5,726 | 3,072 | 5,394 | 3,404 |
| 1975 | 9,679 | 5,257 | 4,422 | 6,169 | 3,510 | 5,709 | 3,970 |
| 1976 | 9,429 | 4,902 | 4,527 | 6,030 | 3,399 | 5,546 | 3,883 |
| 1977 | 9,717 | 4,897 | 4,820 | 6,094 | 3,623 | 5,674 | 4,043 |
| 1978 | 9,691 | 4,766 | 4,925 | 5,967 | 3,724 | 5,663 | 4,028 |
| 1979 | 9,998 | 4,821 | 5,178 | 6,080 | 3,919 | 5,781 | 4,217 |
| 1980 | 10,475 | 5,000 | 5,475 | 6,362 | 4,113 | 5,949 | 4,526 |
| 1981 | 10,755 | 5,109 | 5,646 | 6,449 | 4,306 | 6,039 | 4,716 |
| 1982 | 10,825 | 5,170 | 5,655 | 6,484 | 4,341 | 6,053 | 4,772 |
| 1983 | 10,846 | 5,158 | 5,688 | 6,514 | 4,332 | 6,123 | 4,723 |
| 1984 | 10,618 | 5,007 | 5,611 | 6,348 | 4,270 | 6,087 | 4,531 |
| 1985 | 10,597 | 4,962 | 5,635 | 6,320 | 4,277 | 6,066 | 4,531 |
| 1986 | 10,798 | 5,018 | 5,780 | 6,352 | 4,446 | 6,118 | 4,680 |
| 1987 | 11,046 | 5,068 | 5,978 | 6,463 | 4,584 | 6,270 | 4,776 |
| 1988 | 11,317 | 5,138 | 6,179 | 6,642 | 4,674 | 6,442 | 4,875 |
| 1989 | 11,743 | 5,311 | 6,432 | 6,841 | 4,902 | 6,592 | 5,151 |
| 1990 | 11,959 | 5,380 | 6,579 | 6,976 | 4,983 | 6,719 | 5,240 |
| 1991 | 12,439 | 5,571 | 6,868 | 7,221 | 5,218 | 6,787 | 5,652 |
| 1992 | 12,538 | 5,583 | 6,955 | 7,244 | 5,293 | 6,816 | 5,722 |
| 1993 | 12,324 | 5,484 | 6,840 | 7,179 | 5,144 | 6,758 | 5,566 |
| 1994 | 12,263 | 5,422 | 6,840 | 7,169 | 5,094 | 6,733 | 5,530 |
| 1995 | 12,232 | 5,401 | 6,831 | 7,145 | 5,086 | 6,739 | 5,493 |
| 1996 | 12,327 | 5,421 | 6,907 | 7,299 | 5,029 | 6,764 | 5,563 |
| 1997 | 12,451 | 5,469 | 6,982 | 7,419 | 5,032 | 6,845 | 5,606 |
| 1998 | 12,437 | 5,446 | 6,991 | 7,539 | 4,898 | 6,948 | 5,489 |
| 1999 | 12,681 | 5,560 | 7,122 | 7,735 | 4,947 | 7,089 | 5,592 |
| Projected* | | | | | | | |
| 2000 | 12,894 | 5,617 | 7,277 | 7,785 | 5,109 | 7,161 | 5,733 |
| 2001 | 13,182 | 5,715 | 7,467 | 8,012 | 5,170 | 7,349 | 5,833 |
| 2002 | 13,378 | 5,773 | 7,605 | 8,136 | 5,242 | 7,468 | 5,910 |
| 2003 | 13,628 | 5,845 | 7,784 | 8,316 | 5,313 | 7,624 | 6,004 |
| 2004 | 13,855 | 5,912 | 7,942 | 8,474 | 5,380 | 7,759 | 6,096 |
| 2005 | 14,048 | 5,966 | 8,083 | 8,611 | 5,438 | 7,877 | 6,171 |
| 2006 | 14,261 | 6,031 | 8,231 | 8,772 | 5,490 | 8,011 | 6,250 |
| 2007 | 14,461 | 6,099 | 8,361 | 8,927 | 5,533 | 8,136 | 6,325 |
| 2008 | 14,694 | 6,187 | 8,508 | 9,115 | 5,580 | 8,283 | 6,411 |
| 2009 | 14,922 | 6,274 | 8,648 | 9,296 | 5,626 | 8,430 | 6,492 |
| 2010 | 15,111 | 6,341 | 8,771 | 9,438 | 5,674 | 8,555 | 6,556 |
| 2011 | 15,305 | 6,404 | 8,902 | 9,574 | 5,732 | 8,680 | 6,625 |

* Projections based on data through 1999 and middle alternative assumptions concerning the economy.

NOTE: Data for 1999 were imputed using alternative procedures. Details may not add to totals due to rounding.

SOURCE: U. S. Department of Education, NCES. (2001). *Digest of Education Statistics 2000* (NCES 2001–034), and *Projections of Education Statistics to 2011* (NCES 2001–083).

Trends in Graduate/First-Professional Enrollments

Table 6-1 Total graduate and first-professional enrollment (in thousands) in degree-granting institutions, by sex and enrollment status of student: 1970–99

| Year | Graduate | | | | | First-professional | | | | |
|------|----------|-----|-------|-----------|-----------|--------------------|-----|-------|-----------|-----------|
| | Total | Men | Women | Full-time | Part-time | Total | Men | Women | Full-time | Part-time |
| 1970 | 1,031 | 630 | 400 | 379 | 651 | 173 | 159 | 15 | 157 | 16 |
| 1971 | 1,012 | 615 | 394 | 388 | 621 | 193 | 174 | 19 | 176 | 16 |
| 1972 | 1,066 | 626 | 439 | 394 | 671 | 207 | 183 | 23 | 190 | 17 |
| 1973 | 1,123 | 648 | 477 | 410 | 715 | 219 | 186 | 33 | 202 | 17 |
| 1974 | 1,190 | 663 | 526 | 427 | 762 | 235 | 194 | 41 | 216 | 19 |
| 1975 | 1,263 | 700 | 563 | 453 | 810 | 242 | 192 | 50 | 220 | 22 |
| 1976 | 1,333 | 714 | 619 | 463 | 870 | 244 | 190 | 54 | 220 | 24 |
| 1977 | 1,319 | 700 | 617 | 473 | 845 | 251 | 191 | 60 | 226 | 25 |
| 1978 | 1,312 | 682 | 630 | 468 | 844 | 257 | 192 | 65 | 233 | 24 |
| 1979 | 1,309 | 669 | 640 | 476 | 833 | 263 | 193 | 70 | 239 | 24 |
| 1980 | 1,343 | 675 | 670 | 485 | 860 | 278 | 199 | 78 | 251 | 26 |
| 1981 | 1,343 | 674 | 669 | 484 | 859 | 275 | 193 | 82 | 248 | 26 |
| 1982 | 1,322 | 670 | 653 | 485 | 838 | 278 | 191 | 87 | 252 | 26 |
| 1983 | 1,340 | 677 | 663 | 497 | 843 | 279 | 188 | 90 | 250 | 29 |
| 1984 | 1,345 | 672 | 673 | 501 | 844 | 279 | 185 | 94 | 250 | 29 |
| 1985 | 1,376 | 677 | 700 | 509 | 867 | 274 | 180 | 94 | 247 | 28 |
| 1986 | 1,435 | 693 | 742 | 522 | 913 | 270 | 174 | 97 | 246 | 25 |
| 1987 | 1,452 | 693 | 759 | 527 | 925 | 268 | 170 | 98 | 242 | 27 |
| 1988 | 1,472 | 697 | 774 | 553 | 919 | 267 | 167 | 100 | 241 | 26 |
| 1989 | 1,522 | 710 | 811 | 572 | 949 | 274 | 169 | 106 | 248 | 27 |
| 1990 | 1,586 | 737 | 849 | 599 | 987 | 273 | 167 | 107 | 246 | 28 |
| 1991 | 1,639 | 761 | 878 | 642 | 997 | 281 | 170 | 111 | 252 | 29 |
| 1992 | 1,669 | 772 | 896 | 666 | 1,003 | 281 | 169 | 112 | 252 | 29 |
| 1993 | 1,688 | 771 | 917 | 688 | 1,000 | 292 | 173 | 120 | 260 | 33 |
| 1994 | 1,721 | 776 | 946 | 706 | 1,016 | 295 | 174 | 121 | 263 | 31 |
| 1995 | 1,732 | 768 | 965 | 717 | 1,015 | 298 | 174 | 124 | 266 | 31 |
| 1996 | 1,742 | 759 | 983 | 737 | 1,005 | 298 | 173 | 126 | 267 | 31 |
| 1997 | 1,753 | 758 | 996 | 752 | 1,001 | 298 | 170 | 129 | 267 | 31 |
| 1998 | 1,768 | 754 | 1,013 | 754 | 1,014 | 302 | 169 | 134 | 271 | 31 |
| 1999 | 1,807 | 766 | 1,041 | 781 | 1,026 | 303 | 165 | 138 | 271 | 33 |

NOTE: Data include unclassified graduate students. Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, NCES. Higher Education General Information Survey (HEGIS), *Fall Enrollment in Colleges and Universities* surveys, and Integrated Postsecondary Education Data System (IPEDS), *Fall Enrollment* surveys, various years.

Trends in Graduate/First-Professional Enrollments

Table 6-2 Total graduate and first-professional enrollment (in thousands) and percentage distribution of students in degree-granting institutions, by race/ethnicity and enrollment status: 1976–99

| | 1976 | 1980 | 1990 | 1995 | 1996 | 1997 | 1998 | 1999 |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Enrollment | | | | | | | | |
| Graduate | | | | | | | | |
| Total | 1,323 | 1,341 | 1,586 | 1,732 | 1,742 | 1,753 | 1,768 | 1,807 |
| White | 1,116 | 1,105 | 1,228 | 1,282 | 1,273 | 1,262 | 1,254 | 1,246 |
| Total minority | 134 | 144 | 190 | 271 | 286 | 302 | 318 | 336 |
| Black | 78 | 75 | 84 | 119 | 125 | 132 | 139 | 148 |
| Hispanic | 26 | 32 | 47 | 68 | 73 | 79 | 83 | 90 |
| Asian/Pacific Islander | 25 | 32 | 53 | 76 | 79 | 83 | 87 | 89 |
| American Indian/Alaska Native | 5 | 5 | 6 | 8 | 9 | 9 | 10 | 10 |
| Nonresident alien | 72 | 92 | 167 | 179 | 183 | 189 | 195 | 224 |
| First-professional | | | | | | | | |
| Total | 244 | 277 | 273 | 298 | 298 | 298 | 302 | 303 |
| White | 220 | 248 | 221 | 223 | 222 | 220 | 221 | 220 |
| Total minority | 21 | 26 | 47 | 67 | 69 | 70 | 74 | 75 |
| Black | 11 | 13 | 16 | 21 | 21 | 21 | 22 | 22 |
| Hispanic | 5 | 7 | 11 | 14 | 14 | 14 | 14 | 15 |
| Asian/Pacific Islander | 4 | 6 | 19 | 30 | 31 | 33 | 35 | 36 |
| American Indian/Alaska Native | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| Nonresident alien | 3 | 3 | 5 | 7 | 8 | 7 | 7 | 8 |
| Percentage distribution | | | | | | | | |
| Graduate | | | | | | | | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| White | 89.2 | 88.5 | 86.6 | 82.6 | 81.6 | 80.7 | 79.8 | 78.7 |
| Total minority | 10.8 | 11.5 | 13.4 | 17.4 | 18.4 | 19.3 | 20.2 | 21.3 |
| Black | 6.3 | 6.0 | 5.9 | 7.6 | 8.0 | 8.4 | 8.8 | 9.3 |
| Hispanic | 2.1 | 2.6 | 3.3 | 4.4 | 4.7 | 5.0 | 5.3 | 5.7 |
| Asian/Pacific Islander | 2.0 | 2.5 | 3.8 | 4.9 | 5.1 | 5.3 | 5.5 | 5.6 |
| American Indian/Alaska Native | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 |
| Nonresident alien | (t) |
| First-professional | | | | | | | | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| White | 91.3 | 90.4 | 82.6 | 76.9 | 76.3 | 75.8 | 74.9 | 74.4 |
| Total minority | 8.7 | 9.6 | 17.4 | 23.1 | 23.7 | 24.2 | 25.1 | 25.6 |
| Black | 4.6 | 4.7 | 5.9 | 7.4 | 7.4 | 7.3 | 7.6 | 7.6 |
| Hispanic | 1.9 | 2.4 | 4.0 | 4.8 | 4.8 | 4.8 | 4.9 | 5.0 |
| Asian/Pacific Islander | 1.7 | 2.2 | 7.0 | 10.2 | 10.8 | 11.3 | 11.9 | 12.3 |
| American Indian/Alaska Native | 0.5 | 0.3 | 0.4 | 0.7 | 0.7 | 0.8 | 0.7 | 0.7 |
| Nonresident alien | (t) |

†Not applicable.

NOTE: Data include unclassified graduate students. Distribution for U.S. citizens only. Details may not add to totals due to rounding. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES, Higher Education General Information Survey (HEGIS), "Fall Enrollment in Colleges and Universities" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys, various years.

Reading Performance of Students in Grade 4

Table 7-1 Average reading scale score and percentage of 4th-grade students at or above each reading achievement level, by sex: 1992, 1994, 1998, and 2000

| Sex and achievement level | 1992 | 1994 | 1998 | 2000 |
|------------------------------|---------------------------------|------|------|------|
| | Average scale score | | | |
| All 4 th -graders | 217 | 214 | 217 | 217 |
| Male | 213 | 209 | 214 | 212 |
| Female | 221 | 220 | 220 | 222 |
| | Percentage at achievement level | | | |
| All 4 th -graders | | | | |
| Below Basic | 38 | 40 | 38 | 37 |
| At or above Basic | 62 | 60 | 62 | 63 |
| At or above Proficient | *29 | 30 | 31 | 32 |
| At Advanced | *6 | 7 | 7 | 8 |
| Male | | | | |
| Below Basic | 42 | 45 | 41 | 42 |
| At or above Basic | 58 | 55 | 59 | 58 |
| At or above Proficient | 25 | 26 | 28 | 27 |
| At Advanced | 5 | 6 | 6 | 6 |
| Female | | | | |
| Below Basic | 33 | 34 | 35 | 33 |
| At or above Basic | 67 | 66 | 65 | 67 |
| At or above Proficient | *32 | 34 | 33 | 36 |
| At Advanced | 8 | 9 | 8 | 10 |

*Significantly different from 2000.

SOURCE: U.S. Department of Education, NCES. (2001). *The Nation's Report Card: Fourth-Grade Reading 2000* (NCES 2001-499).

Reading Performance of Students in Grade 4

Table 7-2 Average reading scale score for 4th-graders, by selected student, family, and school characteristics: 2000

| School and student characteristics | Average scale score |
|-------------------------------------------------------------------------------|---------------------|
| Total | 217 |
| Sex | |
| Male | 212 |
| Female | 222 |
| Race/ethnicity | |
| White | 226 |
| Black | 193 |
| Hispanic | 197 |
| Asian/Pacific Islander | 232 |
| American Indian/Alaska Native | 196 |
| Number of pages per day read in school and for homework | |
| 5 or fewer | 202 |
| 6–10 | 215 |
| 11 or more | 222 |
| How often discuss studies at home | |
| Almost every day | 221 |
| Once or twice a week | 219 |
| Once or twice a month | 217 |
| Never/hardly ever | 201 |
| Control | |
| Public | 215 |
| Private | 234 |
| Type of location | |
| Central city | 209 |
| Urban fringe/large town | 222 |
| Rural/small town | 218 |
| Enrollment | |
| Less than 300 | 222 |
| 300–999 | 217 |
| 1,000 or more | 206 |
| Percentage of students in the school eligible for free or reduced-price lunch | |
| 0–10 | 236 |
| 11–25 | 227 |
| 26–50 | 218 |
| 51–75 | 205 |
| 76–100 | 191 |

SOURCE: U.S. Department of Education, NCES. (2001). *The Nation's Report Card: Fourth-Grade Reading 2000* (NCES 2001–499), and unpublished data from the NAEP 2000 Grade 4 Reading Assessment, provided by the Educational Testing Service.

Trends in the Achievement Gap in Reading Between White and Black Students

Table 8-1 Trends in the Black-White gap in average reading scale scores, by age: 1971–99

| Age | 1971 | 1975 | 1980 | 1984 | 1988 | 1990 | 1992 | 1994 | 1996 | 1999 |
|-----|------|------|------|------|------|------|------|------|------|------|
| 9 | 44 | 35 | 32 | 32 | 29 | 35 | 33 | 33 | 29 | 35 |
| 13 | 39 | 36 | 32 | 26 | 18 | 21 | 29 | 31 | 32 | 29 |
| 17 | 53 | 52 | 50 | 31 | 20 | 29 | 37 | 30 | 29 | 31 |

NOTE: The gap is determined by subtracting the average Black score from the average White score in table 8-2. Score gaps may differ by 1 point from that achieved by subtracting the average scores of Blacks from the average scores for Whites due to rounding.

SOURCE: U.S. Department of Education, NCES. (2000). *NAEP 1999 Trends in Academic Progress: Three Decades of Student Performance* (NCES 2000–469) and National Assessment of Educational Progress (NAEP), 1999 Long-Term Trend Assessment, unpublished data produced by the Educational Testing Service.

Table 8-2 Trends in average reading scale scores, by race, age, and score quartile: 1971–99

| Age and score quartile | 1971 | 1975 | 1980 | 1984 | 1988 | 1990 | 1992 | 1994 | 1996 | 1999 | Difference 1971–88 ¹ | Difference 1988–99 ¹ |
|------------------------|------|------|------|------|------|------|------|------|------|------|------------------------------------|------------------------------------|
| White | | | | | | | | | | | | |
| Age 9 | | | | | | | | | | | | |
| Total | 214 | 217 | 221 | 218 | 218 | 217 | 218 | 218 | 220 | 221 | 4 | 3 |
| Lower quartile | 168 | 174 | 180 | 172 | 171 | 166 | 172 | 173 | 176 | 179 | 3 | 8 |
| Middle two quartiles | 217 | 219 | 224 | 219 | 219 | 218 | 219 | 220 | 221 | 222 | 2 | 4 |
| Upper quartile | 255 | 254 | 258 | 262 | 262 | 266 | 260 | 259 | 260 | 261 | 7 | -2 |
| Age 13 | | | | | | | | | | | | |
| Total | 261 | 262 | 264 | 263 | 261 | 262 | 266 | 265 | 266 | 267 | 0 ² | 5 |
| Lower quartile | 223 | 222 | 228 | 222 | 222 | 222 | 223 | 221 | 223 | 223 | -1 | 1 |
| Middle two quartiles | 263 | 264 | 266 | 264 | 263 | 263 | 268 | 267 | 268 | 269 | 0 ² | 6 |
| Upper quartile | 295 | 299 | 297 | 299 | 298 | 300 | 306 | 305 | 305 | 306 | 2 | 8 |
| Age 17 | | | | | | | | | | | | |
| Total | 291 | 293 | 293 | 295 | 295 | 297 | 297 | 296 | 295 | 295 | 3 | 0 ² |
| Lower quartile | 242 | 246 | 252 | 250 | 252 | 250 | 249 | 245 | 248 | 247 | 10 | -6 |
| Middle two quartiles | 294 | 295 | 295 | 297 | 297 | 299 | 301 | 299 | 297 | 297 | 2 | 0 ² |
| Upper quartile | 335 | 337 | 329 | 335 | 333 | 339 | 339 | 340 | 339 | 338 | -2 | 5 |
| Black | | | | | | | | | | | | |
| Age 9 | | | | | | | | | | | | |
| Total | 170 | 181 | 189 | 186 | 189 | 182 | 185 | 185 | 191 | 186 | 18 | -3 |
| Lower quartile | 126 | 138 | 144 | 142 | 146 | 137 | 141 | 141 | 150 | 146 | 20 | 1 |
| Middle two quartiles | 171 | 183 | 192 | 186 | 187 | 180 | 183 | 184 | 189 | 183 | 16 | -5 |
| Upper quartile | 213 | 221 | 230 | 230 | 233 | 230 | 231 | 232 | 236 | 230 | 21 | -4 |
| Age 13 | | | | | | | | | | | | |
| Total | 222 | 226 | 233 | 236 | 243 | 241 | 238 | 234 | 234 | 238 | 21 | -5 |
| Lower quartile | 184 | 184 | 198 | 197 | 208 | 201 | 191 | 190 | 191 | 195 | 24 | -13 |
| Middle two quartiles | 223 | 226 | 233 | 236 | 242 | 242 | 238 | 235 | 235 | 238 | 19 | -4 |
| Upper quartile | 260 | 268 | 267 | 274 | 279 | 281 | 283 | 277 | 274 | 281 | 19 | 2 |
| Age 17 | | | | | | | | | | | | |
| Total | 239 | 241 | 243 | 264 | 274 | 267 | 261 | 266 | 266 | 264 | 36 | -10 |
| Lower quartile | 189 | 187 | 200 | 223 | 233 | 222 | 211 | 215 | 223 | 220 | 44 | -12 |
| Middle two quartiles | 239 | 243 | 244 | 264 | 275 | 269 | 262 | 268 | 266 | 265 | 36 | -10 |
| Upper quartile | 287 | 290 | 283 | 304 | 314 | 310 | 306 | 313 | 310 | 305 | 27 | -9 |

¹Details may not add to totals due to rounding.

²Change is greater than 0 but less than .5.

SOURCE: U.S. Department of Education, NCES. (2000). *NAEP 1999 Trends in Academic Progress: Three Decades of Student Performance* (NCES 2000–469) and National Assessment of Educational Progress (NAEP), 1999 Long-Term Trend Assessment, unpublished data produced by the Educational Testing Service.

International Comparisons of Reading Literacy

Table 9-1 Combined reading literacy average scores, standard deviation, and average subscale scores of 15-year-olds, by country: 2000

| Country | Combined reading literacy score | Standard deviation ¹ | Reading subscales | | |
|------------------------------------|---------------------------------|---------------------------------|------------------------|--------------------|---------------------|
| | | | Retrieving information | Interpreting texts | Reflecting on texts |
| International average ² | 500 | 100 | 498 | 501 | 502 |
| Australia | 528 | 102 | *536 | 527 | 526 |
| Austria | 507 | *93 | 502 | 508 | 512 |
| Belgium | 507 | 107 | 515 | 512 | 497 |
| Brazil | *396 | *86 | *365 | *400 | *417 |
| Canada | *534 | *95 | *530 | *532 | *542 |
| Czech Republic | 492 | 96 | 481 | 500 | 485 |
| Denmark | 497 | 98 | 498 | 494 | 500 |
| Finland | *546 | *89 | *556 | *555 | *533 |
| France | 505 | *92 | 515 | 506 | 496 |
| Germany | 484 | 111 | 483 | 488 | *478 |
| Greece | *474 | 97 | *450 | *475 | 495 |
| Hungary | 480 | *94 | 478 | 480 | *481 |
| Iceland | 507 | *92 | 500 | 514 | 501 |
| Ireland | 527 | *94 | 524 | 526 | *533 |
| Italy | 487 | *91 | 488 | 489 | 483 |
| Japan | 522 | *86 | 526 | 518 | 530 |
| Korea, Republic of | 525 | *70 | *530 | 525 | 526 |
| Latvia | *458 | 102 | *451 | *459 | *458 |
| Liechtenstein | 483 | 96 | 492 | 484 | *468 |
| Luxembourg | *441 | 100 | *433 | *446 | *442 |
| Mexico | *422 | *86 | *402 | *419 | *446 |
| New Zealand | *529 | 108 | *535 | 526 | 529 |
| Norway | 505 | 104 | 505 | 505 | 506 |
| Poland | 479 | 100 | 475 | 482 | *477 |
| Portugal | *470 | 97 | *455 | *473 | *480 |
| Russian Federation | *462 | *92 | *451 | *468 | *455 |
| Spain | 493 | *85 | 483 | 491 | 506 |
| Sweden | 516 | *92 | 516 | 522 | 510 |
| Switzerland | 494 | 102 | 498 | 496 | 488 |
| United Kingdom | 523 | 100 | 523 | 514 | *539 |
| United States | 504 | 105 | 499 | 505 | 507 |

*Significantly different from the United States.

¹A standard deviation provides information about the distribution of students' combined reading literacy scale scores. In a normal distribution, 68 percent of scores fall within plus or minus one standard deviation of the mean, and 95 percent fall within plus or minus two standard deviations of the mean.

²The international average is the average of OECD countries only and thus excludes Brazil, Latvia, Liechtenstein, and the Russian Federation. For more information on this study, see *Supplemental Note 4*.

SOURCE: U.S. Department of Education, NCES. (2001). *Outcomes of Learning: Results from the 2000 Program for International Student Assessment of 15-Year-Olds in Reading, Mathematics, and Science Literacy* (NCES 2002-115).

International Comparisons of Reading Literacy

Table 9-2 Relationship between socioeconomic status and combined reading literacy average score and combined reading literacy average score, by sex and parents' education, by country: 2000

| Country | Socioeconomic status Average score increase with a one- point increase on the ISEI index ¹ | Sex | | | Parents' education | | | |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------|------|------------------------------|--------------------------|-----------------------------------------|-----------------------------------|------------------------------|
| | | Female | Male | Differ- ence ² | Less than high school | High school diploma or equivalent | Bachelor's degree or higher | Differ- ence ² |
| International average ³ | 2.1 | 517 | 485 | 32 | *471 | 508 | 530 | 59 |
| Australia | 1.9 | *546 | 513 | 34 | *498 | *521 | 559 | 61 |
| Austria | 2.2 | 520 | 495 | 26 | *495 | *533 | 536 | *41 |
| Belgium | 2.3 | 525 | 492 | 33 | 450 | *540 | 519 | 69 |
| Brazil | 1.6 | *404 | *388 | 17 | *374 | *420 | *428 | *54 |
| Canada | 1.6 | *551 | *519 | 32 | *482 | *522 | 549 | 67 |
| Czech Republic | 2.7 | 510 | 473 | 37 | 450 | 502 | 538 | 88 |
| Denmark | 1.8 | 510 | 485 | 25 | 457 | 491 | 528 | 71 |
| Finland | *1.3 | *571 | *520 | *51 | *531 | *559 | *566 | *35 |
| France | 1.9 | 519 | 490 | 29 | *484 | *530 | 523 | *39 |
| Germany | 2.8 | 502 | 468 | 35 | 464 | 511 | 524 | 60 |
| Greece | 1.7 | *493 | *456 | 37 | 442 | 482 | *495 | 53 |
| Hungary | 2.4 | 496 | 465 | 32 | 433 | 495 | 529 | 96 |
| Iceland | *1.2 | 528 | 488 | 40 | *497 | 509 | 526 | *29 |
| Ireland | 1.9 | *542 | 513 | 29 | *505 | *530 | 544 | *39 |
| Italy | 1.6 | 507 | 469 | 38 | 465 | 502 | 515 | *50 |
| Japan | *0.4 | 537 | 507 | 30 | — | — | — | — |
| Korea, Republic of | *0.9 | 533 | *519 | 14 | *507 | *532 | 541 | *34 |
| Latvia | *1.3 | *485 | *432 | *53 | *403 | *458 | *473 | 70 |
| Liechtenstein | 2.0 | 500 | 468 | 31 | *476 | (#) | 509 | *33 |
| Luxembourg | 2.4 | *456 | *429 | 27 | *418 | *469 | *479 | 61 |
| Mexico | 1.9 | *432 | *411 | 20 | *403 | *457 | *469 | 66 |
| New Zealand | 2.0 | *553 | 507 | 46 | *515 | *541 | 549 | *34 |
| Norway | 1.8 | 529 | 486 | 43 | *492 | 500 | 520 | *28 |
| Poland | 2.2 | 498 | 461 | 36 | 443 | 485 | 533 | 90 |
| Portugal | 2.4 | *482 | *458 | 25 | 456 | 482 | 514 | 58 |
| Russian Federation | 1.6 | *481 | *443 | 38 | 418 | *458 | *476 | 58 |
| Spain | 1.6 | 505 | 481 | 24 | *473 | 510 | 525 | *52 |
| Sweden | 1.7 | 536 | 499 | 37 | *495 | *518 | 526 | *31 |
| Switzerland | 2.5 | 510 | 480 | 30 | *477 | 517 | 519 | *42 |
| United Kingdom | 2.4 | 537 | 512 | 26 | *500 | *558 | 547 | *47 |
| United States | 2.1 | 518 | 490 | 29 | 443 | 497 | 536 | 93 |

—Not available.

#Too small to report.

*Significantly different from the United States.

¹Socioeconomic status is measured by the International Socioeconomic Index (ISEI), a measure based on the occupations of the student's parent(s). Occupations ranged from 16 to 90 on the ISEI index. The numbers shown in the table indicate the strength of the relationship between socioeconomic status and literacy. A one-point difference in ISEI is associated with an n-point difference in literacy, where "n" is the number shown in the table. Thus, the larger the number, the greater is the association between socioeconomic status and literacy. For example, in the United States, a 50-point difference on the ISEI is roughly equivalent to the difference in socioeconomic status between a medical doctor and a motor vehicle mechanic, or an architect and a garbage collector. This 50-point ISEI difference would translate to a score difference of approximately 105 points in reading literacy. For more information on this measure, see NCES 2002–115.

²The difference was computed by subtracting the male score from the female score and by subtracting the score for students whose parents had less than a high school diploma from the score for students whose parents had a bachelor's degree or higher.

³The international average is the average of OECD countries only and thus excludes Brazil, Latvia, Liechtenstein, and the Russian Federation. For more information on this study, see *Supplemental Note 4*.

SOURCE: U.S. Department of Education, NCES. (2001). *Outcomes of Learning: Results from the 2000 Program for International Student Assessment of 15-Year-Olds in Reading, Mathematics, and Science Literacy* (NCES 2002–115).

Mathematics Performance of Students in Grades 4, 8, and 12

Table 10-1 Average mathematics scale score and percentage of students at or above each mathematics achievement level, by grade: 1990, 1992, 1996, and 2000

| Grade and achievement level | 1990 | 1992 | 1996 | 2000 |
|-----------------------------|---------------------------------|------|------|------|
| | Average scale score | | | |
| Grade 4 | *213 | *220 | *224 | 228 |
| Grade 8 | *263 | *268 | *272 | 275 |
| Grade 12 | *294 | 299 | *304 | 301 |
| | Percentage at achievement level | | | |
| Grade 4 | | | | |
| Below Basic | *50 | *41 | *36 | 31 |
| At or above Basic | *50 | *59 | *64 | 69 |
| At or above Proficient | *13 | *18 | *21 | 26 |
| At Advanced | *1 | *2 | 2 | 3 |
| Grade 8 | | | | |
| Below Basic | *48 | *42 | *38 | 34 |
| At or above Basic | *52 | *58 | *62 | 66 |
| At or above Proficient | *15 | *21 | *24 | 27 |
| At Advanced | *2 | *3 | 4 | 5 |
| Grade 12 | | | | |
| Below Basic | *42 | 36 | *31 | 35 |
| At or above Basic | *58 | 64 | *69 | 65 |
| At or above Proficient | *12 | 15 | 16 | 17 |
| At Advanced | 1 | 2 | 2 | 2 |

*Significantly different from 2000.

NOTE: See *Supplemental Note 3* for more information on achievement levels and the National Assessment of Educational Progress (NAEP).

SOURCE: U.S. Department of Education, NCES. (2001). *The Nations Report Card: Mathematics 2000* (NCES 2001-517).

Mathematics Performance of Students in Grades 4, 8, and 12

Table 10-2 Average mathematics scale score for 4th-, 8th-, and 12th-graders, by selected student and school characteristics: 2000

| Student and school characteristics | Average scale score | | |
|-------------------------------------------------------------------------------|---------------------|------------|------------|
| | Grade 4 | Grade 8 | Grade 12 |
| Total | 228 | 275 | 301 |
| Sex | | | |
| Male | 229 | 277 | 303 |
| Female | 226 | 274 | 299 |
| Race/ethnicity | | | |
| White | 236 | 286 | 308 |
| Black | 205 | 247 | 274 |
| Hispanic | 212 | 253 | 283 |
| Asian/Pacific Islander | (†) | 289 | 319 |
| American Indian/Alaska Native | 216 | 255 | 293 |
| Parents' education | | | |
| High school diploma or less | — | 262 | 286 |
| Bachelor's degree or higher | — | 287 | 313 |
| Current mathematics class in 8 th grade | | | |
| Group 1 | — | 267 | — |
| Group 2 | — | 295 | — |
| Mathematics courses taken by 12 th grade | | | |
| Low-level | — | — | 275 |
| Middle-level | — | — | 292 |
| High-level | — | — | 318 |
| Control | | | |
| Public | 226 | 274 | 300 |
| Private | 238 | 287 | 315 |
| Type of location | | | |
| Central city | 222 | 268 | 298 |
| Urban fringe/large town | 232 | 280 | 304 |
| Rural/small town | 227 | 276 | 300 |
| Enrollment | | | |
| Less than 300 | 230 | 281 | 300 |
| 300–999 | 228 | 276 | 301 |
| 1,000 or more | 217 | 273 | 301 |
| Percentage of students in the school eligible for free or reduced-price lunch | | | |
| 0–10 | 243 | 291 | 311 |
| 11–25 | 234 | 285 | 303 |
| 26–50 | 228 | 273 | 297 |
| 51–75 | 218 | 261 | 280 |
| 76–100 | 207 | 248 | 276 |

—Not available.

†Omitted due to concerns about its accuracy.

NOTE: See *Supplemental Note 3* for more information on the National Assessment of Educational Progress (NAEP), including descriptions of the 8th- and 12th-grade mathematics course-taking levels.

SOURCE: U.S. Department of Education, NCES. (2001). *The Nation's Report Card: Mathematics 2000* (NCES 2001–517), and unpublished data from the NAEP 2000 Mathematics Assessment, provided by the Educational Testing Service.

Mathematics Performance of Students in Grades 4, 8, and 12

Table 10-3 Average mathematics scale score for public school 4th- and 8th-graders in 2000 and change in score since 1992 in grade 4 and since 1990 in grade 8, by state and jurisdiction: 2000

| State and jurisdiction | Grade 4 | | Grade 8 | |
|-------------------------|-----------------------------|--------------------------------------|-----------------------------|--------------------------------------|
| | Average scale score in 2000 | Change from 1992 average scale score | Average scale score in 2000 | Change from 1990 average scale score |
| Nation | 226 | *8 | 274 | *13 |
| Alabama | **218 | *10 | **262 | *9 |
| Arizona ¹ | **219 | 4 | 271 | *11 |
| Arkansas | **217 | *7 | **261 | *5 |
| California ¹ | **214 | *5 | **262 | *6 |
| Connecticut | **234 | *7 | **282 | *12 |
| Georgia | **220 | *4 | **266 | *7 |
| Hawaii | **216 | 2 | **263 | *12 |
| Idaho ¹ | 227 | *5 | **278 | *6 |
| Illinois ¹ | 225 | — | 277 | *16 |
| Indiana ¹ | **234 | *13 | **283 | *16 |
| Iowa ¹ | **233 | 3 | — | — |
| Kansas ¹ | **232 | — | **284 | — |
| Kentucky | **221 | *6 | 272 | *14 |
| Louisiana | **218 | *14 | **259 | *13 |
| Maine ¹ | **231 | -1 | **284 | — |
| Maryland | **222 | *5 | 276 | *15 |
| Massachusetts | **235 | *8 | **283 | — |
| Michigan ¹ | **231 | *11 | **278 | *14 |
| Minnesota ¹ | **235 | *7 | **288 | *12 |
| Mississippi | **211 | *9 | **254 | — |
| Missouri | 229 | *6 | 274 | — |
| Montana ¹ | 230 | — | **287 | *6 |
| Nebraska | 226 | 1 | **281 | *5 |
| Nevada | **220 | — | **268 | — |
| New Mexico | **214 | 1 | **260 | 3 |
| New York ¹ | 227 | *8 | 276 | *15 |
| North Carolina | **232 | *20 | **280 | *30 |
| North Dakota | **231 | 2 | **283 | 2 |
| Ohio ¹ | **231 | *12 | **283 | *19 |
| Oklahoma | 225 | *5 | 272 | *8 |
| Oregon ¹ | 227 | — | **281 | *9 |
| Rhode Island | 225 | *9 | 273 | *13 |
| South Carolina | **220 | *8 | **266 | — |
| Tennessee | **220 | *9 | **263 | — |

See footnotes at end of table.

Mathematics Performance of Students in Grades 4, 8, and 12

Table 10-3 Average mathematics scale score for public school 4th- and 8th-graders in 2000 and change in score since 1992 in grade 4 and since 1990 in grade 8, by state and jurisdiction: 2000—Continued

| State and jurisdiction | Grade 4 | | Grade 8 | |
|------------------------|-----------------------------|--------------------------------------|-----------------------------|--------------------------------------|
| | Average scale score in 2000 | Change from 1992 average scale score | Average scale score in 2000 | Change from 1990 average scale score |
| Texas | **233 | *15 | 275 | *17 |
| Utah | 227 | 3 | 275 | — |
| Vermont ¹ | **232 | — | **283 | — |
| Virginia | **230 | *10 | 277 | *12 |
| West Virginia | 225 | *10 | **271 | *15 |
| Wyoming | 229 | *4 | 277 | *5 |
| Other jurisdictions | | | | |
| American Samoa | **157 | — | **195 | — |
| District of Columbia | **193 | 1 | **234 | 3 |
| DDESS ² | 228 | — | 277 | — |
| DoDDS ³ | 228 | — | **278 | — |
| Guam | **184 | *-9 | **233 | 2 |
| Virgin Islands | **183 | — | — | — |

—Indicates the jurisdiction did not participate in 2000, 1992 or 1990.

*Change in score is statistically significant.

**Significantly different from national average in 2000.

¹Jurisdiction did not meet one or more of the guidelines for school participation in 2000.

²Department of Defense Domestic Dependent Elementary and Secondary Schools.

³Department of Defense Dependent Schools.

NOTE: The NAEP assessment at the state level includes only public schools, while other reported national results in this indicator include both public and private school students. Comparative performance results may be affected by variations or changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. See *Supplemental Note 3* for more information on the National Assessment of Educational Progress (NAEP).

SOURCE: U.S. Department of Education, NCES. (2001). *The Nation's Report Card: Mathematics 2000* (NCES 2001-517).

Poverty and Student Achievement

Table 11-1 Average mathematics scale score and percentage of public school students in 4th-grade mathematics, by percentage of students in the school eligible for free or reduced-priced lunch and selected student characteristics: 2000

| Student characteristic | 10 percent or less | | 11–25 percent | | 26–50 percent | | 51–75 percent | | More than 75 percent | | Total population | |
|-----------------------------------------------------|--------------------|---------|---------------|---------|---------------|---------|---------------|---------|----------------------|---------|------------------|---------|
| | Score | Percent | Score | Percent | Score | Percent | Score | Percent | Score | Percent | Score | Percent |
| Total | 243 | 100.0 | 234 | 100.0 | 228 | 100.0 | 218 | 100.0 | 207 | 100.0 | 226 | 100.0 |
| Language other than English spoken in the home | | | | | | | | | | | | |
| Never | 244 | 66.2 | 235 | 67.8 | 230 | 65.0 | 220 | 63.4 | 207 | 52.1 | 228 | 62.9 |
| Sometimes | 243 | 28.4 | 236 | 25.5 | 228 | 28.9 | 217 | 27.8 | 209 | 34.6 | 226 | 29.0 |
| Always | 240 | 5.4 | 219 | 6.6 | 219 | 6.1 | 209 | 8.8 | 208 | 13.3 | 215 | 8.1 |
| Race/ethnicity | | | | | | | | | | | | |
| White | 245 | 83.9 | 237 | 81.8 | 233 | 70.3 | 226 | 55.7 | 217 | 31.9 | 235 | 64.1 |
| Black | (#) | 3.0 | 215 | 6.8 | 211 | 13.3 | 203 | 19.0 | 201 | 34.4 | 205 | 15.1 |
| Hispanic | 223 | 6.1 | 218 | 8.2 | 221 | 13.1 | 209 | 21.3 | 203 | 27.8 | 211 | 15.7 |
| Student is eligible for free or reduced-price lunch | | | | | | | | | | | | |
| Eligible | (#) | 6.6 | 218 | 17.5 | 219 | 33.8 | 209 | 55.6 | 204 | 80.5 | 210 | 40.6 |
| Not eligible | 244 | 93.4 | 238 | 82.5 | 233 | 66.2 | 228 | 44.4 | 212 | 19.5 | 236 | 59.4 |

#Too few sample cases for a reliable estimate.

NOTE: See *Supplemental Note 3* for more information on the National Assessment of Educational Progress (NAEP).

SOURCE: U.S. Department of Education, NCES. National Assessment of Educational Progress (NAEP), unpublished data provided by the Educational Testing Service, 2000.

Poverty and Student Achievement

Table 11-2 Percentage of 4th-grade students in the school eligible for free or reduced-priced lunch, by selected school and teacher characteristics of public schools: 2000

| School and teacher characteristics | Students in school eligible to receive free or reduced-price lunch | | | | | Total population |
|-------------------------------------------------------------------|--------------------------------------------------------------------|---------------|---------------|---------------|----------------------|------------------|
| | 10 percent or less | 11–25 percent | 26–50 percent | 51–75 percent | More than 75 percent | |
| Academic orientation | | | | | | |
| Average student attitude in school toward achievement | | | | | | |
| Very positive | 79.5 | 45.7 | 34.1 | 27.9 | 28.5 | 43.5 |
| Somewhat positive | 20.5 | 54.3 | 65.9 | 61.5 | 65.3 | 53.2 |
| Somewhat/very negative | 0.0 | 0.0 | 0.0 | 10.6 | 6.2 | 3.3 |
| Teacher characteristics | | | | | | |
| Teacher is certified in elementary mathematics* | | | | | | |
| Yes | 27.1 | 39.6 | 37.6 | 31.2 | 22.0 | 30.3 |
| No | 44.1 | 38.6 | 38.8 | 51.7 | 63.7 | 47.7 |
| Number of years spent teaching mathematics | | | | | | |
| 2 years or less | 12.9 | 11.9 | 13.0 | 14.1 | 15.5 | 14.0 |
| 3–5 | 17.7 | 14.4 | 13.9 | 22.5 | 17.0 | 17.1 |
| 6–10 | 11.2 | 13.4 | 23.3 | 20.0 | 19.3 | 18.0 |
| 11 or more | 58.2 | 60.3 | 49.9 | 43.4 | 48.2 | 50.9 |
| School climate and discipline | | | | | | |
| Physical conflicts in school among students | | | | | | |
| Serious/moderate | 2.3 | 9.5 | 11.0 | 21.5 | 22.0 | 12.7 |
| Minor | 50.8 | 43.1 | 66.9 | 54.4 | 65.3 | 56.3 |
| Not a problem | 46.9 | 47.4 | 22.1 | 24.1 | 12.7 | 31.0 |
| Percentage of students absent on a given day | | | | | | |
| 0–2 | 49.5 | 22.2 | 26.9 | 25.8 | 12.7 | 27.8 |
| 3–5 | 50.5 | 73.3 | 57.3 | 64.2 | 65.1 | 61.5 |
| More than 5 | 0.0 | 4.5 | 15.8 | 10.0 | 22.2 | 10.7 |
| Percentage of teachers who left before the end of the school year | | | | | | |
| 0 | 94.1 | 89.5 | 69.1 | 70.6 | 64.2 | 76.9 |
| 1–2 | 5.9 | 9.2 | 21.9 | 25.2 | 30.5 | 19.2 |
| More than 3 | 0.0 | 1.4 | 9.0 | 4.2 | 5.3 | 3.9 |
| Enrollment | | | | | | |
| Less than 300 | 15.0 | 7.4 | 14.0 | 13.5 | 17.3 | 13.7 |
| 300–1,000 | 84.3 | 87.6 | 83.7 | 82.9 | 73.5 | 82.1 |
| More than 1,000 | 0.7 | 5.0 | 2.3 | 3.6 | 9.2 | 4.2 |
| Type of location | | | | | | |
| Central city | 9.3 | 20.7 | 30.7 | 27.1 | 56.2 | 29.9 |
| Urban fringe/large town | 72.7 | 57.9 | 39.6 | 29.1 | 26.1 | 45.6 |
| Rural/small town | 18.0 | 21.3 | 29.7 | 43.8 | 17.7 | 24.5 |

See footnotes at end of table.

Poverty and Student Achievement

Table 11-2 Percentage of 4th-grade students in the school eligible for free or reduced-priced lunch, by selected school and teacher characteristics of public schools: 2000—Continued

| School and teacher characteristics | Students in school eligible to receive free or reduced-price lunch | | | | | Total population |
|-----------------------------------------------------------------------------|--------------------------------------------------------------------|---------------|---------------|---------------|----------------------|------------------|
| | 10 percent or less | 11–25 percent | 26–50 percent | 51–75 percent | More than 75 percent | |
| School resources and social support | | | | | | |
| Percentage of parents who participate in open-house or back-to-school night | | | | | | |
| 0–50 | 5.2 | 12.7 | 17.7 | 23.7 | 29.2 | 17.4 |
| 51–75 | 11.5 | 12.2 | 38.9 | 45.8 | 29.1 | 28.1 |
| More than 75 | 83.3 | 75.1 | 43.4 | 30.6 | 41.7 | 54.5 |
| Percentage of parents who participate in parent-teacher organizations | | | | | | |
| 0–25 | 21.0 | 29.8 | 61.6 | 68.9 | 70.5 | 50.2 |
| 26–50 | 18.7 | 32.0 | 18.8 | 20.6 | 24.3 | 22.9 |
| More than 50 | 60.3 | 38.2 | 19.6 | 10.6 | 5.2 | 26.9 |
| Percentage of parents who participate in parent-teacher conferences | | | | | | |
| 0–50 | 1.1 | 1.0 | 9.0 | 19.5 | 21.5 | 10.1 |
| 51–75 | 1.7 | 18.0 | 23.1 | 30.1 | 27.1 | 19.6 |
| More than 75 | 97.2 | 81.0 | 67.9 | 50.4 | 51.4 | 70.3 |
| Percentage of students who received Title I funds | | | | | | |
| 0–10 | 92.2 | 76.0 | 55.2 | 17.0 | 1.2 | 48.7 |
| 11–25 | 7.8 | 19.7 | 26.3 | 9.9 | 11.3 | 14.5 |
| 26–50 | 0.0 | 4.4 | 11.4 | 10.9 | 7.5 | 6.7 |
| 51–75 | 0.0 | 0.0 | 0.0 | 9.0 | 1.3 | 2.0 |
| More than 75 | 0.0 | 0.0 | 7.2 | 53.2 | 78.6 | 28.1 |

*Details do not add to 100.0 because the questionnaire also included a category for "certification not offered in the state."

NOTE: See *Supplemental Note 3* for more information on the National Assessment of Educational Progress (NAEP).

SOURCE: U.S. Department of Education, NCES. National Assessment of Educational Progress (NAEP), unpublished data provided by the Educational Testing Service, 2000.

Science Performance of Students in Grades 4, 8, and 12

Table 12-1 Average science scale score and percentage of students at or above each science achievement level, by grade: 1996 and 2000

| Achievement level | Grade 4 | | Grade 8 | | Grade 12 | |
|------------------------|------------|------------|----------------------------------------|------------|-------------|------------|
| | 1996 | 2000 | 1996 | 2000 | 1996 | 2000 |
| Total | 150 | 150 | Average scale score | | *150 | 147 |
| | | | 150 | 151 | | |
| | | | Percentage at achievement level | | | |
| Below Basic | 33 | 34 | 39 | 39 | *43 | 47 |
| At or above Basic | 67 | 66 | 61 | 61 | *57 | 53 |
| At or above Proficient | 29 | 29 | *29 | 32 | 21 | 18 |
| At Advanced | 3 | 4 | 3 | 4 | 3 | 2 |

*Significantly different from 2000.

NOTE: See *Supplemental Note 3* for more information on the National Assessment of Educational Progress (NAEP).

SOURCE: U.S. Department of Education, NCES. (forthcoming). *The Nation's Report Card: Science 2000* (NCES 2002-451).

Science Performance of Students in Grades 4, 8, and 12

Table 12-2 Average science scale score for 4th-, 8th-, and 12th-graders, by selected student and school characteristics: 2000

| Student and school characteristics | Average scale score | | |
|------------------------------------|---------------------|---------|----------|
| | Grade 4 | Grade 8 | Grade 12 |
| Total | 150 | 151 | 147 |
| Sex | | | |
| Male | 153 | 154 | 148 |
| Female | 147 | 147 | 145 |
| Race/ethnicity | | | |
| White | 160 | 162 | 154 |
| Black | 124 | 122 | 123 |
| Hispanic | 129 | 128 | 128 |
| Asian/Pacific Islander | (f) | 156 | 153 |
| American Indian/Alaska Native | 140 | 134 | 139 |
| Parents' education | | | |
| High school diploma or less | — | 136 | 132 |
| Bachelor's degree or higher | — | 162 | 157 |
| Current science class in 8th grade | | | |
| Not taking | — | 117 | — |
| Life sciences | — | 142 | — |
| Earth sciences | — | 152 | — |
| Integrated sciences | — | 154 | — |
| Physical sciences | — | 155 | — |
| General sciences | — | 156 | — |
| Courses taken by 12th grade | | | |
| General science | | | |
| Not taken | — | — | 148 |
| Taken | — | — | 147 |
| 1st-year biology | | | |
| Not taken | — | — | 126 |
| Taken | — | — | 150 |
| 1st-year chemistry | | | |
| Not taken | — | — | 128 |
| Taken | — | — | 157 |
| 1st-year physics | | | |
| Not taken | — | — | 139 |
| Taken | — | — | 165 |

See footnotes at end of table.

Science Performance of Students in Grades 4, 8, and 12

Table 12-2 Average science scale score for 4th-, 8th-, and 12th-graders, by selected student and school characteristics: 2000—Continued

| Student and school characteristics | Average scale score | | |
|-------------------------------------------------------------------------------|---------------------|---------|----------|
| | Grade 4 | Grade 8 | Grade 12 |
| Control | | | |
| Public | 148 | 149 | 145 |
| Private | 163 | 166 | 161 |
| Type of location | | | |
| Central city | 140 | 142 | 144 |
| Urban fringe/large town | 155 | 156 | 149 |
| Rural/small town | 152 | 152 | 145 |
| Enrollment | | | |
| Less than 300 | 156 | 157 | 143 |
| 300–999 | 150 | 152 | 147 |
| 1,000 or more | 133 | 148 | 147 |
| Percentage of students in the school eligible for free or reduced-price lunch | | | |
| 0–10 | 167 | 165 | 156 |
| 11–25 | 162 | 160 | 149 |
| 26–50 | 149 | 151 | 142 |
| 51–75 | 141 | 136 | 131 |
| 76–100 | 124 | 122 | 121 |

—Not available.

†Omitted due to concerns about its accuracy.

NOTE: See *Supplemental Note 3* for more information on the National Assessment of Educational Progress (NAEP).

SOURCE: U.S. Department of Education, NCES. (forthcoming). *The Nation's Report Card: Science 2000* (NCES 2002–451), and unpublished data from the NAEP 2000 Grade 4 Science Assessment, provided by the Educational Testing Service.

Science Performance of Students in Grades 4, 8, and 12

Table 12-3 Average science scale score for public school 4th- and 8th-graders in 2000 and change in score since 1996 in grade 8, by state and jurisdiction

| State and jurisdiction | Grade 4 | Grade 8 | Change from 1996 average scale score |
|-------------------------|-----------------------------|-----------------------------|--------------------------------------|
| | Average scale score in 2000 | Average scale score in 2000 | |
| Nation | 148 | 149 | 1 |
| Alabama | **143 | **141 | 3 |
| Arizona ¹ | **141 | 146 | 1 |
| Arkansas | 144 | **143 | -1 |
| California ¹ | **131 | **132 | -6 |
| Connecticut | **156 | **154 | -1 |
| Georgia | **143 | **144 | 2 |
| Hawaii | **136 | **132 | -2 |
| Idaho ¹ | **153 | **159 | — |
| Illinois ¹ | 151 | 150 | — |
| Indiana ¹ | **155 | **156 | 3 |
| Iowa ¹ | **160 | — | — |
| Kentucky | **152 | 152 | 4 |
| Louisiana | **139 | **136 | 3 |
| Maine ¹ | **161 | **160 | -3 |
| Maryland | 146 | 149 | 4 |
| Massachusetts | **162 | **161 | 4 |
| Michigan ¹ | **154 | **156 | 3 |
| Minnesota ¹ | **157 | **160 | 1 |
| Mississippi | **133 | **134 | 1 |
| Missouri | **156 | **156 | *5 |
| Montana ¹ | **160 | **165 | 3 |
| Nebraska | 150 | **157 | 0 |
| Nevada | **142 | **143 | — |
| New Mexico | **138 | **140 | -1 |
| New York ¹ | 149 | 149 | 3 |
| North Carolina | 148 | 147 | 1 |
| North Dakota | **160 | **161 | -1 |
| Ohio ¹ | **154 | **161 | — |
| Oklahoma | **152 | 149 | — |
| Oregon ¹ | 150 | **154 | 0 |
| Rhode Island | 148 | 150 | 1 |
| South Carolina | **141 | **142 | 3 |
| Tennessee | 147 | 146 | 3 |

See footnotes at end of table.

Science Performance of Students in Grades 4, 8, and 12

Table 12-3 Average science scale score for public school 4th- and 8th-graders in 2000 and change in score since 1996 in grade 8, by state and jurisdiction
—Continued

| State and jurisdiction | Grade 4 | Grade 8 | |
|-----------------------------|-----------------------------|-----------------------------|--------------------------------------|
| | Average scale score in 2000 | Average scale score in 2000 | Change from 1996 average scale score |
| Texas | 147 | **144 | -1 |
| Utah | **155 | **155 | -1 |
| Vermont ¹ | **159 | **161 | 4 |
| Virginia | **156 | 152 | 3 |
| West Virginia | 150 | 150 | 2 |
| Wyoming | **158 | **158 | 0 |
| Other jurisdictions | | | |
| American Samoa | **51 | **72 | — |
| DDESS ² | **157 | **159 | *6 |
| DoDDS ³ | **156 | **159 | *4 |
| Guam | **110 | **114 | -6 |
| Virgin Islands ¹ | **116 | — | — |

—The jurisdiction did not participate in 1996 or 2000 or did not meet the minimum guidelines for participation.

*Difference is significantly different.

**Significantly different from national average.

¹Jurisdiction did not meet one or more of the guidelines for school participation.

²Department of Defense Domestic Dependent Elementary and Secondary Schools.

³Department of Defense Dependent Schools.

NOTE: The NAEP assessment at the state level includes only public schools, while other reported national results in this indicator include both public and private school students. Comparative performance results may be affected by variations or changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples. See *Supplemental Note 3* for more information on the NAEP.

SOURCE: U.S. Department of Education, NCES. (forthcoming). *The Nation's Report Card: Science 2000* (NCES 2002-451).

International Comparisons of 8th-Graders' Performance in Mathematics and Science

Table 13-1 Average mathematics and science performance of 8th-graders for the 38 participating countries, by sex and country: 1999

| Country | Mathematics: mean score | | | Science: mean score | | |
|---------------------------|-------------------------|------|--------|---------------------|------|--------|
| | Total | Male | Female | Total | Male | Female |
| International average | 487 | 489 | 485 | 488 | 495 | 480 |
| Australia | 525 | 526 | 524 | 540 | 549 | 532 |
| Belgium-Flemish | 558 | 556 | 560 | 535 | 544 | 526 |
| Bulgaria | 511 | 511 | 510 | 518 | 525 | 511 |
| Canada | 531 | 533 | 529 | 533 | *540 | 526 |
| Chile | 392 | 397 | 388 | 420 | *432 | 409 |
| Chinese Taipei | 585 | 587 | 583 | 569 | *578 | 561 |
| Cyprus | 476 | 474 | 479 | 460 | 465 | 455 |
| Czech Republic | 520 | *528 | 512 | 539 | *557 | 523 |
| England | 496 | 505 | 487 | 538 | *554 | 522 |
| Finland | 520 | 522 | 519 | 535 | 540 | 530 |
| Hong Kong SAR | 582 | 581 | 583 | 530 | 537 | 522 |
| Hungary | 532 | 535 | 529 | 552 | *565 | 540 |
| Indonesia | 403 | 405 | 401 | 435 | 444 | 427 |
| Iran, Islamic Republic of | 422 | *432 | 408 | 448 | *461 | 430 |
| Israel ¹ | 466 | *474 | 459 | 468 | 476 | 461 |
| Italy | 479 | 484 | 475 | 493 | 503 | 484 |
| Japan | 579 | 582 | 575 | 550 | 556 | 543 |
| Jordan | 428 | 425 | 431 | 450 | 442 | 460 |
| Korea, Republic of | 587 | 590 | 585 | 549 | *559 | 538 |
| Latvia-LSS ² | 505 | 508 | 502 | 503 | *510 | 495 |
| Lithuania ³ | 482 | 483 | 480 | 488 | *499 | 478 |
| Macedonia, Republic of | 447 | 447 | 446 | 458 | 458 | 458 |
| Malaysia | 519 | 517 | 521 | 492 | 498 | 488 |
| Moldova | 469 | 471 | 468 | 459 | 465 | 454 |
| Morocco | 337 | 344 | 326 | 323 | 330 | 312 |
| Netherlands | 540 | 542 | 538 | 545 | *554 | 536 |
| New Zealand | 491 | 487 | 495 | 510 | 513 | 506 |
| Philippines | 345 | 337 | 352 | 345 | 339 | 351 |
| Romania | 472 | 470 | 475 | 472 | 475 | 468 |
| Russian Federation | 526 | 526 | 526 | 529 | *540 | 519 |
| Singapore | 604 | 606 | 603 | 568 | 578 | 557 |
| Slovak Republic | 534 | 536 | 532 | 535 | *546 | 525 |
| Slovenia | 530 | 531 | 529 | 533 | *540 | 527 |
| South Africa | 275 | 283 | 267 | 243 | 253 | 234 |
| Thailand | 467 | 465 | 469 | 482 | 484 | 481 |
| Tunisia | 448 | *460 | 436 | 430 | *442 | 417 |
| Turkey | 429 | 429 | 428 | 433 | 434 | 431 |
| United States | 502 | 505 | 498 | 515 | *524 | 505 |

*The average male score for this country is significantly different from the average female score for this country.

¹Did not meet international sampling and/or other guidelines. See *Supplemental Note 4* for details.

²Only Latvian-speaking schools were tested.

³Lithuania tested the same cohort of students as in other countries, but later in 1999, at the beginning of the next school year.

NOTE: Eighth grade in most countries. See *Supplemental Note 4* for details. The international average is the average of the national average of the 38 countries.

SOURCE: U.S. Department of Education, NCES. (2000). *Pursuing Excellence: Comparisons of International Eighth-Grade Mathematics and Science Achievement from a U.S. Perspective, 1995 and 1999* (NCES 2001-028) (TIMSS-R).

International Comparisons of 8th-Graders' Performance in Mathematics and Science

Table 13-2 Average mathematics and science performance of 8th-graders for the 23 countries that participated in both assessments, by country: 1995 and 1999

| Country | Mathematics: mean score | | | Science: mean score | | |
|---------------------------|-------------------------|------|---------------------------------|---------------------|------|---------------------------------|
| | 1995 | 1999 | 1995–99 difference ¹ | 1995 | 1999 | 1995–99 difference ¹ |
| International average | 519 | 521 | 2 | 518 | 521 | 3 |
| Australia ² | 519 | 525 | 6 | 527 | 540 | 14 |
| Belgium-Flemish | 550 | 558 | 8 | 533 | 535 | 2 |
| Bulgaria ² | 527 | 511 | -16 | 545 | 518 | *-27 |
| Canada | 521 | 531 | *10 | 514 | 533 | *19 |
| Cyprus | 468 | 476 | *9 | 452 | 460 | 8 |
| Czech Republic | 546 | 520 | *-26 | 555 | 539 | -16 |
| England ² | 498 | 496 | -1 | 533 | 538 | 5 |
| Hong Kong SAR | 569 | 582 | 13 | 510 | 530 | 20 |
| Hungary | 527 | 532 | 5 | 537 | 552 | *16 |
| Iran, Islamic Republic of | 418 | 422 | 4 | 463 | 448 | -15 |
| Italy | 491 | 485 | -6 | 497 | 498 | 1 |
| Japan | 581 | 579 | -2 | 554 | 550 | -5 |
| Korea, Republic of | 581 | 587 | 6 | 546 | 549 | 3 |
| Latvia-LSS ^{2,3} | 488 | 505 | *17 | 476 | 503 | *27 |
| Lithuania ^{2,4} | 472 | 482 | 10 | 464 | 488 | *25 |
| Netherlands ² | 529 | 540 | 11 | 541 | 545 | 3 |
| New Zealand | 501 | 491 | -10 | 511 | 510 | -1 |
| Romania ² | 474 | 472 | -1 | 471 | 472 | 1 |
| Russian Federation | 524 | 526 | 2 | 523 | 529 | 7 |
| Singapore | 609 | 604 | -4 | 580 | 568 | -12 |
| Slovak Republic | 534 | 534 | 0 | 532 | 535 | 3 |
| Slovenia ² | 531 | 530 | -1 | 541 | 533 | -8 |
| United States | 492 | 502 | 9 | 513 | 515 | 2 |

*1999 average is statistically different from the 1995 average.

¹Difference is calculated by subtracting the 1995 score from the 1999 score. Details may not sum due to rounding.

²Did not meet international sampling and/or other guidelines in 1995, 1999, or both years. See *Supplemental Note 4* for details.

³Only Latvian-speaking schools were tested.

⁴Lithuania tested the same cohort of students as in other countries, but later in 1999, at the beginning of the next school year.

NOTE: Eighth grade in most countries. See *Supplemental Note 4* for details. International average is the average of the national averages of the 23 countries. Scores for 1995 are based on rescaled data.

SOURCE: U.S. Department of Education, NCES. (2000). *Pursuing Excellence: Comparisons of International Eighth-Grade Mathematics and Science Achievement from a U.S. Perspective, 1995 and 1999* (NCES 2001–028) (TIMSS and TIMSS-R).

International Comparisons of 8th-Graders' Performance in Mathematics and Science

Table 13-3 Score difference from the international average for the 17 participating countries, by mathematics and science performance of 4th-graders in 1995 and 8th-graders in 1999

| Country | Mathematics | | Science | |
|---------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| | 4 th -graders in 1995 | 8 th -graders in 1999 | 4 th -graders in 1995 | 8 th -graders in 1999 |
| International average | 517 | 524 | 514 | 524 |
| Australia ¹ | 0 | 1 | *28 | *16 |
| Canada | *-12 | 7 | *12 | *9 |
| Cyprus | *-42 | *-48 | *-64 | *-64 |
| Czech Republic | *23 | -4 | *18 | *15 |
| England ¹ | *-33 | *-28 | *14 | *14 |
| Hong Kong SAR | *40 | *58 | -6 | 5 |
| Hungary ¹ | 4 | 8 | -6 | *28 |
| Iran, Islamic Republic of | *-130 | *-102 | *-134 | *-76 |
| Italy ¹ | -7 | *-39 | 10 | *-26 |
| Japan | *50 | *55 | *39 | *25 |
| Korea, Republic of | *63 | *63 | *62 | *24 |
| Latvia-LSS ^{1,2} | *-18 | *-19 | *-27 | *-21 |
| Netherlands ¹ | *32 | 16 | *17 | *21 |
| New Zealand | *-48 | *-33 | -9 | *-15 |
| Singapore | *73 | *80 | 10 | *44 |
| Slovenia ¹ | 8 | 6 | 8 | 9 |
| United States | 0 | *-22 | *28 | -9 |

*The average score for this country is significantly different from the international average for the indicated year.

¹Did not meet international sampling and/or other guidelines for 4th grade in 1995. See *Supplemental Note 4* for details.

²Only Latvian-speaking schools were tested.

NOTE: Fourth and 8th grade in most countries. See *Supplemental Note 4* for details. International average is the average of the national averages of the 17 countries. Scores for 1995 are based on rescaled data.

SOURCE: U.S. Department of Education, NCES. (2000). *Pursuing Excellence: Comparisons of International Eighth-Grade Mathematics and Science Achievement from a U.S. Perspective, 1995 and 1999* (NCES 2001-028) (TIMSS and TIMSS-R).

Education and Health

Table 14-1 Percentage of the population age 25 and above who reported being in excellent or very good health, by educational attainment and selected characteristics: 1997

| Characteristic | Less than high school | High school diploma or equivalent | Some college, including vocational/technical | Bachelor's degree or higher | Total |
|---------------------------------|-----------------------|-----------------------------------|----------------------------------------------|-----------------------------|-------------|
| Total | 38.7 | 57.8 | 67.6 | 79.7 | 61.4 |
| Sex | | | | | |
| Male | 42.3 | 60.4 | 69.0 | 80.2 | 63.9 |
| Female | 35.5 | 55.7 | 66.5 | 79.2 | 59.2 |
| Family income | | | | | |
| Less than \$20,000 | 31.0 | 42.5 | 49.5 | 64.3 | 40.5 |
| \$20,000–34,999 | 41.9 | 55.1 | 61.7 | 71.2 | 55.9 |
| \$35,000–54,999 | 48.8 | 63.2 | 71.3 | 79.7 | 67.5 |
| \$55,000–74,999 | 54.0 | 72.8 | 76.1 | 81.7 | 75.2 |
| \$75,000 or more | 59.8 | 71.5 | 77.9 | 86.0 | 80.3 |
| Race/ethnicity | | | | | |
| White | 37.7 | 58.7 | 69.1 | 81.1 | 63.7 |
| Black | 31.8 | 51.6 | 60.2 | 70.4 | 50.9 |
| Hispanic | 45.2 | 61.0 | 67.4 | 77.8 | 56.3 |
| Asian/Pacific Islander | 47.1 | 55.2 | 60.0 | 71.7 | 61.0 |
| American Indian/Alaskan Native | 32.6 | 50.8 | 62.2 | 71.5 | 49.0 |
| Age | | | | | |
| 25–34 | 56.7 | 71.5 | 77.3 | 88.0 | 74.9 |
| 35–44 | 48.5 | 65.7 | 72.6 | 84.3 | 69.8 |
| 45–54 | 40.4 | 56.1 | 66.2 | 79.7 | 63.2 |
| 55–64 | 29.1 | 49.3 | 57.3 | 72.8 | 51.2 |
| 65 and above | 27.6 | 40.1 | 46.1 | 55.3 | 38.3 |
| Metropolitan area status | | | | | |
| 2.5 million or more | 42.4 | 60.1 | 67.5 | 80.1 | 63.9 |
| 1–2.49 million | 40.8 | 60.2 | 68.6 | 81.2 | 64.8 |
| Less than 1 million | 38.5 | 57.9 | 67.7 | 79.7 | 61.6 |
| Nonmetropolitan area | 33.9 | 53.8 | 66.3 | 75.4 | 54.9 |
| Region | | | | | |
| Northeast | 39.9 | 61.1 | 68.5 | 81.0 | 63.6 |
| Midwest | 37.5 | 59.0 | 68.7 | 80.5 | 62.8 |
| South | 36.8 | 54.8 | 66.5 | 78.1 | 58.4 |
| West | 42.8 | 58.0 | 67.4 | 80.2 | 63.1 |

NOTE: Includes those who responded excellent or very good on a scale of excellent, very good, good, fair, and poor.

SOURCE: U.S. Department of Health and Human Services, Centers for Disease Control, National Center for Health Statistics. National Health Interview Survey, 1997.

Annual Earnings of Young Adults

Table 16-1 Median annual earnings (in constant 2000 dollars) of all wage and salary workers ages 25–34, by sex and educational attainment level: March 1971–2000

| Year | Male | | | | | Female | | | | |
|------|-----------|-------------|----------------------------|--------------|-----------------------------|-------------|-------------|----------------------------|--------------|-----------------------------|
| | All males | Grades 9–11 | High school diploma or GED | Some college | Bachelor's degree or higher | All females | Grades 9–11 | High school diploma or GED | Some college | Bachelor's degree or higher |
| 1971 | \$36,564 | \$31,039 | \$36,935 | \$38,947 | \$45,219 | \$15,984 | \$10,045 | \$15,656 | \$17,942 | \$29,345 |
| 1972 | 38,118 | 30,845 | 38,951 | 39,342 | 46,065 | 16,686 | 10,235 | 16,217 | 19,188 | 29,047 |
| 1973 | 38,912 | 32,579 | 39,326 | 39,118 | 45,610 | 16,925 | 11,122 | 15,929 | 20,301 | 28,401 |
| 1974 | 36,833 | 29,965 | 37,122 | 37,765 | 42,491 | 16,873 | 9,833 | 15,815 | 18,885 | 27,463 |
| 1975 | 35,630 | 26,882 | 34,318 | 36,681 | 40,089 | 17,859 | 10,161 | 15,810 | 19,594 | 27,249 |
| 1976 | 35,788 | 27,191 | 34,740 | 35,920 | 41,279 | 18,006 | 10,080 | 16,544 | 18,815 | 26,170 |
| 1977 | 35,826 | 26,970 | 34,968 | 35,779 | 41,175 | 18,852 | 10,527 | 16,820 | 20,613 | 25,757 |
| 1978 | 36,572 | 26,928 | 35,197 | 36,802 | 41,422 | 18,196 | 8,839 | 16,424 | 19,139 | 25,460 |
| 1979 | 35,956 | 26,214 | 34,533 | 36,455 | 40,033 | 18,964 | 11,687 | 16,585 | 19,788 | 25,770 |
| 1980 | 33,278 | 23,575 | 32,100 | 33,459 | 38,242 | 18,747 | 10,624 | 16,469 | 20,454 | 25,042 |
| 1981 | 31,617 | 21,939 | 29,898 | 31,849 | 38,691 | 18,449 | 9,842 | 16,055 | 19,776 | 24,777 |
| 1982 | 30,253 | 19,773 | 27,785 | 31,030 | 37,253 | 18,418 | 10,427 | 15,680 | 18,905 | 25,551 |
| 1983 | 30,317 | 19,598 | 27,945 | 31,622 | 37,809 | 18,781 | 10,542 | 15,857 | 19,662 | 26,438 |
| 1984 | 31,263 | 18,111 | 28,622 | 32,995 | 38,864 | 19,017 | 9,341 | 16,564 | 20,072 | 26,702 |
| 1985 | 31,345 | 19,395 | 27,536 | 32,707 | 41,276 | 19,032 | 10,415 | 16,618 | 19,582 | 28,053 |
| 1986 | 31,164 | 19,204 | 27,660 | 32,602 | 41,608 | 19,239 | 10,690 | 16,534 | 20,075 | 29,437 |
| 1987 | 31,204 | 20,305 | 28,082 | 31,804 | 41,743 | 20,025 | 11,404 | 16,932 | 21,171 | 30,164 |
| 1988 | 30,924 | 19,469 | 28,759 | 31,570 | 40,720 | 20,360 | 9,305 | 16,640 | 21,780 | 30,131 |
| 1989 | 30,261 | 19,559 | 28,040 | 31,479 | 40,656 | 20,149 | 10,037 | 16,020 | 21,118 | 30,889 |
| 1990 | 28,665 | 18,628 | 26,259 | 30,051 | 38,770 | 20,169 | 9,139 | 15,872 | 21,223 | 30,503 |
| 1991 | 27,979 | 16,471 | 25,563 | 29,161 | 39,019 | 19,785 | 9,910 | 15,539 | 20,534 | 29,516 |
| 1992 | 27,274 | 16,596 | 24,389 | 27,668 | 39,070 | 20,268 | 11,724 | 15,339 | 20,575 | 30,684 |
| 1993 | 26,726 | 16,201 | 24,231 | 27,218 | 38,014 | 19,771 | 8,905 | 15,172 | 19,909 | 30,245 |
| 1994 | 26,764 | 16,588 | 24,589 | 28,149 | 37,437 | 19,370 | 9,248 | 15,993 | 19,244 | 29,822 |
| 1995 | 26,894 | 17,847 | 24,213 | 26,891 | 37,553 | 19,281 | 9,436 | 15,346 | 19,603 | 29,328 |
| 1996 | 27,497 | 16,926 | 24,663 | 28,233 | 38,593 | 19,940 | 9,789 | 15,366 | 19,579 | 28,940 |
| 1997 | 27,878 | 18,191 | 25,618 | 28,453 | 38,410 | 20,541 | 10,279 | 16,276 | 19,817 | 31,024 |
| 1998 | 31,028 | 18,569 | 26,717 | 31,118 | 41,695 | 21,642 | 10,989 | 15,863 | 20,736 | 31,789 |
| 1999 | 31,440 | 18,582 | 26,842 | 31,208 | 42,341 | 21,839 | 10,174 | 16,770 | 21,008 | 32,145 |
| 2000 | 31,175 | 19,225 | 26,399 | 31,336 | 42,292 | 22,447 | 11,583 | 16,573 | 21,597 | 32,238 |

NOTE: The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey methodology for the CPS was changed and weights were adjusted. See *Supplemental Note 2* for further discussion. The Consumer Price Index (CPI) was used to adjust earnings into constant dollars; see *Supplemental Note 13*.

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1972–2001.

Annual Earnings of Young Adults

Table 16-2 Ratio of median annual earnings of all wage and salary workers ages 25–34 whose highest education level was grades 9–11, some college, or a bachelor's degree or higher, compared with those with a high school diploma or GED, by sex: March 1971–2000

| Year | Grades 9–11 | | Some college | | Bachelor's degree or higher | |
|------|-------------|--------|--------------|--------|-----------------------------|--------|
| | Male | Female | Male | Female | Male | Female |
| 1971 | 0.84 | 0.64 | 1.05 | 1.15 | 1.22 | 1.87 |
| 1972 | 0.79 | 0.63 | 1.01 | 1.18 | 1.18 | 1.79 |
| 1973 | 0.83 | 0.70 | 0.99 | 1.27 | 1.16 | 1.78 |
| 1974 | 0.81 | 0.62 | 1.02 | 1.19 | 1.14 | 1.74 |
| 1975 | 0.78 | 0.64 | 1.07 | 1.24 | 1.17 | 1.72 |
| 1976 | 0.78 | 0.61 | 1.03 | 1.14 | 1.19 | 1.58 |
| 1977 | 0.77 | 0.63 | 1.02 | 1.23 | 1.18 | 1.53 |
| 1978 | 0.77 | 0.54 | 1.05 | 1.17 | 1.18 | 1.55 |
| 1979 | 0.76 | 0.70 | 1.06 | 1.19 | 1.16 | 1.55 |
| 1980 | 0.73 | 0.65 | 1.04 | 1.24 | 1.19 | 1.52 |
| 1981 | 0.73 | 0.61 | 1.07 | 1.23 | 1.29 | 1.54 |
| 1982 | 0.71 | 0.66 | 1.12 | 1.21 | 1.34 | 1.63 |
| 1983 | 0.70 | 0.66 | 1.13 | 1.24 | 1.35 | 1.67 |
| 1984 | 0.63 | 0.56 | 1.15 | 1.21 | 1.36 | 1.61 |
| 1985 | 0.70 | 0.63 | 1.19 | 1.18 | 1.50 | 1.69 |
| 1986 | 0.69 | 0.65 | 1.18 | 1.21 | 1.50 | 1.78 |
| 1987 | 0.72 | 0.67 | 1.13 | 1.25 | 1.49 | 1.78 |
| 1988 | 0.68 | 0.56 | 1.10 | 1.31 | 1.42 | 1.81 |
| 1989 | 0.70 | 0.63 | 1.12 | 1.32 | 1.45 | 1.93 |
| 1990 | 0.71 | 0.58 | 1.14 | 1.34 | 1.48 | 1.92 |
| 1991 | 0.64 | 0.64 | 1.14 | 1.32 | 1.53 | 1.90 |
| 1992 | 0.68 | 0.76 | 1.13 | 1.34 | 1.60 | 2.00 |
| 1993 | 0.67 | 0.59 | 1.12 | 1.31 | 1.57 | 1.99 |
| 1994 | 0.67 | 0.58 | 1.14 | 1.20 | 1.52 | 1.86 |
| 1995 | 0.74 | 0.61 | 1.11 | 1.28 | 1.55 | 1.91 |
| 1996 | 0.69 | 0.64 | 1.14 | 1.27 | 1.56 | 1.88 |
| 1997 | 0.71 | 0.63 | 1.11 | 1.22 | 1.50 | 1.91 |
| 1998 | 0.70 | 0.69 | 1.16 | 1.31 | 1.56 | 2.00 |
| 1999 | 0.69 | 0.61 | 1.16 | 1.25 | 1.58 | 1.92 |
| 2000 | 0.73 | 0.70 | 1.19 | 1.30 | 1.60 | 1.95 |

NOTE: This ratio is most useful when compared with 1.0. For example, the ratio of 1.60 for males in 2000 whose highest education level was a bachelor's degree or higher means that they earned 60 percent more than males who had a high school diploma or GED. The ratio of 0.73 for males in 2000 whose highest education level was grades 9–11 means that they earned 27 percent less than males who had a high school diploma or GED. The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey methodology for the CPS was changed and weights were adjusted. See *Supplemental Note 2* for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1972–2001.

Annual Earnings of Young Adults

Table 16-3 Ratio of median annual earnings of all male to all female wage and salary workers ages 25–34, by educational attainment: March 1971–2000

| Year | All | Grades 9–11 | High school diploma or GED | Some college | Bachelor's degree or higher |
|------|------|----------------|----------------------------------|-----------------|-----------------------------------|
| 1971 | 2.29 | 3.09 | 2.36 | 2.17 | 1.54 |
| 1972 | 2.28 | 3.01 | 2.40 | 2.05 | 1.59 |
| 1973 | 2.30 | 2.93 | 2.47 | 1.93 | 1.61 |
| 1974 | 2.18 | 3.05 | 2.35 | 2.00 | 1.55 |
| 1975 | 2.00 | 2.65 | 2.17 | 1.87 | 1.47 |
| 1976 | 1.99 | 2.70 | 2.10 | 1.91 | 1.58 |
| 1977 | 1.90 | 2.56 | 2.08 | 1.74 | 1.60 |
| 1978 | 2.01 | 3.05 | 2.14 | 1.92 | 1.63 |
| 1979 | 1.90 | 2.24 | 2.08 | 1.84 | 1.55 |
| 1980 | 1.78 | 2.22 | 1.95 | 1.64 | 1.53 |
| 1981 | 1.71 | 2.23 | 1.86 | 1.61 | 1.56 |
| 1982 | 1.64 | 1.90 | 1.77 | 1.64 | 1.46 |
| 1983 | 1.61 | 1.86 | 1.76 | 1.61 | 1.43 |
| 1984 | 1.64 | 1.94 | 1.73 | 1.64 | 1.46 |
| 1985 | 1.65 | 1.86 | 1.66 | 1.67 | 1.47 |
| 1986 | 1.62 | 1.80 | 1.67 | 1.62 | 1.41 |
| 1987 | 1.56 | 1.78 | 1.66 | 1.50 | 1.38 |
| 1988 | 1.52 | 2.09 | 1.73 | 1.45 | 1.35 |
| 1989 | 1.50 | 1.95 | 1.75 | 1.49 | 1.32 |
| 1990 | 1.42 | 2.04 | 1.65 | 1.42 | 1.27 |
| 1991 | 1.41 | 1.66 | 1.65 | 1.42 | 1.32 |
| 1992 | 1.35 | 1.42 | 1.59 | 1.34 | 1.27 |
| 1993 | 1.35 | 1.82 | 1.60 | 1.37 | 1.26 |
| 1994 | 1.38 | 1.79 | 1.54 | 1.46 | 1.26 |
| 1995 | 1.39 | 1.89 | 1.58 | 1.37 | 1.28 |
| 1996 | 1.38 | 1.73 | 1.61 | 1.44 | 1.33 |
| 1997 | 1.36 | 1.77 | 1.57 | 1.44 | 1.24 |
| 1998 | 1.43 | 1.69 | 1.68 | 1.50 | 1.31 |
| 1999 | 1.44 | 1.83 | 1.60 | 1.49 | 1.32 |
| 2000 | 1.39 | 1.66 | 1.59 | 1.45 | 1.31 |

NOTE: This ratio is most useful when compared with 1.0. For example, the ratio of 1.31 in 2000 for those whose highest education level was a bachelor's degree or higher means that males who had attained a bachelor's degree or higher earned 31 percent more than females with the same level of educational attainment. The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey methodology for the CPS was changed and weights were adjusted. See *Supplemental Note 2* for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1972–2001.

Annual Earnings of Young Adults

Table 16-4 Difference in average annual earnings (in constant 2000 dollars) for all wage and salary workers ages 25–34 between the highest and the lowest quartiles, by sex and educational attainment: March 1971–2000

| Year | Male | | | | Female | | | |
|------|-------------|----------------------------|--------------|-----------------------------|-------------|----------------------------|--------------|-----------------------------|
| | Grades 9–11 | High school diploma or GED | Some college | Bachelor's degree or higher | Grades 9–11 | High school diploma or GED | Some college | Bachelor's degree or higher |
| 1971 | \$19,612 | \$19,218 | \$22,220 | \$28,299 | \$14,768 | \$18,285 | \$21,428 | \$23,756 |
| 1972 | 20,605 | 19,391 | 23,194 | 29,892 | 14,811 | 18,965 | 21,340 | 25,492 |
| 1973 | 21,526 | 19,272 | 23,284 | 29,080 | 14,485 | 18,605 | 21,456 | 25,489 |
| 1974 | 20,733 | 19,895 | 22,261 | 27,910 | 13,138 | 17,693 | 20,878 | 21,673 |
| 1975 | 20,825 | 20,988 | 22,381 | 24,654 | 13,081 | 17,430 | 19,314 | 21,508 |
| 1976 | 20,390 | 21,049 | 24,402 | 24,656 | 13,447 | 17,943 | 19,926 | 21,788 |
| 1977 | 21,277 | 22,735 | 23,376 | 24,765 | 14,842 | 18,347 | 19,544 | 20,465 |
| 1978 | 22,236 | 22,850 | 22,157 | 25,625 | 14,471 | 18,236 | 19,493 | 20,449 |
| 1979 | 22,216 | 22,230 | 24,198 | 24,913 | 13,782 | 17,361 | 18,176 | 19,884 |
| 1980 | 19,130 | 21,218 | 22,281 | 24,766 | 13,144 | 16,547 | 17,023 | 19,237 |
| 1981 | 19,261 | 21,307 | 21,994 | 25,480 | 11,802 | 15,848 | 17,825 | 20,248 |
| 1982 | 20,357 | 20,747 | 22,629 | 25,344 | 13,289 | 15,869 | 18,125 | 19,711 |
| 1983 | 18,288 | 21,496 | 23,399 | 27,374 | 13,236 | 16,331 | 18,840 | 19,147 |
| 1984 | 20,014 | 22,631 | 24,278 | 26,414 | 13,828 | 16,524 | 17,425 | 19,549 |
| 1985 | 17,186 | 22,596 | 23,392 | 29,254 | 13,528 | 17,071 | 18,471 | 22,028 |
| 1986 | 17,989 | 22,152 | 25,228 | 28,919 | 14,343 | 16,621 | 20,131 | 22,331 |
| 1987 | 18,994 | 22,533 | 25,092 | 28,865 | 12,603 | 16,543 | 18,708 | 21,799 |
| 1988 | 18,714 | 21,355 | 24,313 | 29,915 | 12,892 | 16,321 | 19,969 | 22,805 |
| 1989 | 17,783 | 20,016 | 22,489 | 28,892 | 12,424 | 15,755 | 18,874 | 23,108 |
| 1990 | 16,393 | 19,728 | 22,281 | 27,896 | 12,330 | 14,872 | 17,610 | 21,684 |
| 1991 | 16,466 | 20,383 | 21,674 | 29,008 | 10,802 | 15,990 | 18,008 | 21,887 |
| 1992 | 15,723 | 19,787 | 22,123 | 29,452 | 13,169 | 17,105 | 19,496 | 20,941 |
| 1993 | 16,479 | 18,322 | 21,209 | 29,737 | 11,794 | 16,208 | 18,084 | 23,613 |
| 1994 | 15,692 | 18,648 | 20,984 | 29,438 | 11,882 | 15,446 | 18,723 | 22,431 |
| 1995 | 15,773 | 19,427 | 20,546 | 29,918 | 10,944 | 14,850 | 18,154 | 22,452 |
| 1996 | 13,794 | 18,392 | 20,081 | 28,332 | 12,108 | 14,822 | 17,841 | 20,203 |
| 1997 | 14,862 | 17,999 | 21,098 | 33,394 | 11,926 | 15,171 | 17,000 | 21,410 |
| 1998 | 15,776 | 18,757 | 21,006 | 37,145 | 11,883 | 15,528 | 17,119 | 21,562 |
| 1999 | 15,109 | 19,512 | 21,508 | 38,814 | 11,948 | 14,942 | 17,546 | 22,491 |
| 2000 | 15,086 | 18,561 | 24,056 | 39,389 | 12,735 | 15,730 | 16,819 | 23,566 |

NOTE: The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey methodology for the CPS was changed and weights were adjusted. See *Supplemental Note 2* for further discussion. The Consumer Price Index (CPI) was used to adjust earnings into constant dollars; see *Supplemental Note 13*.

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1972–2001.

Annual Earnings of Young Adults

Table 16-5 Percentage of young adults ages 25–34 whose highest education level was a high school diploma or GED and whose annual earnings were higher than the median, and the highest quartile of those with a bachelor's degree or higher, by sex: March 1971–2000

| Year | Male | | Female | |
|------|--------|------------------|--------|------------------|
| | Median | Highest quartile | Median | Highest quartile |
| 1971 | 25.4 | 5.7 | 12.1 | 3.7 |
| 1972 | 29.1 | 8.2 | 15.4 | 4.3 |
| 1973 | 32.5 | 8.8 | 14.5 | 4.7 |
| 1974 | 32.4 | 9.4 | 17.0 | 4.4 |
| 1975 | 33.3 | 11.3 | 15.7 | 4.3 |
| 1976 | 32.6 | 11.6 | 20.4 | 6.7 |
| 1977 | 35.0 | 14.4 | 22.3 | 7.1 |
| 1978 | 35.7 | 12.5 | 23.2 | 8.3 |
| 1979 | 37.3 | 13.1 | 20.8 | 7.2 |
| 1980 | 32.8 | 11.5 | 22.6 | 6.0 |
| 1981 | 27.6 | 9.3 | 20.6 | 5.3 |
| 1982 | 26.8 | 8.4 | 19.5 | 6.0 |
| 1983 | 28.3 | 6.7 | 17.7 | 5.5 |
| 1984 | 27.5 | 8.6 | 18.4 | 6.7 |
| 1985 | 21.7 | 4.7 | 17.9 | 5.3 |
| 1986 | 20.4 | 5.0 | 15.2 | 4.2 |
| 1987 | 21.8 | 6.4 | 14.9 | 4.4 |
| 1988 | 24.1 | 6.0 | 13.6 | 3.2 |
| 1989 | 21.1 | 4.7 | 11.7 | 2.8 |
| 1990 | 21.4 | 5.3 | 11.0 | 2.9 |
| 1991 | 18.6 | 4.7 | 12.8 | 3.1 |
| 1992 | 17.0 | 3.9 | 13.9 | 3.3 |
| 1993 | 17.7 | 3.4 | 10.8 | 2.0 |
| 1994 | 17.7 | 4.4 | 12.4 | 3.4 |
| 1995 | 18.8 | 4.8 | 11.0 | 3.3 |
| 1996 | 16.9 | 4.8 | 11.6 | 3.2 |
| 1997 | 19.0 | 3.3 | 10.6 | 3.1 |
| 1998 | 16.0 | 2.1 | 9.3 | 3.0 |
| 1999 | 16.1 | 2.3 | 9.8 | 2.3 |
| 2000 | 15.8 | 3.0 | 10.6 | 3.4 |

NOTE: The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey methodology for the CPS was changed and weights were adjusted. See *Supplemental Note 2* for further discussion. The Consumer Price Index (CPI) was used to adjust earnings into constant dollars; see *Supplemental Note 13*.

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1972–2001.

Students' Absence From School

Table 17-1 Percentage distributions of 8th-, 10th-, and 12th-grade students according to how many school days they missed in a 4-week period, and average percentage of their total absences attributed to illness, skipping school, or other reasons: 1983, 1991, and 2000

| Grade | Total days absent from school | | | | Percentage of total absences attributed to each reason | | |
|-------|-------------------------------|-------|-------------|------------------|--------------------------------------------------------|----------------|---------------|
| | 0 days | 1 day | 2 to 5 days | More than 5 days | Illness | Skipped school | Other reasons |
| | 1983 | | | | | | |
| 12 | 33.5 | 19.2 | 27.8 | 19.6 | 40.0 | 22.7 | 37.3 |
| | 1991 | | | | | | |
| 8 | 44.2 | 17.9 | 22.1 | 15.8 | 59.9 | 8.4 | 31.8 |
| 10 | 38.9 | 19.6 | 24.8 | 16.7 | 50.1 | 16.0 | 33.9 |
| 12 | 31.1 | 19.6 | 28.3 | 21.0 | 37.5 | 25.8 | 36.7 |
| | 2000 | | | | | | |
| 8 | 44.6 | 19.5 | 22.7 | 13.1 | 53.1 | 9.0 | 37.9 |
| 10 | 40.2 | 20.7 | 25.1 | 14.1 | 45.4 | 15.6 | 39.0 |
| 12 | 28.4 | 20.0 | 30.2 | 21.4 | 34.2 | 26.1 | 39.7 |

NOTE: The data do not meet NCES standards for response rates. "Other reasons" were not specified in the survey. Students absent from the class in which the survey was administered are not represented in the data. Percentages may not add to 100.0 due to rounding.

SOURCE: University of Michigan, Institute for Social Research. Monitoring the Future 8th-, 10th-, and 12th-Grade Studies, 1983, 1991, and 2000.

Students' Absence From School

Table 17-2 Percentage distributions of 8th-, 10th-, and 12th-grade students according to how many days of school they missed in a 4-week period, by reason for absence, and according to how many classes they cut: 1983, 1991, and 2000

| Grade | Days absent from school, by reason for absence | | | | | | | | |
|-------------|------------------------------------------------|--------|----------------|----------------|-------|----------------|---------------|-------|----------------|
| | Illness | | | Skipped school | | | Other reasons | | |
| | 0 days | 1 day | 2 or more days | 0 days | 1 day | 2 or more days | 0 days | 1 day | 2 or more days |
| 1983 | | | | | | | | | |
| 12 | 57.8 | 17.8 | 24.5 | 71.9 | 12.6 | 15.5 | 59.0 | 19.4 | 21.6 |
| 1991 | | | | | | | | | |
| 8 | 55.7 | 17.2 | 27.2 | 89.7 | 5.2 | 5.1 | 70.0 | 15.2 | 14.8 |
| 10 | 57.3 | 18.1 | 24.6 | 81.5 | 9.1 | 9.4 | 66.5 | 16.7 | 16.7 |
| 12 | 58.4 | 17.1 | 24.5 | 68.3 | 14.2 | 17.5 | 58.3 | 19.2 | 22.5 |
| 2000 | | | | | | | | | |
| 8 | 59.6 | 18.1 | 22.3 | 89.4 | 5.4 | 5.2 | 67.3 | 17.6 | 15.1 |
| 10 | 61.0 | 18.2 | 20.8 | 82.7 | 8.6 | 8.8 | 64.8 | 18.7 | 16.5 |
| 12 | 58.7 | 17.6 | 23.7 | 66.8 | 15.0 | 18.2 | 54.4 | 21.2 | 24.5 |
| Grade | Number of classes cut | | | | | | | | |
| | None | 1 or 2 | 3 or more | | | | | | |
| 1983 | | | | | | | | | |
| 12 | 66.4 | 20.1 | 13.5 | | | | | | |
| 1991 | | | | | | | | | |
| 8 | 87.2 | 8.7 | 4.1 | | | | | | |
| 10 | 74.6 | 16.7 | 8.7 | | | | | | |
| 12 | 64.8 | 21.0 | 14.2 | | | | | | |
| 2000 | | | | | | | | | |
| 8 | 88.4 | 7.5 | 4.0 | | | | | | |
| 10 | 75.5 | 15.2 | 9.3 | | | | | | |
| 12 | 63.0 | 21.2 | 15.8 | | | | | | |

NOTE: The data do not meet NCES standards for response rates. "Other reasons" were not specified in the survey. Students absent from the class in which the survey was administered are not represented in the data. Percentages may not add to 100.0 due to rounding.

SOURCE: University of Michigan, Institute for Social Research. Monitoring the Future 8th-, 10th-, and 12th-Grade Studies, 1983, 1991, and 2000.

12th-Graders' Effort and Interest in School

Table 18-1 Percentage distributions of 12th-graders according to their ratings of school work's meaningfulness, courses' degree of interest, and the importance of their school learning in later life, by sex, high school program, and average grades: 1983, 1990, 1995, and 2000

| Student characteristics | How often school work is meaningful | | | How interesting most courses are | | | How important school learning will be in later life | | |
|--------------------------------------------|-------------------------------------|-------------|-----------------|----------------------------------|--------------------|---------------------------|-----------------------------------------------------|------------------|-------------------------|
| | Seldom or never | Sometimes | Often or always | Very or slightly dull | Fairly interesting | Quite or very interesting | Not or slightly important | Fairly important | Quite or very important |
| Total | 18.3 | 41.5 | 40.2 | 19.8 | 45.5 | 34.6 | 19.9 | 29.6 | 50.5 |
| 1983 | | | | | | | | | |
| Sex | | | | | | | | | |
| Male | 22.2 | 40.9 | 36.8 | 22.7 | 45.1 | 32.2 | 22.4 | 29.5 | 48.1 |
| Female | 14.8 | 41.8 | 43.4 | 17.3 | 45.6 | 37.1 | 17.8 | 29.7 | 52.5 |
| High school program ¹ | | | | | | | | | |
| Academic/college-prep | 13.1 | 41.0 | 45.9 | 18.1 | 42.9 | 39.0 | 16.6 | 29.0 | 54.4 |
| General | 23.4 | 42.6 | 33.9 | 23.1 | 49.3 | 27.5 | 26.5 | 31.2 | 42.3 |
| Vocational/technical | 19.0 | 44.6 | 36.5 | 15.9 | 43.2 | 40.9 | 15.6 | 26.2 | 58.2 |
| Average grades in high school ² | | | | | | | | | |
| As | 11.2 | 36.3 | 52.5 | 14.5 | 37.5 | 48.0 | 14.9 | 26.0 | 59.2 |
| Bs | 16.6 | 43.8 | 39.6 | 17.1 | 47.5 | 35.4 | 16.7 | 30.6 | 52.7 |
| C's or D's | 25.5 | 40.8 | 33.7 | 27.9 | 47.8 | 24.2 | 28.9 | 30.6 | 40.4 |
| Total | 20.0 | 44.5 | 35.5 | 24.6 | 46.7 | 28.7 | 20.7 | 32.3 | 47.0 |
| 1990 | | | | | | | | | |
| Sex | | | | | | | | | |
| Male | 21.1 | 44.9 | 34.1 | 26.4 | 46.1 | 27.4 | 21.6 | 30.7 | 47.7 |
| Female | 18.6 | 44.5 | 36.9 | 22.1 | 47.8 | 30.2 | 19.4 | 34.3 | 46.3 |
| High school program ¹ | | | | | | | | | |
| Academic/college-prep | 17.9 | 46.1 | 35.9 | 22.4 | 48.1 | 29.4 | 18.8 | 34.9 | 46.3 |
| General | 23.1 | 45.7 | 31.2 | 28.8 | 48.0 | 23.2 | 24.5 | 31.9 | 43.6 |
| Vocational/technical | 22.9 | 37.3 | 39.8 | 21.7 | 41.1 | 37.3 | 16.1 | 25.8 | 58.1 |
| Average grades in high school ² | | | | | | | | | |
| As | 18.1 | 41.2 | 40.8 | 19.8 | 45.5 | 34.7 | 17.6 | 30.8 | 51.6 |
| Bs | 18.1 | 45.1 | 36.8 | 20.8 | 48.1 | 31.1 | 17.8 | 34.0 | 48.2 |
| C's or D's | 25.3 | 46.3 | 28.5 | 35.6 | 45.8 | 18.6 | 28.8 | 31.0 | 40.1 |
| Total | 23.7 | 45.4 | 30.9 | 29.0 | 47.2 | 23.8 | 23.7 | 34.9 | 41.4 |
| 1995 | | | | | | | | | |
| Sex | | | | | | | | | |
| Male | 26.6 | 43.7 | 29.7 | 31.4 | 44.0 | 24.6 | 24.5 | 33.1 | 42.3 |
| Female | 20.4 | 47.7 | 31.9 | 26.4 | 50.6 | 23.0 | 22.6 | 37.0 | 40.4 |
| High school program ¹ | | | | | | | | | |
| Academic/college-prep | 20.4 | 46.7 | 33.0 | 25.7 | 47.8 | 26.5 | 20.6 | 36.9 | 42.6 |
| General | 28.4 | 47.3 | 24.4 | 35.1 | 50.5 | 14.4 | 28.9 | 34.2 | 36.9 |
| Vocational/technical | 29.6 | 39.1 | 31.3 | 27.2 | 41.6 | 31.1 | 24.5 | 26.8 | 48.7 |
| Average grades in high school ² | | | | | | | | | |
| As | 18.6 | 44.2 | 37.2 | 22.2 | 48.0 | 29.9 | 20.0 | 35.1 | 44.9 |
| Bs | 22.9 | 47.3 | 29.8 | 27.8 | 48.3 | 23.9 | 22.9 | 35.2 | 41.9 |
| C's or D's | 33.0 | 42.7 | 24.2 | 42.2 | 43.6 | 14.2 | 31.4 | 33.9 | 34.7 |

See footnotes at end of table.

12th-Graders' Effort and Interest in School

Table 18-1 Percentage distributions of 12th-graders according to their ratings of school work's meaningfulness, courses' degree of interest, and the importance of their school learning in later life, by sex, high school program, and average grades: 1983, 1990, 1995, and 2000—Continued

| Student characteristics | How often school work is meaningful | | | How interesting most courses are | | | How important school learning will be in later life | | |
|--------------------------------------------|-------------------------------------|-----------|-----------------|----------------------------------|--------------------|---------------------------|-----------------------------------------------------|------------------|-------------------------|
| | Seldom or never | Sometimes | Often or always | Very or slightly dull | Fairly interesting | Quite or very interesting | Not or slightly important | Fairly important | Quite or very important |
| | 2000 | | | | | | | | |
| Total | 26.6 | 44.9 | 28.5 | 31.9 | 46.9 | 21.2 | 26.5 | 34.3 | 39.2 |
| Sex | | | | | | | | | |
| Male | 31.3 | 40.8 | 27.9 | 35.2 | 43.9 | 20.9 | 28.5 | 32.2 | 39.2 |
| Female | 22.4 | 48.9 | 28.7 | 29.0 | 49.3 | 21.7 | 24.9 | 35.9 | 39.3 |
| High school program ¹ | | | | | | | | | |
| Academic/college-prep | 22.2 | 47.9 | 29.9 | 27.6 | 49.2 | 23.3 | 24.1 | 35.9 | 40.0 |
| General | 31.7 | 44.4 | 23.9 | 38.5 | 46.2 | 15.2 | 30.8 | 34.2 | 35.0 |
| Vocational/technical | 31.0 | 38.6 | 30.4 | 31.2 | 40.1 | 28.7 | 23.8 | 33.2 | 43.0 |
| Average grades in high school ² | | | | | | | | | |
| A's | 20.7 | 45.0 | 34.3 | 24.1 | 48.3 | 27.7 | 24.8 | 34.4 | 40.8 |
| B's | 27.0 | 47.3 | 25.8 | 31.6 | 48.3 | 20.1 | 25.4 | 35.4 | 39.2 |
| C's or D's | 35.4 | 39.7 | 24.9 | 45.5 | 40.7 | 13.8 | 31.4 | 32.7 | 35.9 |

¹Respondents in a category labeled "Other/don't know," not shown separately, are included in the totals.

²Categories were made from students' reports of their average grade in high school.

NOTE: The data do not meet NCES standards for response rates. Percentages may not add to 100.0 due to rounding.

SOURCE: University of Michigan, Institute for Social Research. Monitoring the Future 12th-Grade Study: 1983, 1990, 1995, and 2000.

12th-Graders' Effort and Interest in School

Table 18-2 Percentage distributions of 12th-graders according to frequency of engaging in three activities related to effort in school, by sex, high school program, and average grades: 1990, 1995, and 2000

| Student characteristics | Try to do best work | | | Fool around in class | | | Fail to complete/ hand in assignments | | |
|--------------------------------------------|---------------------|-------------|-----------------|----------------------|-------------|-----------------|------------------------------------------|-------------|-----------------|
| | Seldom or never | Sometimes | Often or always | Seldom or never | Sometimes | Often or always | Seldom or never | Sometimes | Often or always |
| Total | 9.4 | 29.9 | 60.7 | 34.6 | 36.4 | 28.9 | 58.7 | 29.1 | 12.2 |
| 1990 | | | | | | | | | |
| Sex | | | | | | | | | |
| Male | 12.9 | 34.1 | 53.0 | 27.7 | 36.3 | 36.0 | 50.5 | 33.1 | 16.5 |
| Female | 4.9 | 25.3 | 69.8 | 43.3 | 36.0 | 20.8 | 68.5 | 24.7 | 6.8 |
| High school program ¹ | | | | | | | | | |
| Academic/college-prep | 8.6 | 26.8 | 64.6 | 36.0 | 36.9 | 27.1 | 65.8 | 25.2 | 9.0 |
| General | 10.5 | 35.3 | 54.2 | 31.3 | 38.8 | 29.9 | 51.6 | 33.8 | 14.6 |
| Vocational/technical | 8.1 | 30.8 | 61.2 | 32.6 | 34.4 | 33.0 | 53.5 | 29.3 | 17.2 |
| Average grades in high school ² | | | | | | | | | |
| As | 4.4 | 13.7 | 81.9 | 40.7 | 35.7 | 23.6 | 81.9 | 13.9 | 4.2 |
| Bs | 6.9 | 28.5 | 64.6 | 36.4 | 35.5 | 28.1 | 64.8 | 27.3 | 7.9 |
| C's or D's | 17.1 | 43.4 | 39.5 | 26.4 | 38.9 | 34.7 | 33.2 | 42.9 | 24.0 |
| Total | 9.3 | 27.1 | 63.6 | 38.1 | 34.0 | 27.9 | 59.4 | 28.5 | 12.1 |
| 1995 | | | | | | | | | |
| Sex | | | | | | | | | |
| Male | 13.1 | 32.4 | 54.5 | 27.3 | 34.2 | 38.5 | 51.3 | 33.7 | 15.1 |
| Female | 5.7 | 22.1 | 72.3 | 47.8 | 34.0 | 18.1 | 67.1 | 23.9 | 9.0 |
| High school program ¹ | | | | | | | | | |
| Academic/college-prep | 6.6 | 24.2 | 69.2 | 39.3 | 35.7 | 25.0 | 66.4 | 24.6 | 9.0 |
| General | 11.8 | 32.5 | 55.7 | 35.1 | 32.7 | 32.3 | 50.4 | 32.1 | 17.6 |
| Vocational/technical | 10.7 | 25.6 | 63.6 | 34.4 | 33.6 | 32.0 | 55.2 | 34.0 | 10.8 |
| Average grades in high school ² | | | | | | | | | |
| As | 2.9 | 14.3 | 82.8 | 46.3 | 31.1 | 22.6 | 82.1 | 13.9 | 4.0 |
| Bs | 8.2 | 28.2 | 63.6 | 37.0 | 36.4 | 26.6 | 59.5 | 32.8 | 7.7 |
| C's or D's | 19.8 | 41.4 | 38.8 | 29.2 | 32.0 | 38.8 | 31.6 | 35.7 | 32.7 |
| Total | 8.7 | 26.0 | 65.3 | 36.2 | 34.4 | 29.4 | 60.5 | 29.2 | 10.3 |
| 2000 | | | | | | | | | |
| Sex | | | | | | | | | |
| Male | 12.3 | 32.2 | 55.5 | 25.1 | 36.7 | 38.3 | 49.9 | 35.4 | 14.7 |
| Female | 5.2 | 20.2 | 74.7 | 45.9 | 33.5 | 20.6 | 70.9 | 23.3 | 5.8 |
| High school program ¹ | | | | | | | | | |
| Academic/college-prep | 8.0 | 21.7 | 70.3 | 37.3 | 34.3 | 28.4 | 69.1 | 23.2 | 7.7 |
| General | 10.7 | 31.6 | 57.7 | 33.2 | 34.3 | 32.4 | 50.4 | 38.2 | 11.4 |
| Vocational/technical | 7.7 | 24.9 | 67.4 | 31.8 | 41.3 | 26.8 | 49.2 | 33.1 | 17.7 |
| Average grades in high school ² | | | | | | | | | |
| As | 4.5 | 14.3 | 81.2 | 39.4 | 36.7 | 23.9 | 81.4 | 16.3 | 2.3 |
| Bs | 9.2 | 26.4 | 64.4 | 36.2 | 33.1 | 30.7 | 59.7 | 31.1 | 9.2 |
| C's or D's | 13.4 | 42.3 | 44.3 | 27.4 | 36.7 | 35.9 | 31.9 | 43.8 | 24.3 |

¹Respondents in a category labeled "Other/don't know," not shown separately, are included in the totals.

²Categories were made from students' reports of their average grade in high school.

NOTE: The data do not meet NCES standards for response rates. Percentages may not add to 100.0 due to rounding.

SOURCE: University of Michigan, Institute for Social Research. Monitoring the Future 12th-Grade Study: 1990, 1995, and 2000.

Status Dropout Rates, by Race/Ethnicity

Table 19-1 Status dropout rates of 16- to 24-year olds, by race/ethnicity: October 1972–2000

| Year | Race/ethnicity (percent)* | | | |
|------|---------------------------|-------|-------|----------|
| | Total | White | Black | Hispanic |
| 1972 | 14.6 | 12.3 | 21.3 | 34.3 |
| 1973 | 14.1 | 11.6 | 22.2 | 33.5 |
| 1974 | 14.3 | 11.9 | 21.2 | 33.0 |
| 1975 | 13.9 | 11.4 | 22.9 | 29.2 |
| 1976 | 14.1 | 12.0 | 20.5 | 31.4 |
| 1977 | 14.1 | 11.9 | 19.8 | 33.0 |
| 1978 | 14.2 | 11.9 | 20.2 | 33.3 |
| 1979 | 14.6 | 12.0 | 21.1 | 33.8 |
| 1980 | 14.1 | 11.4 | 19.1 | 35.2 |
| 1981 | 13.9 | 11.4 | 18.4 | 33.2 |
| 1982 | 13.9 | 11.4 | 18.4 | 31.7 |
| 1983 | 13.7 | 11.2 | 18.0 | 31.6 |
| 1984 | 13.1 | 11.0 | 15.5 | 29.8 |
| 1985 | 12.6 | 10.4 | 15.2 | 27.6 |
| 1986 | 12.2 | 9.7 | 14.2 | 30.1 |
| 1987 | 12.7 | 10.4 | 14.1 | 28.6 |
| 1988 | 12.9 | 9.6 | 14.5 | 35.8 |
| 1989 | 12.6 | 9.4 | 13.9 | 33.0 |
| 1990 | 12.1 | 9.0 | 13.2 | 32.4 |
| 1991 | 12.5 | 8.9 | 13.6 | 35.3 |
| 1992 | 11.0 | 7.7 | 13.7 | 29.4 |
| 1993 | 11.0 | 7.9 | 13.6 | 27.5 |
| 1994 | 11.5 | 7.7 | 12.6 | 30.0 |
| 1995 | 12.0 | 8.6 | 12.1 | 30.0 |
| 1996 | 11.1 | 7.3 | 13.0 | 29.4 |
| 1997 | 11.0 | 7.6 | 13.4 | 25.3 |
| 1998 | 11.8 | 7.7 | 13.8 | 29.5 |
| 1999 | 11.2 | 7.3 | 12.6 | 28.6 |
| 2000 | 10.9 | 6.9 | 13.1 | 27.8 |

*Due to relatively small sample sizes, American Indians/Alaska Natives and Asians/Pacific Islanders are included in the total but are not shown separately.

NOTE: Numbers for years 1987 through 2000 reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items. Numbers for years 1992 through 2000 reflect new wording of the educational attainment item in the CPS beginning in 1992. Numbers for years 1994 through 2000 reflect changes in the CPS due to newly instituted computer-assisted interviewing and the change in the population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See *Supplemental Note 2* for more information.

SOURCE: U.S. Department of Commerce, Bureau of the Census. October Current Population Surveys, 1972–2000.

Status Dropout Rates, by Race/Ethnicity

Table 19-2 Status dropout rates and number and percentage distribution of dropouts ages 16–24, by selected characteristics: October 2000

| Characteristic | Status dropout rate (percent) | Number of status dropouts (thousands) | Population (thousands) | Percent of all dropouts | Percent of population |
|---------------------------------------------------------|-------------------------------|---------------------------------------|------------------------|-------------------------|-----------------------|
| Total | 10.9 | 3,776 | 34,568 | 100.0 | 100.0 |
| Sex | | | | | |
| Male | 12.0 | 2,082 | 17,402 | 55.1 | 50.3 |
| Female | 9.9 | 1,694 | 17,166 | 44.9 | 49.7 |
| Race/ethnicity ¹ | | | | | |
| White | 6.9 | 1,564 | 22,574 | 41.4 | 65.3 |
| Black | 13.1 | 663 | 5,058 | 17.6 | 14.6 |
| Hispanic | 27.8 | 1,456 | 5,237 | 38.6 | 15.1 |
| Asian/Pacific Islander | 3.8 | 54 | 1,417 | 1.4 | 4.1 |
| Age | | | | | |
| 16 | 3.9 | 153 | 3,887 | 4.1 | 11.2 |
| 17 | 7.6 | 307 | 4,023 | 8.1 | 11.6 |
| 18 | 11.6 | 468 | 4,019 | 12.4 | 11.6 |
| 19 | 13.5 | 544 | 4,026 | 14.4 | 11.6 |
| 20–24 | 12.4 | 2,304 | 18,613 | 61.0 | 53.8 |
| Immigration status | | | | | |
| Born outside the 50 states and the District of Columbia | | | | | |
| Hispanic | 44.2 | 1,007 | 2,282 | 26.7 | 6.6 |
| Non-Hispanic | 7.4 | 140 | 1,907 | 3.7 | 5.5 |
| First generation ² | | | | | |
| Hispanic | 14.6 | 244 | 1,669 | 6.5 | 4.8 |
| Non-Hispanic | 4.6 | 84 | 1,837 | 2.2 | 5.3 |
| Second generation or more ³ | | | | | |
| Hispanic | 15.9 | 205 | 1,286 | 5.4 | 3.7 |
| Non-Hispanic | 8.2 | 2,096 | 25,586 | 55.5 | 74.0 |
| Region | | | | | |
| Northeast | 8.5 | 504 | 5,945 | 13.3 | 17.2 |
| Midwest | 9.2 | 741 | 8,058 | 19.6 | 23.3 |
| South | 12.9 | 1,597 | 12,337 | 42.3 | 35.7 |
| West | 11.3 | 933 | 8,228 | 24.7 | 23.8 |

¹Due to relatively small sample sizes, American Indians/Alaska Natives are included in the total but are not shown separately.

²Individuals defined as "first generation" were born in the 50 states or the District of Columbia, and one or both of their parents were born outside the 50 states or the District of Columbia.

³Individuals defined as "second generation or more" were born in the 50 states or the District of Columbia, as were both of their parents.

NOTE: Percentages may not add to 100.0 due to rounding. Details may not add to totals due to rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census. October Current Population Survey, 2000.

Immediate Transition to College

Table 20-1 Percentage of high school completers who were enrolled in college the October after completing high school, by family income and race/ethnicity: October 1972–2000

| October | Family income ¹ | | | | | Race/ethnicity ² | | | | |
|---------|----------------------------|--------|------------------|--------|--------|-----------------------------|--------|------------------|----------------|------------------|
| | Total | Low | | Middle | High | White | Black | | Hispanic | |
| | | Annual | 3-year average | | Annual | | Annual | Annual | 3-year average | |
| 1972 | 49.2 | 26.1 | (³) | 45.2 | 63.8 | 49.7 | 44.6 | (³) | 45.0 | (³) |
| 1973 | 46.6 | 20.3 | (³) | 40.9 | 64.4 | 47.8 | 32.5 | 41.4 | 54.1 | 48.8 |
| 1974 | 47.6 | — | — | — | — | 47.2 | 47.2 | 40.5 | 46.9 | 53.1 |
| 1975 | 50.7 | 31.2 | (³) | 46.2 | 64.5 | 51.1 | 41.7 | 44.5 | 58.0 | 52.7 |
| 1976 | 48.8 | 39.1 | 32.3 | 40.5 | 63.0 | 48.8 | 44.4 | 45.3 | 52.7 | 53.6 |
| 1977 | 50.6 | 27.7 | 32.4 | 44.2 | 66.3 | 50.8 | 49.5 | 46.8 | 50.8 | 48.8 |
| 1978 | 50.1 | 31.4 | 29.8 | 44.3 | 64.0 | 50.5 | 46.4 | 47.5 | 42.0 | 46.1 |
| 1979 | 49.3 | 30.5 | 31.6 | 43.2 | 63.2 | 49.9 | 46.7 | 45.2 | 45.0 | 46.3 |
| 1980 | 49.3 | 32.5 | 32.2 | 42.5 | 65.2 | 49.8 | 42.7 | 44.0 | 52.3 | 49.6 |
| 1981 | 53.9 | 33.6 | 32.9 | 49.2 | 67.6 | 54.9 | 42.7 | 40.3 | 52.1 | 48.7 |
| 1982 | 50.6 | 32.8 | 33.6 | 41.7 | 70.9 | 52.7 | 35.8 | 38.8 | 43.2 | 49.4 |
| 1983 | 52.7 | 34.6 | 34.0 | 45.2 | 70.3 | 55.0 | 38.2 | 38.0 | 54.2 | 46.7 |
| 1984 | 55.2 | 34.5 | 36.3 | 48.4 | 74.0 | 59.0 | 39.8 | 39.9 | 44.3 | 49.3 |
| 1985 | 57.7 | 40.2 | 35.9 | 50.6 | 74.6 | 60.1 | 42.2 | 39.5 | 51.0 | 46.1 |
| 1986 | 53.8 | 33.9 | 36.8 | 48.5 | 71.0 | 56.8 | 36.9 | 43.5 | 44.0 | 42.3 |
| 1987 | 56.8 | 36.9 | 37.6 | 50.0 | 73.8 | 58.6 | 52.2 | 44.2 | 33.5 | 45.0 |
| 1988 | 58.9 | 42.5 | 42.4 | 54.7 | 72.8 | 61.1 | 44.4 | 49.7 | 57.1 | 48.5 |
| 1989 | 59.6 | 48.1 | 45.6 | 55.4 | 70.7 | 60.7 | 53.4 | 48.0 | 55.1 | 52.7 |
| 1990 | 60.1 | 46.7 | 44.8 | 54.4 | 76.6 | 63.0 | 46.8 | 48.9 | 42.7 | 52.5 |
| 1991 | 62.5 | 39.5 | 42.2 | 58.4 | 78.2 | 65.4 | 46.4 | 47.2 | 57.2 | 52.6 |
| 1992 | 61.9 | 40.9 | 43.6 | 57.0 | 79.0 | 64.3 | 48.2 | 50.0 | 55.0 | 58.2 |
| 1993 | 61.5 | 50.4 | 44.0 | 56.9 | 79.3 | 62.9 | 55.6 | 51.3 | 62.2 | 55.7 |
| 1994 | 61.9 | 41.0 | 41.2 | 57.8 | 78.4 | 64.5 | 50.8 | 52.4 | 49.1 | 55.0 |
| 1995 | 61.9 | 34.2 | 41.5 | 56.1 | 83.4 | 64.3 | 51.2 | 52.9 | 53.7 | 51.6 |
| 1996 | 65.0 | 48.6 | 47.1 | 62.7 | 78.0 | 67.4 | 56.0 | 55.4 | 50.8 | 57.6 |
| 1997 | 67.0 | 57.0 | 50.6 | 60.8 | 82.2 | 68.2 | 58.5 | 58.8 | 65.6 | 55.3 |
| 1998 | 65.6 | 46.4 | 50.9 | 64.9 | 77.3 | 68.5 | 61.9 | 59.8 | 47.4 | 51.9 |
| 1999 | 62.9 | 49.4 | 48.5 | 59.5 | 76.0 | 66.3 | 58.9 | 58.6 | 42.3 | 47.4 |
| 2000 | 63.3 | 49.7 | (³) | 59.4 | 77.1 | 65.7 | 54.9 | (³) | 52.9 | (³) |

—Data on family income were not available in 1974.

¹Low income is the bottom 20 percent of all family incomes, high income is the top 20 percent of all family incomes, and middle income is the 60 percent in between. See *Supplemental Note 2* for further discussion.

²Included in the total but not shown separately are high school completers from other racial/ethnic groups.

³Due to small sample sizes for the low-income, Black, and Hispanic categories, 3-year averages also were calculated for each category. For example, the 3-year average for Blacks in 1973 is the average percentage of Black high school completers ages 16–24 who were enrolled in college the October after completing high school in 1972, 1973, and 1974. Thus, 3-year averages cannot be calculated for 1972 and 1998 and for groups of 3 years in which some data are not available (e.g., 1973–75 for the low-income category).

NOTE: Includes those ages 16–24 completing high school in a given year. The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey methodology for the CPS was changed and weights were adjusted. See *Supplemental Note 2* for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census. October Current Population Surveys, 1972–2000.

Immediate Transition to College

Table 20-2 Percentage distribution of high school completers who were enrolled in college the October after completing high school according to sex and type of institution: October 1972–2000

| October | Male | | | Female | | |
|---------|-------|--------|--------|--------|--------|--------|
| | Total | 2-year | 4-year | Total | 2-year | 4-year |
| 1972 | 52.7 | — | — | 46.0 | — | — |
| 1973 | 50.0 | 14.6 | 35.4 | 43.4 | 15.2 | 28.2 |
| 1974 | 49.4 | 16.6 | 32.8 | 45.9 | 13.9 | 32.0 |
| 1975 | 52.6 | 19.0 | 33.6 | 49.0 | 17.4 | 31.6 |
| 1976 | 47.2 | 14.5 | 32.7 | 50.3 | 16.6 | 33.8 |
| 1977 | 52.1 | 17.2 | 35.0 | 49.3 | 17.8 | 31.5 |
| 1978 | 51.1 | 15.6 | 35.5 | 49.3 | 18.3 | 31.0 |
| 1979 | 50.4 | 16.9 | 33.5 | 48.4 | 18.1 | 30.3 |
| 1980 | 46.7 | 17.1 | 29.7 | 51.8 | 21.6 | 30.2 |
| 1981 | 54.8 | 20.9 | 33.9 | 53.1 | 20.1 | 33.0 |
| 1982 | 49.1 | 17.5 | 31.6 | 52.0 | 20.6 | 31.4 |
| 1983 | 51.9 | 20.2 | 31.7 | 53.4 | 18.4 | 35.1 |
| 1984 | 56.0 | 17.7 | 38.4 | 54.5 | 21.0 | 33.5 |
| 1985 | 58.6 | 19.9 | 38.8 | 56.8 | 19.3 | 37.5 |
| 1986 | 55.8 | 21.3 | 34.5 | 51.9 | 17.3 | 34.6 |
| 1987 | 58.3 | 17.3 | 41.0 | 55.3 | 20.3 | 35.0 |
| 1988 | 57.1 | 21.3 | 35.8 | 60.7 | 22.4 | 38.3 |
| 1989 | 57.6 | 18.3 | 39.3 | 61.6 | 23.1 | 38.5 |
| 1990 | 58.0 | 19.6 | 38.4 | 62.2 | 20.6 | 41.6 |
| 1991 | 57.9 | 22.9 | 35.0 | 67.1 | 26.8 | 40.3 |
| 1992 | 60.0 | 22.1 | 37.8 | 63.8 | 23.9 | 40.0 |
| 1993 | 58.7 | 22.4 | 36.3 | 64.0 | 22.4 | 41.6 |
| 1994 | 60.6 | 23.0 | 37.5 | 63.2 | 19.1 | 44.1 |
| 1995 | 62.6 | 25.3 | 37.4 | 61.3 | 18.1 | 43.2 |
| 1996 | 60.1 | 21.5 | 38.5 | 69.7 | 24.6 | 45.1 |
| 1997 | 63.6 | 21.4 | 42.2 | 70.3 | 24.1 | 46.2 |
| 1998 | 62.4 | 24.4 | 38.0 | 69.1 | 24.3 | 44.8 |
| 1999 | 61.4 | 21.0 | 40.5 | 64.4 | 21.1 | 43.3 |
| 2000 | 59.9 | 23.1 | 36.8 | 66.2 | 20.0 | 46.2 |

—Data for type of institution were not collected until 1973.

NOTE: Includes those ages 16–24 completing high school in a given year. The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey methodology for the CPS was changed and weights were adjusted. See *Supplemental Note 2* for further discussion. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census. October Current Population Surveys, 1972–2000.

Immediate Transition to College

Table 20-3 Percentage of high school completers who were enrolled in college the October after completing high school, by parents' highest level of education: October 1990–2000

| Parents' education ¹ | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|----------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Total | 60.1 | 62.5 | 61.9 | 61.5 | 61.9 | 61.9 | 65.0 | 67.0 | 65.6 | 62.9 | 63.3 |
| Less than high school | 33.9 | 42.6 | 33.1 | 47.1 | 43.0 | 27.3 | 45.0 | 51.4 | 49.8 | 36.3 | 44.4 |
| High school diploma or equivalent | 49.0 | 51.0 | 55.5 | 52.3 | 49.9 | 47.0 | 56.1 | 61.7 | 57.2 | 54.4 | 51.8 |
| Some college, including vocational/technical | 65.6 | 67.5 | 67.5 | 62.7 | 65.0 | 70.2 | 66.6 | 62.6 | 67.7 | 60.3 | 63.8 |
| Bachelor's degree or higher | 83.1 | 87.2 | 81.3 | 87.9 | 82.5 | 87.7 | 85.2 | 86.1 | 82.3 | 82.2 | 81.2 |
| Not available ² | 47.7 | 42.1 | 38.0 | 42.0 | 43.1 | 30.8 | 45.6 | 51.3 | 50.1 | 53.1 | 50.5 |

¹Parents' education is defined as the highest educational attainment of the two parents who reside with the student; or if only one parent is in the residence, the highest educational attainment of that parent; or if neither parent resides with the student, the highest educational attainment of the head of the household.

²Parents' education is not available for those who do not live with their parents and who are classified as the head of the household (not including those who live in college dormitories) and for those whose parents' educational attainment was not reported. In 1998, approximately 12 percent of high school completers ages 16–24 were in this category.

NOTE: Includes those ages 16–24 completing high school in a given year. The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey methodology for the CPS was changed and weights were adjusted. See *Supplemental Note 2* for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census. October Current Population Surveys, 1990–2000.

Persistence of Students With Pell Grants

Table 24-1 Percentage of low- and middle-income 1995–96 beginning postsecondary students who persisted, by receipt of Pell Grant, type of institution, SAT/ACT scores, and high school curriculum: 1998

| Characteristics of academic preparation | Pell recipients | Nonrecipients |
|-----------------------------------------|-----------------|-------------------------------|
| | | Public 4-year |
| Total | 63.6 | 62.9 |
| SAT/ACT composite score* | | |
| Low quartile (400–700) | 55.5 | 46.6 |
| Middle quartiles (710–1020) | 63.0 | 63.0 |
| High quartile (1030–1600) | 81.8 | 72.8 |
| High school curriculum | | |
| Core or lower | 60.0 | 55.7 |
| Mid-level | 68.7 | 67.6 |
| Rigorous | 85.1 | 83.0 |
| | | Private not-for-profit 4-year |
| Total | 61.6 | 72.1 |
| SAT/ACT composite score* | | |
| Low quartile (400–700) | 49.1 | 57.6 |
| Middle quartiles (710–1020) | 63.6 | 67.6 |
| High quartile (1030–1600) | 80.3 | 85.7 |
| High school curriculum | | |
| Core or lower | 51.2 | 61.2 |
| Mid-level | 63.7 | 79.6 |
| Rigorous | 89.4 | 89.1 |
| | | Public 2-year |
| Total | 42.0 | 42.5 |

*The SAT/ACT composite score variable is the sum of the verbal and mathematics scores on the SAT. If the ACT examination was taken, the ACT score was converted to an estimated SAT combined score.

NOTE: Low- and middle-income students include all dependent students whose parents had annual incomes of less than \$70,000 in 1994 and all independent students who, combined with their spouse's earnings, had annual incomes of less than \$25,000 in 1994. *Persistence" is defined as being continuously enrolled or making an immediate lateral or upward transfer to another institution. Curriculum levels are described in *Supplemental Note 5*.

SOURCE: U.S. Department of Education, NCES. Beginning Postsecondary Students Longitudinal Study, "First Follow-up" (BPS:1996/1998).

Persistence of Students With Pell Grants

Table 24-2 Percentage distribution of 1995–96 low- and middle-income beginning postsecondary students according to their academic preparation, by receipt of Pell Grant and type of institution

| Characteristics of academic preparation | Total | Pell recipients | Nonrecipients |
|--------------------------------------------|--------------|-----------------|---------------|
| Total | 100.0 | 100.0 | 100.0 |
| Less-than-4-year institutions | | | |
| High school graduation status ¹ | | | |
| High school diploma | 85.3 | 77.1 | 90.0 |
| GED or certificate | 10.5 | 16.6 | 7.0 |
| Did not graduate from high school | 4.2 | 6.3 | 3.0 |
| 4-year institutions | | | |
| SAT/ACT composite score ² | | | |
| Low quartile (400–700) | 16.4 | 24.7 | 12.0 |
| Middle quartiles (710–1020) | 54.3 | 54.3 | 54.3 |
| High quartile (1030–1600) | 29.3 | 21.0 | 33.7 |
| High school curriculum ^{2,3} | | | |
| Core or lower | 33.9 | 37.9 | 31.7 |
| Mid-level | 51.2 | 50.5 | 51.7 |
| Rigorous | 14.9 | 11.6 | 16.7 |

¹Less-than-4-year institutions only. "GED" stands for General Education Development certificate.

²The SAT/ACT composite score variable is the sum of the verbal and mathematics scores on the SAT. If the ACT examination was taken, the ACT score was converted to an estimated SAT combined score.

³Curriculum levels are described in *Supplemental Note 5*.

NOTE: Percentages may not add to 100.0 due to rounding. Low- and middle-income students include all dependent students whose parents had an annual income of less than \$70,000 in 1994 and all independent students who, in combination with their spouse's earnings, had an annual income in 1994 of less than \$25,000.

SOURCE: U.S. Department of Education, NCES, Beginning Postsecondary Students Longitudinal Study, "First Follow-up" (BPS:1996/1998).

Persistence of Students With Pell Grants

Table 24-3 Among 1995–96 low- and middle-income beginning postsecondary students, percentage with each risk factor, by receipt of Pell Grant and type of institution: 1998

| Receipt of Pell Grant | No high school diploma | Delayed enrollment ¹ | Financially independent | Dependents other than a spouse | Single parent | Enrolled part time | Worked more than 35 hours per week |
|--------------------------------------|------------------------|---------------------------------|-------------------------|--------------------------------|---------------|--------------------|------------------------------------|
| Total | 10.2 | 37.9 | 26.4 | 15.7 | 11.1 | 28.0 | 23.0 |
| Pell recipients | 15.4 | 46.4 | 37.7 | 27.0 | 20.5 | 19.1 | 17.4 |
| Nonrecipients | 7.2 | 33.0 | 19.7 | 9.0 | 5.6 | 33.2 | 26.2 |
| Total² | | | | | | | |
| Total | 2.2 | 21.0 | 7.4 | 3.5 | 2.5 | 10.2 | 10.6 |
| Pell recipients | 2.5 | 23.7 | 11.4 | 7.1 | 5.4 | 10.0 | 9.6 |
| Nonrecipients | 2.1 | 19.4 | 5.2 | 1.4 | 0.8 | 10.3 | 11.2 |
| Public 4-year | | | | | | | |
| Total | 3.1 | 19.0 | 9.3 | 3.5 | 2.3 | 7.2 | 10.2 |
| Pell recipients | 5.9 | 20.5 | 12.7 | 5.9 | 4.3 | 6.9 | 9.6 |
| Nonrecipients | 1.4 | 18.2 | 7.3 | 2.2 | 1.2 | 7.4 | 10.5 |
| Private not-for-profit 4-year | | | | | | | |
| Total | 11.8 | 43.7 | 31.2 | 18.7 | 12.5 | 46.1 | 33.2 |
| Pell recipients | 17.9 | 56.9 | 46.5 | 34.3 | 25.8 | 32.2 | 23.8 |
| Nonrecipients | 9.2 | 38.2 | 24.7 | 12.0 | 6.9 | 51.8 | 36.9 |
| Public 2-year | | | | | | | |

¹“Delayed enrollment” means that the student did not enter postsecondary education in the same calendar year that he or she finished high school.

²Includes all beginning postsecondary students, including those in types of institutions not shown separately.

NOTE: Low- and middle-income students include all dependent students whose parents had an annual income in 1994 of less than \$70,000 and all financially independent students who, combined with their spouse's earnings, had an annual income in 1994 of less than \$25,000.

SOURCE: U.S. Department of Education, NCES. Beginning Postsecondary Students Longitudinal Study, “First Follow-up” (BPS:1996/1998).

Educational Attainment

Table 25-1 Percentage of 25- to 29-year-olds who completed high school, by race/ethnicity and sex: March 1971–2000

| March | All* | | | White | | | Black | | | Hispanic | | |
|-------|-------|------|--------|-------|------|--------|-------|------|--------|----------|------|--------|
| | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 1971 | 77.7 | 79.1 | 76.5 | 81.7 | 83.0 | 80.5 | 58.8 | 56.7 | 60.5 | 48.3 | 51.3 | 45.7 |
| 1972 | 79.8 | 80.5 | 79.2 | 83.4 | 84.1 | 82.7 | 64.1 | 61.7 | 66.0 | 47.6 | 47.1 | 47.9 |
| 1973 | 80.2 | 80.6 | 79.8 | 84.0 | 84.2 | 83.9 | 64.1 | 63.2 | 64.9 | 52.3 | 54.2 | 50.6 |
| 1974 | 81.9 | 83.1 | 80.8 | 85.5 | 86.0 | 85.0 | 68.4 | 71.5 | 65.8 | 54.1 | 55.9 | 52.5 |
| 1975 | 83.1 | 84.5 | 81.7 | 86.6 | 88.0 | 85.2 | 71.1 | 72.3 | 70.1 | 53.1 | 52.2 | 53.9 |
| 1976 | 84.7 | 86.0 | 83.5 | 87.7 | 89.0 | 86.4 | 74.0 | 72.8 | 74.9 | 58.1 | 57.6 | 58.4 |
| 1977 | 85.4 | 86.6 | 84.2 | 88.6 | 89.2 | 88.0 | 74.5 | 77.5 | 72.0 | 58.0 | 61.9 | 54.6 |
| 1978 | 85.3 | 86.0 | 84.6 | 88.5 | 88.8 | 88.2 | 77.4 | 78.7 | 76.3 | 56.5 | 58.5 | 54.6 |
| 1979 | 85.6 | 86.3 | 84.9 | 89.2 | 89.8 | 88.5 | 74.7 | 74.0 | 75.3 | 57.1 | 55.5 | 58.6 |
| 1980 | 85.4 | 85.4 | 85.5 | 89.2 | 89.1 | 89.2 | 76.7 | 74.8 | 78.3 | 57.9 | 57.0 | 58.8 |
| 1981 | 86.3 | 86.5 | 86.1 | 89.8 | 89.7 | 89.9 | 77.6 | 78.8 | 76.6 | 59.8 | 59.1 | 60.4 |
| 1982 | 86.2 | 86.3 | 86.1 | 89.1 | 89.1 | 89.1 | 81.0 | 80.4 | 81.5 | 61.0 | 60.6 | 61.2 |
| 1983 | 86.0 | 86.0 | 86.0 | 89.3 | 89.3 | 89.3 | 79.5 | 79.0 | 79.9 | 58.4 | 57.8 | 58.9 |
| 1984 | 85.9 | 85.6 | 86.3 | 89.4 | 89.4 | 89.4 | 79.1 | 75.9 | 81.7 | 58.6 | 56.7 | 60.1 |
| 1985 | 86.2 | 85.9 | 86.4 | 89.5 | 89.2 | 89.9 | 80.5 | 80.6 | 80.5 | 61.0 | 58.6 | 63.1 |
| 1986 | 86.1 | 85.9 | 86.4 | 89.6 | 88.7 | 90.4 | 83.5 | 86.4 | 81.0 | 59.1 | 58.2 | 60.0 |
| 1987 | 86.0 | 85.5 | 86.4 | 89.4 | 88.9 | 90.0 | 83.5 | 84.5 | 82.6 | 59.8 | 58.6 | 61.0 |
| 1988 | 85.9 | 84.7 | 87.1 | 89.7 | 88.4 | 90.9 | 80.9 | 80.9 | 80.9 | 62.3 | 59.9 | 64.8 |
| 1989 | 85.5 | 84.4 | 86.5 | 89.3 | 88.2 | 90.4 | 82.3 | 80.5 | 83.8 | 61.0 | 61.0 | 61.1 |
| 1990 | 85.7 | 84.4 | 87.0 | 90.1 | 88.6 | 91.6 | 81.8 | 81.4 | 82.0 | 58.2 | 56.6 | 59.9 |
| 1991 | 85.4 | 84.9 | 85.8 | 89.8 | 89.2 | 90.5 | 81.8 | 83.6 | 80.1 | 56.7 | 56.4 | 57.2 |
| 1992 | 86.3 | 86.1 | 86.5 | 90.6 | 90.3 | 91.1 | 80.9 | 82.7 | 79.3 | 60.9 | 61.1 | 60.6 |
| 1993 | 86.7 | 86.0 | 87.4 | 91.2 | 90.7 | 91.8 | 82.7 | 84.8 | 80.8 | 60.9 | 58.2 | 63.9 |
| 1994 | 86.1 | 84.5 | 87.6 | 91.1 | 90.0 | 92.3 | 84.1 | 82.8 | 85.3 | 60.3 | 58.0 | 63.0 |
| 1995 | 86.9 | 86.3 | 87.4 | 92.5 | 92.0 | 93.0 | 86.8 | 88.4 | 85.3 | 57.2 | 55.7 | 58.7 |
| 1996 | 87.3 | 86.5 | 88.1 | 92.6 | 92.0 | 93.1 | 86.0 | 87.9 | 84.5 | 61.1 | 59.7 | 62.9 |
| 1997 | 87.4 | 85.8 | 88.9 | 92.9 | 91.7 | 94.0 | 86.9 | 85.8 | 87.8 | 61.8 | 59.2 | 64.8 |
| 1998 | 88.1 | 86.6 | 89.6 | 93.6 | 92.5 | 94.6 | 88.2 | 88.4 | 88.1 | 62.8 | 59.9 | 66.3 |
| 1999 | 87.8 | 86.1 | 89.5 | 93.0 | 91.9 | 94.1 | 88.7 | 88.2 | 89.2 | 61.6 | 57.4 | 65.9 |
| 2000 | 88.1 | 86.7 | 89.4 | 94.0 | 92.9 | 95.2 | 86.8 | 87.6 | 86.3 | 62.8 | 59.2 | 66.4 |
| 2001 | 87.7 | 86.8 | 88.6 | 93.3 | 93.0 | 93.6 | 87.0 | 87.5 | 86.7 | 63.2 | 59.5 | 67.2 |

*Included in the totals but not shown separately are other racial/ethnic categories. See *Supplemental Note 1* for more information on the racial/ethnic categories.

NOTE: "High school completers" also includes those with higher levels of education. The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey instrument for the CPS was changed and weights were adjusted. See *Supplemental Note 2* for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1971–2001.

Educational Attainment

Table 25-2 Percentage of 25- to 29-year-olds with some college, by race/ethnicity and sex: March 1971–2000

| March | All* | | | White | | | Black | | | Hispanic | | |
|-------|-------|------|--------|-------|------|--------|-------|------|--------|----------|------|--------|
| | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 1971 | 33.9 | 38.5 | 29.4 | 36.7 | 41.7 | 31.8 | 18.2 | 16.5 | 19.5 | 14.8 | 19.6 | 10.4 |
| 1972 | 36.0 | 40.8 | 31.3 | 38.6 | 44.0 | 33.3 | 21.4 | 19.5 | 22.9 | 15.3 | 17.5 | 13.6 |
| 1973 | 36.3 | 41.4 | 31.4 | 39.2 | 44.6 | 33.7 | 21.5 | 21.2 | 21.7 | 16.6 | 21.4 | 12.4 |
| 1974 | 40.1 | 44.7 | 35.6 | 43.1 | 47.8 | 38.4 | 24.2 | 26.4 | 22.4 | 21.2 | 24.7 | 18.1 |
| 1975 | 41.6 | 47.4 | 36.0 | 44.3 | 50.4 | 38.3 | 27.5 | 29.6 | 25.8 | 21.8 | 26.3 | 17.6 |
| 1976 | 44.1 | 50.1 | 38.4 | 47.2 | 53.5 | 41.0 | 27.5 | 29.5 | 26.0 | 21.1 | 24.4 | 18.2 |
| 1977 | 45.5 | 50.3 | 40.8 | 48.6 | 53.4 | 43.7 | 31.1 | 34.3 | 28.5 | 23.8 | 26.4 | 21.6 |
| 1978 | 46.4 | 51.0 | 41.9 | 49.5 | 54.6 | 44.4 | 34.7 | 35.6 | 33.9 | 24.6 | 27.6 | 21.9 |
| 1979 | 46.3 | 49.8 | 42.9 | 49.6 | 53.3 | 45.9 | 31.2 | 30.1 | 32.0 | 25.1 | 28.1 | 22.2 |
| 1980 | 44.7 | 47.6 | 41.9 | 48.0 | 51.1 | 44.9 | 32.4 | 32.6 | 32.3 | 23.1 | 25.9 | 20.4 |
| 1981 | 43.2 | 45.7 | 40.9 | 46.0 | 48.5 | 43.5 | 33.0 | 33.8 | 32.3 | 23.7 | 24.6 | 22.8 |
| 1982 | 43.0 | 44.5 | 41.6 | 45.1 | 46.6 | 43.7 | 37.1 | 38.1 | 36.3 | 24.1 | 24.6 | 23.7 |
| 1983 | 43.5 | 44.8 | 42.2 | 46.1 | 47.7 | 44.4 | 33.0 | 33.2 | 32.9 | 25.1 | 23.7 | 26.3 |
| 1984 | 43.0 | 43.6 | 42.5 | 45.6 | 46.2 | 45.0 | 32.9 | 31.6 | 34.0 | 26.7 | 27.0 | 26.4 |
| 1985 | 43.7 | 44.2 | 43.3 | 46.4 | 46.8 | 46.0 | 34.4 | 34.2 | 34.5 | 26.9 | 26.9 | 27.1 |
| 1986 | 44.0 | 44.1 | 43.8 | 46.8 | 46.9 | 46.8 | 36.3 | 35.9 | 36.6 | 25.3 | 24.9 | 25.8 |
| 1987 | 43.6 | 43.1 | 44.1 | 46.0 | 45.7 | 46.2 | 35.9 | 32.4 | 38.8 | 26.7 | 27.1 | 26.3 |
| 1988 | 43.6 | 43.7 | 43.6 | 46.4 | 46.4 | 46.5 | 33.3 | 34.7 | 32.1 | 28.0 | 26.5 | 29.6 |
| 1989 | 43.8 | 43.9 | 43.7 | 47.2 | 47.1 | 47.2 | 34.6 | 34.0 | 35.1 | 27.0 | 27.3 | 26.8 |
| 1990 | 44.5 | 43.7 | 45.3 | 48.3 | 47.3 | 49.3 | 36.1 | 35.0 | 36.9 | 23.3 | 22.9 | 23.9 |
| 1991 | 45.3 | 44.4 | 46.2 | 49.3 | 48.8 | 49.9 | 35.4 | 32.0 | 38.2 | 23.9 | 23.1 | 24.8 |
| 1992 | 48.9 | 48.2 | 49.6 | 53.3 | 52.6 | 53.9 | 36.2 | 35.0 | 37.2 | 28.5 | 27.2 | 30.1 |
| 1993 | 51.0 | 49.5 | 52.6 | 55.6 | 54.7 | 56.6 | 40.0 | 37.0 | 42.4 | 29.7 | 26.9 | 33.2 |
| 1994 | 52.1 | 49.8 | 54.3 | 57.1 | 54.9 | 59.3 | 41.8 | 40.3 | 42.9 | 31.0 | 28.0 | 34.7 |
| 1995 | 54.1 | 52.3 | 55.8 | 59.8 | 57.5 | 62.0 | 45.1 | 45.3 | 44.8 | 28.7 | 26.8 | 31.0 |
| 1996 | 56.5 | 54.5 | 58.5 | 62.0 | 60.3 | 63.7 | 48.1 | 47.9 | 48.3 | 31.1 | 28.0 | 35.0 |
| 1997 | 57.1 | 54.9 | 59.4 | 63.3 | 61.3 | 65.3 | 46.6 | 43.0 | 49.6 | 33.3 | 30.7 | 36.4 |
| 1998 | 57.8 | 54.6 | 61.0 | 64.1 | 61.3 | 66.9 | 50.0 | 46.8 | 52.6 | 32.5 | 29.3 | 36.3 |
| 1999 | 58.0 | 54.7 | 61.3 | 63.9 | 60.7 | 67.0 | 51.3 | 45.9 | 55.6 | 31.2 | 27.4 | 35.0 |
| 2000 | 58.3 | 55.1 | 61.5 | 64.1 | 60.5 | 67.7 | 52.7 | 50.3 | 54.5 | 32.8 | 29.0 | 36.6 |
| 2001 | 58.4 | 54.4 | 62.5 | 64.8 | 60.5 | 69.1 | 50.5 | 46.7 | 53.6 | 32.2 | 28.3 | 36.3 |

*Included in the totals but not shown separately are other racial/ethnic categories. See *Supplemental Note 1* for more information on the racial/ethnic categories.

NOTE: "Some college" also includes those with a bachelor's degree or higher. The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey instrument for the CPS was changed and weights were adjusted. See *Supplemental Note 2* for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1971–2001.

Educational Attainment

Table 25-3 Percentage of 25- to 29-year-olds with a bachelor's degree or higher, by race/ethnicity and sex: March 1971–2000

| March | All* | | | White | | | Black | | | Hispanic | | |
|-------|-------|------|--------|-------|------|--------|-------|------|--------|----------|------|--------|
| | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 1971 | 17.1 | 20.4 | 13.8 | 18.9 | 22.4 | 15.4 | 6.7 | 6.9 | 6.6 | 5.1 | 7.9 | 2.7 |
| 1972 | 19.0 | 22.0 | 16.0 | 20.8 | 24.1 | 17.5 | 8.4 | 7.1 | 9.5 | 3.7 | 4.5 | 3.0 |
| 1973 | 19.0 | 21.6 | 16.4 | 20.8 | 23.8 | 17.9 | 8.2 | 7.2 | 9.0 | 5.6 | 6.7 | 4.9 |
| 1974 | 20.7 | 23.9 | 17.6 | 23.2 | 26.7 | 19.7 | 7.9 | 8.8 | 7.2 | 5.5 | 5.0 | 5.9 |
| 1975 | 21.9 | 25.1 | 18.7 | 23.8 | 27.3 | 20.2 | 10.5 | 11.1 | 10.0 | 8.8 | 10.3 | 7.2 |
| 1976 | 23.7 | 27.5 | 20.1 | 25.7 | 29.8 | 21.6 | 13.0 | 12.0 | 13.9 | 7.4 | 10.3 | 4.8 |
| 1977 | 24.0 | 27.0 | 21.1 | 26.4 | 29.8 | 23.1 | 12.6 | 12.8 | 12.5 | 6.7 | 7.0 | 6.4 |
| 1978 | 23.3 | 26.0 | 20.6 | 25.6 | 28.9 | 22.3 | 11.7 | 10.7 | 12.6 | 9.7 | 9.6 | 9.8 |
| 1979 | 23.1 | 25.8 | 20.5 | 25.5 | 28.4 | 22.6 | 12.4 | 13.1 | 11.8 | 7.4 | 7.9 | 6.7 |
| 1980 | 22.5 | 24.0 | 21.0 | 25.0 | 26.8 | 23.2 | 11.5 | 10.5 | 12.4 | 7.7 | 8.5 | 7.0 |
| 1981 | 21.3 | 23.1 | 19.6 | 23.6 | 25.5 | 21.7 | 11.6 | 12.1 | 11.1 | 7.5 | 8.5 | 6.6 |
| 1982 | 21.7 | 23.3 | 20.2 | 23.8 | 25.7 | 21.9 | 12.6 | 11.7 | 13.4 | 9.7 | 10.8 | 8.7 |
| 1983 | 22.5 | 23.9 | 21.1 | 24.5 | 26.2 | 22.7 | 12.9 | 13.1 | 12.7 | 10.4 | 9.7 | 11.1 |
| 1984 | 21.9 | 23.2 | 20.7 | 24.1 | 25.5 | 22.7 | 11.7 | 12.9 | 10.6 | 10.6 | 9.6 | 11.5 |
| 1985 | 22.2 | 23.1 | 21.3 | 24.4 | 25.5 | 23.3 | 11.6 | 10.4 | 12.6 | 11.1 | 10.9 | 11.2 |
| 1986 | 22.4 | 22.9 | 21.9 | 25.2 | 25.8 | 24.5 | 11.8 | 10.3 | 13.2 | 9.0 | 9.0 | 9.1 |
| 1987 | 22.0 | 22.3 | 21.8 | 24.6 | 24.9 | 24.4 | 11.5 | 11.9 | 11.2 | 8.7 | 9.2 | 8.2 |
| 1988 | 22.7 | 23.4 | 21.9 | 25.1 | 25.7 | 24.5 | 12.0 | 12.4 | 11.7 | 11.3 | 11.9 | 10.6 |
| 1989 | 23.4 | 23.9 | 22.9 | 26.3 | 26.9 | 25.8 | 12.6 | 12.1 | 13.1 | 10.1 | 9.6 | 10.5 |
| 1990 | 23.2 | 23.7 | 22.8 | 26.4 | 26.6 | 26.2 | 13.4 | 15.2 | 11.9 | 8.2 | 7.3 | 9.1 |
| 1991 | 23.2 | 23.0 | 23.4 | 26.7 | 26.5 | 26.9 | 11.0 | 11.5 | 10.5 | 9.2 | 8.1 | 10.4 |
| 1992 | 23.6 | 23.2 | 24.0 | 27.1 | 26.6 | 27.7 | 11.1 | 11.7 | 10.5 | 9.5 | 8.8 | 10.3 |
| 1993 | 23.7 | 23.4 | 23.9 | 27.2 | 27.2 | 27.1 | 13.3 | 12.6 | 13.9 | 8.3 | 7.1 | 9.8 |
| 1994 | 23.2 | 22.5 | 24.0 | 27.1 | 26.8 | 27.4 | 13.6 | 11.6 | 15.2 | 8.0 | 6.6 | 9.8 |
| 1995 | 24.7 | 24.5 | 24.9 | 28.8 | 28.4 | 29.3 | 15.4 | 17.4 | 13.7 | 8.9 | 7.8 | 10.1 |
| 1996 | 27.1 | 26.1 | 28.2 | 31.6 | 30.9 | 32.3 | 14.6 | 12.2 | 16.6 | 10.0 | 10.2 | 9.8 |
| 1997 | 27.8 | 26.3 | 29.3 | 32.6 | 31.2 | 34.0 | 14.2 | 11.8 | 16.3 | 11.0 | 9.5 | 12.7 |
| 1998 | 27.3 | 25.7 | 29.0 | 32.3 | 30.5 | 34.2 | 15.8 | 14.3 | 17.0 | 10.4 | 9.5 | 11.4 |
| 1999 | 28.2 | 26.8 | 29.5 | 33.6 | 32.0 | 35.1 | 15.0 | 13.1 | 16.5 | 8.9 | 7.5 | 10.4 |
| 2000 | 29.1 | 27.9 | 30.1 | 34.0 | 32.3 | 35.8 | 17.9 | 18.3 | 17.4 | 9.6 | 8.3 | 11.0 |
| 2001 | 28.7 | 26.2 | 31.1 | 33.0 | 29.7 | 36.3 | 17.9 | 17.9 | 17.8 | 11.1 | 9.1 | 13.2 |

*Included in the totals but not shown separately are other racial/ethnic categories. See *Supplemental Note 1* for more information on the racial/ethnic categories.

NOTE: The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey instrument for the CPS was changed and weights were adjusted. See *Supplemental Note 2* for further discussion.

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1971–2001.

Trends in Science and Mathematics Coursetaking

Table 26-1 Percentage distribution of high school graduates according to the highest level of advanced science courses completed: 1982, 1987, 1990, 1992, 1994, and 1998

| Year | Low academic level | | | | | Advanced academic level | | | |
|------|--------------------|--------------------------|----------------------------------------------|-----------------|-------|--------------------------|---------------------------|------------------------------------------------|-------|
| | No science* | Primary physical science | Secondary physical science and basic biology | General biology | Total | Chemistry I or physics I | Chemistry I and physics I | Chemistry II or physics II or advanced biology | Total |
| 1982 | 2.2 | 12.2 | 15.0 | 27.2 | 35.2 | 14.9 | 5.9 | 14.6 | 35.4 |
| 1987 | 0.8 | 6.7 | 9.1 | 15.8 | 41.5 | 21.4 | 10.6 | 9.9 | 41.9 |
| 1990 | 0.7 | 4.2 | 8.7 | 12.8 | 37.0 | 25.8 | 12.3 | 11.4 | 49.5 |
| 1992 | 0.3 | 2.8 | 6.9 | 9.7 | 36.4 | 27.1 | 12.2 | 14.3 | 53.5 |
| 1994 | 0.6 | 1.9 | 8.2 | 10.0 | 34.1 | 29.4 | 13.0 | 12.9 | 55.3 |
| 1998 | 0.6 | 3.0 | 6.3 | 9.3 | 28.6 | 30.2 | 16.3 | 15.1 | 61.5 |

*Students in this category may have taken some science courses, but these courses are not defined as science courses according to the classification used in this analysis. See *Supplemental Note 5* for more information.

NOTE: The distribution of graduates among the various levels of science courses was determined by the level of the most academically advanced course they had completed. Graduates may have completed advanced levels of courses without having taken courses at lower levels. See *Supplemental Note 5* for definitions of these levels. These levels are slightly revised and the estimates recalculated from those published in NCES 2000–062, *indicator 40*. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. High School and Beyond Longitudinal Study of 1980 Sophomores, "First Follow-up" (HS&B:1980/1982); National Education Longitudinal Study of 1988, "High School Transcript Study" (NELS:1988/1992); and National Assessment of Educational Progress (NAEP) High School Transcript Studies, 1987, 1990, 1992, 1994, and 1998.

Table 26-2 Percentage distribution of high school graduates according to the highest level of advanced mathematics courses completed: 1982, 1987, 1990, 1992, 1994, and 1998

| Year | No mathematics* | Non-academic | Low academic | Middle academic | | | Advanced academic | | | |
|------|-----------------|--------------|--------------|-----------------|----------|-------|-------------------|----------|-----------|-------|
| | | | | Level I | Level II | Total | Level I | Level II | Level III | Total |
| 1982 | 0.8 | 16.7 | 7.4 | 30.6 | 18.2 | 48.8 | 15.6 | 4.8 | 5.9 | 26.3 |
| 1987 | 0.9 | 12.0 | 7.6 | 27.0 | 23.1 | 50.1 | 12.9 | 9.0 | 7.6 | 29.5 |
| 1990 | 0.6 | 9.0 | 8.2 | 25.4 | 26.2 | 51.6 | 12.9 | 10.4 | 7.2 | 30.6 |
| 1992 | 0.4 | 6.2 | 6.3 | 22.7 | 26.4 | 49.0 | 16.4 | 10.9 | 10.7 | 38.1 |
| 1994 | 0.7 | 5.7 | 6.2 | 22.5 | 26.9 | 49.4 | 16.3 | 11.6 | 10.2 | 38.1 |
| 1998 | 0.8 | 3.6 | 5.3 | 21.2 | 27.7 | 48.9 | 14.4 | 15.2 | 11.8 | 41.4 |

*Students in this category may have taken some mathematics courses, but these courses are not defined as mathematics courses according to the classification used in this analysis. See *Supplemental Note 5* for more information.

NOTE: The distribution of graduates among the various levels of mathematics courses was determined by the level of the most academically advanced course they had completed. Graduates may have completed advanced levels of courses without having taken courses at lower levels. See *Supplemental Note 5* for definitions of these levels. Percentages may not add to 100.0 due to rounding. The 1982, 1987, 1994, and 1998 estimates are revised slightly from those published in NCES 2000–062, *indicator 40*.

SOURCE: U.S. Department of Education, NCES. High School and Beyond Longitudinal Study of 1980 Sophomores, "First Follow-up" (HS&B:1980/1982); National Education Longitudinal Study of 1988, "High School Transcript Study" (NELS:1988/1992); and National Assessment of Educational Progress (NAEP) High School Transcript Studies, 1987, 1990, 1992, 1994, and 1998.

Inclusion of Students With Disabilities in Regular Classrooms

Table 28-1 Percentage distribution of students ages 6–21 with disabilities, by educational environment and disability type: 1988–89 and 1998–99

| Type of disability | Percentage of the day in a regular education classroom | | | | | | Separate facilities | | Residential facilities | | Home/hospital | |
|--------------------------------|--------------------------------------------------------|---------|---------|---------|--------------|---------|---------------------|---------|------------------------|---------|---------------|---------|
| | 80 or more | | 79–40 | | Less than 40 | | 1988–89 | 1998–99 | 1988–89 | 1998–99 | 1988–89 | 1998–99 |
| | 1988–89 | 1998–99 | 1988–89 | 1998–99 | 1988–89 | 1998–99 | | | | | | |
| All disabilities | 30.5 | 47.4 | 39.0 | 28.4 | 24.3 | 20.1 | 4.6 | 2.9 | 0.9 | 0.7 | 0.8 | 0.5 |
| Specific learning disabilities | 19.6 | 45.1 | 57.9 | 38.4 | 20.9 | 15.5 | 1.3 | 0.6 | 0.1 | 0.1 | 0.1 | 0.2 |
| Speech or language impairments | 75.6 | 88.5 | 19.0 | 6.6 | 3.8 | 4.5 | 1.4 | 0.3 | 0.1 | 0.0 | 0.1 | 0.1 |
| Mental retardation | 5.9 | 13.8 | 22.4 | 29.2 | 58.9 | 51.1 | 11.3 | 5.0 | 1.2 | 0.5 | 0.3 | 0.4 |
| Emotional disturbance | 14.1 | 25.5 | 30.0 | 23.0 | 35.8 | 33.2 | 13.4 | 13.3 | 3.8 | 3.6 | 2.9 | 1.4 |
| Multiple disabilities | 7.0 | 10.5 | 14.1 | 16.6 | 46.2 | 44.8 | 25.9 | 22.9 | 4.0 | 2.9 | 2.8 | 2.3 |
| Hearing impairments | 26.9 | 39.6 | 21.0 | 18.7 | 33.5 | 25.3 | 8.5 | 7.1 | 9.8 | 9.0 | 0.2 | 0.2 |
| Orthopedic impairments | 29.3 | 45.6 | 18.6 | 20.5 | 33.5 | 27.3 | 11.1 | 4.5 | 0.7 | 0.2 | 6.9 | 1.9 |
| Other health impairments | 29.9 | 44.3 | 20.3 | 33.2 | 19.6 | 17.2 | 7.8 | 1.6 | 0.8 | 0.3 | 21.6 | 3.4 |
| Visual impairments | 39.8 | 49.6 | 25.4 | 19.4 | 20.3 | 16.5 | 4.7 | 6.8 | 9.4 | 7.1 | 0.5 | 0.6 |
| Autism | — | 20.3 | — | 13.1 | — | 51.1 | — | 13.5 | — | 1.4 | — | 0.4 |
| Deaf-blindness | 11.6 | 14.1 | 5.3 | 9.4 | 29.9 | 34.8 | 25.9 | 22.6 | 26.1 | 17.4 | 1.2 | 1.7 |
| Traumatic brain injury | — | 31.2 | — | 26.3 | — | 29.8 | — | 9.0 | — | 1.4 | — | 2.3 |

—Not available.

NOTE: Students with disabilities are those served under Part B of the Individuals with Disabilities Education Act (IDEA) in the United States and outlying areas. See *Supplemental Note 10* for definitions of the different types of disabilities and educational environments. The U.S. Department of Education began to collect data on students with autism and traumatic brain injury only in 1992–93. Students with disabilities who are in separate facilities, residential facilities, and a home/hospital do not attend school with their nondisabled peers. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, Office of Special Education and Rehabilitative Services. (2000). *22nd Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act*; and U.S. Department of Education, Office of Special Education and Rehabilitative Services. (2001). *23rd Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act*.

Parental Choice of Schools

Table 29-1 Percentage of districts with public school choice programs according to type of program, by region: 1993–94 and 1999–2000*

| Region | Students can enroll in another school within this district | | Students can enroll in another school in another district at no cost | | Students from other districts can enroll in this district at no cost | | District has magnet school program | |
|-----------|------------------------------------------------------------|-----------|----------------------------------------------------------------------|-----------|----------------------------------------------------------------------|-----------|------------------------------------|-----------|
| | 1993–94 | 1999–2000 | 1993–94 | 1999–2000 | 1993–94 | 1999–2000 | 1993–94 | 1999–2000 |
| Total | 13.8 | 24.7 | 28.5 | 42.4 | 25.6 | 45.8 | 7.8 | 5.9 |
| Northeast | 5.5 | 9.6 | 9.6 | 13.2 | 8.5 | 13.1 | 4.2 | 5.1 |
| Midwest | 15.0 | 27.2 | 34.6 | 55.6 | 29.7 | 55.4 | 7.7 | 4.7 |
| South | 10.4 | 22.1 | 24.0 | 32.1 | 23.8 | 38.1 | 7.7 | 7.3 |
| West | 24.0 | 40.0 | 41.7 | 61.5 | 37.6 | 73.0 | 12.1 | 7.6 |

*A Local Education Agency (LEA), or public school district, is defined as a government agency that employs elementary or secondary level teachers and is administratively responsible for providing public elementary and/or secondary instruction and educational support services.

NOTE: Magnet schools represent a type of school choice program offered in conjunction with either within-district or out-of-district school choice programs.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Teacher Demand and Shortage and School District Surveys," 1999–2000.

Parental Choice of Schools

Table 29-2 Percentage distributions of students in grades 1–12 according to type of school, by student and household characteristics: 1993, 1996, and 1999

| Student and household characteristics | School type* | | | | | | | | | | | |
|-------------------------------------------|------------------|-------------|-------------|----------------|-------------|-------------|-------------------------|------------|------------|-----------------------------|------------|------------|
| | Public, assigned | | | Public, chosen | | | Private, church-related | | | Private, not church-related | | |
| | 1993 | 1996 | 1999 | 1993 | 1996 | 1999 | 1993 | 1996 | 1999 | 1993 | 1996 | 1999 |
| Number of students (thousands) | 33,870 | 34,603 | 35,826 | 4,669 | 6,228 | 6,840 | 3,184 | 3,654 | 3,423 | 662 | 1,040 | 1,101 |
| Total (percent) | 79.9 | 76.0 | 75.9 | 11.0 | 13.7 | 14.5 | 7.5 | 8.0 | 7.3 | 1.6 | 2.3 | 2.3 |
| Grade level | | | | | | | | | | | | |
| 1–5 | 78.6 | 74.1 | 73.7 | 11.6 | 14.8 | 15.3 | 8.3 | 8.9 | 8.6 | 1.5 | 2.2 | 2.5 |
| 6–8 | 81.3 | 79.4 | 78.6 | 9.9 | 11.2 | 11.7 | 7.4 | 7.4 | 7.5 | 1.5 | 2.0 | 2.2 |
| 9–12 | 80.6 | 75.9 | 76.9 | 11.2 | 14.1 | 15.6 | 6.5 | 7.3 | 5.3 | 1.8 | 2.7 | 2.3 |
| Race/ethnicity | | | | | | | | | | | | |
| White | 81.0 | 77.1 | 77.1 | 8.6 | 11.1 | 11.5 | 8.6 | 9.2 | 8.7 | 1.8 | 2.7 | 2.7 |
| Black | 77.2 | 72.9 | 71.5 | 18.6 | 21.5 | 22.6 | 3.4 | 4.2 | 4.4 | 0.8 | 1.4 | 1.6 |
| Hispanic | 79.2 | 76.4 | 77.0 | 13.7 | 16.1 | 18.0 | 6.4 | 6.3 | 3.9 | 0.7 | 1.3 | 1.1 |
| Other | 73.0 | 69.3 | 72.6 | 14.9 | 19.0 | 17.4 | 9.0 | 9.5 | 6.9 | 3.1 | 2.2 | 3.1 |
| Number of parents living in the household | | | | | | | | | | | | |
| Two parents | 80.1 | 76.3 | 76.8 | 9.3 | 11.7 | 12.2 | 8.8 | 9.5 | 8.4 | 1.8 | 2.4 | 2.5 |
| One parent | 78.9 | 74.7 | 74.4 | 15.2 | 18.4 | 18.4 | 4.8 | 5.0 | 5.2 | 1.1 | 1.9 | 2.1 |
| Nonparent guardians | 83.7 | 80.2 | 72.9 | 13.5 | 14.6 | 21.7 | 2.1 | 2.3 | 4.1 | 0.7 | 2.9 | 1.2 |
| Household income | | | | | | | | | | | | |
| \$10,000 or less | 82.5 | 76.5 | 73.9 | 14.3 | 19.4 | 21.9 | 2.8 | 2.5 | 2.7 | 0.4 | 1.7 | 1.4 |
| \$10,001–20,000 | 82.4 | 78.8 | 78.1 | 13.7 | 16.3 | 17.4 | 3.4 | 3.6 | 3.2 | 0.5 | 1.3 | 1.4 |
| \$20,001–35,000 | 81.6 | 78.3 | 78.4 | 10.6 | 13.9 | 15.7 | 6.9 | 6.4 | 4.4 | 0.9 | 1.4 | 1.5 |
| \$35,001–50,000 | 79.7 | 77.2 | 76.6 | 10.0 | 12.4 | 13.6 | 8.9 | 8.8 | 8.0 | 1.5 | 1.7 | 1.9 |
| \$50,001–75,000 | 77.1 | 76.0 | 78.3 | 9.1 | 9.9 | 11.0 | 11.4 | 11.8 | 8.7 | 2.4 | 2.4 | 2.1 |
| More than \$75,000 | 72.2 | 67.7 | 70.3 | 7.6 | 11.2 | 10.4 | 14.4 | 15.1 | 14.2 | 5.8 | 6.0 | 5.1 |
| Parents' education | | | | | | | | | | | | |
| Less than high school | 83.6 | 78.8 | 79.6 | 13.7 | 17.4 | 17.8 | 2.4 | 2.0 | 1.7 | 0.2 | 1.8 | 0.9 |
| High school diploma or GED | 83.5 | 82.1 | 80.3 | 11.4 | 12.3 | 14.3 | 4.6 | 5.0 | 4.1 | 0.5 | 0.7 | 1.3 |
| Some college, vocational/technical | 79.8 | 76.4 | 77.4 | 11.1 | 14.7 | 15.2 | 7.7 | 7.1 | 6.0 | 1.4 | 1.8 | 1.4 |
| Bachelor's degree | 75.8 | 70.7 | 71.5 | 9.2 | 13.1 | 13.1 | 12.5 | 13.0 | 12.5 | 2.6 | 3.3 | 2.9 |
| Graduate/professional school | 72.7 | 66.2 | 68.1 | 9.8 | 12.6 | 13.1 | 13.1 | 15.3 | 12.8 | 4.4 | 6.0 | 6.1 |
| Region | | | | | | | | | | | | |
| Northeast | 77.8 | 74.3 | 74.1 | 9.3 | 12.9 | 13.7 | 10.5 | 9.2 | 8.7 | 2.4 | 3.6 | 3.6 |
| South | 82.0 | 78.7 | 77.6 | 10.9 | 12.5 | 13.5 | 5.4 | 6.4 | 6.4 | 1.7 | 2.4 | 2.5 |
| Midwest | 79.6 | 75.4 | 76.0 | 10.4 | 12.4 | 13.5 | 9.2 | 10.9 | 9.3 | 0.8 | 1.3 | 1.2 |
| West | 78.7 | 74.0 | 74.8 | 13.4 | 17.7 | 18.1 | 6.5 | 6.3 | 4.9 | 1.5 | 2.0 | 2.3 |
| Community type | | | | | | | | | | | | |
| Urban | 75.1 | 71.0 | 71.2 | 13.5 | 16.3 | 16.6 | 9.5 | 10.0 | 9.2 | 1.9 | 2.7 | 3.0 |
| Suburban | 86.6 | 81.2 | 81.6 | 7.7 | 10.7 | 12.0 | 4.9 | 6.9 | 5.0 | 0.8 | 1.1 | 1.4 |
| Rural | 87.7 | 84.9 | 84.6 | 6.8 | 9.2 | 10.6 | 4.3 | 3.9 | 3.7 | 1.2 | 1.9 | 1.1 |

*Data have been revised from previously published figures.

NOTE: Excludes home-schooled students. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES, National Household Education Surveys Program (NHES), "School Readiness" survey, 1993; "School Safety and Discipline" survey, 1993; "Parent and Family Involvement" survey, 1996; and "Parent Interview" survey, 1999.

Public Charter Schools

Table 30-1 Number and percentage distribution of public charter schools and students, and percentage of charter schools and students by school origin status, by selected school characteristics: 1999–2000

| Selected school characteristics | Schools and students | | | | | School origin status | | |
|---------------------------------|----------------------|--------------------|--------------------|--------------------|---------------------|----------------------|----------------------------|-----------------------------|
| | Number of schools | Number of students | Average enrollment | Percent of schools | Percent of students | Newly created | Pre-existing public school | Pre-existing private school |
| All public charter schools | 1,010 | 266,721 | 264.1 | 100.0 | 100.0 | 73.6 | 16.5 | 9.9 |
| State | | | | | | | | |
| Arizona | 207 | 39,860 | 192.6 | 20.5 | 14.9 | 78.3 | 5.3 | 16.4 |
| California | 133 | 64,152 | 482.4 | 13.2 | 24.1 | 55.7 | 43.4 | 0.9 |
| Michigan | 135 | 36,052 | 267.1 | 13.4 | 13.5 | 76.4 | 6.5 | 17.2 |
| All other states | 535 | 126,656 | 236.7 | 53.0 | 47.5 | 75.6 | 16.7 | 7.8 |
| Community type | | | | | | | | |
| Central city | 537 | 139,307 | 259.6 | 53.1 | 52.2 | 76.3 | 11.9 | 11.8 |
| Urban fringe/large town | 324 | 108,807 | 336.2 | 32.1 | 40.8 | 68.5 | 23.4 | 8.1 |
| Rural/small town | 150 | 18,607 | 124.3 | 14.8 | 7.0 | 75.4 | 17.8 | 6.9 |
| School level | | | | | | | | |
| Elementary | 586 | 158,801 | 271.1 | 58.0 | 59.5 | 72.2 | 17.3 | 10.5 |
| Combined | 190 | 49,702 | 262.0 | 18.8 | 18.6 | 76.0 | 11.1 | 12.9 |
| Secondary | 235 | 58,218 | 248.2 | 23.2 | 21.8 | 75.3 | 18.9 | 5.8 |
| Enrollment | | | | | | | | |
| Less than 300 | 730 | 94,271 | 129.2 | 72.3 | 35.4 | 78.9 | 9.2 | 11.9 |
| 300–999 | 251 | 130,683 | 519.7 | 24.9 | 49.0 | 64.4 | 30.5 | 5.2 |
| 1,000 or more | 29 | 41,766 | 1,448.2 | 2.9 | 15.7 | 21.0 | 79.0 | 0.0 |
| School origin status | | | | | | | | |
| Newly created | 744 | 166,060 | 223.3 | 73.6 | 62.3 | 100.0 | (t) | (t) |
| Pre-existing public | 166 | 83,811 | 503.4 | 16.5 | 31.4 | (t) | 100.0 | (t) |
| Pre-existing private | 100 | 16,849 | 168.9 | 9.9 | 6.3 | (t) | (t) | 100.0 |
| Percent minority enrollment | | | | | | | | |
| Less than 10 | 180 | 41,115 | 228.1 | 18.1 | 15.8 | 72.9 | 17.7 | 9.4 |
| 10–24 | 187 | 41,647 | 222.9 | 18.8 | 16.0 | 71.3 | 18.7 | 10.0 |
| 25–49 | 141 | 40,377 | 285.5 | 14.2 | 15.5 | 75.6 | 13.8 | 10.6 |
| 50–75 | 136 | 36,986 | 271.7 | 13.7 | 14.2 | 70.3 | 22.0 | 7.8 |
| More than 75 | 349 | 99,878 | 286.0 | 35.1 | 38.4 | 76.2 | 13.4 | 10.4 |

(t) Not applicable.

NOTE: Public charter schools include all public charter schools open as of the 1998–99 school year and still operating in the 1999–2000 school year. Public charter schools that first opened in the 1999–2000 school year, or later, are not included in these data. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public Charter School Survey," 1999–2000.

Public Charter Schools

Table 30-2 Number and percentage distribution of public schools according to school level and type, by selected school characteristics: 1999–2000

| Selected school characteristics | Elementary | | Secondary and combined | |
|---------------------------------------------------------------------|----------------------------|------------------------|----------------------------|------------------------|
| | Traditional public schools | Public charter schools | Traditional public schools | Public charter schools |
| Number of schools | 59,904 | 586 | 23,821 | 424 |
| Race/ethnicity of students | | | | |
| White | 61.4 | 44.7 | 66.6 | 48.9 |
| Black | 18.1 | 31.0 | 15.0 | 21.8 |
| Hispanic | 15.7 | 19.5 | 13.3 | 22.7 |
| Asian/Pacific Islander | 3.6 | 3.3 | 3.9 | 3.1 |
| American Indian/Alaska Native | 1.2 | 1.5 | 1.2 | 3.5 |
| Percent minority enrollment | | | | |
| Less than 10 | 37.4 | 18.8 | 42.3 | 17.2 |
| 10–24 | 16.3 | 18.5 | 17.9 | 19.2 |
| 25–49 | 16.7 | 13.2 | 14.9 | 15.7 |
| 50–75 | 12.2 | 12.9 | 10.9 | 14.8 |
| More than 75 | 17.4 | 36.6 | 14.0 | 33.1 |
| Percent of students eligible for free or reduced-price lunch | | | | |
| Less than 15 | 21.1 | 30.9 | 31.3 | 29.8 |
| 15–29 | 18.6 | 11.0 | 20.0 | 9.8 |
| 30–49 | 21.8 | 16.6 | 20.3 | 16.8 |
| 50–74 | 19.9 | 14.1 | 14.7 | 19.9 |
| 75–100 | 18.7 | 27.4 | 13.7 | 23.7 |

NOTE: Public charter schools include all public charter schools open as of the 1998–99 school year and still operating in the 1999–2000 school year. Public charter schools that first opened in the 1999–2000 school year, or later, are not included in these data. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public and Public Charter School Surveys," 1999–2000.

Public Charter Schools

Table 30-3 Percentage of public school teachers according to school level and type, by teacher characteristics: 1999–2000

| Teacher characteristics | Elementary | | Secondary and combined | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------------------|----------------------------|------------------------|
| | Traditional public schools | Public charter schools | Traditional public schools | Public charter schools |
| Race/ethnicity | | | | |
| White | 83.5 | 75.4 | 85.9 | 77.7 |
| Black | 8.0 | 12.8 | 6.7 | 10.5 |
| Hispanic | 6.0 | 8.5 | 5.0 | 7.7 |
| Asian/Pacific Islander | 1.7 | 2.6 | 1.4 | 2.3 |
| American Indian/Alaskan Native | 0.8 | 0.8 | 1.0 | 1.7 |
| Years of teaching experience | | | | |
| 3 or fewer | 23.2 | 48.3 | 23.8 | 52.8 |
| 4–9 | 33.7 | 34.3 | 34.8 | 31.2 |
| 10–19 | 38.8 | 16.6 | 37.1 | 14.7 |
| 20 or more | 4.3 | 0.8 | 4.3 | 1.3 |
| Among teachers who taught the following subjects, percent who majored at the undergraduate or graduate levels in: | | | | |
| Elementary education | 74.8 | 61.9 | 78.9 | 51.8 |
| Mathematics | 18.7 | 25.2 | 61.8 | 40.7 |
| Science | 27.9 | 47.9 | 70.8 | 62.1 |
| Life science | 27.6 | 27.3 | 54.9 | 45.0 |
| Social studies/history | 33.5 | 48.9 | 70.5 | 65.8 |
| English/language arts | 28.7 | 37.2 | 64.7 | 46.9 |
| Foreign languages | 36.8 | 28.1 | 55.8 | 30.7 |
| Percent of teachers who somewhat agreed or strongly agreed with the following statements:* | | | | |
| The level of student misbehavior in this school (such as noise, horseplay, or fighting in the halls, cafeteria, or student lounge) interferes with my teaching. | 40.7 | 43.3 | 40.9 | 43.8 |
| The amount of student tardiness and class cutting in this school interferes with my teaching. | 24.5 | 32.2 | 42.5 | 38.1 |
| Rules for student behavior are consistently enforced by teachers in this school, even for students who are not in their classes. | 71.2 | 70.4 | 46.8 | 63.9 |

*Teachers were given four choices for these questions: "strongly agree," "somewhat agree," "somewhat disagree," and "strongly disagree." Note that the first two questions are about negative perceptions (hence a lower percentage is desirable), while the third is about a positive perception (hence a higher percentage is desirable).

NOTE: Public charter schools include all public charter schools open as of the 1998–99 school year and still operating in the 1999–2000 school year, or later, are not included in these data.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public and Public Charter School and Teacher Surveys," 1999–2000.

Public Charter Schools

Table 30-4 Percentage of public schools according to school level and type, by parental involvement and selected programs and services: 1999–2000

| School characteristics | Elementary | | Secondary and combined | |
|-----------------------------------------------------------------|----------------------------|------------------------|----------------------------|------------------------|
| | Traditional public schools | Public charter schools | Traditional public schools | Public charter schools |
| Number of schools | 59,904 | 586 | 23,821 | 424 |
| Parental involvement | | | | |
| More than half of parents participated in: | | | | |
| Parent-teacher conferences | 71.7 | 79.8 | 29.8 | 36.7 |
| Written parent-school contracts | 30.4 | 54.3 | 17.6 | 41.6 |
| Instructional issues | 3.4 | 12.0 | 1.6 | 3.9 |
| Governance | 1.5 | 8.9 | 0.8 | 3.3 |
| Programs and services | | | | |
| Programs with special instructional approaches | 17.6 | 51.9 | 24.9 | 59.0 |
| Talented/gifted program | 71.5 | 32.8 | 60.3 | 31.3 |
| Immersion in a foreign language program | 11.0 | 13.5 | 16.7 | 13.6 |
| A program for students with discipline or adjustment problems | 44.0 | 37.9 | 60.8 | 56.2 |
| Extended day or before-school or after-school day care programs | 46.3 | 62.9 | 13.9 | 28.7 |
| Advanced Placement (AP) Courses | (†) | (†) | 51.2 | 30.5 |
| International Baccalaureate (IB) | (†) | (†) | 2.1 | 1.4 |
| Specialized career academy | (†) | (†) | 20.5 | 28.3 |
| Specialized Tech-Prep program(s) | (†) | (†) | 41.6 | 20.3 |

†Not applicable.

NOTE: Public charter schools include all public charter schools open as of the 1998–99 school year and still operating in the 1999–2000 school year. Public charter schools that first opened in the 1999–2000 school year, or later, are not included in these data.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public and Public Charter School and Teacher Surveys," 1999–2000.

Academic Background of College Graduates Who Enter and Leave Teaching

Table 31-1 Percentage distributions of 1992–93 bachelor's degree recipients according to availability of scores and the quartile ranking of their college entrance examination score, by graduate characteristics: 1997

| Graduate characteristics | Total | Graduates with scores available ¹ | Of graduates with scores available, percentage whose scores ranked in the | | |
|------------------------------------------------------------|--------------|----------------------------------------------|---------------------------------------------------------------------------|-------------|--------------|
| | | | Bottom quartile | Middle half | Top quartile |
| Status in teacher pipeline by 1997² | 100.0 | | | | |
| Pipeline-eligible, but did not enter pipeline ² | 63.7 | 63.8 | 59.0 | 64.2 | 67.7 |
| Considered teaching or applied to teach | 19.2 | 18.7 | 20.8 | 17.5 | 19.3 |
| Prepared but had not taught ³ | 4.5 | 4.6 | 5.7 | 4.7 | 3.2 |
| Had taught | 12.7 | 12.9 | 14.5 | 13.7 | 9.8 |
| Had taught but not prepared ³ | 2.5 | 2.6 | 2.3 | 2.2 | 3.8 |
| Prepared and had taught ³ | 10.1 | 10.3 | 12.2 | 11.5 | 6.0 |
| Employment expectations in next 3 years | 100.0 | | | | |
| Teaching full time | 7.6 | 7.6 | 10.1 | 7.9 | 4.4 |
| Nonteaching full-time work | 83.7 | 84.2 | 83.0 | 83.8 | 86.1 |
| Not working full time | 8.8 | 8.3 | 7.0 | 8.3 | 9.5 |
| Baccalaureate major | 100.0 | | | | |
| Education | 11.7 | 12.2 | 14.7 | 13.4 | 7.2 |
| Business/management | 25.2 | 23.9 | 25.9 | 25.8 | 17.8 |
| Humanities | 9.8 | 10.2 | 9.0 | 9.3 | 13.4 |
| Mathematics/computer/natural sciences | 19.6 | 20.8 | 11.6 | 19.6 | 32.4 |
| Social science | 15.2 | 15.6 | 15.2 | 15.3 | 16.8 |
| Other | 18.4 | 17.3 | 23.6 | 16.7 | 12.4 |

¹Includes SAT scores, institution, or self-reported SAT scores. When SAT scores were not available, ACT scores were used. See the glossary for details.

²The "teacher pipeline" is an analytic framework that organizes graduates by the number of steps they have taken to become teachers. "Pipeline-eligible" refers to all graduates who were not teachers before receiving their bachelor's degree. "Entering the pipeline" refers to taking some steps to become a teacher.

³Graduates classified as "prepared to teach" had completed a student-teaching assignment or had earned a teaching certificate.

NOTE: Excludes graduates who had already been teachers before receiving their bachelor's degree in 1992–93. SAT/ACT scores were available for 77 percent of these graduates. The similarity of the distributions for graduates with available scores and total graduates suggests that there is little or no resulting bias from unavailable scores. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES, Baccalaureate and Beyond Longitudinal Study, "Second Follow-up" (B&B:1993/1997).

Academic Background of College Graduates Who Enter and Leave Teaching

Table 31-2 Percentage distributions of 1992–93 bachelor's degree recipients who taught in elementary or secondary schools before 1997 according to availability of scores and the quartile ranking of their college entrance examination score, by selected characteristics of teachers' careers: 1997

| Characteristics of K–12 teachers' careers | Total | Graduates with scores available* | Of graduates with scores available, percentage whose scores ranked in the | | |
|---------------------------------------------------------------------------------------------------|--------------|----------------------------------|---------------------------------------------------------------------------|-------------|--------------|
| | | | Bottom quartile | Middle half | Top quartile |
| By 1997 had taught | 100.0 | | | | |
| Only in public schools | 83.2 | 81.5 | 84.6 | 84.0 | 69.4 |
| Only in private schools | 13.1 | 14.4 | 10.4 | 12.5 | 25.9 |
| Both in public and private schools | 3.8 | 4.0 | 4.9 | 3.4 | 4.7 |
| By 1997 had taught | 100.0 | | | | |
| Only in elementary school(s) | 52.3 | 51.2 | 57.9 | 51.5 | 40.3 |
| Only in secondary school(s) | 30.7 | 31.4 | 28.2 | 29.0 | 44.0 |
| Only in combined school(s) | 4.5 | 4.9 | 3.8 | 5.5 | 4.6 |
| In a mix of these school levels | 12.4 | 12.5 | 10.2 | 14.0 | 11.1 |
| Had taught most recently in | 100.0 | | | | |
| Central city | 33.3 | 32.6 | 34.0 | 30.5 | 37.3 |
| Urban fringe or large town | 28.4 | 28.7 | 24.9 | 31.1 | 26.6 |
| Small town or rural area | 38.3 | 38.7 | 41.1 | 38.4 | 36.1 |
| Had taught most recently at school with enrollment of | 100.0 | | | | |
| Less than 300 | 18.2 | 17.5 | 18.6 | 16.8 | 18.3 |
| 300–999 | 63.9 | 64.3 | 62.8 | 68.9 | 51.5 |
| 1,000 or more | 17.9 | 18.1 | 18.6 | 14.4 | 30.2 |
| Had taught most recently at school with minority enrollment of | 100.0 | | | | |
| Less than 10 percent | 31.3 | 30.8 | 25.9 | 31.3 | 36.6 |
| 10–24 percent | 18.6 | 18.0 | 18.8 | 17.0 | 20.7 |
| 25–49 percent | 17.8 | 19.1 | 21.5 | 17.8 | 20.2 |
| 50–75 percent | 15.7 | 17.4 | 18.2 | 19.0 | 10.1 |
| More than 75 percent | 16.7 | 14.7 | 15.6 | 14.9 | 12.4 |
| Had taught most recently at school with percentage of students in the school lunch program | 100.0 | | | | |
| Less than 15 percent | 27.2 | 30.7 | 27.9 | 29.9 | 40.5 |
| 15–29 percent | 25.1 | 24.4 | 18.9 | 27.5 | 23.3 |
| 30–49 percent | 22.0 | 21.2 | 22.7 | 19.2 | 26.3 |
| 50–74 percent | 14.5 | 14.8 | 15.6 | 16.7 | 4.3 |
| 75–100 percent | 11.2 | 9.1 | 14.9 | 6.8 | 5.7 |
| Teaching status in 1997 | 100.0 | | | | |
| Still teaching | 79.4 | 78.4 | 83.9 | 79.4 | 67.9 |
| No longer teaching | 20.7 | 21.6 | 16.1 | 20.6 | 32.1 |

*Includes SAT scores, institution, or self-reported SAT scores. When SAT scores not were available, ACT scores were used. See the glossary for details.

NOTE: Excludes graduates who had already been teachers before receiving their bachelor's degree in 1992–93. SAT/ACT scores were available for 77 percent of these graduates. The similarity of the distributions for graduates with available scores and total graduates suggests that there is little or no resulting bias from unavailable scores. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. Baccalaureate and Beyond Longitudinal Study, "Second Follow-up" (B&B:1993/1997).

Academic Background of College Graduates Who Enter and Leave Teaching

Table 31-3 Percentage distribution of all 1992–93 bachelor's degree recipients and those who taught in elementary or secondary schools before 1997 according to whether their college entrance examination scores were available, and the percentage whose available scores were in the top half of their peer group, by selected characteristics of teachers' careers: 1997

| Characteristics of K–12 teachers' careers | Of all graduates, percentage with scores* | | Top half |
|---------------------------------------------------------------------------------------------------|-------------------------------------------|-----------|----------|
| | Unavailable | Available | |
| Total of all 1992–93 graduates | 20.4 | 79.6 | 49.6 |
| By 1997 had taught | | | |
| Only in public schools | 20.2 | 79.8 | 40.9 |
| Only in private schools | 10.1 | 89.9 | 53.0 |
| Both in public and private schools | 12.9 | 87.1 | 41.3 |
| By 1997 had taught | | | |
| Only in elementary school(s) | 20.0 | 80.0 | 34.5 |
| Only in secondary school(s) | 16.5 | 83.6 | 52.9 |
| Only in combined school(s) | 11.6 | 88.4 | 43.0 |
| In a mix of these school levels | 17.3 | 82.7 | 47.5 |
| Had taught most recently in | | | |
| Central city | 20.2 | 79.8 | 40.0 |
| Urban fringe or large town | 17.3 | 82.7 | 43.5 |
| Small town or rural area | 17.6 | 82.4 | 43.1 |
| Had taught most recently at school with enrollment of | | | |
| Less than 300 | 21.7 | 78.3 | 46.8 |
| 300–999 | 18.1 | 81.9 | 37.7 |
| 1,000 or more | 17.4 | 82.6 | 51.3 |
| Had taught most recently at school with minority enrollment of | | | |
| Less than 10 percent | 21.5 | 78.5 | 45.4 |
| 10–24 percent | 22.4 | 77.6 | 37.7 |
| 25–49 percent | 13.9 | 86.1 | 41.1 |
| 50–75 percent | 11.3 | 88.7 | 39.6 |
| More than 75 percent | 30.0 | 70.0 | 40.0 |
| Had taught most recently at school with percentage of students in the school lunch program | | | |
| Less than 15 percent | 9.2 | 90.8 | 42.6 |
| 15–29 percent | 23.4 | 76.6 | 45.2 |
| 30–49 percent | 23.9 | 76.2 | 32.9 |
| 50–74 percent | 18.1 | 81.9 | 41.5 |
| 75–100 percent | 36.8 | 63.2 | 26.8 |
| Teaching status in 1997 | | | |
| Still teaching | 17.3 | 82.7 | 39.9 |
| No longer teaching | 12.6 | 87.4 | 54.1 |

*Includes SAT scores, institution, or self-reported SAT scores. When SAT scores were not available, ACT scores were used. See the glossary for details.

NOTE: Excludes graduates who had already been teachers before receiving their bachelor's degree in 1992–93. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES, Baccalaureate and Beyond Longitudinal Study, "Second Follow-up" (B&B:1993/1997).

Educational Background of Teachers

Table 32-1 Percentage distributions of full-time public and private school teachers who held various degrees, by teacher and school characteristics: 1999–2000

| Teacher and school characteristics | Public | | | | Private | | | |
|--------------------------------------------------------------|-----------------------------|-------------------|-----------------|-----------------------------|-----------------------------|-------------------|-----------------|-----------------------------|
| | Less than bachelor's degree | Bachelor's degree | Master's degree | Higher than master's degree | Less than bachelor's degree | Bachelor's degree | Master's degree | Higher than master's degree |
| Total* | 0.6 | 52.6 | 41.3 | 5.4 | 6.3 | 59.8 | 30.0 | 4.1 |
| Years of teaching experience | | | | | | | | |
| 3 or fewer | 0.9 | 79.8 | 17.3 | 2.0 | 10.5 | 71.5 | 15.4 | 2.6 |
| 4–9 | 0.6 | 62.5 | 33.6 | 3.3 | 7.7 | 63.7 | 24.0 | 4.6 |
| 10–19 | 0.8 | 47.4 | 45.9 | 5.9 | 4.8 | 57.8 | 34.1 | 3.3 |
| 20 or more | 0.4 | 37.6 | 54.0 | 8.0 | 2.3 | 46.7 | 45.3 | 5.7 |
| Race/ethnicity | | | | | | | | |
| White | 0.6 | 51.7 | 42.5 | 5.2 | 5.3 | 60.1 | 30.6 | 4.1 |
| Black | 0.8 | 52.0 | 39.9 | 7.3 | 18.2 | 64.1 | 15.8 | 1.8 |
| Hispanic | 0.7 | 65.8 | 28.6 | 4.9 | 10.6 | 54.5 | 30.5 | 4.4 |
| Asian/Pacific Islander | 0.1 | 56.1 | 32.9 | 10.9 | 7.7 | 54.2 | 32.1 | 6.1 |
| American Indian/Alaska Native | 1.2 | 57.4 | 36.8 | 4.6 | 32.0 | 44.4 | 19.2 | 4.4 |
| School level | | | | | | | | |
| Elementary | 0.2 | 54.7 | 40.0 | 5.1 | 5.6 | 68.1 | 23.3 | 3.1 |
| Combined | 1.0 | 50.4 | 42.5 | 6.1 | 8.8 | 54.1 | 32.1 | 5.0 |
| Secondary | 1.5 | 48.9 | 43.8 | 5.9 | 3.8 | 48.8 | 42.4 | 5.0 |
| Enrollment | | | | | | | | |
| Less than 300 | 0.6 | 62.3 | 33.6 | 3.6 | 9.4 | 61.7 | 25.8 | 3.2 |
| 300–999 | 0.5 | 53.7 | 40.6 | 5.2 | 1.9 | 60.9 | 32.1 | 5.2 |
| 1,000 or more | 1.02 | 46.7 | 45.9 | 6.4 | 1.1 | 39.8 | 55.0 | 4.0 |
| Region | | | | | | | | |
| Northeast | 0.7 | 38.9 | 53.1 | 7.4 | 4.1 | 49.8 | 40.3 | 5.8 |
| Midwest | 0.3 | 50.7 | 45.4 | 3.7 | 4.4 | 66.3 | 27.1 | 2.2 |
| South | 0.9 | 59.0 | 35.1 | 5.1 | 8.6 | 60.6 | 27.3 | 3.6 |
| West | 0.6 | 57.8 | 35.7 | 6.0 | 4.9 | 63.9 | 26.1 | 5.1 |
| Percent minority enrollment | | | | | | | | |
| Less than 10 | 0.6 | 50.0 | 44.5 | 5.0 | 6.6 | 61.1 | 29.3 | 3.1 |
| 10–24 | 0.6 | 52.2 | 42.2 | 5.0 | 3.7 | 58.3 | 32.8 | 5.2 |
| 25–49 | 0.8 | 54.7 | 39.3 | 5.2 | 6.7 | 60.5 | 26.5 | 6.3 |
| 50–75 | 0.6 | 56.2 | 37.4 | 5.8 | 7.7 | 51.5 | 36.2 | 4.5 |
| More than 75 | 0.7 | 54.9 | 37.7 | 6.7 | 9.8 | 58.2 | 27.2 | 4.8 |
| Percent of students eligible for free or reduced-price lunch | | | | | | | | |
| Less than 15 | 0.7 | 46.9 | 46.5 | 5.8 | (#) | (#) | (#) | (#) |
| 15–29 | 0.4 | 53.3 | 41.4 | 4.9 | (#) | (#) | (#) | (#) |
| 30–49 | 0.8 | 56.5 | 37.6 | 5.1 | (#) | (#) | (#) | (#) |
| 50–74 | 0.4 | 57.1 | 37.8 | 4.6 | (#) | (#) | (#) | (#) |
| 75–100 | 0.7 | 55.6 | 37.5 | 6.3 | (#) | (#) | (#) | (#) |
| Percent of students with limited English proficiency | | | | | | | | |
| Less than 1 | 0.7 | 51.6 | 42.5 | 5.2 | 6.2 | 60.1 | 29.9 | 3.9 |
| 1–10 | 0.6 | 52.5 | 41.4 | 5.6 | 4.7 | 58.6 | 32.9 | 3.8 |
| More than 10 | 0.6 | 57.1 | 36.4 | 5.9 | 16.7 | 48.7 | 22.0 | 12.6 |

#Too few sample cases to report.

*Includes full-time public school teachers who taught grades 1–12 whose main teaching assignment was in English/language arts, social studies/social sciences, foreign language, mathematics, or science, or who taught in a self-contained classroom.

NOTE: Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES, Schools and Staffing Survey (SASS), *Public, Public Charter, and Private School and Teacher Surveys,* 1999–2000.

Educational Background of Teachers

Table 32-2 Number and percentage distribution of full-time elementary public and private school teachers according to undergraduate and graduate majors in various fields of study, by teacher characteristics: 1999–2000

| Teacher characteristics | Number of teachers | Major field of study | | | | |
|--------------------------------------|--------------------|----------------------|------------------------------------------|-------------|--------------------------------|------------------------------|
| | | Subject area | | | General education ² | Other education ³ |
| | | Academic subject | Specialization in education ¹ | Total | | |
| Total | 1,890,599 | 23.6 | 18.0 | 41.7 | 45.4 | 13.0 |
| For undergraduate or graduate degree | | | | | | |
| School where currently teaching | | | | | | |
| Public | 1,726,366 | 23.0 | 18.5 | 41.5 | 44.8 | 13.7 |
| Private | 164,232 | 29.7 | 13.2 | 42.9 | 51.9 | 5.2 |
| Years of teaching experience | | | | | | |
| 3 or fewer | 309,704 | 31.7 | 12.3 | 44.0 | 48.3 | 7.7 |
| 4–9 | 436,842 | 27.5 | 16.3 | 43.8 | 43.8 | 12.5 |
| 10–19 | 502,456 | 21.7 | 19.5 | 41.2 | 42.9 | 15.9 |
| 20 or more | 641,597 | 18.6 | 20.9 | 39.5 | 47.0 | 13.6 |
| Total | 1,882,786 | 22.4 | 14.6 | 37.0 | 56.7 | 6.3 |
| For undergraduate degree | | | | | | |
| School where currently teaching | | | | | | |
| Public | 1,719,233 | 21.8 | 14.9 | 36.7 | 56.6 | 6.7 |
| Private | 163,553 | 28.4 | 12.3 | 40.7 | 57.1 | 2.2 |
| Years of teaching experience | | | | | | |
| 3 or fewer | 308,556 | 31.6 | 12.0 | 43.6 | 50.3 | 6.1 |
| 4–9 | 433,725 | 26.9 | 13.6 | 40.5 | 53.0 | 6.5 |
| 10–19 | 500,368 | 20.1 | 15.1 | 35.2 | 57.2 | 7.6 |
| 20 or more | 640,137 | 16.6 | 16.2 | 32.9 | 61.9 | 5.3 |
| Total | 796,767 | 7.4 | 19.8 | 27.1 | 39.0 | 33.8 |
| For graduate degree | | | | | | |
| School where currently teaching | | | | | | |
| Public | 753,359 | 6.8 | 20.0 | 26.8 | 38.9 | 34.3 |
| Private | 43,408 | 16.9 | 16.1 | 33.0 | 41.4 | 25.6 |
| Years of teaching experience | | | | | | |
| 3 or fewer | 49,518 | 11.8 | 14.6 | 26.4 | 42.1 | 31.6 |
| 4–9 | 145,959 | 8.3 | 19.7 | 28.0 | 34.9 | 37.1 |
| 10–19 | 239,291 | 7.6 | 20.4 | 28.0 | 34.8 | 37.3 |
| 20 or more | 361,999 | 6.3 | 20.1 | 26.3 | 43.1 | 30.6 |

¹“Subject area specialization in education” is the study of methods for teaching an academic field, such as mathematics education.

²“General education” includes the following fields: pre-elementary and early childhood education; elementary education; and secondary education.

³Examples of “other education” fields are special education, curriculum and instruction, and educational administration.

NOTE: Teachers who held both undergraduate and graduate degrees were included in both of the degree categories, “For undergraduate” and “For graduate.” However, with the “For undergraduate or graduate” category, teachers with more than one major or degree were counted only once. Majors/degrees were counted in the following order: academic field, subject area specialization in education, other education, and general education. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), “Public, Public Charter, and Private School Teacher Surveys,” 1999–2000.

Educational Background of Teachers

Table 32-3 Number and percentage distribution of full-time secondary public and private school teachers according to undergraduate and graduate majors in various fields of study, by teacher characteristics: 1999–2000

| Teacher characteristics | Number of teachers | Major field of study | | | | |
|--------------------------------------|--------------------|----------------------|------------------------------------------|-------------|--------------------------------|------------------------------|
| | | Subject area | | | General education ² | Other education ³ |
| | | Academic subject | Specialization in education ¹ | Total | | |
| Total | 956,567 | 48.8 | 38.3 | 87.0 | 6.6 | 6.4 |
| For undergraduate or graduate degree | | | | | | |
| School where currently teaching | | | | | | |
| Public | 895,358 | 47.4 | 39.3 | 86.7 | 6.7 | 6.7 |
| Private | 61,209 | 68.8 | 23.6 | 92.4 | 5.0 | 2.7 |
| Years of teaching experience | | | | | | |
| 3 or fewer | 149,050 | 58.1 | 29.1 | 87.3 | 7.9 | 4.8 |
| 4–9 | 218,302 | 53.1 | 34.3 | 87.4 | 6.4 | 6.2 |
| 10–19 | 233,765 | 46.7 | 39.0 | 85.7 | 6.7 | 7.6 |
| 20 or more | 355,450 | 43.5 | 44.1 | 87.6 | 6.0 | 6.4 |
| Total | 951,527 | 46.1 | 39.4 | 85.4 | 10.0 | 4.6 |
| For undergraduate degree | | | | | | |
| School where currently teaching | | | | | | |
| Public | 890,557 | 44.7 | 40.4 | 85.2 | 10.1 | 4.8 |
| Private | 60,949 | 65.4 | 23.4 | 88.8 | 9.1 | 2.2 |
| Years of teaching experience | | | | | | |
| 3 or fewer | 148,472 | 57.5 | 29.5 | 87.0 | 8.3 | 4.7 |
| 4–9 | 217,201 | 51.4 | 35.0 | 86.4 | 8.9 | 4.6 |
| 10–19 | 232,012 | 43.6 | 40.2 | 83.8 | 10.7 | 5.6 |
| 20 or more | 353,842 | 39.6 | 45.6 | 85.2 | 10.9 | 3.9 |
| Total | 463,121 | 23.8 | 31.3 | 55.0 | 14.7 | 30.3 |
| For graduate degree | | | | | | |
| School where currently teaching | | | | | | |
| Public | 432,677 | 22.1 | 31.3 | 53.5 | 15.1 | 31.5 |
| Private | 30,444 | 46.7 | 30.4 | 77.1 | 8.8 | 14.1 |
| Years of teaching experience | | | | | | |
| 3 or fewer | 31,631 | 33.1 | 30.4 | 63.4 | 17.5 | 19.1 |
| 4–9 | 81,650 | 23.9 | 27.5 | 51.4 | 14.8 | 33.8 |
| 10–19 | 120,648 | 22.2 | 30.6 | 52.7 | 13.8 | 33.5 |
| 20 or more | 229,192 | 23.2 | 33.1 | 56.3 | 14.7 | 28.9 |

¹“Subject area specialization in education” is the study of methods for teaching an academic field, such as mathematics education.

²“General education” includes the following fields: pre-elementary and early childhood education; elementary education; and secondary education.

³Examples of “other education” fields are special education, curriculum and instruction, and educational administration.

NOTE: Teachers who held both undergraduate and graduate degrees were included in both of the degree categories, “For undergraduate” and “For graduate.” However, with the “For undergraduate or graduate” category, teachers with more than one major or degree were counted only once. Majors/degrees were counted in the following order: academic field, subject area specialization in education, other education, and general education. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), “Public, Public Charter, and Private School Teacher Surveys,” 1999–2000

Participation in Professional Development

Table 33-1 Percentage of public school teachers who participated in professional development activities in various content areas during the past 12 months, by focus of activity and hours of participation: 2000

| Focus of professional development activity | Total participating in activity | Hours of participation | | |
|-------------------------------------------------------------------------|---------------------------------|------------------------|------|--------------|
| | | 1–8 | 9–32 | More than 32 |
| Teachers participating in any professional development activity | 99 | (f) | (f) | (f) |
| State or district curriculum and performance standards | 80 | 46 | 25 | 9 |
| Integration of educational technology in the grade or subject you teach | 74 | 45 | 21 | 8 |
| In-depth study in the subject area of your main teaching assignment | 72 | 31 | 25 | 16 |
| New methods of teaching (e.g., cooperative learning) | 72 | 43 | 21 | 8 |
| Student performance assessment | 62 | 41 | 16 | 5 |
| Addressing the needs of students with disabilities | 49 | 36 | 10 | 4 |
| Encouraging parental and community involvement | 46 | 34 | 8 | 4 |
| Classroom management, including student discipline | 45 | 33 | 9 | 3 |
| Addressing the needs of students from diverse cultural backgrounds | 41 | 29 | 8 | 4 |
| Addressing the needs of students with limited English proficiency | 26 | 18 | 5 | 3 |

†Some teachers participated in more than one activity with the same frequency.

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

SOURCE: U.S. Department of Education, NCES, Fast Response Survey System (FRSS), "Survey on Professional Development and Training in U.S. Public Schools," FRSS 74, 1999–2000.

Table 33-2 Percentage of public school teachers who participated in various collaborative activities during the past 12 months, by focus of activity and frequency of participation: 2000

| Focus of collaborative activity | Total participating in activity | Frequency of participation | | | |
|--------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------|----------------------|--------------|--------------------|
| | | At least once a week | 2 to 3 times a month | Once a month | A few times a year |
| Teachers participating in any collaborative activity | 92 | (f) | (f) | (f) | (f) |
| Regularly scheduled collaboration with other teacher(s), excluding meetings held for administrative purposes | 69 | 22 | 12 | 16 | 19 |
| Networking with teachers outside the school | 62 | 6 | 8 | 12 | 36 |
| Common planning periods for team teachers | 53 | 32 | 7 | 5 | 9 |
| Individual or collaborative research on a topic of interest professionally | 52 | 10 | 8 | 9 | 24 |
| Mentoring another teacher in a formal relationship | 26 | 11 | 5 | 3 | 7 |
| Being mentored by another teacher in a formal relationship | 23 | 8 | 3 | 3 | 9 |

†Some teachers participated in more than one activity with the same frequency.

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

SOURCE: U.S. Department of Education, NCES, Fast Response Survey System (FRSS), "Survey on Professional Development and Training in U.S. Public Schools," FRSS 74, 1999–2000.

Participation in Professional Development

Table 33-3 Percentage of public school teachers indicating the extent to which participation in professional development activities in various content areas during the past 12 months improved their teaching, by focus of activity and hours of participation: 2000

| Focus of professional development activity | Improved classroom teaching | | | |
|-------------------------------------------------------------------------|-----------------------------|------------|----------|------------|
| | A lot | Moderately | Somewhat | Not at all |
| State or district curriculum and performance standards | | | | |
| 1–8 hours | 8 | 33 | 45 | 14 |
| More than 8 hours | 23 | 39 | 30 | 9 |
| Integration of educational technology in the grade or subject you teach | | | | |
| 1–8 hours | 13 | 38 | 42 | 7 |
| More than 8 hours | 38 | 38 | 20 | 3 |
| In-depth study in the subject area of your main teaching assignment | | | | |
| 1–8 hours | 13 | 45 | 37 | 4 |
| More than 8 hours | 37 | 43 | 19 | (#) |
| New methods of teaching (e.g., cooperative learning) | | | | |
| 1–8 hours | 11 | 41 | 43 | 6 |
| More than 8 hours | 33 | 43 | 22 | 2! |
| Student performance assessment | | | | |
| 1–8 hours | 11 | 37 | 43 | 10 |
| More than 8 hours | 26 | 46 | 25 | 3! |
| Addressing the needs of students with disabilities | | | | |
| 1–8 hours | 11 | 33 | 49 | 7 |
| More than 8 hours | 34 | 41 | 23 | 2! |
| Encouraging parental and community involvement | | | | |
| 1–8 hours | 7 | 32 | 48 | 14 |
| More than 8 hours | 28 | 42 | 26 | 4! |
| Classroom management, including student discipline | | | | |
| 1–8 hours | 10 | 39 | 44 | 8 |
| More than 8 hours | 33 | 46 | 25 | 3! |
| Addressing the needs of students from diverse cultural backgrounds | | | | |
| 1–8 hours | 8 | 31 | 51 | 10 |
| More than 8 hours | 32 | 44 | 21 | 3! |
| Addressing the needs of students with limited English proficiency | | | | |
| 1–8 hours | 8 | 31 | 52 | 10 |
| More than 8 hours | 34 | 39 | 24 | 2! |

#Too small to report.

!Interpret data with caution. Standard errors high relative to estimate.

NOTE: Percentages based on teachers participating in professional development activities, not all teachers. Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, NCES. (2001). *Teacher Preparation and Professional Development: 2000* (NCES 2001–088).

Participation in Professional Development

Table 33-4 Percentage of public school teachers indicating the extent to which participation in various collaborative activities during the past 12 months improved their teaching, by focus of activity and frequency of participation: 2000

| Focus of collaborative activity | Improved classroom teaching | | | |
|--------------------------------------------------------------------------------------------------------------|-----------------------------|------------|----------|------------|
| | A lot | Moderately | Somewhat | Not at all |
| Regularly scheduled collaboration with other teacher(s), excluding meetings held for administrative purposes | | | | |
| At least once a week | 45 | 34 | 18 | 2! |
| 2 to 3 times a month | 23 | 50 | 26 | 2! |
| Once a month | 15 | 35 | 45 | 5! |
| A few times a year | 7 | 28 | 56 | 8 |
| Networking with teachers outside the school | | | | |
| At least once a week | 42 | 38 | 20 | 1! |
| 2 to 3 times a month | 33 | 43 | 24 | 1! |
| Once a month | 26 | 39 | 33 | 2 |
| A few times a year | 12 | 29 | 54 | 6 |
| Common planning periods for team teachers | | | | |
| At least once a week | 45 | 31 | 19 | 4 |
| 2 to 3 times a month | 29 | 53 | 15 | 4! |
| Once a month | 17! | 41 | 37 | 6! |
| A few times a year | 12! | 22 | 50 | 16 |
| Individual or collaborative research on a topic of interest professionally | | | | |
| At least once a week | 57 | 30 | 12 | 1! |
| 2 to 3 times a month | 39 | 45 | 15 | (#) |
| Once a month | 26 | 41 | 32 | 1! |
| A few times a year | 16 | 32 | 47 | 4! |
| Mentoring another teacher in a formal relationship | | | | |
| At least once a week | 28 | 39 | 26 | 7! |
| 2 to 3 times a month | 15 | 36 | 38 | 11! |
| Once a month | 13! | 32 | 46 | 9! |
| A few times a year | 7! | 25 | 54 | 15 |
| Being mentored by another teacher in a formal relationship | | | | |
| At least once a week | 66 | 24 | 10 | (#) |
| 2 to 3 times a month | 38 | 35 | 21! | 5! |
| Once a month | 31 | 37 | 28 | 3! |
| A few times a year | 11! | 27 | 45 | 17 |

#Too small to report.

!Interpret with caution. Standard errors high relative to estimate.

NOTE: Percentages based on teachers participating in collaborative activities, not all teachers. Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, NCES. (2001). *Teacher Preparation and Professional Development: 2000* (NCES 2001-088).

Student Victimization

Table 34-1 Number and percentage of students ages 12–18 who reported criminal victimization at school, by student characteristics: 1999

| Student characteristic | Number of students (thousands) | Victimization | | |
|-------------------------|-----------------------------------|------------------|----------------------|-----------------------|
| | | Any ¹ | Violent ² | Property ³ |
| Total | 24,614 | 12.2 | 4.0 | 7.7 |
| Sex | | | | |
| Male | 12,631 | 12.6 | 4.5 | 7.6 |
| Female | 11,983 | 11.8 | 3.5 | 7.8 |
| Race/ethnicity | | | | |
| White | 16,211 | 11.6 | 3.6 | 7.5 |
| Black | 3,826 | 17.0 | 5.8 | 10.8 |
| Hispanic | 3,450 | 10.0 | 4.0 | 5.6 |
| Other | 1,127 | 11.6 | 3.4 | 6.3 |
| Grade level | | | | |
| 6–8 | 10,181 | 14.1 | 5.1 | 8.4 |
| 9–10 | 7,516 | 12.1 | 3.9 | 8.2 |
| 11–12 | 6,918 | 9.5 | 2.5 | 6.2 |
| Family household income | | | | |
| Less than \$15,000 | 2,866 | 13.6 | 5.2 | 7.8 |
| \$15,000–29,999 | 4,206 | 12.8 | 5.1 | 7.9 |
| \$30,000–49,999 | 5,511 | 12.2 | 4.0 | 8.0 |
| \$50,000–74,999 | 4,267 | 13.5 | 4.3 | 8.1 |
| \$75,000 or more | 4,267 | 11.0 | 2.5 | 8.0 |
| Place of residence | | | | |
| Urban | 6,541 | 12.7 | 3.9 | 8.4 |
| Suburban | 12,936 | 11.9 | 4.2 | 7.4 |
| Rural | 5,138 | 12.3 | 3.7 | 7.6 |
| Type of school attended | | | | |
| Public | 22,232 | 12.6 | 4.4 | 7.9 |
| Private | 2,372 | 8.5 | 0.4 | 5.8 |

¹ "Any victimization" is a combination of "violent victimization" and "property victimization." If the student reported an incident of either, he or she is counted as having experienced any victimization. If the respondent reported having experienced both, he or she is counted once under the any victimization category. Also, any victimization includes those students who reported being victimized but did not provide enough information about the victimization for it to be classified as violent or property.

² Violent victimization includes any physical attack (i.e., rape, sexual assault, robbery, or assault, including attempts and threats) or taking of property directly from a student using force, weapons, or threats at school.

³ Property victimization includes theft of a student's property at school.

NOTE: Includes only 12- through 18-year-olds who were in primary or secondary education programs leading to a high school diploma. Details may not add to totals due to rounding and missing cases.

SOURCE: U.S. Department of Education, NCES. (forthcoming). *Are America's Schools Safe? Kids Speak Out* (NCES 2002–146).

Student Victimization

Table 34-2 Number and percentage of students ages 12–18 who reported criminal victimization at school, by perception of conditions at school: 1999

| Student characteristic | Number of students (thousands) | Victimization | | |
|---------------------------------------------------------------|-----------------------------------|------------------|----------------------|-----------------------|
| | | Any ¹ | Violent ² | Property ³ |
| Total | 24,614 | 12.2 | 4.0 | 7.7 |
| Student reports street gangs at school | | | | |
| Yes | 4,252 | 18.4 | 8.4 | 11.3 |
| No | 15,949 | 10.8 | 2.8 | 7.1 |
| Do not know | 3,908 | 11.7 | 4.6 | 6.9 |
| Student reports knowing a student who brought a gun to school | | | | |
| Yes | 1,847 | 20.1 | 9.8 | 10.7 |
| No | 22,566 | 11.6 | 3.5 | 7.4 |
| Student reports seeing a student with a gun at school | | | | |
| Yes | 690 | 24.3 | 10.7 | 13.3 |
| No | 23,743 | 11.9 | 3.8 | 7.6 |
| Do not know | 27 | (#) | (#) | (#) |

#Too small to report.

¹Any victimization is a combination of "violent victimization" and "property victimization." If the student reported an incident of either, he or she is counted as having experienced any victimization. If the respondent reported having experienced both, he or she is counted once under the any victimization category. Also, any victimization includes those students who reported being victimized but did not provide enough information about the victimization for it to be classified as violent or property.

²Violent victimization includes any physical attack (i.e., rape, sexual assault, robbery, or assault, including attempts and threats) or taking of property directly from a student using force, weapons, or threats at school.

³Property victimization includes theft of a student's property at school.

NOTE: Includes only 12- through 18-year-olds who were in primary or secondary education programs leading to a high school diploma. Details may not add to totals due to rounding and missing cases.

SOURCE: U.S. Department of Education, NCES. (forthcoming). *Are America's Schools Safe? Kids Speak Out* (NCES 2002–146).

Undergraduate Diversity

Table 35-1 Percentage distribution of undergraduates according to selected student characteristics, by institution type: 1999–2000

| Student characteristics | Total ¹ | 4-year total ² | Public 4-year | | Private not-for-profit | | Public 2-year |
|--------------------------------------|--------------------|---------------------------|---------------|--------------|------------------------|--------------|---------------|
| | | | Doctoral | Nondoctoral | Doctoral | Nondoctoral | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Sex | | | | | | | |
| Male | 43.7 | 44.7 | 47.1 | 42.5 | 46.0 | 41.4 | 43.7 |
| Female | 56.3 | 55.3 | 52.9 | 57.5 | 54.0 | 58.6 | 56.3 |
| Race/ethnicity³ | | | | | | | |
| White | 68.5 | 71.6 | 73.0 | 69.6 | 69.9 | 72.2 | 67.2 |
| Black | 12.7 | 11.0 | 10.3 | 12.9 | 10.9 | 10.0 | 13.4 |
| Hispanic | 12.3 | 10.8 | 8.7 | 12.1 | 11.0 | 13.8 | 13.0 |
| Asian/Pacific Islander | 5.5 | 5.9 | 7.3 | 4.7 | 7.8 | 2.7 | 5.1 |
| American Indian/Alaska Native | 1.1 | 0.8 | 0.7 | 0.8 | 0.5 | 1.2 | 1.3 |
| Age | | | | | | | |
| 18 and under | 9.5 | 10.9 | 10.8 | 10.0 | 14.0 | 10.1 | 8.5 |
| 19–23 | 47.7 | 58.3 | 62.1 | 53.3 | 65.2 | 51.8 | 36.6 |
| 24–29 | 17.0 | 14.5 | 15.5 | 16.7 | 9.0 | 13.1 | 18.4 |
| 30–39 | 13.9 | 9.4 | 6.7 | 12.0 | 6.1 | 14.1 | 18.5 |
| 40 and above | 11.9 | 6.9 | 4.9 | 8.0 | 5.7 | 10.9 | 17.9 |
| Average age | 26.4 | 24.2 | 23.4 | 25.0 | 23.0 | 25.7 | 28.9 |
| Dependency status | | | | | | | |
| Dependent | 49.1 | 62.7 | 66.0 | 56.3 | 73.4 | 56.7 | 36.3 |
| Independent | 50.9 | 37.3 | 34.0 | 43.7 | 26.6 | 43.3 | 63.7 |
| Respondent has dependents | | | | | | | |
| No | 73.1 | 82.1 | 85.3 | 77.5 | 87.3 | 77.3 | 65.5 |
| Yes | 26.9 | 18.0 | 14.7 | 22.5 | 12.8 | 22.7 | 34.5 |
| Single parent⁴ | | | | | | | |
| No | 86.7 | 91.0 | 91.9 | 88.9 | 93.1 | 90.2 | 83.6 |
| Yes | 13.3 | 9.0 | 8.1 | 11.1 | 6.9 | 9.8 | 16.4 |
| Employment⁵ | | | | | | | |
| Full-time | 39.3 | 26.4 | 21.7 | 32.1 | 20.3 | 33.8 | 53.8 |
| Part-time | 40.8 | 50.7 | 53.9 | 47.7 | 52.4 | 46.3 | 30.4 |
| Not working | 19.9 | 22.9 | 24.4 | 20.3 | 27.3 | 19.9 | 15.8 |
| Disability status⁶ | | | | | | | |
| No disability | 90.7 | 92.3 | 92.5 | 91.8 | 93.9 | 91.6 | 89.3 |
| Disability or difficulty | 9.3 | 7.7 | 7.5 | 8.2 | 6.1 | 8.5 | 10.7 |
| Citizenship | | | | | | | |
| Citizens | 93.0 | 93.9 | 93.8 | 94.0 | 91.7 | 95.5 | 92.2 |
| Student and parent(s) foreign-born | 4.2 | 3.5 | 3.3 | 4.1 | 4.5 | 2.4 | 5.0 |
| Only parent(s) foreign-born | 10.1 | 9.9 | 10.4 | 8.9 | 14.5 | 6.8 | 10.0 |
| All other citizens | 78.6 | 80.5 | 80.0 | 81.0 | 72.8 | 86.3 | 77.3 |
| Permanent residents | 5.1 | 3.9 | 4.1 | 4.6 | 3.7 | 2.5 | 6.1 |
| Foreign students with visa | 2.0 | 2.3 | 2.2 | 1.5 | 4.6 | 2.1 | 1.7 |

See footnotes at end of table.

Undergraduate Diversity

Table 35-1 Percentage distribution of undergraduates according to selected student characteristics, by institution type: 1999–2000—Continued

| Student characteristics | Total ¹ | 4-year total ² | Public 4-year | | Private not-for-profit | | Public 2-year |
|-------------------------------------|--------------------|---------------------------|---------------|-------------|------------------------|-------------|---------------|
| | | | Doctoral | Nondoctoral | Doctoral | Nondoctoral | |
| Home language | | | | | | | |
| English | 87.3 | 89.3 | 89.1 | 89.1 | 87.2 | 91.4 | 85.6 |
| Other than English | 12.7 | 10.7 | 10.9 | 11.0 | 12.8 | 8.6 | 14.4 |
| Attendance | | | | | | | |
| Full-time | 52.1 | 68.5 | 69.1 | 62.7 | 77.3 | 69.3 | 30.5 |
| Part-time | 47.9 | 31.5 | 30.9 | 37.3 | 22.7 | 30.7 | 69.5 |
| Delayed enrollment ⁷ | | | | | | | |
| Did not delay | 54.5 | 67.8 | 71.9 | 62.7 | 72.5 | 61.8 | 41.3 |
| Delayed | 45.5 | 32.2 | 28.1 | 37.3 | 27.5 | 38.3 | 58.7 |
| High school attainment ⁸ | | | | | | | |
| High school diploma | 93.4 | 97.3 | 98.4 | 96.1 | 98.4 | 95.6 | 90.0 |
| GED or other equivalency | 5.2 | 2.1 | 1.1 | 3.4 | 1.0 | 3.7 | 7.9 |
| High school completion certificate | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 |
| No diploma or equivalent | 1.1 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 1.7 |

¹Total includes students in institution types not listed here and students who attended more than one institution.

²Four-year total does not include students enrolled in private for-profit institutions.

³Students who identified their race as "other" (about 1 percent) are not included in this variable in order to make it comparable to the NPSAS 1990 categories. In 1999–2000, 2 percent of students chose more than one race. These students were then asked which single race best described them and were coded as such.

⁴Includes some students with dependents other than children.

⁵Students who were employed full time worked 35 or more hours per a week.

⁶Students reported sensory or mobility limitation or another condition that created difficulties.

⁷Students are considered to have delayed enrollment if there was 1 year or more between their high school graduation date and date of first enrollment in postsecondary education.

⁸Students who attended a foreign high school (about 1 percent) are not included in this variable in order to make it comparable to the NPSAS 1990 categories.

NOTE: Percentages may not add to 100.0 due to rounding. See *Supplemental Note 1* for definitions of the racial/ethnic categories. See *Supplemental Note 9* for information about postsecondary institution classifications.

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

Undergraduate Diversity

Table 35-2 Percentage distribution of undergraduates according to selected student characteristics, by institution type: 1989–90

| Student characteristics | Total ¹ | 4-year total ² | Public 4-year | | Private not-for-profit | | Public 2-year |
|------------------------------------|--------------------|---------------------------|---------------|--------------|------------------------|--------------|---------------|
| | | | Doctoral | Nondoctoral | Doctoral | Nondoctoral | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Sex | | | | | | | |
| Male | 44.6 | 47.0 | 48.8 | 45.2 | 50.5 | 44.3 | 43.3 |
| Female | 55.4 | 53.0 | 51.2 | 54.8 | 49.5 | 55.7 | 56.7 |
| Race/ethnicity | | | | | | | |
| White | 75.9 | 79.6 | 81.0 | 78.0 | 76.6 | 81.0 | 75.2 |
| Black | 10.2 | 8.4 | 7.9 | 10.0 | 7.2 | 7.7 | 10.0 |
| Hispanic | 8.4 | 6.8 | 5.8 | 6.6 | 8.7 | 8.1 | 8.7 |
| Asian/Pacific Islander | 4.7 | 4.6 | 4.6 | 5.0 | 7.0 | 2.7 | 5.1 |
| American Indian/Alaska Native | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 1.1 |
| Age | | | | | | | |
| 18 and under | 10.9 | 13.2 | 13.0 | 11.9 | 16.0 | 14.2 | 9.0 |
| 19–23 | 46.9 | 58.5 | 61.5 | 56.1 | 62.5 | 53.7 | 33.3 |
| 24–29 | 16.7 | 13.7 | 13.8 | 15.4 | 11.2 | 12.4 | 19.2 |
| 30–39 | 15.6 | 9.6 | 8.1 | 10.9 | 7.0 | 12.1 | 22.2 |
| 40 and above | 10.0 | 5.0 | 3.6 | 5.7 | 3.3 | 7.6 | 16.2 |
| Average age | 26.0 | 23.5 | 23.0 | 24.1 | 22.5 | 24.3 | 28.9 |
| Dependency status | | | | | | | |
| Dependent | 47.9 | 64.2 | 66.8 | 59.5 | 72.0 | 61.8 | 32.9 |
| Independent | 52.1 | 35.8 | 33.2 | 40.5 | 28.0 | 38.2 | 67.1 |
| Respondent has dependents | | | | | | | |
| No | 75.8 | 86.6 | 88.9 | 84.3 | 91.7 | 82.5 | 66.2 |
| Yes | 24.3 | 13.4 | 11.1 | 15.7 | 8.3 | 17.5 | 33.8 |
| Employment³ | | | | | | | |
| Full-time | 32.0 | 23.3 | 20.6 | 25.0 | 19.2 | 28.8 | 43.8 |
| Part-time | 49.8 | 61.2 | 64.0 | 59.6 | 63.8 | 56.7 | 37.0 |
| Not working | 18.2 | 15.5 | 15.4 | 15.4 | 17.0 | 14.6 | 19.3 |
| High school attainment | | | | | | | |
| High school diploma | 92.1 | 97.8 | 98.3 | 97.2 | 98.2 | 97.3 | 89.9 |
| GED or other equivalency | 4.8 | 1.6 | 1.2 | 2.1 | 0.8 | 2.1 | 6.9 |
| High school completion certificate | 0.6 | 0.5 | 0.3 | 0.6 | 0.8 | 0.4 | 0.6 |
| No diploma or equivalent | 2.5 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 2.6 |

¹Total includes students in institution types not listed here and students who attended more than one institution.

²Four-year total does not include students enrolled in private for-profit institutions.

³Students who were employed full time worked 35 or more hours per a week.

NOTE: Percentages may not add to 100.0 due to rounding. See *Supplemental Note 1* for definitions of the racial/ethnic categories. See *Supplemental Note 9* for information about postsecondary institution classifications.

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:1990).

Degrees and Fields of Study

Table 36-1 Number of associate's degrees conferred by Title IV degree-granting institutions, percentage of total, and percentage change, by field of study: 1988–89 and 1999–2000

| Field of study | 1988–89 | | 1999–2000 | | Percent change |
|------------------------------------------------------------|-------------------|------------------|-------------------|------------------|----------------|
| | Number of degrees | Percent of total | Number of degrees | Percent of total | |
| Total | 436,764 | 100.0 | 564,933 | 100.0 | 29.3 |
| Liberal arts and sciences, general studies, and humanities | 121,988 | 27.9 | 187,454 | 33.2 | 53.7 |
| Business management and administrative services | 92,481 | 21.2 | 92,274 | 16.3 | -0.2 |
| Health professions and related sciences | 59,535 | 13.6 | 84,081 | 14.9 | 41.2 |
| Engineering-related technologies | 42,593 | 9.8 | 35,395 | 6.3 | -16.9 |
| Computer and information sciences | 7,900 | 1.8 | 20,450 | 3.6 | 158.9 |
| Visual and performing arts | 8,178 | 1.9 | 17,100 | 3.0 | 109.1 |
| Protective services | 11,682 | 2.7 | 16,298 | 2.9 | 39.5 |
| Precision production trades | 7,414 | 1.7 | 11,814 | 2.1 | 59.3 |
| Multi/interdisciplinary studies | 7,737 | 1.8 | 11,784 | 2.1 | 52.3 |
| Mechanics and repairers | 7,769 | 1.8 | 11,614 | 2.1 | 49.5 |
| Consumer and personal services | 2,815 | 0.6 | 9,570 | 1.7 | 240.0 |
| Home economics and vocational home economics | 7,559 | 1.7 | 8,381 | 1.5 | 10.9 |
| Education | 7,445 | 1.7 | 8,226 | 1.5 | 10.5 |
| Law and legal studies | 3,742 | 0.9 | 7,265 | 1.3 | 94.1 |
| Agriculture and natural resources | 4,725 | 1.1 | 6,667 | 1.2 | 41.1 |
| Marketing operations/marketing and distribution | 14,338 | 3.3 | 5,557 | 1.0 | -61.2 |
| Social sciences and history | 2,741 | 0.6 | 5,136 | 0.9 | 87.4 |
| Public administration and services | 2,493 | 0.6 | 3,656 | 0.6 | 46.7 |
| Communications | 1,777 | 0.4 | 2,754 | 0.5 | 55.0 |
| Physical sciences | 1,838 | 0.4 | 2,460 | 0.4 | 33.8 |
| Construction trades | 1,731 | 0.4 | 2,337 | 0.4 | 35.0 |
| Engineering | 2,676 | 0.6 | 1,752 | 0.3 | -34.5 |
| Communications technologies | 1,993 | 0.5 | 1,709 | 0.3 | -14.2 |
| Psychology | 1,090 | 0.2 | 1,455 | 0.3 | 33.5 |
| Biological/life sciences | 982 | 0.2 | 1,434 | 0.3 | 46.0 |
| Transportation and material moving workers | 2,090 | 0.5 | 1,021 | 0.2 | -51.1 |
| English language and literature/letters | 468 | 0.1 | 947 | 0.2 | 102.4 |
| Parks, recreation, leisure, and fitness studies | 641 | 0.1 | 855 | 0.2 | 33.4 |
| Mathematics | 654 | 0.1 | 675 | 0.1 | 3.2 |
| Theological studies/religious vocations | 568 | 0.1 | 636 | 0.1 | 12.0 |
| Foreign languages and literatures | 324 | 0.1 | 501 | 0.1 | 54.6 |
| Architecture and related programs | 1,815 | 0.4 | 392 | 0.1 | -78.4 |
| Area, ethnic, and cultural studies | 16 | (#) | 259 | (#) | 1,518.8 |
| Library science | 101 | (#) | 98 | (#) | -3.0 |
| R.O.T.C. and military technologies | 164 | (#) | 65 | (#) | -60.4 |
| Philosophy and religion | 81 | (#) | 63 | (#) | -22.2 |
| Not classified by field of study | 4,620 | 1.1 | 2,798 | 0.5 | -39.4 |

#Value rounds to less than 0.1.

SOURCE: U.S. Department of Education, NCES. (2002). *Digest of Education Statistics 2001* (NCES 2002–130). Data from U.S. Department of Education, NCES. Integrated Postsecondary Education Data System (IPEDS), "Completions" surveys.

Degrees and Fields of Study

Table 36-2 Number of bachelor's degrees conferred by Title IV degree-granting institutions, percentage of total, and percentage change, by field of study: 1970–71, 1988–89, and 1999–2000

| Field of study | 1970–71 | | 1988–89 | | Percent change 1970–71 to 1988–89 | 1999–2000 | | Percent change 1988–89 to 1999–2000 |
|------------------------------------------------------------|-------------------|------------------|-------------------|------------------|-----------------------------------------|-------------------|------------------|-------------------------------------------|
| | Number of degrees | Percent of total | Number of degrees | Percent of total | | Number of degrees | Percent of total | |
| Total | 839,730 | 100.0 | 1,018,755 | 100.0 | 21.3 | 1,237,875 | 100.0 | 21.5 |
| Business* | 114,729 | 13.7 | 246,399 | 24.2 | 114.8 | 257,709 | 20.8 | 4.6 |
| Social sciences and history | 155,324 | 18.5 | 108,151 | 10.6 | -30.4 | 127,101 | 10.3 | 17.5 |
| Education | 176,307 | 21.0 | 96,913 | 9.5 | -45.0 | 108,168 | 8.7 | 11.6 |
| Health professions and related sciences | 25,226 | 3.0 | 59,005 | 5.8 | 133.9 | 78,458 | 6.3 | 33.0 |
| Psychology | 38,187 | 4.5 | 48,910 | 4.8 | 28.1 | 74,060 | 6.0 | 51.4 |
| Biological/life sciences | 35,743 | 4.3 | 36,059 | 3.5 | 0.9 | 63,532 | 5.1 | 76.2 |
| Visual and performing arts | 30,394 | 3.6 | 38,227 | 3.8 | 25.8 | 58,791 | 4.7 | 53.8 |
| Engineering | 44,898 | 5.3 | 66,099 | 6.5 | 47.2 | 58,427 | 4.7 | -11.6 |
| Communications | 10,324 | 1.2 | 47,405 | 4.7 | 359.2 | 55,760 | 4.5 | 17.6 |
| English language and literature/letters | 64,342 | 7.7 | 42,470 | 4.2 | -34.0 | 50,920 | 4.1 | 19.9 |
| Computer and information sciences | 2,388 | 0.3 | 30,454 | 3.0 | 1175.3 | 36,195 | 2.9 | 18.9 |
| Liberal arts and sciences, general studies, and humanities | 7,481 | 0.9 | 26,388 | 2.6 | 252.7 | 36,104 | 2.9 | 36.8 |
| Multi/interdisciplinary studies | 6,286 | 0.7 | 15,168 | 1.5 | 141.3 | 27,460 | 2.2 | 81.0 |
| Protective services | 2,045 | 0.2 | 14,698 | 1.4 | 618.7 | 24,877 | 2.0 | 69.3 |
| Agriculture and natural resources | 12,672 | 1.5 | 13,492 | 1.3 | 6.5 | 24,247 | 2.0 | 79.7 |
| Public administration and services | 5,466 | 0.7 | 13,162 | 1.3 | 140.8 | 20,185 | 1.6 | 53.4 |
| Parks, recreation, leisure, and fitness studies | 1,621 | 0.2 | 4,376 | 0.4 | 170.0 | 19,111 | 1.5 | 336.7 |
| Physical sciences and science technologies | 21,412 | 2.5 | 17,186 | 1.7 | -19.7 | 18,385 | 1.5 | 7.0 |
| Home economics and vocational home economics | 11,167 | 1.3 | 14,160 | 1.4 | 26.8 | 17,779 | 1.4 | 25.6 |
| Foreign languages and literatures | 20,536 | 2.4 | 11,693 | 1.1 | -43.1 | 14,968 | 1.2 | 28.0 |
| Engineering-related technologies | 5,148 | 0.6 | 18,903 | 1.9 | 267.2 | 14,128 | 1.1 | -25.3 |
| Mathematics | 24,937 | 3.0 | 15,994 | 1.6 | -35.9 | 12,070 | 1.0 | -24.5 |
| Architecture and related programs | 5,570 | 0.7 | 9,150 | 0.9 | 64.3 | 8,462 | 0.7 | -7.5 |
| Philosophy and religion | 8,146 | 1.0 | 6,425 | 0.6 | -21.1 | 8,366 | 0.7 | 30.2 |
| Theological studies/religious vocations | 3,744 | 0.4 | 5,318 | 0.5 | 42.0 | 6,809 | 0.6 | 28.0 |
| Area, ethnic, and cultural studies | 2,582 | 0.3 | 4,102 | 0.4 | 58.9 | 6,381 | 0.5 | 55.6 |
| Transportation and material moving workers | 662 | 0.1 | 2,062 | 0.2 | 211.5 | 3,395 | 0.3 | 64.6 |
| Law and legal studies | 545 | 0.1 | 1,976 | 0.2 | 262.6 | 1,925 | 0.2 | -2.6 |
| Communications technologies | 478 | 0.1 | 1,204 | 0.1 | 151.9 | 1,150 | 0.1 | -4.5 |
| Precision production trades | — | — | 482 | (#) | — | 393 | (#) | -18.5 |
| Library science | 1,013 | 0.1 | 121 | (#) | -88.1 | 154 | (#) | 27.3 |
| R.O.T.C. and military technologies | 357 | (#) | 198 | (#) | -44.5 | 7 | (#) | -96.5 |
| Not classified by field of study | 0 | 0 | 2,405 | 0.2 | (†) | 2,398 | 0.2 | -0.3 |

—Not available.

#Value rounds to less than 0.1.

†Not applicable.

*Business includes Business management and administrative services.

SOURCE: U.S. Department of Education, NCES. (2002). *Digest of Education Statistics 2001* (NCES 2002–130). Data from U.S. Department of Education, NCES. Integrated Postsecondary Education Data System (IPEDS), "Completions" surveys.

Perceived Impact of Work on Postsecondary Learning

Table 37-1 Percentage distribution of undergraduates according to hours worked per week and average hours worked, by how they identified their primary role, their attendance intensity, and type of institution: 1999–2000

| Characteristic | Total | Hours worked per week | | | | | Average hours per week* |
|-------------------------------|-------|-----------------------|------|-------|-------|------------|-------------------------|
| | | Did not work | 1–15 | 16–20 | 24–34 | 35 or more | |
| Total | 100.0 | 19.9 | 12.0 | 11.6 | 17.2 | 39.3 | 31.6 |
| Primary role | | | | | | | |
| Student who works | 48.4 | 0 | 23.0 | 21.1 | 28.7 | 27.1 | 25.8 |
| Employee who studies | 31.6 | 0 | 2.5 | 4.4 | 10.6 | 82.6 | 40.4 |
| Student only (does not work) | 20.0 | 100.0 | 0 | 0 | 0 | 0 | 0 |
| Attendance intensity | | | | | | | |
| Exclusively full-time | 52.3 | 26.2 | 18.3 | 15.3 | 20.5 | 19.7 | 25.5 |
| Exclusively part-time | 34.9 | 11.8 | 2.7 | 5.4 | 10.8 | 69.3 | 39.5 |
| Mixed | 12.8 | 16.3 | 11.4 | 13.7 | 21.7 | 37.0 | 30.9 |
| Type of institution | | | | | | | |
| Public 4-year | 35.8 | 22.9 | 17.0 | 15.3 | 19.3 | 25.5 | 27.3 |
| Private not-for-profit 4-year | 16.0 | 22.8 | 25.1 | 11.6 | 12.0 | 28.5 | 26.5 |
| Public 2-year | 48.2 | 15.8 | 4.4 | 9.0 | 17.1 | 53.8 | 36.0 |

*For those who worked.

NOTE: Percentages may not add to 100.0 due to rounding. In all rows, except those related to type of institution, students in types of institutions not shown here are included. See *Supplemental Note 1* for information on primary role/employment status.

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

Student Participation in Distance Education

Table 38-1 Percentage of undergraduates who participated in distance education classes at postsecondary institutions, by type of institution and selected student characteristics: 1999–2000

| Selected student characteristics | Total | 2-year public | 4-year | | |
|----------------------------------|-------|------------------|--------|--------|---------------------------|
| | | | Total | Public | Private not-for-profit |
| Total | 7.6 | 9.0 | 6.6 | 6.9 | 6.1 |
| Sex | | | | | |
| Male | 6.6 | 7.2 | 6.1 | 6.1 | 6.2 |
| Female | 8.7 | 10.4 | 7.1 | 7.5 | 6.0 |
| Age | | | | | |
| 24 or less | 6.3 | 7.8 | 5.3 | 5.7 | 4.4 |
| More than 24 | 10.2 | 10.2 | 10.3 | 10.3 | 10.2 |
| Attendance status | | | | | |
| Full-time | 6.9 | 9.8 | 5.6 | 6.0 | 5.0 |
| Part-time | 8.8 | 8.7 | 9.0 | 8.9 | 9.4 |
| Student role | | | | | |
| Students who do not work | 6.1 | 8.3 | 4.7 | 5.1 | 3.8 |
| Students who work | 7.5 | 9.4 | 6.3 | 6.7 | 5.3 |
| Employees who study | 9.5 | 9.2 | 10.3 | 10.2 | 10.4 |
| Hours per week worked | | | | | |
| Less than 20 | 5.9 | 8.2 | 4.8 | 5.1 | 4.1 |
| 20 or more | 8.8 | 9.3 | 8.2 | 8.2 | 8.2 |
| Distance from home* | | | | | |
| 30 miles or less | 7.7 | 8.7 | 6.1 | 6.4 | 5.2 |
| More than 30 miles | 8.2 | 11.6 | 7.3 | 7.5 | 6.8 |

*The distance between the student's home and the institution at which the student was primarily enrolled, not necessarily the distance between the student's home and the location of the distance education class.

NOTE: Includes students who participated in distance education at either the institution at which they were enrolled or both the institution at which they were enrolled and another institution. Students who participated in distance education only at an institution other than the one at which they were primarily enrolled were excluded. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES, National Postsecondary Student Aid Study (NPSAS:2000).

Student Participation in Distance Education

Table 38-2 Percentage of master's students who participated in distance education classes at postsecondary institutions, and percentage of participants with various experiences with distance education: 1999–2000

| Distance education characteristics | Total | Education master's degree | MBA | Other master's degree |
|----------------------------------------------------------------------------------------|-------------|------------------------------|-------------|--------------------------|
| Total percentage participating¹ | 12.3 | 13.8 | 10.6 | 12.1 |
| Percentage of participants ² | | | | |
| Type of distance education ³ | | | | |
| Live TV/audio | 44.9 | 50.5 | 35.4 | 44.6 |
| Prerecorded audio/TV | 29.3 | 27.1 | 28.3 | 31.1 |
| Internet | 68.3 | 56.0 | 77.1 | 73.5 |
| Entire program available through distance education | 38.1 | 29.6 | 41.4 | 43.0 |
| Level of satisfaction with distance education classes compared with regular classes | | | | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| More satisfied | 21.4 | 20.0 | 14.0 | 25.0 |
| Equally satisfied | 51.3 | 60.2 | 52.7 | 44.7 |
| Less satisfied | 27.3 | 19.8 | 33.3 | 30.3 |

¹Based on total master's population.

²The rows below based on the number of masters students who participated in distance education classes.

³Type of distance education categories are not mutually exclusive.

NOTE: Includes students who participated in distance education at either the institution at which they were enrolled or both the institution at which they were enrolled and another institution. Students who participated in distance education only at an institution other than the one at which they were primarily enrolled were excluded. Percentages may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

Status of Women and Minority Faculty

Table 39-1 Average base salary of full-time instructional faculty and staff with various characteristics, before and after controlling for other faculty characteristics: Fall 1998

| Faculty characteristics | Average base salary before controlling for other variables | Average base salary after controlling for other variables ¹ |
|--------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------------------|
| Total | \$56,851 | \$56,851 |
| Sex | | |
| Female | *48,374 | *53,620 |
| <i>Male</i> ² | <i>61,685</i> | <i>58,694</i> |
| Race/ethnicity ³ | | |
| Black | *50,360 | 56,950 |
| Asian/Pacific Islander | *62,798 | 60,331 |
| Hispanic | 54,372 | 57,042 |
| American Indian/Alaska Native | *48,095 | 54,873 |
| <i>White</i> ² | <i>57,003</i> | <i>56,618</i> |
| Institutional type | | |
| Public doctoral, research, and medical | *66,120 | *59,641 |
| Private not-for-profit doctoral, research, and medical | *77,649 | *67,424 |
| Private not-for-profit liberal arts | 43,605 | *51,349 |
| Other ⁴ | *49,307 | *51,884 |
| <i>Public 2-year</i> ² | <i>44,636</i> | <i>55,450</i> |
| Field of teaching | | |
| Business/law/communications | 57,724 | *59,586 |
| Health sciences | *75,238 | *72,491 |
| Humanities | *47,703 | *51,017 |
| Social sciences/education | 54,276 | 54,204 |
| Occupationally specific | *47,224 | 55,199 |
| Other | *49,339 | 52,308 |
| <i>Natural sciences and engineering</i> ² | <i>58,449</i> | <i>54,341</i> |
| Level of instruction | | |
| Undergraduates only | *48,840 | *55,136 |
| Graduates only | *74,104 | *62,238 |
| <i>Both graduates and undergraduates</i> ² | <i>61,016</i> | <i>58,222</i> |
| Tenure status | | |
| Tenure track | *48,835 | 56,959 |
| Not on tenure track | *47,889 | *51,824 |
| No tenure system | *42,725 | *54,049 |
| <i>Tenured</i> ² | <i>65,399</i> | <i>59,055</i> |
| Academic rank | | |
| Associate professor | *57,685 | *53,722 |
| Assistant professor | *48,229 | *51,730 |
| Other | *40,725 | *52,261 |
| <i>Full professor</i> ² | <i>74,762</i> | <i>66,468</i> |
| Highest degree attained | | |
| Doctorate/first-professional | *64,057 | *58,976 |
| <i>Other</i> ² | <i>42,250</i> | <i>52,545</i> |

See footnotes at end of table.

Status of Women and Minority Faculty

Table 39-1 Average base salary of full-time instructional faculty and staff with various characteristics, before and after controlling for other faculty characteristics: Fall 1998—Continued

| Faculty characteristics | Average base salary before controlling for other variables | Average base salary after controlling for other variables ¹ |
|-----------------------------------------|------------------------------------------------------------|------------------------------------------------------------------------|
| Years since receiving highest degree | | |
| 0–5 years | *\$41,451 | *\$50,951 |
| 6–10 years | *47,305 | *53,253 |
| 11–15 years | *53,485 | *54,278 |
| <i>More than 15 years²</i> | 65,907 | 60,691 |
| Age | | |
| Less than 35 | *39,882 | 54,243 |
| 35–44 | *51,114 | 56,453 |
| 45–54 | *57,872 | 56,915 |
| <i>More than 54²</i> | 64,278 | 57,710 |
| Percentage of time engaged in teaching | | |
| 50 percent or less | *67,718 | *60,604 |
| 51–75 percent | *51,996 | 54,578 |
| <i>More than 75 percent²</i> | 45,906 | 54,079 |
| Number of for-credit classes taught | | |
| 1–2 | *60,663 | *58,251 |
| <i>More than 2²</i> | 48,627 | 55,278 |
| Percentage of time engaged in research | | |
| None | *46,984 | 56,772 |
| 1–10 percent | *54,934 | 57,666 |
| <i>More than 10 percent²</i> | 65,366 | 56,141 |
| Recent total publications | | |
| None | *45,495 | *54,523 |
| 1–5 | *55,219 | *56,472 |
| 6–10 | *61,543 | *56,211 |
| <i>More than 10²</i> | 72,513 | 61,116 |

*The comparison between a particular group and the reference group is statistically significant at the .05 level.

¹See *Supplemental Note 14* for more information regarding the multivariate analysis presented in this table.

²The italicized group is the reference group being compared.

³In 1998, respondents had the option of selecting more than one racial category. See *Supplemental Note 1* for more information regarding the creation of this variable.

⁴Other institutions include public and private not-for-profit comprehensive universities, private not-for-profit 2-year institutions, public liberal arts colleges, and other specialized institutions.

NOTE: The analysis includes only full-time instructional faculty and staff at Title IV degree-granting institutions who had some instructional duties for credit. Instructional duties include teaching one or more classes for credit or advising or supervising students' academic activities.

SOURCE: U.S. Department of Education, NCES. National Study of Postsecondary Faculty (NSOPF:1999).

Parents' Attitudes Toward Schools

Table 40-1 Percentage of children in grades 3–12 with parents who were very satisfied with various aspects of the school their child attends, by selected family characteristics: 1993 and 1999

| Characteristic | Child's school | | Child's teachers | | School's academic standards | | School's order and discipline | |
|----------------------------------------------|----------------|-------------|------------------|-------------|-----------------------------|-------------|-------------------------------|-------------|
| | 1993 | 1999 | 1993 | 1999 | 1993 | 1999 | 1993 | 1999 |
| Total | 55.9 | 52.9 | 58.3 | 56.8 | 58.4 | 56.8 | 58.5 | 58.2 |
| Race/ethnicity | | | | | | | | |
| White | 57.2 | 53.3 | 58.9 | 56.9 | 59.8 | 56.7 | 59.7 | 58.0 |
| Black | 49.3 | 49.0 | 53.7 | 53.6 | 52.4 | 55.4 | 54.1 | 55.6 |
| Hispanic | 57.9 | 57.6 | 60.5 | 62.1 | 58.0 | 61.3 | 58.0 | 63.3 |
| Other | 53.5 | 47.6 | 58.9 | 52.6 | 58.3 | 51.7 | 57.5 | 55.9 |
| Household income | | | | | | | | |
| \$10,000 or less | 49.6 | 56.6 | 57.3 | 62.5 | 54.9 | 60.7 | 57.0 | 62.6 |
| \$10,001–20,000 | 54.4 | 50.0 | 58.3 | 56.5 | 54.2 | 55.9 | 54.5 | 55.0 |
| \$20,001–35,000 | 55.3 | 49.2 | 58.2 | 54.8 | 58.2 | 54.3 | 58.5 | 55.2 |
| \$35,001–50,000 | 57.4 | 52.3 | 57.7 | 54.6 | 59.6 | 55.0 | 59.4 | 57.0 |
| More than \$50,000 | 59.8 | 55.0 | 59.3 | 57.4 | 62.3 | 58.2 | 61.4 | 60.1 |
| Parents' highest education level | | | | | | | | |
| Less than high school | 56.6 | 58.0 | 61.5 | 61.8 | 56.9 | 61.3 | 59.0 | 64.0 |
| High school diploma or equivalent | 54.5 | 51.7 | 58.9 | 56.1 | 56.9 | 56.0 | 57.4 | 56.1 |
| Some college, including vocational/technical | 53.8 | 49.1 | 55.3 | 54.4 | 56.6 | 53.9 | 56.0 | 54.5 |
| Bachelor's degree | 59.8 | 52.8 | 60.9 | 57.9 | 62.7 | 56.6 | 62.5 | 59.5 |
| Graduate/professional degree | 60.1 | 58.7 | 59.1 | 58.7 | 63.2 | 61.1 | 63.2 | 63.7 |
| Family structure | | | | | | | | |
| Two biological/adoptive parents | 57.1 | 55.3 | 58.5 | 58.6 | 59.2 | 58.2 | 59.4 | 60.5 |
| One biological/adoptive parent | 51.8 | 50.2 | 56.7 | 54.7 | 55.9 | 55.6 | 55.6 | 56.4 |
| One biological/adoptive and one stepparent | 51.0! | 51.4 | 66.5! | 55.8 | 40.3! | 54.4 | 47.2! | 55.5 |
| Other relatives/step- or foster parents | 63.0! | 46.7 | 65.2! | 53.5 | 62.3! | 54.8 | 63.6! | 55.7 |
| Urbanicity | | | | | | | | |
| Live inside urban area | 55.4 | 54.4 | 57.9 | 57.9 | 58.7 | 58.5 | 59.1 | 61.3 |
| Live outside urban area | 56.4 | 52.8 | 59.9 | 55.6 | 57.9 | 55.5 | 55.7 | 54.1 |
| Rural | 56.8 | 49.2 | 58.3 | 54.9 | 58.0 | 53.4 | 59.0 | 52.8 |

!Interpret with caution; standard errors are large due to small sample size.

NOTE: Included in the total but not shown separately are children from other types of family structures. See *Supplemental Note 1* for the definition of urbanicity.

SOURCE: U.S. Department of Education, NCES. National Household Education Surveys Program (NHES), "School Safety and Discipline" survey, 1993 and "Parent Interview" survey, 1999.

International Comparisons of Expenditures for Education

Table 41-1 Expenditures per student (in equivalent U.S. dollars converted using Purchasing Power Parity [PPP] indices) and expenditures as a percentage of GDP on public and private institutions, by level of education and country (based on full-time equivalents): 1998

| Country | Expenditures per student ¹ on public and private institutions ² | | | Expenditures on public and private institutions as a percentage of GDP | | | GDP per capita ³ |
|----------------|---------------------------------------------------------------------------------------|---------------------|-------------------------|------------------------------------------------------------------------|---------------------|-------------------------|-----------------------------|
| | Primary education | Secondary education | Postsecondary education | Primary education | Secondary education | Postsecondary education | |
| OECD mean | \$3,940 | \$5,294 | \$9,063 | 1.4 | 2.2 | 1.3 | \$20,681 |
| Australia | 3,981 | 5,830 | 11,539 | 1.6 | 2.1 | 1.6 | 24,226 |
| Austria | 6,065 | 8,163 | 11,279 | 1.2 | 3.2 | 1.5 | 23,583 |
| Belgium | 3,743 | 5,970 | 6,508 | — | — | 0.9 | 23,804 |
| Canada | — | — | 14,579 | — | — | 1.9 | 25,203 |
| Czech Republic | 1,645 | 3,182 | 5,584 | 0.8 | 2.3 | 0.9 | 12,939 |
| Denmark | 6,713 | 7,200 | 9,562 | 1.8 | 2.3 | 1.5 | 25,584 |
| Finland | 4,641 | 5,111 | 7,327 | 1.6 | 2.1 | 1.7 | 21,780 |
| France | 3,752 | 6,605 | 7,226 | 1.2 | 3.1 | 1.1 | 21,676 |
| Germany | 3,531 | 6,209 | 9,481 | 0.7 | 2.7 | 1.0 | 22,904 |
| Greece | 2,368 | 3,287 | 4,157 | 1.0 | 1.7 | 1.2 | 14,327 |
| Hungary | 2,028 | 2,140 | 5,073 | 1.0 | 2.0 | 1.0 | 10,445 |
| Iceland | — | — | — | — | — | 1.8 | 25,260 |
| Ireland | 2,745 | 3,934 | 8,522 | 1.5 | 1.7 | 1.4 | 22,699 |
| Italy | 5,653 | 6,458 | 6,295 | 1.2 | 2.3 | 0.8 | 22,160 |
| Japan | 5,075 | 5,890 | 9,871 | 1.3 | 1.8 | 1.0 | 24,102 |
| Korea | 2,838 | 3,544 | 6,356 | 1.6 | 2.3 | 2.5 | 14,384 |
| Luxembourg | — | — | — | — | — | — | 37,348 |
| Mexico | 863 | 1,586 | 3,800 | 1.7 | 1.8 | 0.9 | 7,879 |
| Netherlands | 3,795 | 5,304 | 10,757 | 1.2 | 1.8 | 1.2 | 24,678 |
| New Zealand | — | — | — | — | — | — | 17,785 |
| Norway | 5,761 | 7,343 | 10,918 | — | — | 1.5 | 26,147 |
| Poland | 1,496 | 1,438 | 4,262 | 2.3 | 1.1 | 1.3 | 8,183 |
| Portugal | 3,121 | 4,636 | — | — | — | 1.0 | 15,592 |
| Spain | 3,267 | 4,274 | 5,038 | 1.3 | 2.1 | 1.1 | 17,027 |
| Sweden | 5,579 | 5,648 | 13,224 | 2.1 | 2.4 | 1.7 | 21,845 |
| Switzerland | 6,470 | 9,348 | 16,563 | 1.7 | 2.6 | 1.1 | 27,338 |
| Turkey | — | — | — | — | — | 0.8 | 6,544 |
| United Kingdom | 3,329 | 5,230 | 9,699 | 1.2 | 2.3 | 1.1 | 22,050 |
| United States | 6,043 | 7,764 | 19,802 | 1.7 | 2.0 | 2.3 | 32,262 |

—Not available.

¹Per student expenditures are calculated based on public and private full-time-equivalent (FTE) enrollment figures and expenditures from both public and private sources where data are available. Purchasing Power Parity (PPP) indices are used to convert other currencies to U.S. dollars. Within-country consumer price indices are used to adjust the PPP indices to account for inflation because the fiscal year has a different starting date in different countries.

²Includes all institutions, public and private, with the exception of Austria, Iceland, Italy, Norway, Switzerland, and Turkey, which include only public institutions, and Belgium, Greece, and the United Kingdom, which include public and government-dependent private institutions.

³Purchasing Power Parity (PPP) indices are used to convert other currencies to U.S. dollars. Within-country consumer price indices are used to adjust the PPP indices to account for inflation because the fiscal year has a different starting date in different countries.

SOURCE: Organization for Economic Cooperation and Development, Center for Educational Research and Innovation. (2001). *Education at a Glance: OECD Indicators, 2001*.

Public Effort to Fund Education

Table 42-1 Indicators of public effort to fund education (in constant 1999 dollars), by level: Selected school years ending 1950–99

| School year ending | Public revenue per student* | | Total public revenue as a percentage of total personal income | |
|--------------------|--------------------------------|-------------------------|---------------------------------------------------------------|-------------------------|
| | Elementary/secondary education | Postsecondary education | Elementary/secondary education | Postsecondary education |
| 1950 | \$1,304 | \$1,663 | 2.37 | 0.30 |
| 1960 | 2,008 | 2,652 | 3.57 | 0.43 |
| 1966 | 2,659 | 3,334 | 4.19 | 0.61 |
| 1968 | 3,024 | 3,673 | 4.47 | 0.75 |
| 1970 | 3,342 | 3,626 | 4.79 | 0.81 |
| 1971 | 3,528 | 3,647 | 4.92 | 0.85 |
| 1972 | 3,837 | 3,727 | 5.03 | 0.85 |
| 1973 | 3,807 | 3,808 | 4.68 | 0.85 |
| 1974 | 3,851 | 3,798 | 4.75 | 0.89 |
| 1975 | 3,934 | 3,731 | 4.84 | 0.94 |
| 1976 | 4,216 | 3,635 | 4.83 | 0.95 |
| 1977 | 4,132 | 3,740 | 4.60 | 0.93 |
| 1978 | 4,216 | 3,741 | 4.41 | 0.91 |
| 1979 | 4,187 | 3,662 | 4.23 | 0.87 |
| 1980 | 4,145 | 3,485 | 4.17 | 0.87 |
| 1981 | 4,148 | 3,305 | 4.08 | 0.85 |
| 1982 | 4,124 | 3,222 | 3.98 | 0.84 |
| 1983 | 4,297 | 3,275 | 3.99 | 0.84 |
| 1984 | 4,439 | 3,351 | 3.85 | 0.81 |
| 1985 | 4,675 | 3,671 | 3.91 | 0.84 |
| 1986 | 4,976 | 3,943 | 4.02 | 0.87 |
| 1987 | 5,077 | 3,786 | 4.00 | 0.83 |
| 1988 | 5,185 | 3,794 | 3.97 | 0.81 |
| 1989 | 5,609 | 3,834 | 4.17 | 0.82 |
| 1990 | 5,721 | 3,723 | 4.25 | 0.82 |
| 1991 | 5,808 | 3,607 | 4.39 | 0.81 |
| 1992 | 5,822 | 3,440 | 4.35 | 0.78 |
| 1993 | 5,849 | 3,362 | 4.41 | 0.76 |
| 1994 | 5,901 | 3,402 | 4.42 | 0.74 |
| 1995 | 5,931 | 3,468 | 4.40 | 0.74 |
| 1996 | 5,973 | 3,438 | 4.39 | 0.71 |
| 1997 | 6,086 | — | 4.40 | — |
| 1998 | 6,329 | — | 4.41 | — |
| 1999 | 6,619 | — | 4.46 | — |

—Not available.

*See *Supplemental Note 13* for information on the Consumer Price Index (CPI).

NOTE: Public funds for postsecondary education may be used at many types of institutions, both publicly and privately controlled. Enrollment in both publicly and privately controlled institutions is included. For more information about the indexes, see *Supplemental Note 13*.

SOURCE: U.S. Department of Education, NCES, (2002). *Digest of Education Statistics 2001* (NCES 2002–134); (various years: 1964–1997) *Digest of Education Statistics: (1993) 120 Years of American Education: A Statistical Portrait* (NCES 93–442).

Public Effort to Fund Education

Table 42-2 Indicators of public revenue for education, total personal income (in constant 1999 dollars), and total enrollments, by level: Selected years ending 1950–99 (in billions of dollars)

| School year ending | Total public revenue ¹ | | Total personal income ¹ | Total enrollment | |
|--------------------|-----------------------------------|--------------------------------------|------------------------------------|--------------------------------|-------------------------|
| | Elementary/secondary education | Postsecondary education ² | | Elementary/secondary education | Postsecondary Education |
| 1950 | \$37.2 | \$4.4 | \$1,570.0 | 28,491 ³ | 2,659 ³ |
| 1960 | 82.0 | 9.7 | 2,294.4 | 40,857 | 3,640 |
| 1966 | 128.9 | 19.7 | 3,079.2 | 49,239 | 6,390 |
| 1968 | 150.9 | 25.4 | 3,379.1 | 50,744 | 7,513 |
| 1970 | 170.6 | 29.0 | 3,563.7 | 51,257 | 8,581 |
| 1971 | 180.8 | 31.3 | 3,677.0 | 51,271 | 8,949 |
| 1972 | 196.7 | 33.4 | 3,911.4 | 50,726 | 9,215 |
| 1973 | 193.1 | 35.1 | 4,125.1 | 50,445 | 9,602 |
| 1974 | 194.3 | 36.5 | 4,088.8 | 50,073 | 10,224 |
| 1975 | 197.0 | 38.1 | 4,070.6 | 49,819 | 11,185 |
| 1976 | 205.8 | 40.7 | 4,264.8 | 49,478 | 11,012 |
| 1977 | 204.4 | 41.2 | 4,443.3 | 48,717 | 11,286 |
| 1978 | 205.4 | 42.2 | 4,660.9 | 47,637 | 11,260 |
| 1979 | 199.4 | 41.2 | 4,718.0 | 46,651 | 11,570 |
| 1980 | 193.4 | 40.3 | 4,638.9 | 46,208 | 12,097 |
| 1981 | 191.7 | 40.0 | 4,702.8 | 45,544 | 12,372 |
| 1982 | 187.8 | 39.9 | 4,719.2 | 45,166 | 12,426 |
| 1983 | 194.1 | 40.7 | 4,867.1 | 44,967 | 12,465 |
| 1984 | 199.6 | 41.8 | 5,185.7 | 44,908 | 12,242 |
| 1985 | 210.0 | 44.9 | 5,375.4 | 44,979 | 12,247 |
| 1986 | 223.8 | 48.3 | 5,571.6 | 45,205 | 12,504 |
| 1987 | 229.5 | 47.3 | 5,736.7 | 45,487 | 12,767 |
| 1988 | 235.9 | 48.4 | 5,942.6 | 45,430 | 13,055 |
| 1989 | 254.8 | 50.1 | 6,103.8 | 45,741 | 13,539 |
| 1990 | 262.6 | 50.4 | 6,173.2 | 46,451 | 13,819 |
| 1991 | 269.7 | 49.8 | 6,142.1 | 47,322 | 14,359 |
| 1992 | 275.0 | 49.4 | 6,320.2 | 48,145 | 14,487 |
| 1993 | 281.9 | 48.7 | 6,386.5 | 48,813 | 14,305 |
| 1994 | 288.8 | 48.7 | 6,535.6 | 49,609 | 14,279 |
| 1995 | 294.8 | 49.5 | 6,693.2 | 50,502 | 14,262 |
| 1996 | 301.6 | 49.0 | 6,864.5 | 51,375 | 14,368 |
| 1997 | 312.7 | — | 7,109.9 | 51,968 | (⁴) |
| 1998 | 328.9 | — | 7,459.0 | 52,476 | (⁴) |
| 1999 | 347.3 | — | 7,789.6 | 52,875 | (⁴) |

—Not available.

¹See *Supplemental Note 13* for information on the Consumer Price Index (CPI).

²Total public revenue for years earlier than 1970 are based on a linear interpolation of the share of appropriations of total current-fund revenue based on 1970–96.

³Enrollments are for 1949–50.

⁴Not provided since revenue data are not available.

SOURCE: U.S. Department of Education, NCES. (2002). *Digest of Education Statistics 2001* (NCES 2002–134); (various years: 1964–1997) *Digest of Education Statistics*; (1993) *120 Years of American Education: A Statistical Portrait* (NCES 93–442).

Public Effort to Fund Education

Table 42-3 Tuitions and fees and state government appropriations as a percentage of total current fund revenue of all public degree-granting institutions: 1950–96

| School year ending | Tuition and fees as a percentage of total current fund revenue | State appropriations as a percentage of total current fund revenue |
|--------------------|----------------------------------------------------------------|--------------------------------------------------------------------|
| 1950 | — | — |
| 1960 | 8.8 | 33.1 |
| 1966 | 11.5 | 39.6 |
| 1968 | 11.6 | 39.9 |
| 1970 | 12.6 | 40.2 |
| 1971 | 13.1 | 40.0 |
| 1972 | 13.7 | 39.7 |
| 1973 | 13.4 | 40.1 |
| 1974 | 12.9 | 41.2 |
| 1975 | 12.8 | 42.5 |
| 1976 | 13.0 | 43.1 |
| 1977 | 13.2 | 43.0 |
| 1978 | 13.1 | 44.3 |
| 1979 | 12.7 | 44.8 |
| 1980 | 12.5 | 44.8 |
| 1981 | 12.9 | 44.0 |
| 1982 | 13.5 | 43.8 |
| 1983 | 14.5 | 43.3 |
| 1984 | 14.9 | 42.8 |
| 1985 | 14.5 | 43.6 |
| 1986 | 14.5 | 43.2 |
| 1987 | 14.7 | 41.6 |
| 1988 | 15.0 | 41.3 |
| 1989 | 15.2 | 40.2 |
| 1990 | 15.5 | 39.2 |
| 1991 | 16.1 | 37.8 |
| 1992 | 17.1 | 35.8 |
| 1993 | 18.0 | 34.3 |
| 1994 | 18.4 | 33.3 |
| 1995 | 18.4 | 32.5 |
| 1996 | 18.8 | 32.5 |

—Not available separately for public degree-granting institutions.

SOURCE: U.S. Department of Education, NCES. (various years: 1964–2000). *Digest of Education Statistics*.

Change in Public School Revenue Sources

Table 43-1 Total revenues and percentage distribution of total revenues for public elementary and secondary schools, by region and revenue source: 1989–90 to 1998–99

| Region and revenue source | 1989–90 | 1990–91 | 1991–92 | 1992–93 | 1993–94 | 1994–95 | 1995–96 | 1996–97 | 1997–98 | 1998–99 |
|-----------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Revenues (in thousands of constant 1998–99 dollars) | | | | | | | | | | |
| United States | | | | | | | | | | |
| Total revenue | 270,248 | 274,416 | 279,277 | 285,878 | 292,765 | 298,816 | 306,402 | 315,880 | 331,568 | 347,330 |
| Federal | 16,458 | 16,926 | 18,445 | 19,928 | 20,640 | 20,328 | 20,346 | 20,793 | 22,586 | 24,522 |
| State | 127,303 | 129,411 | 129,510 | 130,922 | 132,197 | 139,732 | 145,554 | 151,627 | 160,374 | 169,299 |
| Local | 126,486 | 128,078 | 131,321 | 135,029 | 139,927 | 138,756 | 140,503 | 143,460 | 148,607 | 153,510 |
| Northeast | | | | | | | | | | |
| Total revenue | 66,422 | 67,309 | 67,828 | 68,723 | 69,951 | 71,134 | 72,334 | 72,804 | 75,235 | 79,105 |
| Federal | 3,080 | 3,103 | 3,483 | 3,727 | 3,726 | 3,354 | 3,618 | 3,535 | 3,797 | 4,222 |
| State | 26,717 | 27,250 | 26,779 | 26,639 | 26,851 | 27,750 | 28,010 | 28,096 | 29,277 | 32,312 |
| Local | 36,625 | 36,956 | 37,566 | 38,358 | 39,375 | 40,029 | 40,705 | 41,173 | 42,161 | 42,571 |
| Midwest | | | | | | | | | | |
| Total revenue | 63,488 | 64,668 | 65,922 | 68,327 | 70,430 | 72,922 | 74,204 | 77,413 | 80,321 | 83,364 |
| Federal | 3,405 | 3,576 | 3,894 | 4,135 | 4,219 | 4,282 | 4,246 | 4,430 | 4,806 | 5,182 |
| State | 25,141 | 25,476 | 25,004 | 26,272 | 27,451 | 33,400 | 34,638 | 36,267 | 37,874 | 39,847 |
| Local | 34,943 | 35,615 | 37,024 | 37,920 | 38,759 | 35,240 | 35,320 | 36,716 | 37,641 | 38,334 |
| South | | | | | | | | | | |
| Total revenue | 83,640 | 85,394 | 86,523 | 88,479 | 91,395 | 93,879 | 96,940 | 99,284 | 105,101 | 111,294 |
| Federal | 6,113 | 6,243 | 6,739 | 7,424 | 7,696 | 7,532 | 7,401 | 7,706 | 8,361 | 9,014 |
| State | 41,095 | 42,248 | 41,929 | 42,433 | 43,906 | 45,140 | 47,473 | 48,502 | 51,864 | 54,839 |
| Local | 36,432 | 36,902 | 37,855 | 38,622 | 39,793 | 41,207 | 42,067 | 43,076 | 44,876 | 47,441 |
| West | | | | | | | | | | |
| Total revenue | 56,698 | 57,045 | 59,004 | 60,349 | 60,989 | 60,881 | 62,924 | 66,379 | 70,910 | 73,567 |
| Federal | 3,861 | 4,004 | 4,330 | 4,641 | 4,999 | 5,160 | 5,081 | 5,122 | 5,622 | 6,103 |
| State | 34,350 | 34,437 | 35,798 | 35,578 | 33,989 | 33,442 | 35,432 | 38,761 | 41,360 | 42,300 |
| Local | 18,486 | 18,605 | 18,877 | 20,130 | 22,000 | 22,280 | 22,411 | 22,495 | 23,929 | 25,164 |

See footnotes at end of table.

Change in Public School Revenue Sources

Table 43-1 Total revenues and percentage distribution of total revenues for public elementary and secondary schools, by region and revenue source: 1989–90 to 1998–99—Continued

| Region and revenue source | 1989–90 | 1990–91 | 1991–92 | 1992–93 | 1993–94 | 1994–95 | 1995–96 | 1996–97 | 1997–98 | 1998–99 |
|--------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Percentage distribution | | | | | | | | | | |
| United States | | | | | | | | | | |
| Total revenue | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Federal | 6.1 | 6.2 | 6.6 | 7.0 | 7.1 | 6.8 | 6.6 | 6.6 | 6.8 | 7.1 |
| State | 47.1 | 47.2 | 46.4 | 45.8 | 45.2 | 46.8 | 47.5 | 48.0 | 48.4 | 48.7 |
| Local | 46.8 | 46.7 | 47.0 | 47.2 | 47.8 | 46.4 | 45.9 | 45.4 | 44.8 | 44.2 |
| Northeast | | | | | | | | | | |
| Total revenue | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Federal | 4.6 | 4.6 | 5.1 | 5.4 | 5.3 | 4.7 | 5.0 | 4.9 | 5.0 | 5.3 |
| State | 40.2 | 40.5 | 39.5 | 38.8 | 38.4 | 39.0 | 38.7 | 38.6 | 38.9 | 40.8 |
| Local | 55.1 | 54.9 | 55.4 | 55.8 | 56.3 | 56.3 | 56.3 | 56.6 | 56.0 | 53.8 |
| Midwest | | | | | | | | | | |
| Total revenue | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Federal | 5.4 | 5.5 | 5.9 | 6.1 | 6.0 | 5.9 | 5.7 | 5.7 | 6.0 | 6.2 |
| State | 39.6 | 39.4 | 37.9 | 38.5 | 39.0 | 45.8 | 46.7 | 46.8 | 47.2 | 47.8 |
| Local | 55.0 | 55.1 | 56.2 | 55.5 | 55.0 | 48.3 | 47.6 | 47.4 | 46.9 | 46.0 |
| South | | | | | | | | | | |
| Total revenue | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Federal | 7.3 | 7.3 | 7.8 | 8.4 | 8.4 | 8.0 | 7.6 | 7.8 | 8.0 | 8.1 |
| State | 49.1 | 49.5 | 48.5 | 48.0 | 48.0 | 48.1 | 49.0 | 48.9 | 49.3 | 49.3 |
| Local | 43.6 | 43.2 | 43.8 | 43.7 | 43.5 | 43.9 | 43.4 | 43.4 | 42.7 | 42.6 |
| West | | | | | | | | | | |
| Total revenue | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Federal | 6.8 | 7.0 | 7.3 | 7.7 | 8.2 | 8.5 | 8.1 | 7.7 | 7.9 | 8.3 |
| State | 60.6 | 60.4 | 60.7 | 59.0 | 55.7 | 54.9 | 56.3 | 58.4 | 58.3 | 57.5 |
| Local | 32.6 | 32.6 | 32.0 | 33.4 | 36.1 | 36.6 | 35.6 | 33.9 | 33.7 | 34.2 |

NOTE: Percentages may not add to 100.00 due to rounding. *Supplemental Note 1* identifies the states in each region. See *Supplemental Note 13* for more information on revenue types.

SOURCE: U.S. Department of Education, NCES. Common Core of Data (CCD), Revenues and Expenditures of Public Elementary and Secondary Day Schools; Statistics of State School Systems; Common Core of Data Surveys, 1989–90 to 1998–99.

Net Price of College Attendance

Table 44-1 Percentage of full-time, full-year dependent undergraduates receiving different types of grants, by type of institution and family income: Academic year 1999–2000

| Type of institution and family income | Total grants* | Total federal grants | Total state grants | Total institutional grants | Total other grants |
|---------------------------------------|---------------|----------------------|--------------------|----------------------------|--------------------|
| Total | 56.2 | 23.1 | 21.2 | 33.1 | 15.6 |
| Public 4-year | 51.3 | 22.0 | 20.4 | 23.9 | 15.6 |
| Low income | 83.9 | 71.6 | 40.0 | 31.5 | 13.7 |
| Lower middle | 57.3 | 22.5 | 25.8 | 26.8 | 16.8 |
| Upper middle | 38.3 | 1.9 | 12.1 | 21.3 | 16.0 |
| High income | 31.7 | 0.5 | 7.5 | 17.8 | 15.6 |
| Private not-for-profit 4-year | 74.9 | 23.0 | 25.4 | 63.7 | 20.4 |
| Low income | 90.5 | 78.3 | 42.8 | 62.6 | 18.1 |
| Lower middle | 80.7 | 28.3 | 36.8 | 70.1 | 23.6 |
| Upper middle | 78.9 | 2.7 | 24.6 | 72.6 | 23.0 |
| High income | 57.9 | 1.0 | 7.4 | 52.8 | 17.7 |
| Public 2-year | 42.8 | 23.5 | 17.8 | 15.9 | 10.1 |
| Low income | 72.7 | 63.2 | 33.4 | 25.2 | 8.6 |
| Lower middle | 42.3 | 14.2 | 17.7 | 15.0 | 11.6 |
| Upper middle | 24.6 | 0.8 | 8.1 | 9.4 | 12.4 |
| High income | 17.2 | 0.7 | 4.4 | 10.4 | 6.9 |

*Includes the sum of all federal, state, institutional, and "other" grants (those not classified as federal, state, or institutional) received during 1999–2000. Includes employer tuition reimbursements and grants from private sources. Total grants may be greater than the sum of individual components since some students receive more than one type of grant.

NOTE: Limited to students who attended only one institution. For definitions of the categories, see *Supplemental Notes 9 and 12*.

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

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Appendix 2

Supplemental Notes





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Note 1: Commonly Used Variables

Certain common variables, such as educational attainment, race/ethnicity, urbanicity, geographic region, poverty, and employment status are used by different surveys cited in *The Condition of Education 2002*. The definitions for these variables can vary from survey to survey and sometimes vary between different time periods for a single survey. This supplemental note describes how several common variables, used in some indicators in this volume, are defined in each of the surveys that collected that information. In addition, this note describes in further detail certain terms used in some indicators.

EDUCATIONAL ATTAINMENT

For surveys that NCES sponsors, the categories of educational attainment are as follows:

- *National Household Education Surveys Program*: Less than high school diploma; High school diploma, GED, or equivalent; Some college/vocational/technical; Bachelor's degree/College graduate; and Graduate or Professional degree.
- *National Education Longitudinal Study of 1988*: Less than high school; High school diploma, GED, or equivalent; Some postsecondary education; and Bachelor's degree or higher.
- *Beginning Postsecondary Students Longitudinal Study*: Did not complete high school; Completed high school or equivalent; Less than 1 year of occupational/trade/technical or business school; One, but less than 2 years of occupational/trade/technical or business school; Two years or more of occupational/trade/technical or business school; Less than 2 years of college; Two or more years of college, including 2-year degree; Bachelor's degree—4- or 5-year degree; Master's degree or

equivalent; MD/DDS/LLB/other advanced professional degree; and Doctorate degree—Ph.D, Ed.D, DBA.

- *National Assessment of Education Progress*: Did not finish high school; Graduated from high school; Some education after high school; and Graduated from college.

For surveys from other agencies and organizations, the categories of educational attainment are as follows:

- *Current Population Survey*: None; 1st–4th grade; 5th–6th grade; 7th–8th grade; 9th grade; 10th grade; 11th grade; 12th grade, no diploma; High school graduate or the equivalent (e.g., GED); Some college, no degree; Associate degree, occupational; Associate degree, academic; Bachelor's degree; Master's degree; Professional degree; and Doctorate degree. Further information on the Current Population Survey can be found in *Supplemental Note 2*.
- *National Health Interview Survey*: Never attended/kindergarten only; Grades 1–11; 12th grade, no diploma; High school graduate; GED or equivalent; Some college, no degree; Associate degree: occupational, technical, or vocational program; Bachelor's degree; Master's degree; Professional school degree; and Doctoral degree.

Within individual indicators, these categories may be collapsed to facilitate analysis. In *The Condition of Education 2002*, the previous definitions apply to *indicators 1, 10, 12, 14, 16, 20, 22, 23, 25, 29, and 40*.

PARENTS' EDUCATION

In the National Household Education Surveys Program (NHES), parents' education is de-

Note 1: Commonly Used Variables

Continued

defined as the highest level of education of the child's parents or nonparent guardians who reside in the household. The variable is based on the higher of the educational levels of the mother or female guardian or the father or male guardian. If only one parent resided in the household, that parent's education is used. *Indicators 1, 29, and 40* present NHES data by parents' education. Further information on the definition of parents' education in the Current Population Survey can be found in *Supplemental Note 2*.

RACE/ETHNICITY

Classifications indicating racial/ethnic heritage are based primarily on self-identification, as in data collected by the Bureau of the Census, or, in rare instances, on observer identification. These categories are in accordance with the Office of Management and Budget's standard classification scheme and are as follows:

- **American Indian/Alaska Native:** A person having origins in any of the original 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 original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippines, and Samoa.
- **Black:** A person having origins in any of the Black racial groups of Africa. In *The Condition of Education*, this category excludes persons of Hispanic origin except as specifically noted.
- **Hispanic:** A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

- **White:** A person having origins in any of the original peoples of Europe, North Africa, or the Middle East. In *The Condition of Education*, this category excludes persons of Hispanic origin except as specifically noted.
- **Other:** Any person that is not included in the above categories (White, Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native).

Not all categories are shown in all indicators because of insufficient data in some of the smaller categories. In *The Condition of Education 2002*, the previous definitions apply to *indicators 1, 3, 6, 7, 8, 10, 11, 12, 14, 19, 20, 25, 27, 29, 30, 32, 34, 35, and 40*.

Indicator 39 uses classifications of race and ethnicity from the National Study of Postsecondary Faculty (NSOPF). Between the 1993 and 1999 administrations of NSOPF, the federal government changed the procedures that survey respondents use to identify their race/ethnicity. In the 1993 survey, respondents were asked to select the racial group from among five possible categories that best described themselves: White; Black; Asian/Pacific Islander; American Indian/Alaska Native; or other. Those who selected "other" were placed into one of the other four categories based on additional information provided. White or Black respondents who indicated "Hispanic or Latino" ethnicity were grouped together. The resulting categories are as follows: White, non-Hispanic; Black, non-Hispanic; Hispanic; Asian/Pacific Islander; and American Indian/Alaska Native.

For the 1999 NSOPF, respondents were permitted to indicate whether they are "Asian" or "Native Hawaiian or other Pacific Islander." Further, respondents were permitted to indicate as many categories for race as were applicable.

Note 1: Commonly Used Variables

Continued

To achieve comparability between the two studies, data on race and ethnicity for faculty in the latter survey were placed in the same categories used in the earlier survey. Only 0.9 percent of all respondents indicated multiple racial categories in the later survey, so the reassignment of these cases affected only a small proportion of respondents. The race/ethnicity variable for faculty in the 1999 survey was constructed as follows. First, the Asian and Native Hawaiian/Pacific Islander categories were combined. Next, cases were assigned to the first of the following categories that respondents had selected: Hispanic; Black/African American; Asian or other Pacific Islander; American Indian/Alaska Native; and White. Then, Asians or other Pacific Islanders who also indicated that they were of Hispanic or Latino origin and no other race were assigned to the Asian or other Pacific Islander group. Thus, the resulting race/ethnicity variable has five categories: non-Hispanic White; non-Hispanic Black or African American; Asian or other Pacific Islander; Hispanic; and non-Hispanic American Indian/Alaska Native. This strategy minimizes the number of non-Hispanic Whites in the sample, but as noted, the impact is minimal.

COMMUNITY TYPE

In the Bureau of the Census's Current Population Survey, community type is based on the concept of a metropolitan area (MA), a large population nucleus together with adjacent communities that have a high degree of economic and social integration with that nucleus. Metropolitan Statistical Areas (MSAs) are metropolitan areas (MAs) that are not closely associated with other MAs.

MSAs are designated and defined by the Office of Management and Budget, following standards established by the interagency Fed-

eral Executive Committee on Metropolitan Areas, with the aim of producing definitions that are as consistent as possible for all MSAs nationwide. (See http://www.census.gov/geo/www/cob/ma_metadata.html for more details.)

In order to be designated as an MSA, an area must meet one or both of the following criteria: (1) include a city with a population of at least 50,000, or (2) include a Census Bureau-defined urbanized area and a total population of at least 100,000 (75,000 in New England). An MSA is comprised of one or more central counties and can also include one or more outlying counties that have close economic and social relationships with the central county. An outlying county must have a specified level of commuting to the central counties and also must meet certain standards regarding metropolitan character, such as population density, urban population, and population growth. In New England, MSAs are composed of cities and towns rather than entire counties.

All territory, population, and housing units inside of MSAs are characterized as *metropolitan*. *Central city* refers to the largest city in an MSA. Smaller cities may also qualify as central cities if they meet certain specified requirements concerning commuting patterns and population size. All areas within MSAs that do not qualify as central cities are classified as *outside a central city*. Any territory, population, or housing unit located outside of an MSA is defined as *nonmetropolitan*.

In the School Crime Supplement to the National Crime Victimization Survey (U.S. Department of Justice, Bureau of Justice Statistics), community type is based on the classification used by the Bureau of the Census and is designated by the following terms:

Note 1: Commonly Used Variables

Continued

- *Urban*: a central city of an MSA
- *Suburban*: outside of a central city of an MSA
- *Rural*: nonmetropolitan area

The National Health Interview Survey defines community type according to the following MSA categories:

- *MSA of 2,500,000 and above*
- *MSA of 1,000,000 2,499,999*
- *MSA under 1,000,000*
- *Non-MSA*

The National Household Education Surveys Program relies on Census classifications for community type. It designates each respondent's community type based on the community type of the majority of households in the respondent's residential ZIP Code. Community type is categorized as follows:

- *Urbanized area*: a place and the adjacent densely settled surrounding territory that combined have a minimum population of 50,000.
- *Urban, outside of urbanized areas*: incorporated or unincorporated places outside of urbanized areas that have a minimum population of 25,000, with the exception of rural portions of extended cities.
- *Rural*: all areas that are not classified as urban, either inside or outside of urbanized areas.

In the Common Core of Data, community type is based on Metropolitan Status Codes. This is the eight-level Bureau of the Census classification of the locale served by a school relative to an MSA. Every school is placed in one of the following categories:

- *Central city, within a large MSA*: a central city of an MSA with a population of 400,000 or more or a population density of 6,000 or more persons per square mile.
- *Central city, within a small MSA*: a central city of an MSA but not designated as a large central city.
- *Suburb/urban fringe, within a large MSA*: a place within the MSA of a large central city.
- *Suburb/urban fringe, within a small MSA*: a place within the MSA of a small city.
- *Large town*: a place not within an MSA, but with a population of 25,000 or more and defined as urban.
- *Small town*: a place not within an MSA with a population of at least 2,500, but less than 25,000.
- *Rural, not within an MSA*: a place with a population of less than 2,500 outside an MSA.
- *Rural, within an MSA*: a place with a population of less than 2,500 within an MSA.

It is important to note that Metropolitan Status Codes are assigned only by school, and not by school district. For the purposes of the indicators in *The Condition of Education 2002*, which measure data by school district, the Metropolitan Status Code of the school district is determined by the modal status code of all schools within the school district. The surveys listed below use variations of the eight-level Census standards to categorize community type.

In the Baccalaureate and Beyond Longitudinal Study, community type is categorized as follows:

Note 1: Commonly Used Variables

Continued

- *Large central city*
- *Midsized central city*
- *Urban fringe of large city*
- *Urban fringe of mid-size city*
- *Large town*
- *Small town*
- *Rural*

In the National Assessment of Education Progress and the Schools and Staffing Survey, community type is categorized as follows:

- *Central city*: a large or midsized central city of an MSA.
- *Urban fringe/large town*: an urban fringe of a large or small central city; a large town; or a rural area within an MSA.
- *Rural/small town*: a small town or rural area outside of an MSA.

In *The Condition of Education 2002*, the definitions explained above apply to *indicators 4, 7, 10, 11, 12, 14, 29, 30, 31, 34, and 40*.

POVERTY

Indicator 4 uses poverty as defined by the Bureau of the Census, which uses a set of money income thresholds that vary by family size and composition to determine who is poor. If a family's income is less than the family's threshold, then that family, and every individual in it, is considered poor. The poverty thresholds are updated annually for inflation using the Consumer Price Index.

In *indicator 1*, data on household income and the number of people living in the house-

hold from the National Household Education Surveys Program, combined with information from the Bureau of the Census on income and household size, are used to classify children as "poor" or "nonpoor." Children in families whose incomes are at or below the poverty threshold are classified as "poor"; children in families with incomes above the poverty threshold are classified as "nonpoor." The thresholds used to determine whether a child is "poor" or "nonpoor" differ for each survey year. The weighted average poverty thresholds for various household sizes for 1991, 1993, 1995, 1996, 1999, and 2001 are shown in the table on the next page. Poverty thresholds from the Bureau of the Census for 1993 and 1999 are revised and may differ from previously published data (see table on next page).

Eligibility for the National School Lunch Program also serves as a measurement of poverty status. The National School Lunch Program is a federally assisted meal program operated in public and private nonprofit schools and residential child care centers. Eligibility for free or reduced-price lunch under the national Free School Lunch Act is one of four measures of poverty specified in the basic program requirements for Title I federal funding. To be eligible for free lunch, a student must be from a household with an income at or below 130 percent of the poverty level; to be eligible for reduced-price lunch, a student must be from a household with an income at or below 185 percent of the poverty level. In *The Condition of Education 2002*, eligibility for the National School Lunch Program applies to *indicators 7, 10, 11, 12, 30, 31, and 32*.

Note 1: Commonly Used Variables

Continued

Weighted average poverty thresholds, by household size: 1991, 1993, 1995, 1996, 1999, and 2001

| Household size | Poverty threshold | Household size | Poverty threshold |
|------------------|-------------------|------------------|-------------------|
| NHES:1991 | | NHES:1996 | |
| 2 | \$8,865 | 2 | \$10,233 |
| 3 | 10,860 | 3 | 12,516 |
| 4 | 13,924 | 4 | 16,036 |
| 5 | 16,456 | 5 | 18,952 |
| 6 | 18,587 | 6 | 21,389 |
| 7 | 21,058 | 7 | 24,268 |
| 8 | 23,582 | 8 | 27,091 |
| 9 or more | 27,942 | 9 or more | 31,971 |
| NHES:1993 | | NHES:1999 | |
| 2 | 9,414 | 2 | 10,636 |
| 3 | 11,522 | 3 | 13,001 |
| 4 | 14,763 | 4 | 16,655 |
| 5 | 17,449 | 5 | 19,682 |
| 6 | 19,718 | 6 | 22,227 |
| 7 | 22,383 | 7 | 25,188 |
| 8 | 24,838 | 8 | 28,023 |
| 9 or more | 29,529 | 9 or more | 33,073 |
| NHES:1995 | | NHES:2001 | |
| 2 | 9,933 | 2 | 11,239 |
| 3 | 12,158 | 3 | 13,738 |
| 4 | 15,569 | 4 | 17,603 |
| 5 | 18,408 | 5 | 20,189 |
| 6 | 20,804 | 6 | 23,528 |
| 7 | 23,552 | 7 | 26,754 |
| 8 | 26,267 | 8 | 29,701 |
| 9 or more | 31,280 | 9 or more | 35,060 |

SOURCE: U.S. Department of Education, NCES. National Household Education Surveys Program (NHES), 1991, 1993, 1995, 1996, 1999, and 2001.

Note 1: Commonly Used Variables

Continued

GEOGRAPHIC REGION

The following regional classification system represents the four geographical regions determined by the Bureau of the Census. In *The Condition of Education 2002*, indicators 2, 3, 4, 14, 19, 29, 32, and 43 use this system.

| Regional Classification | |
|-------------------------|----------------------|
| Northeast | South |
| Connecticut | Alabama |
| Maine | Arkansas |
| Massachusetts | Delaware |
| New Hampshire | District of Columbia |
| New Jersey | Florida |
| New York | Georgia |
| Pennsylvania | Kentucky |
| Rhode Island | Louisiana |
| Vermont | Maryland |
| | Mississippi |
| | North Carolina |
| | Oklahoma |
| | South Carolina |
| | Tennessee |
| | Texas |
| | Virginia |
| | West Virginia |
| Midwest | West |
| Illinois | Alaska |
| Indiana | Arizona |
| Iowa | California |
| Kansas | Colorado |
| Michigan | Hawaii |
| Minnesota | Idaho |
| Missouri | Montana |
| Nebraska | Nevada |
| North Dakota | New Mexico |
| Ohio | Oregon |
| South Dakota | Utah |
| Wisconsin | Washington |
| | Wyoming |

EMPLOYMENT STATUS

Indicator 16 uses combined categories of employment status from the Current Population Survey to show data for all wage and salary workers. The Current Population Survey identifies the following categories of employment status:

- *Full-time*: includes those who usually work 35 hours or more per week.
- *Full-year*: includes those who work at least 50 weeks per year.
- *Part-time*: includes those who usually work 1–34 hours per week.
- *Part-year*: includes those who work 1–49 weeks per year.
- *Unemployed*: includes those who have no employment but are available for work.
- *Not in labor force*: includes those who are 15 years or older who are not classified as employed or unemployed. These persons include students, homemakers, those unable to work due to physical or mental illness, retired persons, and others.

Indicator 1 uses employment status classifications from the National Household Education Surveys Program, which uses variations on the Current Population Survey classifications. They are as follows:

- *Working 35 hours or more per week*
- *Working less than 35 hours per week*
- *Looking for work* (equivalent to unemployed)
- *Not in the labor force*

Note 1: Commonly Used Variables

Continued

Indicators 37 and 38 use classifications in the National Postsecondary Student Aid Study, which are as follows:

- *Student working to meet expenses*
- *Employee enrolled in school*
- *Student, not working*

Note 2: The Current Population Survey (CPS)

The Current Population Survey (CPS) is a monthly survey of approximately 50,000 households in the United States and has been conducted for more than 50 years. The Bureau of the Census conducts the survey for the Bureau of Labor Statistics. The CPS collects data on the social and economic characteristics of the civilian, noninstitutional population, including information on income, education, and participation in the labor force.

Each month a “basic” CPS questionnaire is used to collect data on participation in the labor force about each member 15 years old and over in every sample household. In March and October of each year, the CPS includes additional questions about education. The Annual Demographic Survey or March CPS supplement is the primary source of detailed information on income and work experience in the United States. The March CPS is used to generate the annual Population Profile of the United States, reports on geographical mobility and educational attainment, and detailed analysis of money income and poverty status. Each October, in addition to the basic questions about education, interviewers ask supplementary questions about school enrollment for all household members 3 years old and over.

Interviewers initially used printed questionnaires. Since 1994, the Census Bureau has used Computer-Assisted Personal (and Telephone) Interviewing (CAPI and CATI) to collect data. CAPI allows interviewers to use a complex questionnaire and increases consistency by reducing interviewer error. Further information on the CPS can be found at <http://www.bls.census.gov/cps>.

DEFINITION OF SELECTED VARIABLES

Family income

The October CPS collects data on family income, which is used in *indicator 20* to measure a student’s economic standing. Low income is the bottom 20 percent of all family incomes, high income is the top 20 percent of all family incomes, and middle income is the 60 percent in between. The table at the end of this note shows the real dollar amount (rounded to the nearest \$100) of the breakpoints between low and middle income and between middle and high income. For example, low income in 2000 is defined as the range between \$0 and \$15,300; middle income is defined as the range between \$15,301 and \$72,000; and high income is defined as \$72,001 and over. Therefore, the breakpoints between low and middle income and between middle and high income are \$15,300 and \$72,000, respectively.

Parental education

For *indicator 20*, information on parents’ education was obtained by merging data from parents’ records with their children’s. Estimates of a mother’s and father’s education were calculated only for children who lived with their parents at the time of the survey. For example, estimates of a mother’s education are based on children who lived with “both parents” or with “mother only.” For children who lived with “father only,” the mother’s education was unknown; therefore, the “unknown” group was excluded in the calculation of this variable.

Educational attainment

Data from CPS questions on educational attainment are used for *indicators 16, 19, 20, and 25*.

Note 2: The Current Population Survey (CPS)

Continued

Dollar value (in current dollars) at the breakpoint between low- and middle- and between middle- and high-income categories of family income: October 1970–2000

| October | Breakpoints between: | |
|---------|------------------------|-------------------------|
| | Low- and middle-income | Middle- and high-income |
| 1970 | \$3,300 | \$11,900 |
| 1971 | — | — |
| 1972 | 3,500 | 13,600 |
| 1973 | 3,900 | 14,800 |
| 1974 | — | — |
| 1975 | 4,300 | 17,000 |
| 1976 | 4,600 | 18,300 |
| 1977 | 4,900 | 20,000 |
| 1978 | 5,300 | 21,600 |
| 1979 | 5,800 | 23,700 |
| 1980 | 6,000 | 25,300 |
| 1981 | 6,500 | 27,100 |
| 1982 | 7,100 | 31,300 |
| 1983 | 7,300 | 32,400 |
| 1984 | 7,400 | 34,200 |
| 1985 | 7,800 | 36,400 |
| 1986 | 8,400 | 38,200 |
| 1987 | 8,800 | 39,700 |
| 1988 | 9,300 | 42,100 |
| 1989 | 9,500 | 44,000 |
| 1990 | 9,600 | 46,300 |
| 1991 | 10,500 | 48,400 |
| 1992 | 10,700 | 49,700 |
| 1993 | 10,800 | 50,700 |
| 1994 | 11,800 | 55,500 |
| 1995 | 11,700 | 56,200 |
| 1996 | 12,300 | 58,200 |
| 1997 | 12,800 | 60,800 |
| 1998 | 13,900 | 65,000 |
| 1999 | 14,700 | 68,000 |
| 2000 | 15,300 | 72,000 |

— Not available.

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

Note 2: The Current Population Survey (CPS)

Continued

From 1972 to 1991, two CPS questions provided data on the number of years of school completed: (1) “What is the highest grade...ever attended?” and (2) “Did...complete it?” An individual’s educational attainment was considered to be his or her last fully completed year of school. Individuals who completed 12 years were deemed to be high school graduates as were those who began but did not complete the first year of college. Respondents who completed 16 or more years were counted as college graduates.

Beginning in 1992, the CPS combined the two questions into the following question: “What is the highest level of school...completed or the highest degree...received?” In the revised response categories, several of the lower levels are combined in a single summary category such as “1st, 2nd, 3rd, or 4th grades.” Several new categories are used, including “12th grade, no diploma”; “High school graduate, high school diploma, or the equivalent”; and “Some college but no degree.” College degrees are now listed by type, allowing for a more accurate description of educational attainment. The new question emphasizes credentials received rather than the last grade level attended or completed if attendance did not lead to a credential. The new categories include:

- High school graduate, high school diploma, or the equivalent (e.g., GED)
- Some college but no degree
- Associate’s degree in college, occupational/vocational program
- Associate’s degree in college, academic program
- Bachelor’s degree (e.g., B.A., A.B., B.S.)
- Master’s degree (e.g., M.A., M.S., M.Eng., M.Ed., M.S.W., M.B.A.)

- Professional school degree (e.g., M.D., D.D.S., D.V.M., LL.B., J.D.)

- Doctorate degree (e.g., Ph.D., Ed.D.)

The change in questions in 1992 affects comparisons of educational attainment over time.

High school completion

The pre-1992 questions about educational attainment did not consider high school equivalency certificates (GEDs). Consequently, an individual who attended 10th grade, dropped out without completing that grade, and who subsequently received a high school equivalency credential would not have been counted as completing high school. The new question counts these individuals as if they are high school graduates. Since 1988, an additional question has also asked respondents if they have a high school degree or the equivalent, such as a GED. People who respond “yes” are classified as high school graduates. Prior to 1988, the majority of high school graduates did not fall into this category, and the overall increase in the total number of people counted as high school graduates is small.

Prior to 1992, the CPS considered individuals who completed 12th grade to be high school graduates. The revised question added a response category: “12th grade, no diploma.” Individuals who select this response are not counted as graduates. The number of individuals in this category in this publication is small.

Despite these changes in the procedures for assessing the completion of a high school degree or its equivalent, the overall impact is also likely to be small and, perhaps, insignificant.

Note 2: The Current Population Survey (CPS)

Continued

College completion

Some students require more than 4 years to earn an undergraduate degree, so some researchers are concerned that the completion rate, based on the pre-1992 category “4th year or higher of college completed,” overstated the number of respondents with a bachelor’s degree (or higher). In fact, however, the completion rates among those ages 25–29 in 1992 and 1993 were similar to the completion rates for those in 1990 and 1991, before the change in the question’s wording. In sum, there is little reason to believe that the change has affected the completion rates reported in this publication.

Some college

Based on the question used in 1992 and in subsequent surveys, an individual who attended college for less than a full academic year would respond “some college but no degree.” Prior to 1992, the appropriate response would have been “attended first year of college and did not complete it”; the calculation of the percentage of the population with 1–3 years of college excluded these individuals. With the new question, such respondents are placed in the “some college but no degree” category. Thus, the percentage of individuals with some college might be larger than the percentage with 1–3 years of college because “some college” includes those who have not completed an entire year of college, whereas “1–3 years of college” does not include these people. Therefore, it is not appropriate to make comparisons between the percentage of those with “some

college but no degree” using the post-1991 question and the percentage of those who completed “1–3 years of college” using the two pre-1992 questions.

EFFECTS OF CHANGES IN EDUCATIONAL ATTAINMENT QUESTIONS ON EARNINGS DATA

Indicator 16 presents estimates of annual median earnings for wage and salary workers with different levels of education. The discussion above suggests that the number of people with a high school diploma or its equivalent (but no further education), based on the post-1991 question, is larger than before because it includes all those with an equivalency certificate. In fact, however, the number of people in this category is smaller because it excludes those who completed 12th grade but did not receive a diploma and those who completed less than a full academic year of college. The latter group is now included in the pre-1992 category, “1–3 years of college.”

The employment and earnings of respondents who were added and dropped from each category are similar; therefore, the net effect of the reclassification on employment rates and average annual earnings is likely to be minor. Thus, it is still useful to compare the employment rates and median annual earnings of recent cohorts with some college or an associate’s degree with older cohorts who completed 1 to 3 years of college.

For further information on this issue, see Kominski and Siegel (1993).

Note 3: National Assessment of Educational Progress (NAEP)

The National Assessment of Educational Progress (NAEP), administered regularly in a number of subjects since 1969, has two major goals: to assess student performance reflecting current educational and assessment practices; and to measure change in student performance reliably over time. To address these goals, the NAEP includes a main assessment and a long-term trend assessment. The assessments are administered to separate samples of students at separate times, use separate instrumentation, and measure different educational content. Consequently, results from the assessments should not be compared. Both assessments excluded certain subgroups of students identified as “special needs students,” including students with disabilities and students with limited English proficiency. In 1998 and 2000, the main NAEP assessment provided a separate assessment with provisions made for accommodations for these students.

MAIN NAEP

Indicators 7, 10, and 12 are based on the main NAEP. The main NAEP periodically assesses students’ performance in several subjects, following the curriculum frameworks developed by the National Assessment Governing Board (NAGB) and using the latest advances in assessment methodology. NAGB develops the frameworks using standards developed within the field, using a consensus process involving educators, subject-matter experts, and other interested citizens.

The content and nature of the main NAEP evolves to match instructional practices, so the ability to measure change reliably over time is limited. As standards for instruction and curriculum change, so does the main NAEP. As a result, data from different assessments are not always comparable. Recent NAEP main assessment instruments have typically been kept stable for short periods

of time, allowing for a comparison across time in mathematics, science, and reading. Assessment instruments from 1990 to 2000 were developed using the same framework, they share a common set of tasks, and the populations of students were sampled and assessed using comparable procedures. For some subjects that are not assessed frequently, such as civics and the arts, no trend data are available.

Main NAEP results are reported in terms of predetermined achievement levels. Each assessment reflects current standards of performance in each subject. The achievement levels define what students who are performing at *Basic*, *Proficient*, and *Advanced* levels of achievement should know and be able to do. NAGB establishes achievement levels whenever a new main NAEP framework is adopted. These achievement levels have undergone several evaluations but remain developmental in nature and continue to be used on a trial basis. Until the Commissioner of NCES determines that the levels are reasonable, valid, and informative to the public, they should be interpreted and used with caution. The policy definitions of the achievement levels that apply across all grades and subject areas are:

- *Basic*: This level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.
- *Proficient*: This level represents solid academic performance for each grade assessed. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.

Note 3: National Assessment of Educational Progress (NAEP)

Continued

- *Advanced*: This level signifies superior performance.

MAIN NAEP MATHEMATICS COURSETAKING

The main NAEP assessments included questions asking students in grades 8 and 12 about their specific course-taking patterns. In 8th grade, students reported on the mathematics course they were currently taking. For reporting purposes, courses were grouped into lower level (group 1) courses and higher level (group 2) courses. Group 1 courses include 8th-grade mathematics and prealgebra. Group 2 courses include algebra I, algebra II, geometry, and integrated or sequential mathematics.

In grade 12, students reported on the courses they had taken in grades 9 through 12 and the year they had taken each course. For reporting purposes, course-taking patterns were grouped into three levels: low level, middle level, and high level. Low-level coursetaking included students who had taken no mathematics courses or had taken only courses among the following: general mathematics, business mathematics, applied mathematics, and introduction to algebra. Middle-level coursetaking included students who took algebra I in grade 9 and geometry in grade 10 but had not taken the most advanced courses, including trigonometry, precalculus, statistics, or calculus. High-level coursetaking included students who took one or more among the

following: trigonometry, precalculus, statistics, discrete or finite mathematics, and calculus. The three levels equate roughly with the mathematics pipeline detailed in *Supplemental Note 5*. Low-level courses are roughly equivalent to the nonacademic or low academic levels. Middle-level courses are roughly equivalent to the middle academic levels, and high-level courses are roughly equivalent to the advanced academic levels.

LONG-TERM TREND NAEP

The long-term trend NAEP measures student performance in reading, writing, science, and mathematics. Since the mid-1980s, the long-term NAEP has used the same instruments to provide a means to compare performance over time, but it does not necessarily reflect current teaching standards or curricula.

Results from the long-term trend NAEP are presented as mean scale scores. Unlike the main NAEP, the long-term trend NAEP does not define achievement levels. Another important difference between the two assessments is that they collect data from different groups. In the main NAEP, results are reported for grades 4, 8, and 12. In most long-term trend assessments, average scores are reported by age. For science, reading, and mathematics, students at ages 9, 13, and 17 are assessed.

Indicator 8 uses data from the Long-Term Trend assessment in reading.

Note 4: International Assessments

TIMSS AND TIMSS-R

Under the auspices of the International Association for the Evaluation of Educational Achievement, the Third International Mathematics and Science Study (TIMSS) assessed, collected data, and reported results for more than half a million students at five grade levels (the 3rd, 4th, 7th, and 8th grades, plus the final year of secondary school), providing information on student achievement, student background characteristics, and school resources in 42 countries in 1995. In 1999, the TIMSS study was repeated at the 8th-grade level for science and mathematics, resulting in the Third International Mathematics and Science Study–Repeat (TIMSS-R). Data presented in *indicator 13* are from the 1999 assessment.

TIMSS

The assessment components of TIMSS tested students in three populations:

- *Population 1:* Students enrolled in the two adjacent grades that contained the largest proportion of 9-year-old students at the time of the assessment—3rd- and 4th-grade students in most countries.
- *Population 2:* Students enrolled in the two adjacent grades that contained the largest proportion of 13-year-old students at the time of the assessment—7th- and 8th-grade students in most countries.
- *Population 3:* Students enrolled in their final year of secondary education, which ranged from 9th to 14th grade. In many countries, students in more than one grade participated in the study because the length of secondary education varied by type of program (e.g., academic, technical, vocational). No indicators in *The Condition of Education* used data from this population.

All countries that participated in the study were required to administer assessments to the students in the two grades at *population 2* but could choose whether to participate in the assessments of other populations. Results were reported for 42 countries in the survey of *population 2*.

TIMSS used a two-stage sample design. For *populations 1* and *2*, the first stage involved selecting, at a minimum, 150 public and private schools within each country. Nations were allowed to over sample to allow for analyses of particular national interest, and all collected data were appropriately weighted to account for the final sample. Random sampling methods were then used to select from each school one mathematics class for each grade level within a population (generally 3rd and 4th for *population 1* and 7th and 8th for *population 2*). All of the students in these mathematics classes (except for excluded students) then participated in the TIMSS testing in science and mathematics.

TIMSS-R

All countries that participated in TIMSS in 1995 were invited to participate in TIMSS-R, as were countries that did not participate in 1995. In total, 38 countries collected data for TIMSS-R, including 26 that had participated in TIMSS and 12 that participated for the first time.

TIMSS-R used the same international sampling guidelines as TIMSS to ensure that the data are comparable between the two studies. In order for a country to be included in TIMSS-R, it had to meet several international guidelines. The sample was to be representative of at least 90 percent of students in the total population eligible for the study; therefore, exclusion rates had to be less than 10 percent. The required participation rates from the samples were to be at least 85 percent of

Note 4: International Assessments

Continued

both schools and students or a combined rate of 75 percent for schools and students. Countries that did not reach a participation rate of 50 percent without replacement schools, or who failed to reach the required rate even with the inclusion of replacement schools, failed to meet the sampling standards for participation. The table below details the countries that did not meet the complete sampling guidelines and the reason.

For TIMSS-R, the international desired population consisted of all students in the country who were enrolled in the upper of the two adjacent grades that contained the greatest proportion of 13-year-olds at the time of testing. In the United States and most countries, this corresponded to grade 8. If the national desired population of a nation fell below 65 percent, the country's name is annotated to reflect this fact. This differed slightly from the sampling method used in TIMSS in 1995. The TIMSS population consisted of students enrolled in the two adjacent grades that contained the largest proportion of 9-year-old or 13-year-old students at the time of assessment—3rd- and 4th-grade students in most countries for 9-year-olds and 7th- and 8th-grade students in most countries for 13-year-old students.

TIMSS-R utilized the same assessment framework designed for TIMSS. Approximately

one-third of the original 1995 TIMSS assessment items were kept secure so that they could be included in the 1999 TIMSS-R assessment. For the two-thirds that were released to the public, a panel of international assessment and content experts and the national research coordinators of each participating country developed and reviewed replacement items that closely matched the content of the original items to provide trend data. The assessment and questionnaire items were developed and field-tested for similarity and to allow reliable comparisons between TIMSS and TIMSS-R.

CIVIC EDUCATION STUDY

Indicator 15 is based on data from the International Association for the Evaluation of Educational Achievement's two-part study of civic education in 28 countries in 1994 (NCES 2001–096). The first phase summarized what experts in each participating country believed 14-year-olds should know about a number of topics related to democratic institutions, including elections, individual rights, national identity, political participation, and respect for ethnic and political diversity. Phase two of the study assessed a nationally representative sample of 14-year-olds in 28 countries in 1999.

Countries covering less than 100 percent of the international desired population: 1999

| Country | International desired population coverage | National desired population overall exclusion | Note on coverage |
|-----------|-------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------|
| Israel | 100 | 16.1 | Exclusion rate over 10 percent |
| Latvia | 61 | 4 | Exclusion of 39 percent of student population (non-Latvian-speaking students) |
| Lithuania | 87 | 4.5 | Exclusion of 13 percent of student population (non-Lithuanian-speaking students) |

Note 4: International Assessments

Continued

Fourteen-year-olds were chosen as the target population because testing an older group would have meant a substantial loss of students who had ended their secondary education. For sampling purposes, countries were instructed to select the grade in which most 14-year olds were enrolled at the time of the study. In the United States, this was 9th grade. In the United States, the assessment was administered to almost 3,000 students in 124 public and private schools. The overall sample design was intended to approximate a self-weighting sample of students as much as possible, with each 9th-grade student in the United States having an approximately equal probability of being selected within the major school strata.

The assessment produced a “total civic knowledge” scale that consists of two subscales: civic content and civic skills. Civic content items assessed knowledge of key civic principles and pivotal ideas (e.g., key features of democracies). Civic skills items assessed skills in using civic-related knowledge (e.g., understanding a brief political article or a political cartoon). In addition, the assessment measured students’ concepts of democracy, citizenship, and government, attitudes toward civic issues, and expected political participation. The assessment also included school, teacher, and student background questionnaires. These provided characteristics of the individual student, the school context, and a picture of how civic education was delivered through the school curriculum.

PROGRAM FOR INTERNATIONAL STUDENT ASSESSMENT

Indicator 9 is based on data collected as part of the Program for International Student Assessment (PISA). This assessment, first conducted in 2000, focused on 15-year-olds’ capabilities in reading literacy, mathematics literacy, and science literacy. PISA is spon-

sored by the Organization for Economic Cooperation and Development (OECD), an intergovernmental organization of 30 industrialized countries that serves as a forum for member countries to cooperate in research and policy development on social and economic topics of common interest. PISA is a triannual study of reading literacy, mathematics literacy, and science literacy, providing a more detailed examination for one of the subjects in each test cycle. The 2000 assessment focused on reading literacy through a mix of multiple choice, short answer, and extended response questions.

In 2000, 32 countries participated in PISA, including 28 of the 30 OECD countries and 4 non-OECD countries. The Netherlands, an OECD country, participated in the assessment, but technical problems with its sample prevented its results from being included. Because PISA is an OECD initiative, all international averages presented for PISA are the average of the participating OECD countries’ results.

To implement PISA 2000, each participating country selected a nationally representative sample of 15-year-olds. Each student completed an approximately 90-minute assessment and a 20- to 30-minute questionnaire designed to gather information about his or her background and experiences related to reading, mathematics, and science literacy. Principals in schools where students participated in the PISA assessment also completed a questionnaire about their schools. The United States had a relatively high standard error compared to other countries in the study due to the size of the original sample of students and the response rate.

What is reading, mathematics, and science literacy?

PISA seeks to represent the overall yield of learning for 15-year-olds. PISA assumes that by the age of 15, young people have had a

Note 4: International Assessments

Continued

series of learning experiences, both in and out of school, that allow them to perform at particular levels in reading, mathematics, and science literacy. Formal education will have played a major role in student performance, but other factors, such as learning opportunities at home, also play a role. PISA's results provide an indicator of the overall performance of a country's educational system, but they also provide information about other factors that influence performance. By assessing students near the end of compulsory schooling in key knowledge and skills, PISA provides information about how well prepared students will be for their future lives as they approach an important transition point for education and work. PISA thus aims to show how well equipped 15-year-olds are for their futures based on what they have learned to that point.

Reading literacy seeks to measure the extent to which students can “construct, extend, and reflect on the meaning of what they have read” across a wide variety of texts associated with a wide variety of situations. Reading literacy tasks were developed using three dimensions: content or structure, referring to types of texts such as continuous and non-continuous texts; processes, including retrieving information, understanding texts, interpreting texts, and reflecting on content and forms of texts; and situations, distinguishing the use for which texts are constructed or the context in which knowledge and skills are applied. For further description of this study and reading, science, and mathematics literacy, see U.S. Department of Education (NCES 2002–115) and the Organization for Economic Cooperation and Development (2001a).

Note 5: NAEP, NELS, and HS&B Transcript Studies

At least two methods exist to classify the academic challenge or difficulty of the coursework that high school graduates complete. One method is to measure the *highest level* of coursework completed in different subjects (e.g., whether a graduate's most academically challenging mathematics course was algebra I, trigonometry, or calculus). The other method is to measure the *number* of courses completed in different subjects (e.g., whether a graduate completed two, three, or four courses in mathematics). Based on these two methods, analysts have created different taxonomies to categorize the academic challenge or difficulty of the completed coursework in graduates' high school transcripts. This supplemental note describes two of these taxonomies, which are used in the analyses of individual indicators in *The Condition of Education*.

Indicators 20, 25, and 27 use an “academic pipeline” to classify course-taking data according to the highest level of coursework completed. These data come from transcripts of graduates of public high schools, which were collected as part of the U.S. Department of Education's National Assessment of Educational Progress (NAEP), National Education Longitudinal Study of 1988 (NELS), and the High School & Beyond study (HS&B). *Indicators 23 and 24* use a taxonomy of “academic rigor” to classify course-taking data, partly according to the number of courses completed. The same data sources are used for these indicators along with information about students' participation in Advanced Placement (AP) courses and tests.

ACADEMIC PIPELINES

Academic “pipelines” organize transcript data in English, science, mathematics, and foreign language into levels based on the normal progression and difficulty of courses

within these areas. Each level includes courses either of similar academic challenge and difficulty or at the same stage in the progression of learning in that subject area. In the mathematics pipeline, for example, algebra I is placed at a level lower in the pipeline hierarchy than is algebra II because algebra I is less difficult than (and is traditionally completed before) algebra II.

Classifying transcript data into these levels allows one to infer that high school graduates who have completed courses at the higher levels of a pipeline have completed more advanced coursework than graduates whose courses fall at the lower levels of the pipeline. Tallying the percentage of graduates who completed courses at each level permits comparisons of the degree of academic challenge and difficulty of completed coursework among graduates of a given year, as well as among different graduating classes. This system of classification does not, however, allow one to make conclusive statements about the rigor of the coursework completed by students because courses with the same name in different districts and states can have different content and varying expectations for performance.

Likewise, this system of classification does not provide information on the highest level of coursework graduates *attempted* in a subject area. The pipeline is used only to classify *completed* courses in a subject area. The pipeline also does not provide information on how many courses graduates completed in a particular subject area. Graduates are placed at a particular level in the pipeline based on the level of their highest completed course, regardless of whether they completed courses that would fall lower in the pipeline. Thus, graduates who completed year 3 of (or 11th-grade) French did not *necessarily* complete the first 2 years.

Note 5: NAEP, NELS, and HS&B Transcript Studies

Continued

Mathematics Pipeline

The mathematics pipeline progresses from no mathematics courses or nonacademic courses to low, middle, and advanced academic coursework. Each level in the pipeline represents the highest level of mathematics coursework that a graduate completed in high school. Thus, a graduate whose highest course is at the low academic level progressed no farther in the mathematics pipeline and did not complete a traditional algebra I course, a prerequisite for higher level mathematics in high school.

The mathematics pipeline has eight levels: no mathematics; nonacademic; low academic; middle academic I; middle academic II; advanced I; advanced II; and advanced III. Middle levels I and II and advanced levels I, II, and III can be combined to create one middle level and one advanced level, respectively, thus creating a five-level pipeline (no mathematics; nonacademic; low academic; middle academic; and advanced academic).

No mathematics

No coursework completed in mathematics by graduates, or only basic or remedial-level mathematics completed. It is thus possible for a graduate to have taken one or more courses in mathematics but to be placed in the no-mathematics level.

Nonacademic level

Highest completed courses are in general mathematics or basic skills mathematics, such as general mathematics I or II; basic mathematics I, II, or III; consumer mathematics; technical or vocational mathematics; and mathematics review.

Low academic level

Highest completed courses are preliminary courses (e.g., prealgebra) or mathematics

courses of reduced rigor or pace (e.g., algebra I taught over 2 academic years). Considered to be more academically challenging than nonacademic courses, courses at this level include prealgebra; algebra I, part I; algebra I, part II; and geometry (informal).

Middle academic level

The middle academic level is divided into two sublevels, each of which is considered to be more academically challenging than the nonacademic and low academic levels, though level I is not considered as challenging as level II.

- *Middle academic level I:* Highest completed courses include algebra I; plane geometry; plane and solid geometry; unified mathematics I and II; and pure mathematics.
- *Middle academic level II:* Highest completed course is algebra II or unified mathematics III.

Advanced academic level

The advanced academic level is divided into three sublevels, each of which is considered more academically challenging than the nonacademic, low academic, and middle academic levels; however, level I is not considered as challenging as level II, nor level II as challenging as level III.

- *Advanced academic level I:* Highest completed courses are algebra III; algebra/trigonometry; algebra/analytical geometry; trigonometry; trigonometry/solid geometry; analytical geometry; linear algebra; probability; probability/statistics; statistics; statistics (other); or an independent study.
- *Advanced academic level II:* Highest completed course is precalculus or an introduction to analysis.

Note 5: NAEP, NELS, and HS&B Transcript Studies

Continued

- *Advanced academic level III:* Highest completed courses are Advanced Placement (AP) calculus; calculus; or calculus/analytical geometry.

Science Pipeline

Unlike mathematics and other subjects, such as foreign languages, coursework in science does not follow a common or easily defined sequence. Depending on a school's curriculum, students can choose from several courses with minimal sequencing requirements. Consequently, the method used to construct the science pipeline differs from that used to construct the mathematics pipeline. First, all science courses are placed in one of four groups based on subject matter: life science (biology); chemistry; physics; and all other physical sciences (e.g., geology, earth science, physical science). Second, a pipeline is constructed for each of these four groups. Third, the pipelines for chemistry, physics, and all other physical sciences are combined into a single pipeline (a physical science pipeline). Finally, the physical science and life science pipelines are combined to create a single science pipeline. The final pipeline has seven levels: no science; primary physical science; secondary physical science and basic biology; general biology; chemistry I or physics I; chemistry I and physics I; and chemistry II or physics II or advanced biology.

No science

Includes graduates who did not complete any courses in science or who completed only basic or remedial-level science. It is possible for a graduate to have taken one or more courses in science but to be placed in the no-science level.

Primary physical science

Highest completed course is in basic physical sciences: applied physical science; earth

science; college preparatory earth science; and unified science.

Secondary physical science and basic biology

Highest completed courses are astronomy; geology; environmental science; oceanography; general physics; basic biology I; or consumer or introductory chemistry.

General biology

Highest completed courses are general biology I; secondary life sciences (including ecology, zoology, marine biology, and human physiology); or general or honors biology II.

Chemistry I or physics I

Highest completed courses are introductory chemistry; chemistry I; organic chemistry; physical chemistry; consumer chemistry; general physics; or physics I.

Chemistry I and physics I

Highest completed courses include one level I chemistry course (see above) and one level I physics course (see above).

Chemistry II or physics II or advanced biology

Highest completed courses are advanced biology; International Baccalaureate (IB) biology II; IB biology III; AP biology; field biology; genetics; biopsychology; biology seminar; biochemistry and biophysics; biochemistry; botany; cell and molecular biology; cell biology; microbiology; anatomy; and miscellaneous specialized areas of life sciences; chemistry II; IB chemistry II; IB chemistry III; AP chemistry; physics II; IB physics; AP physics B; AP physics C: mechanics; AP physics C: electricity/magnetism; or physics II without calculus.

Note 5: NAEP, NELS, and HS&B Transcript Studies

Continued

ACADEMIC RIGOR

To measure the “academic rigor” of coursework, four levels of academic rigor have been constructed, using the following criteria:

- the number of courses that students had completed in academic subjects in science, mathematics, English, social studies, and foreign language;
- the level or intensity of courses that students had taken in mathematics and science; and
- whether students had taken any honors or AP courses.

When information on honors/AP coursetaking is missing, AP testtaking is used as supplementary data. It is assumed that, if AP records indicated that students had taken an AP test, students had taken a honors/AP course.

Classifying transcript data into these four levels allows one to conclude that high school graduates who meet the criteria of more “rigorous” levels have completed more academically challenging and difficult coursework than graduates who meet only the criteria of less “rigorous” levels. The primary differences between this taxonomy and that using “academic pipelines” is that this taxonomy classifies students who have completed a set number of courses at the “rigorous” level,

whereas the “academic pipelines” do not indicate how many courses a student has taken—they indicate only the highest level of coursework completed.

For *indicator 23*, the following four levels are used. For *indicator 24*, the two middle levels are combined.

- *Core curriculum or below*: Student completed no more than 4 years of English and 3 years each of science, mathematics, and social studies.
- *Mid-level curriculum I*: Student completed at least 4 years of English; 3 years of science (including 2 years of biology, chemistry, *or* physics); 3 years of mathematics (including algebra I and geometry); and 3 years of social studies.
- *Mid-level curriculum II*: Student completed at least 4 years of English; 3 years of science (including biology, chemistry, *and* physics); 3 years of mathematics (including algebra II); and 3 years of social studies.
- *Rigorous curriculum*: Student completed at least 4 years of English; 4 years of mathematics (including precalculus); 3 years of science (including biology, chemistry, *and* physics); 3 years of social studies; 3 years of foreign language; and 1 honors/AP course or AP test score.

Note 6: Monitoring the Future

The University of Michigan's Institute for Social Research has collected and administered the Monitoring the Future (MTF) data annually since 1975 to measure trends among U.S. youth on a range of topics. In addition to education-related questions, the survey includes items on demographic characteristics; job experience and other employment topics; drug, alcohol, and tobacco use, and other health topics; values and attitudes about social issues, family, religion, and politics; and personality variables. A nationally representative sample of high school seniors has been surveyed since 1975, and 8th-grade and 10th-grade surveys were added in 1991. Data analyzed in this volume come from the 8th-, 10th-, and 12th-grade surveys. Students in public and private schools in the 48 contiguous states are included in the samples.

The MTF study has remained generally consistent over time in purpose and scope, sample design and methods, and content. However, a small number of questions are added or dropped from time to time. In the sampling process, geographic areas are selected first, then schools in each selected area are chosen, and finally students are sampled within selected schools. Surveys are administered in regular class periods, and students are encouraged to participate and finish the entire set of questions. The main group of sampled students who do not participate are those absent from class when the survey is given; field representatives estimate that only about 1 percent of students who are in class fail to complete and hand in the questionnaire.

The NCES guideline for response rates provides that if the total response rate (school participation rate times student participation rate times item response rate) falls below 70 percent, estimates for any such items (variables) will not be published unless a nonresponse bias analysis has been conducted. The total response rates calculated in this way for the MTF study are all below 70 percent. However, a more liberal response rate, defined by multiplying the student participation rate by the item rates, often produces rates above 70 percent. The participation rate of sampled schools ranged from about 66 percent to 80 percent from year to year, although schools that refuse are generally replaced by other schools matched on basic characteristics. The student response rates for the data files used in this volume ranged from 83 percent (for 1991 and 2000 12th-graders) to 90 percent (for 1991 8th-graders). The response rates for questionnaire items used in this volume ranged from about 89 to 99 percent.

Further information about these surveys can be obtained in several ways.

E-mail: MTFinfo@isr.umich.edu
Go to MTF's Web Site (and linked pages)
at: <http://monitoringthefuture.org>

Call ISR staff: (734) 764-8354

Write to:
Institute for Social Research,
University of Michigan,
426 Thompson St.,
Ann Arbor, MI 48104-2321

Note 7: International Standard Classification of Education

Indicator 41 uses the International Standard Classification of Education (ISCED), which is designed to facilitate comparisons among educational systems in different countries. Many countries report education statistics to UNESCO and the Organization for Economic Cooperation and Development (OECD) using the ISCED. In this classification system, education is divided into levels as follows:

- *Education preceding the first level (early childhood education)* where it is provided usually begins at age 3, 4, or 5 (sometimes earlier) and lasts from 1 to 3 years. In the United States, this level includes nursery school and kindergarten.
- *Education at the first level (primary education)* usually begins at age 5, 6, or 7 and continues for about 5 or 6 years. For the United States, the first level starts with 1st grade and ends with 6th grade.
- *Education at the secondary level (lower secondary education)* begins at about age 11 or 12 and continues for about 3 years. For the United States, the second level starts with 7th grade and typically ends with 9th grade. Education at the lower secondary level continues the basic programs of the first level, although teaching is typically more subject focused, often employing more specialized teachers who conduct classes in their field of specialization. The main criteria for distinguishing lower secondary education from primary education depend on whether programs begin to be organized in a more subject-oriented pattern, using more specialized teachers who conduct classes in their field of specialization. If there is no clear breakpoint for this organizational change, the lower secondary education begins at the end of 6 years of primary education. In countries with no clear division between lower secondary and upper secondary education, and where lower secondary education lasts for more than 3 years, only the first 3 years following primary education are counted as lower secondary education.
- *Education at the third level (upper secondary education)* begins at about age 14 or 15 and lasts for approximately 3 years. For the United States, the third level starts with 10th grade and ends with 12th grade. Upper secondary education is the final stage of secondary education in most OECD countries. Instruction is often organized along subject-matter lines, in contrast to the lower secondary level, and teachers typically must have a higher level, or more subject-specific, qualification. There are substantial differences in the typical duration of programs both across and between countries, ranging from 2 to 5 years of schooling. The main criteria for classifications are: national boundaries between lower and upper secondary education; and admission into educational programs, which usually requires the completion of lower secondary education or a combination of basic education and life experience that demonstrates the ability to handle the subject matter in upper secondary schools.
- *Education at the fifth level (nonuniversity higher education)* is provided at community colleges, vocational/technical colleges, and other degree-granting institutions in which programs typically take 2 years or more, but less than 4 years, to complete.
- *Education at the sixth level (university higher education)* is provided in undergraduate programs at 4-year colleges and universities in the United States and, generally, at universities in other countries. Education at this level is largely theoretic-

Note 7: International Standard Classification of Education

Continued

cal and is intended to provide sufficient qualifications for gaining entry into advanced research programs and professions with high-skill requirements. Entry into sixth-level programs normally requires the successful completion of an upper secondary education; admission is competitive in most cases. The minimum cumulative theoretical duration at this level is 3 years of full-time enrollment. Completion of research projects or theses may be involved. The faculty must have advanced research credentials.

- *Education at the seventh level (graduate and professional higher education)* is provided in graduate and professional schools that generally require a university degree or diploma as a minimum condition for admission. Programs at the seventh level lead to the award of an advanced research qualification, such as a Ph.D. The theoretical duration of these programs is 3 years of full-time enrollment in most coun-

tries (for a cumulative total of at least 7 years at levels six and seven), although the length of actual enrollment is often longer. The programs at the seventh level are devoted to advanced study and original research.

- *Education at the ninth level (undistributed)* is a classification reserved for enrollments, expenditures, or programs that cannot be unambiguously assigned to one of the aforementioned levels. Some countries, for example, assign nongraded special education or recreational nondegree adult education programs to this level. Other countries assign nothing to this level, preferring instead to allocate enrollments, expenditures, and programs to levels as best they can.

SOURCE: Organization for Economic Cooperation and Development, Center for Educational Research and Innovation. (2001). *Education at a Glance: OECD Indicators, 2001*.

Note 8: Teacher Pipeline

The Baccalaureate and Beyond (B&B) Longitudinal Studies track the experiences of a cohort of college graduates who received baccalaureate degrees in a given year. The B&B data presented in *The Condition of Education 2002* were collected from the first B&B cohort: students, identified in the National Postsecondary Student Aid Study (NPSAS:1993), who completed a bachelor's degree in 1992–93.

The B&B data used for *indicator 31* are from the initial and follow-up surveys of the 1992–93 cohort. As part of the initial survey, these students were asked about their future employment and expectations for education as well as about their undergraduate education. The B&B:1993 First Follow-up in 1994 (B&B:1993/1994) collected information about their job search activities after graduation as well as information concerning their education and employment experiences after graduation. Individuals who had shown an interest in becoming teachers were asked additional questions about their pursuit of this career, and if teaching, about their current teaching position. In addition, the First Follow-up collected undergraduate transcripts whenever possible. The Second Follow-up in 1997 (B&B:1993/1997) collected information on education, employment, and other experiences since the previous interview.

TEACHER PIPELINE

The “teacher pipeline” is an analytical framework that organizes graduates by the number of steps they have taken to become teachers. All bachelor's degree recipients are considered eligible to enter the teacher pipeline except those who had taught or been certified to teach 1 year or more before getting their bachelor's degree. (Excluded graduates in the analysis of *indicator 31* constituted 3 percent of all 1992–93 graduates [NCES 2000–152, p. iv].)

For the purposes of analysis in *indicator 31*, graduates were classified as “in the teacher pipeline” if they reported that they taught in an elementary or secondary school; became certified to teach; applied for a teaching position; completed a student-teaching assignment as an undergraduate; or were considering teaching at the time of either the 1994 or the 1997 follow-up interview. In 1994, 1 year after completing the 1992–93 degree, one-quarter of 1992–93 bachelor's degree recipients had entered the teacher pipeline (though only 8 percent had actually taught). By 1997, 4 years after completing the degree, more than one-third (36 percent) had entered the teacher pipeline, and 13 percent had actually taught.

Graduates in the teaching pipeline were further subdivided according to whether they prepared to teach and whether they actually taught. For the purposes of analysis, graduates were defined as “prepared to teach” if their undergraduate transcripts indicated that they had completed a student-teaching assignment or if they reported having earned a teaching certificate at the probationary level or higher. (This label does not indicate that the graduates necessarily majored in education or the subject in which they taught.)

These definitions and classifications for organizing B&B data into the teacher pipeline are the same as those used in NCES 2000–152.

COLLEGE ENTRANCE EXAMINATION SCORES

For *indicator 31*, college entrance examination scores were used as a proxy measure for academic caliber. Scholastic Assessment Test (SAT) scores were used primarily, but when unavailable, ACT scores were used if they were available. When possible, scores were collected from the Educational Testing Service or degree-granting institution, but some

Note 8: Teacher Pipeline

Continued

self-reported scores were also used. Respondents with SAT scores available in the B&B sample were assigned to a quartile ranking based on their scores' quartile ranking among all SAT scores from the same administration. If no SAT score was available, the quartile

ranking of the respondent's ACT composite score was used. These ACT quartiles were determined by converting the SAT quartile scores to equivalent ACT scores using a concordance table (Marco, Abdel-Fattah, and Baron 1992).

Note 9: Classification of Postsecondary Education Institutions

The U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS) employs various categories to classify postsecondary institutions. This note outlines the different categorizations used in *indicators 5, 24, 35, 38, 39, and 44*.

BASIC IPEDS CLASSIFICATIONS

The term “postsecondary institutions” is the category used to refer to institutions with formal instructional programs and a curriculum designed primarily for students who have completed the requirements for a high school diploma or its equivalent. For many analyses, however, comparing all institutions from across this broad universe of postsecondary institutions would not be appropriate. Thus, postsecondary institutions are placed in one of three levels, based on the highest award offered at the institution:

- *4-year-and-above institutions:* Institutions or branches that award at least a 4-year degree or higher award in one or more programs, or a postbaccalaureate, postmaster's, or post-first-professional certificate.
- *2-year but less-than-4-year institutions:* Institutions or branches that confer at least a 2-year formal award (certificate, diploma, or associate's degree), or that have a 2-year program creditable toward a baccalaureate degree.
- *Less-than-2-year institutions:* Institutions or branches that have programs lasting less than 2 years that result in a terminal occupational award or are creditable toward a degree at the 2-year level or higher.

Postsecondary institutions are further divided according to these criteria: degree-granting versus nondegree-granting; type of financial control; and Title IV-participating versus not Title IV-participating.

Degree-granting institutions offer associate's, bachelor's, master's, doctor's, and/or first-professional degrees that a state agency recognizes or authorizes. *Nondegree-granting* institutions offer other kinds of credentials and exist at all three levels. The number of 4-year nondegree-granting institutions is small compared with the number at both the 2-year but less-than-4-year and less-than-2-year levels.

IPEDS classifies institutions at each of the three levels of institutions by type of financial control: *public*; *private not-for-profit*; or *private for-profit* (e.g., proprietary schools). Thus, IPEDS divides the universe of postsecondary institutions into nine different “sectors.” In some sectors (for example, 4-year private for-profit institutions), the number of institutions is small relative to other sectors. Institutions in any of these sectors can be degree- or nondegree-granting.

Institutions in any of these sectors can also be Title IV-participating or not. For an institution to participate in federal Title IV, Part C, financial aid programs it must offer a program of study at least 300-clock hours in length; have accreditation recognized by the U.S. Department of Education; have been in business for at least 2 years; and have a Title IV participation agreement with the U.S. Department of Education.

- *Indicator 5* includes 4-year and 2-year degree-granting institutions in its analysis.
- *Indicators 24, 35, 38, and 44* include the categories of 4-year and 2-year degree-granting institutions and of public and private financially controlled institutions in their analyses.
- *Indicator 39* includes public and private degree-granting institutions in its analysis.

Note 9: Classification of Postsecondary Education Institutions

Continued

CARNEGIE CLASSIFICATION

The Carnegie Classification groups American colleges and universities by their purpose and size. First developed in 1970 by the Carnegie Commission on Higher Education, the classification system does not establish a hierarchy among 2- and 4-year degree-granting institutions; instead it groups colleges and universities with similar programs and purposes to facilitate meaningful comparisons and analysis. The Carnegie Classification system has been revised four times—in 1976, 1987, 1994, and 2000—since it was created. The 1994 classification, used for indicators in this volume, divides institutions of higher education into 10 categories, with the 10th category—Professional Schools and Specialized Institutions—subdivided into 10 subcategories (see table of definitions on next page).

The information used to classify institutions into the Carnegie categories comes from survey data. The 1994 version of Carnegie Classifications relied on data from IPEDS, the National Science Foundation, The College Board, and the 1994 Higher Education Directory published by Higher Education Publications, Inc.

For the purposes of analysis, *indicators 35* and *39* use the Carnegie Classifications (reprinted below) to subdivide the IPEDS groupings (e.g., 4-year institutions—an IPEDS grouping—may be subdivided into research, doctoral, master’s, and/or other institutions, which are Carnegie Classifications). The following key provides a guide to each

indicator’s category labels and what Carnegie Classification categories they include:

Indicator 35

- *4-year doctoral institutions* include Research Universities I and II and Doctoral Universities I and II.
- *4-year nondoctoral institutions* include Master’s (Comprehensive) Universities and Colleges I and II, Baccalaureate Colleges I and II, and Professional Schools and Specialized Institutions that offer 4-year degrees.
- All *4-year institutions* include all the institutions included in the two categories above.
- *2-year institutions* include 2-year or Associate of Arts Colleges.

Indicator 39

- *Public research institutions* include Research Universities I and II that are coded as public.
- *Public doctoral institutions* include Doctoral Universities I and II that are coded as public.
- *Public medical institutions* include Professional Schools and Specialized Institutions that are coded as public and as medical schools and medical centers.
- *Private not-for-profit doctoral institutions* include Doctoral Universities I and II that are coded as private not-for-profit.

Note 9: Classification of Postsecondary Education Institutions

Continued

- *Private not-for-profit liberal arts institutions* include Baccalaureate Colleges I and II that are coded as private not-for-profit.
- *Public two-year institutions* include 2-year or Associate of Arts Colleges that are coded as public.
- *Other institutions* include public and private not-for-profit comprehensive universities, private not-for-profit 2-year institutions, public liberal arts colleges, and other specialized institutions.

Carnegie Classification Categories (1994 Definitions)

Research Universities I

"These institutions offer a full range of baccalaureate programs, are committed to graduate education through the doctorate, and give high priority to research. They award 50 or more doctoral degrees² each year. In addition, they receive annually \$40 million or more in federal support."³

Research Universities II

"These institutions offer a full range of baccalaureate programs, are committed to graduate education through the doctorate, and give high priority to research. They award 50 or more doctoral degrees² each year. In addition, they receive annually between \$15.5 million and \$40 million in federal support."³

Doctoral Universities I

"In addition to offering a full range of baccalaureate programs, the mission of these institutions includes a commitment to graduate education through the doctorate. They award at least 40 doctoral degrees annually in five or more disciplines."⁴

Doctoral Universities II

"In addition to offering a full range of baccalaureate programs, the mission of these institutions includes a commitment to graduate education through the doctorate. They award annually at least 10 doctoral degrees—in three or more disciplines—or 20 or more doctoral degrees in one or more disciplines."⁴

Master's (Comprehensive) Universities and Colleges I

"These institutions offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. They award 40 or more master's degrees annually in three or more disciplines."

Master's (Comprehensive) Universities and Colleges II

"These institutions offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. They award 20 or more master's degrees annually in one or more disciplines."

Baccalaureate Colleges I

"These institutions are primarily undergraduate colleges with major emphasis on baccalaureate degree programs. They award 40 percent or more of their baccalaureate degrees in liberal arts fields and are restrictive in admissions."

Baccalaureate Colleges II

"These institutions are primarily undergraduate colleges with major emphasis on baccalaureate degree programs. They award less than 40 percent of their baccalaureate degrees in liberal arts fields and are less restrictive in admissions."

Two-Year or Associate of Arts Colleges

"These institutions offer associate of arts certificate or degree programs and, with few exceptions, offer no baccalaureate degrees."

Note 9: Classification of Postsecondary Education Institutions

Continued

Carnegie Classification Categories (1994 Definitions¹)—Continued

Professional Schools and Specialized Institutions

"These institutions offer degrees ranging from the bachelor's to the doctorate. At least 50 percent of the degrees awarded by these institutions are in a single discipline." They are divided into the following subcategories:

- Theological seminaries, bible colleges, and other institutions offering degrees in religion;
- Medical schools and medical centers;
- Other separate health professional schools;
- Schools of engineering and technology;
- Schools of business and management;
- Teachers' colleges;
- Other specialized institutions; and
- Tribal colleges.

¹*Carnegie Foundation for the Advancement of Teaching* (1994). In December 2000, the Carnegie Foundation released an updated version of its classification system of institutions of higher education. The new scheme is available at the Carnegie foundation Web site (<http://www.carnegiefoundation.org/Classification/index.htm>).

²Doctoral degrees include Doctor of Education, Doctor of Juridical Science, Doctor of Public Health, and the Ph.D. in any field.

³Total federal obligation figures are available from the National Science Foundation's annual report, *Federal Support to Universities, Colleges, and Nonprofit Institutions*. The years used in averaging total federal obligations are 1989, 1990, and 1991.

⁴The academic year for determining the number of degrees awarded by institutions was 1983–84.

Note 10: Students With Disabilities

The U.S. Department of Education's Office of Special Education and Rehabilitative Services (OSERS) collects information on students with disabilities as part of the implementation of the Individuals with Disabilities Education Act (IDEA). OSERS classifies students with disabilities according to 4 categories of educational environments and 13 categories of disabilities. *Indicator 28* uses 12 of these categories, which are defined by OSERS as follows. (For more detailed definitions, see U.S. Department of Education 2001i.)

EDUCATIONAL ENVIRONMENTS FOR STUDENTS WITH DISABILITIES

Regular classroom: includes children who receive special education services in programs designed primarily for nondisabled children.

Separate facility (public and private): includes children who receive special education services in a separate program from their nondisabled peers.

Residential facility (public and private): includes children who are served in publicly or privately operated programs in which children receive care 24 hours a day.

Homebound/hospital: includes children who are served in either a home or hospital setting, including those receiving special education and related services in the home and provided by a professional or paraprofessional who visits the home on a regular basis or schedule.

DISABILITY TYPES

Autism

A developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident be-

fore age 3, that adversely affects a child's educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences.

Deaf-blindness

Concomitant hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational problems that the student cannot be accommodated in special education programs solely for children with deafness or children with blindness.

Emotional disturbance

A condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance:

1. An inability to learn that cannot be explained by intellectual, sensory, or health factors.
2. An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
3. Inappropriate types of behavior or feelings under normal circumstances.
4. A general pervasive mood of unhappiness or depression.
5. A tendency to develop physical symptoms or fears associated with personal or school problems.

The term includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance.

Note 10: Students With Disabilities

Continued

Hearing impairments

An impairment in hearing, whether permanent or fluctuating, that adversely affects a child's educational performance, in the most severe case because the child is impaired in processing linguistic information through hearing.

Mental retardation

Significantly subaverage general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period, that adversely affects a child's educational performance.

Multiple disabilities

Concomitant impairments (such as mental retardation-blindness, mental retardation-orthopedic impairment, etc.), the combination of which causes such severe educational needs that they cannot be accommodated in special education programs solely for one of the impairments. The term does not include deaf-blindness.

Orthopedic impairments

A severe orthopedic impairment that adversely affects a child's educational performance. The term includes impairments caused by congenital anomaly (e.g., club-foot, absence of some member, etc.), impairments caused by disease (e.g., poliomyelitis, bone tuberculosis, etc.), and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns that cause contractures).

Other health impairments

Having limited strength, vitality or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment, that—

1. is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, and sickle cell anemia; and
2. adversely affects a child's educational performance.

Specific learning disabilities

A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

Speech or language impairments

A communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, that adversely affects a child's educational performance.

Traumatic brain injury

An acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects a child's educational performance. The term applies to open or closed head injuries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgment;

Note 10: Students With Disabilities

Continued

problem-solving; sensory, perceptual, and motor abilities; psychosocial behavior; physical functions; information processing; and speech. The term does not apply to brain injuries that are congenital or degenerative, or to brain injuries induced by birth trauma.

Visual impairments

An impairment in vision that, even with correction, adversely affects a child's educational performance. The term includes both partial sight and blindness.

Note 11: The College Qualification Index

WHO IS PREPARED FOR COLLEGE?

The college qualification index used in *indicator 21* was developed for *Access to Postsecondary Education for the 1992 High School Graduates* (NCES 98–105). The index measures a student’s readiness to attend a 4-year institution and uses up to five sources of information about a student’s preparation: high school grade-point average (GPA) in academic courses, senior class rank, scores on the cognitive test battery of the Second Follow-up to the National Education Longitudinal Study (NELS) of 1988, and scores on the ACT or SAT college entrance examination. Since admission standards and requirements vary widely among 4-year colleges and universities, the analysis for the indicator examined the actual distribution of these five measures of academic aptitude and achievement among those graduating seniors who did attend a 4-year institution. Approximately half (45 percent) of the NELS graduating seniors had data available for four or five of the criteria: class rank, GPA, the NELS test, and ACT or SAT scores. For about one-third of the students, only three data sources were available because they lacked ACT or SAT scores. All of these students had NELS test scores, however. In order to identify as many students as possible who were potentially qualified academically to attend a 4-year college, students were assigned the highest level of qualification yielded by any of the five criteria that were available.

Students were classified in a two-stage process. The initial classification was determined as follows:

- *Very highly qualified:* those whose highest value on any of the five criteria would put them among the top 10 percent of 4-year college students (specifically the NELS 1992 graduating seniors who enrolled in 4-year colleges and universities) for that criterion. Minimum values were GPA=3.7, class rank percentile=96, NELS test percentile=97, combined SAT=1250, composite ACT=28.
- *Highly qualified:* those whose highest value on any of the five criteria would put them among the top 25 percent of 4-year college students (but not the top 10 percent) for that criterion. Minimum values were GPA=3.6, class rank percentile=89, NELS test percentile=90, combined SAT=1110, composite ACT=25.
- *Somewhat qualified:* those whose highest value on any of the five criteria would put them among the top 50 percent (but not the top 25 percent—i.e., in the second quartile) of 4-year college students for that criterion. Minimum values were GPA=3.2, class rank percentile=75, NELS test percentile=76, combined SAT=960, composite ACT=22.
- *Minimally qualified:* those whose highest value on any of the five criteria would put them among the top 75 percent (but not the top 50 percent—i.e., in the third quartile) of 4-year college students for that criterion. Minimum values were GPA=2.7, class rank percentile=54, NELS test percentile=56, combined SAT=820, composite ACT=19.
- *Marginally or not qualified:* those who had no value on any criterion that would put them among the top 75 percent of 4-year college students (i.e., all values were in the lowest quartile). In addition, those in vocational programs (according to their high school transcript) were classified as not college qualified. This procedure affected the classification of less than 1 percent of students. Few students in vocational programs met any of the criteria for a higher classification.

Note 11: The College Qualification Index

Continued

Next, adjustments were made for programs of rigorous academic coursework, defined as including at least 4 years of English; 3 years each of science, mathematics, and social studies; and 2 years of a foreign language. Those who had taken a program of rigorous academic courses were moved into one higher level of qualification. In addition, students initially placed in the “very highly qualified” category who had not taken the rigorous academic coursework were placed into the “highly qualified” category.

Students were identified as “college qualified” if they were at least minimally qualified according to this index. It is important to recognize that some “marginally or not qualified” students enrolled at a 4-year institution. Admission standards vary widely and admission may be based on factors other than academic preparation (for example, some public 4-year institutions are open to any in-state high school graduate).

Note 12: Price of College Attendance

The sample used for *indicator 44* consists of dependent full-time, full-year students who attended one postsecondary institution during the 1999–2000 academic year. During that year, approximately 28 percent of all undergraduates were dependent and attended full time, full year (defined as 8 or more months of attendance). The specific terms used in the indicator are as follows:

- **Family income:** The four income categories, “low income,” “lower middle,” “upper middle,” and “high income,” are calculated on the basis of family income for dependent students and correspond to the four quartiles of the distribution of parental family income. The quartile cutpoints for dependent student income are \$31,000, \$54,000, and \$84,000.
- **Dependency status:** Students were considered dependent for purposes of federal financial aid programs unless institutional records indicated they were
 - (1) age 24 or older as of December 31, 1999;
 - (2) a veteran of the U.S. Armed Forces;
 - (3) enrolled in a graduate or professional program (beyond a bachelor’s degree);
 - (4) married;
 - (5) an orphan or ward of the court; or
 - (6) had legal dependents, other than a spouse.

If any of these conditions were met, the student was classified as independent for purposes of financial aid.

- **Tuition and fees:** Indicates the tuition the student was charged for the academic year, as reported by the institution in the National Postsecondary Student Aid Study

(NPSAS). If the tuition was not reported, it was estimated based on the average per credit or per term charges for other students at the institution according to their class level, degree program, and attendance status.

- **Total price:** Refers to the attendance-adjusted student budget at the sampled NPSAS institution for students who attended only one institution during 1999–2000. The student budget is the sum of tuition and fees and the sum of nontuition items, including room and board, transportation, books and supplies, and other expenses. For students attending at least half time but less than full time, nontuition items are reduced to 75 percent of the allowance for full-time, full-year students, to 50 percent for students with unknown attendance status, and to 25 percent for students attending less than half time. The actual tuition is added to the estimated nontuition items. Students who attended more than one institution are excluded from the tables.
- **Grants:** Total amount of all grants and scholarships, federal, state, institutional, and other, received during 1999–2000, including employer tuition reimbursements. The total amount of grants may not equal the sum of individual components since some students receive more than one type of grant.
- **Net price:** Total price for the student, which includes tuition and fees and nontuition items minus total grants. Net price does not include loans that must be repaid or the future price of interest payments on such loans. This definition of net price differs from an earlier version that appeared in *The Condition of Education 1998* (NCES 98–013). The 1998 definition was total price minus total aid, which

Note 12: Price of College Attendance

Continued

includes loans that students or their families must repay. The present definition more accurately reflects the price that students and their families pay. Differences between the net price shown in the text table and net price calculated by subtracting grants from total price are due to rounding.

Note 13: Finance

USING THE CONSUMER PRICE INDEX (CPI) TO ADJUST FOR INFLATION

The Consumer Price Indexes (CPIs) represent changes in the prices of all goods and services purchased for consumption by urban households. Indexes vary for specific areas or regions, periods of time, major groups of consumer expenditures, and population groups. Finance indicators in *The Condition of Education* use the “U.S. All Items CPI for All Urban Consumers, CPI-U.”

The CPI-U is the basis for both the calendar year CPI and the school year CPI. The calendar year CPI is the same as the annual CPI-U. The school year CPI is calculated by adding the monthly CPI-U figures, beginning with July of the first year and ending with June of the following year, and then dividing that figure by 12. The school year CPI is rounded to three decimal places. Data for the CPI-U are available on the Bureau of Labor Statistics Web Site (given below). Also, figures for both the calendar year CPI and the school year CPI can be obtained from the *Digest of Education Statistics 2001* (NCES 2002–130), an NCES annual publication.

Although the CPI has many uses, its principal function in *The Condition of Education* is to convert monetary figures (salaries, expenditures, income, and so on) into inflation-free dollars to allow comparisons over time. For example, due to inflation, the buying power of a teacher’s salary in 1995 is not comparable to that of a teacher in 2000. In order to make such a comparison, the 1995 salary must be converted into 2000 constant dollars using the following formula: the 1995 salary is multiplied by a ratio of the 2000 CPI over the 1995 CPI.

$$1995 \text{ salary} * \frac{(2000 \text{ CPI})}{(1995 \text{ CPI})} = 1995 \text{ salary in } 2000 \text{ constant dollars}$$

For more detailed information on how the CPI is calculated or the other types of CPI indexes, go to the Bureau of Labor Statistics Web Site (<http://www.bls.gov/cpihome.htm>).

In *The Condition of Education 2002*, this description of the CPI applies to *indicators 16, 42, and 43*.

CLASSIFICATIONS OF REVENUE

In *indicator 43*, revenues are classified by source (local, state, or federal). Revenues from federal sources include direct grants-in-aid from the federal government; federal grants-in-aid through a state or an intermediate agency; and other revenue in lieu of taxes that would have accrued had the tax base been subject to taxation. Revenues from state sources include those that can be used without restriction; those for categorical purposes; and revenues in lieu of taxation. Revenues from local sources include revenues from a local education agency (LEA), including taxes levied or assessed by an LEA; revenues from a local government to an LEA; tuition received; transportation fees; earnings on investments from LEA holdings; net revenues from food services (gross receipts less gross expenditures); net revenues from student activities (gross receipts less gross expenditures); and other revenues (e.g., textbook sales, donations, property rentals).

General formula assistance is a type of revenue from state sources. It includes revenue from general state assistance programs such as foundation, minimum or basic formula support, principal apportionment, equalization, flat or block grants, and state public school fund distributions. It also includes state revenue dedicated from major state taxes, such as income and sales taxes.

Note 13: Finance

Continued

MEASURES OF PUBLIC EFFORT TO FUND EDUCATION

The first index (Resources per student) in *indicator 42* is revenue per student, which is public revenue for elementary and secondary education divided by the total number of public and private elementary and secondary students, or public revenues for postsecondary education in degree-granting institutions divided by the total number of students enrolled in these institutions. No adjustments are made for part-time enrollment.

The second measure (Collective effort) is total public revenue divided by total personal income for the United States. It measures the amount of public resources provided for education in relation to available societal resources.

Algebraically,

Collective effort = Public Revenue/Personal Income

Alternatively,

$$\begin{aligned} \text{Collective effort} &= \frac{\text{Public Revenue/}}{\text{Personal Income/}} * \frac{\text{Enrollment/}}{\text{Population}} \\ &= \frac{\text{Revenue per Student}}{\text{Per Capita Income}} * \frac{\text{Enrollment/}}{\text{Population}} \end{aligned}$$

Hence, the index for collective effort can also be expressed as revenue per student relative to the public's capacity (per capita income), adjusted for the enrollment ratio in the population. The latter adjustment is important for isolating the changes in revenue per student that are exclusively due to changes in public revenue, rather than enrollment levels. For example, if both total public revenue for education and per capita income remain constant, collective effort as described above remains unchanged. However, revenue per student can still increase if the number of students falls. Hence, if the ratio of revenue per

student to per capita income were not adjusted for the decline in the percentage of students, it would mistakenly signal an increase in collective effort. The index used for *indicator 42* implicitly adjusts for changes in the percentage of students in the population and gives an accurate index for collective effort.

Educational revenue is in 1999 dollars based on the Consumer Price Index (CPI), prepared by the Bureau of Labor Statistics, U.S. Department of Labor. Personal income is in constant 1999 dollars adjusted by CPI for the calendar year.

Revenue data from elementary/secondary and postsecondary education are based on different accounting systems and are not entirely comparable. For example, public revenues for elementary and secondary education represent additions to assets (cash) from taxes, appropriation, and other funds, which do not incur an obligation that must be met at some future date (loans) in all public schools. These include revenues that are spent on construction of buildings and other investments in the physical plant. Due to the difficulty in constructing a comparable time series, public funds given to private schools (for Head Start, disabled children, etc.) are excluded. For postsecondary education, educational and general public revenues are those available from public sources at both public and private institutions for the *regular or customary activities* of an institution that are part of, and contributory to, or necessary to its instruction or program. *In contrast, revenue from (unrestricted and restricted) grants and contracts at all government levels are excluded.* Overall, public revenue at postsecondary institutions include salaries and travel of faculty and administrative or other employees; purchase of supplies or materials for current use in classrooms, libraries, laboratories, or offices; and operation and maintenance of the educational plant. Unlike public

Note 13: Finance

Continued

revenues for elementary/secondary education, postsecondary public revenues, as defined in *indicator 42*, do not include public funds used for expansion of a physical plant. As a result, readers should focus on the changes over time within the elementary/secondary and postsecondary education measures rather than making comparisons across levels.

Note 14: Multivariate Linear Regression

Indicator 39 shows that differences exist between the base salaries of full-time male and female faculty and among racial/ethnic groups, but these differences do not reflect other characteristics that may explain why one group is paid more than another. In other words, it is unclear whether the salaries of sex or racial/ethnic groups vary in ways that can be accounted for by their differences in other characteristics, such as the types of institutions at which they teach, their academic rank and tenure status, their levels of experience, or their research activities. Many such characteristics vary together, so it is necessary to conduct an analysis that considers these interrelationships simultaneously in order to understand the net differences, if any, in salaries by sex and race/ethnicity.

A multiple linear regression was used to obtain the average base salaries of different sex and racial/ethnic groups while holding constant for other faculty characteristics, including type of institution, age, teaching field, level of students taught, tenure status, academic rank, highest degree attained, years since receiving highest degree, number of for-credit classes taught, percentage of time engaged in teaching, percentage of time engaged in research, and total number of recent publications. The results of this analysis are presented in the second column of supplemental table 39-1. These data indicate the average base salaries, considering the various faculty characteristics described above.

To determine the average base salary for female faculty while controlling for other variables, consider a hypothetical case in which a person's base salary is predicted based on three variables—sex, age, and employment status. The categories of these three variables are as follows:

| | |
|-------------------|--------|
| Sex | Coding |
| Female | 1 |
| Male | 2 |
| Age | Coding |
| Less than 35 | 1 |
| 35–44 | 2 |
| 45–54 | 3 |
| More than 54 | 4 |
| Employment status | Coding |
| Full-time | 1 |
| Part-time | 2 |

The three variables are first recoded into a series of dummy variables that have only two values, with the value of “1” representing one group and value of “0” representing another. For each variable, the number of dummy variables is equal to the total number of categories in that variable minus 1. Thus, a variable that has two categories (such as sex) is recoded into one dummy variable (i.e., $2-1=1$), and a variable that has four categories (such as age) is recoded into three dummy variables (i.e., $4-1=3$). The dummy variables for sex, age, and employment status are as follows:

| | |
|-------------------|-------|
| Sex | G |
| Female | 1 |
| Male | 0 |
| Age | A_1 |
| Less than 35 | 1 |
| Not less than 35 | 0 |
| Age | A_2 |
| 35–44 | 1 |
| Not 35–44 | 0 |
| Age | A_3 |
| 45–54 | 1 |
| Not 45–54 | 0 |
| Employment status | E |
| Full-time | 1 |
| Part-time | 0 |

Note 14: Multivariate Linear Regression

Continued

The following is a multivariate linear regression equation, where \hat{Y} represents average faculty base salary, b_0 is the estimated intercept, b_1 is the estimated regression coefficient for sex (G), b_2 is the estimated regression coefficient for the first age dummy variable (A_1), b_3 is the estimated regression coefficient for the second age dummy variable (A_2), b_4 is the estimated regression coefficient for the third age dummy variable (A_3), and b_5 is the estimated regression coefficient for employment status (E):

$$\hat{Y} = b_0 + b_1G + b_2A_1 + b_3A_2 + b_4A_3 + b_5E$$

Suppose the regression equation results are as follows:

$$\hat{Y} = 63,000 - 5,000G - 8,000A_1 - 3,000A_2 - 2,000A_3 + 2,000E$$

Next, suppose the unadjusted mean values of sex (G), age (A_1, A_2, A_3), and employment status (E) are as follows:

| Variable | Mean |
|----------|-------|
| G | 0.411 |
| A_1 | 0.073 |
| A_2 | 0.253 |
| A_3 | 0.360 |
| E | 0.540 |

To determine the adjusted base salary for female faculty, one substitutes the “1” in the variable sex (G) and the mean values for the other variables, age (A_1, A_2, A_3) and employment status (E). This results in the following equation:

$$\hat{Y} = 63,000 - 5,000 \cdot 1.000 - 8,000 \cdot 0.073 - 3,000 \cdot 0.253 - 2,000 \cdot 0.360 + 2,000 \cdot 0.540 = 57,017$$

To determine the adjusted base salary for male faculty, one substitutes the “0” in the variable sex (G) and the mean values for the other two variables, age (A_1, A_2, A_3) and employment status (E). This results in the following equation:

$$\hat{Y} = 63,000 - 5,000 \cdot 0.000 - 8,000 \cdot 0.073 - 3,000 \cdot 0.253 - 2,000 \cdot 0.360 + 2,000 \cdot 0.540 = 62,017$$

Thus, in this hypothetical case, the average base salaries for females and males, after controlling for age and employment status, are \$57,017 and \$62,017, respectively. The difference (of \$5,000) represents the salary gap between males and females that is equal on the other characteristics (i.e., age and employment status in this case) included in the model. In other words, even if age and employment status are the same for male and female faculty, male faculty earn about \$5,000 more than their female colleagues in this hypothetical case.

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Appendix 3

Standard Error Tables





This appendix includes tables of standard errors for indicator tables and figures that present data collected through sample surveys. There are no standard error tables for indicator tables and figures that present data from universe surveys (such as all school districts), compilations of administrative records, or statistical projections.

Standard errors for supplemental tables are not included here, but can be found on the NCES Web Site (<http://nces.ed.gov>).

Standard Errors

The information presented in this report was obtained from many sources, including federal and state agencies, private research organizations, and professional associations. The data were collected using many research methods, including surveys of a universe (such as all school districts) or of a sample of respondents, compilations of administrative records, and statistical projections. Users of *The Condition of Education* should be cautious when comparing data from different sources. Differences in procedures, timing, phrasing of questions, interviewer training, and so forth mean that the results are not strictly comparable.

STATISTICAL SIGNIFICANCE

Unless otherwise noted, all statements cited in the text about differences between two or more groups or changes over time were tested for statistical significance and are statistically significant at the 0.05 level. Several test procedures were used, depending on the type of data interpreted and the nature of the statement tested. The most commonly used test procedures are: *t*-tests; multiple *t*-tests with a Bonferroni adjustment to the significance level; and linear trend tests. As an illustration, when a statement compares sample estimates for males and females, a *t*-test was used. When multiple comparisons between more than two groups were made, a Bonferroni adjustment to the significance level was made, even if only one comparison is cited in the text, to ensure that the significance level for the tests as a group is at the 0.05 level. The Bonferroni adjustment is commonly used when making comparisons between racial/ethnic groups and between the United States and other countries. A linear trend test was used when a statement describing a trend, such as the growth of enrollment rates over time, was made or when a statement describing a relationship, such as that between a parent's educational attainment and a student's reading proficiency, was made.

The joint effects of sampling and nonsampling errors determine the accuracy of any statistic. Estimates based on a sample will differ from the figures that would have been obtained if a complete census had been taken using the same survey instruments, instructions, and procedures. In addition to such sampling errors, all surveys, both sample and universe, are susceptible to design, reporting, and processing errors due to nonresponse. To the extent possible, these nonsampling errors are minimized by methods included in the survey procedures. Nonetheless, the effects of nonsampling errors are more difficult to gauge than those produced by sampling variability.

The estimated standard error of a statistic is a measure of the variation due to sampling and can be used to examine the precision obtained in a particular sample. The sample estimate and an estimate of its standard error permit the construction of interval estimates with prescribed confidence that the interval includes the average result of all possible samples. If all possible samples were selected, each was surveyed under the same conditions, and an estimate and its standard error were calculated from each sample, then approximately 90 percent of the intervals from 1.6 standard errors below the estimate to 1.6 standard errors above the estimate would include the actual value; 95 percent of the intervals from 2 standard errors below the estimate to 2 standard errors above the estimate would include the actual value; and 99 percent of all intervals from 2.5 standard errors below the estimate to 2.5 standard errors above the estimate would include the actual value. These intervals are called 90 percent, 95 percent, and 99 percent confidence intervals, respectively.

To illustrate this further, consider the figure for *indicator 1* and the standard error table S1 for estimates from the National Household Education Surveys Program (NHES).

Standard Errors

Continued

For the 2001 estimate of the percentage of children ages 3–5 that were enrolled in center-based early childhood care and education programs (56.4 percent), table S1 shows a standard error of 0.6. Therefore, a 95 percent confidence interval can be constructed from 55.2 to 57.6 (i.e., $56.4 \pm 2 \times 0.6$). If this procedure was used for every possible sample, about 95 percent of the intervals would include the actual percentage of children ages 3–5 enrolled in center-based early childhood care and education programs.

The estimated standard errors for two sample statistics can be used to estimate the precision of the difference between the two statistics and to avoid concluding that there is an actual difference when the difference in sample estimates may be due only to sampling error. The need to be aware of the precision of differences arises, for example, when comparing mean proficiency scores between groups or years in the National Assessment of Educational Progress (NAEP) or when comparing percentages between groups or years in the Current Population Survey (CPS). The standard error (se) of the difference between sample estimate A and sample estimate B (when A and B do not overlap) is

$$se_{A-B} = \sqrt{se_A^2 + se_B^2}$$

When a ratio (called a *t*-statistic) of the difference between the two sample statistics and the standard error of the difference as calculated above is less than 2, one cannot be sure at the 5 percent significance level that the difference is not due only to sampling error, and caution should be used in drawing any conclusions about the difference. In this report, for example, using the rationale above, one would not conclude that a statistically significant difference exists between the two sample statistics.

To illustrate this further, consider the data on the performance of male and female 4th-grade students in the assessment of reading

in the National Assessment of Educational Progress in 2000 (see *indicator 7*). Males had a scale score of 212; females had a scale score of 222. Is the difference in scale scores between these samples of males and females statistically significant? The standard errors of these estimates are 1.1 and 0.9, respectively (see standard error table S7-1). Using the formula above, the standard error of the difference is 1.4. The ratio, or *t*-statistic, of the estimated difference of 10 scale points to the standard error of the difference (1.4) is 7.1. This value is considerably higher than the critical value of the *t* distribution for a 5 percent level of significance and a large sample, 1.96, indicated in the table below. With this information, one can see that there is less than a 5 percent chance that the difference of 10 scale points is due only to sampling error and can conclude that there was a difference between the performance of males and females in reading in 4th grade in 2000.

| Percent chance that a difference is due only to sampling error (for large samples): | | | |
|-------------------------------------------------------------------------------------|------|------|------|
| <i>t</i> -statistic | 1.00 | 1.64 | 1.96 |
| Percent chance | 32 | 10 | 5 |

It should be noted that most of the standard errors presented in this report and in the original documents are approximations. That is, to derive estimates of standard errors that would be applicable to a wide variety of items and that could be prepared at a moderate cost, a number of approximations were required. As a result, most of the standard errors presented provide a general order of magnitude rather than the exact standard error for any specific item.

STANDARD ERROR TABLES ON THE WEB

The following pages in this section contain tables of standard error tables for all of the graphics or tables found on the indicator

Standard Errors

Continued

pages in sections 1 through 6. Tables of standard errors for all supplemental tables are located on the NCES Web Site. Go to nces.ed.gov and select *The Condition of Edu-*

cation volume appearing on the home page. The supplemental and standard error tables for each indicator (and all other supporting information) are in that volume.

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Racial/Ethnic Distribution of Public School Students

Table S3 Standard errors for the percentage of public school students enrolled in grades K–12 who were minorities, by region: October 1972–2000

| October | Minority enrollment | | | Minority enrollment | | |
|---------|---------------------|-----------|-------|---------------------|----------|-------|
| | Black | Hispanic | Other | Black | Hispanic | Other |
| | | Northeast | | | Midwest | |
| 1972 | 0.5 | 0.4 | 0.1 | 0.5 | 0.2 | 0.1 |
| 1973 | 0.5 | 0.4 | 0.1 | 0.5 | 0.2 | 0.1 |
| 1974 | 0.5 | 0.4 | 0.1 | 0.5 | 0.2 | 0.1 |
| 1975 | 0.5 | 0.4 | 0.1 | 0.5 | 0.2 | 0.1 |
| 1976 | 0.5 | 0.5 | 0.2 | 0.5 | 0.2 | 0.1 |
| 1977 | 0.5 | 0.4 | 0.2 | 0.5 | 0.2 | 0.1 |
| 1978 | 0.6 | 0.4 | 0.1 | 0.5 | 0.2 | 0.2 |
| 1979 | 1.0 | 0.8 | 0.2 | 0.8 | 0.4 | 0.3 |
| 1980 | 0.7 | 0.6 | 0.3 | 0.7 | 0.3 | 0.3 |
| 1981 | 0.6 | 0.5 | 0.2 | 0.5 | 0.3 | 0.2 |
| 1982 | 0.6 | 0.6 | 0.3 | 0.6 | 0.3 | 0.2 |
| 1983 | 0.6 | 0.6 | 0.3 | 0.6 | 0.3 | 0.2 |
| 1984 | 0.6 | 0.6 | 0.3 | 0.6 | 0.3 | 0.2 |
| 1985 | 0.6 | 0.7 | 0.3 | 0.6 | 0.4 | 0.3 |
| 1986 | 0.6 | 0.8 | 0.3 | 0.6 | 0.4 | 0.2 |
| 1987 | 0.6 | 0.7 | 0.3 | 0.6 | 0.4 | 0.3 |
| 1988 | 0.7 | 0.8 | 0.3 | 0.7 | 0.5 | 0.3 |
| 1989 | 0.7 | 0.9 | 0.4 | 0.7 | 0.5 | 0.3 |
| 1990 | 0.7 | 0.8 | 0.4 | 0.6 | 0.4 | 0.3 |
| 1991 | 0.7 | 0.8 | 0.3 | 0.6 | 0.4 | 0.3 |
| 1992 | 0.7 | 0.7 | 0.4 | 0.6 | 0.4 | 0.3 |
| 1993 | 0.7 | 0.7 | 0.4 | 0.6 | 0.4 | 0.3 |
| 1994 | 0.6 | 0.5 | 0.3 | 0.6 | 0.4 | 0.2 |
| 1995 | 0.6 | 0.6 | 0.3 | 0.5 | 0.3 | 0.2 |
| 1996 | 0.6 | 0.6 | 0.3 | 0.5 | 0.4 | 0.3 |
| 1997 | 0.6 | 0.6 | 0.3 | 0.5 | 0.4 | 0.3 |
| 1998 | 0.6 | 0.6 | 0.3 | 0.5 | 0.4 | 0.3 |
| 1999 | 0.6 | 0.6 | 0.3 | 0.6 | 0.4 | 0.3 |
| 2000 | 0.6 | 0.6 | 0.4 | 0.6 | 0.4 | 0.3 |

See footnotes at end of table.

Racial/Ethnic Distribution of Public School Students

Table S3 Standard errors for the percentage of public school students enrolled in grades K–12 who were minorities, by region: October 1972–2000
—Continued

| October | Minority enrollment | | | Minority enrollment | | |
|---------|---------------------|----------|-------|---------------------|----------|-------|
| | Black | Hispanic | Other | Black | Hispanic | Other |
| | | South | | | West | |
| 1972 | 0.6 | 0.4 | 0.1 | 0.5 | 0.8 | 0.4 |
| 1973 | 0.6 | 0.4 | 0.1 | 0.5 | 0.8 | 0.4 |
| 1974 | 0.6 | 0.4 | 0.1 | 0.5 | 0.8 | 0.4 |
| 1975 | 0.6 | 0.4 | 0.1 | 0.5 | 0.8 | 0.5 |
| 1976 | 0.6 | 0.4 | 0.1 | 0.5 | 0.8 | 0.4 |
| 1977 | 0.6 | 0.4 | 0.1 | 0.5 | 0.8 | 0.5 |
| 1978 | 0.6 | 0.4 | 0.2 | 0.5 | 0.9 | 0.5 |
| 1979 | 1.1 | 0.7 | 0.2 | 0.9 | 1.5 | 0.8 |
| 1980 | 0.8 | 0.6 | 0.2 | 0.6 | 1.2 | 0.6 |
| 1981 | 0.6 | 0.5 | 0.2 | 0.5 | 0.9 | 0.5 |
| 1982 | 0.7 | 0.5 | 0.2 | 0.5 | 1.0 | 0.6 |
| 1983 | 0.7 | 0.5 | 0.2 | 0.5 | 1.0 | 0.6 |
| 1984 | 0.7 | 0.5 | 0.2 | 0.5 | 1.0 | 0.6 |
| 1985 | 0.7 | 0.6 | 0.2 | 0.5 | 1.1 | 0.6 |
| 1986 | 0.7 | 0.6 | 0.2 | 0.5 | 1.1 | 0.6 |
| 1987 | 0.7 | 0.6 | 0.2 | 0.5 | 1.1 | 0.6 |
| 1988 | 0.7 | 0.7 | 0.2 | 0.5 | 1.3 | 0.7 |
| 1989 | 0.7 | 0.7 | 0.3 | 0.5 | 1.3 | 0.6 |
| 1990 | 0.7 | 0.6 | 0.2 | 0.5 | 1.1 | 0.6 |
| 1991 | 0.7 | 0.6 | 0.2 | 0.5 | 1.1 | 0.6 |
| 1992 | 0.7 | 0.6 | 0.3 | 0.5 | 1.1 | 0.6 |
| 1993 | 0.7 | 0.6 | 0.3 | 0.5 | 1.1 | 0.6 |
| 1994 | 0.6 | 0.4 | 0.2 | 0.4 | 0.8 | 0.5 |
| 1995 | 0.6 | 0.4 | 0.2 | 0.4 | 0.8 | 0.4 |
| 1996 | 0.6 | 0.5 | 0.2 | 0.4 | 0.8 | 0.5 |
| 1997 | 0.6 | 0.5 | 0.2 | 0.4 | 0.8 | 0.5 |
| 1998 | 0.6 | 0.5 | 0.2 | 0.4 | 0.8 | 0.5 |
| 1999 | 0.6 | 0.5 | 0.2 | 0.4 | 0.8 | 0.5 |
| 2000 | 0.6 | 0.5 | 0.2 | 0.4 | 0.8 | 0.5 |

SOURCE: U.S. Department of Commerce, Bureau of the Census. October Current Population Surveys, 1972–2000.

Reading Performance of Students in Grade 4

Table S7 Standard errors for the average reading scale scores for 4th-graders, by sex: 1992, 1994, 1998, and 2000

| Average scale score | 1992 | 1994 | 1998 | 2000 |
|------------------------------|------|------|------|------|
| All 4 th -graders | 0.9 | 1.0 | 0.8 | 0.8 |
| Male | 1.2 | 1.3 | 1.1 | 1.1 |
| Female | 1.0 | 1.1 | 0.7 | 0.9 |

SOURCE: U.S. Department of Education, NCES. (2001). *The Nation's Report Card: Fourth-Grade Reading 2000* (NCES 2001-499).

Trends in the Achievement Gap in Reading Between White and Black Students

Table S8a Standard errors for the difference in average reading scale scores of 9-, 13-, and 17-year-old White and Black students: 1971-99

| Age | 1971 | 1975 | 1980 | 1984 | 1988 | 1990 | 1992 | 1994 | 1996 | 1999 |
|-----|------|------|------|------|------|------|------|------|------|------|
| 9 | 1.9 | 1.4 | 1.9 | 1.3 | 2.8 | 3.2 | 2.4 | 2.6 | 2.8 | 2.8 |
| 13 | 1.4 | 1.4 | 1.6 | 1.1 | 2.6 | 2.4 | 2.7 | 2.7 | 2.8 | 2.7 |
| 17 | 2.0 | 2.1 | 2.0 | 1.2 | 2.7 | 2.6 | 2.5 | 4.2 | 3.0 | 2.3 |

SOURCE: U.S. Department of Education, NCES. (2000). *NAEP 1999 Trends in Academic Progress: Three Decades of Student Performance* (NCES 2000-469) and National Assessment of Educational Progress (NAEP), 1999 Long-Term Trend Assessment, unpublished data produced by the Educational Testing Service.

Table S8b Standard errors for the change in average reading scale scores for 17-year-olds, by race and score quartile: 1971-88 and 1988-99

| Score quartile | Difference 1971-88 | Difference 1988-99 |
|----------------------|-----------------------|-----------------------|
| Black | | |
| Lower quartile | 2.8 | 4.0 |
| Middle two quartiles | 2.0 | 2.5 |
| Upper quartile | 3.2 | 3.8 |
| White | | |
| Lower quartile | 1.4 | 2.5 |
| Middle two quartiles | 1.0 | 1.0 |
| Upper quartile | 1.9 | 2.3 |

SOURCE: U.S. Department of Education, NCES. (2000). *NAEP 1999 Trends in Academic Progress: Three Decades of Student Performance* (NCES 2000-469) and National Assessment of Educational Progress (NAEP), 1999 Long-Term Trend Assessment, unpublished data produced by the Educational Testing Service.

International Comparisons of Reading Literacy

Table S9 Standard errors for the average reading literacy score of 15-year-olds, by country: 2000

| Country | Combined reading literacy score |
|-----------------------|---------------------------------|
| International average | 0.6 |
| Australia | 3.5 |
| Austria | 2.4 |
| Belgium | 3.6 |
| Brazil | 3.1 |
| Canada | 1.6 |
| Czech Republic | 2.4 |
| Denmark | 2.4 |
| Finland | 2.6 |
| France | 2.7 |
| Germany | 2.5 |
| Greece | 5.0 |
| Hungary | 4.0 |
| Iceland | 1.5 |
| Ireland | 3.2 |
| Italy | 2.9 |
| Japan | 5.2 |
| Korea, Republic of | 2.4 |
| Latvia | 5.3 |
| Liechtenstein | 4.1 |
| Luxembourg | 1.6 |
| Mexico | 3.3 |
| New Zealand | 2.8 |
| Norway | 2.8 |
| Poland | 4.5 |
| Portugal | 4.5 |
| Russian Federation | 4.2 |
| Spain | 2.7 |
| Sweden | 2.2 |
| Switzerland | 4.2 |
| United Kingdom | 2.6 |
| United States | 7.0 |

SOURCE: U.S. Department of Education, NCES. (2001). *Outcomes of Learning: Results from the 2000 Program for International Student Assessment of 15-Year-Olds in Reading, Mathematics, and Science Literacy* (NCES 2002-115).

Mathematics Performance of Students in Grades 4, 8, and 12

Table S10 Standard errors for the average mathematics scale scores for 4th-, 8th-, and 12th-graders: 1990, 1992, 1996, and 2000

| Average scale score | 1990 | 1992 | 1996 | 2000 |
|---------------------|------|------|------|------|
| Grade 4 | 0.9 | 0.7 | 0.9 | 0.9 |
| Grade 8 | 1.3 | 0.9 | 1.1 | 0.8 |
| Grade 12 | 1.1 | 0.9 | 1.0 | 0.9 |

SOURCE: U.S. Department of Education, NCES. (2001). *The Nation's Report Card: Mathematics 2000* (NCES 2001-517).

Poverty and Student Achievement

Table S11 Standard errors for the average scale score of public school students in 4th-grade mathematics, by the percentage of students in the school eligible for free or reduced-price lunch and whether the student was eligible for free or reduced-price lunch: 2000

| Characteristic | 0–10 percent | 11–25 percent | 26–50 percent | 51–75 percent | More than 75 percent |
|-----------------------------------------------------|--------------|---------------|---------------|---------------|----------------------|
| All students | 1.8 | 1.7 | 1.7 | 1.6 | 1.6 |
| Student is eligible for free or reduced-price lunch | | | | | |
| Eligible | (#) | 4.7 | 2.0 | 1.8 | 1.4 |
| Not eligible | 2.2 | 1.4 | 2.1 | 1.8 | 5.4 |

#Too few sample cases for a reliable estimate.

SOURCE: U.S. Department of Education, NCES. National Assessment of Educational Progress (NAEP), unpublished data provided by the Educational Testing Service, 2000.

Science Performance of Students in Grades 4, 8, and 12

Table S12 Standard errors for the percentage distribution of students performing at each science achievement level, by grade: 2000

| Achievement level | Grade 4 | Grade 8 | Grade 12 |
|-------------------|---------|---------|----------|
| Below Basic | 0.8 | 0.8 | 1.1 |
| Basic | 0.7 | 0.5 | 0.7 |
| Proficient | 0.7 | 0.7 | 0.9 |
| Advanced | 0.3 | 0.4 | 0.3 |

SOURCE: U.S. Department of Education, NCES. (forthcoming). *The Nations Report Card: Science 2000* (NCES 2002–451).

Education and Health

Table S14 Standard errors for the percentage of the population age 25 and above who reported being in excellent or very good health, by educational attainment and family income: 1997

| Family income | Less than high school | High school diploma or equivalent | Some college, including vocational/technical | Bachelor's degree or higher |
|--------------------|-----------------------|-----------------------------------|----------------------------------------------|-----------------------------|
| Less than \$20,000 | 1.2 | 0.3 | 0.4 | 1.4 |
| \$20,000–34,999 | 0.6 | 0.3 | 0.5 | 0.3 |
| \$35,000–54,999 | 0.8 | 0.4 | 0.4 | 0.6 |
| \$55,000–74,999 | 1.7 | 0.7 | 0.9 | 0.5 |
| \$75,000 or more | 3.2 | 0.9 | 0.3 | 0.5 |

SOURCE: U.S. Department of Health and Human Services, Centers for Disease Control, National Center for Health Statistics. National Health Interview Survey, 1997.

Civic Performance of U.S. Students in an International Perspective

Table S15 Standard errors for the average total civic knowledge and civic content and civic skills subscale performance of 9th-grade students, by score and country: 1999

| Country | Total civic knowledge | Subscales | |
|--------------------|-----------------------|---------------|--------------|
| | | Civic content | Civic skills |
| Australia | 0.8 | 0.7 | 0.8 |
| Belgium (French) | 0.9 | 0.9 | 1.0 |
| Bulgaria | 1.3 | 1.1 | 1.3 |
| Chile | 0.7 | 0.6 | 0.8 |
| Colombia | 0.9 | 0.8 | 1.2 |
| Cyprus | 0.5 | 0.5 | 0.5 |
| Czech Republic | 0.8 | 0.8 | 0.8 |
| Denmark | 0.5 | 0.5 | 0.5 |
| England | 0.6 | 0.6 | 0.7 |
| Estonia | 0.5 | 0.5 | 0.5 |
| Finland | 0.7 | 0.7 | 0.6 |
| Germany | 0.5 | 0.5 | 0.5 |
| Greece | 0.8 | 0.7 | 0.7 |
| Hong Kong (SAR) | 1.1 | 1.0 | 1.0 |
| Hungary | 0.6 | 0.6 | 0.7 |
| Italy | 0.8 | 0.8 | 0.7 |
| Latvia | 0.9 | 0.9 | 0.8 |
| Lithuania | 0.7 | 0.7 | 0.7 |
| Norway | 0.5 | 0.5 | 0.4 |
| Poland | 1.7 | 1.3 | 1.7 |
| Portugal | 0.7 | 0.7 | 0.7 |
| Romania | 0.9 | 1.0 | 0.7 |
| Russian Federation | 1.3 | 1.3 | 1.3 |
| Slovak Republic | 0.7 | 0.7 | 0.7 |
| Slovenia | 0.5 | 0.5 | 0.4 |
| Sweden | 0.8 | 0.8 | 0.7 |
| Switzerland | 0.8 | 0.8 | 0.8 |
| United States | 1.2 | 1.1 | 1.0 |

SOURCE: U.S. Department of Education, NCES. (2001). *What Democracy Means to Ninth-Graders: U.S. Results from the International IEA Civic Education Study* (NCES 2001-096).

Annual Earnings of Young Adults

Table S16a Standard errors for the ratio of median annual earnings of all wage and salary workers ages 25–34 whose highest education level was grades 9–11, some college, or a bachelor's degree or higher, compared with those with a high school diploma or GED, by sex: March 1971–2000

| Year | Grades 9–11 | | Some college | | Bachelor's degree or higher | |
|------|-------------|--------|--------------|--------|-----------------------------|--------|
| | Male | Female | Male | Female | Male | Female |
| 1971 | 0.02 | 0.05 | 0.02 | 0.08 | 0.02 | 0.08 |
| 1972 | 0.02 | 0.05 | 0.02 | 0.07 | 0.02 | 0.07 |
| 1973 | 0.02 | 0.05 | 0.02 | 0.06 | 0.02 | 0.06 |
| 1974 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 | 0.06 |
| 1975 | 0.03 | 0.03 | 0.02 | 0.05 | 0.02 | 0.06 |
| 1976 | 0.02 | 0.04 | 0.02 | 0.05 | 0.02 | 0.05 |
| 1977 | 0.03 | 0.05 | 0.02 | 0.04 | 0.02 | 0.05 |
| 1978 | 0.03 | 0.02 | 0.03 | 0.04 | 0.03 | 0.05 |
| 1979 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 |
| 1980 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 |
| 1981 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 | 0.04 |
| 1982 | 0.02 | 0.04 | 0.02 | 0.03 | 0.02 | 0.05 |
| 1983 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 |
| 1984 | 0.03 | 0.04 | 0.04 | 0.03 | 0.05 | 0.04 |
| 1985 | 0.02 | 0.04 | 0.02 | 0.03 | 0.02 | 0.04 |
| 1986 | 0.02 | 0.04 | 0.02 | 0.04 | 0.03 | 0.04 |
| 1987 | 0.03 | 0.04 | 0.02 | 0.03 | 0.03 | 0.04 |
| 1988 | 0.03 | 0.03 | 0.02 | 0.04 | 0.04 | 0.03 |
| 1989 | 0.03 | 0.05 | 0.02 | 0.03 | 0.03 | 0.04 |
| 1990 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.04 |
| 1991 | 0.03 | 0.05 | 0.03 | 0.03 | 0.02 | 0.04 |
| 1992 | 0.03 | 0.04 | 0.03 | 0.04 | 0.03 | 0.05 |
| 1993 | 0.03 | 0.03 | 0.02 | 0.04 | 0.03 | 0.06 |
| 1994 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.05 |
| 1995 | 0.02 | 0.03 | 0.03 | 0.04 | 0.05 | 0.06 |
| 1996 | 0.02 | 0.04 | 0.02 | 0.04 | 0.03 | 0.05 |
| 1997 | 0.02 | 0.05 | 0.02 | 0.04 | 0.03 | 0.05 |
| 1998 | 0.02 | 0.04 | 0.03 | 0.04 | 0.04 | 0.05 |
| 1999 | 0.03 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 |
| 2000 | 0.03 | 0.04 | 0.02 | 0.03 | 0.04 | 0.04 |

NOTE: The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey methodology for the CPS was changed and weights were adjusted. See *Supplemental Note 2* for further discussion. The Consumer Price Index (CPI) was used to adjust earnings into constant dollars; see *Supplemental Note 1*.

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1972–2001.

Annual Earnings of Young Adults

Table S16b Standard errors for the difference in average annual earnings (in constant 2000 dollars) for all wage and salary workers ages 25–34 between the highest and lowest quartiles, by sex and educational attainment: March 1971–2000

| Year | Male | | | | Female | | | |
|------|-------------|----------------------------|--------------|-----------------------------|-------------|----------------------------|--------------|-----------------------------|
| | Grades 9–11 | High school diploma or GED | Some college | Bachelor's degree or higher | Grades 9–11 | High school diploma or GED | Some college | Bachelor's degree or higher |
| 1971 | \$1,144 | \$668 | \$1,187 | \$1,488 | \$893 | \$549 | \$1,187 | \$1,595 |
| 1972 | 1,274 | 580 | 1,049 | 1,458 | 1,053 | 695 | 1,019 | 1,489 |
| 1973 | 1,275 | 707 | 1,487 | 1,197 | 920 | 605 | 958 | 1,301 |
| 1974 | 1,164 | 740 | 1,185 | 1,139 | 857 | 632 | 1,062 | 1,405 |
| 1975 | 1,158 | 698 | 1,124 | 822 | 1,012 | 483 | 794 | 1,176 |
| 1976 | 1,290 | 714 | 1,000 | 1,170 | 810 | 526 | 992 | 926 |
| 1977 | 1,587 | 670 | 828 | 912 | 834 | 590 | 964 | 914 |
| 1978 | 1,467 | 798 | 1,057 | 873 | 792 | 598 | 760 | 1,176 |
| 1979 | 1,479 | 661 | 875 | 792 | 915 | 443 | 811 | 1,062 |
| 1980 | 1,010 | 533 | 708 | 898 | 926 | 510 | 883 | 785 |
| 1981 | 1,104 | 472 | 848 | 834 | 784 | 453 | 695 | 994 |
| 1982 | 1,180 | 547 | 850 | 1,176 | 911 | 540 | 800 | 770 |
| 1983 | 952 | 654 | 847 | 1,022 | 920 | 545 | 621 | 965 |
| 1984 | 1,265 | 601 | 770 | 732 | 1,026 | 515 | 680 | 645 |
| 1985 | 1,436 | 554 | 976 | 942 | 888 | 478 | 856 | 830 |
| 1986 | 1,055 | 498 | 1,071 | 823 | 745 | 443 | 896 | 827 |
| 1987 | 1,072 | 500 | 983 | 1,115 | 807 | 394 | 721 | 742 |
| 1988 | 1,167 | 549 | 917 | 1,226 | 755 | 423 | 682 | 1,095 |
| 1989 | 927 | 615 | 688 | 804 | 696 | 391 | 656 | 996 |
| 1990 | 944 | 616 | 737 | 870 | 867 | 495 | 730 | 772 |
| 1991 | 854 | 709 | 760 | 1,325 | 616 | 481 | 795 | 908 |
| 1992 | 686 | 703 | 914 | 1,389 | 1,216 | 492 | 622 | 915 |
| 1993 | 758 | 779 | 828 | 897 | 1,044 | 495 | 744 | 736 |
| 1994 | 888 | 720 | 1,112 | 1,023 | 838 | 463 | 609 | 752 |
| 1995 | 915 | 521 | 843 | 1,485 | 917 | 502 | 556 | 654 |
| 1996 | 743 | 526 | 650 | 1,453 | 1,031 | 446 | 563 | 702 |
| 1997 | 943 | 500 | 774 | 1,982 | 910 | 495 | 483 | 1,248 |
| 1998 | 1,095 | 801 | 888 | 1,691 | 1,015 | 638 | 514 | 616 |
| 1999 | 869 | 471 | 503 | 1,568 | 802 | 741 | 838 | 855 |
| 2000 | 1,153 | 547 | 1,165 | 1,386 | 1,286 | 509 | 664 | 794 |

NOTE: The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey methodology for the CPS was changed and weights were adjusted. See *Supplemental Note 2* for further discussion. The Consumer Price Index (CPI) was used to adjust earnings into constant dollars; see *Supplemental Note 1*.

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1972–2001.

Students' Absence From School

Table S17 Standard errors for the percentage distributions of 8th-, 10th-, and 12th-grade students by how many school days they missed in a 4-week period from skipping school, and for reasons other than skipping or illness: 2000

| Students | Skipped school | | | Absent for other reasons | | |
|--------------|----------------|-------|----------------|--------------------------|-------|----------------|
| | 0 days | 1 day | 2 or more days | 0 days | 1 day | 2 or more days |
| 8th-graders | 0.5 | 0.3 | 0.3 | 0.7 | 0.6 | 0.5 |
| 10th-graders | 0.6 | 0.4 | 0.4 | 0.7 | 0.6 | 0.6 |
| 12th-graders | 0.8 | 0.6 | 0.6 | 0.8 | 0.7 | 0.7 |

SOURCE: University of Michigan, Institute for Social Research. Monitoring the Future 8th-, 10th-, and 12th-Grade Studies, 2000.

12th-Graders' Effort and Interest in School

Table S18 Standard errors for the percentage of 12th-graders who expressed various opinions about their school experience: 1983, 1990, 1995, and 2000

| Year | School work is often or always meaningful | Courses are quite or very interesting | School learning will be quite/very important in later life |
|------|-------------------------------------------|---------------------------------------|------------------------------------------------------------|
| 1983 | 1.2 | 1.1 | 1.2 |
| 1990 | 1.0 | 0.9 | 1.0 |
| 1995 | 0.9 | 0.9 | 1.0 |
| 2000 | 1.0 | 0.9 | 1.1 |

SOURCE: University of Michigan, Institute for Social Research. Monitoring the Future 12th-Grade Study: 1983, 1990, 1995, and 2000.

Status Dropout Rates, by Race/Ethnicity

Table S19 Standard errors for the dropout rates of 16- to 24-year olds, by race/ethnicity: October 1972–2000

| Year | Race/ethnicity (percent) | | | |
|------|--------------------------|-------|-------|----------|
| | Total | White | Black | Hispanic |
| 1972 | 0.3 | 0.3 | 1.1 | 2.2 |
| 1973 | 0.3 | 0.3 | 1.1 | 2.2 |
| 1974 | 0.3 | 0.3 | 1.1 | 2.1 |
| 1975 | 0.3 | 0.3 | 1.1 | 2.0 |
| 1976 | 0.3 | 0.3 | 1.0 | 2.0 |
| 1977 | 0.3 | 0.3 | 1.0 | 2.0 |
| 1978 | 0.3 | 0.3 | 1.0 | 2.0 |
| 1979 | 0.3 | 0.3 | 1.0 | 2.0 |
| 1980 | 0.3 | 0.3 | 1.0 | 1.9 |
| 1981 | 0.3 | 0.3 | 0.9 | 1.8 |
| 1982 | 0.3 | 0.3 | 1.0 | 1.9 |
| 1983 | 0.3 | 0.3 | 1.0 | 1.9 |
| 1984 | 0.3 | 0.3 | 0.9 | 1.9 |
| 1985 | 0.3 | 0.3 | 0.9 | 1.9 |
| 1986 | 0.3 | 0.3 | 0.9 | 1.9 |
| 1987 | 0.3 | 0.3 | 0.9 | 1.8 |
| 1988 | 0.3 | 0.3 | 1.0 | 2.3 |
| 1989 | 0.3 | 0.3 | 1.0 | 2.2 |
| 1990 | 0.3 | 0.3 | 0.9 | 1.9 |
| 1991 | 0.3 | 0.3 | 1.0 | 1.9 |
| 1992 | 0.3 | 0.3 | 1.0 | 1.9 |
| 1993 | 0.3 | 0.3 | 0.9 | 1.8 |
| 1994 | 0.3 | 0.3 | 0.8 | 1.2 |
| 1995 | 0.3 | 0.3 | 0.7 | 1.2 |
| 1996 | 0.3 | 0.3 | 0.8 | 1.1 |
| 1997 | 0.3 | 0.3 | 0.8 | 1.1 |
| 1998 | 0.3 | 0.3 | 0.8 | 1.1 |
| 2000 | 0.3 | 0.3 | 0.8 | 1.1 |

SOURCE: U.S. Department of Commerce, Bureau of the Census. October Current Population Surveys, 1972–2000.

Immediate Transition to College

Table S20 Standard errors for the immediate enrollment in postsecondary education, by race/ethnicity: October 1972–2000

| | Actual rates of enrollment | | |
|------|----------------------------|-------|----------|
| | White | Black | Hispanic |
| 1972 | 1.4 | 4.6 | 9.7 |
| 1973 | 1.4 | 4.3 | 9.0 |
| 1974 | 1.4 | 4.6 | 8.9 |
| 1975 | 1.4 | 4.7 | 8.4 |
| 1976 | 1.4 | 4.8 | 8.0 |
| 1977 | 1.4 | 4.7 | 8.0 |
| 1978 | 1.4 | 4.5 | 8.4 |
| 1979 | 1.4 | 4.7 | 7.9 |
| 1980 | 1.4 | 4.4 | 8.7 |
| 1981 | 1.4 | 4.4 | 8.2 |
| 1982 | 1.5 | 4.3 | 8.0 |
| 1983 | 1.6 | 4.3 | 9.0 |
| 1984 | 1.5 | 4.1 | 7.7 |
| 1985 | 1.6 | 4.8 | 9.8 |
| 1986 | 1.6 | 4.4 | 8.9 |
| 1987 | 1.7 | 4.8 | 8.3 |
| 1988 | 1.8 | 4.9 | 10.1 |
| 1989 | 1.9 | 5.3 | 10.5 |
| 1990 | 1.8 | 5.1 | 10.8 |
| 1991 | 1.8 | 5.2 | 9.6 |
| 1992 | 1.8 | 4.9 | 8.5 |
| 1993 | 1.9 | 5.3 | 8.2 |
| 1994 | 1.6 | 4.4 | 6.3 |
| 1995 | 1.6 | 4.2 | 4.9 |
| 1996 | 1.7 | 4.0 | 5.8 |
| 1997 | 1.6 | 4.1 | 4.5 |
| 1998 | 1.6 | 4.0 | 4.9 |
| 1999 | 1.6 | 3.9 | 4.8 |
| 2000 | 1.7 | 4.1 | 5.0 |

SOURCE: U.S. Department of Commerce, Bureau of the Census. October Current Population Surveys, 1972–2000.

College Qualifications and College Enrollment

Table S21 Standard errors for the percentage of college-qualified 1992 high school graduates who enrolled in postsecondary education by 1994, by type of institution and family income

| | Family income | | |
|---------------------------------------------------|--------------------|-----------------|------------------|
| | Less than \$25,000 | \$25,000–74,999 | \$75,000 or more |
| College-qualified, total | | | |
| Any 4-year | 1.8 | 1.3 | 1.5 |
| Public 2-year | 1.4 | 1.2 | 1.4 |
| Other less-than-4-year | 0.7 | 0.5 | 0.4 |
| College-qualified and took steps toward admission | | | |
| Any 4-year | 1.7 | 1.3 | 1.2 |
| Public 2-year | 1.6 | 1.2 | 1.0 |
| Other less-than-4-year | 0.6 | 0.3 | 0.3 |

SOURCE: U.S. Department of Education, NCES. National Education Longitudinal Study of 1988, "Third Follow-up" (NELS:1988/1994).

Enrollment of Students With Risk Factors

Table S22a Standard errors for the percentage of 1992 high school graduates with risk factors for low educational attainment, and percentage distribution according to type of institution in which first enrolled (by 1994)

| Risk factors | Percentage of all students | Type of institution first enrolled | | | |
|--------------------------------------------------------------------------------------------------------|----------------------------|------------------------------------|---------------|------------------------|----------------|
| | | 4-year | Public 2-year | Other less-than-4-year | Never enrolled |
| Number of risk factors | | | | | |
| No risk factors | 0.7 | 1.2 | 1.0 | 0.3 | 0.7 |
| Any risk factors | 0.7 | 0.9 | 1.0 | 0.5 | 0.9 |
| One risk factor | 0.6 | 1.3 | 1.1 | 0.7 | 0.9 |
| Two risk factors | 0.5 | 1.3 | 1.6 | 0.7 | 1.6 |
| Three or more risk factors | 0.4 | 1.3 | 2.9 | 1.1 | 2.6 |
| Risk factors | | | | | |
| Changed schools two or more times from 1 st to 8 th grade (except to next level) | 0.7 | 1.5 | 1.5 | 0.9 | 1.2 |
| Lowest SES quartile | 0.6 | 1.1 | 1.5 | 0.7 | 1.6 |
| Average grades C's or lower from 6 th to 8 th grade | 0.6 | 1.1 | 1.9 | 0.9 | 1.7 |
| Single-parent household in 8 th grade | 0.6 | 1.7 | 2.0 | 0.7 | 1.7 |
| One or more older siblings left high school | 0.4 | 1.6 | 1.7 | 1.0 | 2.0 |
| Held back one or more grades from 1 st to 8 th grade | 0.5 | 1.6 | 2.5 | 0.8 | 2.3 |

SOURCE: U.S. Department of Education, NCES. National Education Longitudinal Study of 1988, "Third Follow-up" (NELS:1988/1994).

Enrollment of Students With Risk Factors

Table S22b Standard errors for the percentage of 1992 high school graduates with risk factors who had enrolled in a 4-year college by 1994, by selected student characteristics

| | |
|-----------------------------------------------|-----|
| Student's 10 th -grade aspirations | |
| Less than a bachelor's degree | 0.8 |
| Bachelor's degree or higher | 1.2 |
| High school mathematics | |
| Non- or low-academic | 0.8 |
| Middle academic I | 1.0 |
| Middle academic II | 1.8 |
| Advanced academic | 1.8 |
| Academic preparation | |
| Not prepared | (#) |
| At least minimally prepared | 1.2 |
| Help with postsecondary application | |
| High school did not help | 1.1 |
| High school helped | 1.4 |
| Extracurricular activities: 1990 | |
| None | 1.5 |
| One | 1.2 |
| Two or more | 1.4 |
| Parents' highest educational level | |
| High school diploma or less | 1.1 |
| Some postsecondary education | 1.3 |
| Bachelor's degree or higher | 2.2 |
| School-related discussions with parents: 1992 | |
| Infrequent or none | 1.5 |
| Moderately frequent | 1.2 |
| Very frequent | 1.8 |
| Friends who plan to attend 4-year college | |
| None to some | 1.1 |
| Most | 1.4 |

#Too small to report.

SOURCE: U.S. Department of Education, NCES. National Education Longitudinal Study of 1988 Eighth Graders, "Third Follow-up" (NELS:1988/1994).

High School Academic Preparation and Postsecondary Progress

Table S23 Standard errors for the percentage of 1995–96 beginning postsecondary students who persisted toward a bachelor's degree, by the academic rigor of their secondary school curriculum and first-generation status: June 1998

| Curriculum | First-generation | At least one parent has bachelor's degree |
|---------------|------------------|-------------------------------------------|
| Total | 1.7 | 1.2 |
| Core or lower | 3.3 | 2.6 |
| Mid-level | 2.9 | 2.2 |
| Rigorous | 4.1 | 2.0 |

SOURCE: U.S. Department of Education, NCES. Beginning Postsecondary Students Longitudinal Study, "First Follow-up" (BPS:1996/1998).

Persistence of Students With Pell Grants

Table S24 Standard errors for the percentage of low- and middle-income 1995–96 beginning postsecondary students who persisted, by receipt of Pell Grant and type of institution: 1998

| Type of institution | Pell Grant recipient | Nonrecipient |
|-------------------------------|----------------------|--------------|
| Public 2-year | 4.1 | 2.8 |
| Public 4-year | 2.0 | 1.7 |
| Private not-for-profit 4-year | | |
| Total | 3.2 | 2.1 |
| Rigorous curriculum | 3.8 | 3.3 |

SOURCE: U.S. Department of Education, NCES. Beginning Postsecondary Students Longitudinal Study, "First Follow-up" (BPS:1996/1998).

Educational Attainment

Table S25 Standard errors for percentage of 25- to 29-year-olds who completed high school, at least some college, and a bachelor's degree or higher, by race/ethnicity: March 1971–2001

| March | High school completion | | | | At least some college | | | | Bachelor's degree or higher | | | |
|-------|------------------------|-------|-------|----------|-----------------------|-------|-------|----------|-----------------------------|-------|-------|----------|
| | All | White | Black | Hispanic | All | White | Black | Hispanic | All | White | Black | Hispanic |
| 1971 | 0.5 | 0.5 | 2.2 | 2.9 | 0.6 | 0.6 | 1.7 | 2.0 | 0.5 | 0.5 | 1.1 | 1.3 |
| 1972 | 0.5 | 0.5 | 2.1 | 2.9 | 0.6 | 0.6 | 1.8 | 2.1 | 0.5 | 0.5 | 1.2 | 1.1 |
| 1973 | 0.5 | 0.5 | 2.0 | 2.6 | 0.6 | 0.6 | 1.7 | 1.9 | 0.5 | 0.5 | 1.2 | 1.2 |
| 1974 | 0.4 | 0.4 | 1.9 | 2.5 | 0.6 | 0.6 | 1.8 | 2.0 | 0.5 | 0.5 | 1.1 | 1.1 |
| 1975 | 0.4 | 0.4 | 1.8 | 2.5 | 0.5 | 0.6 | 1.8 | 2.0 | 0.5 | 0.5 | 1.2 | 1.4 |
| 1976 | 0.4 | 0.4 | 1.7 | 2.5 | 0.5 | 0.6 | 1.8 | 2.0 | 0.5 | 0.5 | 1.3 | 1.3 |
| 1977 | 0.4 | 0.4 | 1.7 | 2.5 | 0.5 | 0.6 | 1.8 | 2.2 | 0.5 | 0.5 | 1.3 | 1.3 |
| 1978 | 0.4 | 0.4 | 1.6 | 2.3 | 0.5 | 0.6 | 1.8 | 2.0 | 0.5 | 0.5 | 1.2 | 1.4 |
| 1979 | 0.4 | 0.4 | 1.6 | 2.3 | 0.5 | 0.6 | 1.7 | 2.0 | 0.5 | 0.5 | 1.2 | 1.2 |
| 1980 | 0.4 | 0.4 | 1.5 | 2.2 | 0.5 | 0.6 | 1.7 | 1.8 | 0.4 | 0.5 | 1.1 | 1.2 |
| 1981 | 0.4 | 0.3 | 1.5 | 2.1 | 0.5 | 0.6 | 1.6 | 1.8 | 0.4 | 0.5 | 1.1 | 1.1 |
| 1982 | 0.4 | 0.4 | 1.4 | 2.1 | 0.5 | 0.6 | 1.7 | 1.9 | 0.4 | 0.5 | 1.2 | 1.3 |
| 1983 | 0.4 | 0.4 | 1.4 | 2.2 | 0.5 | 0.6 | 1.7 | 1.9 | 0.4 | 0.5 | 1.2 | 1.3 |
| 1984 | 0.4 | 0.4 | 1.4 | 2.1 | 0.5 | 0.6 | 1.6 | 1.9 | 0.4 | 0.5 | 1.1 | 1.3 |
| 1985 | 0.4 | 0.4 | 1.4 | 2.1 | 0.5 | 0.6 | 1.6 | 1.9 | 0.4 | 0.5 | 1.1 | 1.4 |
| 1986 | 0.4 | 0.4 | 1.3 | 2.0 | 0.5 | 0.6 | 1.7 | 1.8 | 0.4 | 0.5 | 1.1 | 1.2 |
| 1987 | 0.4 | 0.4 | 1.3 | 2.0 | 0.5 | 0.6 | 1.6 | 1.8 | 0.4 | 0.5 | 1.1 | 1.1 |
| 1988 | 0.4 | 0.4 | 1.5 | 2.3 | 0.6 | 0.6 | 1.8 | 2.1 | 0.5 | 0.6 | 1.2 | 1.5 |
| 1989 | 0.4 | 0.4 | 1.4 | 2.2 | 0.6 | 0.6 | 1.8 | 2.0 | 0.5 | 0.6 | 1.2 | 1.4 |
| 1990 | 0.4 | 0.4 | 1.4 | 2.0 | 0.5 | 0.6 | 1.7 | 1.7 | 0.5 | 0.6 | 1.2 | 1.1 |
| 1991 | 0.4 | 0.4 | 1.4 | 2.0 | 0.5 | 0.6 | 1.7 | 1.7 | 0.5 | 0.6 | 1.1 | 1.2 |
| 1992 | 0.4 | 0.4 | 1.4 | 2.0 | 0.6 | 0.7 | 1.7 | 1.8 | 0.5 | 0.6 | 1.1 | 1.2 |
| 1993 | 0.4 | 0.4 | 1.4 | 1.9 | 0.6 | 0.7 | 1.8 | 1.8 | 0.5 | 0.6 | 1.2 | 1.1 |
| 1994 | 0.4 | 0.4 | 1.1 | 1.2 | 0.5 | 0.6 | 1.5 | 1.2 | 0.4 | 0.6 | 1.1 | 0.7 |
| 1995 | 0.4 | 0.3 | 1.0 | 1.3 | 0.5 | 0.6 | 1.5 | 1.1 | 0.5 | 0.6 | 1.1 | 0.7 |
| 1996 | 0.4 | 0.4 | 1.1 | 1.3 | 0.5 | 0.6 | 1.6 | 1.2 | 0.5 | 0.6 | 1.1 | 0.8 |
| 1997 | 0.4 | 0.3 | 1.1 | 1.2 | 0.5 | 0.7 | 1.6 | 1.2 | 0.5 | 0.6 | 1.1 | 0.8 |
| 1998 | 0.4 | 0.3 | 1.0 | 1.2 | 0.6 | 0.7 | 1.6 | 1.2 | 0.5 | 0.6 | 1.2 | 0.8 |
| 1999 | 0.4 | 0.4 | 1.0 | 1.3 | 0.6 | 0.7 | 1.6 | 1.2 | 0.5 | 0.7 | 1.2 | 0.7 |
| 2000 | 0.4 | 0.3 | 1.1 | 1.2 | 0.6 | 0.7 | 1.7 | 1.2 | 0.5 | 0.7 | 1.3 | 0.7 |
| 2001 | 0.4 | 0.4 | 1.1 | 1.2 | 0.6 | 0.7 | 1.7 | 1.2 | 0.5 | 0.7 | 1.3 | 0.8 |

SOURCE: U.S. Department of Commerce, Bureau of the Census. March Current Population Surveys, 1971–2001.

Trends in Science and Mathematics Coursetaking

Table S26 Standard errors for the percentage of high school graduates who completed middle or advanced level science and mathematics courses, by level of highest course completed: Selected years 1982 to 1998

| | 1982 | 1987 | 1990 | 1992 | 1994 | 1998 |
|------------------------------------------------|------|------|------|------|------|------|
| Science | | | | | | |
| Advanced academic level | | | | | | |
| Chemistry II or physics II or advanced biology | 0.7 | 0.9 | 1.0 | 0.8 | 0.8 | 1.3 |
| Chemistry I and physics I | 0.4 | 0.8 | 0.6 | 0.6 | 0.7 | 1.1 |
| Chemistry I or physics I | 0.5 | 1.0 | 0.9 | 1.0 | 1.0 | 1.3 |
| Middle academic level | | | | | | |
| General biology | 1.0 | 1.4 | 1.4 | 1.0 | 1.1 | 1.1 |
| Mathematics | | | | | | |
| Advanced academic level | | | | | | |
| Level III | 0.5 | 0.6 | 0.5 | 0.8 | 0.6 | 0.9 |
| Level II | 0.4 | 0.5 | 0.7 | 0.6 | 0.7 | 1.1 |
| Level I | 0.6 | 1.2 | 0.9 | 0.8 | 1.0 | 1.2 |
| Middle academic level | | | | | | |
| Level II | 0.6 | 0.9 | 0.8 | 0.9 | 0.8 | 1.1 |
| Level I | 0.8 | 0.9 | 0.7 | 0.8 | 0.8 | 1.0 |

SOURCE: U.S. Department of Education, NCES. High School and Beyond Longitudinal Study of 1980 Sophomores, "First Follow-up" (HS&B:1980/1982); National Education Longitudinal Study of 1988, "High School Transcript Study" (NELS:1988/1992); and National Assessment of Educational Progress (NAEP) High School Transcript Studies, 1987, 1990, 1992, 1994, and 1998.

Coursetaking in Science and Mathematics

Table S27a Standard errors for the percentage of high school graduates who completed some advanced level coursework in science or mathematics, by race/ethnicity: 1998

| Race/ethnicity | Advanced academic science | Advanced academic mathematics |
|-------------------------------|---------------------------|-------------------------------|
| Total | 1.5 | 1.4 |
| White | 1.6 | 1.6 |
| Black | 2.2 | 2.1 |
| Hispanic | 3.3 | 2.1 |
| Asian/Pacific Islander | 2.0 | 2.7 |
| American Indian/Alaska Native | 4.6 | 4.0 |

SOURCE: U.S. Department of Education, NCES. National Assessment of Educational Progress (NAEP) High School Transcript Study, 1998.

Table S27b Standard errors for the percentage distribution of 1998 high school graduates according to highest level of science courses completed, by student and school characteristics: 1998

| Student and school characteristics | Low academic level | | | | Advanced academic level | | | | |
|------------------------------------|--------------------|--------------------------|----------------------------------------------|-------|-------------------------|--------------------------|---------------------------|------------------------------------------------|-------|
| | No science | Primary physical science | Secondary physical science and basic biology | Total | General biology | Chemistry I or physics I | Chemistry I and physics I | Chemistry II or physics II or advanced biology | Total |
| Total | 0.1 | 0.5 | 0.7 | 0.8 | 1.1 | 1.3 | 1.1 | 1.3 | 1.5 |
| Sex | | | | | | | | | |
| Male | 0.1 | 0.7 | 0.8 | 1.0 | 1.3 | 1.4 | 1.7 | 1.3 | 1.8 |
| Female | 0.1 | 0.4 | 0.6 | 0.8 | 1.3 | 1.3 | 1.0 | 1.3 | 1.6 |
| Race/ethnicity | | | | | | | | | |
| White | 0.1 | 0.6 | 0.6 | 0.8 | 1.3 | 1.4 | 1.2 | 1.5 | 1.6 |
| Black | 0.2 | 0.4 | 1.4 | 1.5 | 2.0 | 1.7 | 1.6 | 1.4 | 2.2 |
| Hispanic | 0.2 | 1.7 | 1.9 | 2.6 | 1.6 | 2.8 | 1.6 | 1.4 | 3.3 |
| Asian/Pacific Islander | (#) | 1.0 | 1.0 | 1.1 | 1.3 | 2.8 | 3.8 | 2.2 | 2.0 |
| American Indian/Alaska Native | (†) | 1.4 | 2.2 | 1.6 | 5.0 | 3.6 | 3.9 | 1.6 | 4.6 |
| Met Core New Basics | | | | | | | | | |
| Yes | (†) | (†) | 0.2 | 0.2 | 1.6 | 2.4 | 2.8 | 2.1 | 1.6 |
| No | 0.2 | 0.8 | 0.9 | 1.1 | 1.2 | 1.2 | 0.9 | 1.2 | 1.6 |
| Control of school | | | | | | | | | |
| Public | 0.1 | 0.6 | 0.7 | 0.9 | 1.0 | 1.2 | 0.9 | 1.3 | 1.4 |
| Private | (†) | 0.2 | 0.9 | 0.9 | 5.4 | 5.1 | 8.3 | 4.3 | 5.7 |
| School enrollment | | | | | | | | | |
| Less than 300 | 0.3 | 1.0 | 1.2 | 1.5 | 2.5 | 2.1 | 1.5 | 1.8 | 2.9 |
| 300–999 | 0.4 | 0.9 | 1.5 | 1.9 | 4.8 | 4.2 | 6.3 | 5.8 | 5.6 |
| 1,000 or more | 0.1 | 0.6 | 0.9 | 1.0 | 1.5 | 1.5 | 1.1 | 1.2 | 1.7 |

#Too small to report.

†Not applicable.

SOURCE: U.S. Department of Education, NCES. National Assessment of Educational Progress (NAEP) High School Transcript Study, 1998.

Coursetaking in Science and Mathematics

Table S27c Standard errors for the percentage distribution of 1998 high school graduates according to highest level of mathematics courses completed, by student and school characteristics: 1998

| Student and school characteristics | No mathematics | Non-academic | Low academic | Middle academic | | | Advanced academic | | | |
|------------------------------------|----------------|--------------|--------------|-----------------|------------|------------|-------------------|------------|------------|------------|
| | | | | Level I | Level II | Total | Level I | Level II | Level III | Total |
| Total | 0.1 | 0.4 | 0.4 | 1.0 | 1.1 | 1.3 | 1.2 | 1.1 | 0.9 | 1.4 |
| Sex | | | | | | | | | | |
| Male | 0.2 | 0.4 | 0.4 | 0.1 | 1.3 | 1.6 | 1.1 | 1.4 | 0.9 | 1.8 |
| Female | 0.1 | 0.4 | 0.4 | 1.0 | 1.2 | 1.4 | 1.4 | 1.1 | 1.0 | 1.4 |
| Race/ethnicity | | | | | | | | | | |
| White | 0.2 | 0.3 | 0.4 | 1.1 | 1.3 | 1.5 | 1.4 | 1.3 | 0.9 | 1.6 |
| Black | 0.2 | 0.8 | 0.9 | 1.7 | 1.7 | 2.1 | 2.0 | 0.9 | 1.7 | 2.1 |
| Hispanic | 0.2 | 1.2 | 1.0 | 1.3 | 1.9 | 2.1 | 1.0 | 1.2 | 1.2 | 2.1 |
| Asian/Pacific Islander | 0.1 | 0.7 | 0.6 | 1.8 | 1.7 | 2.1 | 1.2 | 1.5 | 3.4 | 2.7 |
| American Indian/Alaska Native | 0.7 | 2.3 | 1.7 | 3.2 | 3.5 | 3.9 | 1.9 | 3.6 | 2.2 | 4.0 |
| Met Core New Basics | | | | | | | | | | |
| Yes | 0.2 | 0.2 | 0.5 | 0.8 | 1.5 | 1.7 | 1.4 | 1.6 | 1.3 | 1.7 |
| No | 0.2 | 0.7 | 0.7 | 1.7 | 1.1 | 1.6 | 1.4 | 1.1 | 0.6 | 1.8 |
| Control of school | | | | | | | | | | |
| Public | 0.1 | 0.4 | 0.4 | 1.0 | 1.2 | 1.3 | 1.2 | 1.0 | 0.8 | 1.3 |
| Private | (†) | 0.3 | 0.3 | 3.4 | 4.0 | 6.2 | 3.7 | 5.4 | 4.9 | 6.5 |
| School enrollment | | | | | | | | | | |
| Less than 300 | 0.2 | 0.5 | 0.7 | 1.6 | 2.3 | 2.1 | 1.9 | 1.7 | 0.9 | 2.1 |
| 300–999 | 0.5 | 0.4 | 1.0 | 2.7 | 3.3 | 5.3 | 4.0 | 5.7 | 4.0 | 5.9 |
| 1,000 or more | 0.1 | 0.5 | 0.5 | 1.0 | 1.3 | 1.4 | 1.1 | 1.0 | 0.9 | 1.5 |

†Not applicable.

SOURCE: U.S. Department of Education, NCES, National Assessment of Educational Progress (NAEP) High School Transcript Study, 1998.

Parental Choice of Schools

Table S29 Standard errors for the percentage distribution of students in grades 1–12, by school type: 1993 and 1999

| School type | 1993 | 1999 |
|-----------------------------|------|------|
| Public, assigned | 0.4 | 0.4 |
| Public, chosen | 0.4 | 0.4 |
| Private, church-related | 0.3 | 0.3 |
| Private, not church-related | 0.1 | 0.1 |

SOURCE: U.S. Department of Education, NCES. National Household Education Surveys Program (NHES), "School Readiness" survey, 1993; "School Safety and Discipline" survey, 1993; "Parent and Family Involvement" survey, 1996; and "Parent Interview" survey, 1999.

Public Charter Schools

Table S30 Standard errors for the percentage of public charter schools, by community type, school level, and school origin status: 1999–2000

| Selected school characteristics | Percentage of schools |
|---------------------------------|-----------------------|
| Community type | |
| Central city | 0.8 |
| Urban fringe/large town | 0.7 |
| Rural/small town | 0.6 |
| School level | |
| Elementary | 0.6 |
| Combined | 0.6 |
| Secondary | 0.5 |
| School origin status | |
| Newly created | 0.6 |
| Pre-existing public | 0.4 |
| Pre-existing private | 0.4 |

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), "Public Charter School Survey," 1999–2000.

Academic Background of College Graduates Who Enter and Leave Teaching

Table S31 Standard errors for the percentage distribution of all 1992–93 college graduates and those who became teachers, in the top and bottom quartile of SAT or ACT scores

| Characteristics of graduates | Top quartile | Bottom quartile |
|---------------------------------------------------------------------------|--------------|-----------------|
| All graduates according to their status in the “teacher pipeline” by 1997 | | |
| Pipeline-eligible, but did not enter pipeline | 1.4 | 1.5 |
| Considered teaching or applied to teach | 1.2 | 1.4 |
| Prepared but had not taught | 0.6 | 0.8 |
| Had taught but not prepared | 0.5 | 0.4 |
| Prepared and had taught | 0.6 | 0.8 |
| Graduates who became teachers according to their teaching status in 1997 | | |
| Still teaching | 4.1 | 2.8 |
| No longer teaching | 4.1 | 2.8 |

SOURCE: U.S. Department of Education, NCES. Baccalaureate and Beyond Longitudinal Study, “Second Follow-up” (B&B:1993/1997).

Educational Background of Teachers

Table S32 Standard errors for the percentage distribution of secondary school teachers according to the type of undergraduate or graduate major, by control of school and years of teaching experience: 1999–2000

| Teacher and school characteristics | Total | Academic subject | Subject area specialization | General education | Other education |
|------------------------------------|-------------|------------------|-----------------------------|-------------------|-----------------|
| Total | 0.07 | 0.12 | 0.10 | 0.08 | 0.05 |
| Control | | | | | |
| Public | 0.07 | 0.12 | 0.10 | 0.08 | 0.06 |
| Private | 0.27 | 0.20 | 0.24 | 0.23 | 0.10 |
| Years of teaching experience | | | | | |
| 3 or fewer | 0.17 | 0.23 | 0.19 | 0.14 | 0.09 |
| 4–9 | 0.17 | 0.19 | 0.16 | 0.13 | 0.12 |
| 10–19 | 0.11 | 0.17 | 0.15 | 0.13 | 0.09 |
| 20 or more | 0.10 | 0.11 | 0.11 | 0.11 | 0.08 |

SOURCE: U.S. Department of Education, NCES. Schools and Staffing Survey (SASS), “Public, Public Charter, and Private School Teacher Surveys,” 1999–2000.

Participation in Professional Development

Table S33 Standard errors for the percentage of public elementary and secondary school teachers who participated in professional development during the past 12 months who believed the activity improved their classroom teaching “a lot,” by focus of activity and hours of participation in selected activities: 2000

| Focus of professional development activity | Hours of participation | |
|--------------------------------------------------------------------|------------------------|-------------|
| | 1–8 | More than 8 |
| State or district curriculum and performance standards | 0.9 | 1.3 |
| New methods of teaching (e.g., cooperative learning) | 1.0 | 1.9 |
| Addressing the needs of students with disabilities | 1.2 | 2.9 |
| Encouraging parental and community involvement | 0.7 | 2.7 |
| Classroom management, including student discipline | 1.1 | 2.8 |
| Addressing the needs of students from diverse cultural backgrounds | 1.0 | 2.9 |
| Addressing the needs of students with limited English proficiency | 1.2 | 3.5 |

SOURCE: U.S. Department of Education, NCES. (2001). *Teacher Preparation and Professional Development: 2000* (NCES 2001–088).

Student Victimization

Table S34 Standard errors for the percentage of students ages 12–18 who reported criminal victimization at school according to type of victimization, by their perception of conditions at school: 1999

| Perception of conditions at school | Response rate | Victimization | | |
|--------------------------------------------|---------------|---------------|------------|------------|
| | | Any | Violent | Property |
| Total | | 0.4 | 0.2 | 0.4 |
| Street gangs at school | | | | |
| Yes | 0.6 | 1.2 | 0.7 | 1.0 |
| No | 0.9 | 0.5 | 0.2 | 0.4 |
| Knew a student who brought a gun to school | | | | |
| Yes | 0.4 | 1.8 | 1.2 | 1.4 |
| No | 0.4 | 0.4 | 0.2 | 0.4 |
| Saw a student with a gun at school | | | | |
| Yes | 0.2 | 3.0 | 1.9 | 2.4 |
| No | 0.2 | 0.4 | 0.2 | 0.4 |

SOURCE: U.S. Department of Education, NCES. (forthcoming). *Are America's Schools Safe? Kids Speak Out* (NCES 2002–146).

Undergraduate Diversity

Table S35 Standard errors for the percentage of undergraduates with selected student characteristics: 1999–2000

| Selected characteristics | |
|-------------------------------|-----|
| Sex | |
| Male | 0.4 |
| Female | 0.4 |
| Race/ethnicity | |
| White | 0.8 |
| Black | 0.6 |
| Hispanic | 0.7 |
| Asian/Pacific Islander | 0.2 |
| American Indian/Alaska Native | 0.1 |
| Age | |
| 18 and under | 0.2 |
| 19–23 | 0.5 |
| 24–29 | 0.3 |
| 30–39 | 0.3 |
| 40 and above | 0.3 |

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

Perceived Impact of Work on Postsecondary Learning

Table S37 Standard errors for the percentage reporting various effects of work on their schooling, and the percentage who borrowed, of undergraduates who considered themselves primarily students but worked to help pay for school expenses, by average hours worked per week: 1999–2000

| Hours worked per week | Effects of working | | | | | |
|-----------------------|---------------------------|------------------------|---------------------------|----------------------|---------------------------|-------------------------------|
| | Limited number of classes | Limited class schedule | Limited access to library | Reduced class choice | Negative effect on grades | Borrowed to pay for education |
| Total | 0.6 | 0.6 | 0.5 | 0.6 | 0.5 | 0.6 |
| 1–15 | 0.7 | 0.8 | 0.6 | 0.6 | 0.7 | 0.9 |
| 16–20 | 1.0 | 1.1 | 1.0 | 1.1 | 1.0 | 1.1 |
| 21–34 | 1.1 | 1.0 | 0.8 | 1.0 | 1.0 | 1.0 |
| 35 or more | 1.0 | 0.9 | 1.2 | 1.2 | 1.1 | 1.0 |

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

Student Participation in Distance Education

Table S38 Standard errors for the percentage of undergraduates who participated in distance education classes at postsecondary institutions, and percentage of participants with various experiences with distance education: 1999–2000

| Distance education characteristics | Total | 2-year public | 4-year | | |
|-------------------------------------------------------------------------------------|-------|---------------|--------|--------|------------------------|
| | | | Total | Public | Private not-for-profit |
| Total percentage participating | 0.3 | 0.5 | 0.3 | 0.4 | 0.5 |
| Percentage of participants | | | | | |
| Type of distance education | | | | | |
| Live TV/audio | 1.5 | 2.6 | 1.7 | 2.0 | 3.0 |
| Prerecorded audio/TV | 1.7 | 3.1 | 1.7 | 2.0 | 2.8 |
| Internet | 1.6 | 2.9 | 1.6 | 2.0 | 2.5 |
| Entire program available through distance education | 1.2 | 2.0 | 1.7 | 2.1 | 2.8 |
| Level of satisfaction with distance education classes compared with regular classes | | | | | |
| Total | (t) | (t) | (t) | (t) | (t) |
| More satisfied | 1.1 | 1.8 | 1.5 | 1.9 | 2.1 |
| Equally satisfied | 1.4 | 2.5 | 1.6 | 2.0 | 2.6 |
| Less satisfied | 1.2 | 2.0 | 1.5 | 2.0 | 1.9 |

tNot applicable.

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

Status of Women and Minority Faculty

Table S39 Standard errors for the percentage of full-time instructional faculty and staff having selected characteristics and their average base salary (in constant 1998 dollars), by sex and race/ethnicity: Fall 1992 and 1998

| Faculty characteristics | Percentage of all full-time instructional faculty and staff who: | | | | | | | | Average base salary of full-time instructional faculty and staff | |
|-----------------------------------|------------------------------------------------------------------|------|----------------------------|------|------------|------|----------------------------------------------|------|------------------------------------------------------------------|-------|
| | Taught at public doctoral, research, and medical institutions | | Ranked as a full professor | | Had tenure | | Had a doctorate or first-professional degree | | | |
| | 1992 | 1998 | 1992 | 1998 | 1992 | 1998 | 1992 | 1998 | 1992 | 1998 |
| Total | 1.6 | 1.8 | 0.7 | 0.7 | 0.8 | 0.9 | 0.8 | 0.8 | \$780 | \$689 |
| Sex | | | | | | | | | | |
| Male | 1.7 | 2.0 | 0.9 | 0.9 | 0.9 | 1.0 | 0.8 | 0.9 | 1,037 | 835 |
| Female | 1.3 | 1.6 | 0.7 | 0.8 | 1.0 | 1.1 | 1.0 | 1.1 | 544 | 641 |
| Race/ethnicity | | | | | | | | | | |
| White | 1.6 | 1.8 | 0.8 | 0.8 | 0.9 | 0.9 | 0.8 | 0.9 | 842 | 728 |
| Black | 2.7 | 2.7 | 1.5 | 1.8 | 2.1 | 2.5 | 2.4 | 2.7 | 1,430 | 1,060 |
| Asian/Pacific Islander | 3.2 | 3.4 | 2.0 | 2.1 | 2.5 | 2.5 | 2.0 | 2.1 | 2,708 | 1,575 |
| Hispanic | 3.7 | 4.1 | 2.3 | 3.5 | 2.8 | 3.5 | 3.0 | 3.4 | 1,072 | 1,950 |
| American Indian/ Alaska Native | 4.8 | 7.0 | 4.0 | 4.7 | 6.3 | 5.5 | 6.6 | 6.6 | 13,795 | 3,009 |

SOURCE: U.S. Department of Education, NCES. National Study of Postsecondary Faculty (NSOPF:1993 and NSOPF:1999).

Parents' Attitudes Toward Schools

Table S40 Standard errors for the percentage of children in grades 3–12 whose parents were very satisfied with their schools, by family income: 1993 and 1999

| Household income | 1993 | 1999 |
|--------------------|------|------|
| \$10,000 or less | 1.9 | 2.2 |
| \$10,001–20,000 | 1.4 | 1.8 |
| \$20,001–35,000 | 1.4 | 1.1 |
| \$35,001–50,000 | 1.4 | 1.4 |
| More than \$50,000 | 0.9 | 1.0 |

SOURCE: U.S. Department of Education, NCES. National Household Education Surveys Program (NHES), "School Safety and Discipline" survey, 1993 and "Parent Interview" survey, 1999.

Net Price of College Attendance

Table S44 Standard errors for the average price of college attendance and student financial aid for dependent full-time, full-year undergraduates, by type of institution and family income: Academic year 1999–2000

| Type of institution and family income | Tuition/fees | Total price | Grants | Net price | Student loans | Student earnings |
|---------------------------------------|--------------|-------------|--------|-----------|---------------|------------------|
| Total | 121.6 | 136.7 | 74.0 | 111.6 | 40.5 | 88.9 |
| Public 4-year | 77.6 | 104.3 | 42.8 | 106.2 | 47.2 | 98.5 |
| Low income | 119.9 | 203.3 | 119.6 | 167.6 | 101.3 | 189.1 |
| Lower middle | 97.5 | 124.1 | 78.6 | 124.1 | 81.6 | 169.2 |
| Upper middle | 99.8 | 120.2 | 73.1 | 126.0 | 79.4 | 167.2 |
| High income | 110.5 | 123.8 | 63.9 | 129.5 | 63.2 | 163.4 |
| Private not-for-profit 4-year | 254.3 | 278.9 | 213.3 | 271.6 | 92.4 | 573.0 |
| Low income | 532.3 | 640.4 | 398.7 | 430.8 | 211.3 | 652.0 |
| Lower middle | 329.6 | 368.8 | 376.7 | 384.5 | 170.8 | 369.2 |
| Upper middle | 307.4 | 337.7 | 374.0 | 396.9 | 163.8 | 715.9 |
| High income | 248.0 | 255.5 | 195.2 | 300.7 | 117.7 | 1863.6 |
| Public 2-year | 59.9 | 97.3 | 64.2 | 130.4 | 54.2 | 288.7 |
| Low income | 82.5 | 143.8 | 126.0 | 220.9 | 62.6 | 367.1 |
| Lower middle | 85.2 | 145.1 | 70.5 | 169.9 | 157.9 | 514.3 |
| Upper middle | 82.4 | 157.7 | 70.8 | 178.6 | 46.4 | 364.4 |
| High income | 94.0 | 167.8 | 66.5 | 172.4 | 55.2 | 562.8 |

SOURCE: U.S. Department of Education, NCES. National Postsecondary Student Aid Study (NPSAS:2000).

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Glossary





Glossary

A

ACT Assessment: An examination administered by ACT, Inc. (formerly the American College Testing Program) and used to predict the facility with which an individual will progress in learning college-level subjects. The ACT differs from the SAT in that it assesses students' knowledge in the curricular areas of English, mathematics, reading, and science reasoning.

Advanced degree: Any formal degree attained after the bachelor's degree. Advanced degrees include master's degrees, doctoral degrees, and first-professional degrees.

Advanced Placement: The Advanced Placement (AP) program is an assessment program owned and conducted by the Educational Testing Service (ETS). The program includes a demanding academic course of study in college-level subjects such as physics, biology, calculus, and foreign languages, among others. A student who performs above a specified level on the assessment may be awarded college credit for certain courses upon entry to the institution.

Associate's degree: A degree granted for the successful completion of a subbaccalaureate program of studies, usually requiring at least 2 years (or the equivalent) of full-time college-level study. This includes degrees granted in a cooperative or work-study program.

B

Bachelor's degree: A degree granted for the successful completion of a baccalaureate program of studies, usually requiring at least 4 years (or the equivalent) of full-time college-level study. This includes degrees granted in a cooperative or work-study program.

Biological/life sciences: Biological/life sciences are instructional programs that describe the systematic study of living organisms. Life sciences include biology, biochemistry, biophysics, and zoology.

C

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

Center-based programs: Includes Head Start, nursery school, prekindergartens, day care centers, and preschools.

Certificate: An award granted for the successful completion of a subbaccalaureate program of studies, which usually requires less than 2 years of full-time postsecondary study.

Charter school: (See Public charter school.)

Civic education: Civic education in school takes place across a wide range of courses, such as social studies, civics, history, government, global studies, and geography. It is concerned, in part, with the meaning of democracy in a national context, describing a sense of national identity and issues of social cohesion and social diversity.

Combined schools: A combined school has one or more of grades K–6 and one or more of grades 9–12. For example, schools with grades K–12, 6–9, or 1–12 are classified as combined schools. Schools in which all students are ungraded (i.e., not classified by standard grade levels) are also classified as combined.

Constant dollars: Dollar amounts that have been adjusted by means of price and cost indexes to eliminate inflationary factors and allow direct comparison across years.

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Consumer Price Index (CPI): This price index measures the average change in the cost of a fixed-market basket of goods and services purchased by consumers.

Control of institutions: A classification of institutions of elementary/secondary or postsecondary education by whether the institution is operated by publicly elected or appointed officials (public control) or by privately elected or appointed officials and derives its major source of funds from private sources (private control).

Core New Basics curriculum: The most commonly implemented form of the New Basics curriculum, which includes 4 years of English and 3 years each of mathematics, science, and social studies, but not the one-half of year of computer science included in the New Basics curriculum. (See New Basics curriculum.)

Core subjects: *A Nation at Risk* recommended that all students seeking a high school diploma be required to enroll in a core curriculum called “New Basics.” The core subjects included in this plan are 4 units of English; 3 units each of science, social studies, and mathematics; and 0.5 units of computer science.

D

Dependent student: (See Financial dependency.)

Distance education: Instructional programs or courses in which the instructor and students need not be in the same physical place, particularly those relying on computers, audio, or video technology as the medium for delivery and sometimes for two-way interaction.

Dropout: The term is used to describe both the event of leaving school before graduating and the status of an individual who is not in

school and who is not a graduate. Transferring schools from a public to a private school, for example, is not regarded as a dropout event. A person who drops out of school may later return and graduate but is called a “dropout” at the time he or she left school. At the time the person returns to school, he or she is called a “stopout.” Measures to describe these often complicated behaviors include the event dropout rate (or the closely related school persistence rate), the status dropout rate, and the high school completion rate. (See Event dropout rate and Status dropout rate.)

E

Educational attainment: The highest grade of regular school attended and completed.

English: A group of instructional programs that describes the English language arts, including composition, creative writing, and the study of literature.

Enrollment: The total number of students registered in a given school unit at a given time, generally in the fall of a year.

Event dropout rate: Event rates calculated using the October CPS data for a certain year measure the proportion of students who dropped out between October of that year and October of the previous year. The event rate is determined by counting all persons in a certain age range (e.g., 15–24 years old) who were enrolled in high school in October of the previous year but had not completed high school and were not enrolled in grades 10–12 a year later. This count is then divided by the total number of persons in the age range who were enrolled the previous October to compute the rate. High school is completed when the person either earns a high school diploma or an alternative credential such as a GED.

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F

Financial dependency: Students are considered dependent for purposes of federal financial aid programs if they are (1) age 24 or older; (2) a veteran of the U.S. Armed Forces; (3) enrolled in a graduate or professional program (beyond a bachelor's degree); (4) married; (5) an orphan or ward of the court; or (6) have legal dependents, other than a spouse. If any of these conditions are met, the student is classified as independent for purposes of financial aid.

First-professional enrollment: The number of students enrolled in a professional school or program requiring at least 2 years of academic college work for entrance and a total of at least 6 years for a degree, including both previously required college work and the professional program itself. These programs include dentistry (D.D.S. or D.M.D.), medicine (M.D.), optometry (O.D.), osteopathic medicine (D.O.), pharmacy (D.Pharm.), podiatric medicine (D.P.M.), veterinary medicine (D.V.M.), chiropractic (D.C. or D.C.M.), law (J.D.), and theological professions (M.Div. or M.H.L.).

Foreign languages: A group of instructional programs that describes the structure and use of language that is common or indigenous to individuals of the same community or nation, the same geographical area, or the same cultural traditions. Programs cover such features as sound, literature, syntax, phonology, semantics, sentences, prose, and verse, as well as the development of skills and attitudes used in communicating and evaluating thoughts and feelings through oral and written language.

Free lunch eligibles: (See National School Lunch Program.)

Full-time enrollment: The number of students enrolled in higher education courses with a total credit load equal to at least 75 percent of the normal full-time course load.

G

GED certificate: (See High school equivalency certificate.)

General formula assistance: State revenues from general noncategorical state assistance programs such as foundation, minimum or basic formula support, principal apportionment, equalization, flat or block grants, and state public school fund distributions. It also includes state revenue dedicated from major state taxes, such as income and sales taxes.

General revenues: Noncategorical revenues that consist of all local revenues, state general formula assistance, and state payments on behalf of the local education agency for employee benefits.

Graduate enrollment: The number of students who hold the bachelor's or first-professional degree, or the equivalent, and who are working toward a master's or doctor's degree. These enrollment data measure those students who are registered at a particular institution during the fall. At some institutions, graduate enrollment also includes students who are in post baccalaureate classes, but not in degree programs.

Gross Domestic Product (GDP): Gross National Product (GNP) less net property income from abroad. Both GNP and GDP aggregate only the incomes of residents of a nation, corporate and individual, derived directly from the current production of goods and services by consumers and government, gross private domestic investment, and net exports of goods and services. The goods and services included are largely those brought

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for final use (excluding illegal transactions) in the market economy. A number of inclusions, however, represent imputed values, the most important of which is rental value of owner-occupied housing. GNP, in this broad context, measures the output attributable to the factors of production, labor, and property supplied by U.S. residents.

H

High school: A secondary school offering the final years of high school work necessary for graduation, usually including grades 10, 11, and 12 (in a 6-3-3 plan) or grades 9, 10, 11, and 12 (in a 6-2-4 plan).

High school completion: An individual has completed high school if he or she is between the ages of 18 and 24 and has completed a high school diploma or an equivalent credential, including a General Education Development (GED) credential.

High school diploma: A formal document regulated by the state certifying the successful completion of a prescribed secondary school program of studies. In some states or communities, high school diplomas are differentiated by type such as an academic diploma, a general diploma, or a vocational diploma.

High school equivalency certificate: A formal document certifying that an individual met the state requirements for high school graduation equivalency by obtaining satisfactory scores on an approved examination and by meeting other performance requirements (if any) set by a state education agency or other appropriate body. One particular version of this certificate is the GED. The GED (General Education Development test) is defined as a comprehensive test

used primarily to appraise the educational development of students who have not completed their formal high school education, and who may earn a high school equivalency certificate through achievement of satisfactory scores.

I

Income tax: Taxes levied on net income, that is, on gross income less certain deductions permitted by law. These taxes can be levied on individuals, corporations, or unincorporated businesses where the income is taxed distinctly from individual income.

Independent student: (See Financial dependency.)

International Baccalaureate (IB): A high school degree program internationally licensed by the International Baccalaureate Organization. The program placed a strong emphasis on the ideals of international understanding and responsible citizenship. The IBO (International Baccalaureate Organization) offers schools three programs: the Diploma Programme for students in the final two years of secondary school, the Middle Years Programme for students ages 11–16, and the Primary Years Programme for students ages 3–12. Additional information can be found at (www.ibo.org).

International Socioeconomic Index (ISEI): An index with a range from 0–90 used in the Program for International Student Assessment (PISA) to create a hierarchy of occupational status to equate the socioeconomic status of parents to student achievement.

K

Kindergarten: Includes transitional kindergarten, kindergarten, and pre-first-grade students.

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L

Local Education Agency (LEA): (See School district.)

M

Master's degree: A degree awarded for successful completion of a program generally requiring 1 or 2 years of full-time college-level study beyond the bachelor's degree. One type of master's degree, including the Master of Arts degree, or M.A., and the Master of Science degree, or M.S., is awarded in the liberal arts and sciences for advanced scholarship in a subject field or discipline and demonstrated ability to perform scholarly research. A second type of master's degree is awarded for the completion of a professionally oriented program, for example, an M.Ed. in education, an M.B.A. in business administration, an M.F.A. in fine arts, an M.M. in music, an M.S.W. in social work, and an M.P.A. in public administration. A third type of master's degree is awarded in professional fields for study beyond the first-professional degree, for example, the Master of Laws (LL.M.) and Master of Science in various medical specializations.

Metropolitan population: The population residing in Metropolitan Statistical Areas (MSAs). (See Metropolitan Statistical Area.)

Metropolitan Statistical Area (MSA): A large population nucleus and the nearby communities that have a high degree of economic and social integration with that nucleus. Each MSA consists of one or more entire counties (or county equivalents) that meet specified standards pertaining to population, commuting ties, and metropolitan character. In New England, towns and cities, rather than counties, are the basic units. MSAs are designated by the Office of

Management and Budget. An MSA includes a city and generally its entire urban area and the remainder of the county or counties in which the urban area is located. An MSA also includes such additional outlying counties that meet specified criteria relating to the metropolitan character and level of commuting of workers into the central city or counties. Specified criteria governing the definition of MSAs recognized before 1980 are published in *Standard Metropolitan Statistical Areas: 1975*, issued by the Office of Management and Budget. New MSAs were designated when 1980 and 1990 counts showed that they met one or both of the following criteria:

- (1) Included a city with population of at least 50,000 within their corporate limits; or
- (2) Included a Census Bureau-defined urbanized area (which must have a population of at least 50,000) and a total MSA population of at least 100,000 (or in New England, 75,000).

Minority: Any racial/ethnic group that is nonwhite and not Hispanic is considered minority.

N

National School Lunch Program: This program is a federally assisted meal program operated in public and private nonprofit schools and residential child care centers. To be eligible, a student must be from a household with an income at or below 185 percent of the poverty level for reduced-price lunch or at or below 130 percent of the poverty level for free lunch.

New Basics curriculum: A minimum curriculum recommended by the National Commission of Excellence in Education (NCEE) in 1983 to be completed by high school gradu-

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ates that consists of 4 years of English; 3 years each of mathematics, science, and social studies; and one-half year of computer science. College-bound high school graduates are also advised to complete 2 years of foreign language. (See Core New Basics curriculum.)

Nonresident alien: A person who is not a citizen of the United States and who is in this country on a temporary basis and does not have the right to remain indefinitely.

Nursery school: A separately organized and administered elementary school for groups of children during the year or years preceding kindergarten, which provides educational experiences under the direction of professionally qualified teachers.

O

Odds ratio: Odds is the ratio of success to failure in probability calculation. Odds ratio is the ratio of one odds to another.

P

Part-time enrollment: The number of students enrolled in higher education courses with a total credit load less than 75 percent of the normal full-time credit load.

Postsecondary education: The provision of formal instructional programs with a curriculum designed primarily for students who have completed the requirements for a high school diploma or its equivalent. This includes programs with an academic, vocational, and continuing professional education purpose and excludes vocational and adult basic education programs. (See also *Supplemental Note 9*.)

Praxis Core Battery Tests: A subgroup of the Praxis II Subject Assessments, the Core Battery consists of three Praxis II tests: the Test of General Knowledge, the Test of

Communication Skills, and the Test of Professional Knowledge. General Knowledge tests fundamental understanding of general principles known to the average well-educated person. Communication Skills tests the ability to retain and interpret spoken and written language and the ability to communicate effectively in standard written English. Professional Knowledge tests classroom management, evaluations, instruction, professional foundations, and professional functions. Many states require the candidate to take some or all of the three Core Battery tests for teacher certification.

Praxis II: A series of professional assessments for beginning teachers. The Praxis II National Teacher Exam (NTE) is designed to assess qualifications of prospective teachers. It is used by state education agencies in making licensing decisions. The Praxis II Subject Assessments measure knowledge of the subjects that candidates will teach, as well as general and subject-specific teaching skills and knowledge. A set of Core Battery tests, as well as Specialty area tests in more than 140 subject areas, are included in this group. Many states require some or all of the Praxis II elements for teacher certification.

Prekindergarten: (See Preprimary.)

Preprimary: Elementary education programs for children who are too young for first grade. Includes center-based programs and kindergarten.

Preschool: A beginning group or class enrolling children younger than 5 years of age and organized to provide educational experience under professionally qualified teachers in cooperation with parents during the year or years immediately preceding kindergarten (or prior to entry into elementary school when there is no kindergarten).

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Private school or institution: A school or institution that is controlled by an individual or agency other than a state, a subdivision of a state, or the federal government; that is usually not supported primarily by public funds; and that is not operated by publicly elected or appointed officials.

Property tax: The sum of money collected from a tax levied against the value of property.

Public charter school: A public charter school is a publicly funded school that, in accordance with an enabling statute, has been granted a charter exempting it from selected state or local rules and regulations. A public charter school may be a newly created school, or it may previously have been a public or private school. In return for funding and autonomy, the charter school must meet accountability standards. A school's charter is reviewed (typically every 3 to 5 years) and can be revoked if guidelines on curriculum and management are not followed or the standards are not met (U.S. Department of Education 2000e). (See Public school.)

Public school: A public school is defined as an institution that provides educational services for at least one of grades 1–12 (or comparable ungraded levels), has one or more teachers to give instruction, is located in one or more buildings, receives public funds as primary support, and is operated by an education or chartering agency. Public schools include regular, special education, vocational/technical, alternative, and public charter schools. They also include schools in juvenile detention centers, schools located on military bases and operated by the Department of Defense, and Bureau of Indian Affairs-funded schools operated by local public school districts.

Purchasing Power Parity (PPP) indices: Purchasing Power Parity (PPP) exchange rates, or indices, are the currency exchange rates that equalize the purchasing power of different currencies, meaning that when a given sum of money is converted into different currencies at the PPP exchange rates, it will buy the same basket of goods and services in all countries. PPP indices are the rates of currency conversion that eliminate the difference in price levels among countries. Thus, when expenditures on GDP for different countries are converted into a common currency by means of PPP indices, they are expressed at the same set of international prices, so that comparisons among countries reflect only differences in the volume of goods and services purchased.

R

Reading literacy: Understanding, using, and reflecting on written texts in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society.

Revenues: All funds received from external sources, net of refunds, and correcting transactions. Noncash transactions such as receipt of services, commodities, or other receipts "in kind" are excluded, as are funds received from the issuance of debt, liquidation of investments, and nonroutine sale of property.

Revenues from federal sources: Revenues from federal sources include direct grants-in-aid from the federal government; federal grants-in-aid through the state or an intermediate agency; and other revenue, in lieu of taxes that would have accrued had the tax base been subject to taxation.

Revenues from local sources: Revenues from local sources include revenues from a local

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education agency (LEA), including taxes levied or assessed by an LEA; revenues from a local government to the LEA; tuition received; transportation fees; earnings on investments from LEA holdings; net revenues from food services (gross receipts less gross expenditures); net revenues from student activities (gross receipts less gross expenditures); and other revenues (textbook sales, donations, property rentals).

Revenues from state sources: Revenues from a state government source include those that can be used without restriction; those for categorical purposes; and revenues in lieu of taxation.

S

Sales taxes: Tax imposed upon the sale and consumption of goods and services. It can be imposed either as a general tax on the retail price of all goods and services sold or as a tax on the sale of selected goods and services.

SAT Assessment: (See Scholastic Assessment Test.)

Scholastic Assessment Test (SAT): An examination administered by the Educational Testing Service (ETS) and used to predict the facility with which an individual will progress in learning college-level subjects. The SAT differs from the ACT in that it assesses students' aptitude in English, reading, and mathematics generally rather than on their curricular knowledge.

School district: An education agency at the local level that exists primarily to operate public schools or to contract for public school services. Synonyms are "local basic administrative unit" and "local education agency."

School lunch program: (See National School Lunch Program.)

Science: The body of related courses concerned with knowledge of the physical and biological world and with the processes of discovering and validating this knowledge.

Social studies: A group of instructional programs that describes the substantive portions of behavior, past and present activities, interactions, and organizations of people associated together for religious, benevolent, cultural, scientific, political, patriotic, or other purposes.

Socioeconomic status (SES): The SES quartile variable used for both High School and Beyond and the National Education Longitudinal Study of 1988 was built using parental education level, parental occupation, family income, and household items. Students were placed in quartiles based on their standardized composite score. By definition, one-quarter of each cohort will reside in the bottom SES quartile, even if education levels, income, and the number of persons in more prestigious occupations increase. The terms high, middle, and low SES refer to the upper, middle two, and lower quartiles of the weighted SES composite index distribution.

Standard deviation: The standard deviation measures the spread of a set of data around the mean of the data. In a normal distribution, approximately 68 percent of scores fall within plus or minus one standard deviation of the mean, and 95 percent fall within plus or minus two standard deviations of the mean.

Status dropout rate: The status dropout rate is a cumulative rate that estimates the proportion of young adults who are dropouts, regardless of when they dropped out. The numerator of the status dropout rate for any given year is the number of young adults ages 16–24 years who, as of October of that

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year, had not completed high school and were not currently enrolled. The denominator is the total number of 16- to 24-year-olds in October of that same year.

T

Title I grant program: The federal government provides grants to local education agencies to supplement state and local education funding based primarily on the number of children from low-income families in each local education agency. The program provides extra academic support and learning opportunities to help disadvantaged students catch up with their classmates or make significant academic progress.

Traditional public school: In this volume, traditional public schools are all public schools

that are not public charter schools or Bureau of Indian Affairs-funded schools operated by local public school districts. These traditional public schools include regular, special education, vocational/technical, and alternative schools. They also include schools in juvenile detention centers and schools located on military bases and operated by the Department of Defense. (See Public school and Public charter school.)

U

Undergraduate students: Students registered at a postsecondary education institution in a program leading to a baccalaureate degree or other formal award below the baccalaureate such as an associate degree.

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