



## Indicators of Children's Well-Being

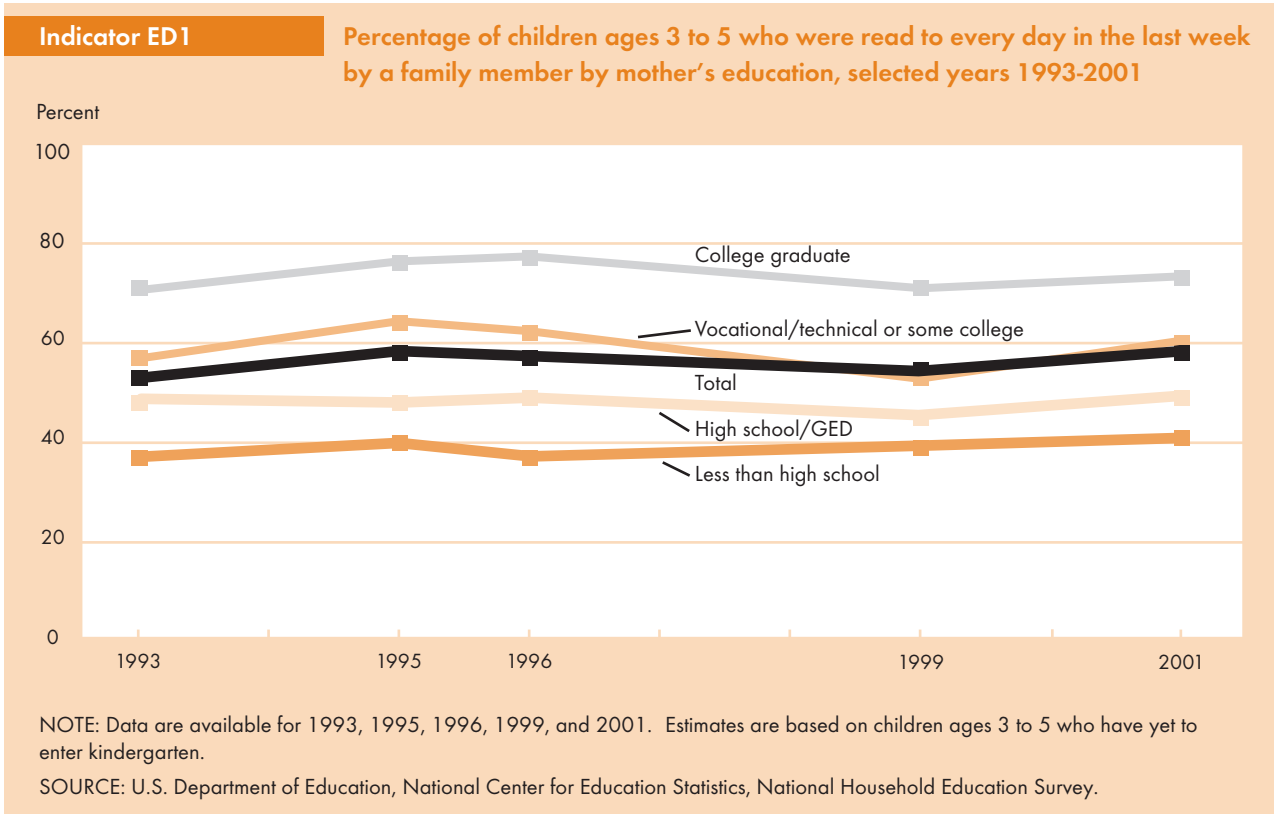
---

### Education Indicators

The education of children shapes their own personal development and life chances, as well as the economic and social progress of our Nation. This section presents key indicators of how well children are learning and progressing from early childhood through postsecondary school. Two indicators related to early childhood development are presented: family reading to young children and participation in early childhood care and education. Both measures are placeholders for a direct recurring assessment of what preschoolers know and can do, which is not yet available. Scores on national assessments of mathematics and reading for elementary, middle, and high school students are presented, followed by an indicator on advanced coursetaking. Completion rates for high school and college indicate the extent to which students have attained a basic education and are prepared for higher levels of education or the workforce. By contrast, the indicator on youth neither enrolled in school nor working tracks the extent to which youth are at risk of limiting their future prospects at a critical stage of their lives.

## Family Reading to Young Children

**R**eading to young children promotes language acquisition and correlates with literacy development and, later on, with achievement in reading comprehension and overall success in school.<sup>65</sup> The percentage of young children read aloud to daily by a family member is one indicator of how well young children are being prepared for school. Mother's education is consistently related to whether children are read to by a family member.



- In 2001, 58 percent of children ages 3 to 5 were read to daily by a family member, a higher rate than in 1993. The percentage has fluctuated between 53 and 58 percent since 1993.
- In 2001, 73 percent of children whose mothers were college graduates were read to every day. In comparison, daily reading occurred for 60 percent of children whose mothers had some postsecondary education, 49 percent of children whose mothers had completed high school but had no further education, and 42 percent of children whose mothers had not finished high school.
- White, non-Hispanic children were more likely to be read to every day than either black, non-Hispanic or Hispanic children. Sixty-four percent of white, non-Hispanic children, 48 percent of black, non-Hispanic children, and 42 percent of Hispanic children were read to every day.
- Children in families with incomes below the poverty line were less likely to be read to every day than were children in families with incomes at or above the poverty line. Forty-eight percent of children in families in poverty were read to every day in 2001, compared with 61 percent of children in families at or above the poverty line.
- Children living with two parents were more likely to be read to every day than were children who live with one or no parent. Sixty-one percent of children in two-parent households were read to every day in 2001, compared with 48 percent of children living with one or no parent.

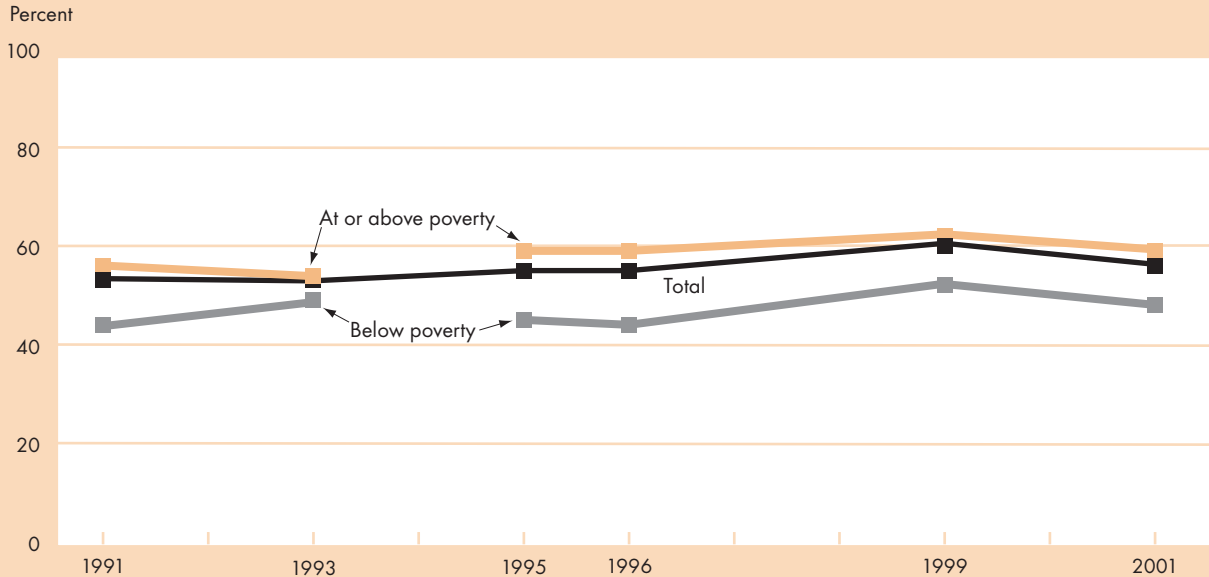
*Bullets contain references to data that can be found in Table ED1 on page 104. Endnotes begin on page 59.*

## Early Childhood Care and Education

**L**ike family reading, participation in an early childhood education program can provide preschoolers with skills and enrichment that can increase their chances of success in school. Studies have demonstrated that participation in high-quality early childhood education programs has short-term positive effects on IQ and achievement and long-term positive effects on low-income minority children's school completion.<sup>66</sup> Until an ongoing direct measure of preschoolers' cognitive, behavioral, and social skills is available for this monitoring report, this indirect indicator monitors the percentage of children who are exposed to a variety of early childhood education programs.

### Indicator ED2

### Percentage of children ages 3 to 5 who are enrolled in center-based early childhood care and education programs by poverty status, selected years 1991-2001



NOTE: Data are available for 1991, 1993, 1995, 1996, 1999, and 2001. Estimates are based on children who have yet to enter kindergarten. Poverty estimates for 1991 and 1993 are not comparable to those for later years.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey.

- In 2001, 56 percent of children ages 3 to 5 who had not yet entered kindergarten attended center-based early childhood care and education programs. These programs include day care centers, nursery schools, preschool programs, Head Start programs, and prekindergarten programs.
- Between 1991 and 2001, the percentage of children of this age attending early childhood programs varied between 53 and 60 percent.
- Children living in poverty were less likely to attend these programs than were those living in families at or above poverty in 2001 (47 percent compared with 59 percent).
- Children with more highly educated mothers are more likely to attend an early childhood program than other children. 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.
- White, non-Hispanic and black, non-Hispanic children are more likely than Hispanic children to attend an early childhood program. In 2001, 59 percent of white, non-Hispanic and 64 percent of black, non-Hispanic children ages 3 to 5 attended such programs, compared with 40 percent of Hispanic children.
- Children with employed mothers are more likely to participate in early childhood care and education programs than children of mothers not in the labor force.

*Bullets contain references to data that can be found in Table ED2 on page 105. Endnotes begin on page 59.*

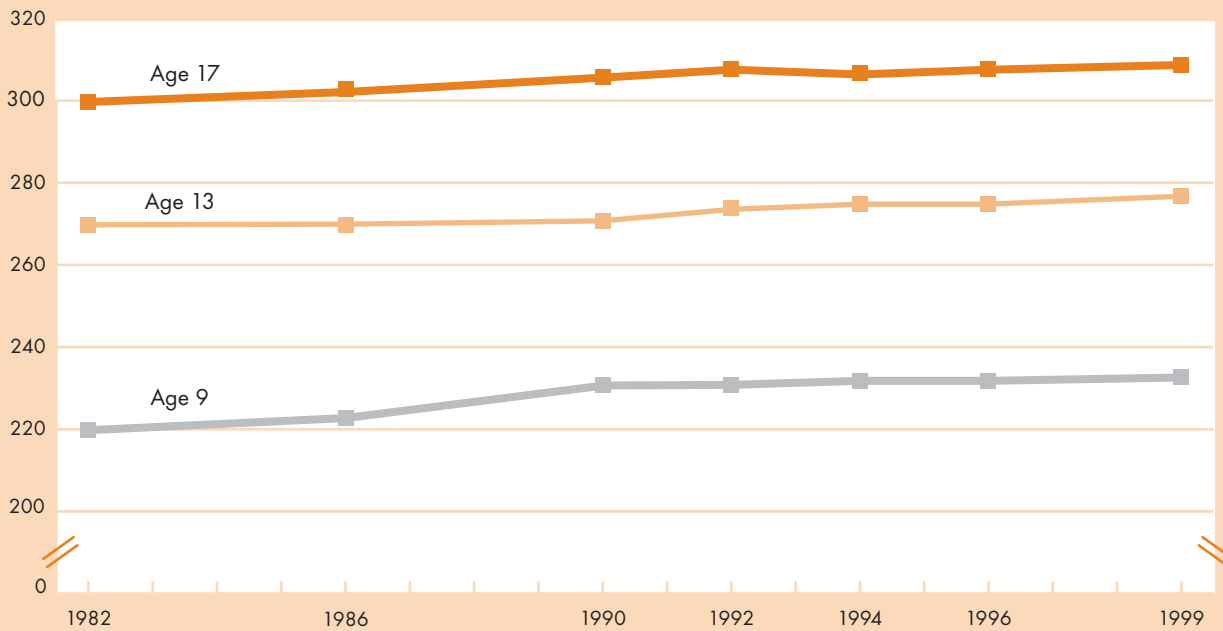
## Mathematics and Reading Achievement

The extent and content of students' knowledge, as well as their ability to think, learn, and communicate, affect their ability to succeed in the labor market as adults. On average, students with higher test scores will earn more and will be unemployed less often than students with lower test scores.<sup>67</sup> Mathematics and reading achievement test scores are important measures of students' skills in these subject areas, as well as good indicators of achievement overall in school. To assess progress in mathematics and reading, the National Assessment of Educational Progress measures national trends in the academic performance of students at ages 9, 13, and 17.

### Indicator ED3.A

### Average mathematics scale scores for students ages 9, 13, and 17, selected years 1982-99

Average score (on a scale from 0-500)



NOTE: Data are available for 1982, 1986, 1990, 1992, 1994, 1996, and 1999. The mathematics proficiency scale ranges from 0 to 500, with the following skill levels associated with the corresponding scale score:

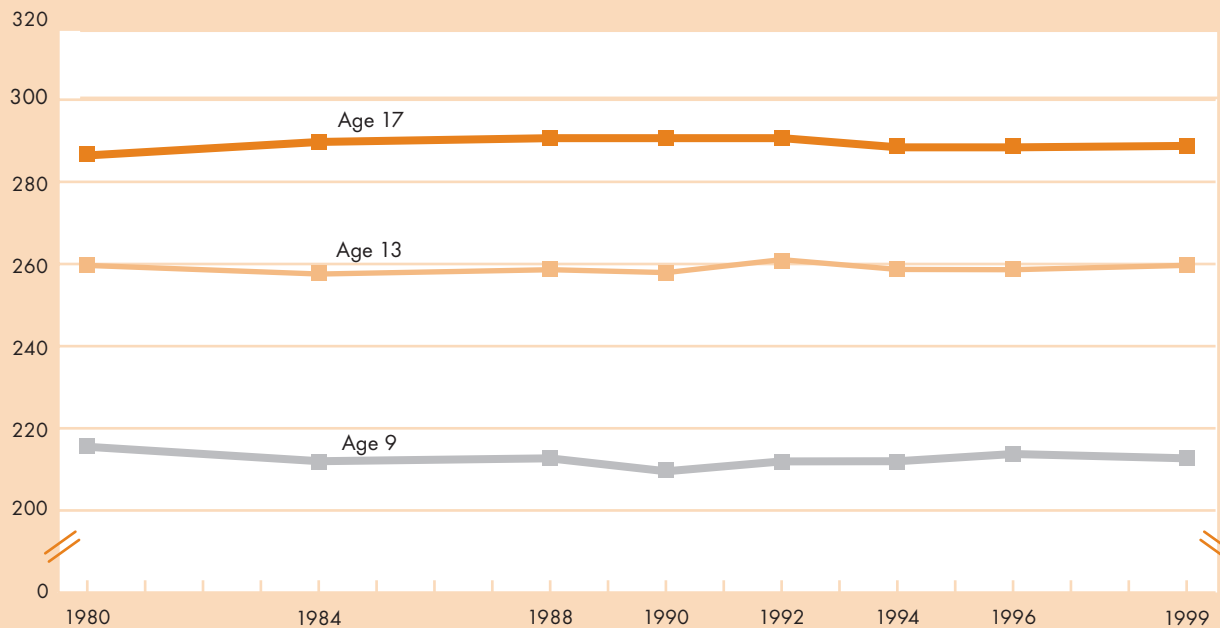
- Level 150: Simple arithmetic facts
- Level 200: Beginning skills and understandings
- Level 250: Numerical operations and beginning problem solving
- Level 300: Moderately complex procedures and reasoning
- Level 350: Multi-step problem solving and algebra

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

- Average mathematics scores increased for all age groups between 1982 and 1999.
- Scores in 1999 did not improve significantly over the last assessment in 1996 in reading or mathematics or in any of the three age groups tested—ages 9, 13, and 17.
- White, non-Hispanic students have had consistently higher reading and mathematics scores than either black, non-Hispanic or Hispanic students at ages 9, 13, and 17. The gaps between non-Hispanic whites and blacks and between non-Hispanic whites and Hispanics decreased in each subject in some age groups during the 1980s and 1990s, but widened for others. Larger reductions in these gaps occurred during the 1970s because of gains in the scores of black, non-Hispanic and Hispanic students.

**Indicator ED3.B****Average reading scale scores for students ages 9, 13, and 17, selected years 1980-99**

Average score (on a scale from 0-500)



NOTE: Data are available for 1980, 1984, 1988, 1990, 1992, 1994, 1996, and 1999. The reading proficiency scale ranges from 0 to 500, with the following skill levels associated with the corresponding scale score:

- Level 150: Simple, discrete reading tasks
- Level 200: Partial skills and understanding
- Level 250: Interrelates ideas and makes generalizations
- Level 300: Understands complicated information
- Level 350: Learns from specialized reading materials

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

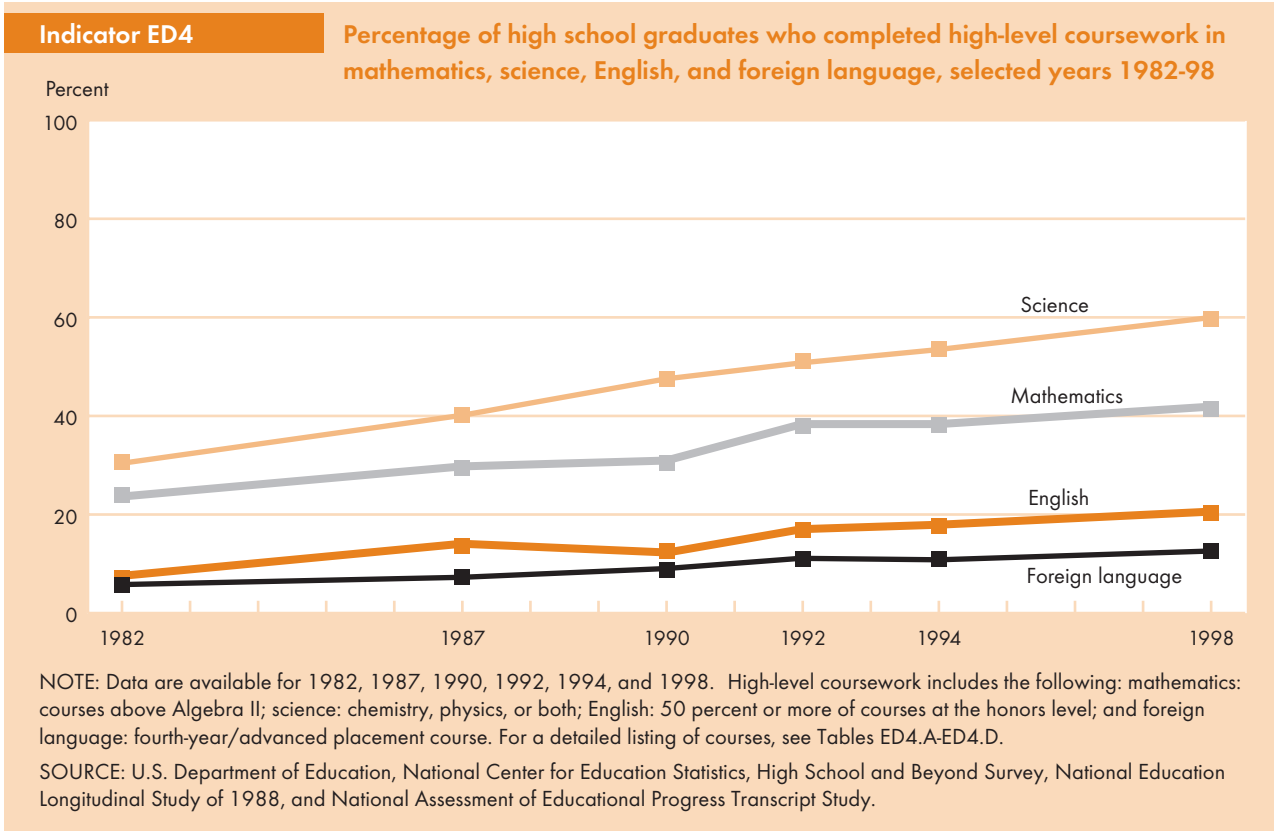
- Average reading scores have not improved among students ages 9, 13, or 17 since 1980.
- On average, students at ages 13 and 17 whose parents have completed more years of school have higher reading and mathematics scores than do their peers whose parents have had fewer years of education.<sup>68</sup>

- Girls had higher reading scores than boys at all three ages in 1999. In 1996, boys outperformed girls in mathematics at all three ages, but that gap was no longer significant in 1999. At ages 9 and 13, the differences between boys and girls were not significant for most years between 1980 and 1996.

*Bullets contain references to data that can be found in Tables ED3.A and ED3.B on pages 106 -107. Endnotes begin on page 59.*

## High School Academic Coursetaking

Since *A Nation at Risk* was published in 1983, school reforms have emphasized increasing the number of academic courses students take in high school. Research has shown a strong relationship between the level of difficulty of courses students take and their performance on assessments. For both college-bound and non-college-bound students, assessment scores increased more for students taking advanced courses than for students who did not take advanced courses.<sup>69</sup> Studies have also shown that students who take advanced coursework, such as Calculus, in high school are more likely to enroll in college and succeed beyond college.<sup>70</sup>



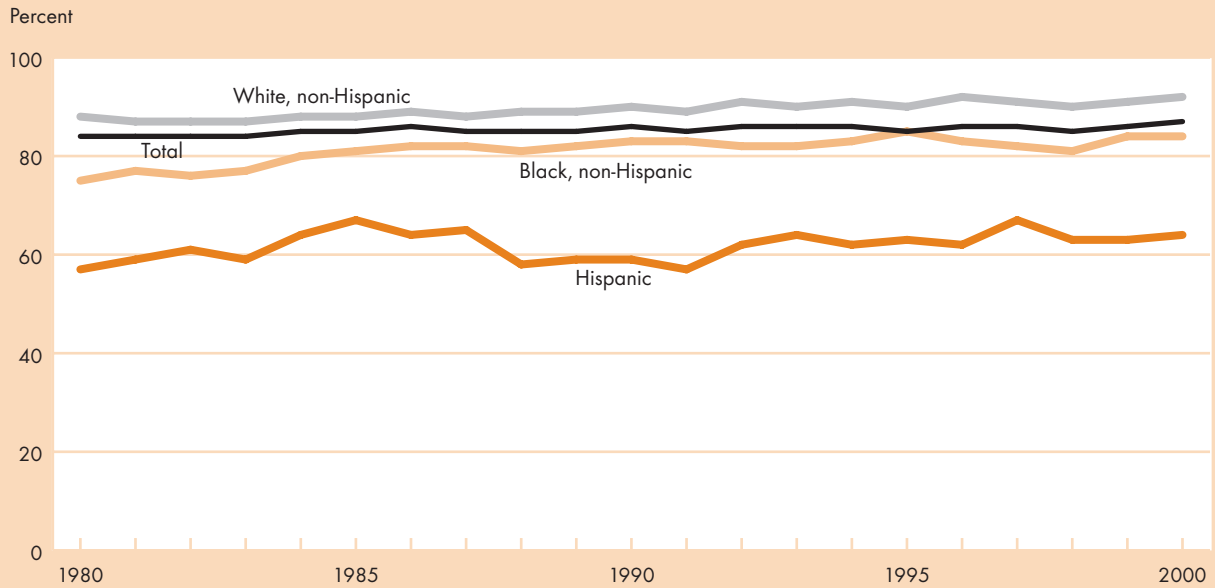
- Forty-one percent of 1998 high school graduates had taken at least one advanced mathematics course, (defined as a course above Algebra II), an increase from 26 percent of 1982 high school graduates. In addition, the percentage of 1998 high school graduates taking a nonacademic or low-level academic course as their most advanced course was 9 percent, compared with 24 percent for 1982 graduates.
  - In science, more than half (60 percent) of all 1998 high school graduates had taken Physics I and/or Chemistry I or both, nearly doubling the percentage of 1982 graduates who had taken one or both courses (31 percent). In addition, the percentage of students who had taken a physical science course lower than biology, chemistry, and physics as their most advanced course dropped from 27 percent of 1982 graduates to 9 percent of 1998 graduates.
  - Twenty percent of all 1998 high school graduates took the majority of their English courses at the honors level, an increase from 7 percent of 1982 high school graduates. Twenty nine percent of 1998 graduates took a mix of middle- and high-level English courses without taking any low-level courses, up from 13 percent in 1982.
  - More high school students are taking foreign language courses. Thirteen percent of 1998 high school graduates had taken a 4th-year or advanced placement course, compared with 6 percent of 1982 graduates. Nineteen percent of 1998 high school graduates did not take any foreign language course, compared with 46 percent of 1982 high school graduates.
- Bullets contain references to data that can be found in Tables ED4.A-ED4.D on pages 108 -109. Endnotes begin on page 59.*

## High School Completion

**A** high school diploma or its equivalent represents acquisition of the basic reading, writing, and mathematics skills a person needs to function in modern society. The percentage of young adults ages 18 to 24 with a high school diploma or an equivalent credential is a measure of the extent to which young adults have completed a basic prerequisite for many entry-level jobs as well as higher education.

### Indicator ED5

### Percentage of adults ages 18 to 24 who have completed high school by race and Hispanic origin, 1980-2000



NOTE: Percentages are based only on those not currently enrolled in high school or below. Prior to 1992, this indicator was measured as completing 4 or more years of high school rather than the actual attainment of a high school diploma or equivalent.

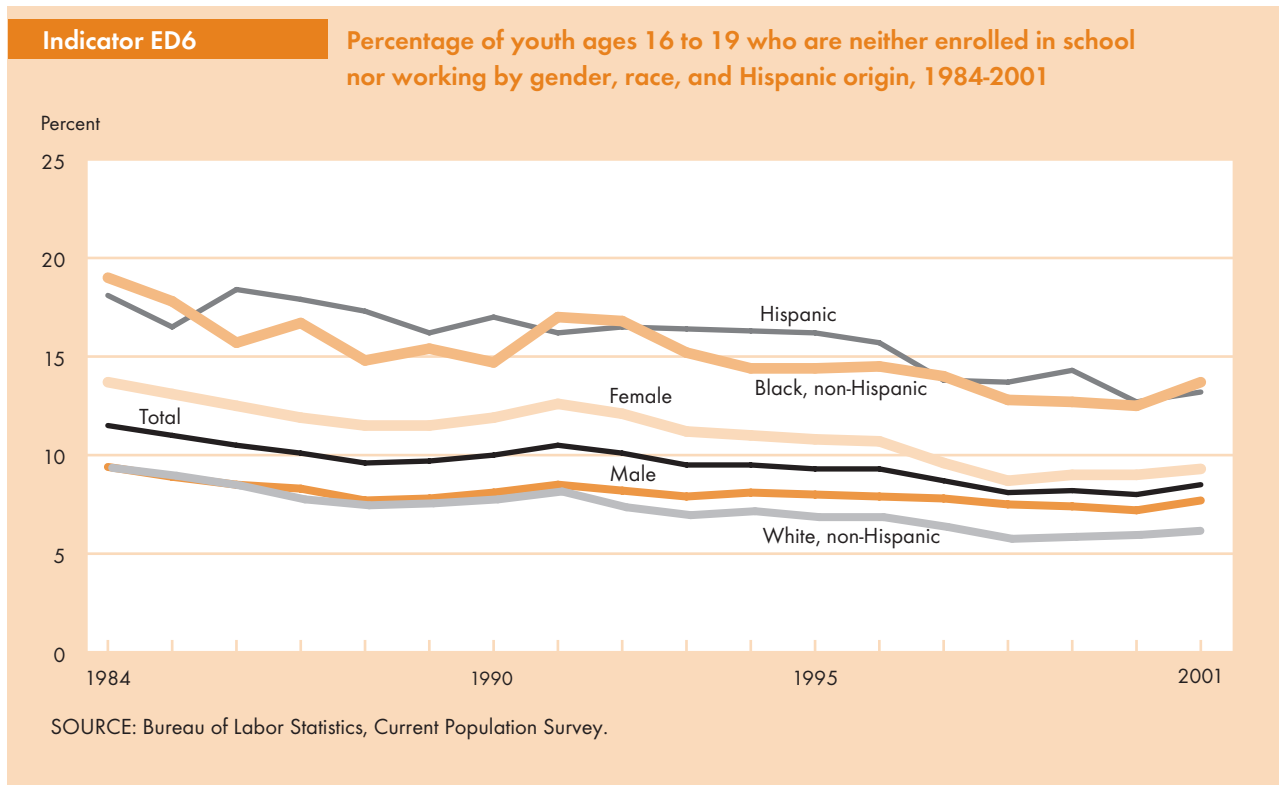
SOURCE: U.S. Census Bureau, October Current Population Survey. Tabulated by the U.S. Department of Education, National Center for Education Statistics.

- In 2000, 87 percent of young adults ages 18 to 24 had completed high school with a diploma or an alternative credential such as a General Education Development (GED) certificate. The high school completion rate has increased slightly since 1980, when it was 84 percent.
- The rate at which black, non-Hispanic youth completed high school increased markedly between 1980 and 1990, from 75 percent to 83 percent. It has fluctuated since then and was at 84 percent in 2000. Among white, non-Hispanics, the high school completion rate increased from 88 percent in 1980 to 92 percent in 2000.
- Hispanic youth have had a consistently lower high school completion rate than white, non-Hispanic and black, non-Hispanic youth. Since 1980, the high school completion rate for Hispanic youth has fluctuated between 57 and 67 percent and was at 64 percent in 2000.
- Most young adults complete high school by earning a regular high school diploma. Others complete high school by earning an alternative credential, such as a GED. Between 1990 and 1999, the diploma rate declined by 4 percentage points, falling from 81 percent to 77 percent. In comparison, the alternative credential rate increased by 5 percentage points, increasing from 4 to 9 percent.<sup>71</sup>

*Bullets contain references to data that can be found in Table ED5 on page 110. Endnotes begin on page 59.*

## Youth Neither Enrolled in School Nor Working

The transition from adolescence to adulthood is a critical period in each individual's life. Youth ages 16 to 19 who are neither in school nor working are detached from both of the core activities that usually occupy teenagers during this period. Detachment from school or the workforce, particularly if this situation lasts for several years, puts youth at increased risk of having lower earnings and a less stable employment history than their peers who stayed in school and/or secured jobs.<sup>72</sup> The percentage of youth who are not enrolled in school and not working is one measure of the proportion of young people who are at risk of limiting their future prospects.



- In an average week during the 2001 school year, about 9 percent of youth ages 16 to 19 were neither enrolled in school nor working.
- The proportion of youth neither enrolled nor working has been declining since 1991, when it was 11 percent. Most of the decline in the proportion of youth neither enrolled nor working occurred among young women. In 1991, 13 percent of young women were neither in school nor working. By 2001, this proportion had decreased to 9 percent. Nevertheless, young women continue to be more likely to be detached from these activities than young men.
- Black, non-Hispanic and Hispanic youth are considerably more likely to be detached from these activities than white, non-Hispanic youth. In 2001, 13 percent of Hispanic youth and 14 percent of black, non-Hispanic youth were neither in school nor working, compared with 6 percent of white, non-Hispanic youth.
- The proportion of black, non-Hispanic youth who are neither enrolled in school nor working has decreased from 19 percent in 1984 to 14 percent in 2001. The proportion of Hispanic youth who are neither enrolled in school nor working has also decreased, from 18 percent in 1984 to 13 percent in 2001.
- Older youth, ages 18 to 19, are three times as likely to be detached from these activities as youth ages 16 to 17. In 2001, 13 percent of youth ages 18 to 19 were neither enrolled in school nor working compared with 4 percent of youth ages 16 to 17.
- In contrast to the decrease in the percentage of youth who are neither enrolled in school nor working, the percentage of youth who are both enrolled and employed increased during this period. Between 1984 and 2001, the percentage of youth ages 16 to 19 who are both enrolled and employed increased from 25 to 28 percent.

*Bullets contain references to data that can be found in Tables ED6.A and ED6.B on pages 111-112. Endnotes begin on page 59.*

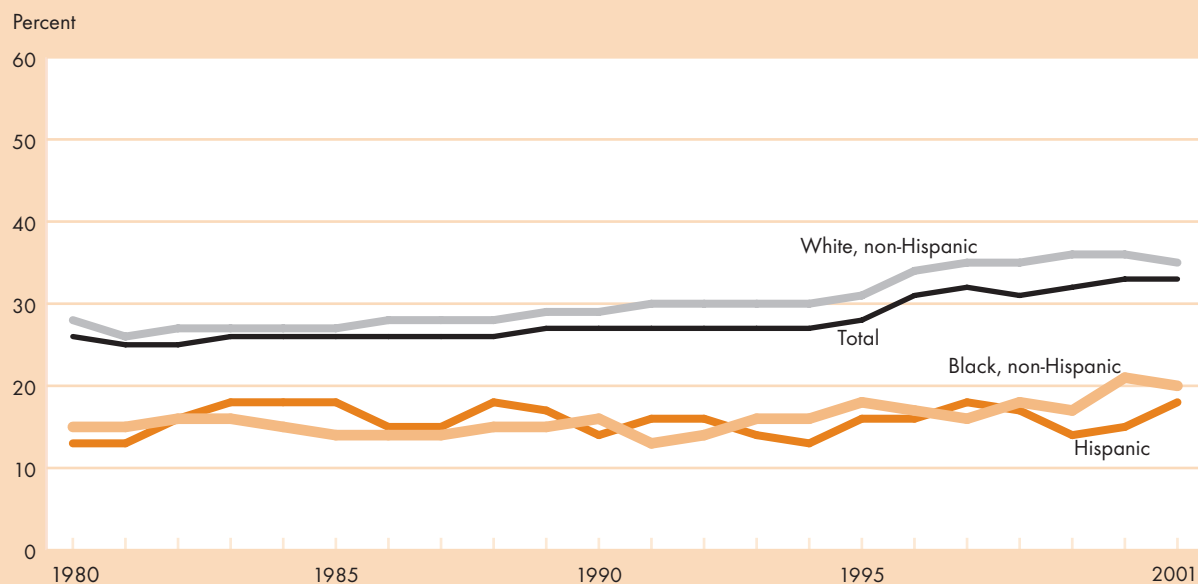


## Higher Education

**H**igher education, especially completion of a bachelor's or more advanced degree, generally enhances a person's employment prospects and increases his or her earning potential.<sup>73</sup> The percentage of high school graduates who have completed a bachelor's degree is one measure of the percentage of young people who have successfully applied for and persisted through a program of higher education.

### Indicator ED7

### Percentage of high school graduates ages 25 to 29 who have completed a bachelor's or more advanced degree by race and Hispanic origin, 1980-2001



NOTE: Prior to 1992, this indicator was measured as completing 4 or more years of college rather than the actual attainment of a bachelor's degree.

SOURCE: U.S. Census Bureau, March Current Population Survey. Tabulated by the U.S. Department of Education, National Center for Education Statistics.

- In 2001, 33 percent of high school graduates ages 25 to 29 had earned a bachelor's or a higher degree.
- This percentage increased between 1980 and 2001, from 26 to 33 percent; since 1996, the percentage has fluctuated between 31 and 33 percent.
- White, non-Hispanic high school graduates ages 25 to 29 were more likely than either black, non-Hispanic or Hispanic high school graduates in the same age group to have earned a bachelor's degree. In 2001, 35 percent of white, non-Hispanic, 20 percent of black, non-Hispanic and 18 percent of Hispanic high school graduates in this age group had earned a bachelor's degree or higher.
- The percentage of Hispanic high school graduates who earned bachelor's degrees or higher fluctuated between 13 percent in 1980 and 18 percent in 2001.
- The percentage of black, non-Hispanic high school graduates who earned a bachelor's degree increased from 14 percent in 1985 to 20 percent in 2001.
- In 2001, 10 percent of high school graduates ages 25 to 29 had earned an associate's degree but had not subsequently earned a bachelor's degree.

*Bullets contain references to data that can be found in Table ED7 on page 113. Endnotes begin on page 59.*

## Indicator Needed

---

### Education

Regular, periodic data collections are needed to collect information on young children's cognitive, social, and emotional development.

- *Early childhood development.* Although this report offers indicators of young children's exposure to reading and early childhood education, a regular source of data is needed to monitor specific social, intellectual, and emotional skills of preschoolers over time. One assessment of kindergartners' skills and knowledge was presented as a special feature in *America's Children, 2000*. Another assessment of kindergartners' skills may be available in 2008.