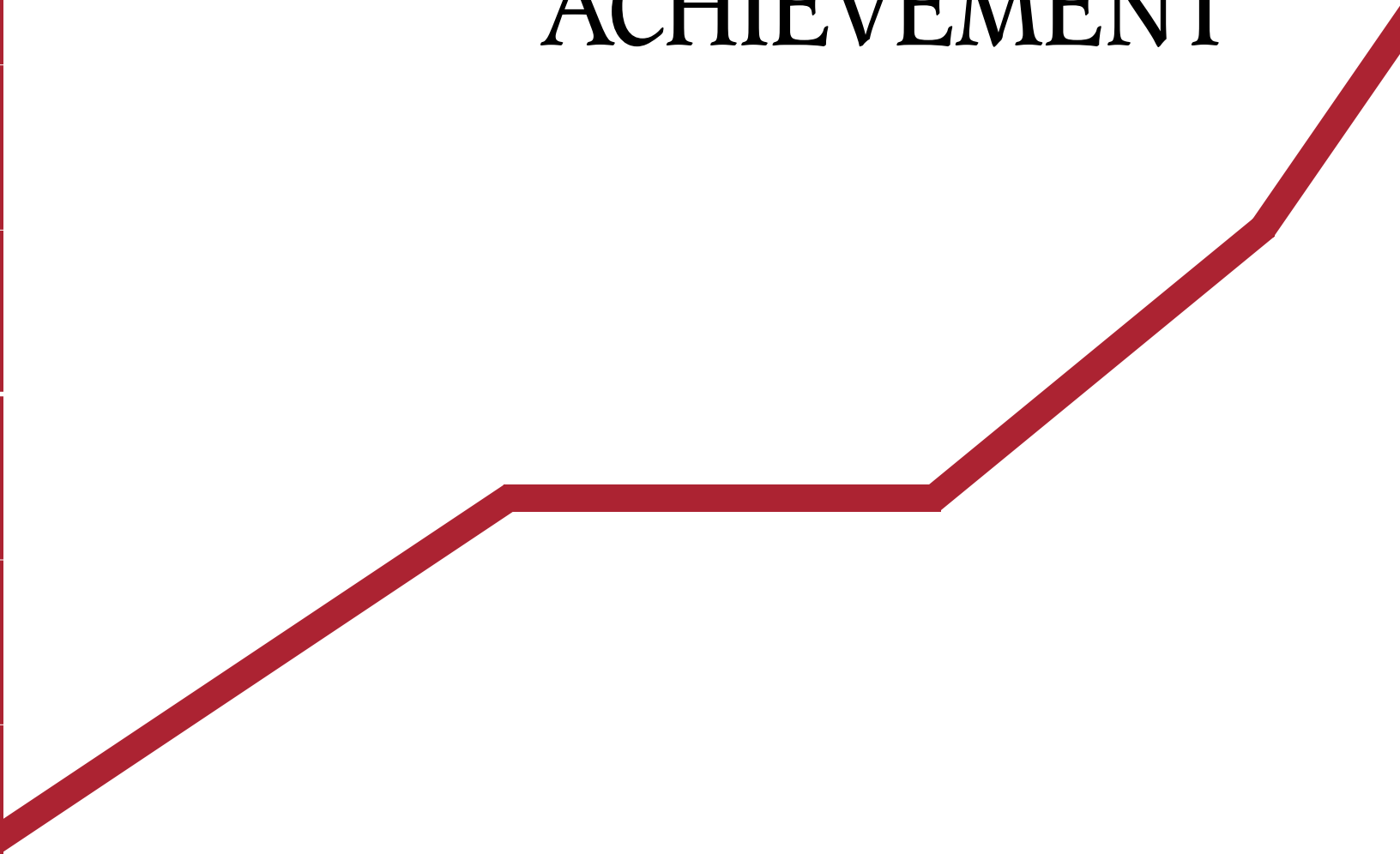


SECTION 5

EDUCATION & ACHIEVEMENT



*EA 1.1***EARLY CHILDHOOD PROGRAM ENROLLMENT OF 3–5 YEAR-OLDS**

Enrollment in an early childhood program is one indicator of readiness to learn that may be especially relevant for children from disadvantaged backgrounds for elementary school. One of the National Education Goals for the year 2000, adopted by Congress, is that “all children will have access to high-quality and developmentally appropriate preschool programs that help prepare children for school.”¹ Table EA 1.1 presents the percentage of 3- to 5-year-olds enrolled in center-based programs.² Center-based programs include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.

In 1996, over half (55 percent) of all 3- to 5-year old children were enrolled in a center-based program. This reflects a modest increase from 53 percent in 1991 and 1993 (see Table EA 1.1).

Differences by Race and Ethnicity.³ There are notable differences in early childhood program enrollment rates among racial and ethnic groups. For example, in 1996, only 39 percent of Hispanic children were enrolled in an early childhood program compared with 57 percent of whites and 65 percent of blacks. Throughout the 1990s, black 3- to 5-year olds have had the highest enrollments in early childhood programs, followed closely by whites, with much lower enrollments among Hispanics (see Figure EA 1.1.A).

Differences by Family Type. In 1996, center-based enrollments were lower among children in two parent families (54 percent) than among children with either one or no parents (58 percent) (see Figure EA 1.1.B).

Differences by Socioeconomic Status. There are substantial differences in center-based enrollments by socioeconomic status, including poverty status and maternal education (see Figure EA 1.1.B).

- In 1996, enrollments were much higher among families that were above the poverty threshold (60 percent) than those who were at or below the poverty threshold (43 percent).
- Enrollments also differ by maternal education, with the highest enrollment (73 percent) among children whose mothers were college graduates and the lowest (37 percent) among children whose mothers lacked a high school diploma.

These differences by socioeconomic status were apparent for all years reported (see Table EA 1.1).

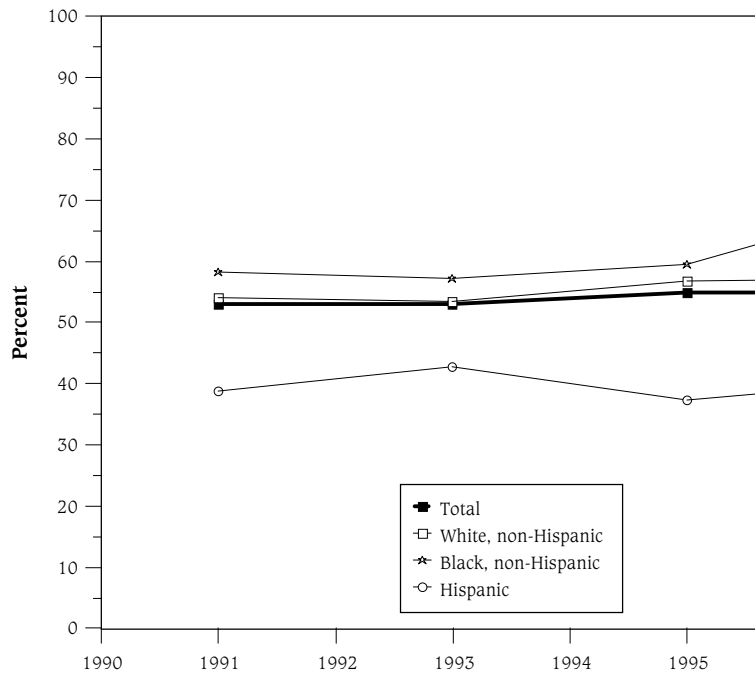
Differences by Mother’s Employment Status. There are also differences in enrollments by maternal employment status (see Figure EA 1.1.B). For example, in 1996, children whose mothers were working either full time (35 hours or more per week) or part time (less than 35 hours per week) had substantially higher enrollments than children whose mothers were not in the labor force. These differences have been apparent since 1991.

¹ *National Education Goals Panel (1994). The National Education Goals Report: Building a Nation of Learners 1994. Washington, DC: U.S. Government Printing Office.*

² *Estimates are based on children who have yet to enter kindergarten.*

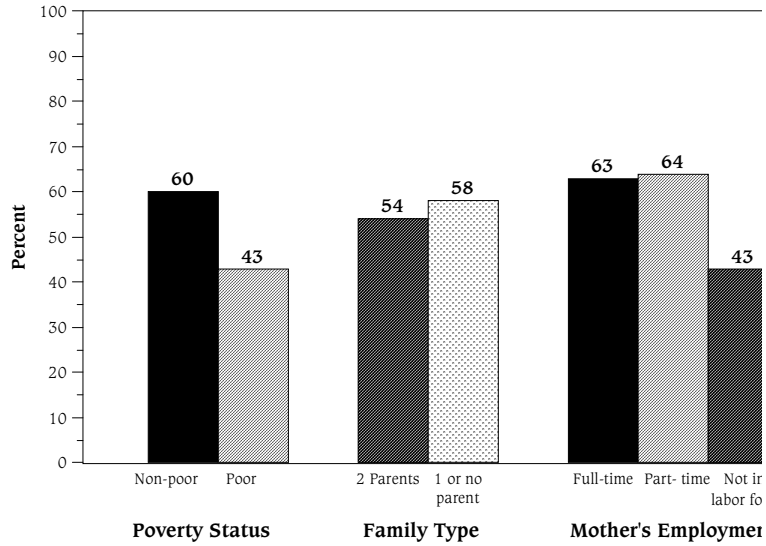
³ *Estimates for whites and blacks exclude Hispanics of those races.*

Figure EA 1.1.A
Percentage of 3- to 5-Year-Olds Enrolled in Center-Based Programs,
by Race/Ethnicity: 1991, 1993, 1995, and 1996



Source: U.S. Department of Education, National Center for Education Statistics, 1991, 1993, 1995, and 1996 National Household Education Survey.

Figure EA 1.1.B
Percentage of 3- to 5-Year-Olds Enrolled in Center-Based Programs, by Poverty Status, Family Type, and Mother's Employment Status: 1996



Source: U.S. Department of Education, National Center for Education Statistics, 1996 National Household Education Survey.

Table EA 1.1
Percentage of 3- to 5-Year-Olds^a Enrolled in Center-Based Programs,^b
by Child and Family Characteristics: 1991, 1993, 1995, and 1996

	<u>1991</u>	<u>1993</u>	<u>1995</u>	<u>1996</u>
TOTAL	53	53	55	55
Gender				
Male	53	53	55	55
Female	53	53	55	55
Race/Ethnicity				
White, non-Hispanic	54	54	57	57
Black, non-Hispanic	58	57	60	65
Hispanic	39	43	37	39
Poverty Status^c				
Non-poor	56	57	60	60
Poor	44	43	44	43
Family Type				
Two parents	54	52	55	54
One or no parent	50	54	56	58
Mother's Education^d				
Less than high school	32	33	35	37
High school/GED	46	43	48	49
Vocational/technical or some college	60	60	57	58
College graduate	72	73	75	73
Mother's Employment Status^d				
35 hours or more per week	59	61	60	63
Less than 35 hours per week	58	57	62	64
Not in labor force	45	44	47	43

Notes: ^aEstimates are based on children who have yet to enter kindergarten.
^bCenter-based programs include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.
^cChildren were classified as non-poor (living above the poverty threshold) or poor (living below the poverty threshold), based on family size and income. See Wright, D., Hausken, E.G., and West, J. (1994). *Family-Child Engagement in Literacy Activities: Changes in Participation Between 1991 and 1993*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
^dChildren without mothers in the home are not included in estimates dealing with mother's education or mother's employment status. A mother is defined as a biological mother, adoptive mother, stepmother, foster mother, or female guardian (e.g., grandmother) who resides in the home with the child.

Source: U.S. Department of Education, National Center for Education Statistics, 1991, 1993, 1995, and 1996, National Household Education Survey.

EA 1.2

GRADE RETENTION: PERCENTAGE OF CURRENT SECOND GRADERS WHO WERE RETAINED IN KINDERGARTEN AND/OR FIRST GRADE

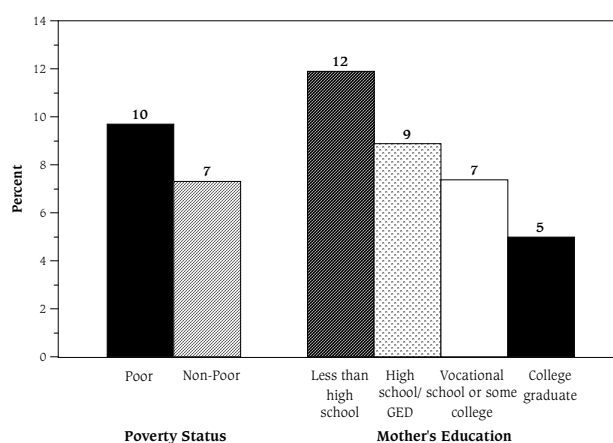
Children's early primary school experiences are associated with their adjustment to school and their later school success. Grade retention (repeating a grade) at an early age may indicate that a child has started school without adequate preparation and may continue to experience school problems in subsequent years. It may also measure the degree to which schools are able to respond to children from a variety of backgrounds.⁴

Table EA 1.2 presents data on the percentage of second grade students who were retained in kindergarten and/or first grade, as reported by their parents. Estimates are presented for 1991, 1993, and 1995. These data indicate that 11 percent of second grade children in 1991 had repeated kindergarten and/or first grade and 8 percent in 1993 and 1995 had repeated either or both of these grades.

Differences by Gender. Males were more likely than females to have repeated kindergarten and/or first grade. For example, in 1995, 11 percent of male second graders had repeated a grade, in comparison with only 5 percent of females (see Table EA 1.2).

Differences by Race and Ethnicity.⁵ In 1995, black and Hispanic second graders were more likely than their white peers to have repeated kindergarten and/or first grade (see Table EA 1.2). Twelve percent of black children and 10 percent of Hispanic children had repeated a grade, compared with 7 percent of white children. Rates declined for each race and ethnic group between 1991 and 1995, but especially among Hispanic children, for whom rates dropped by almost half, from 18 percent to 10 percent.

Figure EA 1.2
Percentage of Second Graders Who Were Retained in Kindergarten and/or First Grade, by Poverty Status and Mother's Education: 1995



Source: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey of 1995.

⁴ Alexander, K.L., Entwisle, D.R., & Dauber, S.L. (1994). *On the Success of Failure: a Reassessment of the Effects of Retention in the Primary Grades*. New York: Cambridge University Press.

⁵ Estimates for whites and blacks exclude Hispanics of those races.

Differences by Socioeconomic Status. Grade repetition differs by family socioeconomic status, measured by poverty status and maternal education levels (see Figure EA 1.2). In 1995, 10 percent of children in poor families (at or below the poverty threshold) had repeated a grade, in comparison with 7 percent of second graders living in nonpoor families (above the poverty threshold). Grade repetition varies by maternal education, with the highest percentage of grade repetition in 1995 among children whose mothers did not complete high school (12 percent) and the lowest percentage among children whose mothers were college graduates (5 percent). Rates of grade repetition among children whose mothers did not complete high school declined substantially between 1991 and 1995, from 21 percent to 12 percent.

Table EA 1.2
Percentage of Second Graders Who Were Retained in Kindergarten and/or First Grade, by Child and Family Characteristics: 1991, 1993, and 1995

	1991	1993	1995
TOTAL	11	8	8
Gender			
Male	13	10	11
Female	9	7	5
Race/Ethnicity			
White non-Hispanic	9	7	7
Black non-Hispanic	15	12	12
Hispanic	18	11	10
Poverty Status^a			
Non-poor	9	8	7
Poor	18	10	10
Family Type			
Two parents	10	7	8
One or no parent	14	11	9
Mother's Education^b			
Less than high school	21	15	12
High school/GED	12	9	9
Vocational/technical or some college	9	6	7
College graduate	4	5	5
Mother's Employment Status^b			
35 hours or more per week	12	8	9
Less than 35 hours per week	8	8	6
Not in labor force	11	9	8

Note: ^aChildren were classified as non-poor (living above the poverty threshold) or poor (living below the poverty threshold), based on family size and income. See Wright, D., Hausken, E.G., and West, J. (1994). *Family-Child Engagement in Literacy Activities: Changes in Participation Between 1991 and 1993*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

^bChildren without mothers in the home are not included in estimates dealing with mother's education or mother's employment status. A mother is defined as a biological mother, adoptive mother, stepmother, foster mother, or female guardian (e.g., grandmother) who resides in the home with the child.

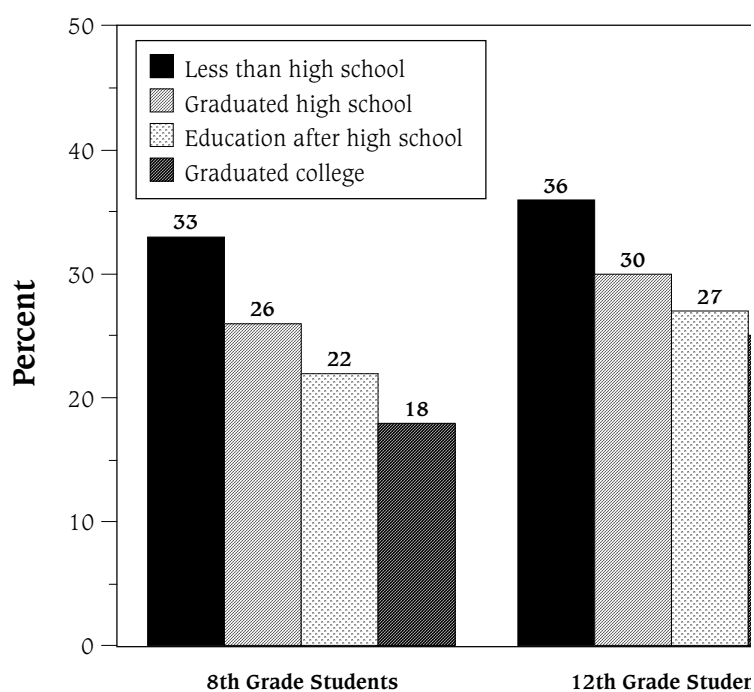
Source: U.S. Department of Education, National Center for Education Statistics, 1991, 1993, and 1995 National Household Education Survey.

*EA 1.3***SCHOOL ABSENTEEISM: PERCENTAGE OF EIGHTH GRADE AND TWELFTH GRADE STUDENTS WHO WERE ABSENT FROM SCHOOL THREE OR MORE DAYS IN THE PRECEDING MONTH**

Student absenteeism is associated with poorer achievement in school, among other outcomes. For example, absenteeism is one of five personal and family background factors that accounted for 91 percent of the variation in states' mathematics scores.⁶

Differences Across Grade Levels. The percentage of eighth grade students who were absent from school three or more days in the preceding month has remained relatively constant at around 22 percent between 1990 and 1994 (see Table EA 1.3). During the same time period, a slightly larger percentage of twelfth grade students were absent from school for that length of time, with percentages ranging between 26 and 31 percent.

Figure EA 1.3
Percentage of 8th and 12th Grade Students Who Were Absent from School Three or More Days in the Preceding Month, by Parents' Education Level: 1994



Note: The data for this table come from the 1994 National Reading Assessment.

Source: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1994.

⁶ *National Education Goals Panel. (1994). The National Education Goals Report: Building a Nation of Learners. Washington, DC: U.S. Government Printing Office.*

Differences by Race and Ethnicity.⁷ There are notable differences in school absenteeism among racial and ethnic groups. Among eighth graders in 1994, Native American students, at 39 percent, were by far the most likely to have been absent 3 or more days in the preceding month. White and Asian students had the lowest absentee rates at 20 and 21 percent, respectively, followed by black and Hispanic students at 27 and 28 percent, respectively. The patterns are similar for 12th grade students, though the differences range from lows of 26–28 percent for white and Asian students to a high of 53 percent for Native Americans.

Differences by Parents' Educational Levels. Absentee rates among students also differ by parents' educational levels (see Figure EA 1.3). Absences from school were highest for students whose parents have less than a high school education. In 1994, for example, 33 percent of eighth graders whose parents lacked a high school diploma were absent from school 3 or more days, compared to 18 percent of their peers who had at least one parent with a college degree.

Differences by Type of School. Students who attended private or Catholic schools also experienced fewer school absences than did students from public schools across all grades and years (see Table EA 1.3).

Table EA 1.3
School Absenteeism: Percentage of 8th and 12th Grade Students Who Were Absent from School Three or More Days in the Preceding Month, by Gender, Race/Ethnicity, Parents' Education Level, and Type of School: 1990, 1992, and 1994

	8TH GRADE			12TH GRADE		
	1990	1992	1994	1990	1992	1994
TOTAL	23	22	22	31	26	28
Gender						
Male	21	21	22	29	24	27
Female	24	24	22	32	27	28
Race/Ethnicity						
White, non-Hispanic	22	21	20	31	24	26
Black, non-Hispanic	23	22	27	30	29	32
Hispanic	27	31	28	34	32	32
Asian/Pacific American	9	12	21	32	19	28
American Indian/Alaskan Native	37	38	39	28	31	53
Parents' Education Level						
Less than high school	38	31	33	41	30	36
Graduated high school	27	23	26	34	28	30
Education after high school	22	21	22	31	26	27
Graduated college	15	19	18	27	23	25
Type of School						
Public	23	23	23	31	27	28
Catholic or other private	13	14	15	24	17	21

Note: The sample for this table is based on the 1990 and 1992 National Math Assessments, and 1994 National Reading Assessment.

Source: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1994.

⁷ Estimates for whites and blacks exclude Hispanics of those races.

EA 1.4

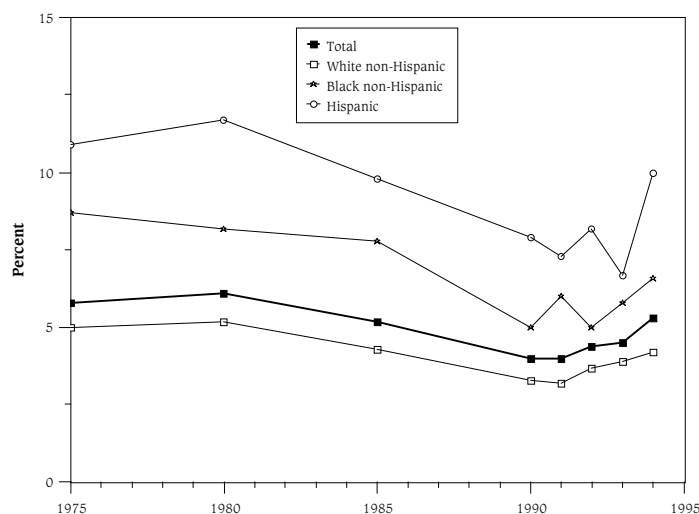
HIGH SCHOOL DROPOUTS: EVENT DROPOUT RATE (PERCENT) FOR GRADES 10-12

High school dropouts have lower earnings, experience more unemployment, and are more likely to end up on welfare and in prison than their peers who complete high school or college.⁸ Women who drop out of high school are more likely to become pregnant and give birth at a young age, and are more likely to become single parents.⁹

Table EA 1.4 shows the event dropout rate for students in grades 10 through 12, ages 15 to 24. Event dropout rates measure the proportion of students enrolled in grades 10 through 12 in the last year, who were not enrolled and who had not completed high school in the year the data are reported. From 1980 to 1990, dropout rates fell from 6 percent to 4 percent. The event dropout rate in 1994 was 5 percent. While this rate appears higher than rates in previous years, the observed difference may be due to changes in Census methodology.

Differences by Race and Ethnicity.¹⁰ In 1994, event dropout rates were 10 percent for Hispanics, 7 percent for blacks, and 4 percent for whites (see Figure EA 1.4). Dropout rates for blacks and whites were lower in 1994 than they were in 1975.

Figure EA 1.4
*Event Dropout Rate for Grades 10-12 (Ages 15-24),
by Gender and Race/Ethnicity: 1975-1994*



Note: The event dropout rate is the proportion of students enrolled in grades 10 through 12 in the previous year who were not enrolled and not graduated in the present year.

Source: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished tabulations; and U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1994*.

⁸ See McMillen, Marilyn and Phillip Kaufman. 1996. Dropout rates in the United States: 1994. U.S. Department of Education, National Center for Education Statistics.

⁹ McMillen et. al. 1996; Manlove, Jennifer. 1996. "Breaking the cycle of disadvantage: Ties between educational attainments, dropping out and teenage motherhood." under review.

¹⁰ Estimates for whites and blacks exclude Hispanics of those races.

Table EA 1.4
Event Dropout Rate^a (Percent) for Grades 10-12 (Ages 15-24),
by Gender and Race/Ethnicity: 1975-1994

	1975	1980	1985	1990 ^b	1991 ^b	1992 ^{b,c}	1993 ^{b,c}	1994 ^{b,c,d}
TOTAL	6	6	5	4	4	4	5	5
White, non-Hispanic								
Total	5	5	4	3	3	4	4	4
Male	5	6	5	4	3	4	4	4
Female	5	5	4	3	4	4	4	4
Black, non-Hispanic								
Total	9	8	8	5	6	5	6	7
Male	8	8	8	4	5	3	6	7
Female	9	9	7	6	7	7	5	6
Hispanic								
Total	11	12	10	8	7	8	7	10
Male	10	18	9	9	10	8	5	9
Female	12	7	10	7	5	9	8	11

Notes: ^aThe event dropout rate is the proportion of students enrolled in grades 10 through 12 in the previous year who were not enrolled and not graduated in the present year.

^bNumbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

^cNumbers for these years reflect new wording of the educational attainment item in the Current Population Survey (CPS).

^dNumbers in this year may reflect changes in CPS due to newly instituted computer assisted interviewing and/or due to the change in the population controls used this year to the 1990 Census-based estimates, with adjustments for undercount.

Source: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished tabulations; and U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1993, 1994*.

*EA 1.5***HIGH SCHOOL COMPLETION RATES FOR 18- TO 24-YEAR-OLDS**

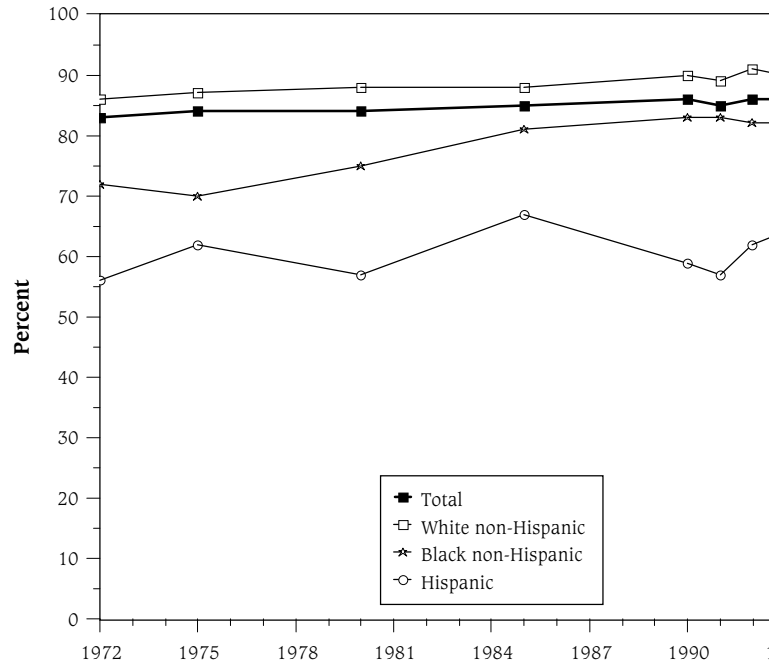
High school graduates earn substantially more than persons who leave high school without graduating.¹¹ Table EA 1.5.A presents the high school completion rates for 18- to 24-year-olds who were not still enrolled in a high school program — *i.e.*, the percentage in this age group who have received a high school diploma or its equivalent, such as passing the General Educational Development (GED) exam. In 1995, the high school completion rate was 85 percent. As can be seen in Table EA 1.5.B, most students receive a high school diploma rather than an equivalent credential (78 percent versus 7 percent). Between 1972 and 1995, the completion rate has varied between 83 percent and 86 percent (see Table EA 1.5.A).

Differences by Race and Ethnicity.¹² As Figure EA 1.5 shows, completion rates vary dramatically by race/ethnicity. Hispanics have had much lower high school completion rates than either blacks or whites since the early 1970s. The high school completion rate for Hispanics in 1995 was only 63 percent, compared to 85 percent for blacks and 90 percent for whites. This suggests that many Hispanic youth and young adults will be less prepared than other 18- to 24-year-olds to enter or progress in the labor force. While completion rates for Hispanics have remained fairly constant since the early 1970s, completion rates for blacks have risen dramatically, from 72 percent in 1972 to 85 percent in 1995. Completion rates have also increased among whites, but to a lesser extent, so that the gap between black and white completion rates has narrowed over time (see Figure EA 1.5)

¹¹ *Current Population Survey, March 1996, Table PinC-06a.*

¹² *Estimates for whites and blacks exclude Hispanics of those races.*

Figure EA 1.5
High School Completion Rates for 18- Through 24-Year-Olds,^a
by Race/Ethnicity: 1972-1995



Note: ^aNot currently enrolled in high school or below.

Source: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years); McMillen, M., and Kaufman, P. 1996. *Dropout rates in the United States: 1994*. U.S. Department of Education, National Center for Education Statistics.

Table EA 1.5.A
High School Completion Rates (Percent) for 18- Through 24-Year-Olds,^a
by Race/Ethnicity: 1972-1995

	1972	1975	1980	1985	1990 ^b	1991 ^b	1992 ^{b,c}	1993 ^{b,c}	1994 ^{b,c,d}	1995 ^{b,c,d}
TOTAL	83	84	84	85	86	85	86	86	86	85
Race/Ethnicity										
White, non-Hispanic	86	87	88	88	90	89	91	90	91	90
Black, non-Hispanic	72	70	75	81	83	83	82	82	83	85
Hispanic	56	62	57	67	59	57	62	64	62	63

Notes: ^aNot currently enrolled in high school or below.

^bNumbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

^cNumbers for these years reflect new wording of the educational attainment item in the Current Population Survey (CPS).

^dNumbers in this year may reflect changes in CPS due to newly instituted computer assisted interviewing and/or due to the change in the population controls used this year to the 1990 Census-based estimates, with adjustments for undercount.

Source: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years); McMillen, M. and Kaufman, P. 1996. *Dropout rates in the United States: 1994*. U.S. Department of Education, National Center for Education Statistics.

Table EA 1.5.B
High School Completion Rates and Method of Completion of 18- Through
24-Year-Olds,^a by Race/Ethnicity: October 1990–October 1995

COMPLETION METHOD	1990	1991	1992^b	1993^b	1994^{b,c}	1995^{b,c}
TOTAL						
Completed	86	85	86	86	86	85
Diploma	81	81	82	81	79	78
Equivalent ^d	5	4	5	5	6	7
WHITE, NON-HISPANIC						
Completed	90	89	91	90	91	90
Diploma	85	85	86	85	85	83
Equivalent ^d	5	4	5	5	6	7
BLACK, NON-HISPANIC						
Completed	83	83	82	82	83	85
Diploma	78	77	77	76	76	76
Equivalent ^d	5	5	5	6	8	9
HISPANIC						
Completed	59	57	62	64	62	63
Diploma	57	54	58	59	57	58
Equivalent ^d	3	2	4	6	5	5

Note: ^aNot currently enrolled in high school or below.

^bNumbers for these years reflect new wording of the educational attainment item in the CPS.

^cNumbers for these years may reflect changes in CPS due to newly instituted computer assisted interviewing and/or due to the change in the population controls used.

^dDiploma equivalents include such things as passing the General Educational Development (GED) exam.

Source: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years); McMillen, M., and Kaufman, P. 1996. *Dropout rates in the United States: 1994*. U.S. Department of Education, National Center for Education Statistics.

*EA 1.6***COLLEGE ATTENDANCE AND ATTAINMENT: PERCENTAGE OF 25- TO 29-YEAR-OLD HIGH SCHOOL GRADUATES WHO HAVE ATTENDED COLLEGE OR RECEIVED A BACHELOR'S DEGREE**

College attendance and receipt of a bachelor's degree increase employment opportunities and income potential. One of the National Education Goals for the year 2000, adopted by Congress, is for adult literacy and lifelong learning, with an objective of increasing the proportion of qualified students, especially minorities, who enter college, who complete at least two years, and who complete their degree programs.¹³

Table EA 1.6 presents the percentage of 25- to 29-year-old high school graduates who had completed at least some college, and the percentage who had received a bachelor's degree:¹⁴

- In 1995, 62 percent of high school graduates in this age group had completed some college, and 28 percent had received at least a Bachelor's degree.
- College attendance rates for this group have increased dramatically since the early 1970s. The percentage of high school graduates completing at least some college rose from 44 percent in 1971 to 62 percent in 1995 (see Figure EA 1.6.A)
- College completion, defined here as receipt of a bachelor's degree, increased more modestly, from 22 percent of 25- to 29-year-old high school graduates in 1971 to 28 percent of this group in 1995 (see Figure EA 1.6.B)

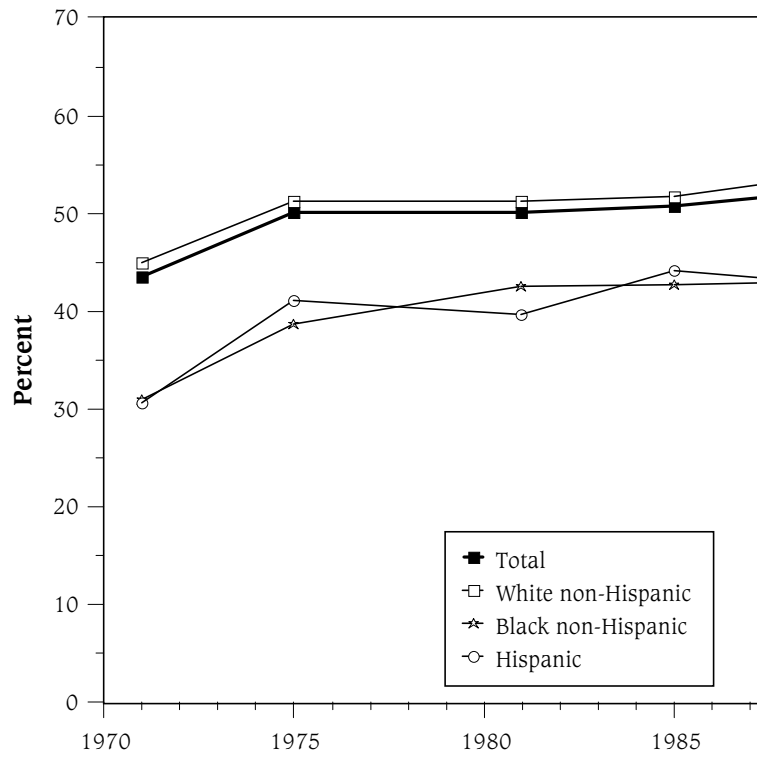
Differences by Race and Ethnicity.¹⁵ College attendance or graduation differs by racial and ethnic group. For example, in 1995, whites were far more likely (31 percent) than blacks (18 percent) or Hispanics (16 percent) to have received a Bachelor's degree or higher. Whites were also more likely to have attended college (65 percent) than blacks (52 percent) or Hispanics (50 percent). Whites have had far higher rates of attendance and completion than blacks or Hispanics since the early 1970s, and the gap between whites and the other two racial/ethnic groups in college attendance and completion has not decreased over time (see Figures EA 1.6.A and EA 1.6.B).

¹³ *National Education Goals Panel. (1995). The National Education Goals Report: Building a Nation of Learners 1995. Washington, DC: U.S. Government Printing Office.*

¹⁴ *Note that the measure of college attendance changed from "1 or more years of college" in 1971–1991 to "some college or more" in 1992–1995. Similarly, the measure of college completion changed from "4 or more years of college" in 1971–1991 to "Bachelor's degree or higher" in 1992–1995.*

¹⁵ *Estimates for whites and blacks exclude Hispanics of those races.*

Figure EA 1.6.A
Percentage of 25- to 29-Year-Old High School Graduates^a Who
Have Attended Some College,^b by Race/Ethnicity: 1971-1995

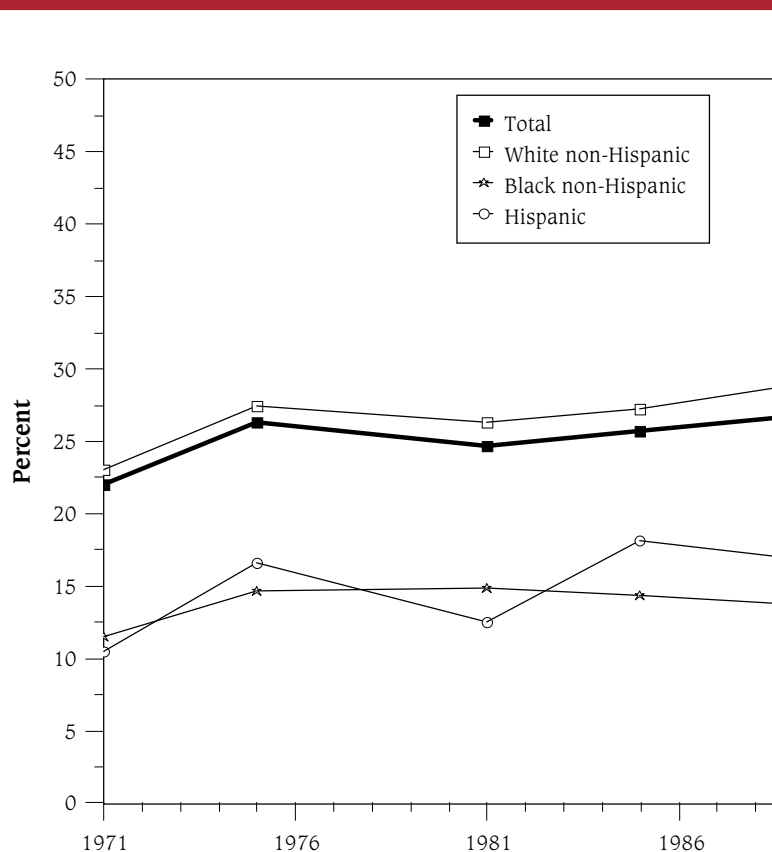


Note: ^a12 years of school completed for 1971-1991, and high school diploma or equivalency certificate for 1992-1995. Beginning in 1992, the Current Population Survey (CPS) changed the questions used to obtain the educational attainment of respondents.

^bThis was measured as "1 or more years of college," 1971 - 1991, and as "some college or more," 1993-1995.

Source: U.S. Department of Education. National Center for Education Statistics. *The Condition of Education 1996*, NCES 96-304. Washington, D.C.: U.S. Government Printing Office, 1996 (based on March Current Population Surveys).

Figure EA 1.6.B
Percentage of 25- to 29-Year-Old High School Graduates^a Who
Have Received a Bachelor's Degree,^b by Race/Ethnicity: 1971-1995



Note: ^a12 years of school completed for 1971-1991, and high school diploma or equivalency certificate for 1992-1995. Beginning in 1992, the Current Population Survey (CPS) changed the questions used to obtain the educational attainment of respondents.

^bThis was measured as "4 or more years of college," 1971 - 1991, and as "Bachelor's degree or higher," 1993-1995.

Source: U.S. Department of Education. National Center for Education Statistics. *The Condition of Education 1996*, NCES 96-304. Washington, D.C.: U.S. Government Printing Office, 1996 (based on March Current Population Surveys).

Table EA 1.6
Percentage of 25- to 29-Year-Old High School Graduates^a Who Have Attended Some College or Who Have Received a Bachelor's Degree or Higher, by Race/Ethnicity: Selected Years, 1971-1995

	1971	1975	1981	1985	1991	1992	1993	1994	1995
SOME COLLEGE OR MORE^b									
Total	44	50	50	51	53	57	59	61	62
Race/Ethnicity									
White, non-Hispanic	45	51	51	52	55	59	61	63	65
Black, non-Hispanic	31	39	43	43	43	45	48	50	52
Hispanic	31	41	40	44	42	47	49	52	50
BACHELOR'S DEGREE OR HIGHER^c									
Total	22	26	25	26	27	27	27	27	28
Race/Ethnicity									
White, non-Hispanic	23	28	26	27	30	30	30	30	31
Black, non-Hispanic	12	15	15	14	13	14	16	16	18
Hispanic	11	17	13	18	16	16	14	13	16

Note: ^aHigh School completion or high school graduate is defined as 12 years of school completed for 1971 - 1991, and high school diploma or equivalency certificate for 1992 - 1995. Beginning in 1992, the Current Population Survey (CPS) changed the questions used to obtain educational attainment of respondents.

^bThis was measured as "1 or more years of college," 1971 - 1991, and as "some college or more," 1993-1995.

^cThis was measured as "4 or more years of college," 1971 - 1991, and as "Bachelor's degree or higher," 1993-1995.

Source: U.S. Department of Education. National Center for Education Statistics. *The Condition of Education 1996*, NCES 96-304. Washington, D.C.: U.S. Government Printing Office, 1996 (based on March Current Population Surveys).

*EA 2.1***READING PROFICIENCY (AGES 9, 13, 17)**

Literacy proficiency and reading achievement are vital to educational reform efforts in the United States.¹⁶ One of the National Education Goals for the year 2000, adopted by Congress, is for adult literacy and lifelong learning, with objectives of having all students demonstrate competency in English and having all adults be literate.¹⁷ Levels of reading achievement will help measure the extent to which these goals are being met.

In order to monitor progress in the reading achievement of U.S. students, the National Assessment of Educational Progress (NAEP) has conducted national assessments of the reading performance of 9-, 13-, and 17-year-olds. There are five levels of reading proficiency reported by NAEP, ranging from Level 150 (completing simple, discrete reading tasks) to Level 350 (learning from specialized reading materials).¹⁸ The following tables (Tables EA 2.1.A, EA 2.1.B, and EA 2.1.C) report the average reading proficiency scores of students in the three age groups between 1971 and 1994.

Trends in Reading Proficiency Levels. Among 9-year-olds, average reading proficiency scores improved between 1971 and 1980, declined between 1980 and 1984, and remained steady until 1994 so that the average score in 1994 (211.0) was similar to the score in 1975 (210.0) (see Table EA 2.1.A). Among 13-year-olds, average reading proficiency scores varied from year to year, and were similar in 1994 (257.9) and 1971 (255.2) (see Table EA 2.1.B). Among 17-year-olds, average scores increased between 1971 and 1990, after which they stabilized. In 1994, the average score for 17-year-olds was 288.1 (see Table EA 2.1.C).

Differences by Gender. Females have scored consistently higher than males over time and for all ages. For example, among 13-year-olds in 1994, females had an average score of 265.7, compared with an average score of 250.6 for males (see Table EA 2.1.B).

Differences by Race and Ethnicity.¹⁹ There are large and consistent differences in reading proficiency by race and ethnicity among all age groups. For example, among 17-year-olds in 1994, whites had higher average reading proficiency scores (295.7) than either blacks or Hispanics (266.2 and 263.2, respectively) (see Table EA 2.1.C). However, black and Hispanic 17-year-olds had especially high gains in achievement relative to whites in the 1980s. Thus, the gaps in reading proficiency scores between whites and both blacks and Hispanics have narrowed since the mid-1970s among 17-year-olds (see Figure EA 2.1).

Differences by Parent's Education. Average reading proficiency levels vary dramatically by parent's education level.²⁰ For example, among 13-year-olds and 17-year-olds in 1994, the lowest average reading proficiency scores were among teens whose parents did not have a high school education, while the highest scores were

¹⁶ *National Center for Education Statistics. (1994). NAEP 1992 Trends in Academic Progress. No. 23-TR01.*

¹⁷ *National Education Goals Panel. (1995). The National Education Goals Report: Building a Nation of Learners 1995. Washington, DC: U.S. Government Printing Office.*

¹⁸ *NAEP has regularly been conducting assessments of U.S. students in public and private schools in order to monitor trends in academic achievement in core curriculum areas since the 1970s. NAEP uses proficiency scales that range from 0 to 500. To give meaning to the results, students' performance is characterized at five levels along the proficiency scales (150, 200, 250, 300, 350).*

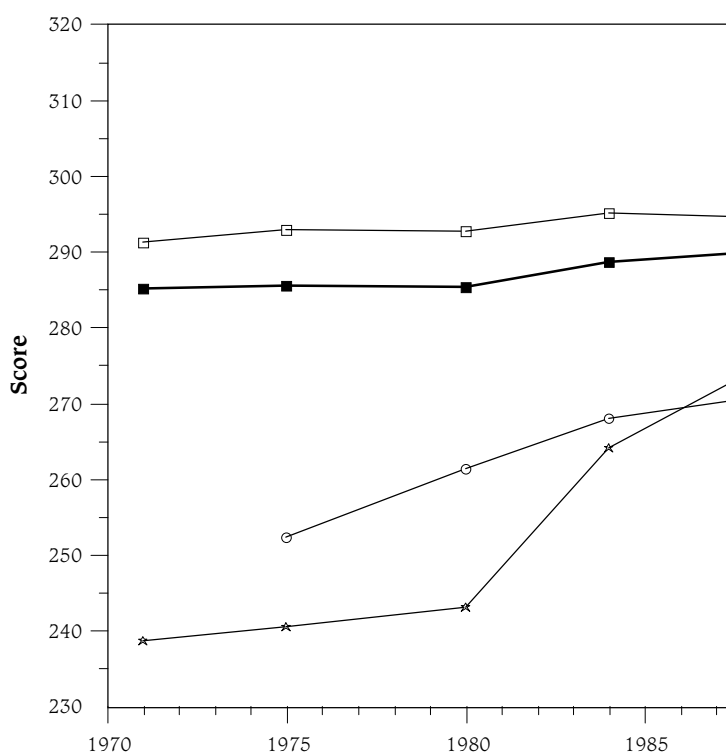
¹⁹ *Estimates for whites and blacks exclude Hispanics of those races.*

²⁰ *Parent's education is not reported at age 9 because approximately a third of these students did not know their parent's education level.*

among teens who had a parent with post-high school education. In fact, the average reading proficiency score among 13-year-old children of parents with post-high school education levels (268.5) was similar to the average score among 17-year-old children of parents without a high school degree (267.9) (see Tables EA 2.1.B and EA 2.1.C).

Differences by School Type. Average reading proficiency scores have been consistently higher among students attending non-public schools than among students attending public schools. This is true for every age group and every year reported.

Figure EA 2.1
Reading Proficiency—Age 17, Average Proficiency of Students, by Race/Ethnicity: 1971-1994



Note: The reading proficiency scale ranges from 0 to 500:
 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 (NAEP), *1994 Trends in Academic Progress*.

Table EA 2.1.A
Reading Proficiency — Age 9, Average Proficiency of Students, by Gender, Race/Ethnicity, and Type of School: 1971-1994

	1971	1975	1980	1984	1988	1990	1992	1994
TOTAL	207.6	210.0	215.0	210.9	211.8	209.2	210.5	211.0
Gender								
Male	201.2	204.3	210.0	207.5	207.5	204.0	205.9	207.3
Female	213.9	215.8	220.1	214.2	216.3	214.5	215.4	214.7
Race/Ethnicity								
White, non-Hispanic	214.0	216.6	221.3	218.2	217.7	217.0	217.9	218.0
Black, non-Hispanic	170.1	181.2	189.3	185.7	188.5	181.8	184.5	185.4
Hispanic	—	182.7	190.2	187.2	193.7	189.4	191.7	185.9
Type of School								
Public	—	—	213.5	209.4	210.2	207.5	208.6	209.4
Non-Public	—	—	227.0	222.8	223.4	228.3	224.7	225.0

Note: The reading proficiency scale has a range from 0 to 500:

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 (NAEP), 1994 Trends in Academic Progress.

Table EA 2.1.B
Reading Proficiency — Age 13, Average Proficiency of Students, by Gender, Race/Ethnicity, Parent's Education, and Type of School: 1971-1994

	1971	1975	1980	1984	1988	1990	1992	1994
TOTAL	255.2	255.9	258.5	257.1	257.5	256.8	259.8	257.9
Gender								
Male	249.6	249.6	254.3	252.6	251.8	250.5	254.1	250.6
Female	260.8	262.3	262.6	261.7	263.0	263.1	265.3	265.7
Race/Ethnicity								
White, non-Hispanic	260.9	262.1	264.4	262.6	261.3	262.3	266.4	265.1
Black, non Hispanic	222.4	225.7	232.8	236.3	242.9	241.5	237.6	234.3
Hispanic	—	232.5	237.2	239.6	240.1	237.8	239.2	235.1
Parent's Education								
Less than high school	238.4	238.7	238.5	240.0	246.5	240.8	239.2	236.7
Graduated high school	255.5	254.6	253.5	253.4	252.7	251.4	252.1	251.4
Post high school	270.2	269.8	270.9	267.6	265.3	266.9	269.9	268.5
Type of School								
Public	—	—	256.9	255.2	256.1	255.0	257.2	255.6
Non-Public	—	—	270.6	271.2	268.3	269.7	276.3	275.8

Note: The reading proficiency scale has a range from 0 to 500:

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 (NAEP), 1994 Trends in Academic Progress.

Table EA 2.1.C
Reading Proficiency — Age 17, Average Proficiency of Students, by Gender, Race/Ethnicity, Parent's Education, and Type of School: 1971-1994

	1971	1975	1980	1984	1988	1990	1992	1994
TOTAL	285.2	285.6	285.5	288.8	290.1	290.2	289.7	288.1
Gender								
Male	278.9	279.7	281.8	283.8	286.0	284.0	284.2	281.7
Female	291.3	291.2	289.2	293.9	293.8	296.5	295.7	294.7
Race/Ethnicity								
White, non-Hispanic	291.4	293.0	292.8	295.2	294.7	296.6	297.4	295.7
Black, non Hispanic	238.7	240.6	243.1	264.3	274.4	267.3	260.6	266.2
Hispanic	—	252.4	261.4	268.1	270.8	274.8	271.2	263.2
Parent's Education								
Less than high school	261.3	262.5	262.1	269.4	267.4	269.7	270.8	267.9
Graduated high school	283.0	281.4	277.5	281.2	282.0	282.9	280.5	276.1
Post high school	302.2	300.6	298.9	301.2	299.5	299.9	298.6	298.5
Type of School								
Public	—	—	284.4	287.2	288.7	288.6	287.8	286.0
Non-Public	—	—	298.4	303.0	299.6	311.0	309.6	306.1

Note: The reading proficiency scale has a range from 0 to 500:

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 (NAEP), *1994 Trends in Academic Progress*.

*EA 2.2***MATHEMATICS PROFICIENCY (AGES 9, 13, 17)**

One of the National Education Goals for the year 2000, adopted by Congress, is to improve the relative standing of U.S. students in mathematics achievement.²¹ In a 1995 comparison of American eighth graders to 40 other countries, the Third International Math and Science Study showed that U.S. students had significantly lower overall mathematics proficiency scores than students in 20 countries, had similar scores to students in 13 countries, and had higher scores than students in 7 countries.²² Levels of mathematics achievement, both in the U.S. and internationally, will help measure the extent to which these goals are being met.

In order to monitor progress in the mathematics achievement of U.S. students, the National Assessment of Educational Progress (NAEP) has conducted national assessments of the mathematics performance of 9-, 13-, and 17-year-olds. There are five levels of mathematics proficiency reported by NAEP ranging from Level 150 (understanding simple arithmetic facts) to Level 350 (multistep problem solving and algebra).²³ The following tables (Tables EA 2.2.A, EA 2.2.B, and EA 2.2.C) report the average mathematics proficiency scores of students in the three age groups between 1973 and 1994.

Trends in Mathematics Proficiency Levels. Among 9-year-olds, average mathematics proficiency scores remained the same between 1973 and 1982, and then increased substantially to 231.1 in 1994 (see Table EA 2.2.A). Among 13-year-olds, mathematics proficiency scores increased between 1978 (264.1) and 1994 (274.3) (see Table EA 2.2.B). Among 17-year-olds, average proficiency scores declined between 1973 and 1982, after which they increased to a level similar to 1973 in 1994 (see Table EA 2.2.C).

Differences by Gender. Average mathematics proficiency scores among males and females were virtually identical among 9-year-old students in 1994. In 1994, mathematics proficiency scores were higher for males among 13-year-olds (by an average of 3.3 points) and 17 year olds (by an average of 4.4 points).

Differences by Race and Ethnicity.²⁴ There are consistently large differences in mathematics proficiency by race and ethnicity. For example, among 17-year-olds in 1994, blacks and Hispanics had lower proficiency scores (285.5 and 290.8) than whites (312.3) (see Table EA 2.2.C). However, black and Hispanic 17-year-olds had substantial gains in achievement between 1973 and 1994 (see Figure EA 2.2).

Differences by Parent's Education. There are large variations in average mathematics proficiency levels by parental education for 13- and 17-year-olds (see Tables EA 2.2.B and EA 2.2.C).²⁵ For example, in 1994, 13-year-olds whose parents did not have a high school education had the lowest average proficiency scores (254.5), while those whose parents had graduated from college had the highest scores (284.9) (see Table EA 2.2.B).

²¹ *National Center for Education Statistics. (1994). NAEP 1992 Trends in Academic Progress. No. 23-TR01.*

²² *U.S. Department of Education. National Center for Education Statistics, Pursuing Excellence, No. 97-198. Washington, DC: U.S. Government Printing Office.*

²³ *NAEP has regularly been conducting assessments of U.S. students in public and private schools in order to monitor trends in academic achievement in core curriculum areas since the 1970s. NAEP uses proficiency scales that range from 0 to 500. To give meaning to the results, students' performance is characterized at five levels along the proficiency scales (150, 200, 250, 300, 350).*

²⁴ *Estimates for whites and blacks exclude Hispanics of those races.*

²⁵ *Parent's education is not reported at age 9 because approximately a third of these students did not know their parent's education level.*

Differences by School Type. Average mathematics proficiency scores among students in public schools have been consistently lower than average scores among students in non-public schools. This is true for every age group and every year reported.

Figure EA 2.2
Mathematics Proficiency — Age 17, Average Proficiency of Students,
by Race/Ethnicity: 1973-1994

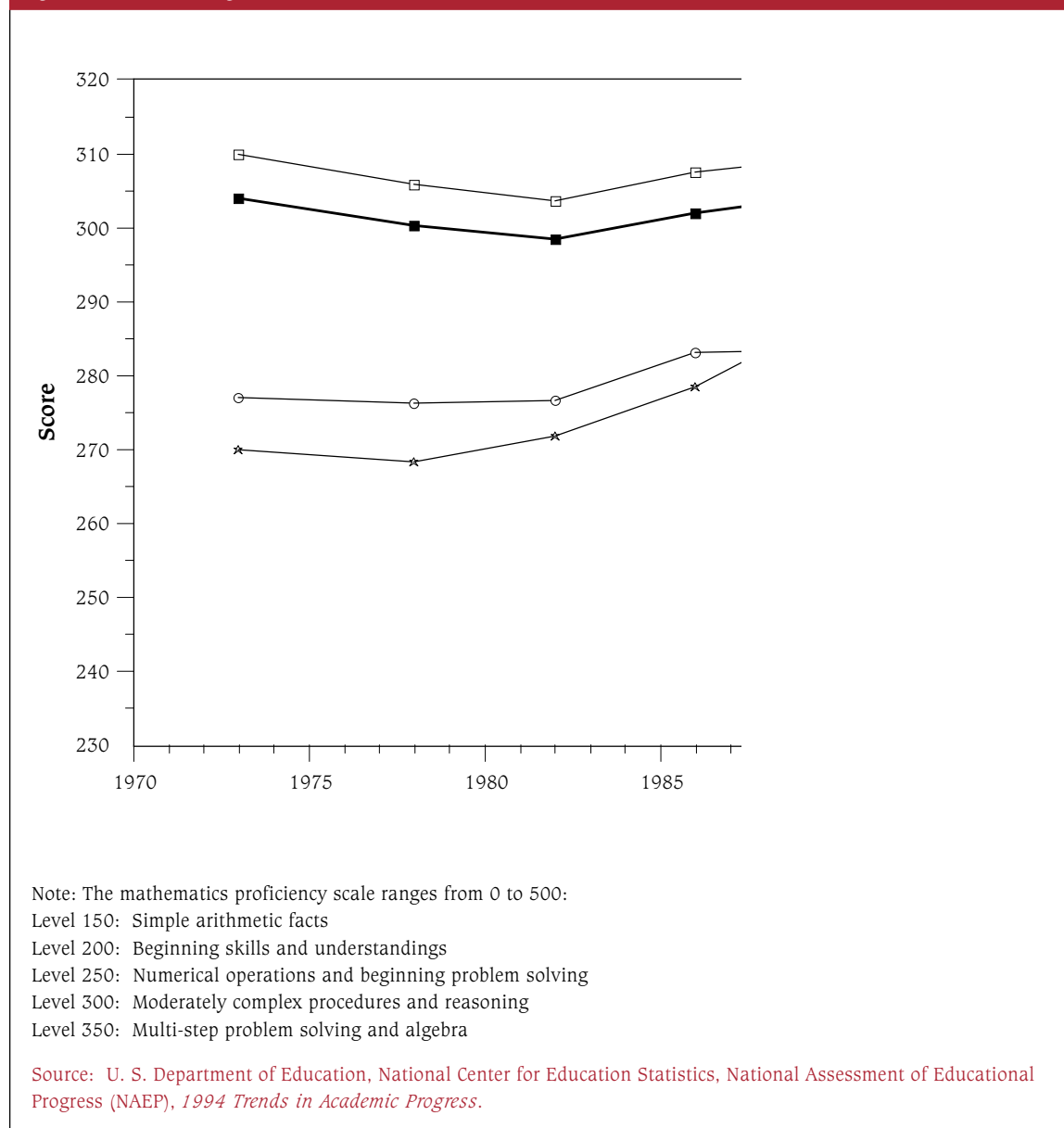


Table EA 2.2.A
Mathematics Proficiency — Age 9, Average Proficiency of Students, by Gender, Race/Ethnicity, and Type of School: 1973-1994

	1973	1978	1982	1986	1990	1992	1994
TOTAL	219.0	218.6	219.0	221.7	229.6	229.6	231.1
Gender							
Male	218.0	217.4	217.1	221.7	229.1	230.8	232.2
Female	220.0	219.9	220.8	221.7	230.2	228.4	230.0
Race/Ethnicity							
White, non-Hispanic	225.0	224.1	224.0	226.9	235.2	235.1	236.8
Black, non-Hispanic	190.0	192.4	194.9	201.6	208.4	208.0	212.1
Hispanic	202.0	202.9	204.0	205.4	213.8	211.9	209.9
Type of School							
Public	—	217.2	217.0	220.1	228.6	227.7	229.3
Non-Public	—	230.5	231.8	230.0	238.1	241.5	244.5

Note: The mathematics proficiency scale ranges from 0 to 500:
 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 (NAEP), 1994 Trends in Academic Progress.

Table EA 2.2.B
Mathematics Proficiency — Age 13, Average Proficiency of Students, by Gender, Race/Ethnicity, Parent's Education, and Type of School: 1973-1994

	1973	1978	1982	1986	1990	1992	1994
TOTAL	266.0	264.1	268.6	269.0	270.4	273.1	274.3
Gender							
Male	265.0	263.6	269.2	270.0	271.2	274.1	276.0
Female	267.0	264.7	268.0	267.9	269.6	272.0	272.7
Race/Ethnicity							
White, non-Hispanic	274.0	271.6	274.4	273.6	276.3	278.9	280.8
Black, non Hispanic	228.0	229.6	240.4	249.2	249.1	250.2	251.5
Hispanic	239.0	238.0	252.4	254.3	254.6	259.3	256.0
Parent's Education							
Less than high school	—	244.7	251.0	252.3	253.4	255.5	254.5
Graduated high school	—	263.1	262.9	262.7	262.6	263.2	265.7
Some education after HS	—	273.1	275.1	273.7	277.1	277.6	277.3
Graduated college	—	283.8	282.3	279.9	280.4	282.8	284.9
Type of School							
Public	—	262.6	267.1	268.7	269.3	271.7	273.0
Non-Public	—	279.2	281.1	275.7	279.9	283.3	284.6

Note: The mathematics proficiency scale ranges from 0 to 500:
 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 (NAEP), 1994 Trends in Academic Progress.

Table EA 2.2.C
Mathematics Proficiency — Age 17, Average Proficiency of Students, by Gender, Race/Ethnicity, Parent's Education, and Type of School: 1973-1994

	1973	1978	1982	1986	1990	1992	1994
TOTAL	304.0	300.4	298.5	302.0	304.6	306.7	306.2
Gender							
Male	309.0	303.8	301.5	304.7	306.3	308.9	308.5
Female	301.0	297.1	295.6	299.4	302.9	304.5	304.1
Race/Ethnicity							
White, non-Hispanic	310.0	305.9	303.7	307.5	309.5	311.9	312.3
Black, non Hispanic	270.0	268.4	271.8	278.6	288.5	285.8	285.5
Hispanic	277.0	276.3	276.7	283.1	283.5	292.2	290.8
Parent's Education							
Less than high school	—	279.6	279.3	279.3	285.4	285.5	283.7
Graduated high school	—	293.9	293.4	293.1	293.7	297.6	295.3
Some education after HS	—	305.3	303.9	305.2	307.7	307.5	305.0
Graduated college	—	316.8	312.4	313.9	316.2	315.9	317.6
Type of School							
Public	—	299.6	297.3	301.2	303.5	305.3	304.4
Non-Public	—	314.3	311.4	320.1	317.7	320.4	319.4

Note: The mathematics proficiency scale ranges from 0 to 500:
 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 (NAEP), *1994 Trends in Academic Progress*.

*EA 2.3***SCIENCE PROFICIENCY (AGES 9, 13, 17)**

One of the National Education Goals for the year 2000, adopted by Congress, is to improve the relative standing of U.S. students in science achievement.²⁶ In a 1995 comparison of American eighth graders to 40 other countries, the Third International Math and Science Study showed that U.S. students had significantly lower overall science proficiency scores than students in 9 countries, had similar scores to students in 16 countries, and had higher scores than students in 15 countries.²⁷ Levels of science achievement, both in the U.S. and internationally, will help measure the extent to which these goals are being met.

In order to present time trends in science proficiency levels, the National Assessment of Educational Progress (NAEP) reports five different proficiency levels, ranging from Level 150 (knows everyday science facts) to Level 350 (integrates specialized scientific information).²⁸ The following tables (Tables EA 2.3.A, EA 2.3.B, and EA 2.3.C) report the average science proficiency scores of students in three age groups (9-, 13-, and 17-year-olds).

Trends in Science Proficiency Levels. Average science proficiency scores have increased among all age groups since 1977. Among 9-year-olds, average science proficiency scores increased between 1977 (219.9) and 1994 (231.0) (see Table EA 2.3.A). Among 13-year-olds, average scores increased between 1977 (247.4) and 1994 (256.8) (see Table EA 2.3.B). Among 17-year-olds, average science proficiency scores declined between 1977 (289.5) and 1982 (283.3), after which they increased to 294.0 in 1994. Thus, gains in science proficiency levels among 17-year-olds were not as great as gains for the other two age groups.

Differences by Gender. In 1994, females scored slightly lower than males on average science proficiency scores among 13-year-olds and 17-year-olds.

Differences by Race and Ethnicity.²⁹ There are large differences in science proficiency scores by race and ethnicity among all age groups. For example, among 17-year-olds in 1994, whites had higher average science proficiency scores (306.0) than blacks (256.8) or Hispanics (261.4) (see Table EA 2.3.C). However, black 17-year-olds had especially high gains in achievement since 1977 (see Figure 2.3). Black 9-year-olds and 13-year-olds also showed high gains in science achievement over time.

Differences by Parent's Education. Average science proficiency levels vary dramatically by parent's education level.³⁰ For example, among 13-year-olds and 17-year-olds in 1994, the lowest average science proficiency scores were among teens whose parents did not have a high school education, while the highest scores were among teens who had a parent who had graduated from college. In fact, in 1994 the average science

²⁶ *National Center for Education Statistics. (1994). NAEP 1992 Trends in Academic Progress. No. 23-TR01.*

²⁷ *U.S. Department of Education. National Center for Education Statistics, Pursuing Excellence, No. 97-198. Washington, DC: U.S. Government Printing Office.*

²⁸ *NAEP has regularly been conducting assessments of U.S. students in public and private schools in order to monitor trends in academic achievement in core curriculum areas since the 1970s. NAEP uses proficiency scales that range from 0 to 500. To give meaning to the results, students' performance is characterized at five levels along the proficiency scales (150, 200, 250, 300, 350).*

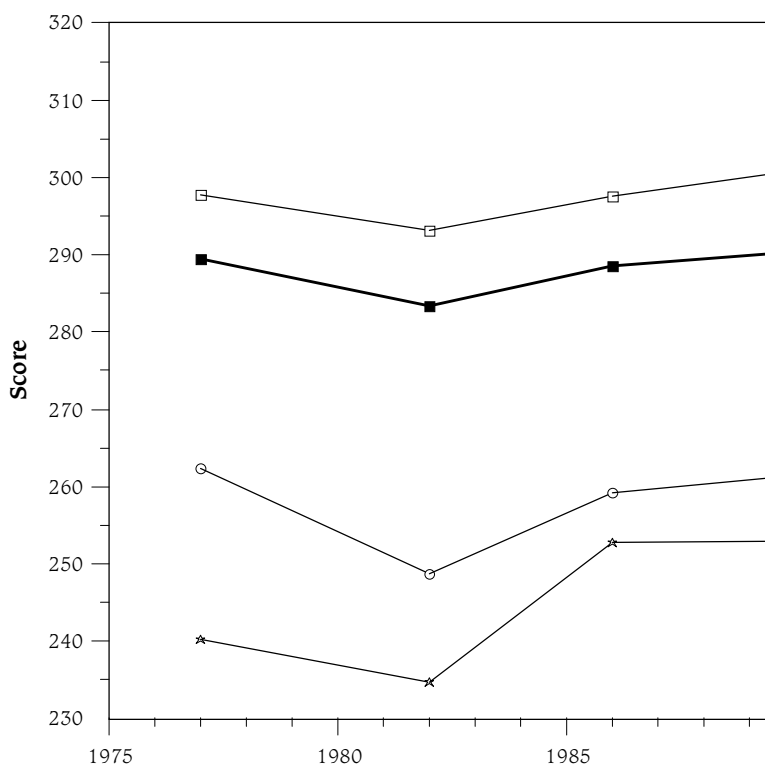
²⁹ *Estimates for whites and blacks exclude Hispanics of those races.*

³⁰ *Parent's education is not reported at age 9 because approximately a third of these students did not know their parent's education level.*

proficiency score among 13-year-old children of parents with a college education (268.8) was substantially higher than the average score among 17-year-old children of parents without a high school degree (255.8) (see Tables EA 2.3.B and EA 2.3.C).

Differences by School Type. Average science proficiency scores have been consistently higher among students attending non-public schools than among students attending public schools. This is true for every age group and every year reported.

Figure EA 2.3
Science Proficiency — Age 17, Average Proficiency of Students, by Race/Ethnicity: 1977-1994



Note: The science proficiency scale ranges from 0 to 500:
 Level 150: Knows everyday science facts
 Level 200: Understands simple scientific principles
 Level 250: Applies general scientific information
 Level 300: Analyzes scientific procedures and data
 Level 350: Integrates specialized scientific information

Source: U. S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), *1994 Trends in Academic Progress*.

Table EA 2.3.A
Science Proficiency — Age 9, Average Proficiency of Students, by Gender, Race/Ethnicity, and Type of School: 1977-1994

	1977	1982	1986	1990	1992	1994
TOTAL	219.9	220.8	224.3	228.7	230.6	231.0
Gender						
Male	222.1	221.0	227.3	230.3	234.7	232.2
Female	217.6	220.7	221.3	227.1	226.7	230.0
Race/Ethnicity						
White, non-Hispanic	229.6	229.0	231.9	237.5	239.1	240.3
Black, non-Hispanic	174.8	187.0	196.2	196.4	200.3	201.4
Hispanic	191.9	189.0	199.4	206.2	204.7	201.0
Type of School						
Public	218.0	219.7	222.6	227.7	229.1	229.5
Non-Public	234.6	231.5	233.0	236.8	240.2	242.2

Note: The science proficiency scale ranges from 0 to 500:
 Level 150: Knows everyday science facts
 Level 200: Understands simple scientific principles
 Level 250: Applies general scientific information
 Level 300: Analyzes scientific procedures and data
 Level 350: Integrates specialized scientific information

Source: U. S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1994 Trends in Academic Progress.

Table EA 2.3.B
Science Proficiency — Age 13, Average Proficiency of Students, by Gender, Race/Ethnicity, Parent's Education, and Type of School: 1977-1994

	1977	1982	1986	1990	1992	1994
TOTAL	247.4	250.1	251.4	255.2	258.0	256.8
Gender						
Male	251.1	255.6	256.1	258.5	260.1	259.4
Female	243.7	245.0	246.9	251.8	256.0	254.3
Race/Ethnicity						
White, non-Hispanic	256.1	257.3	259.2	264.1	267.1	266.5
Black, non Hispanic	208.1	217.1	221.6	225.7	224.2	223.9
Hispanic	213.4	225.5	226.1	231.6	237.5	232.1
Parent's Education						
Less than high school	223.5	225.3	229.4	232.9	233.8	234.3
Graduated high school	245.3	243.1	244.8	247.3	246.4	247.1
Some education after HS	260.3	258.8	257.8	262.8	265.9	260.4
Graduated college	266.4	263.5	264.4	267.5	269.2	268.8
Type of School						
Public	245.2	248.5	250.9	253.6	257.2	255.4
Non-Public	267.7	263.7	263.1	269.0	264.5	267.6

Note: The science proficiency scale ranges from 0 to 500:
 Level 150: Knows everyday science facts
 Level 200: Understands simple scientific principles
 Level 250: Applies general scientific information
 Level 300: Analyzes scientific procedures and data
 Level 350: Integrates specialized scientific information

Source: U. S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1994 Trends in Academic Progress.

Table EA 2.3.C
Science Proficiency — Age 17, Average Proficiency of Students, by Gender, Race/Ethnicity, Parent's Education, and Type of School: 1977-1994

	1977	1982	1986	1990	1992	1994
TOTAL	289.5	283.3	288.5	290.4	294.1	294.0
Gender						
Male	297.0	291.9	294.9	295.6	299.1	299.5
Female	282.2	275.2	282.3	285.4	289.0	288.9
Race/Ethnicity						
White, non-Hispanic	297.7	293.1	297.5	300.9	304.2	306.0
Black, non Hispanic	240.2	234.7	252.8	253.0	256.2	256.8
Hispanic	262.3	248.7	259.3	261.5	270.2	261.4
Parent's Education						
Less than high school	265.3	258.5	257.5	261.4	262.0	255.8
Graduated high school	284.4	275.2	277.0	276.3	280.2	279.2
Some education after HS	295.6	290.1	295.1	296.5	295.9	294.8
Graduated college	309.3	300.2	303.8	305.5	308.3	310.6
Type of School						
Public	288.2	282.3	287.1	289.0	292.2	291.7
Non-Public	308.4	292.0	321.3	307.8	311.7	310.4
<p>Note: The science proficiency scale ranges from 0 to 500: Level 150: Knows everyday science facts Level 200: Understands simple scientific principles Level 250: Applies general scientific information Level 300: Analyzes scientific procedures and data Level 350: Integrates specialized scientific information</p>						
<p>Source: U. S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1994 Trends in Academic Progress.</p>						

EA 3.1.A

FAMILY–CHILD ENGAGEMENT IN LITERACY ACTIVITIES

Numerous studies have documented the importance of parental involvement in literacy activities with their children. One of the National Education Goals stresses the importance of family–child engagement in literacy activities, especially among children who are “at risk” of school failure, in order for all U.S. children to be able to start school ready to learn.

Table EA 3.1.A presents three types of literacy activities that parents may engage in with their children. In 1996, a majority of 3- to 5-year-old children (57 percent) were read to by a parent or other family member every day, showing a slight increase from 1993 (53 percent). More than a third of children (37 percent) visited a library at least once in the past month. About 55 percent of children were regularly told stories (3 or more times a week), a substantial increase from 1991 (39 percent).

Differences by Race and Ethnicity.³¹ There are substantial differences in all literacy activities by race and ethnicity. For example, in 1996, white children were more likely to be read to every day (64 percent) than black children (44 percent) or Hispanic children (39 percent). These differences have been fairly stable over time. There were also differences in library visits by race and ethnicity. Black and Hispanic children were also less likely to be told a story frequently (47 percent) than were white children (59 percent) (see Table EA 3.1.A).

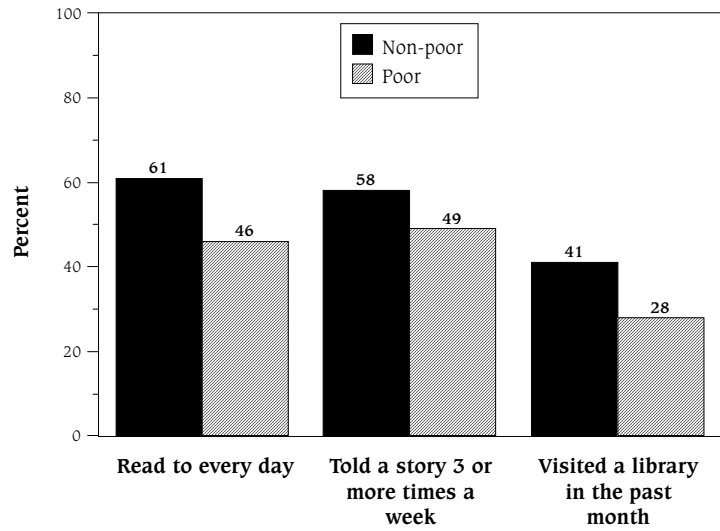
Differences by Family Type. Children in two-parent families were more likely to participate in all three types of literacy activities than children who lived with one or no parent.

Differences by Socioeconomic Status. Children in families living above the poverty threshold are much more likely to be engaged in literacy activities on a regular basis than children who live in poverty. For example, in 1996, 61 percent of children in nonpoor families (above the poverty threshold) were read to every day by a parent or other family member, compared to 46 percent of children in poor families (at or below the poverty level) (see Figure EA 3.1.A). There are also substantial differences in literacy activities by mother’s education level. For example, about one-fifth (19 percent) of children whose mothers did not have a high school diploma visited a library once or more in the past month, compared to more than half (56 percent) of children whose mothers were college graduates (see Table EA 3.1.A).

Differences by Mother’s Employment Status. Children whose mothers were employed 35 hours or more per week were slightly less likely to engage in any of the three literacy activities than children whose mothers were either working part-time or not working.

³¹ *Estimates for whites and blacks exclude Hispanics of those races.*

Figure EA 3.1.A
Percentage of 3- to 5-Year-Olds Who Have Participated in Literacy Activities with a Family Member, by Poverty Status: 1996



Source: U.S. Department of Education, National Center for Education Statistics, 1996 National Household Education Survey.

Table EA 3.1.A
Percentage of 3- to 5-Year-Olds^a Who Have Participated in Literacy Activities with a Family Member, by Child and Family Characteristics: 1991, 1993, 1995, and 1996

	READ TO EVERY DAY				TOLD A STORY 3 OR MORE TIMES A WEEK				VISITED A LIBRARY AT LEAST ONCE IN THE PAST MONTH			
	1991	1993	1995	1996	1991	1993	1995	1996	1991	1993	1995	1996
	—	53	58	57	39	43	50	55	35	38	39	37
TOTAL	—	53	58	57	39	43	50	55	35	38	39	37
Gender												
Male	—	51	57	56	37	43	49	55	34	38	37	37
Female	—	54	59	57	41	43	51	56	36	38	41	36
Race/Ethnicity												
White, non-Hispanic	—	59	65	64	40	44	53	59	39	42	43	41
Black, non-Hispanic	—	39	43	44	34	39	42	47	25	29	32	31
Hispanic	—	37	38	39	38	38	42	47	23	26	27	27
Poverty Status^b												
Non-poor	—	56	62	61	39	44	53	58	38	42	43	41
Poor	—	44	48	46	38	40	44	49	26	29	30	28
Family Type												
Two parents	—	55	61	61	39	44	52	59	38	41	43	40
One or no parent	—	46	49	46	37	41	46	47	23	30	30	29
Mother's Education^c												
Less than high school	—	37	40	37	34	37	39	47	16	22	20	19
High school/GED	—	49	48	49	38	41	48	54	29	31	33	31
Vocational/technical or some college	—	54	64	62	41	45	53	55	40	44	42	41
College graduate	—	71	76	77	42	49	55	64	55	56	57	56
Mother's Employment Status^c												
35 hours or more per week	—	52	55	54	37	43	49	53	30	34	35	32
Less than 35 hours per week	—	56	63	59	40	45	53	56	41	47	46	39
Not in labor force	—	55	60	59	42	43	50	56	38	37	42	40

Notes: ^aEstimates are based on children who have yet to enter kindergarten.
^bChildren were classified as non-poor (living above the poverty threshold) or poor (living below the poverty threshold), based on family size and income. See Wright, D., Hausken, E.G., and West, J. (1994). *Family-Child Engagement in Literacy Activities: Changes in Participation Between 1991 and 1993*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
^cChildren without mothers in the home are not included in estimates dealing with mother's education or mother's employment status. A mother is defined as a biological mother, adoptive mother, stepmother, foster mother, or female guardian (e.g., grandmother) who resides in the home with the child.

Source: U.S. Department of Education, National Center for Education Statistics, 1991, 1993, 1995, and 1996 National Household Education Survey.

EA 3.1.B

READING HABITS OF CHILDREN AND YOUTH

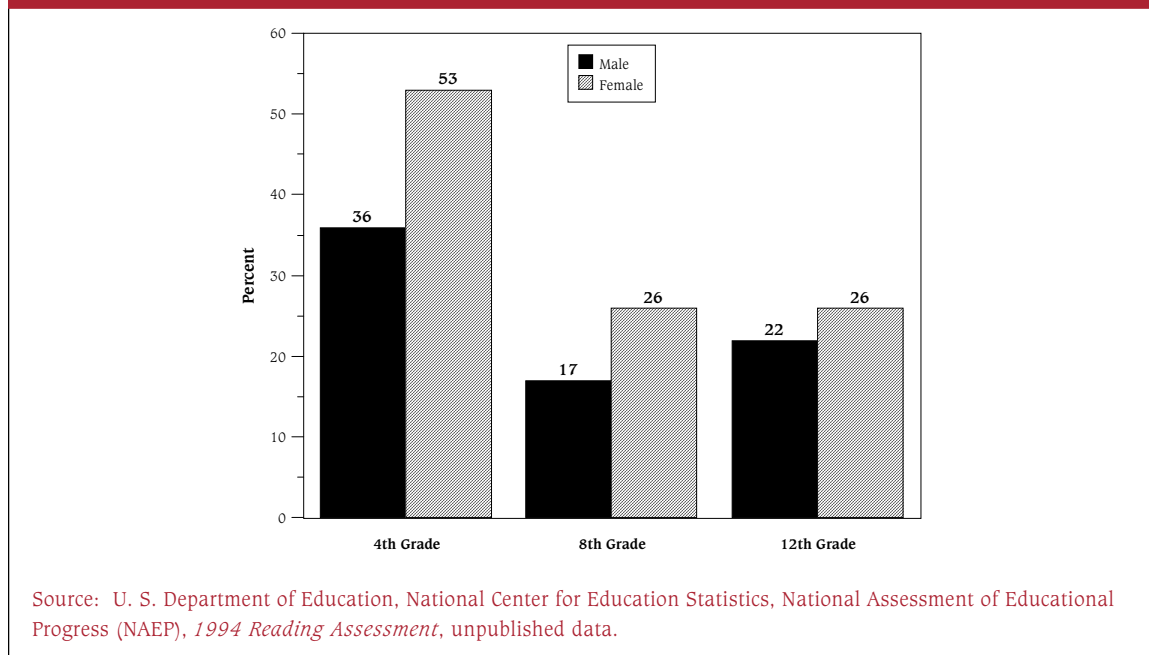
Independent reading is one necessary aspect of literacy development. The National Assessment of Educational Progress (NAEP) has documented the association between students who read for fun in their free time and reading achievement. Students in grades 4, 8, and 12 who read more frequently for fun had consistently higher average reading proficiency scores than those students who read less often.³²

Differences by Age. In 1994, nearly half of fourth graders (45 percent) reported reading for fun on a daily basis, compared to less than a quarter of eighth and twelfth graders (22 percent and 24 percent, respectively) (see Table EA 3.1.B).

Differences by Gender. In both fourth and eighth grades, larger proportions of girls than boys reported frequent reading in their spare time. For example, more than half (53 percent) of fourth grade girls read for fun on a daily basis, compared to only 36 percent of fourth grade boys in 1994. Among twelfth graders, however, similar proportions of boys (22 percent) and girls (26 percent) reported reading on a daily basis (see Figure EA 3.1.B).

Differences by Race and Ethnicity.³³ In 1994, the percentage of fourth graders who reported reading for fun on a daily basis was similar for all racial/ethnic groups. By twelfth grade, rates of daily reading had declined

Figure EA 3.1.B
Percentage of Students in 4th, 8th, and 12th Grade Who Read for Fun on a Daily Basis, by Gender: 1994



³² National Center for Education Statistics (1993). NAEP 1992: Reading Report Card for the Nation and the States. Report No. 23-ST06. Washington, DC: U.S. Government Printing Office.

³³ Estimates for whites and blacks exclude Hispanics of those races.

substantially for every racial or ethnic group. In the twelfth grade, white students were the most likely to report reading for fun (see Table EA 3.1.B).

Differences by Parent's Educational Levels. Students whose parents had some post-high school education were more likely to read for fun than students whose parents had not graduated from high school or had no education beyond high school. For example, in 1994, 29 percent of twelfth graders whose parents had graduated from college and 22 percent whose parents had some education after high school read for fun on a daily basis. In contrast, 19 percent of twelfth graders whose parents had graduated from high school (but had no education beyond that) and 18 percent whose parents had not finished high school reported reading for fun on a daily basis. These patterns are similar among eighth graders (see Table EA 3.1.B).

Differences by Type of School. Larger percentages of eighth and twelfth graders who attended non-Catholic private schools read for fun on a daily basis than did their counterparts in public schools (see Table EA 3.1.B).

Table EA 3.1.B
Percentage of Students in 4th, 8th, and 12th Grade Who Read for Fun on a Daily Basis by Gender, Race/Ethnicity, Parent's Education, and Type of School: 1992 and 1994

	4TH GRADE		8TH GRADE		12TH GRADE	
	1992	1994	1992	1994	1992	1994
TOTAL	44	45	22	22	23	24
Gender						
Male	36	36	17	17	23	22
Female	51	53	27	26	22	26
Race/Ethnicity						
White, non-Hispanic	44	45	24	24	25	26
Black, non-Hispanic	40	40	15	14	17	16
Hispanic	44	43	17	16	18	18
Asian/Pacific Islander	50	48	26	25	22	20
American Indian	45	45	31	31	25	25
Parents' Education^a						
Did not finish high school	—	—	18	13	14	18
Graduated high school	—	—	18	16	18	19
Some education after high school	—	—	23	24	22	22
Graduated college	—	—	26	26	28	29
Type of School						
Public schools	43	45	21	21	22	24
Catholic schools	41	46	25	24	23	25
Other Private schools	55	40	35	33	31	28

Note: ^aPercentage reading for fun is not reported by parent's education for 4th graders because over a third did not know their parents' level of education. Parents' education represents the highest level of education reported by the student.

Source: U. S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), *1994 Reading Assessment*, unpublished data.

EA 3.2

PARENTAL INVOLVEMENT IN CHILD'S SCHOOL

Many educators consider parental involvement in school activities to have a beneficial effect on children's school performance. They associate higher levels of parental involvement with greater monitoring of school and classroom activities, a closer coordination of teacher and parent efforts, greater teacher attention to the child, and earlier identification of problems that might inhibit learning.³⁴

Differences by Children's Grade Level. Figure EA 3.2 presents national estimates for 1996 on the degree of parental school participation among parents of children in grades 3–5, 6–8, and 9–12. Possible activities include: 1) attending general school meetings (*e.g.*, a PTA meeting or back-to-school night); 2) going to a regularly scheduled parent–teacher conference; 3) attending a school or class event such as a play or sports event; and 4) volunteering at the school or serving on a school committee.³⁵ As the figure indicates, the level of parental involvement in school activities decreases substantially as children get older. For example:

- Thirty-nine percent of children in grades 3–5 had parents who were classified as highly involved in their children's schools, meaning that they had been involved in three or more types of activities described above during the school year.
- Children in grades 6–8 and 9–12 had parents with substantially lower involvement levels, with 24 and 22 percent, respectively, classified as highly involved.
- Nearly one half of children in grades 9–12 had parents who were classified as having a low level of involvement, defined as having participated in one or no school activities.

Differences by Gender. Among some age groups, girls were more likely than boys to have parents with high or moderate levels of involvement. For example, among children in grades 6–8, girls were more likely than boys to have parents with high levels of involvement, and in grades 9–12, girls were more likely to have parents with moderate involvement levels. Alternatively, boys were more likely to have parents with low involvement levels in grades 6–8 and 9–12 (see Table EA 3.2).

Differences by Race and Ethnicity.³⁶ White children had parents who were more likely than parents of black or Hispanic children to be highly involved in their schools at each grade level (see Table EA 3.2).

³⁴ Zill, N., and Nord, C.W. (1994). Running in Place: How American Families are Faring in a Changing Economy and Individualistic Society. *Child Trends, Inc.*

³⁵ The level of involvement depends on the number of different activities reported by the parents, ranging from 0 or 1 (low involvement) to 2 (moderate involvement) to 3 or more activities (high involvement). Note that the number of times that the parent has been involved in each activity was not measured.

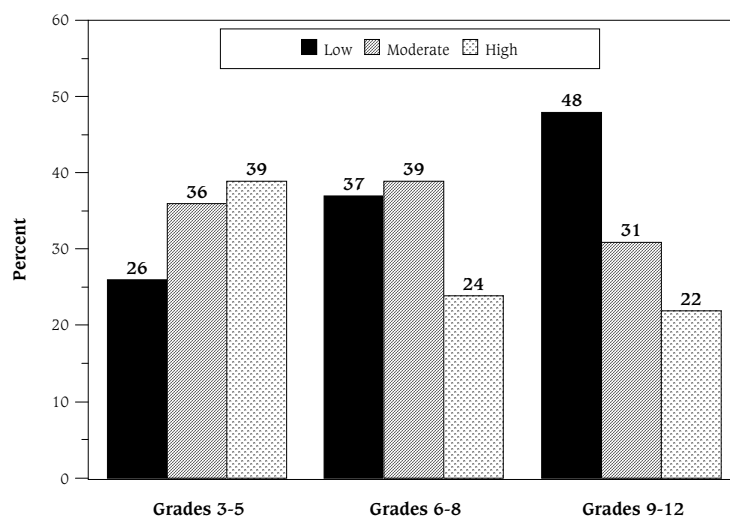
³⁶ Estimates for whites and blacks exclude Hispanics of those races.

Differences by Family Type. Children in two-parent families were more likely to have parents who were highly involved than children in families with one or no parent. For example, among students in grades 3–5, 43 percent of children with two parents had parents who were highly involved in their schools, compared to 29 percent of children with one or no parent (see Table EA 3.2).

Differences by Socioeconomic Status. Children with non-poor parents (above the poverty threshold) were much more likely to have highly involved parents than children with poor parents (at or below the poverty threshold), for all grade levels. Children whose mothers had higher levels of education had more highly involved parents than children whose mothers had lower education levels, at all grades (see Table EA 3.2).

Differences by Mother's Employment Status. Among children in grades 3–5 and 9–12, those whose mothers worked part time (less than 35 hours per week) had more involved parents than children whose mothers either worked full time (35 hours or more per week) or were not in the labor force. For instance, of children in grades 3–5, 56 percent of children whose mothers worked part time were classified as highly involved, compared to 33 percent of children whose mothers worked full time, and 36 percent of children whose mothers were not in the labor force (see Table EA 3.2).

*Figure EA 3.2
Degree of Parental Involvement in Child's School Activities: 1996*



Note:

- Low involvement = involvement in 0 or 1 activities
- Moderate involvement = involvement in 2 activities
- High involvement = involvement in 3 or more activities

Possible activities include 1) attending general school meetings; 2) going to a regularly scheduled parent-teacher conference; 3) attending school or class event; and 4) volunteering in the school or serving on a school committee.

Source: U.S. Department of Education, National Center for Education Statistics, 1996 National Household Education Survey (NHES:96).

Table EA 3.2
Percentage of Parents Who Have Been Involved in their Child's School Activities, by Level of Involvement,^a Grade, and Family Characteristics: 1996

	LOW INVOLVEMENT			MODERATE INVOLVEMENT			HIGH INVOLVEMENT		
	Grades 3-5	Grades 6-8	Grades 9-12	Grades 3-5	Grades 6-8	Grades 9-12	Grades 3-5	Grades 6-8	Grades 9-12
TOTAL	26	37	48	36	39	31	39	24	22
Gender									
Male	27	40	50	35	38	29	38	22	22
Female	24	34	46	36	39	33	40	27	22
Race/Ethnicity									
White non-Hispanic	21	31	43	36	41	32	44	28	25
Black non-Hispanic	37	52	60	36	31	27	27	17	14
Hispanic	36	49	61	36	36	26	29	16	14
Poverty Status^b									
Non-poor	21	31	44	35	41	31	44	28	25
Poor	39	55	64	37	31	27	24	14	10
Family Type									
Two parents	22	32	43	35	40	32	43	28	25
One or no parent	35	47	59	36	36	27	29	17	13
Mother's Education^c									
Less than HS	52	64	74	32	29	21	16	7	6
High School/GED	29	43	54	38	37	28	34	20	17
Vocational/technical or some college	21	30	43	36	42	34	43	28	23
College graduate	11	19	27	33	42	36	56	39	37
Mother's Employment Status									
≥ 35 hours per week	28	37	46	39	40	24	33	31	23
< 35 hours per week	16	30	42	28	37	34	56	31	27
Not in labor force	29	42	54	35	37	21	36	30	16

Note: ^aLow involvement = involvement in 0 or 1 activities
 Moderate involvement = involvement in 2 activities
 High involvement = involvement in 3 or more activities

Possible activities include 1) attending general school meetings; 2) going to a regularly scheduled parent-teacher conference; 3) attending school or class event; and 4) volunteering in the school or serving on a school committee.

^bChildren were classified as non-poor (living above the poverty threshold) or poor (living at-or-below the poverty threshold), based on family size and income. For more information about this classification, see Wright, D., Hausken, E.G., and West, J. (1994). *Family-Child Engagement in Literacy Activities: Changes in Participation Between 1991 and 1993*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

^cChildren without mothers in the home are not included in estimates of mother's education or mother's employment status. A mother is defined as a biological mother, adoptive mother, stepmother, foster mother, or female guardian (e.g., grandmother) who resides in the home with the child.

Source: U.S. Department of Education, National Center for Education Statistics, 1996 National Household Education Survey (NHES:96).

EA 3.3

DIFFICULTY SPEAKING ENGLISH

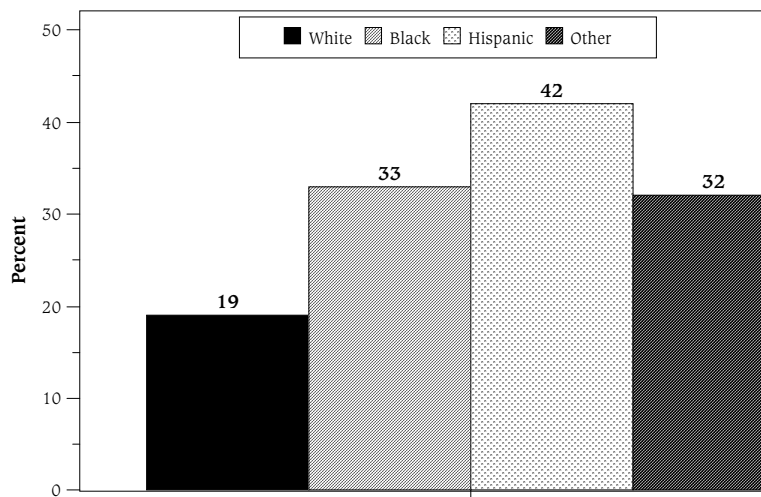
Children who have difficulty speaking English may find that this difficulty limits their educational progress and their future employment prospects. They may also need special instruction in school to improve their English. Difficulty speaking English is most common among immigrant children and the U.S.-born children of immigrants. In the last three decades, the great majority of immigrants to the U.S. have come from Asia, Latin America, and the Caribbean.

In 1995, of the 6.7 million children ages 5–17 in the U.S. who lived in homes in which a language other than English was spoken, 2.4 million (37 percent) had difficulty speaking English. This represents a slight increase from the 33 percent who had difficulty speaking English in 1979 (see Table EA 3.3).

Differences by Race and Hispanic Origin.³⁷ Thirty-three percent of non-Hispanic black children from homes where a language other than English was spoken had difficulty speaking English in 1995, an increase from 26 percent in 1979 (see Figure EA 3.3). Among Hispanic children from such homes, 42 percent had difficulty speaking English, up slightly from 38 percent in 1979. Nineteen percent of non-Hispanic white children from homes where a language other than English was spoken had difficulty speaking English in 1995. The proportion was similarly low in 1992 and in 1979, but was substantially higher (33 percent) in 1989.

³⁷ *Estimates for whites and blacks exclude Hispanics of those races.*

Figure EA 3.3
*Percentage Who Are Reported to Speak English Less Than "Very Well,"
 Among Children Ages 5-17 Who Speak a Language Other Than English at Home,
 by Race/Ethnicity: 1995*



Source: Unpublished tables based on analyses of the November Current Population Survey for selected years. National Center for Education Statistics.

Table EA 3.3
*Percentage Who Are Reported to Speak English Less Than "Very Well,"
 Among Children Ages 5-17 Who Speak a Language Other Than English at Home,
 by Race/Ethnicity: 1979-1995*

	1979	1989	1992	1995	Number in 1995 (in thousands)
TOTAL	33	38	35	37	2,442
Race/Ethnicity					
White, non-Hispanic	17	33	20	19	219
Black, non-Hispanic	26	32	33	33	73
Hispanic	38	39	39	42	1,934
Other	45	39	36	32	214

Source: Unpublished tables based on analyses of the November Current Population Survey for selected years. National Center for Education Statistics.