

Education and Achievement



EA 3.1 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 children in the United States to be able to start school ready to learn.⁴⁵

Table EA 3.1 presents three types of literacy activities that parents may engage in with their children. In 1999, a majority of 3- to 5-year-old children (53 percent) were read to by a parent or other family member every day. Fifty percent of children were regularly told stories in 1999 (three or more times a week), a substantial increase from 1991 levels (39 percent).

Differences by Race and Hispanic Origin.⁴⁶ There are substantial differences in all literacy activities by race and Hispanic origin; for example, in 1999, white children were more likely to be read to every day (61 percent) than black children (41 percent) or Hispanic children (33 percent). Similarly, white children (53 percent) were more likely to be told a story frequently than either black or Hispanic children (45 and 40 percent respectively) (see Table EA 3.1). Also, more white children visited a library at least once in the past month in 1999 (39 percent) than either black children (35 percent) or Hispanic children (25 percent). These differences have been fairly stable over time.

Differences by Socioeconomic Status. Children in families living at or above the poverty threshold are much more likely to be engaged in literacy activities on a regular basis than are children who live in poverty; for example, in 1999, 58 percent of children in nonpoor families were read to every day by a parent or other family member, compared with 38 percent of children in poor families (see Figure EA 3.1). There are also substantial differences in literacy activities by mother’s education level. For example, about one-fifth (18 percent) of children whose mothers did not have a high school diploma visited a library once or more in the past month, compared with 30 percent of children whose mothers had graduated high school and 50 percent whose mothers were college graduates (see Table EA 3.1).

Differences by Family Structure. 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 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.

⁴⁵ National Education Goals Panel. 1997. (Goal 1, p. xiv).

⁴⁶ Estimates of whites and blacks exclude Hispanics of those races.

Table EA 3.1

Percentage of 3- through 5-year-olds^a in the United States who have participated in literacy activities with a family member, by child and family characteristics: 1991, 1993, 1995, 1996, and 1999

	Read to every day					Told a story at least three times a week					Visited a library at least once in the past month				
	1991	1993	1995	1996	1999	1991	1993	1995	1996	1999	1991	1993	1995	1996	1999
Total	—	53	58	57	53	39	43	50	55	50	35	38	39	37	36
Gender															
Male	—	51	57	56	51	37	43	49	55	49	34	38	37	37	35
Female	—	54	59	57	54	41	43	51	56	50	36	38	41	36	38
Race and Hispanic origin^b															
White	—	59	65	64	61	40	44	53	59	53	39	42	43	41	39
Black	—	39	43	44	41	34	39	42	47	45	25	29	32	31	35
Hispanic	—	37	38	39	33	38	38	42	47	40	23	26	27	27	25
Poverty status															
At or above poverty	—	56	62	61	58	39	44	53	58	52	38	42	43	41	40
Below poverty	—	44	48	46	38	38	39	44	49	42	26	29	30	28	24
Family structure^c															
Two parents	—	55	61	61	57	39	44	52	59	52	38	41	43	40	40
One or no parent	—	46	49	46	42	37	41	46	47	44	23	30	30	29	29
Mother's education level^d															
Less than high school	—	37	40	37	38	34	37	39	47	36	16	22	20	19	18
High school/GED	—	48	48	49	44	38	41	48	54	48	29	31	33	31	30
Vocational/technical or some college	—	57	64	62	53	41	45	53	55	52	40	44	42	41	40
Graduated college	—	71	76	77	70	42	48	55	64	55	55	55	57	56	50
Mother's employment status^d															
35 hours or more per week	—	52	55	54	48	37	43	49	53	48	30	34	35	32	—
Less than 35 hours per week	—	56	63	59	55	40	45	53	56	55	41	47	46	39	—
Not in labor force	—	55	60	59	60	42	43	50	56	60	38	37	42	40	40

^a Estimates are based on children who have yet to enter kindergarten.

^b Persons of Hispanic origin may be of any race. Estimates for whites and blacks exclude persons of Hispanic origin.

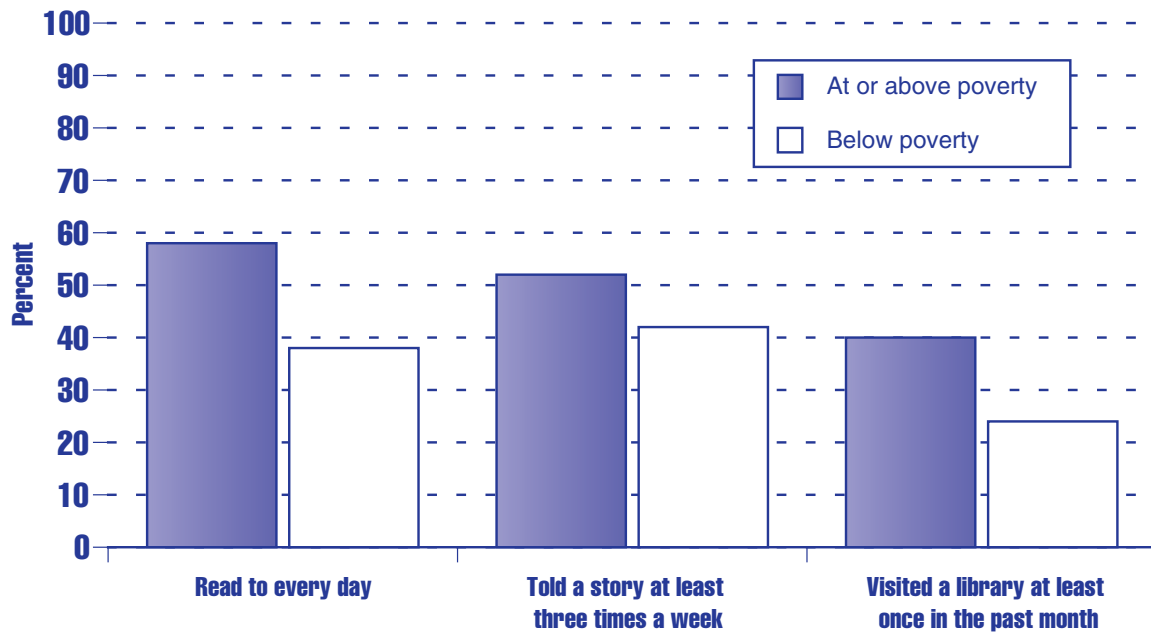
^c Parents include any combination of a biological, adoptive, step-, and foster mother and/or father. No parents in the household indicates that the child is living with nonparent guardians (e.g., grandparents).

^d Children 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.

Sources: U.S. Department of Education, National Center for Education Statistics, 1991, 1993, 1995, 1996, and 1999 National Household Education Survey (unpublished data); Tabulated by U.S. Department of Education, National Center for Education Statistics; Estimates of "read to every day" as published in Federal Interagency Forum on Child and Family Statistics, 1998, Table ED1.

Figure EA 3.1

Percentage of 3- through 5-year-olds in the United States who have participated in literacy activities with a family member, by poverty status: 1999



Sources: U.S. Department of Education, National Center for Education Statistics, 1999 National Household Education Survey (unpublished data); Tabulated by U.S. Department of Education, National Center for Education Statistics; Estimates of "read to every day" as published in Federal Interagency Forum on Child and Family Statistics, 1998, Table ED1.



EA 3.2 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 ages 9, 13, and 17 who read more frequently for fun had consistently higher average reading proficiency scores than those students who read less often.⁴⁷

Table EA 3.2 presents the percentage of students who read for fun on a daily basis for three age groups (9-, 13-, and 17-year-olds).

Differences by Age. In 1996, over half of 9-year-olds (54 percent) reported reading for fun on a daily basis, compared with about one-third of 13-year-olds (32 percent) and about one-quarter of 17-year-olds (23 percent) (see Table EA 3.2).

Differences by Gender. Among children ages 9 and 13, larger proportions of girls than boys reported frequent reading in their spare time. For example, more than half (57 percent) of 9-year-old girls read for fun on a daily basis, compared with 51 percent of 9-year-old boys, in 1996. Among 17-year-olds, however, similar proportions of boys (22 percent) and girls (24 percent) reported reading on a daily basis in 1996 (see Figure EA 3.2).

Differences by Race and Hispanic Origin.⁴⁸ In 1996, the percentage of 9-, 13-, and 17-year-olds who reported reading for fun on a daily basis was similar for all racial/ethnic groups (see Table EA 3.2).

Differences by Parents' Education Level.⁴⁹ In 1996, 13-year-olds whose better-educated parent had some education after high school were more likely to read for fun than students whose parent(s) had no education beyond high school (see Table EA 3.2). A similar pattern is found among 17-year-olds; for example, in 1996, 28 percent of 17-year-olds whose better-educated parent had graduated from college read for fun on a daily basis. In contrast, 18 percent of 17-year-olds whose parent(s) had graduated from high school (but had no education beyond that) and 14 percent whose parent(s) had not finished high school reported reading for fun on a daily basis (see Table EA 3.2).

Differences by Type of School. Larger percentages of 13- and 17-year-olds who attended nonpublic schools read for fun on a daily basis than did their counterparts in public schools (see Table EA 3.2). Among 9-year-olds, a larger percentage of public school students reported reading for fun in 1992 and 1994, but this pattern reversed in 1996 (see Table EA 3.2).

⁴⁷ Campbell, Voelkl, & Donahue. 1997, p. 141.

⁴⁸ Estimates for whites and blacks exclude Hispanics of those races.

⁴⁹ Parents' education level refers to the highest level of education completed by either parent.

Table EA 3.2

Percentage of students ages 9, 13, and 17 in the United States who read for fun on a daily basis, by gender, race and Hispanic origin,^a parents' education level,^b and type of school: 1992, 1994, and 1996

	Age 9			Age 13			Age 17		
	1992	1994	1996	1992	1994	1996	1992	1994	1996
Total	56	58	54	37	32	32	27	30	23
Gender									
Male	48	49	51	30	25	27	23	29	22
Female	64	66	57	44	39	38	30	30	24
Race and Hispanic origin^a									
White, non-Hispanic	57	58	54	37	38	33	29	34	24
Black, non-Hispanic	54	58	51	35	18	29	14	16	21
Hispanic	54	58	56	44	15	28	25	17	21
Parents' education level^b									
Less than high school	—	—	—	16	24	29	23	15	14
Graduated high school	—	—	—	33	28	28	16	25	18
Some education after high school	—	—	—	37	40	41	28	30	22
Graduated college	—	—	—	44	37	34	35	36	28
Type of school									
Public	57	57	54	36	31	33	26	29	21
Nonpublic	52	54	61	49	40	36	44	46	28

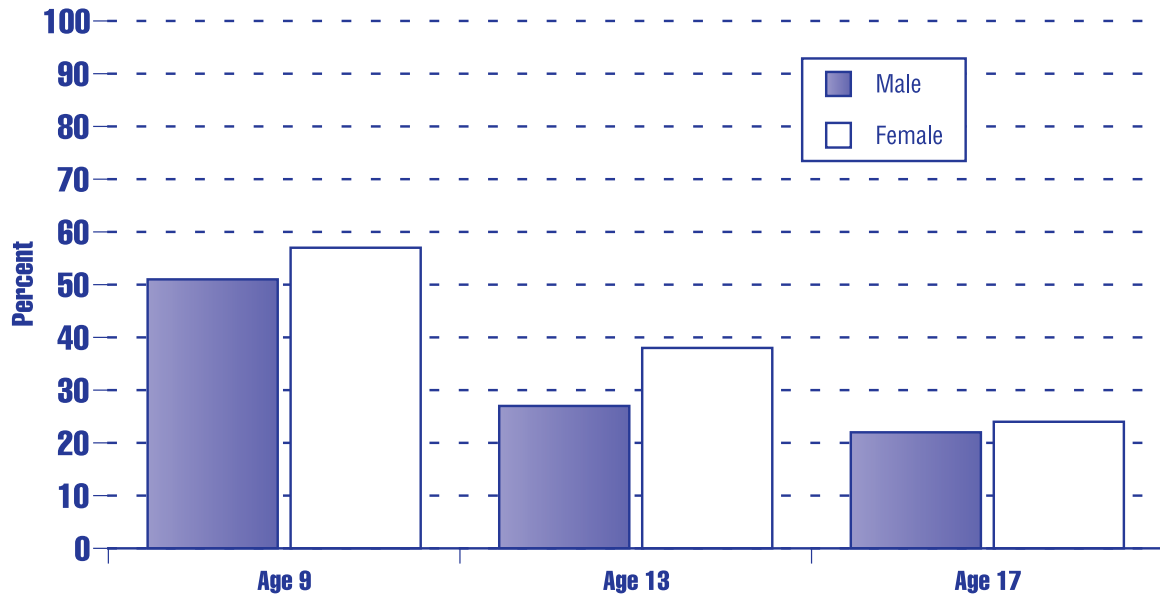
^a Persons of Hispanic origin may be of any race.

^b Parents' education level refers to the highest level of education completed by either parent.

Source: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, and 1996 Long-Term Trends, Reading Assessment, unpublished data. Tabulated by U.S. Department of Education, National Center for Education Statistics.

Figure EA 3.2

Percentage of students ages 9, 13, and 17 in the United States who read for fun on a daily basis, by gender: 1996



Source: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, and 1996 Long-Term Trends, Reading Assessment, unpublished data. Tabulated by U.S. Department of Education, National Center for Education Statistics.



EA 3.3 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.⁵⁰ Indeed, in two-parent families, parental involvement of both mothers and fathers in their child's school is significantly associated with an increased likelihood of 1st- through 12th-grade children earning mostly A's and with a reduced likelihood that these children will ever repeat a grade.⁵¹

Differences by Children's Grade Level. Figure EA 3.3 presents national estimates for 1999 on the degree of parental school participation among parents of children in grades 3 through 5, 6 through 8, and 9 through 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.⁵² As the figure indicates, the level of parental involvement in school activities decreases substantially as children get older.

- Sixty-eight percent of children in grades 3 through 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 through 8 and 9 through 12 had parents with substantially lower involvement levels, with 54 and 40 percent, respectively, classified as highly involved.
- Just over one-third (35 percent) of children in grades 9 through 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 Race and Hispanic Origin.⁵³ Parents of white children were more likely than parents of black or Hispanic children to be highly involved in their children's schools at each grade level (see Table EA 3.3).

Differences by Socioeconomic Status. Children living in nonpoor households were much more likely to have highly involved parents than children living in poor households, 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 3.3).

Differences by Family Structure. Children in two-parent families were more likely than children in single-parent families to have parents who were highly involved in school activities. For example, among students in grades 3 through 5, 73 percent of children with two

⁵⁰ Zill, N., & Nord, C.W. 1994. *Running in Place: How American Families Are Faring in a Changing Economy and Individualistic Society*. Washington, D.C.: Child Trends.

⁵¹ Nord, C.W., Brimhall, D., & West, J. 1997. *Fathers' Involvement in Their Children's Schools*. NCES 98-091. Washington, D.C.: National Center for Education Statistics.

⁵² 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.

⁵³ Estimates for whites and blacks exclude Hispanics of those races.

parents had parents who were highly involved in their schools, compared with 59 percent of children with one or no parent (see Table EA 3.3).

Among children in two-parent families, mothers were more likely to be highly involved than fathers. For example, in 1999, about half of students in grades 6 through 8 had highly involved mothers, but only one-quarter had highly involved fathers (see Table EA 3.3).

Children in single-mother families were somewhat less likely to have highly involved mothers (44 percent for grades 6 through 8) than comparable children in two-parent families (52 percent). However, children in single-father families were more likely to have a highly involved father (50 percent for grades 6 through 8) than comparable children in two-parent families (29 percent).

Differences by Mother's Employment Status. Children in grades 3 through 8 and whose mothers worked part-time (less than 35 hours per week) had more highly involved parents than 3rd through 8th graders whose mothers either worked full-time (35 hours or more per week) or who were not in the labor force. For instance, 76 percent of children in grades 3 through 5 whose mothers worked part-time had parents who were classified as highly involved, compared with 66 percent of children whose mothers worked full-time and 69 percent of children whose mothers were not in the labor force (see Table EA 3.3). Among children in grades 9 through 12, those whose mothers were in the labor force had more involved parents than children whose mothers were not in the labor force (see Table EA 3.3).

Related Behaviors and Characteristics

Table EA 3.3

Percentage of children in the United States whose parents are involved in their schools, by level of involvement,^a grade, and child and family characteristics: 1999

	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	13	21	35	19	26	26	68	54	40
Gender									
Male	14	21	36	19	26	25	67	54	39
Female	11	20	34	19	25	26	70	55	40
Race and Hispanic origin									
White ^b	10	17	31	16	25	26	74	58	43
Black ^b	19	27	40	24	28	26	58	45	34
Hispanic ^c	20	31	49	23	26	24	57	43	27
Poverty status									
At or above poverty	10	17	32	17	25	26	73	59	43
Below poverty	21	35	48	27	29	25	53	36	26
Family structured^d									
Two parents	10	17	31	17	24	25	73	59	45
Mother	14	21	36	18	27	24	68	52	41
Father	40	47	55	26	25	21	34	29	24
One or no parent ^e	18	28	43	24	28	27	59	44	30
Mother-only	17	29	42	22	28	28	61	44	30
Father-only	18	22	38	25	28	25	57	50	37
Nonparent guardian(s)	24	26	51	32	31	28	44	44	21
Mother's education level^f									
Less than high school	27	38	58	30	28	26	44	34	16
High school/GED	17	24	41	21	28	25	62	48	35
Vocational/technical or some college	9	19	34	17	28	25	74	54	41
College graduate	6	11	20	13	18	27	81	71	53
Mother's employment status^f									
35 hours or more per week	12	19	34	22	26	27	66	55	39
Less than 35 hours per week	8	18	30	16	24	24	76	59	46
Not in labor force	16	26	40	15	25	23	69	49	36

^a Low involvement = involvement in 0 or 1 activity. 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 a school or class event, and (4) volunteering at the school or serving on a school committee.

^b Non-Hispanic.

^c Persons of Hispanic origin may be of any race.

^d Parents include any combination of a biological, adoptive, step-, and foster mother and/or father. No parents in the household indicates that the child is living with nonparent guardians (e.g., grandparents).

^e Estimates for single parent households may include involvement of other adults living in the household.

^f Children 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.

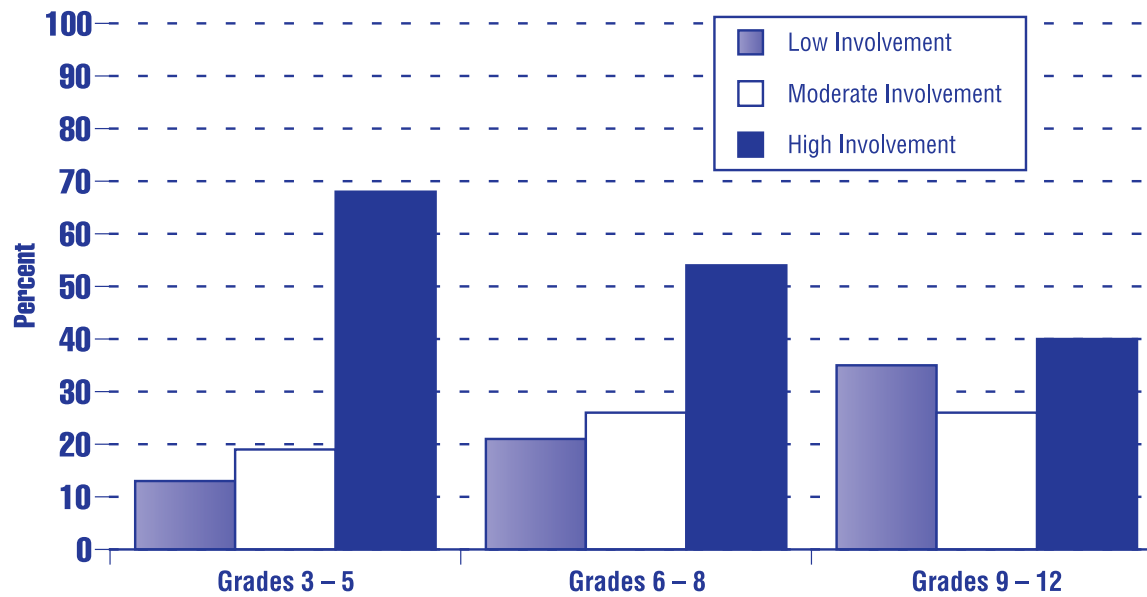
Note: Because of rounding, percents may not add to 100.

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

Tabulated by U.S. Department of Education, National Center for Education Statistics (unpublished).

Figure EA 3.3

Percentage of parental involvement^a in child's school activities by grade level, in the United States: 1999



^aLow involvement = involvement in 0 or 1 activity. 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 a school or class event, and (4) volunteering at the school or serving on a school committee.

Source: U.S. Department of Education, National Center for Education Statistics, 1996 National Household Education Survey. Tabulated by U.S. Department of Education, National Center for Education Statistics (unpublished).

EA 3.4 Difficulty Speaking English

Difficulty speaking English may limit children's educational progress and their future employment prospects. Children may also need special instruction in school to improve their English. Difficulty speaking English is most common among immigrant children and U.S.-born children of immigrants. In the past three decades, the great majority of immigrants to the United States have come from Asia, Latin America, and the Caribbean.

In 1995, of the 6.7 million children ages 5 through 17 in the United States who spoke a language other than English at home, 2.4 million (36.5 percent) had difficulty speaking English. This represents a 3.8 percentage point increase from the proportion of similar children who had difficulty speaking English in 1979 (see Table EA 3.4). While the proportion of all children experiencing difficulty speaking English nearly doubled between 1979 and 1995, this group constituted only 5.1 percent of the total population of children ages 5 through 17 in 1995 (see Table EA 3.4).

Differences by Race and Hispanic Origin. Children of Hispanic or "other" ethnic origin are more likely than black or white children to have difficulty speaking English. For example, in 1995, 31.0 percent of all Hispanic children and 14.1 percent of children of "other" races (including Asians) had difficulty speaking English, compared with about 1 percent each of black and white children. These differences are due in part to the fact that Hispanic and Asian children are more likely than whites or blacks to speak another language in the home (see Table EA 3.4). Nearly one-third (31.8 percent) of non-Hispanic black children from homes where a language other than English was spoken had difficulty speaking English in 1995 (see Figure EA 3.4), an increase from 25.6 percent in 1979. Among Hispanic children from such homes, 41.9 percent had difficulty speaking English. 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 1979, 1989, and 1992 for these children.

Differences by Region. The percentage of children who speak another language at home varies substantially by geographic region, ranging from 5.9 percent in the Midwest to 26.4 percent in the West in 1995. Further, in the West more than 1 in 10 children have difficulty speaking English, compared to 2.3 percent in the Midwest.

Table EA 3.4

Difficulty speaking English: children ages 5 to 17 who speak a language other than English at home and who are reported to have difficulty speaking English,^a by race and Hispanic origin and by region: Selected years, 1979-1995

	1979	1989	1992	1995 ^b
Children who speak another language at home				
Number (in thousands)	3,825	5,293	6,375	6,656
Percentage of children ages 5-17	8.5	12.6	14.2	14.1
Race and Hispanic origin				
White, non-Hispanic	3.2	3.5	3.7	3.6
Black, non-Hispanic	1.3	2.4	4.2	3.0
Hispanic ^c	75.1	71.2	76.6	73.9
Other, non-Hispanic	44.1	53.4	58.3	45.5
Region ^d				
Northeast	10.5	13.5	16.2	15.1
Midwest	3.7	4.9	5.6	5.9
South	6.8	10.7	11.1	11.7
West	17.0	24.2	27.2	26.4
Children who have difficulty speaking English				
Number (in thousands)	1,250	1,850	2,178	2,431
Percentage of children ages 5-17	2.8	4.4	4.9	5.1
Race and Hispanic origin				
White, non-Hispanic	0.5	0.8	0.6	0.7
Black, non-Hispanic	0.3	0.5	1.3	0.9
Hispanic ^c	28.7	27.4	29.9	31.0
Other, non-Hispanic	19.8	20.4	21.0	14.1
Region ^d				
Northeast	2.9	4.8	5.3	5.0
Midwest	1.1	1.3	1.6	2.3
South	2.2	3.8	3.5	3.4
West	6.5	8.8	10.4	11.4
Percentage of those speaking another language at home who have difficulty speaking English				
	32.7	34.9	34.2	36.5
Race and Hispanic origin				
White, non-Hispanic	17.3	22.6	17.2	19.0
Black, non-Hispanic	25.6	22.5	31.0	31.8
Hispanic ^c	38.2	38.5	39.0	41.9
Other, non-Hispanic	44.9	38.1	36.1	31.1

^a Respondents were asked if the children in the household spoke a language other than English at home and how well they could speak English. Categories used for reporting were "Very well," "Well," "Not well," and "Not at all." All those reported to speak English less than "Very well" were considered to have difficulty speaking English.

^b Numbers in this year may reflect changes in the Current Population Survey because of newly instituted computer-assisted interviewing techniques and/or because of the change in the population controls to the 1990 Census-based estimates, with adjustments.

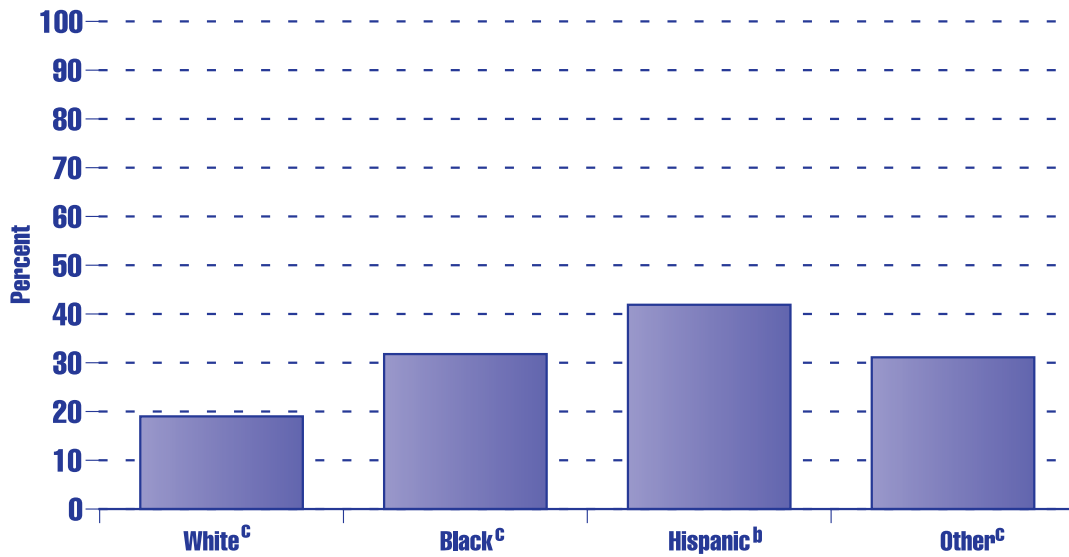
^c Persons of Hispanic origin may be of any race.

^d Regions: Northeast includes CT, ME, MA, NH, NJ, NY, PA, RI, and VT. Midwest includes IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, and WI. South includes AL, AR, DE, DC FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, and WV. West includes AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, and WY.

Source: National Center for Education Statistics. Tabulations based on October 1992 and 1995 and November 1979 and 1989 Current Population Surveys, U.S. Bureau of the Census. As published in Federal Interagency Forum on Child and Family Statistics, 1998, Table POP4.

Figure EA 3.4

Percentage of children ages 5 through 17 in the United States who speak a language other than English at home and who are reported to have difficulty speaking English,^a by race and Hispanic origin:^b 1995



^a Parents were asked if their child spoke a language other than English at home and how well the child could speak English. Categories used for reporting were “Very well,” “Well,” “Not well,” and “Not at all.” All children who were reported to speak below the level of “Very well” were considered to have difficulty speaking English.

^b Persons of Hispanic origin may be of any race.

^c Non-Hispanic.

Source: National Center for Education Statistics. Tabulations based on October 1992 and 1995 and November 1979 and 1989 *Current Population Surveys*, U.S. Bureau of the Census. As published in Federal Interagency Forum on Child and Family Statistics, 1998, Table POP4.



EA 3.5 STUDENT COMPUTER USE

Computer literacy has become increasingly important for success in the workplace. Computers have become an essential tool for retrieving and manipulating information, for producing reports, and for communicating with colleagues. The extent to which children have access to computers, and the uses children make of computers, may be an indicator of how well prepared students will be to enter an increasingly technological workplace.

Tables EA 3.5.A and EA 3.5.B present data on the frequency of computer use by children at school and at home. A review of these tables reveals the following general trends:

- The percentage of 4th, 8th, and 12th graders who reported using a computer for schoolwork 1-2 times a week increased substantially between 1992 and 1998 (see Table EA 3.5.A). For example, 14 percent of 12th graders reported using a computer at school 1-2 times a week in 1992, compared with 28 percent in 1998.

Differences by Grade. Computer usage for schoolwork appears to increase as students enter the higher grades. For example, in 1998, 8 percent of 4th graders reported using a computer every day for schoolwork, while 21 percent of 12th graders reported the same.

Differences by Family Income.⁵⁴ Data from the Current Population Survey indicate that students from high-income families were more likely than students from middle- and low-income families to report using a computer at home or at school (see Table EA 3.5.B). However, family income appears to have a stronger impact on children's exposure to computers at home than at school. For example, in 1997, the rate of computer usage at home was 15 percent for students in grades 7-12 from low-income families, compared with 79 percent for students from high-income families in the same grades. The corresponding computer usage rates at school were 68 percent and 75 percent for students in grades 7-12 from low-income and high-income families, respectively (see Table EA 3.5.B).

⁵⁴ Low income is the bottom 20 percent of all family incomes; high income is the top 20 percent of all family incomes; and middle income is the 60 percent in between.

Table EA 3.5.A

Percentage of students who reported using a computer for schoolwork, by grade and frequency of use: Selected years, 1992-1998

	Grade 4			Grade 8			Grade 12		
	1992	1994	1998	1992	1994	1998	1992	1994	1998
Frequency of use									
Never	67	60	54	58	51	32	45	37	22
Ever	33	40	46	42	49	68	55	63	78
1-2 times a week	17	21	20	14	16	25	14	18	28
1-2 times a month	10	11	18	20	23	29	22	26	30
Every day	6	9	8	8	10	15	18	18	21

Source: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress. 1988. *Almanac: Writing, 1984 to 1996*. As published in *The Condition of Education 1998*, p. 38. Some tabulations performed by Child Trends.

Table EA 3.5.B

Percentage of students who reported using a computer at school or at home, by grade level and family income: October 1984, 1989, 1993,^a and 1997

Location of Computer	Income Level															
	Total				Low				Middle				High			
	1984	1989	1993	1997	1984	1989	1993	1997	1984	1989	1993	1997	1984	1989	1993	1997
Grades 1-6																
At home	11.8	16.1	23.0	41.3	2.5	3.2	3.9	12.4	9.7	13.1	18.0	36.4	24.4	33.6	48.5	74.6
At school	30.5	52.4	66.6	79.1	18.5	39.4	57.4	70.9	29.5	52.3	66.2	78.6	42.2	62.5	74.0	86.5
At school or home	36.2	56.9	70.7	83.8	20.0	40.5	58.1	71.9	34.5	56.3	69.5	82.8	53.0	70.9	82.4	95.0
Grades 7-12																
At home	13.4	21.1	27.7	49.2	3.3	5.7	5.6	14.9	10.1	17.0	22.2	44.2	24.8	38.3	51.2	78.6
At school	28.9	43.0	57.0	73.5	20.0	36.7	49.0	67.6	28.4	42.6	57.3	74.1	34.1	47.2	60.7	75.4
At school or home	36.2	52.1	65.6	84.3	22.2	39.0	50.4	70.7	33.6	49.9	64.1	83.5	48.1	63.9	77.0	93.3

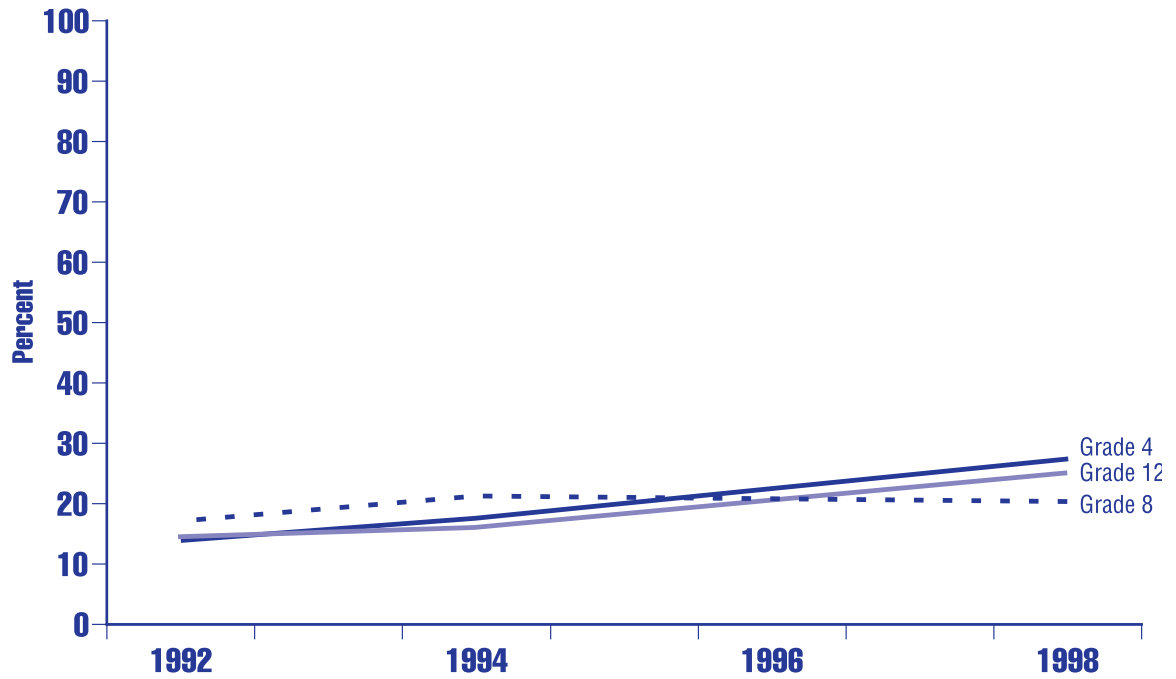
^a Data for 1984, 1989, and 1993 are revised from previously published figures.

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

Source: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress. 1998. *Almanac: Writing, 1984 to 1996*. As published in *The Condition of Education 1998*, p. 38.

Figure EA 3.5.A

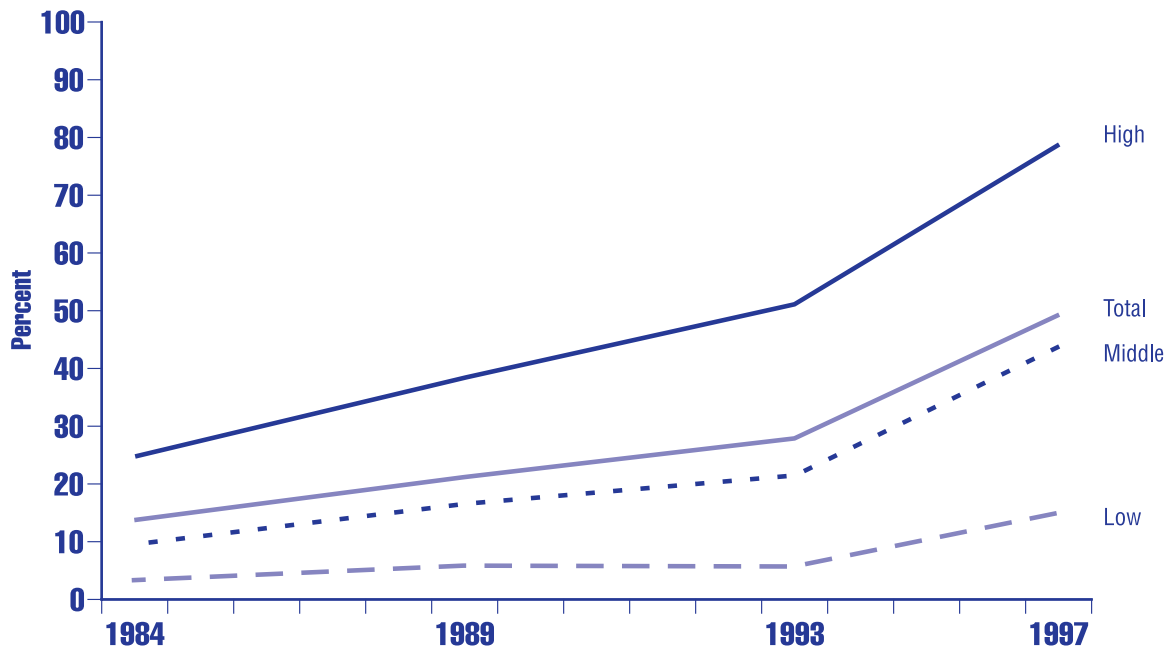
Percentage of students who reported using a computer for schoolwork 1-2 times a week, by grade level: Selected years, 1992-1998



Source: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress. *Almanac: Writing, 1998*. As published in *The Condition of Education 1998*, p. 38. Some tabulations performed by Child Trends.

Figure EA 3.5.B

Percentage of students in grades 7-12 who reported using a computer at home, by family income:^a 1984, 1989, 1993, and 1997



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

Source: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys (CPS). As published in *The Condition of Education 1998*, Table 3-1.