

## 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.<sup>45</sup>

Table EA 3.1 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 one-third of children (37 percent) visited a library at least once in the past month. About 55 percent of children were regularly told stories in 1996 (three or more times a week), a substantial increase from 1991 levels (39 percent).

**Differences by Race and Hispanic Origin.**<sup>46</sup> There are substantial differences in all literacy activities by race and Hispanic origin; 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). Similarly, white children (59 percent) were more likely to be told a story frequently than either black or Hispanic children (47 percent) (see Table EA 3.1). Also, more white children visited a library at least once in the past month in 1996 (41 percent) than either black children (31 percent) or Hispanic children (27 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 1996, 61 percent of children in non-poor families were read to every day by a parent or other family member, compared with 46 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 (19 percent) of children whose mothers did not have a high school diploma visited a library once or more in the past month, compared with more than half (56 percent) of children 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.

<sup>45</sup>National Education Goals Panel. 1997. *The National Education Goals Report: Building a Nation of Learners, 1997* (Goal 1, p. xiv). Washington, D.C.: U.S. Government Printing Office.

<sup>46</sup>Estimates of whites and blacks exclude Hispanics of those races.

Table EA 3.1

Percentage of 3- through 5-year-olds<sup>a</sup> in the United States 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 at least three 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 |
| <b>Total</b> —                                | 53                | 58   | 57   | 39   | 43                                       | 50   | 55   | 35   | 38  | 39   | 37   |      |
| <b>Gender</b>                                 |                   |      |      |      |  |      |      |      |   |      |      |      |
| Male  | —                 | 51   | 57   | 56   | 37                                       | 43   | 49   | 55   | 34  | 38   | 37   | 37   |
| Female  | —                 | 54   | 59   | 57   | 41                                       | 43   | 51   | 56   | 36  | 38   | 41   | 36   |
| <b>Race and Hispanic origin<sup>b</sup></b>   |                   |      |      |      |  |      |      |      |   |      |      |      |
| 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   |
| <b>Poverty status</b>                         |                   |      |      |      |  |      |      |      |   |      |      |      |
| At or above poverty                           | —                 | 56   | 62   | 61   | 39                                       | 44   | 53   | 58   | 38  | 42   | 43   | 41   |
| Below poverty                                 | —                 | 44   | 48   | 46   | 38                                       | 40   | 44   | 49   | 26  | 29   | 30   | 28   |
| <b>Family structure<sup>c</sup></b>           |                   |      |      |      |  |      |      |      |   |      |      |      |
| 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   |
| <b>Mother's education level<sup>d</sup></b>   |                   |      |      |      |  |      |      |      |   |      |      |      |
| Less than high school                         | —                 | 37   | 40   | 37   | 34                                       | 37   | 39   | 47   | 16  | 22   | 20   | 19   |
| High school/GED                               | —                 | 48   | 48   | 49   | 38                                       | 41   | 48   | 54   | 29  | 31   | 33   | 31   |
| Vocational/technical or some college          | —                 | 57   | 64   | 62   | 41                                       | 45   | 53   | 55   | 40  | 44   | 42   | 41   |
| College graduate                              | —                 | 71   | 76   | 77   | 42                                       | 49   | 55   | 64   | 55  | 56   | 57   | 56   |
| <b>Mother's employment status<sup>d</sup></b> |                   |      |      |      |  |      |      |      |   |      |      |      |
| 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   |

— = not available

<sup>a</sup>Estimates are based on children who have yet to enter kindergarten.

<sup>b</sup>Persons of Hispanic origin may be of any race.

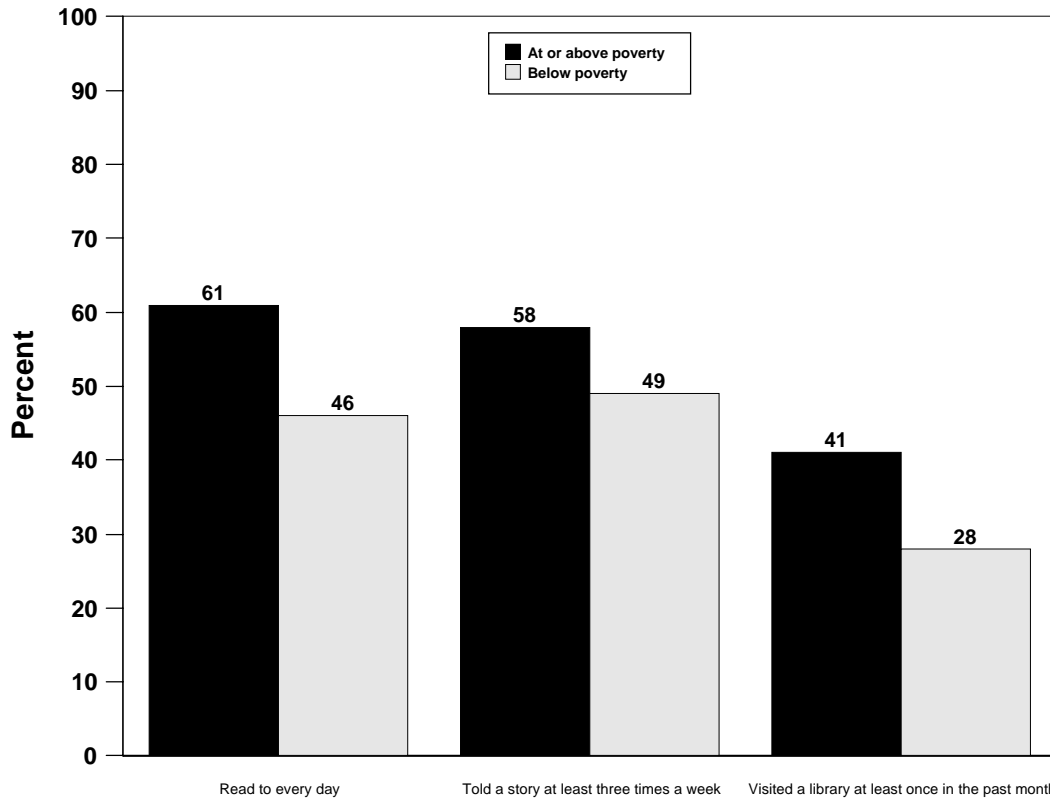
<sup>c</sup>Parents include any combination of a biological, adoptive, step-, and foster mother and/or father. No parents in the household indicates that the child is living with nonparent guardians (e.g., grandparents).

<sup>d</sup>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, and 1996 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 *America's Children: Key National Indicators of Well-Being, 1998*. Federal Inter-agency Forum on Child and Family Statistics, Washington, D.C.: U.S. Government Printing Office. 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: 1996



Sources: U.S. Department of Education, National Center for Education Statistics, 1996 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. *America's Children: Key National Indicators of Well-Being, 1998*. Washington, D.C.: U.S. Government Printing Office, 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.<sup>47</sup>

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.**<sup>48</sup> 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.**<sup>49</sup> 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).

<sup>47</sup>Campbell, J.R., Voelkl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress* (p. 141). NCES 97-985. Washington, D.C.: National Center for Education Statistics.

<sup>48</sup>Estimates for whites and blacks exclude Hispanics of those races.

<sup>49</sup>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,<sup>a</sup> parents' education level,<sup>b</sup> and type of school: 1992, 1994, and 1996

|   | Age 9 |      |      | Age 13 |      |      | Age 17 |      |      |
|---|-------|------|------|--------|------|------|--------|------|------|
|   | 1992  | 1994 | 1996 | 1992   | 1994 | 1996 | 1992   | 1994 | 1996 |
| <b>Total</b>                                | 56    | 58   | 54   | 37     | 32   | 32   | 27     | 30   | 23   |
| <b>Gender</b>                               |       |      |      |        |      |      |        |      |      |
| Male  | 48    | 49   | 51   | 30     | 25   | 27   | 23     | 29   | 22   |
| Female                                      | 64    | 66   | 57   | 44     | 39   | 38   | 30     | 30   | 24   |
| <b>Race and Hispanic origin<sup>a</sup></b> |       |      |      |        |      |      |        |      |      |
| 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   |
| <b>Parents' education level<sup>b</sup></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   |
| <b>Type of school</b>                       |       |      |      |        |      |      |        |      |      |
| Public                                      | 57    | 57   | 54   | 36     | 31   | 33   | 26     | 29   | 21   |
| Nonpublic                                   | 52    | 54   | 61   | 49     | 40   | 36   | 44     | 46   | 28   |

— = not available

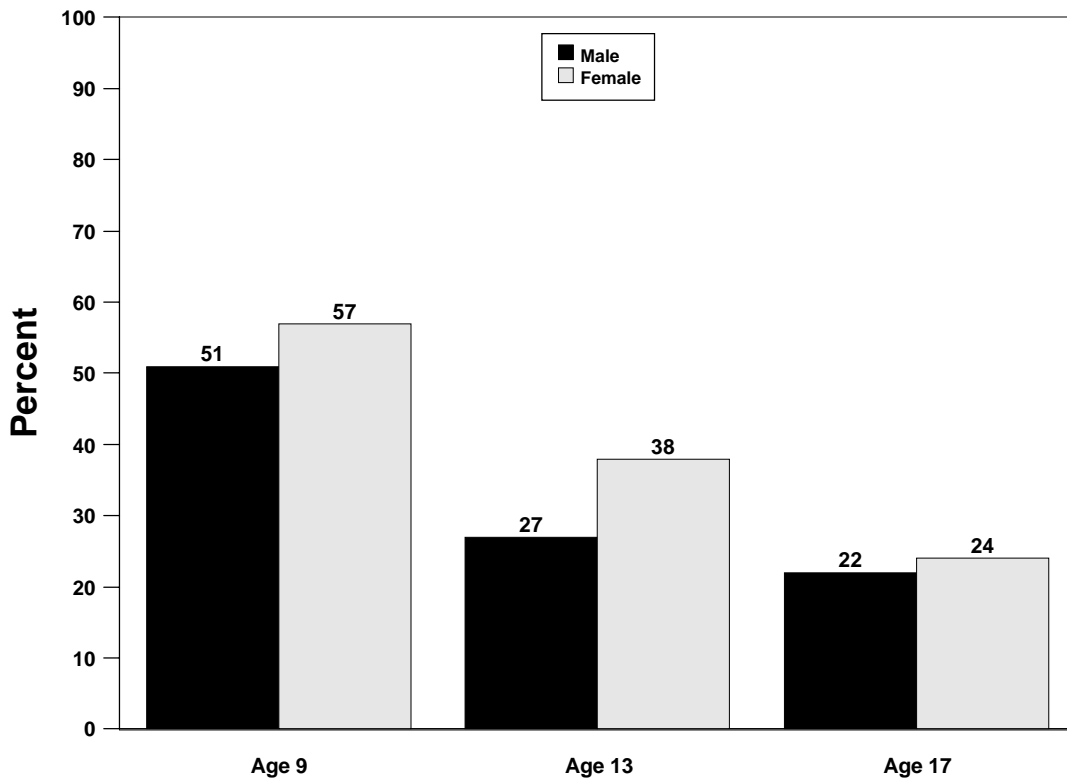
<sup>a</sup>Persons of Hispanic origin may be of any race.

<sup>b</sup>Parents' education level refers to the highest level of education completed by either parent.

Sources: 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



Sources: 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.<sup>50</sup> 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.<sup>51</sup>

**Differences by Children's Grade Level.** Figure EA 3.3 presents national estimates for 1996 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.<sup>52</sup> As the figure indicates, the level of parental involvement in school activities decreases substantially as children get older.

- Sixty-nine 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 53 and 39 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.**<sup>53</sup> 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 non-poor 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, 74 percent of children with two parents had parents who were highly involved in their schools, compared with 60 percent of children with one or no parent (see Table EA 3.3).

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

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

<sup>52</sup>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.

<sup>53</sup>Estimates for whites and blacks exclude Hispanics of those races.

Among children in two-parent families, mothers were more likely to be highly involved than fathers. For example, in 1996, 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 (45 percent for grades 6 through 8) than comparable children in two-parent families (51 percent). However, children in single-father families were more likely to have a highly involved father (52 percent for grades 6 through 8) than comparable children in two-parent families (25 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, 81 percent for children in grades 3 through 5 whose mothers worked part-time had parents who were classified as highly involved, compared with 67 percent of mothers worked full-time and 66 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 highly involved parents than children whose mothers were not in the labor force (see Table EA 3.3).

Table EA 3.3

Percentage of children in the United States whose parents are involved in their schools, by level of involvement,<sup>a</sup> grade, and child and family characteristics: 1996

|   | Low Involvement |        |        | Moderate Involvement |        |        | High Involvement |        |        |
|---|-----------------|--------|--------|----------------------|--------|--------|------------------|--------|--------|
|   | Grades          | Grades | Grades | Grades               | Grades | Grades | Grades           | Grades | Grades |
|   | 3 - 5           | 6 - 8  | 9 - 12 | 3 - 5                | 6 - 8  | 9 - 12 | 3 - 5            | 6 - 8  | 9 - 12 |
| <b>Total</b>                                  | 11              | 21     | 35     | 19                   | 26     | 26     | 69               | 53     | 39     |
| <b>Gender</b>                                 |                 |        |        |                      |        |        |                  |        |        |
| Male  | 12              | 22     | 35     | 19                   | 27     | 27     | 69               | 51     | 38     |
| Female  | 11              | 20     | 35     | 19                   | 26     | 25     | 70               | 54     | 40     |
| <b>Race and Hispanic origin<sup>b</sup></b>   |                 |        |        |                      |        |        |                  |        |        |
| White non-Hispanic                            | 8               | 17     | 32     | 18                   | 25     | 26     | 74               | 57     | 43     |
| Black non-Hispanic                            | 20              | 28     | 42     | 22                   | 31     | 27     | 59               | 41     | 31     |
| Hispanic                                      | 15              | 29     | 44     | 24                   | 28     | 28     | 60               | 43     | 28     |
| <b>Poverty status</b>                         |                 |        |        |                      |        |        |                  |        |        |
| At or above poverty                           | 8               | 17     | 32     | 18                   | 26     | 26     | 74               | 57     | 42     |
| Below poverty                                 | 21              | 35     | 51     | 24                   | 28     | 25     | 56               | 38     | 24     |
| <b>Family structure<sup>c</sup></b>           |                 |        |        |                      |        |        |                  |        |        |
| Two parents                                   | 9               | 18     | 31     | 18                   | 26     | 26     | 74               | 56     | 43     |
| Mother  | 12              | 22     | 36     | 19                   | 27     | 26     | 68               | 51     | 39     |
| Father  | 43              | 50     | 54     | 26                   | 26     | 23     | 31               | 25     | 23     |
| One or no parent <sup>d</sup>                 | 16              | 29     | 45     | 24                   | 26     | 26     | 60               | 45     | 30     |
| Mother-only                                   | 15              | 27     | 43     | 24                   | 28     | 25     | 61               | 45     | 32     |
| Father-only                                   | *               | 31     | 40     | 27                   | 18     | 33     | 58               | 52     | 27     |
| Nonparent guardian(s)                         | *               | 38     | 55     | *                    | *      | 27     | 57               | 39     | 17     |
| <b>Mother's education level<sup>e</sup></b>   |                 |        |        |                      |        |        |                  |        |        |
| Less than high school                         | 32              | 43     | 58     | 25                   | 28     | 22     | 43               | 29     | 19     |
| High school/GED                               | 11              | 24     | 41     | 24                   | 30     | 27     | 66               | 46     | 33     |
| Vocational/technical or some college          | 8               | 15     | 31     | 17                   | 26     | 26     | 75               | 58     | 43     |
| College graduate                              | 3               | 10     | 17     | 11                   | 21     | 25     | 86               | 70     | 58     |
| <b>Mother's employment status<sup>e</sup></b> |                 |        |        |                      |        |        |                  |        |        |
| 35 hours or more per week                     | 11              | 20     | 33     | 22                   | 27     | 26     | 67               | 53     | 41     |
| Less than 35 hours per week                   | 7               | 16     | 31     | 13                   | 25     | 23     | 81               | 59     | 47     |
| Not in labor force                            | 15              | 25     | 42     | 20                   | 28     | 27     | 66               | 48     | 32     |

\* = sample size is insufficient to permit a reliable estimate.

<sup>a</sup>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.

<sup>b</sup>Persons of Hispanic origin may be of any race.

<sup>c</sup>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).

<sup>d</sup>Estimates for single parent households may include involvement of other adults living in the household.

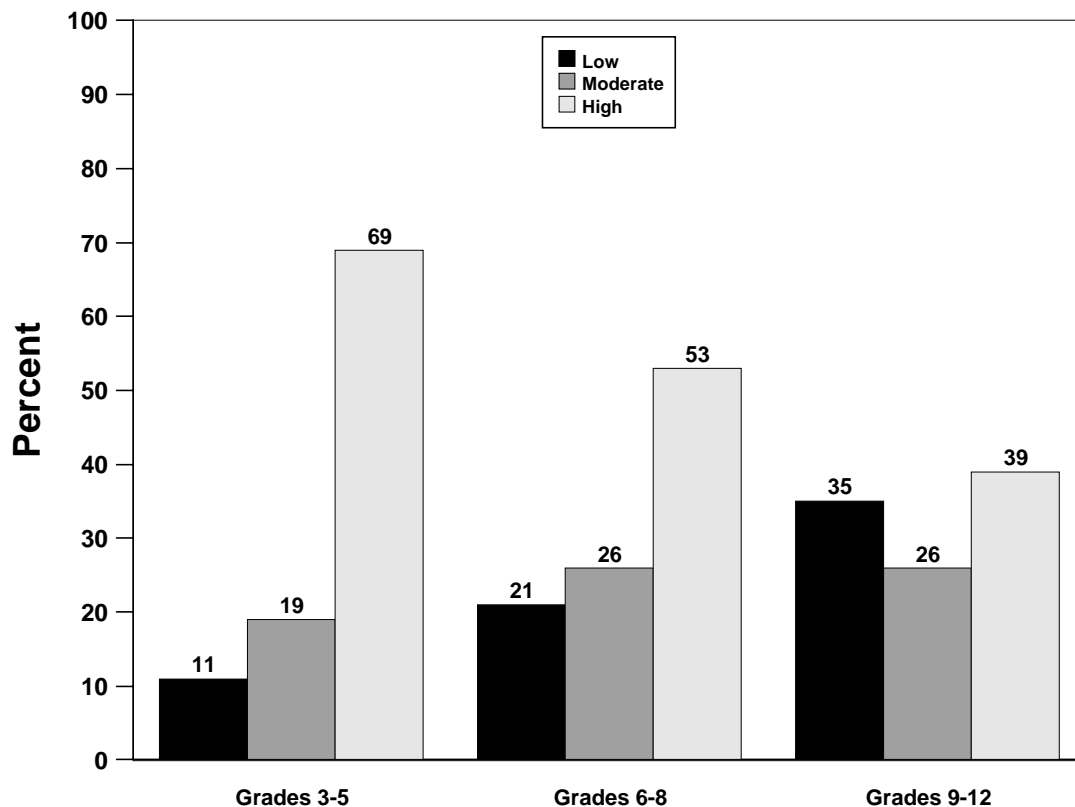
<sup>e</sup>Children without mothers in the home are not included in estimates of mother's education or mother's employment status. A mother is defined as a biological mother, adoptive mother, stepmother, foster mother, or female guardian (e.g., grandmother) who resides in the home with the child.

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<sup>a</sup> in child's school activities by grade level, in the United States: 1996



<sup>a</sup>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.

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.**<sup>54</sup> 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 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.

<sup>54</sup>Estimates for whites and blacks exclude Hispanics of those races.

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,<sup>a</sup> by race and Hispanic origin<sup>c</sup> and by region: selected years, 1979-1995**

|   | 1979  | 1989  | 1992  | 1995 <sup>b</sup> |
|---|-------|-------|-------|-------------------|
| <b>Children who speak another language at home</b>  |       |       |       |                   |
| 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              |
| <b>Race and Hispanic origin</b>   |       |       |       |                   |
| White, non-Hispanic   | 3.2   | 3.5   | 3.7   | 3.6               |
| Black, non-Hispanic   | 1.3   | 2.4   | 4.2   | 3.0               |
| Hispanic <sup>c</sup>   | 75.1  | 71.2  | 76.6  | 73.9              |
| Other, non-Hispanic <sup>d</sup>  | 44.1  | 53.4  | 58.3  | 45.5              |
| <b>Region<sup>e</sup></b>   |       |       |       |                   |
| 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              |
| <b>Children who have difficulty speaking English</b>  |       |       |       |                   |
| 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               |
| <b>Race and Hispanic origin</b>   |       |       |       |                   |
| White, non-Hispanic   | 0.5   | 0.8   | 0.6   | 0.7               |
| Black, non-Hispanic   | 0.3   | 0.5   | 1.3   | 0.9               |
| Hispanic <sup>c</sup>   | 28.7  | 27.4  | 29.9  | 31.0              |
| Other, non-Hispanic <sup>d</sup>  | 19.8  | 20.4  | 21.0  | 14.1              |
| <b>Region<sup>e</sup></b>   |       |       |       |                   |
| 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              |
| <b>Percentage of those speaking another language at home who have difficulty speaking English 32.7 34.9 34.2 36.5</b> |       |       |       |                   |
| <b>Race and Hispanic origin</b>   |       |       |       |                   |
| White, non-Hispanic   | 17.3  | 22.6  | 17.2  | 19.0              |
| Black, non-Hispanic   | 25.6  | 22.5  | 31.0  | 31.8              |
| Hispanic <sup>c</sup>   | 38.2  | 38.5  | 39.0  | 41.9              |
| Other, non-Hispanic <sup>d</sup>  | 44.9  | 38.1  | 36.1  | 31.1              |

<sup>a</sup>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, based on an evaluation of the English-speaking ability of a sample of the children in the 1980s.

<sup>b</sup>Numbers in this year may reflect changes in 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.

<sup>c</sup>Persons of Hispanic origin may be of any race.

<sup>d</sup>Most in this category are Asian/Pacific Islanders, but American Indian/Alaska Native children also are included.

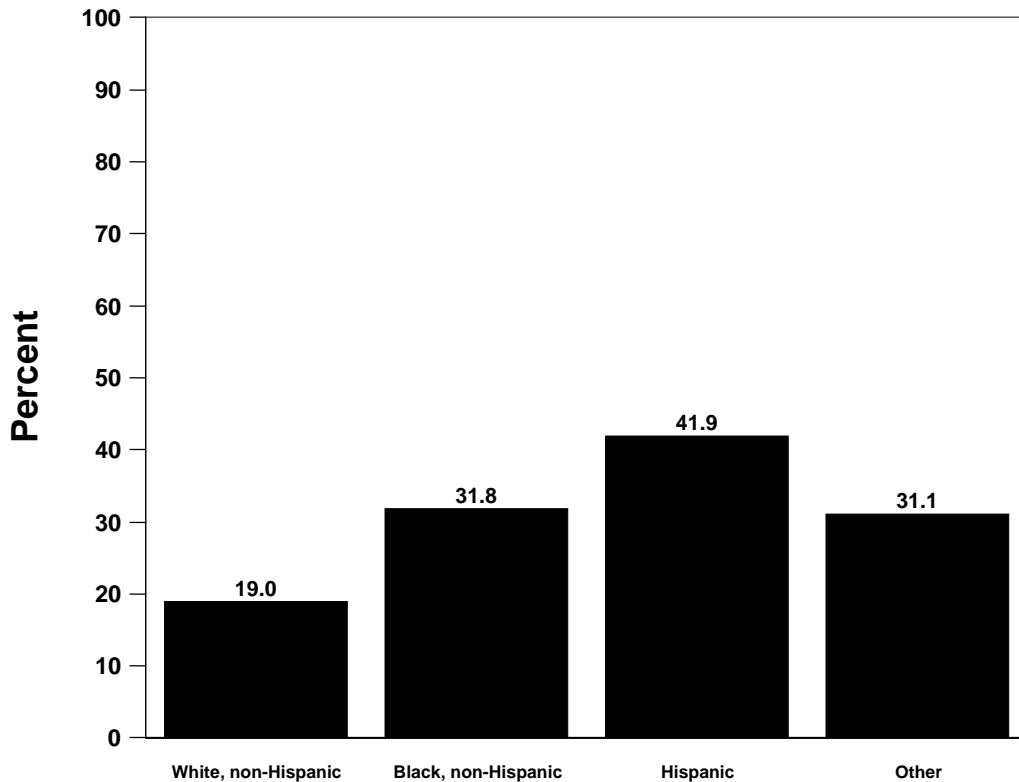
<sup>e</sup>Regions: Northeast includes Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. Midwest includes Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. South includes Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. West includes Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Note: The data for racial and ethnic groups may differ slightly from those published in 1998 in this volume due to a change in programming. All nonresponses to the language questions are excluded from the tabulations.

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. *America's Children: Key National Indicators of Well-Being, 1998*. Washington, D.C.: U.S. Government Printing Office, 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,<sup>a</sup> by race and Hispanic origin:<sup>b</sup> 1995



<sup>a</sup>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.

<sup>b</sup>Persons of Hispanic origin may be of any race.

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. *America’s Children: Key National Indicators of Well-Being 1998*. Washington, D.C.: U.S. Government Printing Office, 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 and reason for computer use by children in grades 4, 8, and 11. A review of these tables reveals the following general trends:

- The percentage of 4th-, 8th-, and 11th-graders who reported using a computer at school at least once a week increased substantially between 1984 and 1996 (see Table EA 3.5.A). For example, 50 percent of 11th-graders reported using a computer at school at least once a week in 1996, compared with 24 percent in 1984.
- The percentage of students who reported using computers at home or at school for scholastic activities (e.g., learning and writing) increased dramatically between 1984 and 1996 for students in all three grades (see Table EA 3.5.B). For example, the percentage of 11th-graders who reported using a computer to write stories or papers increased from 19 percent in 1984 to 96 percent in 1996. Similarly, 55 percent of 11th-graders reported using computers to learn things in 1984, compared with 80 percent in 1996. In 1996, the percentage of students using computers for learning and writing approached or surpassed the percentage who used computers for playing games in all three grades (see Table EA 3.5.B).

**Differences by Grade.** Younger students were more likely than older students to report computer use at school (see Table EA 3.5.A). In 1996, 72 percent of students in grade 4 reported using computers at school at least once a week, compared to 47 percent of 8th-graders and 50 percent of 11th-graders (see Figure EA 3.5.A). However, 8th- and 11th-graders were more likely than 4th-graders to report using a computer every day (see Table EA 3.5.A).

**Differences by Family Income.**<sup>55</sup> 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.C). However, family income appears to have a stronger impact on children's exposure to computers at home than at school. For example, in 1993, the rate of computer usage at home was only 6 percent for students in grades 7-12 from low-income families, compared with 55 percent for students from high-income families in the same grades. The corresponding computer usage rates at school were 53 percent and 66 percent for students in grades 7-12 from low-income and high-income families, respectively (see Table EA 3.5.C).

Increases in computer usage between 1984 and 1993 followed a similar pattern. Computer usage at school increased by large amounts regardless of family income levels for children in both grades 1-6 and 7-12. However, the increase in the percentage of students from high-income families who reported using a computer at home was substantially greater than for students from low- and middle-income families. For example, 55 percent of students in grades 7-12 from high-income families reported using a computer at home in 1993 compared with 26 percent in 1984, an increase of 29 percentage points (see Figure EA 3.5.B). In contrast, computer use at home increased by only 2 percentage points for low-income students in grades 7-12 between 1984 and 1993 (see Figure EA 3.5.B).

<sup>55</sup>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 at school, by grade and frequency of use: selected years, 1984-1996

|                         | Grade 4                 |             |             |             |             |             | Grade 8 |      |      |      |      |      |
|-------------------------|-------------------------|-------------|-------------|-------------|-------------|-------------|---------|------|------|------|------|------|
|                         | 1984                    | 1988        | 1990        | 1992        | 1994        | 1996        | 1984    | 1988 | 1990 | 1992 | 1994 | 1996 |
|                         | <b>Frequency of use</b> |             |             |             |             |             |         |      |      |      |      |      |
| Never                   | 61                      | 30          | 19          | 17          | 14          | 11          | 67      | 42   | 41   | 38   | 28   | 23   |
| Ever                    | 39                      | 70          | 81          | 84          | 86          | 89          | 33      | 58   | 60   | 62   | 72   | 77   |
| At least once a week    | 26                      | 53          | 67          | 62          | 70          | 72          | 16      | 36   | 40   | 38   | 46   | 47   |
| At least twice a week   | 11                      | 19          | 26          | 25          | 31          | 36          | 8       | 22   | 27   | 26   | 29   | 33   |
| Every day               | 3                       | 4           | 8           | 6           | 8           | 10          | 4       | 10   | 11   | 11   | 15   | 17   |
|                         | <b>Grade 11</b>         |             |             |             |             |             |         |      |      |      |      |      |
|                         | <b>1984</b>             | <b>1988</b> | <b>1990</b> | <b>1992</b> | <b>1994</b> | <b>1996</b> |         |      |      |      |      |      |
| <b>Frequency of use</b> |                         |             |             |             |             |             |         |      |      |      |      |      |
| Never                   | 55                      | 45          | 45          | 27          | 26          | 16          |         |      |      |      |      |      |
| Ever                    | 45                      | 55          | 55          | 73          | 74          | 84          |         |      |      |      |      |      |
| At least once a week    | 24                      | 31          | 29          | 41          | 43          | 50          |         |      |      |      |      |      |
| At least twice a week   | 18                      | 25          | 22          | 31          | 35          | 35          |         |      |      |      |      |      |
| Every day               | 12                      | 15          | 14          | 19          | 23          | 18          |         |      |      |      |      |      |

Note: Details may not add to 100 percent due to rounding.

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*. NCES 98-013. U.S. Department of Education, Office of Education Research and Improvement, Washington, D.C.: U.S. Government Printing Office, p. 38. Some tabulations performed by Child Trends.

Table EA 3.5.B (Part 1)

Percentage of students who use a computer at home or at school, by grade and reason for use: selected years, 1984-1996

| Reason for use             | Grade 4 |      |      |      |      |      | Grade 8 |      |      |      |      |      |
|----------------------------|---------|------|------|------|------|------|---------|------|------|------|------|------|
|                            | 1984    | 1988 | 1990 | 1992 | 1994 | 1996 | 1984    | 1988 | 1990 | 1992 | 1994 | 1996 |
| To play games              | 72      | 79   | 85   | 83   | 87   | 90   | 84      | 85   | 84   | 85   | 87   | 89   |
| To learn things            | 68      | 70   | 76   | 83   | 82   | 88   | 58      | 74   | 71   | 73   | 76   | 83   |
| To write stories or papers | 23      | 40   | 49   | 57   | 68   | 79   | 15      | 58   | 61   | 73   | 82   | 91   |

| Reason for use             | Grade 11 |      |      |      |      |      |
|----------------------------|----------|------|------|------|------|------|
|                            | 1984     | 1988 | 1990 | 1992 | 1994 | 1996 |
| To play games              | 76       | 79   | 79   | 78   | 77   | 84   |
| To learn things            | 55       | 65   | 65   | 72   | 71   | 80   |
| To write stories or papers | 19       | 61   | 69   | 84   | 87   | 96   |

Note: Details may not add to 100 percent due to rounding.

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*. NCES 98-013. U.S. Department of Education, Office of Education Research and Improvement, Washington, DC: U.S. Government Printing Office, p. 38.

Table EA 3.5.C (Part 1)

Percentage of students who reported using a computer at school or at home, by grade level and family income:<sup>a</sup> 1984, 1989, and 1993

| Location of Computer Use | Income Level |      |      |      |      |      |
|--------------------------|--------------|------|------|------|------|------|
|                          | Total        |      |      | Low  |      |      |
|                          | 1984         | 1989 | 1993 | 1984 | 1989 | 1993 |
| <b>Grades 1-6</b>        |              |      |      |      |      |      |
| At home                  | 12           | 17   | 24   | 3    | 3    | 4    |
| At school                | 31           | 54   | 70   | 19   | 41   | 60   |
| At school or home        | 37           | 59   | 74   | 21   | 42   | 61   |
| <b>Grades 7-12</b>       |              |      |      |      |      |      |
| At home                  | 14           | 23   | 30   | 4    | 7    | 6    |
| At school                | 31           | 47   | 61   | 22   | 42   | 53   |
| At school or home        | 39           | 57   | 70   | 24   | 45   | 55   |
| Location of Computer Use | Income Level |      |      |      |      |      |
|                          | Middle       |      |      | High |      |      |
|                          | 1984         | 1989 | 1993 | 1984 | 1989 | 1993 |
| <b>Grades 1-6</b>        |              |      |      |      |      |      |
| At home                  | 10           | 14   | 19   | 25   | 35   | 51   |
| At school                | 30           | 54   | 69   | 43   | 64   | 78   |
| At school or home        | 35           | 58   | 73   | 55   | 73   | 87   |
| <b>Grades 7-12</b>       |              |      |      |      |      |      |
| At home                  | 11           | 18   | 24   | 26   | 41   | 55   |
| At school                | 30           | 46   | 61   | 36   | 51   | 66   |
| At school or home        | 36           | 54   | 68   | 50   | 69   | 83   |

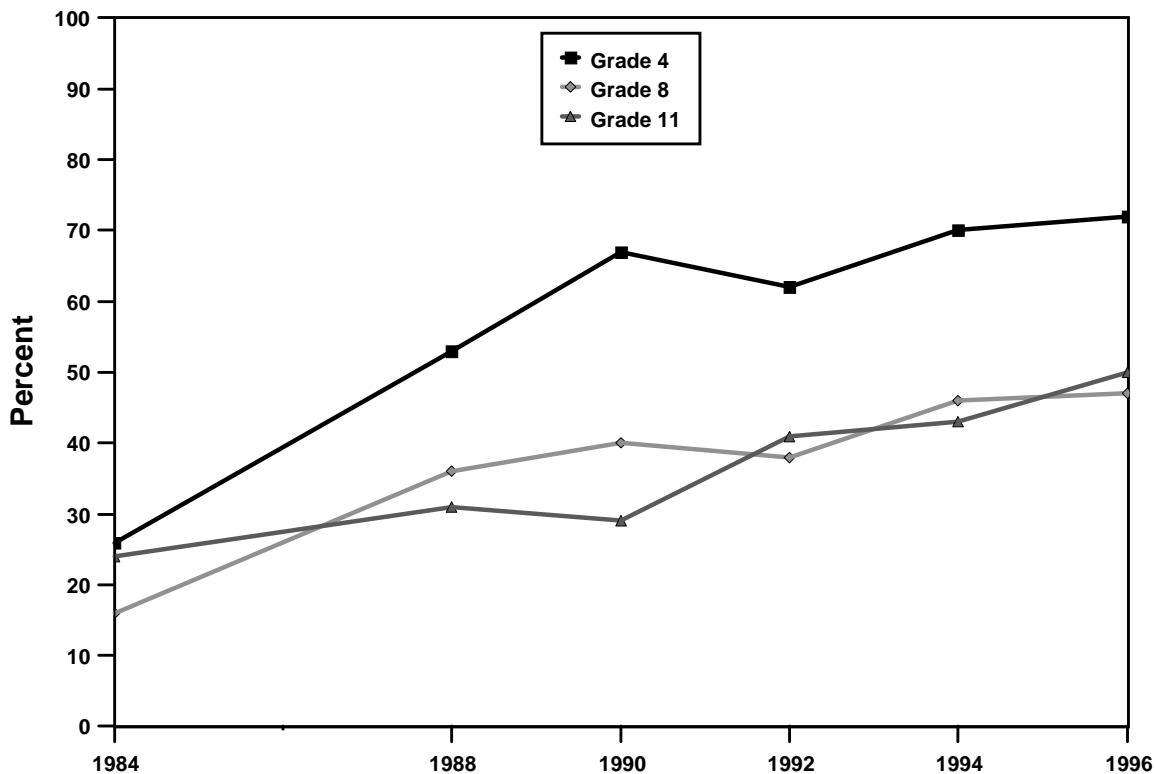
<sup>a</sup>Low income is the bottom 20 percent of all family incomes; high income is the top 20 percent of all family incomes; and middle income is the 60 percent in between.

Note: Data shown in this table are from the Current Population Survey (CPS). The CPS is household-reported data, while the NAEP Almanac data shown in other tables in this analysis are student-reported data. Therefore, data in this table are not comparable to data shown in the other tables of the analysis (Tables EA 3.5.A and EA 3.5.B).

Source: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys (CPS). As published in *The Condition of Education 1998*. NCES 98-013. U.S. Department of Education, Office of Education Research and Improvement, Washington, D.C.: U.S. Government Printing Office, Table 3-1.

Figure EA 3.5.A

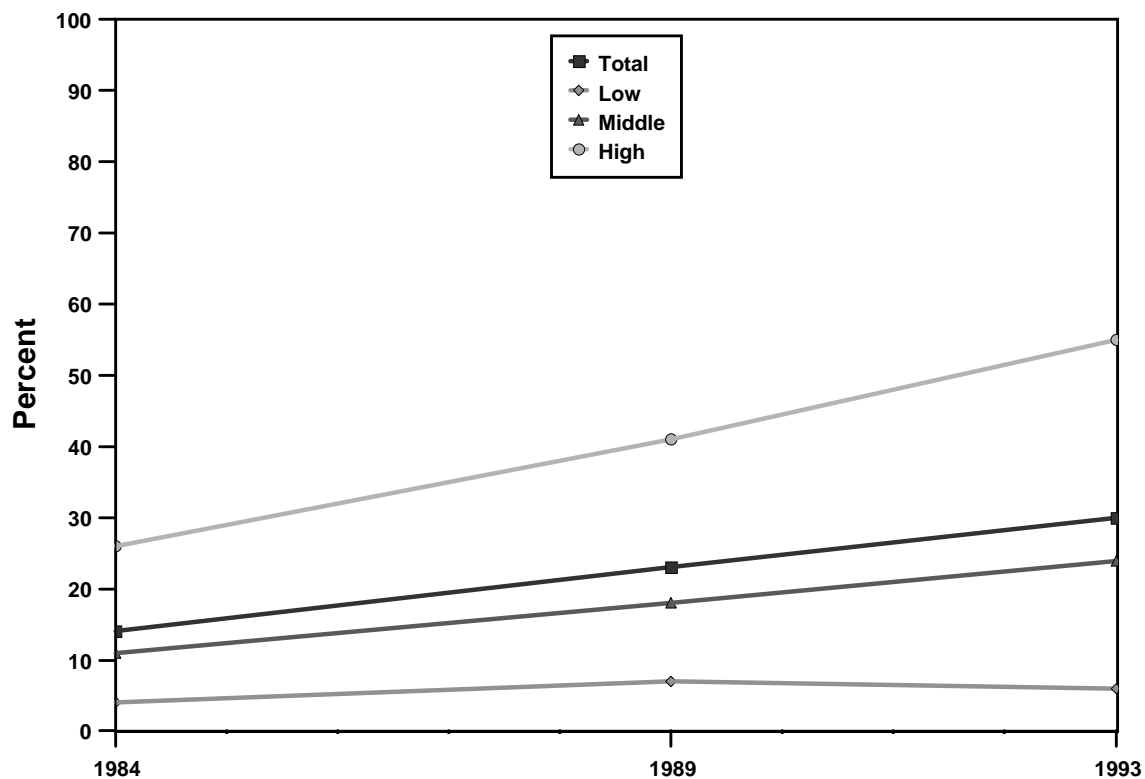
Percentage of students who reported using a computer at school at least once a week, by grade level: selected years, 1984-1996



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*. NCES 98-013. U.S. Department of Education, Office of Education Research and Improvement, Washington, D.C.: U.S. Government Printing Office, 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:<sup>a</sup> 1984, 1989, and 1993



<sup>a</sup>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.

Note: Data shown in this figure are from the Current Population Survey (CPS). The CPS is household-reported data, while the NAEP Almanac data shown in other tables and figure EA 3.5.A in this analysis are student-reported data. Therefore, data in this figure are not comparable to data shown in Table EA 3.5.A, Table EA 3.5.B, and Figure EA 3.5.A.

Source: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys (CPS). As published in *The Condition of Education 1998*. NCES 98-013. U.S. Department of Education, Office of Education Research and Improvement, Washington, D.C.: U.S. Government Printing Office, Table 3-1.