Section 1
Participation in Education
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Section 1—Participation in Education

Summary: Participation in Education

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

Early childhood education programs are intended to prepare children socially and academically for formal schooling. Elementary and secondary education provides knowledge, skills, and habits of minds that prepare students for further learning and productive membership in society. Because enrollment at the elementary and secondary levels is mandatory, changes in enrollment are driven by shifts in the size of the school-age population. This population fluctuates due to changes in birth rates, immigration, and other factors.

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

Enrollment in Early Childhood Education Programs

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

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

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

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

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

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

### Indicator 1

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Below poverty</th>
<th>At or above poverty</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1995</td>
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<td></td>
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<td>1996</td>
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<td></td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

**FOR MORE INFORMATION**
Supplemental Note 1
Supplemental Table 1-1
Bredekamp and Copple 1997
Public elementary and secondary enrollment is projected to reach 47.4 million in 2002, and to increase through 2005, before decreasing slowly. The West will experience most of this increase.

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

After declining during the 1970s and early 1980s, enrollment in public schools for grades K–12 increased in the latter part of the 1980s and the 1990s, reaching an estimated 47.2 million in 2001. This enrollment is projected to be 47.4 million in 2002. Through the first half of this decade, public enrollment for grades K–12 is projected to continue increasing to an all-time high of 47.5 million in 2005, and then to begin declining slowly. Between 2001 and 2011, public enrollment in grades K–8 is projected to decrease slowly through 2008 and then to increase slowly, whereas public enrollment in grades 9–12 is projected to increase through 2006 and then to decrease slowly (see supplemental table 2-1).

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

In 1999–2000, private school enrollment for grades K–12 was 5.1 million. It was higher in 1999–2000 than in 1989–90. Between these years, enrollments in private schools increased in both the South and West. Despite increases in enrollment in the West, private enrollment for grades K–12 was lowest in the West and highest in the South in 1999–2000 (see supplemental table 2-3).
Changes in the racial/ethnic composition of student enrollments can alter the language and culture in the nation’s public schools. Although differences in student backgrounds can offer opportunities to enhance the learning environment, these differences can also raise challenges for schools. Knowledge of the shifting racial/ethnic distribution of public school students in grades K–12 can be helpful to schools in responding to these changing conditions.

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

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

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

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


FOR MORE INFORMATION:
Supplemental Notes 1, 2
Supplemental Tables 3-1, 3-2
Elementary/Secondary Education

Poverty Among School-Aged Children


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

Poor children can be found across the United States, but the extent to which they are concentrated in various regions differs appreciably. For example, in 1997 (the latest year for which data are available on family income by public school district), the school-age poverty rate in public school districts ranged from 29 percent on average in U.S. central cities within large metropolitan areas to an average of 13 percent in suburbs within large and small metropolitan areas. School-age poverty rates in rural areas outside of metropolitan areas and in large and small towns were higher than the rate in the suburbs, while the rate in the “exurbs” (rural areas inside metropolitan areas) resembled that of the suburbs. This pattern was found within each region, but differences between U.S. central cities within large metropolitan areas and the rest of their region were most apparent in the Northeast and Midwest. Whereas the suburbs and exurbs in these two regions had rates that were about half the national school-age poverty rate, most of the suburbs and exurbs in the South and West had rates that were similar to the national school-age poverty rate. One-third of all school-aged children in U.S. central cities within large metropolitan areas in the Northeast lived in poverty in 1997 (see supplemental table 4-2).

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

<table>
<thead>
<tr>
<th>Region</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td></td>
</tr>
<tr>
<td>Midwest</td>
<td></td>
</tr>
<tr>
<td>South</td>
<td></td>
</tr>
<tr>
<td>West</td>
<td></td>
</tr>
<tr>
<td>Central city within MSA</td>
<td>18</td>
</tr>
<tr>
<td>Suburb within MSA</td>
<td>12</td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

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


FOR MORE INFORMATION:
Supplemental Notes 1, 2
Supplemental Tables 4-1, 4-2
NCES 96–184; Lippman et al. 1996; National Academy of Sciences 1999
Total undergraduate enrollments in degree-granting postsecondary institutions generally increased in the past 3 decades and are projected to increase throughout this decade. These increases have been accompanied by changes in the enrollment status of students, the type of institution attended, and the proportion of students who are women.

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

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

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

**Past and Projected Undergraduate Enrollments**

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

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Female</th>
<th>Male</th>
<th>Full-time</th>
<th>Part-time</th>
<th>4-year</th>
<th>2-year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>1,000</td>
<td>1,500</td>
<td>1,000</td>
<td>500</td>
<td>1,500</td>
<td>2,000</td>
</tr>
<tr>
<td>1980</td>
<td>2,000</td>
<td>3,000</td>
<td>2,000</td>
<td>1,000</td>
<td>3,000</td>
<td>4,000</td>
</tr>
<tr>
<td>1990</td>
<td>3,000</td>
<td>5,000</td>
<td>3,000</td>
<td>2,000</td>
<td>5,000</td>
<td>7,000</td>
</tr>
<tr>
<td>2000</td>
<td>4,000</td>
<td>7,000</td>
<td>4,000</td>
<td>3,000</td>
<td>7,000</td>
<td>10,000</td>
</tr>
<tr>
<td>2011</td>
<td>5,000</td>
<td>10,000</td>
<td>5,000</td>
<td>4,000</td>
<td>10,000</td>
<td>15,000</td>
</tr>
</tbody>
</table>

Graduate and Professional Education

Trends in Graduate/First-Professional Enrollments

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

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

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

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

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

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

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

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

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