Section I
Participation in Education
Summary: Participation in Education

Many educational opportunities are available to children and adults in the United States. Preprimary education prepares children socially and academically for formal schooling; elementary and secondary education provide skills that prepare students to become productive members of society; and postsecondary education gives individuals opportunities to gain advanced knowledge and skills either immediately after high school or later in life. In addition, many adults participate in learning activities to upgrade work-related skills, change their careers, or expand their personal interests.

The contributions of formal education are related to the degree of participation, as shown in earnings of young adults (Indicator 18), adult literacy and media use (Indicator 15), and even personal health (Indicator 17). Thus, it is important to monitor the extent to which individuals and groups have access to educational opportunities and how they progress through various levels.

Enrollment in education changes as a result of fluctuations in the size of the population and rates of enrollment in a population group. Such change can affect the resources, such as qualified teachers, physical facilities, and funding levels, required to provide a quality education for the Nation's students. In addition, 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.

Early Childhood Programs

Participation in early childhood programs, such as nursery school, prekindergarten, or Head Start, prepare children for formal schooling. Enrollment rates in center-based early childhood care and education programs rose from 53 percent of the population ages 3–5 in 1991 to 60 percent in 1999 (Indicator 1). This increase may be attributed to a combination of factors, including increases in the percentage of working mothers of preschoolers (Hayghe 1997).

Rates of enrollment in preprimary programs vary by children's race/ethnicity and the relative poverty of their families. In 1999, 73 percent of black children, 60 percent of white children, and 44 percent of Hispanic children ages 3–5 were enrolled in preprimary programs. Children living in poverty were less likely to attend programs than those living in families at or above poverty (52 versus 62 percent).

Elementary and Secondary School Enrollment

Enrollment at the elementary and secondary levels is mandatory, so 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. In the aftermath of the baby boom era, for example, total enrollments declined in the 1970s and early 1980s but have increased since then as a result of the "baby boom echo" (N CES 2000–071). Enrollments in public elementary and secondary schools reached an estimated 47.0 million in 2000. Projections through 2010 suggest that enrollments for grades K–8 will decrease slightly but will increase by 4 percent for grades 9–12 (Indicator 2). Private school enrollment for grades K–12 increased between 1989–90 and 1997–98. Between these years, enrollment in private schools rose in both the South and the West.

Growth in elementary and secondary enrollments will not be uniform across regions of the country. Public schools in the Midwest and Northeast will experience declines in their share of total enrollment in the present decade, while schools in the South and West will increase their share (Indicator 2). In addition to facing an all-time high in student enrollment, schools in the West serve an increasingly heterogeneous student body. Between 1972 and 1999, for instance, the percentage of students in the West
who were Hispanic rose from 15 to 31 percent of the total. In 1999, 47 percent of students in public elementary and secondary schools in the West were minority students (Indicator 3).

**Undergraduate Enrollment in Postsecondary Education**

Because postsecondary education is voluntary, changes in total undergraduate enrollments reflect shifts in enrollment rates and the perceived availability and value of postsecondary education as well as the size of the traditional college-age population. Total undergraduate enrollments in degree-granting postsecondary institutions have generally risen over the past 3 decades. These increases have been accompanied by changes in the attendance status of students, the types of institutions attended, and the proportion of students who are women (Indicator 5). Recent growth in undergraduate enrollment may be associated with the increasing importance of postsecondary education in the job market. Over this decade, the strongest job growth is expected to occur in occupations requiring at least an associate's degree (Braddock 1999). Undergraduate enrollment in degree-granting postsecondary institutions is also projected to continue to climb during this decade.

Projections for this decade suggest that changes in undergraduate enrollments will not be uniform for all groups. The rate of growth for full-time undergraduate enrollment is expected to increase at a faster rate than part-time undergraduate enrollment; undergraduate enrollment at 4-year institutions is expected to grow faster than undergraduate enrollment at 2-year institutions. In addition, the undergraduate enrollment of women, which now exceeds that of men, is projected to continue to grow faster than men's undergraduate enrollment (Indicator 5).

**Participation in Adult Learning**

During the past decade, the rate of participation in adult education has increased. The total proportion of adults ages 18 and above who participated in adult education in the previous 12 months increased from 38 to 48 percent between 1991 and 1999. Most of the enrollments in adult learning occur outside the formal education system, particularly among older adults (Indicator 7).

**Conclusions**

Education plays an increasingly important role in people's lives. For those not already participating in mandatory educational programs, enrollment rates have increased. Nonetheless, growth has not been uniform, and some differences remain. Although preprimary enrollments have been expanding, not all groups are well represented. For elementary and secondary schools, one of the largest increases in the number and diversity of students has occurred, and is projected to continue in the West. In degree-granting postsecondary institutions, growth is expected to continue during this decade, but not for all types of institutions or groups: 4-year institutions and full-time programs will experience these increases to a greater extent. While adult education has grown across different age, sex, and racial/ethnic groups, the gap between men and women in postsecondary education is expected to widen, favoring women.
Preprimary Education

Enrollment in Preprimary Education

Preprimary enrollment rates for 3- to 5-year-olds were higher in 1999 than in 1991. Black children enrolled in preprimary education programs at higher rates than did white and Hispanic children.

Participation in preprimary education programs such as Head Start, nursery school, or prekindergarten can help a child prepare for elementary school or serve as child care for working parents. Between 1991 and 1999, 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 60 percent.

Most groups of children had higher participation rates in preprimary education programs in 1999 than in 1991. The participation rates of children living in poverty increased from 44 to 52 percent. Those of children with mothers who were not in the labor force rose from 45 to 52 percent. Black children’s rates increased from 58 to 73 percent. Despite these increases, children living in poverty were still less likely to attend programs than those above poverty in 1999 (52 versus 62 percent) (see supplemental table 1-1).

Black children were more likely than white or Hispanic children to participate in center-based early childhood care and education programs. In 1999, 73 percent of black children ages 3–5 attended such programs, compared with 60 percent of white children and 44 percent of Hispanic children.

Children with more highly educated mothers were more likely to participate in center-based early childhood and education programs than other children. Seventy-four percent of children whose mothers had completed college attended such programs in 1999, compared with 40 percent whose mothers had less than a high school education.

NOTE: Estimates are based on children who have yet to enter kindergarten. Center-based programs include day care centers, Head Start programs, preschool, nursery school, pre-kindergarten, and other early childhood programs.


FOR MORE INFORMATION
Supplemental Notes 1, 3
Supplemental Table 1-1
Public elementary and secondary enrollment is projected to reach 47.2 million in 2001, and to increase through 2005 before decreasing slowly. The West will experience the majority of this growth in the student population.

The baby boom echo—the 25 percent increase in the Nation’s birthrate that began in the mid-1970s and peaked in 1990—and rising immigration have boosted school enrollment. Growing enrollments, in turn, increase the need for new schools, teachers, and money to fund education.

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 47.0 million in 2000. This enrollment is projected to be 47.2 million in 2001. 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 slightly. Between 2000 and 2010, public enrollment in grades K–8 is projected to decrease slightly, whereas public enrollment in grades 9–12 is projected to increase 4 percent (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 2000 and 2010, public enrollment in grades K–12 is expected to decrease in the Northeast and Midwest, and to increase in the South and West (see supplemental table 2-2).

Private school enrollment for grades K–12 was higher in 1997–98 than in 1989–90. Between these years, enrollments in private schools rose 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 higher in the South in 1997–98 (see supplemental table 2-3).
### Elementary/Secondary Education

#### Racial/Ethnic Distribution of Public School Students

Hispanic students are the fastest growing student group in the Nation’s elementary and secondary schools.

Changes in the racial/ethnic composition of student enrollments can alter the diversity of language and culture in the Nation’s schools. Although variety in student backgrounds can enhance the learning environment, it can also create or increase challenges for schools. Knowledge of the shifting racial/ethnic distribution of public school students in grades K–12 can be helpful to schools in planning for this change.

In 1999, 38 percent of public school students were considered to be part of a minority group, an increase of 16 percentage points from 1972. This increase was largely due to the growth in the proportion of students who were Hispanic. In 1999, black and Hispanic students accounted for 16.5 and 16.2 percent of the public school enrollment, up by 2 and 10 percentage points, respectively, from 1972. The percentage of students from other racial/ethnic groups also increased, from 1 percent in 1972 to 6 percent in 1999 (see supplemental table 3-1).

Although minority students comprised 38 percent of the total public school enrollment in 1999, their enrollment differed by region. In that year, there were large concentrations of minority students in the West and South, where 47 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 1999, the proportion of students in the South who were black (27 percent) was higher than the proportion of students who were black in other regions (6 to 14 percent). In the West, Hispanic students accounted for 31 percent of the student body (up from 15 percent in 1972). In contrast, in 1999, Hispanic students represented 6 percent of all students in public elementary and secondary schools in the Midwest (see supplemental table 3-2).

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</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>2.3%</td>
<td>2.6%</td>
<td>3.0%</td>
<td>3.3%</td>
<td>3.6%</td>
<td>3.9%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Midwest</td>
<td>2.2%</td>
<td>2.3%</td>
<td>2.6%</td>
<td>2.9%</td>
<td>3.2%</td>
<td>3.5%</td>
<td>3.8%</td>
</tr>
<tr>
<td>South</td>
<td>1.1%</td>
<td>1.4%</td>
<td>1.7%</td>
<td>2.0%</td>
<td>2.3%</td>
<td>2.6%</td>
<td>2.9%</td>
</tr>
<tr>
<td>West</td>
<td>1.0%</td>
<td>1.2%</td>
<td>1.5%</td>
<td>1.8%</td>
<td>2.1%</td>
<td>2.4%</td>
<td>2.7%</td>
</tr>
</tbody>
</table>


**For more information:** Supplemental Notes 1, 2, Supplemental Tables 3-1, 3-2
Parents’ educational attainment is related to student achievement and other dimensions of educational participation and outcomes (Grissmer et al. 1994). In 1999, a higher percentage of white children than black and Hispanic children ages 6–18 had parents who attained at least a high school education. The same is true for the percentage who attained at least a bachelor’s degree.

Between 1974 and 1999, the percentage of children ages 6–18 whose parents had at least a high school education increased among all racial/ethnic groups. However, the rates of increase differed by racial/ethnic groups. While fewer black children ages 6–18 had parents who completed at least a high school education compared with their white peers, the attainment gap between the percentage of white and black children whose parents attained this level of education narrowed considerably between 1974 and 1999. This large reduction in the gap was due to a large increase in the percentage of black children with parents who attained at least a high school education compared with their white peers. In contrast, the gap between the percentages of white and Hispanic children whose mothers attained at least a high school education did not change, while the gap between the percentages of white and Hispanic children whose fathers attained this level of education increased (see supplemental table 4-1).

Patterns in the bachelor’s degree attainment of parents are different from those in high school attainment. Although more black and Hispanic 6- to 18-year-olds had mothers who attained at least a bachelor’s degree in 1999 than in 1974, the gap in the percentages of white and black and white and Hispanic 6- to 18-year-olds whose parents had at least a bachelor’s degree has increased in the past 25 years, with the exception of the gap between the fathers of black and white children, which has not changed (see supplemental table 4-1).
Undergraduate Education

Past and Projected Undergraduate Enrollments

Although part-time and 2-year enrollments displayed more rapid growth than full-time and 4-year enrollments in the 1970s, future growth is expected to be greater in full-time and 4-year enrollments. Women’s enrollment is expected to continue increasing faster than that of men.

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 and 1990s, growth slowed for both groups. In the present decade, the rate of growth for 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 2-year undergraduate enrollment slowed and is expected to grow at that slower rate in the present decade. Four-year undergraduate enrollment has consistently increased over the past 3 decades and is expected to increase at a faster rate than 2-year undergraduate enrollment in the present decade (see supplemental table 5-1).

The number of undergraduate women in degree-granting 2- and 4-year institutions had exceeded the number of undergraduate men by 1978. Since the 1970s, women’s enrollment has increased faster than men’s, which fluctuated in the 1980s and 1990s. Men’s undergraduate enrollment is projected to increase in the 2000s, but women’s enrollment is projected to grow at a faster rate. As a result, the number of women undergraduates is projected to reach a new high throughout this decade.

UNDERGRADUATE ENROLLMENT: Total enrollment in degree-granting 2- and 4-year postsecondary institutions (in thousands) by sex, enrollment status, and type of institution, with projections: Fall 1970–2010

NOTE: Projections are based on the middle alternative assumptions concerning the economy.
Graduate and Professional Education

Graduate/Professional Enrollment and Employment

Graduate and first-professional students in different degree programs combine school and work in very different ways.

Graduate and first-professional programs form an important segment of higher education, with 2.8 million students enrolled during the 1995–96 academic year. Just over half of them (56 percent) were enrolled in master’s degree programs. Another 12 percent each were enrolled in doctoral and first-professional degree programs, and the remaining 20 percent in post-baccalaureate certificate or nondegree programs (NCES 98–083). Attendance patterns and focus on school or work as the primary activity varied considerably with level and specific degree program.

Graduate study at the master’s level is primarily a part-time activity. Most students enrolled less than full time for the full year and worked while enrolled (many full time). Among MBA and education master’s students who worked, most considered themselves primarily employees rather than students (85 and 75 percent, respectively). Students in other master’s-level programs were just as likely to work, but more likely to consider themselves primarily students (57 percent).

About half of Ph.D. students enrolled full time for the full year. Although the majority of all Ph.D. students worked while enrolled, 80 percent of those who worked nevertheless considered themselves primarily students. The pattern for Ed.D. students was different. Relatively few Ed.D. students enrolled full time, full year (16 percent), and most of those who worked considered themselves primarily employees (82 percent).

Students in law or medicine were much more likely than master’s or doctoral students to enroll full time, full year and less likely to work while enrolled. When they did work, most considered themselves primarily students.

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<tr>
<td>Total</td>
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<td>100.0</td>
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<tr>
<td>Full-time, full-year&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>15.9</td>
<td>27.8</td>
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<td>Part-time, full-year</td>
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<td>45.0</td>
<td>39.5</td>
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<tr>
<td>Other</td>
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<td>39.1</td>
<td>32.7</td>
<td>12.4</td>
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<th>Employment status&lt;sup&gt;2&lt;/sup&gt;</th>
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<tr>
<td>Worked at all</td>
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<td>85.9</td>
<td>83.2</td>
<td>75.7</td>
<td>97.5</td>
<td>30.8</td>
<td>56.1</td>
</tr>
<tr>
<td>Worked full time if worked</td>
<td>76.3</td>
<td>67.3</td>
<td>47.5</td>
<td>32.3</td>
<td>82.6</td>
<td>15.0</td>
<td>16.9</td>
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<tr>
<td>Primary role if working</td>
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<td></td>
<td></td>
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<tr>
<td>Student meeting expenses</td>
<td>15.1</td>
<td>25.0</td>
<td>57.1</td>
<td>80.0</td>
<td>17.7</td>
<td>87.5</td>
<td>82.5</td>
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<tr>
<td>Employee enrolled in school</td>
<td>84.9</td>
<td>75.0</td>
<td>42.9</td>
<td>20.0</td>
<td>82.3</td>
<td>12.5</td>
<td>17.5</td>
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<sup>1</sup> Excluding summer.
<sup>2</sup> Research assistantships are considered employment. Full-time employment is 35 hours or more per week.

NOTE: Percentages may not add to 100.0 due to rounding.


For more information: Supplemental Note 8 NCES 98-083
Adult Learning
Participation in Adult Learning

Participation in adult learning was higher in 1999 than in 1991. Participation in credential programs declines with age, while participation in other types of activities remains about the same with age.

In an age of rapid technological and economic change, lifelong learning can provide benefits for individuals and for society as a whole. Participation in learning activities increased from 38 percent of those in the population age 18 and above in 1991 to 48 percent in 1999. These learning activities included participation in credential programs, provided either by a postsecondary institution or some other kind of organization, such as an employer; work-related learning other than a credential program; basic skills training; learning English as a Second Language; apprenticeships; and learning for purposes of personal development (see supplemental table 7-1).

For those ages 18–44, participation in credential programs leading to a degree, certificate, or diploma from a postsecondary institution generally decreased with age in 1999, while participation in all other kinds of adult learning activities remained about the same for all age groups within this age range. At ages 21–22, the percentage of the population who participated in a credential program in a postsecondary institution was about the same as the percentage who participated in all other types of adult learning. At ages 43–44, 7 percent of adults participated in credential programs in postsecondary institutions, and 56 percent participated in other types of adult learning activities.

Adults obtained their learning from different types of providers. In 1999, among those age 18 and above who participated in credential courses of all kinds, 74 percent took courses from a postsecondary institution, and the rest from a business or other kind of organization. At least half of those age 18 and above who participated in work-related courses took courses given by businesses or professional associations. Among adults who took courses for personal development, private organizations were the most likely providers (48 percent) (see supplemental table 7-2).

In 1999, adults 18 and above with a bachelor’s degree were more likely to participate in a learning activity (65 percent) than were high school completers (39 percent) (see supplemental table 7-1).

ADULT LEARNING: Percentage of adults ages 18–44 who participated in credential or other types of learning programs in the past 12 months: 1999

<table>
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<tr>
<th>Age</th>
<th>All other activities¹</th>
<th>Credential program²</th>
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<tbody>
<tr>
<td>18–20</td>
<td>41</td>
<td>11</td>
</tr>
<tr>
<td>21–22</td>
<td>49</td>
<td>17</td>
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<td>23–24</td>
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<td>25–26</td>
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<td>27–28</td>
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<td>7</td>
</tr>
<tr>
<td>41–42</td>
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<td>7</td>
</tr>
<tr>
<td>43–44</td>
<td>9</td>
<td>7</td>
</tr>
</tbody>
</table>

¹Includes participation in apprenticeships, courses for basic skills, personal development, English as a Second Language, work-related courses, and credential programs in organizations other than postsecondary institutions.

²Includes both part- and full-time participation in postsecondary institutions leading to a college degree, diploma, or certificate.

NOTE: Adults may be counted in both categories. Individuals may have participated in both a credential program in a college or university and some other learning activity. Data have been revised from previously published figures.


FOR MORE INFORMATION:
Supplemental Notes 1, 3
Supplemental Tables 7-1, 7-2
NCES 2000–027