Older students (those beyond the age of 24) represented nearly 40 percent of all college and university enrollment in 1988, compared with 33 percent in 1974. Two sets of projections are suggested to show that, by 1995, the share of older students may increase somewhat, but students in the "traditional" age range (less than 25 years old) will still be in the majority. The projections examine changes since 1974 in the number of those over 24 years of age in the population and the number enrolled in higher education, and the rate at which they have enrolled in college. One set of projections is based on the assumption that enrollment rates for the major age-groups would stay constant at 1988 levels, and the other set of projections is based on the assumption that enrollment rates would continue the same trend observed over the last 7 years, with increased participation in some age groups and stagnation or decline in others. In both projections, older students continue to be a major presence in higher education, while traditional age-group students continue to be in the majority. Policy implications are discussed. The research brief provides three end notes and notes about five data resources. (JDD)
Enrollment by Age: Distinguishing the Numbers from the Rates

Charles J. Andersen
Enrollment by Age: Distinguishing the Numbers from the Rates
Charles J. Andersen

Older students (those beyond the age of 24) represented nearly 40 percent of all college and university enrollment in 1988. This contrasts with their 33 percent share fourteen years earlier. This change has been due in large part to the increase in the size of the population beyond the age of 24, not to any major increase in the college-going rate of that population. Two sets of projections are suggested to show that, by 1995, the share of older students may increase somewhat, but students in the “traditional” age range—less than 25 years old—will still be in the majority.

HIGHLIGHTS

- Increased enrollment of older students in the 1970s and 1980s appear to have resulted from the growth in the size of the population over age 24.
- Rates of college enrollment among the older age-groups did not increase appreciably during the 1980s.
- Nearly all (95 percent) postsecondary students come from three major age-groups—18–24 year olds, 25–34 year olds; and 35–44 year olds. The size of each of these age-groups has been changing:
  - For the immediate future, the 18–24 year old and the 25–34 year old populations are projected to decline, but the size of the population over 34 will grow.
  - The “45 and over” age-group offers a great potential for participation in higher education. Because this population group is so large, a change in its enrollment rate of only one-tenth of a percentage would affect 75,000 students.
- If enrollment rates for major age groups remain constant at their 1988 levels, by 1995—
  - enrollment will drop by about four percent, or half a million students, but
  - the number of older students will increase, and their share of the total college population will increase to 43 percent.
- If enrollment rates for the major age groups were to change by 1995 in the same manner that they changed between 1981 and 1988, by 1995—
  - enrollment will increase by five percent, or about two-thirds of a million students, and
  - the number of older students will increase; however, their share of the total college population will increase by only one percentage point, to 40 percent.

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IMPLICATIONS

- Enrollment will be under strong downward demographic pressures in the early nineties because the 25–34 year old age-group will join the 18–24 age-group in diminishing in size each year through the mid-decade.

- Recruitment strategies directed at older students to increase their rates of participation may assist institutions in maintaining their current levels of enrollment. Such efforts could be specifically tailored to the needs of the underserved, especially low-income and minority groups.

- Declining enrollment rates among 25–34 year olds may mean that a significant portion of this population has achieved its educational goals, or it may mean that program offerings are considered too costly, too time-consuming, or irrelevant. Policy makers in both academe and government need to review the demographic aspects of enrollment to assure the relevance of program offerings and assistance programs for higher education.

- Enrollment of large numbers of older students may indicate their desire to update or acquire new skills or develop new areas of knowledge for personal satisfaction. If this is the case, institutions will need to carefully monitor manpower demands and their client population's levels of educational attainment and interest to provide programs that will permit the achievement of desired educational goals.

- Enrollment of large numbers of older students may mean that baccalaureate completion time is being stretched out because of students' financial situations. If this is the case, authorities may wish to tailor student assistance programs to provide more efficient achievement of educational goals.

- If institutions want to offer programs and educational opportunities to broader populations, they need to be increasingly sensitive to the needs and talents of older individuals.

INTRODUCTION

Most explanations of higher education's enrollment growth over the last decade have pointed to increased numbers of older students. Indeed, the numerical increase of such students has been substantial; their numbers have grown from approximately 3.2 million in 1974 to 5.1 million in 1988.

This dramatic increase has overshadowed a more significant question: has there been any change in the rates at which older students have engaged in college study? Of the two sources of enrollment variation—size of a potential student age-group and the rate at which that age-group enrolls in college—only the latter is amenable to adjustment.

This policy brief examines changes since 1974 in both the number of those over 24 years of age and the rate at which they have enrolled in college. It also considers the effects of different participation rates on future enrollment patterns.

Note: It should be noted that when the terms "traditional" and "non-traditional" are used in this paper, they refer to age only, not to program, socio-economic category, or attendance status. "Traditional age" is arbitrarily defined as under the age of 25 years; "non-traditional age" refers to age 25 years and older.

The reader should also note that all of the data in this paper are based on total headcount enrollment; part-time students are counted equally with full-time students. Older students represent a relatively small share of full-time enrollment (19 percent) but a major portion of part-time enrollment (72 percent).
Enrollment by Age Group

- The share of higher education enrollment by older students (over 24 years old) has increased since 1974, rising from 33 percent to 39 percent in 1988 (figure 1).
- Students under 25 years of age are still in the majority, but with a decreasing share of the total. The younger segment of this age-group (those aged less than 22) accounted for 52 percent of total enrollments in 1974, but only 45 percent in 1988.

Changes among Older Students: Numbers Enrolled

The enrollment of older students has increased dramatically since 1974.
- The number of older students increased by nearly 2 million since 1974, growing from 3.2 million to 5.1 million in 1988 (figure 2). This represents an increase of 59 percent.
- Most of this growth took place from 1974 to 1981, as enrollments rose sharply from 3.2 to 4.3 million.

Figure 2
Enrollment of Older Students, by Age Group, 1974-88

- After this period, growth in the early and mid-eighties (1982-87) slowed, increasing by only half a million. However, in 1988 enrollment of older students increased by over one-third of a million. Most of this increase (262,000) was in the 35–44 age-group.

Most older students are between 25 and 34 years of age, but that age-group's proportion of the older student enrollment has been decreasing.
- The number of 25–34 year olds was one-third greater in 1988 than in 1974, increasing from 2.2 million to 3.0 million. However, students this age accounted for only 58 percent of enrollment by older students in 1988, a drop from 68 percent in 1974.
- Enrollment growth in this age-group was concentrated in the mid-1970s. In the three years between 1974 and 1977, enrollment increased by 27 percent, from 2.2 million to 2.8 million. The number in this age-group has remained around 3 million for the last 5 years.

The number of students older than 35 years of age has also increased since 1974. The younger segment, ages 35–44, has grown rapidly in recent years. This recent increase parallels the demographic shift as the Baby Boom generation moves into its late 30’s and early 40’s.
- The number of students aged 35–44 more than doubled from 1974 to 1988. Most of this increase has occurred since 1980, with more than half a million students added since 1984.
- The number of students aged 45 and older has also increased since 1974, but at a slower rate, increasing by 77 percent. Most of this growth occurred in the mid-seventies.

Changes among Older Students: Enrollment Rates

Despite the growth in the number of older students, there have been only small changes in the rates at which older population groups attend college (figure 3).
- The enrollment rate has dropped modestly for 25–34 year olds, the age bracket with the largest number of older persons enrolled in college. The enrollment rate was 7.3 percent in 1974; it rose to 8.2 percent in 1977, but has since dropped. In 1988 it stands at 6.7 percent.
- For ten years the enrollment rate for 35–44 year olds fluctuated between 3.0 and 3.6 percent; in 1988 it rose to 4.4 percent.
- There has been little change in the enrollment rate for persons over age 45. The rate for this group has remained low—between one-half and three-quarters of a percent—for most of the period under consideration. However, the population is so large that an increase of one-tenth of a percentage point would mean added enrollment of 75,000 students.
Change among Younger Students

Most students in U.S. colleges and universities continue to be in the "traditional" age range, that is, under age 25.

- In 1974, the number of these students stood at 6.6 million. Their numbers nearly reached 8 million in 1988.
- It is the impressive increase in the enrollment rate for the 18 to 24 year-olds that has maintained the current large number of "traditional age" students in college, even as its population base has shrunk. That enrollment rate was 29.0 percent in 1988, having gradually risen from 23 percent in 1974 (figure 3).

Students less than 22 years of age make up the largest segment, by far, of these "traditional age" students (figure 4).

- Students less than 22 years of age account for 74 percent of all younger students in 1988, and they account for 45 percent of total enrollment (figure 1).
- Since 1974, their number has increased moderately (by 16 percent), with most of the increase taking place during the mid-1970s.

Students 22 to 24 years of age made up only 16 percent of total enrollment in 1988. This group includes those completing college study on a delayed basis, late entrants to college, and postbaccalaureate (graduate and professional) students.

Population Changes

Nearly all (95 percent) postsecondary students come from three major age-groups—18–24 year-olds; 25–34 year-olds; and 35–44 year olds. The size of each of these age-groups has been changing—and will continue to change—in the future (figure 5).

- The 18–24 year old age-group has been getting smaller since 1981.
- The 25–34 year old age-group peaked in 1989 and will become smaller through the nineties.
- The 35–44 year old age-group will get larger through the nineties as will the cohort of those aged 45 and older.

Thus, as the two younger age-groups are shrinking, the older ones are growing. One might expect future enrollments to follow the same pattern; however, such may not be the case. We next explore both possibilities and their ramifications to higher education.
Looking to 1995

If enrollment rates for the major age-groups stay constant at 1988 levels for the next seven years (1989–1995), total enrollment would drop to around 12.6 million in 1995 (figure 6).²

- For the future, the population base for 18–24 year olds is projected to drop and, because of the projected constant enrollment rate, enrollment of this age-group will decrease to 7 million from the estimated 7.8 million in 1988.

- The population of 25–34 year olds is also projected to drop, so, with an unchanging enrollment rate, its contribution to total enrollment is only 2.8 million, down from 3 million in 1988.

- The projected growth in the older population (35 and older) brings enrollment for these age groups to 2.6 million (1.9 million for the 35–44 year olds and .7 million for those 45 years old and over). This is 400,000 more than in 1988, but does not offset the decreases in the younger age-groups.

- Although total enrollment under these assumptions is down from 1988, the share of total enrollment that the older students represent increases from 39 to 43 percent.

If, on the other hand, enrollment rates in 1995 were to be the result of a continuation of the same trends that have been observed in the last seven years—that is,
with increased participation in some age-groups and stagnation or decline in others—total enrollment would near the 14 million mark (figure 7).

- Enrollment of 18–24 year-olds would remain constant at around eight million students—despite their smaller population base—because of the assumed continuation of the recent strong increase in their enrollment rate.

- The enrollment for the 25–34 year-olds would decline by about one-half million because of the projected decrease in this population and the assumed continuation of the recent decline in its enrollment rate.

- The two older age groups would contribute 3.1 million to these 1995 projections—2.2 million aged 35–44 and .9 million aged 45 years and older. These estimates represent an increase of nearly a million students over the 1988 estimates. They result from a combination of the recent slight increases in enrollment rates and the larger population bases.

- Although the number of students aged 35 and over would increase significantly under these assumptions, the decline in the number of students aged 25–34 results in only a minimal net increase in the percentage of older students (25 and over) in the total enrollment picture. It would edge up to 40 percent.

These two quite different sets of assumptions do not presage any startling enrollment changes in the next seven years. The older student will continue to be a major presence in higher education, while the "traditional age-group" students will continue to be in the majority.

Policy Implications

This paper's emphasis on enrollment rates tends to endow that term with a reality all its own. One may be tempted to look at charts and projections and think that rates create enrollment. However, such is not the case. It is only after students have enrolled that an enrollment rate can be calculated. Administrators and policy makers do not increase the enrollment rate and then watch students enroll. They must first look at the needs, demands, and opportunities of individuals, provide relevant programs for them and then, after the individuals have responded to these opportunities, determine what the enrollment rates are.

Planners must consider the nature of an institution's clientele population before developing or adjusting programs for older students. A state or area with a high and increasing enrollment rate among 18–24 year olds should move carefully in considering programs for the older student.

If high enrollment rates among traditional age students mean that they are completing the baccalaureate—or otherwise meeting their educational goals—before age 25, it would not be surprising to see a dropping participation rate in the 25–34 year old population. In such a situation, the development of programs aimed at baccalaureate completions later in life would not seem to be wise policy. Instead, postbaccalaureate programs for an existing supply of potential graduate/professional students might be quite advantageous for both the students and the area's business and industry.

On the other hand, high rates of enrollment—especially part-time—may indicate the stretching out of degree completion time. This, in turn, may reflect a need for increased student aid or other means of reducing the net price of postsecondary education. High part-time enrollments might also mean that programs for late completion of baccalaureates would be entirely in order. Institutions that want to take advantage of growing population bases in the next five to eight years will need to concentrate on education programs for students over the age of 34. Attention should be given to ways to offset current barriers to enrollment of these older learners.

Many institutions wishing to increase their enrollments may wish to target population groups that remain underserved; these would include low-income and minority populations. Another prospect, only partially subject to institutional action, is for some enrollment gain from immigration or foreign students.

Institutions that draw a significant portion of their enrollment from the geographic region in which they are located need to examine regional demographic and enrollment patterns, commercial and industrial development, and educational attainment levels in order to learn whether completion rates and business needs will make the establishment of degree completing programs for part-time students viable prospects.

Development of programs tailored specifically for the 25–34 year old age-group may stem the decline of that group's enrollment rate. If, in 1995, that enrollment rate were brought up to its 1981 level, enrollment would increase by nearly 300,000 students over projections that assume a continuation of the 1988 enrollment rate.

All institutions will have to pay more attention to the demands for trained manpower on the part of business, government, and academia itself. They should also be increasingly sensitive to the needs and talents of older individuals, if they are to offer programs and educational opportunities to larger portions of the population in order to maintain or increase current enrollment levels.
1. Enrollment rates are calculated from enrollment data and population estimates and projections that come from the U.S. Bureau of the Census. The enrollment data appear in the Bureau's publication, *School Enrollment—Social and Economic Characteristics of Students*, published annually during the 1970s and either annually or biennially in recent years as part of the Bureau's Current Population Reports, Series P-20, Population Characteristics. Census enrollment data are used because they are the only source of trend data for enrollment by age. The Census figures come from the Current Population Survey sample of 60,000 households that are interviewed each October.

The U.S. Department of Education gathered enrollment data by age for the first time in 1987; it will do so again in 1991. Its data source is the institution, not a household member.

Whereas the 1987 totals reported by the Department of Education and the Bureau of the Census surveys were within one-half a percentage point of each other, the Department's count of students under the age of 25 was eight percent smaller than the Bureau's and its count of students aged 35 and over was almost 20 percent larger. The Department also reported 215,000 students in the "age unknown" category.

The Bureau of the Census was also the source of the population estimates and projections used in calculating the enrollment rates. However, the publication that contained the figures is *Projections of Education Statistics to 2000*, which was published by the U.S. Department of Education. This source was used because of its wide availability as a resource document and its convenient aggregation of several of the age ranges.

The enrollment rates shown here were calculated using total population figures and therefore will differ from those shown in other publications that use estimates of high school graduates as the base for calculating enrollment rates.

2. The projected enrollments are calculated by multiplying the projected population figures by the projected enrollment rates.

3. The following table shows the key elements used in calculating the enrollment projections.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Enrollment Rates, by Age-group, 1981 and 1988, with Projections to 1995</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Enrollment Rates</td>
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<tr>
<td>18-24</td>
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<tr>
<td>25-34</td>
<td>.0747</td>
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<tr>
<td>35-44</td>
<td>.0355</td>
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<tr>
<td>45+</td>
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<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

* In millions.

** Includes 200,000 students under the age of 18.

* Calculated by adding (subtracting) the difference in enrollment rates between 1981 and 1988 to (from) the 1988 figure.

* Calculated by multiplying the population by the enrollment rate; enrollments are in millions.


RESOURCES

1. Enrollment data by age are derived from the U.S. Bureau of the Census' fall household survey. The results are published in the school enrollment issues of its Current Population Reports, Series P-20. The most recent of these is Number 443, titled School Enrollment—Social and Economic Characteristics of Students: October 1988 and 1987. For further information, contact U.S. Bureau of the Census, Education and Social Stratification Branch, (301) 763-1154.


5. Projections of college age population are shown in the U.S. Department of Education's publication series, Projections of Education Statistics which is published periodically (most recently annually). These data are derived from Bureau of the Census projections and are aggregated in convenient age-groups. This series of publications also shows projections of enrollment for about ten years ahead of the year of publication. The results of the National Center for Education Statistics (NCES) survey of enrollment by age (1987) are published in its Digest of Education Statistics, 1989. For further information contact NCES' Education Information Branch 1-800-424-1616. Both publications are available for purchase from the Superintendent of Documents, Government Printing Office, Washington, DC 20402, (202) 275-3054.

SOURCES


The Division of Policy Analysis and Research publishes the ACE Research Brief Series, a collection of analytical papers exploring timely and pertinent issues in higher education. Current topics include trends in minority student participation, student employment, community college students, and the labor market for college graduates. The series is published eight times a year and is available for $50 for one year, $95 for two years, or $135 for three years. ACE members receive a 10 percent discount. To order, contact the Division of Policy Analysis and Research, American Council on Education, One Dupont Circle NW, Washington, D.C. 20036, (202) 939-9450.

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