A profile of older college graduates can be constructed from special tabulations provided by the National Center for Education Statistics' 1989-90 Recent College Graduate Survey. Findings indicate the following: one in six bachelor's degree recipients was 30 years old or older; four in five were interested in further education; professional fields of study were chosen more often by older than by younger graduates; 1 year after receiving their bachelor's degrees, older adults were as likely as their younger peers to be working full time; among women, interest in the fields of education and the health professions was greater among the older graduates; and interest in business/management fields was higher and lower in the social sciences among older male graduates in comparison to younger male graduates; the average salary of older graduates was higher than that of younger colleagues; only 4 percent of older graduates working full time were classified as "underemployed" compared to 13 percent of younger graduates; and four in five older graduates considered their jobs to be related to their major fields of study and to have career potential. Specific programs that can help older individuals make a successful transition from the home or job to campus include the following: adult resource centers, workshops to translate work or volunteer skills into study skills, demonstrations on documentation of prior learning for credit, peer support groups, child care services, and staff training on needs and concerns of adult students. (YLB)
Labor Force Participation of Older College Graduates

by CATHY HENDERSON

Older students constitute a growing proportion of college undergraduates. In 1991, about one in four undergraduates was 30 years old or older.¹ Who are these students? Adults who postponed college enrollment or degree completion while they provided the primary care for their children are part of this older student population. Others are students who have combined periods of employment with enrollment and still are working toward their initial postsecondary degrees. Some older students, who may not be interested in earning a credential, enroll part time to pursue personal interests or take advantage of courses that could improve their job performance or lead to new careers. Eventually, some of these older students persist in their studies and earn bachelor’s degrees.

What do we know about the demographic characteristics of older college graduates? What fields of study do they pursue?

1991 Recent College Graduate Survey

A profile of older college graduates can be constructed from special tabulations provided by the National

HIGHLIGHTS

- In 1991, one in six bachelor’s degree recipients was 30 years old or older.
- Four in five older graduates were interested in further education.
- Professional fields of study were chosen more often by older than by younger graduates (60 percent vs. 46 percent).
- One year after receiving their bachelor’s degrees, older graduates were as likely as their younger peers to be working full time (73 percent vs. 71 percent).
- Among women, interest in the fields of education and the health professions was greater among the older graduates.
- Interest in business/management fields was higher among older men graduates, while the popularity of the social sciences was lower in comparison to the interest expressed by younger men graduates.
- The average salary of older graduates was higher than the average salary of their younger colleagues ($28,961 vs. $21,905) one year after graduation. This advantage was enjoyed by both men ($32,170 vs. $23,982) and women ($26,441 vs. $20,535).
- Only 4 percent of older graduates who were working full time were classified as "underemployed"; among younger graduates, the figure was 13 percent.
- Four in five older graduates considered their jobs to be related to their major fields of study and to have career potential.
Profile of Recent College Graduates

Demographic Characteristics
In 1991, about one in six of the bachelor's degree recipients (16 percent) was 30 years old or above. (See Figure 1.)

The majority of older graduates were women (60 percent).

About 15 percent of graduates over age 30 were individuals of color, including African Americans (8 percent), Hispanics (4 percent), Asian Americans (2 percent), and Native Americans (1 percent).

The share of women and persons of color in this graduate segment was fairly similar to that in the youngest group of graduates (23 years old and below).

Educational Expectations
In spite of the fact that the older graduates often were 10 to 20 years older than their younger counterparts, the educational expectations of the two groups were surprisingly similar. (See Figure 2.)

Most of the older graduates (80 percent) were interested in pursuing additional educational credentials.

Almost two-thirds hoped to earn a master's degree, and 12 percent were interested in doctoral studies.

The category that displayed the greatest difference between the groups was the first-professional degree, in which only 4 percent of the older but 12 percent of the younger graduates expressed interest.2

Major Fields of Study
When the fields of study are grouped into broad categories, more older graduates had chosen professional fields (60 percent) than the arts and sciences (30 percent) or other subjects (10 percent).3 In contrast, among the younger graduates, 46 percent had chosen professional fields, while 42 percent had chosen the arts and sciences.

Business/management was the most popular major field of study for men and women in both age groups. A summary look at women shows:

Among all women, about one in five graduates had chosen business/management.

Two other fields that were very popular among older women were education (20 percent) and the health professions (17 percent).

Other majors chosen frequently by younger women included education (12 percent), the humanities (12 percent), and the social sciences (11 percent).

Interest in education (20 percent vs. 12 percent) and the health professions (17 percent vs. 7 percent) was higher among the older women graduates.
The social sciences was the only major selected by significantly more younger than older women graduates (11 percent vs. 5 percent).

With respect to men, the data indicate that:

- One-half of the men of all ages had majored in business/management, engineering, or the social sciences.

- Interest in business/management as a major was higher among older men graduates than among their younger counterparts (32 percent vs. 27 percent), while the popularity of the social sciences was lower (8 percent vs. 14 percent). Interest in engineering remained steady (12–13 percent).

**Labor Force Participation**

A larger proportion of older men graduates than of their younger peers were working full time one year after graduation. (See Figure 3.)

- Among older men graduates, about eight in ten were employed full time one year after receiving their bachelor’s degrees; the proportion among younger men was seven in ten. However, younger men graduates were about three times more likely to be out of the labor force because they were enrolled in additional schooling (16 percent vs. 5 percent).

- Among all women graduates, about seven in ten were employed full time. The younger women graduates also were more likely to have continued in school (10 percent vs. 6 percent).

**Occupations**

The data on chosen occupations varied by the graduates’ gender and age.

- The most typical job held by older women graduates was in the field of education (25 percent), while the same proportion of younger graduates found jobs as administrative support/clerical personnel.

- Older women graduates were more likely than their younger colleagues to be working in the areas of education (25 percent vs. 18 percent) and the health professions (19 percent vs. 7 percent). A smaller proportion of older women graduates were working in sales (3 percent vs. 10 percent) or administrative support/clerical positions (16 percent vs. 25 percent).

- Among all men graduates, one in six was working in a business/management position. Among younger
Younger graduates were 23 years old or below; older graduates were 30 years old or above.


In contrast, older graduates who had majored in psychology, the humanities, or the social sciences had more faith in the potential of their jobs than in the current connection of their jobs to their areas of academic concentration.

Necessity of Degree
More younger graduates than older degree recipients (61 percent vs. 46 percent) felt that a college degree had been important in helping them get their jobs. This probably is because younger graduates typically have accumulated less relevant work experience before earning their bachelor's degrees.

Older graduates who were working in professional fields (for example, education, engineering, or public affairs/the social services) were more inclined than older graduates who were employed in other fields to believe that a degree had been a prerequisite for their employment.

Underemployment
"Underemployed" graduates (as defined by the NCES) were those who indicated that a college degree was not required for their jobs and who were employed full time in sales, service, administrative support/clerical, or mechanic/operator/laborer positions.
Younger graduates described themselves as underemployed more frequently than did their older counterparts (13 percent vs. 4 percent).

Graduates of any age who had majored in the field of business/management were the most likely group to be classified as underemployed (20 percent).

Salaries
Among recent graduates of all ages who were working full time in 1991, the average salary of men ($25,484) exceeded that of women ($22,016) by 16 percent. Among all recent graduates, the average salary of Asian Americans ($25,909) was slightly higher, and the average salary of Native Americans ($21,586) was slightly lower, than those of whites ($23,669), Hispanics ($23,949), and African Americans ($22,553).

Salaries also varied by gender, age, and major field of study. (See Table 1, page 6.)

The highest average salaries were earned by those who had majored in professional fields. For example, among the younger women graduates working full time, those who had majored in the health professions or engineering earned about $29,000 to $30,000, while their older women colleagues averaged slightly higher salaries of about $34,000.

Older women graduates, on average, earned 29 percent higher salaries than their younger women colleagues ($26,441 vs. $20,535). The average difference varied by discipline. The smallest disparity in average salary between younger and older graduates was in the field of education, where starting salaries are set by local governments. Therefore, an older graduate who becomes newly certified to teach typically earns a salary similar to one earned by a 23-year-old teacher ($19,472 vs. $18,068 in 1991).4

Older men graduates who were working full time earned on average one-third more than their younger male colleagues with bachelor's degrees ($32,170 vs. $23,962). Men who had majored in certain fields enjoyed even more of an advantage.

Older men graduates who had concentrated in business/management earned almost 50 percent more than their younger peers ($35,703 vs. $24,332). Compensation in the business community more typically reflects past work experience, thus giving older graduates with business degrees a salary advantage.

Salary differences were related to gender, age, and occupation. Across all occupations and for both women and men, older graduates' average salaries exceeded those of younger graduates. (See Figure 5.) The leading earners

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Figure 4
Older Graduates's Opinions of Full-Time Jobs Held
One Year After Receiving Bachelor's Degrees, by Major Field of Study: 1991

- Health Professions
- Education
- Math/Computers/Physics
- Engineering
- Business/Management
- Public Affairs/Social Services
- Psychology
- Humanities
- Social Sciences

0% 20% 40% 60% 80% 100%

- Job is related to major field
- Job has career potential

Note: There were too few cases for analysis in the fields of history and biological sciences.
Table 1
Salaries of Recent College Graduates Who Were Employed Full Time
One Year After Receiving Their Bachelor’s Degrees, By Selected Characteristics: 1991

<table>
<thead>
<tr>
<th>Category</th>
<th>Women Younger</th>
<th>Women Older</th>
<th>Men Younger</th>
<th>Men Older</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SELECTED MAJOR FIELD OF STUDY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business/Management</td>
<td>$21,948</td>
<td>$29,047</td>
<td>$24,332</td>
<td>$35,703</td>
</tr>
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<td>Education</td>
<td>$18,284</td>
<td>$19,368</td>
<td>$19,761</td>
<td>$24,403</td>
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<tr>
<td>Engineering</td>
<td>$29,913</td>
<td>$33,971</td>
<td>$30,851</td>
<td>$33,975</td>
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<tr>
<td>Health Professions</td>
<td>$29,007</td>
<td>$34,104</td>
<td>$30,069</td>
<td>$32,323</td>
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<tr>
<td>Biological Sciences</td>
<td>$18,763</td>
<td>$28,741</td>
<td>$20,992</td>
<td>$25,037</td>
</tr>
<tr>
<td>Mathematics, Computer Sciences, and Physical Sciences</td>
<td>$22,742</td>
<td>$30,124</td>
<td>$24,854</td>
<td>$33,147</td>
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<tr>
<td>Social Sciences</td>
<td>$19,165</td>
<td>$20,974</td>
<td>$23,264</td>
<td>$32,365</td>
</tr>
<tr>
<td>Humanities</td>
<td>$17,718</td>
<td>$22,822</td>
<td>$18,869</td>
<td>$24,901</td>
</tr>
<tr>
<td>Psychology</td>
<td>$18,030</td>
<td>$23,389</td>
<td>$19,244</td>
<td>$28,965</td>
</tr>
<tr>
<td>Average Salary</td>
<td>$20,535</td>
<td>$26,441</td>
<td>$23,962</td>
<td>$32,170</td>
</tr>
<tr>
<td><strong>OCCUPATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business/Managers</td>
<td>$22,896</td>
<td>$32,024</td>
<td>$25,865</td>
<td>$36,613</td>
</tr>
<tr>
<td>Educators</td>
<td>$18,068</td>
<td>$19,472</td>
<td>$19,082</td>
<td>$22,813</td>
</tr>
<tr>
<td>Engineers</td>
<td>$28,459</td>
<td>$36,315</td>
<td>$31,360</td>
<td>$37,486</td>
</tr>
<tr>
<td>Health Professionals</td>
<td>$29,016</td>
<td>$33,428</td>
<td>$23,397</td>
<td>$31,024</td>
</tr>
<tr>
<td>Public Affairs/Social Services</td>
<td>$18,944</td>
<td>$20,070</td>
<td>$18,172</td>
<td>$19,114</td>
</tr>
<tr>
<td>Biological Scientists</td>
<td>$20,718</td>
<td>$23,117</td>
<td>$17,784</td>
<td>$28,406</td>
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<td>Math and Physical Scientists</td>
<td>$26,153</td>
<td>$28,583</td>
<td>$26,484</td>
<td>$29,832</td>
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<tr>
<td>Computer Scientists and Programmers</td>
<td>$27,097</td>
<td>$33,560</td>
<td>$28,199</td>
<td>$40,453</td>
</tr>
<tr>
<td>Communications</td>
<td>$19,775</td>
<td>$25,574</td>
<td>$18,723</td>
<td>$25,084</td>
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<tr>
<td>Technicians</td>
<td>$22,260</td>
<td>$25,942</td>
<td>$23,780</td>
<td>$29,305</td>
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<tr>
<td>Administrative Support/Clerical Workers</td>
<td>$19,522</td>
<td>$23,572</td>
<td>$19,857</td>
<td>$30,746</td>
</tr>
<tr>
<td>Mechanics, Operators, Laborers</td>
<td>$16,840</td>
<td>$19,508</td>
<td>$21,085</td>
<td>$32,158</td>
</tr>
<tr>
<td>Sales Personnel</td>
<td>$19,592</td>
<td>$29,010</td>
<td>$25,677</td>
<td>$26,073</td>
</tr>
<tr>
<td>Service Personnel</td>
<td>$14,776</td>
<td>$17,665</td>
<td>$19,487</td>
<td>$26,965</td>
</tr>
<tr>
<td>Other</td>
<td>$23,567</td>
<td>$23,302</td>
<td>$23,610</td>
<td>$35,719</td>
</tr>
<tr>
<td>Average Salary</td>
<td>$20,535</td>
<td>$26,441</td>
<td>$23,962</td>
<td>$32,170</td>
</tr>
</tbody>
</table>

**Note:** Younger graduates were 23 years old or below; older graduates were 30 years old or above.

Major field of study applies to those graduates who received bachelor’s degrees during the 1989–90 academic year. Two categories (public affairs/the social services and history) had too few cases to be listed separately, but are included in the total.

for both men and women were graduates who worked in professional fields.

Among women, older graduates who were engineers earned the top salaries ($36,315), while younger graduates working in the health professions ranked first ($29,016).

Older men who were working in the computer industry earned the most ($40,453), while younger men who were engineers led their age group ($31,360).

**Additional Studies on Older Undergraduate Students**

Unfortunately, the NCES survey included no specific information on the prior employment or enrollment history of these older recent college graduates. The data do not indicate whether these graduates got a job for the first time, changed occupations, or received promotions in their current jobs as a result of having earned their degrees. In addition, information is not available on whether the graduates spent their entire undergraduate years at one four-year institution, received an associate degree from a two-year college and transferred, or enrolled in a variety of institutions over a period of many years before receiving their bachelor’s degrees. Likewise, it is not known whether they studied at public or independent institutions. However, data from other studies of older undergraduate students can be helpful in understanding some of their educational characteristics and the factors that trigger older students to enroll in college.

Data from the 1989–90 National Postsecondary Student Aid Study (NPSAS), conducted by the U.S. Department of Education, provides the following descriptive information on the 2.7 million undergraduates who were 30 years of age and above. In 1989–90, the majority were:

- enrolled at a public institution (82 percent)
- white, non-Hispanic (78 percent)
- enrolled part time (74 percent)
- attending a less-than-four-year college (73 percent)
- women (65 percent)
- married (62 percent)
- first-generation college students (62 percent)
- living with dependents (57 percent)

Another study, which looked at older undergraduate students enrolled in the University of Wisconsin System, indicated that in 1986, about two in three were attending college on a part-time basis, were employed, and had attended some type of higher education institution previously.

Family and work responsibilities were the top two reasons cited by the Wisconsin students for the delay between their previous and current college enrollments. Two important factors that had motivated these older students to enroll once again were (1) the encouragement they
received from their families, and (2) the feeling that they were able to juggle work and child care responsibilities because their children were old enough to attend school.

Like their younger peers, many of these students listed job dissatisfaction as a primary reason for enrolling in college. A bachelor's degree might enable them to advance within their careers, or to seek more professional employment elsewhere. However, compared with their younger colleagues, the older undergraduates were more likely to cite learning for its own sake as an important motivation in their decision to return to college.

A 1987 study of undergraduates at Georgia State University showed that the following factors had influenced older undergraduates to enroll:

- the availability of specific programs of study
- flexible class schedules
- proximity of the school to work (or home)
- the academic reputation of the institution
- affordable tuition

**Conclusion**

Older college graduates recognize from their experiences in the work force and in their communities the value of the knowledge they acquired from a bachelor's degree. While some attended college for the sake of learning, others did so to gain new skills and credentials to advance them in their present careers, or to pursue new job opportunities. Older students who persist and earn bachelor's degrees are highly motivated individuals who have managed to juggle the demands of family, work, and classes to achieve their goals. Only one in four adults aged 25 to 64 has earned this credential.

Administrators at an increasing number of colleges and universities understand that they must incorporate adults into their marketing plans. Specific programs that can help older individuals make a successful transition from the home or job to campus include:

- Adult Resource Centers that provide academic advising, personal counseling, and career guidance
- workshops that explain how skills gained through volunteer or work experiences can be translated into successful study skills on campus
- demonstrations on how credit for prior learning often can be documented and applied to degree requirements
- peer support groups

**Adult Orientation Programs**

- comprehensive day and evening child care services
- weekend courses or classes held at satellite centers
- workshops that demonstrate how community college students can transfer credits to continue their education at senior colleges
- staff training on the needs and concerns of adult students

**Endnotes**

2. First-professional degrees require at least six years of college work for completion (including at least two years of preprofessional training). Examples include legal, medical, and dental degrees.
3. Professional fields include business/management, education, engineering, the health professions, and public affairs/the social services. Arts and sciences fields include biological sciences, mathematics/computer sciences/physical sciences, the social sciences, history, the humanities, and psychology.
4. Compensation in public schools can reflect past experience in the school system. A teacher who has been teaching for ten years will earn more than someone who has been in the classroom for only two years, assuming that they have the same academic credentials.

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