Now What?

Life After College for Recent Graduates

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Ernest T. Freeman, President and CEO, TERI
Thomas D. Parker, President, Boston Systems Resources, Inc.
Sarah Pendleton, Assistant to the President, TERI

To request a copy of the report, please contact:
The Education Resources Institute
330 Stuart Street, Suite 500 Boston, MA 02116-5237

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Jamie P. Merisotis, President
Colleen T. O’Brien, Managing Director
Katheryn L. Volle, Research Analyst
Alisa M. Federico, Research Analyst

For further information, please contact:
THE INSTITUTE for Higher Education Policy
1930 18th Street, NW, Suite 24, Washington, DC 20009
Phone: 202-588-8383 / Facsimile: 202-588-8379 / E-mail: institute@ihep.com

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EXECUTIVE SUMMARY

Since 1992, nearly 7 million students have completed at least a bachelor's degree in the U.S. system of higher education. For many of these graduates, life after college has meant success and achievement at the personal and professional level. For others, it has meant challenges and struggles to "find their way" in the world after college.

What happens to students in their first few years after receiving a bachelor's degree? What kinds of opportunities and obstacles do they face? What does the future hold for these recent graduates? This report attempts to provide answers to these questions by taking a broad view of the post-collegiate experiences of recent graduates. Prepared by The Institute for Higher Education Policy and The Education Resources Institute (TERI), the report offers an extensive view of the transition from college by examining three key aspects of life after college: employment, further education, and lifestyle.

Information on employment includes current and future job market prospects, and the range of compensation that recent graduates receive. Data are also presented on those graduates who participate in education beyond the baccalaureate degree, either at the graduate and professional level, or in other classes and training. Lifestyle information includes an array of experiences and circumstances, including family status and residence, financial assets, voting and community service participation, and alumni relationships with their undergraduate institutions. In general, the information in this report focuses on students who have graduated from a four-year college within the last five years.

Though some of the data in this report have been published elsewhere, no recent report has drawn together information from such disparate sources. Information and analyses in the report are drawn from several federal agencies, including the U.S. Department of Education, the Census Bureau, and the Bureau of Labor Statistics. Data and information from higher education associations, institutions, and other organizations are also utilized.
The major findings of this report can be broken down into two categories: promising trends, and areas of concern.

**Promising Trends**

*Recent college graduates face a good job market, with employers reporting sharp increases in expected hiring.* A recent survey reported that employers would be hiring 17% more graduates from the class of 1997 than from last year’s class. Overall, 60% of employers surveyed said they plan to hire more graduates than they did last year.

*Average starting salaries for recent graduates are increasing faster than inflation, and are particularly strong for those in the service and manufacturing sectors.* The highest estimated starting salaries are for Engineering majors—averaging from $33,000 to $43,000—Computer Science majors—nearly $37,000—and Management Information Systems majors—$35,000. Starting salaries for other majors are also impressive: Economics/Finance, $31,000, Accounting, $30,000, Business Administration, $29,000, and Marketing, $28,000. Among other Liberal Arts and Humanities/Social Science degrees, average starting salary offers are lower, ranging from $25,000 for History majors and $24,000 for English majors, to approximately $23,000 for Political Science, Visual and Performing Arts, or Psychology graduates.

*Not all recent college graduates see their education simply as a means to earn money.* While 45% of recent graduates stated that good income potential was an important factor influencing their future job choices, other factors were also significant. The intellectual nature of their work was important for 45%, and another 42% said their job choices would depend on whether the work was interesting.

*Planning for the future financially appears to be an important goal for recent graduates.* Seventy-one percent of recent graduates are currently saving money for education, retirement, home buying, or other purposes. This savings rate is significantly higher than the national average of 55% of all families who save money.

*Recent graduates have distinguished themselves as good citizens.* An impressive 69% of recent graduates have performed some kind of community service. While the majority volunteered less than 20 hours a month, 9% performed more than 30 hours of service per month. Similarly, 90% of recent graduates report that they are registered to vote, compared to 68% of the general population. In addition, many recent graduates give back to the colleges from which they graduated by contributing money, serving as admissions and recruiting volunteers, and even working as employees at their alma maters.
Projections indicate that those with bachelor’s degrees will experience the fastest job growth and the largest number of job openings. According to the Bureau of Labor Statistics, the number of jobs requiring a bachelor’s degree will grow by 27% between 1994 and 2005. The fastest growing occupations for bachelor’s degree recipients are projected to be systems analysts, computer engineers, computer scientists, physical therapists, residential counselors, occupational therapists, and special education teachers.

Areas Of Concern

The combined debts of student loans, car loans, rent, and credit cards are increasingly burdening some recent graduates. The typical recent college graduate who borrowed to pay for college has total monthly debt payments—student loans, rent, car loans, and other debt—totaling $852 per month. This includes an average of $174 per month in student loans, and $678 in non-educational debt. Two of the fastest growing components of composite debt of recent college graduates are student loans and credit cards. In fact, the number of college students who have credit cards has grown from 54% in 1990 to 67% in 1996, with the average balance for these students growing from $900 in 1990 to $2,100 in 1995, an increase of 134%.

Some employers express dissatisfaction with the training and skills levels of those who have just graduated from college. In a recent survey, employers said that both technical and non-technical entry-level employees were deficient in basic skills such as thinking abstractly, establishing priorities and setting goals, and using interpersonal skills to handle conflict or criticism. Employers were particularly concerned about technical graduates’ (computer scientists, accountants, engineers) writing and presentation skills.

A large percentage of recent college graduates live at home with their parents, potentially adding to the financial burdens of their parents’ generation. One-quarter of recent graduates are living in their parents’ or guardians’ residences within one to two years of graduating. Among graduates 21 to 25 years old, 30% live with their parents.
Each year, as college students across the country finish their final exams and prepare to graduate, one question that they hear with increasing frequency is: “Now what are you going to do?” For many students, the answers to this question are just beginning to emerge. While it is not uncommon for some students to have a clear sense of their life direction, for others graduation signals a time of uncertainty and new beginnings.

This annual ritual is also accompanied by media stories about the “Class of XX.” Newspaper, radio, and television stories tend to focus on what the job market looks like for this year’s graduating class: who is hiring, in what fields and majors, and at what salary levels. Though the job prospects for college graduates vary year to year—for example, the Class of 1997 is facing a much better job market than did their peers in previous classes in the 1990s—the stories often have a similar theme: life will be good for graduates in certain fields, but more challenging for those with degrees in fields where there is less immediate job market demand.

While these stories present an interesting snapshot of the post-collegiate employment experience, they are narrowly focused on a single outcome of a college degree: getting a job. But in fact, a college education in America today is about much more than getting a job. Life after college means a variety of experiences for recent graduates, ranging from further study at the graduate and professional level, to a new lifestyle that may include family, finances, and other choices and obligations.

Now What? Life After College for Recent Graduates takes this more comprehensive, inclusive view of the post-collegiate life experiences of graduates. Prepared by The Institute for Higher Education Policy and The Education Resources Institute (TERI), the report offers a broad overview of the transition from college by examining three key aspects of life after college: employment, further education, and lifestyle. Information on employment includes factors influencing the employment of recent graduates, current and future job market prospects, and the range of compensa-
tion they receive. Data are also presented on those college graduates who participate in education beyond the baccalaureate degree, either at the graduate and professional level, or in other classes and training. Facts about recent graduates' lifestyle include an array of experiences and circumstances, including family status and residence, financial assets, voting and community service participation, and alumni relationships with their undergraduate institutions. In general, the material presented in this report focuses on students who have graduated from a four-year college within the last five years.

Information and analyses contained in this report are drawn from several sources, including the U.S. Department of Education, the Census Bureau, and the Bureau of Labor Statistics. Additional data are also utilized from higher education associations, institutions, and other organizations including American College Testing (ACT), the Collegiate Employment Research Institute (CERI) at Michigan State University, and the National Association of Colleges and Employers (NACE).

An important component of the analysis conducted for this report is “Baccalaureate and Beyond” (B&B), a longitudinal study designed by the U.S. Department of Education to track students as they prepare for graduation and beyond. Drawing from a nationally representative sample of students, data on issues such as job search methods, initial job placements, and financial status were collected from this cohort, first in 1992-93, and then during a follow-up in 1994. Special analyses of these data have been conducted to determine some of the most common post-graduate “facts of life,” and what impact the college experience has had on the economic, social, and family status of recent graduates.

Overview of Recent College Graduates

Since 1992, nearly 7 million students have completed at least a bachelor's degree in the U.S. system of higher education. While the composition of the individual graduating classes has varied over this span, the demographic breakdown of students has remained generally constant. Recently, college graduating classes have been about 55% female and 45% male. The majority—83%—were White, non-Hispanic, while 6% percent were Black, non-Hispanic, 5% were Hispanic, 5% were Asian/Pacific Islanders, and 1% were American Indian/Alaskan Native. Sixty-seven percent of the graduates attended public colleges and universities, and 33% attended private institutions. Seventy-five percent of recent college graduates were between the ages of 21 and 25 when they received their bachelor's degree, 15% were ages 26 to 35, 7% were ages 36 to 45, 3% were over 45 years old, and less than 1% were younger than 21.

Trends among the degrees that recent college graduates have earned illustrate the changing nature of the job market and students' interests. For example, the largest percentage of students in 1994 received bachelor's degrees in Business Management, a field which grew steadily through
the 1970s and 1980s, as the popularity and success of jobs on Wall Street and in private businesses flourished. The percentage of degrees earned in the Humanities and the Social Sciences has grown in the past few years after a decline that started in 1971 and continued until the mid-1980s. Degrees in all technical and professional fields of study have accounted for approximately half of all bachelor’s degrees earned since 1977. From 1971 to 1994, the percentage of degrees earned in Education decreased by more than 50%, while the numbers of degrees earned in Business Management, Health Sciences, and other Technical and Professional fields grew.

Data on degrees earned in 1994—the most recent year available—indicate that the greatest percentage of degrees conferred over this time were in Business Management, 21%. The other fields of study producing the most degrees include the Social Sciences, 17%; the Humanities, 17%; other Technical/Professional fields, 13%; Education, 9%; Engineering, 7%; and Health Sciences, 6%.

According to the ACT “Alumni Survey Report,” graduates who have been out four years or less report their current status as follows:

- 79% are employed, either full-time, part-time, in the military, or self-employed, while 4% are unemployed;
- 13% are either pursuing education full-time or are working while in school; and
- 3% are at home with family (an additional 1% listed “other” as their current status).
### Bachelor's Degrees Earned by Field of Study, AY 1971-94

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<tbody>
<tr>
<td></td>
<td>Number of Graduates</td>
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<td>Number of Graduates</td>
<td>Number of Graduates</td>
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<tr>
<td>Humanities</td>
<td>134,511</td>
<td>143,167</td>
<td>135,562</td>
<td>132,626</td>
<td>160,772</td>
<td>194,472</td>
<td></td>
<td>36%</td>
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<tr>
<td>Social and Behavioral Sciences</td>
<td>193,511</td>
<td>202,459</td>
<td>157,831</td>
<td>140,917</td>
<td>134,468</td>
<td>172,035</td>
<td>202,939</td>
<td>5%</td>
</tr>
<tr>
<td>Life Sciences</td>
<td>36,340</td>
<td>48,340</td>
<td>51,502</td>
<td>41,639</td>
<td>38,524</td>
<td>37,204</td>
<td>51,383</td>
<td>44%</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>21,178</td>
<td>22,986</td>
<td>24,052</td>
<td>21,717</td>
<td>16,066</td>
<td>18,400</td>
<td>14,396</td>
<td>-42%</td>
</tr>
<tr>
<td>Mathematics</td>
<td>21,761</td>
<td>13,065</td>
<td>12,226</td>
<td>17,147</td>
<td>15,176</td>
<td>14,396</td>
<td></td>
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<tr>
<td>Computer and Information Sciences</td>
<td>4,756</td>
<td>7,201</td>
<td>20,267</td>
<td>41,889</td>
<td>27,257</td>
<td>24,200</td>
<td></td>
<td>913%</td>
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<tr>
<td>Engineering and Engineering Technologies</td>
<td>50,046</td>
<td>55,654</td>
<td>80,005</td>
<td>95,600</td>
<td>81,322</td>
<td>78,225</td>
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<tr>
<td>Education</td>
<td>184,907</td>
<td>135,821</td>
<td>100,932</td>
<td>87,114</td>
<td>105,112</td>
<td>107,600</td>
<td></td>
<td>-39%</td>
</tr>
<tr>
<td>Business Management</td>
<td>131,640</td>
<td>159,691</td>
<td>213,374</td>
<td>237,319</td>
<td>248,698</td>
<td>246,654</td>
<td></td>
<td>115%</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>41,459</td>
<td>59,434</td>
<td>63,653</td>
<td>64,396</td>
<td>58,302</td>
<td>74,421</td>
<td></td>
<td>195%</td>
</tr>
<tr>
<td>Other Technical/Professional</td>
<td>82,473</td>
<td>114,852</td>
<td>120,331</td>
<td>116,923</td>
<td>126,687</td>
<td>153,283</td>
<td></td>
<td>195%</td>
</tr>
<tr>
<td>Not Classified in a Field of Study</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>2,713</td>
<td>3,302</td>
<td>N/A</td>
</tr>
<tr>
<td>Total</td>
<td>639,730</td>
<td>921,204</td>
<td>952,958</td>
<td>987,783</td>
<td>1,051,344</td>
<td>1,169,275</td>
<td>39%</td>
<td></td>
</tr>
</tbody>
</table>

I: EMPLOYMENT

As the nation has changed and the workforce has evolved, the relationship between educational attainment and employment has grown stronger. The impact of education beyond the high school level on earnings and employment has been well-documented: Census data indicate that, in general, the more education a person has, the greater the lifetime earnings and the lower levels of unemployment he or she will experience. This chapter reviews how recent college graduates find a job, employment prospects for recent graduates, workforce participation, compensation levels, and projections for future employment.

Factors Influencing Employment

Methods for Finding a Job

For some students the job search process can start as early as their first year in college, with the choice of classes, a major, on- and off-campus activities, and summer internships and jobs. For others, junior and senior years are when increasing effort is focused on looking for a job. But for many students, it takes the onset of the final semester and graduation for the process to begin in earnest. About 40% of students who have completed college in the last four years had found their first full-time job prior to leaving college. While only 13% had found their first job in less than a month, one-third took one to six months to find their job. By 12 months, another 7% had obtained a job, and an additional 7% took over a year to secure employment.

While the process varies for almost every student, there are some commonalities. Preparing resumes, devising search strategies, and identifying prospective employers are just a few of the steps that need to be taken. In particular, the search strategies used to secure a job after graduation range from recruiting fairs, to the help wanted ads in newspapers, to the placement offices at their colleges. According to ACT’s “Alumni Survey Report,” students use the following sources to find their first job:

- 20% found out about the position from either a parent/relative or another student/friend;
- 18% had seen the position listed in a publication;
Businesses employ a similar range of methods to recruit students, depending on the size and nature of the organization. The Collegiate Employment Research Institute (CERI) at Michigan State University annually surveys businesses, industries, and governmental agencies that hire new college graduates to ascertain trends in hiring, compensation, and placement. According to CERI, on-campus recruitment activities are some of the most popular and successful methods for employers. In the late 1980s and early 1990s, many large businesses curtailed their on-campus activities as a slower economy brought about more downsizing and limited the number of entry-level positions available for new college graduates. However, recent trends indicate a resurgence of recruiting activities, especially at job and recruiting fairs that are held at central locations and sponsored by collegiate consortia and businesses.8

Internships and co-op programs are also successful methods that benefit both companies and students. These programs give students the chance to determine their interest in a given field while gaining valuable work experience, most often while they are still in school. According to the National Association of Colleges and Employers (NACE), 70% of companies surveyed in November 1996 use internship and co-op programs as a source for prospective full-time employees. Participants become familiar with the company and gain skills that would have to be taught to another recruit. Of those companies who have summer internships, 98% use their programs to convert interns into permanent employees. Approximately 40% of students who participate in co-op programs go on to become full-time employees with that company.9

Technology—particularly the Internet—has impacted the job search process. Increasing numbers of employers are advertising job openings on their websites: in 1996, 36% of companies participating in CERI’s survey had established webpages for the purpose of promoting job openings, up from 18% in 1995. Companies frequently distribute the addresses for these sites through career service offices. Graduating students use the sites to find out about open positions and access more information about the companies. The websites are also advantageous to companies, since they are relatively easy to update.10

Resume databases on the Internet have become a popular tool. These sites are administered by a variety of parties, including specific companies, recruiting organizations, higher education associations, and individual colleges and universities. In 1996, 11% of companies had created a data-
base to receive resumes; only 7% had such databases in 1995. However, while these types of resources may help widen the pool for employers, companies report that relatively few new employees are hired in this manner.\textsuperscript{11}

In addition to company websites that provide information about specific positions and employers, several organizations publish on-line job guides, career planners, and “how to” manuals about life after college. Resources dedicated to employment issues contain suggestions about resumes and interviews, as well as starting salary information in specific fields. More generally oriented sites cover everything from finding an apartment and living alone, to repaying student loans and financial planning.

**What Influences the Job Choice Decision?**

Many factors influence students’ choice of occupation and job. Respondents in the Baccalaureate and Beyond (B&B) study were asked what factors would influence their future job choice. While 45% stated that good *income potential* was an important factor—and 55% did not—only 35% felt that a good *starting income* was of significance in their choice of jobs. Other factors such as the quality and type of work they would be performing were compelling for students; the intellectual nature of their work was important for 45%; and another 42% said their job choice would depend on whether the work was interesting. In addition, considerations such as job security and interaction with other people were both significant for one-third of respondents. Issues such as prestige and travel were relatively unimportant for most students.\textsuperscript{12}

**Background/Experiences of New Hires**

“Recruiting Trends,” an annual publication produced by CERI based on their survey of businesses, provides a profile of the characteristics of newly hired recent college graduates. The 1995-96 hiring profile showed the following:

- 52% of those newly hired had career-related pre-professional experiences;
- 41% were women;
- 16% were minorities;
- 10% of the new graduates were liberal arts majors; and
- 2% were individuals with disabilities.\textsuperscript{13}

**Job Prospects For Recent College Graduates**

Regardless of academic majors, training, or job search strategies, the most important factor determining whether or not college graduates will find work is the status of the job market. In a given year, confidence in the economy, projected growth in specific occupational fields, and individual performance and personnel issues influence companies’ hiring decisions regarding new college graduates. For example, according to “Recruiting Trends 1995-96,” discussions about balancing the
Employment

The federal budget may affect a company's hiring plan since reductions in the federal workforce could result in increased private sector hiring. As the overall economy has improved coming out of the recessionary period of the early 1990s, businesses and corporations surveyed by CERI have reported gradual increases in their intentions to hire new graduates.14

In addition to data gathered by CERI, NACE also collects information from employers about their plans to hire new graduates. In the Fall of 1996, employers reported that they would be hiring 17% more graduates from the Class of 1997 than from last year's class. Overall, 60% of employers surveyed said they plan to hire more graduates than they did last year.15

Technology needs are driving employers in their search for college graduates, particularly among computer and business equipment manufacturers and companies upgrading their technological capacities. Engineers, programmers, analysts, and information systems and networking personnel are among the most wanted as employers look to hire.

By industry group, the service sector is expected to provide the greatest number of employment opportunities for members of the Class of 1997, but employers in the manufacturing segment report they will hire 22% more graduates than last year, the biggest increase for all sectors. The government and non-profit sectors expect to hire fewer college graduates.16

**Participation In The Workforce**

Among students who had been out of school one to two years, almost 90%—73% full-time and 14% part-time—of recent college graduates were employed. Four percent were unemployed, but were not receiving benefits, and another 9% were out of the workforce.17
Fifty-three percent of graduates who had not worked since completing their education cited going to school full-time as their main reason for not working. Eleven percent had family responsibilities that prevented them from working, 5% did not want to work, another 5% had been traveling, 3% were waiting for a new job, and 2% were physically unable to work.\textsuperscript{18}

**Financial Compensation**

One of the most frequent indicators of employment prospects for college graduates is the starting salary offers they receive. NACE conducts a periodic survey to determine the average starting salaries offered to graduates in certain academic fields and majors. In general, starting salaries for bachelor's degree recipients are expected to increase by an average of 3.9% from last year, well above the current 2.5% rate of inflation. In 1997, the highest estimated starting salaries for new college graduates are for engineering majors: Chemical Engineering, $42,817; Computer Engineering, $39,722; Electrical Engineering, $39,513; and Mechanical Engineering, $38,113. High starting salaries are also available for majors in Industrial Engineering, $38,026; Computer Science $36,597; Management Information Systems, $34,778; and Civil Engineering, $33,119.

Starting salaries for other majors are also impressive: Economics/Finance, $31,294; Accounting, $30,321; Business Administration, $29,433; and Marketing, $27,874. Among other Liberal Arts and Humanities/Social Science degrees, average starting salary offers are lower. The average offer for graduates who majored in foreign languages is $25,608; History $24,688; English $23,553; Political Science, $23,364; Visual and Performing Arts, $23,344; and Psychology, $23,315.

According to NACE, service sector and manufacturing employers plan to offer the greatest increases in starting salaries from the previous year. Government and non-profit employers expect to offer increases as well, but at a lower rate than other sectors.\textsuperscript{19}

**Employer Satisfaction With Recent College Graduates**

Once hired, recent graduates must be able to perform up to the standards established by their employers. In 1997, CERI conducted a survey of employers regarding the skill level and performance of newly hired college graduates in entry-level technical and non-technical positions. While employers of new graduates in technical positions in fields such as engineering, computer science, and accounting were more likely to report that these employees were well prepared in mathematical and information system skills, they rated their abstract thinking, goal setting, and interpersonal skills somewhat lower. They were particularly concerned about technical graduates' writing and presentation skills. Furthermore, employers thought that these graduates were not prepared to take leadership roles or able to navigate their way in their new environment.
In fields such as general business, social sciences, and communications, employers said that graduates had strong mathematical and informational skills. However, these employees were viewed as often less adept at setting goals, abstract thinking, handling conflict and criticism, and specific writing tasks such as drafting proposals than their employers had expected. Employers also cited their limited capacity to maneuver through the professional environment.20

What Will The Future Job Market Look Like?

For college graduates who either are preparing to enter the workforce or have been employed for a short period of time, the future of the labor market, and in particular of college-level jobs, directly affects their professional future. This may influence their choice of occupation, or affect their decision to either participate in or delay entrance to graduate or professional school, or even heighten their need for some additional education or training beyond college.

The Bureau of Labor Statistics (BLS) projects that overall employment will increase nearly 14% between 1994 and 2005, from 127 million to 144.7 million, an average of 1.6 million new jobs per year. This is significantly slower than the 24% employment growth that occurred from 1983 to 1994, when an average of 2.2 million jobs were created per year. Nevertheless, jobs requiring at least an associate’s degree are projected to grow faster than all other job categories. In fact, jobs requiring bachelor’s and master’s degrees will grow the fastest among the 11 categories identified by BLS.

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### Projected 1997 Starting Salaries

<table>
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<tr>
<th>Major</th>
<th>Average Starting Salary 1997</th>
<th>Projected Change From 1996</th>
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<tr>
<td>Chemical Engineering</td>
<td>$42,817</td>
<td>3.3%</td>
</tr>
<tr>
<td>Computer Engineering</td>
<td>$39,722</td>
<td>5.8%</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>$39,513</td>
<td>3.9%</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>$38,113</td>
<td>2.9%</td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td>$38,026</td>
<td>4.8%</td>
</tr>
<tr>
<td>Computer Science</td>
<td>$36,597</td>
<td>3.9%</td>
</tr>
<tr>
<td>Management Information Systems</td>
<td>$34,778</td>
<td>2.8%</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>$33,119</td>
<td>5.8%</td>
</tr>
<tr>
<td>Economics/Finance</td>
<td>$31,294</td>
<td>6.3%</td>
</tr>
<tr>
<td>Accounting</td>
<td>$30,321</td>
<td>3.2%</td>
</tr>
<tr>
<td>Business Administration</td>
<td>$29,433</td>
<td>7.9%</td>
</tr>
<tr>
<td>Marketing</td>
<td>$27,874</td>
<td>4.1%</td>
</tr>
<tr>
<td>Foreign Languages</td>
<td>$25,608</td>
<td>1.8%</td>
</tr>
<tr>
<td>History</td>
<td>$24,688</td>
<td>0.2%</td>
</tr>
<tr>
<td>Letters/English</td>
<td>$23,553</td>
<td>2.0%</td>
</tr>
<tr>
<td>Political Science</td>
<td>$23,364</td>
<td>-2.1%</td>
</tr>
<tr>
<td>Visual and Performing Arts</td>
<td>$23,344</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Psychology</td>
<td>$23,315</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

### Projected Change in Employment by Education and Training Category, 1994-2005

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Jobs (in thousands)</td>
<td>Percent</td>
<td>Number of Jobs (in thousands)</td>
<td>Percent</td>
</tr>
<tr>
<td>Total</td>
<td>127,014</td>
<td>100.0%</td>
<td>144,708</td>
<td>100.0%</td>
</tr>
<tr>
<td>First Professional Degree</td>
<td>1,702</td>
<td>1.3%</td>
<td>2,076</td>
<td>1.4%</td>
</tr>
<tr>
<td>Doctor's Degree</td>
<td>976</td>
<td>0.8%</td>
<td>1,156</td>
<td>0.8%</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>1,500</td>
<td>1.2%</td>
<td>1,927</td>
<td>1.3%</td>
</tr>
<tr>
<td>Work Experience, Plus a Bachelor's or Higher Degree</td>
<td>8,191</td>
<td>6.5%</td>
<td>9,494</td>
<td>6.6%</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>14,007</td>
<td>11.0%</td>
<td>17,771</td>
<td>12.3%</td>
</tr>
<tr>
<td>Associate's Degree</td>
<td>3,956</td>
<td>3.1%</td>
<td>4,919</td>
<td>3.4%</td>
</tr>
<tr>
<td>Postsecondary Vocational Training</td>
<td>7,102</td>
<td>5.6%</td>
<td>7,845</td>
<td>5.4%</td>
</tr>
<tr>
<td>Work Experience</td>
<td>9,994</td>
<td>7.9%</td>
<td>11,325</td>
<td>7.8%</td>
</tr>
<tr>
<td>Long-term On-the-Job Training</td>
<td>13,672</td>
<td>10.8%</td>
<td>14,901</td>
<td>10.3%</td>
</tr>
<tr>
<td>Moderate-term On-the-Job Training</td>
<td>16,219</td>
<td>12.8%</td>
<td>17,083</td>
<td>11.8%</td>
</tr>
<tr>
<td>Short-term On-the-Job Training</td>
<td>49,696</td>
<td>39.1%</td>
<td>56,208</td>
<td>38.8%</td>
</tr>
</tbody>
</table>

There are certain occupations that are expected to experience high earnings, fast growth, and a large number of job openings. BLS projections indicate that those with bachelor's degrees will experience the fastest job growth and the largest number of job openings. The fastest growing occupations for bachelor's degree recipients between 1994 and 2005 are projected to be systems analysts, computer engineers, computer scientists, physical therapists, residential counselors, occupational therapists, and special education teachers.\textsuperscript{21}
II: EDUCATION

T

hough most recent graduates go from college to work, a percentage continue their edu-
cations at the graduate or professional level, or through some other form of advanced edu-
cation. This chapter reviews the fields of study that these recent graduates pursue, the methods
they use to pay for their post-baccalaureate education, and education and training opportunities
provided by employers and others.

Enrollment In Graduate And Professional Education

Each year, an average of about 10 to 12% of graduates at the baccalaureate level continue on to
graduate and professional level study. Twenty-nine percent of recent college graduates apply to
graduate and professional education. The reasons cited by those who do not apply are the status of
their work, 33%; cost-related issues, 24%; personal reasons, 22%; academic issues, 4%; and other
unspecified reasons, 17%.22

Where Do They Go and What Do They Study?

Recent graduates participating in advanced education attend public institutions by a two to one
margin. Seventy percent attend public institutions, while 30% attend private institutions.23

Recent college graduates most frequently pursue the following post-baccalaureate fields of study:
Education, 21%; Business and Management, 15%; Engineering, Mathematics, and Computer Sci-
ence, 11%; Arts and Humanities, 10%; Health, 10%; Other, 10%; Social and Behavioral Science,
8%; Life and Physical Sciences, 7%; Law, 5%; and Medicine and Dentistry, 4%. 24

How Recent Graduates Finance Their Post-Baccalaureate Education

Approximately 53% of recent college graduates now pursuing advanced education receive finan-
cial aid from any source each year. Most of this aid comes from federal programs and institutional
sources. The average annual amount of aid that these students receive is $10,552. One-third re-
ceive aid in the form of loans, with an average annual total loan amount of $9,289. Forty percent
of these students receive some form of need-based aid, and 8% are awarded merit-only grants and scholarships. Approximately 15% receive other types of aid, including assistantships.

Thirty-four percent of recent college graduates participating in graduate and professional education receive financial aid from federal student assistance programs. The majority of this aid comes in the form of loans: approximately 33% receive federal loans, with an average loan amount of $8,512.

Only 5% of all recent college graduates receive state aid for their advanced education, with an average amount of $2,742. In contrast, 30% receive aid from the institution they are attending, for an average of $6,759.25

Participation In Further Education and Training

What Types of Classes and Training are Recent Graduates Taking?

The major reasons that recent graduates cite for furthering their education are largely related to their careers. Nearly half—41%—are furthering their education either to satisfy job or career requirements or to learn a new occupation. Another 23% seek to increase their earning power through additional education, 19% want to achieve general self improvement, 13% need to obtain or maintain a license or certification, and 4% cite “other” as their reason.26

In the four years or less since they left college, respondents in ACT’s “Alumni Survey” have logged a wide range of credit hours. Thirty-nine percent have earned 10 or less credit hours, 21% have taken 11 to 30 credit

Why Recent College Graduates Continue Their Education

Credit Hours Earned
Since Graduating from College

Attendance Status of Recent College Graduates

Employer-Provided Training

Of those recent college graduates participating in training, 34% were provided training by their current employers. Training was required either to keep a job or to advance in a job for 46% and 35%, respectively.²⁹

One of the most important—but often most difficult to quantify—outcomes of a college education is its impact on the quality of life for graduates. While 91% of the respondents to the ACT “Alumni Survey” said that a college education has improved the quality of their life, the specific effects of a college education for recent graduates span a wide range of issues. This chapter reviews the post-collegiate living arrangements of recent graduates, their financial assets, community service participation, voting patterns, and experiences as alumni of the institutions they attended.

**Post-Collegiate Living Arrangements**

A significant amount of information regarding the post-collegiate living arrangements of graduates exists. For instance, the B&B study indicates that, among recent college graduates, 63% had never been married. Only 31% were married—although 2% lived together in a “marriage-like” relationship. Three percent were divorced, and 1% were separated.

Just one to two years after graduation, 82% of recent college graduates did not have children, and 18% did. Furthermore, only 3% were single parents.

When the respondents are broken into subgroups by age, a different perspective emerges. Among recent college graduates ages 21 to 25, 75% had never been married, 21% were married, 3% lived together in a marriage-like relationship and 1% were divorced. For older graduates—between the ages of 26 and 35—only 34% had never been married, 54% were married, 3% lived together, and 9% were either divorced or separated. As the age of the graduates increases, so too does the percentage of those who are married.

Only 5% of those graduates between the ages of 21 and 25 had children, compared to 44% and 80% of those ages 26 to 35 and 36 to 45, respectively. Similarly, the percentage of graduates who are single parents also changes as respondents are broken into age groups: while only 3% of all
A phenomenon that has received significant media and popular culture attention is graduates returning home after completing college, since these graduates may be adding to the financial burdens of their parents' generation. B&B data indicate that within one to two years of graduating, one-quarter of recent graduates lived in their parents' or guardians' residences, and 1% lived with other relatives. Seventy percent of the graduates resided in their own home or apartment, 2%
were in school-owned housing, less than 2% utilized some other type of housing, and 1% lived in employer-provided residences.

Residence patterns also vary by age of the respondent. More of the younger graduates lived in their parents’ or guardians’ residences—30%, compared to 12% and 2% percent for the next two older age groups. While only 64% of 21 to 25 year olds lived in their own home or apartment, much larger percentages of 26 to 35 year olds and 36 to 45 year olds did—85% and 95%, respectively.35

In addition, according to ACT’s survey, most recent college graduates tend to live relatively close to their alma maters. More than three-fourths—78%—of those who have been out of college four years or less currently reside in the state in which their college is located. Only 22% live in another state or country. 36

Financial Status

Household Income

Given that most recent graduates receive low amounts of compensation and are more likely to be moving out on their own for the first time, household income levels for recent college graduates are predictably low, particularly among younger graduates. Nearly three-quarters of all recent graduates have an annual household income under $30,000. Household income for 23% of graduates is between $30,000 and
$80,000, and the remaining 3% have an income of $90,000 and above. Those with these higher income levels are generally older students who have returned to college after several years of experience in the workforce. In addition, older graduates' household income frequently includes contributions from their spouse, since as previously noted, they are more likely to be married. Among 21 to 25 year olds, 84% have income below $30,000, 15% have household income between $30,000 to $80,000, and only 1% have income above $100,000. In comparison, 48% of 26 to 35 year olds have household income below $30,000, another 45% have income between $30,000 to $80,000,
3% are between $80,000 to $100,000, and 5% are over $100,000. Only one-third of 36 to 45 year olds’ household income is below $30,000, and half are in the $30,000 to $80,000 range. As would be expected, more graduates in this age group have higher income, since they have been in the workforce longer; 7% have income between $80,000 to $100,000, and 9% have income over $100,000.37

Savings
Analyses of B&O data indicate responsible savings habits among recent college graduates. Seventy-one percent are currently saving money and only 29% are not.38 According to the Federal Reserve Board’s 1995 Survey of Consumer Finances, only 55% of all families are saving money.39 In general, recent graduates are saving for a wide variety of reasons, but several are more common. The largest percentage of students are putting money aside for “a rainy day.” This is followed by those who say they are saving to purchase a home, for further education, and for their retirement.40

Debt
Among recent college graduates, 41% borrowed to finance their undergraduate education. Of those who borrowed, 70% had $5,000 or less in loans, 23% had between $5,000 to $15,000, and the remaining 7% had total loans between $15,000 to $30,000. Only 2% have had any loans forgiven or canceled.

The average monthly payment for those recent graduates who had undergraduate loans was $174. While the majority of graduates—76%—have payments under $200, 23% pay between $200 and $500 a month, and 1% have monthly payments greater than $500.

Student loan payments are just one aspect of the debt with which many recent college graduates must contend each month. Rent or mortgage payments can constitute a significant portion of monthly expenses, since only one in four graduates report that they pay no monthly rent. In addition, over half of recent graduates have monthly auto loan payments. Finally, all recent college graduates have some amount of

### Monthly Non-Educational Debt Payments for Recent Graduates with Undergraduate Educational Debt

![Bar chart showing monthly non-educational debt payments for recent graduates with undergraduate educational debt.]

“other” debt, most likely from credit cards. Analyses of B&B data reveal that recent graduates who took out undergraduate loans have an average monthly payment of $678 towards “non-educational” debt—rent or mortgage payments, auto loans, and other debt combined. This means that the typical recent graduate who borrowed to pay for college has total monthly payments of $852—$678 in non-educational debt, and $174 in undergraduate loan payments.41

Many students who borrowed to pay for college have fairly modest non-educational debt payments. However, a slight majority—52%—have payments greater than $500 per month, with 16% facing monthly payments in excess of $1,000.42

Two factors in the composite debt of recent college graduates are growing quickly: student loans and credit cards. Note that the amounts reported above for recent college graduates only include loans taken out through the 1992-93 academic year. Since that time, an explosion in borrowing has occurred, due to changes in federal programs that have raised borrowing limits and permitted more students to borrow. Analyses of the trends in borrowing after 1992-93 suggest that cumulative debt for undergraduate students is significantly higher than previous levels, particularly for those students who have graduated since 1994. Furthermore, these increased levels of debt hold significant challenges for those recent college graduates who, in order to continue their education at the graduate and professional level, must take out even more loans.43

The second factor, increased use of credit cards at the undergraduate level, also has raised concerns. A recent report by Claritas Inc. estimates that in 1996, 67% of college students had credit cards, a sizeable increase from 54% in 1990. As the number of cardholders has grown, so too has the amount of debt they have incurred: the average balance for college students has grown from $900 in 1990 to $2,100 in 1995, an increase of approximately 134%.44 While the time frame of the Claritas report does not focus specifically on those students who have graduated in the last five years, it provides a good indication of this growing component of graduates' total debt.

**Community Service Participation**

Since most students in recent graduating classes have had increased opportunities to perform community service at the undergraduate level through formal institutional and federally funded programs—such as Americorps and Federal Work-Study—it is not surprising that a sizeable percentage of this cohort continues to participate in these activities after graduation. B&B data indicate that 69% of recent college graduates had performed some community service. More than half—56%—planned to perform community service in the next 12 months. For 38% of those who were currently performing community service, their service activities were related to their future careers. While the majority of participants—84%—volunteered 20 hours or less a month, 7% performed 20 to 35 hours each month, and 9% performed more than 35 hours of service each month.45
Voting Patterns

According to B&B, 90% of recent graduates are registered to vote, compared to 68% of the general population.46 A slightly smaller percentage—87%—said they have voted in any election at the national, state, or local level, and 78% of recent graduates reported voting in the 1992 Presidential election.47 In comparison, 61% of the voting age population voted in the 1992 Presidential election.48

The political activities of recent college graduates are limited. Only 6% said they have campaigned for a candidate on a volunteer basis. Slightly larger numbers of recent graduates reported giving money to a campaign, or donating either their time or money to community or political action groups, 7% and 15%, respectively.49

Political Activity of Recent College Graduates


Recent College Graduates as Alumni

Another aspect of life after college for recent graduates is the new relationship with their college or university. In their new role as alumni, former students participate in fundraising and development, admissions and recruitment, and professional mentoring opportunities. In turn, the former students look to their alma mater for career and placement assistance, referrals for employment and advanced education, post-baccalaureate education opportunities, and in some cases, direct employment.

- **Fundraising & Development**: Young alumni have not traditionally been a prime target for fundraising and development activities, due to their financial situation in the first few years out of school. More recently, though, institutions have stepped up efforts to encourage young alumni contributions, even at low levels, to maintain contact, to establish a pattern of giving, and to achieve high levels of participation within each graduating class.
Admissions and Recruiting: Many institutions seek to mine their young alumni population’s enthusiasm in efforts to recruit new students to campus. Alumni attend local college nights and fairs and contact prospective students from their high schools and neighborhoods. Colleges and universities often highlight the experiences and accomplishments of their young alumni to show the short-term impact of the particular educational experience they offer.

Employment and Professional Opportunities: Many graduates will stay in touch with campus career services and placement offices to help identify job openings, contact prospective employers, or participate in alumni mentoring programs that connect current and recently graduated students with alumni from certain occupations and organizations. Faculty and college administrators also provide information and recommendations for graduate and professional education.

In addition, anecdotal evidence suggests that many students continue their association with their alma mater beyond graduation by joining the staff of the institution. As high as 25% of staff at colleges and universities were once students at the institution. Most frequently students serve in admissions, alumni relations, development, and student life departments. They also conduct postgraduate research with professors or perform student teaching, and later, some become instructors.
ENDNOTES


4. American College Testing, *Alumni Survey Normative Report, Zero to Four Year Graduates* (Iowa City: ACT, 1997). ACT produces the Alumni Survey instrument, which institutions throughout the country administer to their alumni. Normative reports compiling national data from the survey are produced periodically. ACT data cited in this report are drawn from a normative report produced by ACT at The Institute's request. The report focused on the responses of over 22,000 students who had been out of college zero to four years from the most recent normative report. The “zero to four year” respondents represent 55% of the over 40,000 total responses included in the most recent normative report, which includes students who were interviewed between January 1, 1991 and August 15, 1996.


17. B&B: 94.


22. B&B: 94.


29. B&B: 94.


32. B&B: 94.


35. B&B: 94.

37. B&B: 94.

38. Ibid.


40. B&B: 94.

41. Ibid.

42. Ibid.

43. For further information on the recent growth in student loan borrowing at the undergraduate and graduate levels, see TERI and The Institute’s publications *College Debt and the American Family* (Boston, MA: TERI, 1995) and *Graduating Into Debt: The Burdens of Borrowing for Graduate and Professional Students* (Boston, MA: TERI, 1996).


45. B&B: 94.


47. B&B: 94.


49. B&B: 94.