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ABSTRACT

The study analyzed responses received from Bachelor's Degree recipients to the 1987 Recent College Graduates Survey administered in June, 1987. Among many findings are the following: One year after graduation, approximately 86% of degree recipients were employed--75% full time (who earned \$20,300 annually on average) and 11% part time. Of the 14% not working 57% were attending school. About 78% of employed respondents reported that their jobs were related to their major field of study in college. Business/management graduates had a higher rate of employment than other graduates. Graduates in biological sciences were employed at a lower rate (59%) than all other graduates but had the highest enrollment rate (61%) for additional schooling. Over 30% of all employed respondents felt that a degree was not necessary to obtain the jobs they held. Findings are presented in both narrative and tabular form for individual fields of study (business/management; education; engineering; health professions; public affairs/social services; biological sciences; mathematics, computer science, physical sciences; social sciences, humanities, and psychology). Appendixes provide further technical notes and definitions of terms. (DB)

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NATIONAL CENTER FOR EDUCATION STATISTICS

Survey Report

August 1989

Occupational and Educational Outcomes of 1985-86 Bachelor's Degree Recipients

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U.S. Department of Education
Office of Educational Research and Improvement

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**Occupational and
Educational Outcomes
of 1985–86 Bachelor's
Degree Recipients**

Joanell Porter
Elementary and Secondary Education Statistics Division

Data Series:
DR-RCGS-1987-1.20

**U.S. Department of Education
Office of Educational Research and Improvement**

CS 89-327

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Highlights

Employment

- o Approximately 86 percent of all 1985-86 bachelor's degree recipients were employed year after graduation--75 percent were employed full time and 11 percent were working part time. Fourteen percent were not working in 1987--5 percent were unemployed but looking for work, while 9 percent were not in the labor force by choice.
- o About 91 percent of the bachelor's degree recipients who majored in a professional field were employed 1 year after graduation--82 percent full time and 9 percent part time. Nine percent were not working, although 5 percent of these graduates were not looking for work.
- o Seventy-eight percent of all bachelor's degree recipients who majored in an arts and sciences field were employed in 1987--63 percent full time and 15 percent part time. Approximately .2 percent were not working, but a large proportion (15 percent) were not in the labor force by choice.
- o Business/management graduates were employed full time (85 percent) at a higher rate than graduates in other major fields of study. Only 59 percent of the graduates who majored in the biological sciences were employed in 1987. Graduates in the humanities fields had a high proportion of their graduates (21 percent) working part time in 1987.

Salary

- o In 1987, the average annual salary of bachelor's degree graduates employed full time was about \$20,300.
- o The average annual salary of graduates who majored in a professional field and who were employed full time was about \$21,300.
- o The average annual salary of arts and sciences fields graduates working full time was about \$19,400.
- o Engineering degree recipients received significantly higher salaries (\$26,600) than graduates in other fields of study working full time, while those graduates who majored in education* were paid about \$15,800 per year.

Enrolled in school for additional formal training

- o About 28 percent of all bachelor's degree recipients were enrolled in school in 1987 and 20 percent held jobs, as well as attended classes. Of the 14 percent not working, 57 percent were attending school.

*Teacher salaries were adjusted to a 12-month pay cycle for consistency.

Highlights--Continued

- o Approximately 21 percent of the graduates who majored in a professional field were enrolled in school in 1987, and 17 percent were working and attending school. Of the 9 percent not working in 1987, about 44 percent were enrolled in school.
- o Arts and sciences majors reported a high proportion (39 percent) of enrollment in school, and 15 percent were attending school only. Of the 22 percent who were not working in 1987, over 68 percent were enrolled in school.
- o Graduates who majored in the biological sciences had the highest enrollment rate for additional formal training (61 percent) than those graduating in other fields of study. Of all bachelor's degree recipients who were not working in 1987, biological sciences majors also had the highest proportion (90 percent) of all graduates attending school.

Work relationship to field of study

- o Of all employed 1985-86 bachelor's degree recipients, about 78 percent reported that their jobs were closely or somewhat related to their major field of study. Sixty-eight percent felt their jobs had definite or possible career potential. Nearly 36 percent indicated that a degree was not required for the jobs they obtained in 1987.
- o A high proportion (85 percent) of the graduates who majored in a professional field stated that their jobs were closely or somewhat related to their major field of study. Seventy-four percent saw these jobs as having definite or possible career potential. Thirty-one percent reported that a degree was not required to obtain the job.
- o Employed arts and sciences graduates reported that only 65 percent of these jobs were closely or somewhat related to their major field of study. Fifty-eight percent considered these jobs as having definite or possible career potential and about 41 percent felt that a degree was not required in obtaining their jobs.
- o Graduates with a degree in the health professions overwhelmingly found jobs related to their field of study (93 percent), whereas those majoring in the fields of humanities and social sciences reported that only about one-half found jobs related to their fields of study (55 and 53 percent, respectively). Less than 50 percent of all employed graduates who majored in biological sciences, psychology, and the humanities fields felt that their jobs had some career potential. Graduates who majored in the fields of public affairs/social services, the humanities, and psychology reported that 50 to 55 percent of their jobs were obtained without a degree requirement.

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Introduction

From 1975-76 through 1985-86, nearly 1 million bachelor's degrees were awarded each year by higher education institutions in the United States, and the number of degrees awarded has increased each year from the prior academic year. In light of this, it is interesting to look at the relationship between educational experiences and employment outcomes after graduation. In particular, major concerns have been raised, by both students and parents who pay for the cost of a college education, about which major fields of study are likely to produce favorable transitions from college to employment. This report is designed to provide valuable labor force information on how recent college graduates fare in the labor market, by the graduates' major fields of study. It is a follow-up to a previous report published by the National Center for Education Statistics (NCES), "Occupational and Educational Consequences of a Baccalaureate Degree," which was based on data collected from the 1985 survey on 1983-84 college graduates.

NCES has sought to address such important issues as educational experiences versus labor force outcomes for new baccalaureate graduates through the Recent College Graduates Survey. First conducted in 1976 on 1974-75 graduates, this survey was also done in 1978, 1981, and 1985. The 1987 survey of 1985-86 graduates provides a picture, as do the earlier surveys, of many new professionals and the relationship of their education to their professions.

All differences cited in the text are significant at the .05 level, and pair-wise t tests were used to test for the statistical significance of observed differences. (See appendix A for more details about the survey methodology and the reliability of the data.)

This report is based on the responses received from bachelor's degree recipients to the 1987 Recent College Graduates Survey administered in June, 1987. It will provide valuable insight on the graduates' major fields of study and their occupational outcomes by specifically examining areas such as

- o graduates' enrollment in school for additional formal training;
- o employment experiences;
- o average annual salaries;
- o definite or possible career potential of jobs;
- o jobs related to major fields of study; and
- o degree not required for jobs obtained.

All of these items will be examined by the graduates' major fields of study, which will be distributed under two major categories: the professional fields and the arts and sciences fields. (See table 1 for the major fields included in each category.)

Composite Picture

One year after graduation (1987), approximately 86 percent of all 1985-86 bachelor's degree recipients were employed--75 percent full time (who earned \$20,300 annually on average) and 11 percent part time. The remaining 14 percent were not working--5 percent were unemployed but looking for work, while 9 percent were not in the labor force by choice. Of the 14 percent not working, 57 percent were attending school.

Some of the bachelor's degree recipients decided to continue their education. About 28 percent were enrolled in school for additional formal training in 1987 and 20 percent held jobs, as well as attended classes.

Of the employed 1985-86 bachelor's degree recipients, about 78 percent reported that their jobs were closely or somewhat related to their major field of study in college, and nearly 36 percent indicated that a degree was not required for the jobs they obtained in 1987. Sixty-eight percent felt their jobs had definite or possible career potential.

As the more specific fields are examined, other interesting and divergent statistics emerge (see table 1 and figures 1 and 2).

Professional Fields

For the purpose of this survey, professional fields include the disciplines of business/management; education; engineering; health professions; and public affairs/social services. About 91 percent of bachelor's degree recipients who majored in a professional field were employed 1 year after graduation--82 percent full time and 9 percent part time. On the average, the full-time employed graduates of professional fields earned about \$21,300. Nine percent were not working, although 5 percent of these graduates were not looking for work. Select employment data of each professional discipline are presented in tables 3 through 7.

Approximately 21 percent of the graduates majoring in a professional field were enrolled for additional schooling in 1987, and of the 9 percent not working in 1987, about 44 percent were enrolled in school.

Eighty-five percent of the graduates who majored in a professional field stated that their jobs were closely or somewhat related to their major field of study. Seventy-four percent saw these jobs as having definite or possible career potential. Thirty-one percent reported that a degree was not required to obtain the job.

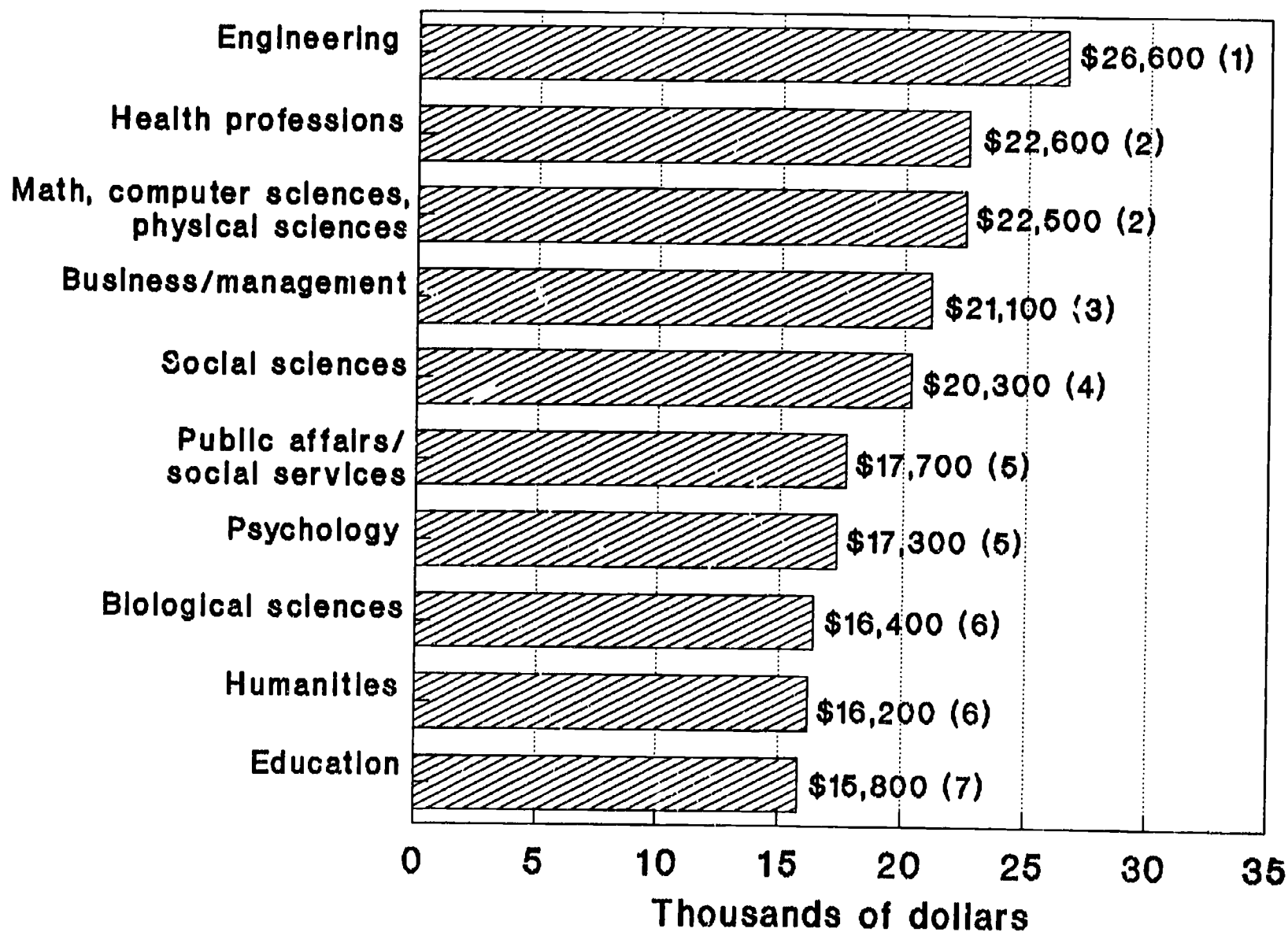
Table 1.--Labor force status, salaries, enrollment rates, and job characteristics of 1985-86 bachelor's degree recipients 1 year after graduation, by major fields of study: 1987

Major fields of study	Average annual salary of full-time employed	Working					Not working		Enrolled in school			
		Employed		Job related to field of study	Some career potential of job	Degree not required for job	Looking for work	Not looking for work	Total enrolled	Enrolled--		
		Full time	Part time							Working	Not working	
												Percent
All majors	\$20,300	75	11	78	68	36	5	9	28	20	8	
Professional fields	21,300	82	9	85	74	31	4	5	21	17	4	
Business and management ...	21,100	85	5	84	73	37	5	5	16	13	3	
Education	15,800	77	15	85	72	22	3	5	28	25	3	
Engineering	26,600	84	6	89	80	15	5	5	28	23	5	
Health professions	22,600	76	13	93	79	31	2	9	20	14	6	
Public affairs/ social services	17,700	76	14	71	63	55	4	6	26	22	4	
Arts and sciences fields	19,400	63	15	65	58	41	7	15	39	24	15	
Biological sciences	16,400	44	15	57	46	45	7	34	61	24	37	
Math, computer sciences, physical science*	22,500	76	10	81	71	26	5	9	30	21	9	
Social science	20,300	61	13	53	60	46	8	18	38	21	17	
Humanities	16,200	59	21	55	49	51	7	13	38	27	11	
Psychology	17,300	65	16	66	47	50	5	14	42	29	13	
Other*.....	17,800	75	11	76	66	42	6	8	23	16	7	

* Includes agriculture and natural resources; architecture and environmental design; area studies; communications; home economics; law; library science; and military sciences.

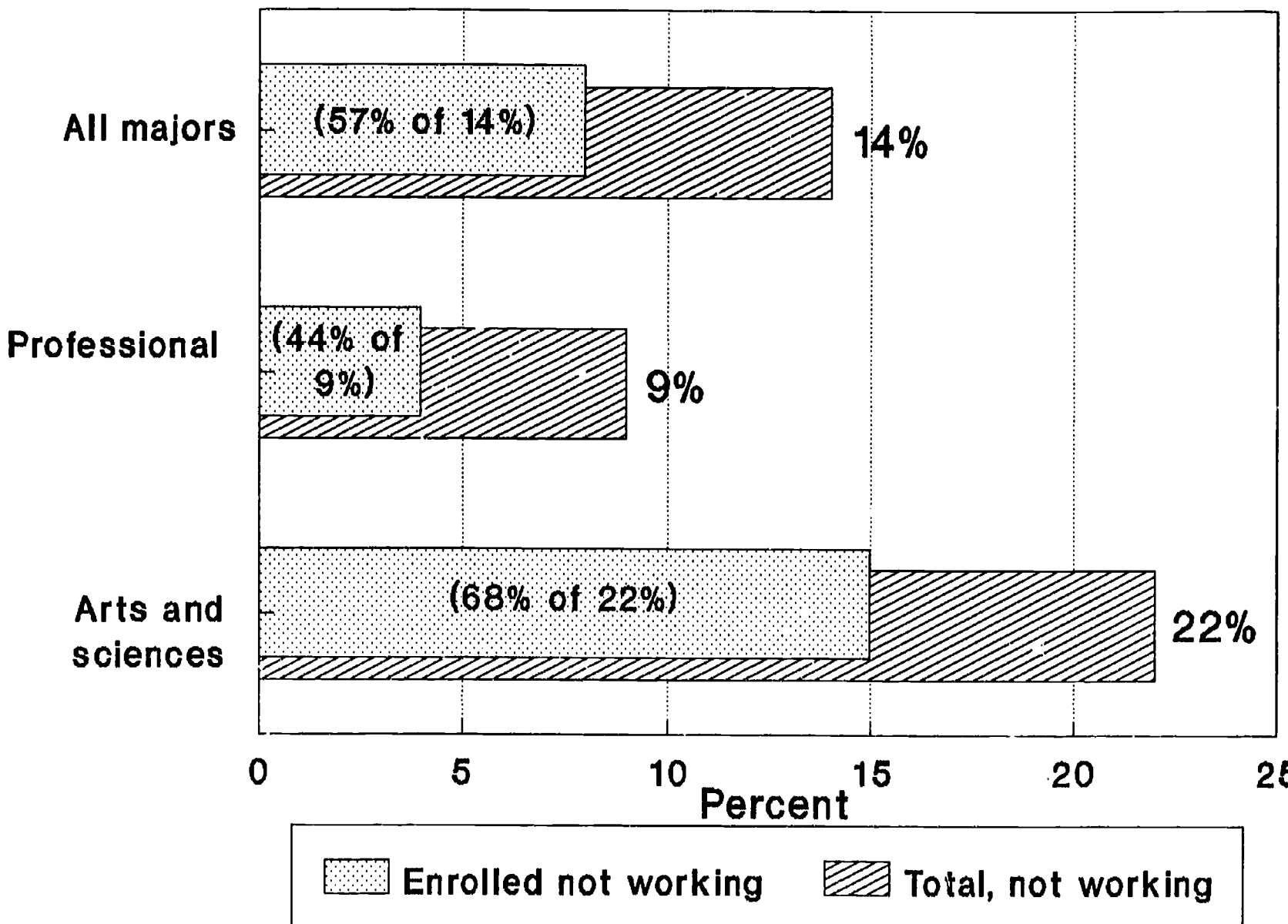
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

Figure 1.--Rank of average annual salaries of 1985-86 bachelor's degree recipients, by major fields of study: 1987



NOTE: Rankings in parentheses. Equal ranks indicate no significant differences.
 SOURCE: U.S. Department of Education, National Center for Education Statistics,
 1987 Recent College Graduates Survey.

Figure 2.--Percentage of 1985-86 bachelor's degree recipients not working and enrolled, not working: 1987



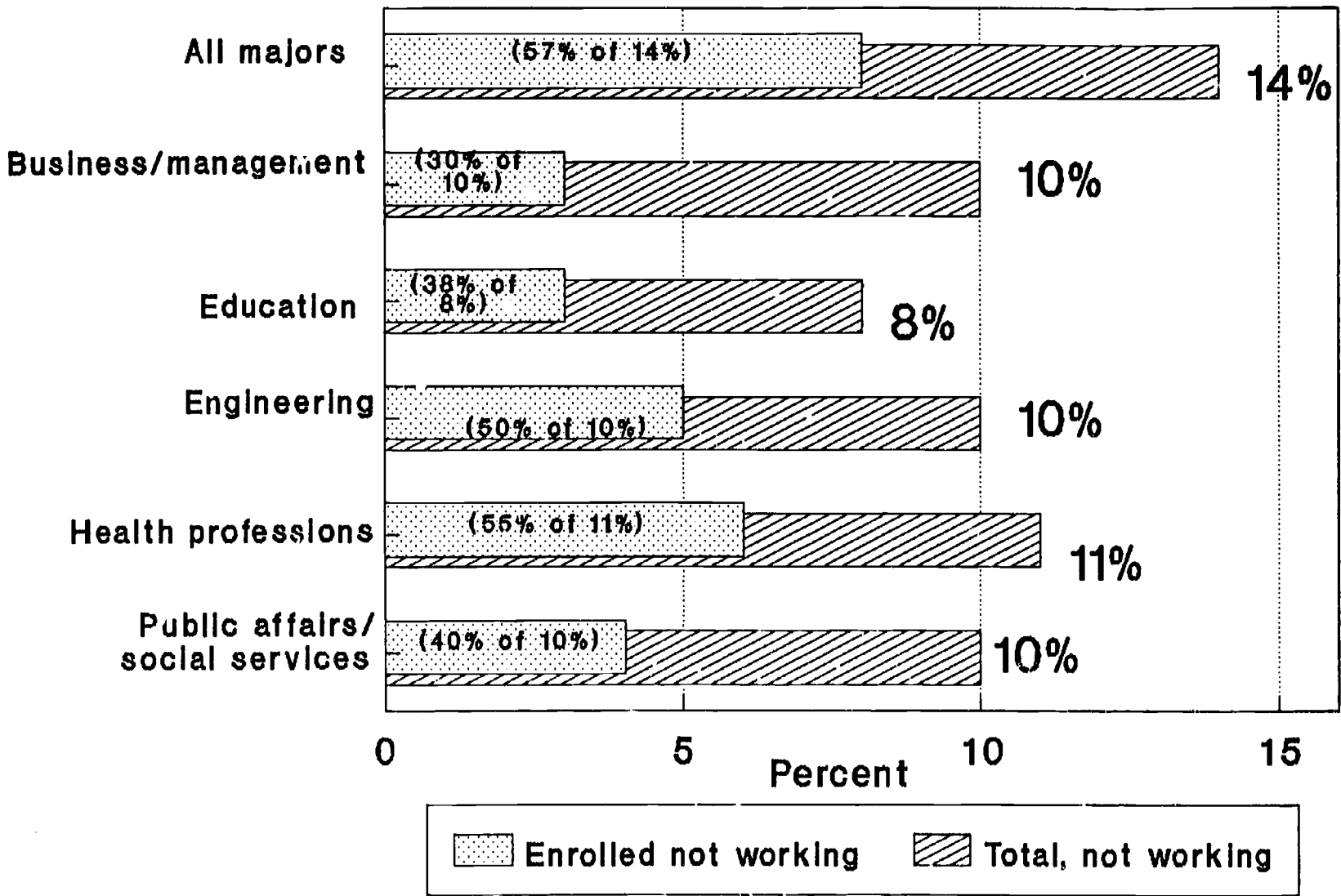
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

Table 2.--Enrollment rates of nonworking 1985-86
bachelor's degree recipients, by
professional major fields of study: 1987

Major fields of study	Proportion not working	Enrollment rate of nonworking bachelor's degree recipients
Percent		
All majors	14	57
Professional fields	9	44
Business/management	10	30
Education	8	38
Engineering	10	50
Health professions	11	55
Public affairs/ social services	10	40

SOURCE: U.S. Department of Education, National
Center for Education Statistics, 1987 Recent College
Graduates Survey.

Figure 3.--Percentage of 1985-86 bachelor's degree recipients not working and enrolled, but not working, by professional major fields of study: 1987



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

Business/Management

Ninety percent of those who graduated with a degree in business/management were employed in 1987. In addition, 84 percent reported finding jobs related to their major field of study (table 1). Approximately 46 percent found jobs in business/management occupations, 15 percent found jobs in sales and 3 percent were employed in the mathematics, computer sciences, or physical sciences areas. The graduates employed in these three occupations reported that their job was related (94, 90, and 89 percent, respectively) to their major field of study. About 82 percent of the graduates working in business/management and 87 percent working in math/computer/physical sciences occupations saw these jobs as having some career potential, and only 25 percent of the graduates in each of these occupational areas reported that a degree was not required to obtain these jobs. Approximately 16 percent of all business/management majors continued on for additional schooling, and 13 percent of these graduates also held jobs while attending school. Of the 10 percent of business/management majors who were not working in 1987, about one-third (30 percent) were enrolled in school.

Working		Not working		Enrolled in school	
Full time	Part time	Looking for work	Not looking for work	Working	Not working
85	5	5	5	13	3

Percent

Education

Graduates with education majors reported a 92-percent employment rate in 1987, and 85 percent found jobs related to their field of study. (See table 1.) Sixty-six percent found jobs as educators, 7 percent were employed as clerks, and about 4 percent found jobs in business/management occupations. As one might expect, nearly all graduates working in education--99 percent--reported their jobs were related to their major field of study, and 83 percent saw these jobs as having some career potential. Also, only 6 percent felt that a degree was not required for the jobs they obtained. One-half of the education majors working in business/management occupations reported that these jobs were related to their field of study and that a degree was required for their jobs. The vast majority of those working as clerks (84 percent) said that these jobs were obtained without the requirement of a degree and only 36

Table 3.--Major occupation of 1985-86 bachelor's degree recipients in business/management, by occupation and job characteristics: 1987

Job characteristics	Major occupation				
	Business/manager	Sales person	Clerk	Math/computer/ physical science	Laborer
	Percent				
All graduates	46	15	14	3	3
Reporting job related to major	94	90	75	89	42
Reporting job had career potential	82	75	58	87	47
Reporting job required for degree	25	39	58	25	80
	Dollars				
Average annual salary	\$21,300	\$20,300	\$16,600	\$26,600	\$20,600

NOTE: Table includes only occupations in which at least 3 percent of graduates were employed.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

percent reported that the jobs had some career potential. Twenty-eight percent of education majors were enrolled for additional schooling in 1987, and 25 percent of these graduates held jobs and attended classes. Of the 8 percent of education majors who were not working in 1987, 38 percent were enrolled in school.

Working		Not working		Enrolled in school	
Full time	Part time	Looking for working	Not looking for work	Working	Not working
Percent					
77	15	3	5	25	3

Average annual salaries for graduates with degrees in education employed full time were about \$15,800, and ranked below graduates in other fields of study. Reported salaries for teachers in this study were adjusted to a 12-month pay cycle because of the diversity in teacher contracts.

Engineering

Ninety percent of the graduates with engineering majors were employed in 1987, and received the best starting salary of all bachelor's degree recipients (\$26, - .). The high rate of pay was fairly consistent across all occupational areas that engineering graduates tended to enter. Nearly 57 percent of these graduates found jobs as engineers and about 90 percent viewed these jobs as having some career potential. Although only 4 percent of engineering majors were employed in the fields of business/management, their future could be bright in these jobs because over 85 percent reported the job as having some career potential, in spite of the fact that 31 percent felt that a degree was not required for the job. Twenty-eight percent of engineering majors were enrolled in school in 1987. Of the 10 percent not working in 1987, 50 percent were enrolled in school.

Table 4.--Major occupations of 1985-86 bachelor's degree recipients in education, by occupation and job characteristics: 1987

Job characteristics	Major occupation		
	Educator	Clerk	Business/manager
	Percent		
All graduates	66	7	4
Reporting job related to major	99	30	50
Reporting job had career potential	83	36	57
Reporting job required no degree	6	84	52
	Dollars		
Average annual salary	\$14,500	\$12,700	\$16,200

NOTE: Table includes only occupations in which at least 3 percent of graduates were employed.

SOURCE: U.S. Department of Education, National Center for Statistics, 1987 Recent College Graduates Survey.

Working		Not working		Enrolled in school	
Full time	Part time	Looking for work	Not looking for work	Working	Not working
Percent					
84	6	5	5	23	5

Health Professions

Approximately 73 percent of all graduates who majored in the health professions found jobs in two major occupational areas--as health professionals and health technicians--both of which are clearly related to their major field of study. It is interesting to note that, although over 99 percent of those working as health professionals reported the job related to their field of study, nearly 30 percent said that their jobs did not require a degree. Only 11 percent of those working as technicians reported that a degree was not required for these jobs. With the exception of those employed as clerks in 1987, graduates with a degree in the health professions received relatively high average annual salaries--\$22,900 for health professionals; \$19,400 for technicians; and \$20,600 for those employed as business/managers. Twenty percent of all graduates who majored in the health professions were attending school in 1987, while 14 percent were working while attending school. Of the 11 percent not working 1 year after graduation, approximately 55 percent were going to school.

Working		Not working		Enrolled in school	
Full time	Part time	Looking for work	Not looking for work	Working	Not working
Percent					
76	13	2	9	14	6

Table 5.--Major occupations of 1985-86 bachelor's degree recipients in engineering, by occupation and job characteristics: 1987

Job characteristics	Major occupation			
	Engineer	Business/ manager	Laborer	Technician
	Percent			
All graduates	57	4	4	3
Reporting job related to major	98	66	56	77
Reporting job had career potential	90	85	52	60
Reporting job required no degree	5	31	58	37
	Dollars			
Average annual salary	\$28,000	\$26,200	\$20,500	\$20,600

NOTE: Table includes only occupations in which at least 3 percent of graduates were employed.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

Table 6. Major occupations of 1985-86 bachelor's degree recipients in the health professions, by occupation and job characteristics: 1987

Job characteristics	Major occupation			
	Health professional	Health technicians	Business/manager	Clerk
	Percent			
All graduates	65	8	3	3
Reporting job related to major	99	94	72	48
Reporting job had career potential	87	83	68	26
Reporting job required degree	30	11	37	73
	Dollars			
Average annual salary	\$22,900	\$19,400	\$20,600	\$12,400

NOTE: Table includes only occupations in which at least 3 percent of graduates were employed.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

Public Affairs/Social Services

In 1987, individuals who received a degree in public affairs/social services in 1985-86 were mainly employed in three occupational areas: public affairs/social work, service fields, and as clerks. It seems likely that those employed in public affairs/social work and in service positions would feel that their jobs were related to their major field of study. However, a high proportion of the graduates in service positions (82 percent) reported that a degree was not required to obtain these jobs. Not surprisingly, a low proportion of graduates employed as clerks reported that their jobs were related to their major field (32 percent) that a degree was not required to obtain these jobs (75 percent), and only 41 percent reported that their jobs had some career potential. Nonetheless, these graduates employed as clerks received salaries comparable to those employed in public affairs/social work positions, which were more degree-oriented. Only about one-fourth (26 percent) of graduates with a degree in public affairs/social services reported that they were enrolled in school for additional training in 1987.

Working		Not working		Enrolled in school	
Full time	Part time	Looking for work	Not looking for work	Working	Not working
76	14	4	6	22	4

Percent

Arts and Sciences Fields

There are five major fields which make up the category of arts and sciences in this survey--biological sciences; mathematics, computer sciences, and physical sciences; social sciences; the humanities; and psychology. In 1987, 78 percent of the 1985-86 bachelor's degree recipients in these areas were employed (63 percent full time and 15 percent part time). The average annual salary of arts and sciences graduates working full time was about \$19,400. Twenty-two percent of arts and sciences graduates were not working in 1987 and 15 percent were not looking for work. Selected employment data for arts and sciences graduates are presented by discipline in tables 8 through 13.

Many arts and sciences bachelor's graduates were enrolled for additional schooling in 1987, 39 percent--15 percent attended school only and 24 percent worked while attending classes. Of those not working in 1987 (22 percent), about 68 percent were enrolled in school.

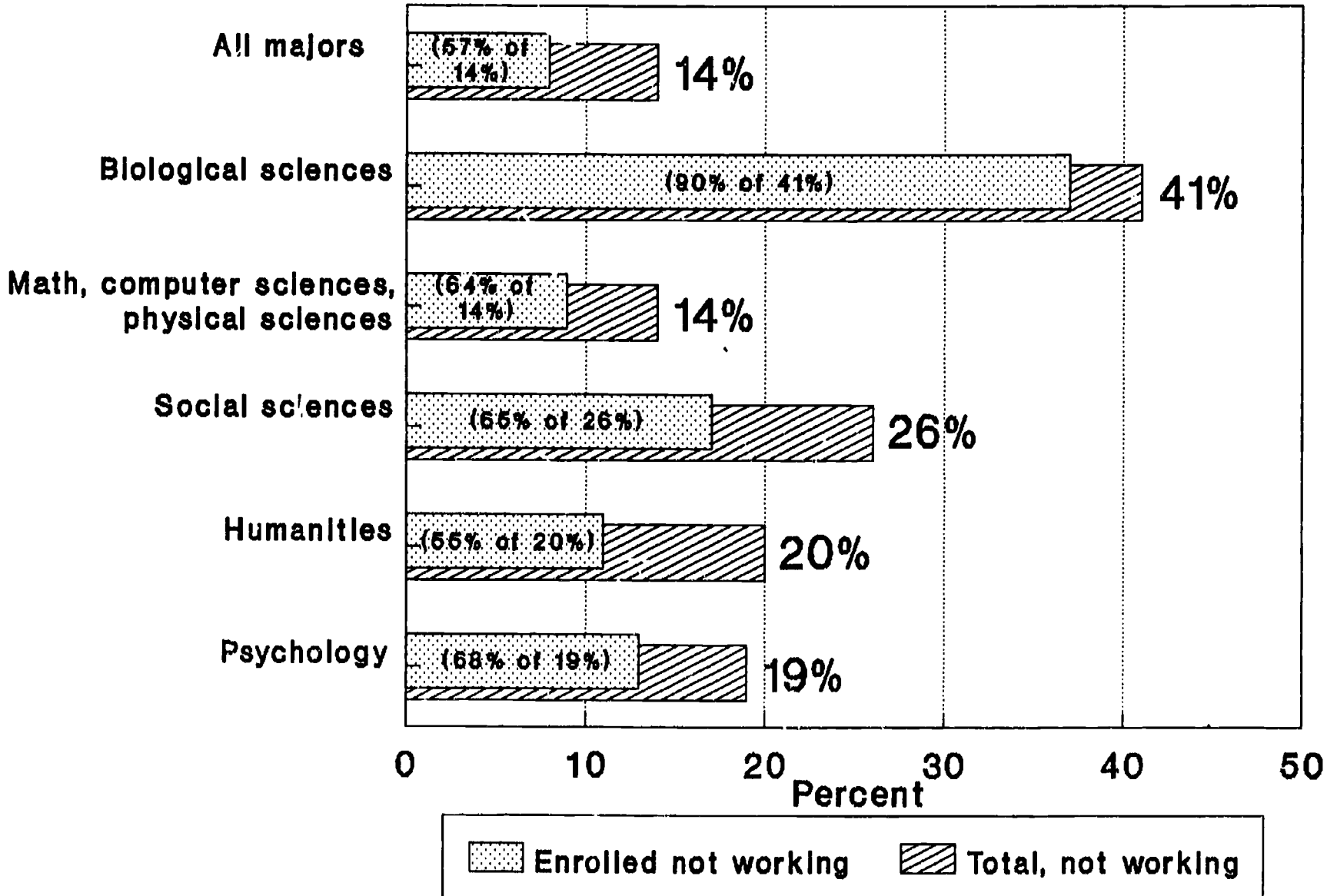
Table 7.--Major occupations of 1985-86 bachelor's degree recipients in public affairs/social services, by occupation and job characteristics: 1987

Job characteristics	Major occupation		
	Public affairs/ social worker	Service person	Clerk
		Percent	
All graduates	19	19	12
Reporting job related	98	87	32
Reporting job had career potential	80	66	41
Reporting job required no degree	18	82	75
		Dollars	
Average annual salary	\$14,600	\$18,100	\$14,700

NOTE: Table includes only occupations in which at least 3 percent of graduates were employed.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

Figure 4.--Percentage of 1985-86 bachelor's degree recipients not working and enrolled, but not working, by arts and sciences major fields of study: 1987



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

Table 8.--Enrollment rates of nonworking 1985-86
bachelor's degree recipients, by major
arts and sciences fields of study: 1987

Major fields of study	Proportion not working	Enrollment rate of nonworking bachelor's degree recipients
Percent		
All majors	14	57
Arts and sciences fields	22	68
Biological sciences	41	90
Math, computer sciences, physical sciences	14	64
Social sciences	26	65
Humanities	20	55
Psychology	19	68

SOURCE: U.S. Department of Education, National Center
for Education Statistics, 1987 Recent College Graduates
Survey.

About 65 percent of the employed arts and sciences graduates reported that their jobs were related to their major field of study in college. Fifty-eight percent considered these jobs as having some career potential and about 41 percent reported that a degree was not required to obtain these jobs.

Biological Sciences

Graduates who received a degree in biological sciences were employed at a lower rate (59 percent) than all other graduates in other fields of study. On the other hand, biological sciences degree recipients had the highest enrollment rate (61 percent) for additional schooling of all other bachelor's graduates. Graduates with biological sciences degrees also reported the highest rate of graduates not working in 1987 (41 percent); however, a high 90 percent of this group were attending school (see figure 4).

Working		Not working		Enrolled in school	
Full time	Part time	Looking for work	Not looking for work	Working	Not working
44	15	7	34	24	37

Percent

Looking at the employment picture for graduates with biological sciences degrees, a high proportion were employed in four occupational fields--two professional and two nonprofessional. The graduates employed as clerks reported a low proportion (28 percent) of jobs related to major field of study, little career potential (15 percent), and a high proportion reported that no degree was required for the job (91 percent). Only those employed in biological sciences occupations reported that their jobs had some career potential (81 percent). Average annual salaries of full-time employed graduates with biological sciences degree also tended to be on the low side, ranking only above education degree graduates.

Table 9.--Major occupations of 1985-86 bachelor's degree recipients in the biological sciences: 1987

Job characteristics	Major occupation			
	Professional		Nonprofessional	
	Biological science	Educator	Clerk	Technician
	Percent			
All graduates	5	8	5	11
Reporting job related to major	100	92	28	89
Reporting job had career potential	81	52	15	43
Reporting job required no degree	14	28	91	30
	Dollars			
Average annual salary	\$16,000	\$10,800	\$10,600	\$15,600

NOTE: Table includes only occupations in which at least 3 percent of graduates were employed.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

Mathematics, Computer Sciences, and Physical Sciences

With the exception of graduates with humanities degrees, individuals who received a degree in mathematics, computer sciences, or physical sciences seemed to enter more occupational fields than other graduates, ranging from mathematics, computer or physical sciences occupations, to clerical positions. Across the eight occupations (see table 10) in which these graduates were employed in 1987, only those employed as laborers (3 percent) reported that a low proportion (18 percent) of their jobs were related to their major field. Eighty percent of those employed as laborers also reported that a degree was not required for the jobs obtained. About 30 percent of the graduates with math, computer, and physical sciences degrees were enrolled in school 1 year later, and of the 14 percent who were not working in 1987, 64 percent were attending school.

Working		Not working		Enrolled in school	
Part time	Part time	Looking for work	Not looking for work	Working	Not working
Percent					
76	10	5	9	21	9

Except for the graduates employed in education occupations, graduates with math, computer, or physical sciences degrees received relatively high salaries, on the average, ranking second to those employed in engineering occupations. The graduates that entered education occupations had lower full-time salaries than the average graduate in math, computer science, and the physical sciences fields, even lower than those employed in the nonprofessional occupations.

Social Sciences

Seventy-four percent of all graduates with a bachelor's degree who majored in the social sciences fields were employed in 1987, ranking only higher than those graduates with a major in the biological sciences (see table 1). More than 70 percent of graduates with social sciences degrees who were employed in the areas of public affairs/social work and education reported that their jobs were related to their field of study. Only one-third of graduates with a social sciences degree employed in the service occupations reported that their

Table 10.--Major occupations of 1985-86 bachelor's degree recipients in mathematics, computer sciences, and physical sciences, by occupation and job characteristics: 1987

Job characteristics	Major occupation							
	Math, computer physical scientist	Educator	Clerk	Business/ manager	Engineer	Technician	Laborer	Sales person
	Percent							
All graduates	35	8	8	7	5	4	3	3
Reporting job related to major	98	93	52	65	95	77	18	31
Reporting job had career potential	87	50	42	66	93	63	25	42
Reporting job required no degree	15	8	65	35	5	31	80	66
	Dollars							
Average annual salary	\$24,200	\$11,900	\$14,700	\$21,200	\$29,400	\$17,900	\$17,600	\$19,600

NOTE: Table includes only occupations in which at least 3 of graduates were employed.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

Table 11.--Major occupations of 1985-86 bachelor's degree recipients in social sciences, by occupation and job characteristics: 1987

Job characteristics	Major occupation					
	Business/ manager	Clerk	Sales person	Educator	Service person	Public affairs/ social worker
	Percent					
All graduates	17	15	11	6	5	4
Reporting job related to major	61	47	38	73	34	75
Reporting job had career potential	69	51	68	60	33	67
Reporting job required no degree	31	58	49	28	87	41
	Dollars					
Average annual salary	\$21,200	\$15,200	\$20,200	\$10,000	\$14,500	\$14,800

NOTE: Table includes only occupations in which at least 3 of graduates were employed.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

jobs had some career potential (33 percent) and were related to their major field of study (34 percent). About 87 percent of this group reported that a degree was not required for the jobs obtained. On the other hand, graduates with a social sciences degree did tend to continue their schooling (38 percent) at a higher rate than the average degree recipient, and 65 percent of those who were not working in 1987 were enrolled in school.

Working		Not working		Enrolled in school	
Full time	Part time	Looking for work	Not looking for work	Working	Not working
61	13	8	18	21	17

Percent

Humanities

Graduates with humanities degrees include individuals who majored in the visual and performing arts, letters, foreign languages, philosophy, and theology, so it is not surprising that graduates in the humanities entered more occupational areas than other bachelor's degree recipients with different majors. Of the nine occupational areas (see table 12) that at least 3 percent of the humanities degree recipients entered by 1987, a high proportion of these graduates (19 percent) became clerks. Only about one-third (33 percent) of this group reported that the jobs were related to their major, 38 percent reported the jobs had some career potential, and 78 percent reported that their jobs did not have a degree requirement. Graduates with a humanities degree did find jobs related to their major fields in three occupational areas: writer/artists (97 percent); public affairs/social workers (91 percent); and communications (88 percent). However, only those employed in the public affairs/social work areas reported a high proportion of career potential (83 percent) in these jobs. Ninety-two percent of the graduates with humanities degrees employed as laborers in 1987 reported that a degree was not required to obtain their jobs, while only 10 percent of those employed in education occupations reported that a degree was required. Although about 80 percent of the graduates with a humanities degree were employed in 1987, their overall

Table 12.--Major occupations of 1985-86 bachelor's degree recipients in the humanities, by occupation and job characteristics: 1987

Job characteristics	Major occupation								
	Clerk	Educator	Business/ manager	Public affair/ social worker	Sales person	Writer/ artist	Laborer	Communication	Service person
	Percent								
All graduates	19	12	8	7	7	6	5	4	4
Reporting job related to major	33	71	58	91	34	97	17	88	17
Reporting job had career potential	38	50	64	83	39	67	18	68	12
Reporting job required no degree	78	10	30	45	58	53	92	21	84
	Dollars								
Average annual salary	\$13,400	\$10,800	\$17,400	\$16,000	\$13,200	\$14,500	\$12,900	\$14,600	\$10,000

NOTE: Table includes only occupations in which at least 3 percent of graduates were employed.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

salaries ranked higher than education majors and lower than graduates with all other major fields of study (see figure 1). About 38 percent of graduates with humanities degrees were attending school for additional training in 1987. More than half of these graduates (55 percent) who were not working in 1987 were enrolled in school (see table 8).

Working		Not working		Enrolled in school	
Full time	Part time	Looking for work	Not looking for work	Working	Not working
59	21	7	13	27	11

Percent

Psychology

Individuals who received a degree in psychology seemed to be distributed fairly evenly across four occupational areas (see table 13)—two professional and two nonprofessional. Those employed in the professional areas (education and business/manager) reported a high proportion of jobs related to their major field of study, 89 and 72 percent, respectively. However, no more than 55 percent of all graduates with a psychology degree employed across the four occupational areas reported that their jobs had some career potential. A majority of the graduates, except those working in the education occupations (19 percent), said a degree was not required to obtain the jobs. Ironically, those with psychology degrees working in the education occupations reported a lower salary than any of the other three occupations. A relatively high proportion (42 percent) of graduates with psychology degrees was enrolled for additional schooling, and 29 percent was working and going to school at the same time. Of the 19 percent not working 1 year later, 68 percent was attending school (see table 13).

Working		Not working		Enrolled in school	
Full time	Part time	Looking for work	Not looking for work	Working	Not working
65	16	5	14	29	13

Percent

Table 13.--Major occupations of 1985-86 bachelor's degree recipients in psychology, by occupation and job characteristics: 1987

Job characteristics	Major occupation			
	Professional		Nonprofessional	
	Business/ manager	Educator	Sale person	Clerk
	Percent			
All graduates	13	10	8	15
Reporting job related to major	72	89	40	37
Reporting job had career potential	55	45	53	33
Reporting job required no degree	45	19	57	76
	Dollars			
Average annual salary	\$20,500	\$12,500	\$18,700	\$14,900

NOTE: Table includes only occupations in which at least 3 percent of graduates were employed.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

Summary

It is evident from the examination of 1985-86 bachelor's degree recipient data that, between the professional and arts and sciences fields, graduates who majored in a professional field of study were working in 1987 at a higher rate; found jobs related to their fields of study more often; and received better salaries than their counterparts who majored in the arts and sciences fields, at least, in the short term. Graduates majoring in the arts and sciences fields tended to be enrolled for additional formal training more often than the graduates in a professional field.

Looking at the individual disciplines, engineering graduates had the highest average annual salary. A higher proportion of graduates with a biological sciences degree was enrolled in school for additional training almost immediately after receiving their undergraduate degree than graduates majoring in other fields of study. It must also be noted that, except for occupations in which a degree is viewed as a requirement for a job (i.e., education, engineering, math, computer sciences, and physical sciences), a surprisingly high proportion of degree recipients (over 30 percent) did not feel that a degree was necessary to obtain the jobs they held 1 year after graduation.

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For Further Information

For further information about this survey, contact Joannell Porter, National Center for Education Statistics, Postsecondary Education Statistics Division, Special Surveys and Analysis Branch, Room 422, 555 New Jersey Avenue NW, Washington, DC 20208-5652, telephone (202) 357-6595. Information about the Center's statistical program and a catalog of publications may be obtained from the Education Information Branch, same address (zip 20208-5641), Room 300, telephone (202) 357-6651 or 1-800-424-1616. Inquiries concerning data tapes on the 1987 Recent College Graduates survey should be directed to the Information Technology Branch, same address (zip 20208-5725), Room 306, telephone (202) 357-6522.

Appendix A--Technical Notes

Methodology

The Recent College Graduate Survey was designed to obtain data on the post-degree employment and education experiences of bachelor's or master's degree recipients from an American college or university between July 1, 1985 and June 30, 1986. The survey data collection component of this study was conducted from June 1987 to February 1988, and obtained data on the employment experiences of graduates as of April 27, 1987. A sample of approximately 22,400 graduates was selected in the second stage of a two-stage sample. The first-stage sample was selected from all institutions in the Nation awarding bachelor's and/or master's degrees.

Type of Data Collected

The questionnaire requested information regarding educational financing, additional education/training following receipt of degree, and employment experience, as well as selected biographical/background information. Additional information about employment experience was obtained from graduates who were qualified to teach in elementary and secondary schools.

Data Editing

Prior to key-entry, each form was scan-edited for completeness, readability, and critical items. Telephone calls were made to individuals whose forms failed scan edit, in order to resolve errors. Forms that passed scan edit were keyed and submitted for machine edit, which checked for range errors, logical inconsistencies, and erroneous skip patterns. For cases in which error patterns or frequencies suggested coding or keying errors, hard-copy documents were reviewed. When resolution from hard copy was not possible, imputation was applied to the data, as appropriate. All forms requiring error resolution were resubmitted for machine edit until no further errors were identified.

Imputation

Imputation was carried out for item nonresponse using several different strategies. Implicit or explicit routing (skip) patterns were evaluated to identify items for which it was possible to assign values to missing items by performing logical imputation. When logical imputation procedures could not be used, regression imputation procedures were considered. This procedure made use of a regression equation to calculate a value for a missing item (dependent variable) based on data reported by the individual for other related items (independent variables). The parameters of the regression equation were estimated from complete responses within the imputation class. Finally, if neither logical nor regression imputation procedures could be used, random imputation within class was carried out. For each survey item, each nonrespondent was assigned the value of a respondent randomly selected from the same imputation class.

Status of Data and Response Rates

The questionnaire was sent to 21,957 eligible sample members (19,473 bachelor's and 2,484 master's degree recipients) and responses were obtained from 16,878 (80 percent) by mail and telephone interview.

Table A-1.--Final status of questionnaire data collection

	Bachelor's recipients	Master's recipients	All sample members
Eligible sample*	19,473	2,484	21,957
Prior refusals	30	0	30
Post-mailing ineligibles	648	129	777
Post-mailing refusals	347	64	411
Respondents	15,088	1,790	16,878
Nonrespondents	3,360	501	3,861
Response rate (percent)	80.1	76.0	79.7

*Excludes ineligibles identified prior to initial mailout.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

Sample Design

The design of the sample called for the selection of 16,000 bachelor's degree recipients and 2,000 master's degree recipients from 400 institutions that granted bachelor's or master's degrees during the 1985-86 academic year. This core sample was subsequently augmented within the same 400 schools to include (1) 3,400 bachelor's degree recipients in nursing, and (2) 1,000 bachelor's and master's degree recipients in fields of study likely to provide bilingual education teachers.

The sample was selected with a two-stage cluster sample design, with institutions offering degrees of interest as the first-stage units and graduates of these institutions (within the specified time period and degree type) as the second-stage units. The first-stage sampling frame was comprised of the 1,867 institutions that granted bachelor's or master's degrees in 1983-84.

A first-stage sample of 400 institutions was selected with probability proportionate to size. Except for Traditionally Black Institutions (TBIs), the size measure used was the sum of bachelor's and master's degrees in 1983-84. TBIs were assigned three times the number of degrees awarded in order to increase the number of black graduates in the sample. Institutions on the frame were stratified into 4 strata by crossing public and private with educational and non-educational. Educational schools were those that granted 100 or more education degrees or those who granted half or more of all bachelor's and master's degrees in education. Of the 400 institutions selected, 240 were selected with certainty. The remaining 160 sample selections were proportionally allocated to each of the four strata on the basis of size and were selected within strata with probability proportional to size.

In selecting the sample of graduates, the primary goal was to select a sample of graduates containing specified numbers of sample members in the seven defined strata or subgroups shown in table A-2. Lists of graduates were requested from each sampled institution and discrepancies between the numbers of graduates listed and the numbers reported on the 1984-85 "Earned Degrees" survey were resolved. Simple random samples of graduates were then selected from each subgroup with sampling rates that would attain the desired stratum sample sizes and make the overall selection probabilities assigned to each graduate in the same stratum equal whenever possible. Table A-2 shows the distribution of the sample of graduates by subgroup.

Sampling Error

The sampling standard errors for all of the statistics shown in this report have been estimated by a procedure called Ultimate Cluster Taylor Series Approximation. This procedure takes into account the complexities of the sample design, resulting in significantly higher sampling errors than those that would have been calculated using formulas based on the assumption of simple random sampling.

Table A-2.--Distribution of the sample of graduates

Subgroups	Number of graduates		
	Population	Sample	Augmentation*
Total	1,260,669	22,400	4,400
Bachelor's	975,540	19,665	3,665
Math, computer science physical science, letters	111,069	3,262	--
Education	88,017	2,964	265
Nursing	33,252	3,742	3,400
Foreign languages	9,954	500	--
All other bachelor's	733,248	9,197	--
Master's	284,112	2,000	--
Bilingual education (bachelor's and master's)	1,017	735	735

*Graduates whose inclusion in the sample is attributable to augmentation.

--Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Earned Degrees" survey, 1984-85.

Table A-3 contains the standard error and the coefficient of variation for each of the estimates shown in this report. For example, the average salary for business and management graduates was \$21,956, with a standard error of \$306. This standard error may then be used to construct a confidence interval around the estimate. To establish the 95 percent confidence interval, the standard error is multiplied by 1.96 and the resulting value is added to and subtracted from the estimate.

$$\begin{aligned} \$306 \times 1.96 &= \$602 \\ \$21,956 - \$602 &= \$21,354 \\ \$21,956 + \$602 &= \$22,558 \end{aligned}$$

If all possible samples were selected, each being chosen under the same conditions as the current sample, then 95 percent of the confidence intervals for all samples would contain the "true" average salary for business and management graduates. The true value is the value that would have been obtained if all graduates had been surveyed rather than just a sample of graduates.

The coefficient of variation (CV) is the standard error of an estimate divided by the estimate. The CVs, which are expressed as percentages in table A-3, have the advantage of standardizing the variation in terms of units and orders of magnitude.

Analytic Methodology

Each comparison cited in this report is significant at the .05 level as determined by a pairwise t test for independent samples. The variance of the difference of two estimates shown in table A-3 was calculated as

$$SE_d^2 = SE_1^2 + SE_2^2$$

When an entire "family" of comparisons was made, each pairwise comparison within the family was tested against an adjusted significance level to ensure that all the comparisons within the family are significant at the .05 level. Adjustments were made for the number of comparisons within the family by means of the Bonferroni adjustment.

For example, the report states that engineering graduates had the highest starting salary of all recent graduates. This means that salaries for engineering graduates had to be tested against each of the other nine categories of graduates, creating a family of comparisons. Therefore, the .05 significance level for each of the nine pairwise t tests had to be adjusted using the Bonferroni adjustment. As a result, the t value computed for each of the nine comparisons had to exceed 2.79, while t values for individual comparisons need only exceed 1.96.

Nonsampling Errors

Nonresponse to the survey is one source of nonsampling error. Survey estimates may be biased if nonrespondents have different educational and occupational experiences than those who responded. To account for nonparticipating institutions and nonresponding graduates, a post-stratification ratio adjustment procedure was used with 14 post-strata (the seven groups shown in table A-2 divided into public and private subgroups). The initial weight for each graduate was adjusted so that the sum of the graduate weights in each post-strata equaled the corresponding number of graduates tabulated from the 1985-86 "Earned Degrees" survey. Based on a validation study conducted in 1979,* the earned degrees data are very accurate. Therefore, the use of the post-stratification adjustment should reduce nonresponse bias.

In addition to nonresponse, there are many other potential sources of nonsampling error. These include definition difficulties, differences in the interpretation of questions, errors by the respondents, and errors made in recording the data. No measure of the nonsampling error from such sources is currently available.

*Peng, Samuel, HEGIS Post-Survey Validation Study, 1979.

Table A-3...Standard errors and coefficients of variation for activity estimates used in this report, by major fields of study

Major fields of study and activity	Estimate	Standard error	Coefficient of variation
		Percent	
All fields			
Employed full time	74.7	0.53	0.71
Employed part time	11.0	0.34	3.09
Unemployed	5.4	0.28	5.19
Not looking for work	9.4	0.39	4.15
Enrolled	27.7	0.59	2.13
Enrolled, not working	8.3	0.40	4.82
Business/management			
Employed full time	85.5	0.78	0.91
Employed part time	5.3	0.48	9.06
Unemployed	4.8	0.48	10.00
Not looking for work	4.7	0.46	9.79
Enrolled	15.7	0.88	5.61
Enrolled, not working	3.3	0.39	11.82
Education			
Employed full time	77.1	1.18	1.53
Employed part time	15.5	1.01	6.52
Unemployed	3.5	0.48	13.71
Not looking for work	5.3	0.53	10.00
Enrolled	28.5	1.19	4.18
Enrolled, not working	3.3	0.41	12.42
Engineering			
Employed full time	83.6	1.24	1.48
Employed part time	5.9	0.75	12.71
Unemployed	5.5	0.77	14.00
Not looking for work	5.1	0.66	12.94
Enrolled	28.3	1.60	5.65
Enrolled, not working	3.3	0.76	14.90
Health professions			
Employed full time	76.2	1.46	1.92
Employed part time	12.6	1.00	7.94
Unemployed	2.2	0.48	21.82
Not looking for work	9.1	0.92	10.11
Enrolled	19.6	1.39	7.09
Enrolled, not working	5.6	0.87	15.54
Public affairs/social services			
Employed full time	76.1	2.67	3.71
Employed part time	13.9	2.04	14.68
Unemployed	4.0	1.32	33.00
Not looking for work	6.4	1.45	22.66
Enrolled	25.7	2.53	9.84
Enrolled, not working	3.9	1.11	28.46
Biological science			
Employed full time	43.4	2.66	6.13
Employed part time	15.3	1.83	11.96
Unemployed	6.9	1.40	20.29
Not looking for work	34.1	2.41	7.07
Enrolled	61.3	2.50	4.08
Enrolled, not working	36.8	2.48	6.74
Mathematics/computer sciences			
Physical Sciences			
Employed full time	75.8	1.23	1.62
Employed part time	10.1	0.72	7.13
Unemployed	5.4	0.53	9.81
Not looking for work	8.8	0.84	9.55
Enrolled	30.4	1.28	4.21
Enrolled, not working	8.7	0.85	9.77

Table A-3.--Standard errors and coefficients of variation for activity estimates used in this report, by major fields of study--Continued

Major fields of study and activity	Estimate	Standard error	Coefficient of variation
		Percent	
Social sciences			
Employed full time	61.2	1.79	2.92
Employed part time	13.1	1.12	8.55
Unemployed	8.4	0.99	11.79
Not looking for work	17.5	1.37	7.83
Enrolled	37.9	1.90	5.01
Enrolled, not working	17.3	1.44	8.32
Humanities			
Employed full time	59.1	1.68	2.84
Employed part time	20.3	1.41	6.78
Unemployed	7.7	1.47	19.09
Not looking for work	13.0	2.05	15.77
Enrolled	38.1	2.17	5.70
Enrolled, not working	11.2	1.80	16.07
Psychology			
Employed full time	65.4	2.79	4.27
Employed part time	15.7	1.97	12.55
Unemployed	5.2	1.26	24.23
Not looking for work	4.6	1.86	40.43
Enrolled	42.3	2.62	6.19
Enrolled, not working	12.7	1.77	13.94
All other			
Employed full time	75.2	1.32	1.76
Employed part time	10.9	1.07	9.82
Unemployed	5.8	0.74	12.76
Not looking for work	8.4	0.94	11.19
Enrolled	22.9	1.40	6.11
Enrolled, not working	7.2	0.84	11.67

NOTE: The coefficient of variation has been converted into percentage.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

Table A.4.--Standard errors and coefficients of variation for salary estimates used in this report, by major fields of study

Major fields of study	Estimate	Standard error	Coefficient of variation
	(Dollars)		(Percent)
All fields	\$20,350.5	162.17	0.80
Business/management ..	21,095.6	306.32	1.45
Education	15,761.3	173.33	1.10
Engineering		263.40	0.89
Health professions ...	22,557.7	267.53	1.19
Public affairs/ social services	17,676.1	456.28	2.58
Biological sciences ..	16,374.8	529.76	3.24
Mathematics/computer sciences, physical sciences	22,517.0	289.48	1.29
Social sciences	20,333.7	709.18	3.49
Humanities	16,222.0	256.06	1.58
Psychology	17,315.5	524.10	3.03
All other	17,639.6	278.79	1.58

NOTE: The coefficient of variation has been converted into a percentage.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduate Survey.

Table A-5.--Standard errors and coefficients of variation for job characteristic estimates used in this report, by major fields of study

Major fields of study	Job characteristics								
	Related to major			Had career potential			Required no degree		
	Estimate	Standard error	Coefficient of variation	Estimate	Standard error	Coefficient of study	Estimate	Standard error	Coefficient of variation
	Percent								
All fields	77.7	0.70	0.90	68.2	0.55	0.81	35.5	0.64	1.80
Business management	84.0	0.79	0.94	73.1	0.92	1.26	37.3	1.10	2.95
Education	84.5	0.84	0.97	72.2	1.15	1.59	22.2	1.11	5.00
Engineering	88.7	1.02	1.15	79.9	1.25	1.56	14.6	1.41	9.66
Health professions	93.2	0.86	0.92	79.1	1.55	1.96	30.8	1.43	4.64
Public affairs/ social science	71.1	2.83	3.98	63.2	2.63	4.16	54.7	2.95	5.39
Biological science	67.0	3.27	4.88	46.3	3.70	7.99	44.8	3.70	8.26
Mathematics/computer science physical science	80.8	1.02	1.26	71.0	1.17	1.65	26.2	1.14	4.35
Social sciences	52.7	2.12	4.02	60.3	2.05	3.40	45.7	2.10	4.60
Humamities	54.9	2.85	5.19	48.8	2.32	4.75	50.9	2.08	4.09
Psychology	65.9	2.54	3.85	47.3	2.93	6.19	50.2	2.82	5.62
All other	75.6	1.44	1.90	65.6	1.77	2.70	42.4	1.86	4.39

NOTE: The coefficient of variation has been converted into a percentage.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987 Recent College Graduates Survey.

Appendix B

Employment status - Graduates were asked if they were employed for pay during the week of April 27, 1987. A response of "yes" indicated they were employed. The number of reported hours per week indicated full-time/part-time employment (35 hours or more for full time; less than 35 hours for part time). Not working but looking for work indicates unemployed. Not working but not looking for work indicates not in labor force.

Responding survey questionnaire items

Question 16. Were you working for pay during the week of April 27, 1987?
Yes
No

Question 17. Were you looking for work during the week of April 27, 1987?
Yes
No

Question 19. Please describe below the principal job you held during the week of April 27, 1987. Specify _____

Question 21. How many hours per week were you employed at this job?
Hours per week: _____

Question 22. At what rate (before deductions) were you paid on this job?
Per year
Per month
Per week \$ _____
Per day
Per hour

Job related to major field of study--Graduates were asked if the work of their principal job was closely related, somewhat related, or not related to their major field.

Responding survey questionnaire item

Question 24. Please indicate the extent to which your work on this principal job was related to your major field of study for this degree.
Closely related or somewhat related
Not related

Job has career potential--Graduates were asked to select the statement that best describes their principal job. Responses of "job has either possible or definite career potential" were used.

Responding survey questionnaire item

Question 25. Which of the following statements best describes your principal job?

- A job with possible career potential
- A job with definite career potential
- A temporary job until a better one could be found
- A temporary job while waiting to report to a new job
- A job to earn money while I decided what kind of work I wanted
- A temporary job to earn money for something else
- Other (specify) _____

Degree not required to obtain job--Graduates were asked if a degree was required to obtain their job. A response of "no" or "don't know" indicates a degree was not required.

Responding survey questionnaire item

Question 23. Was a college degree required in order to obtain this job?

- Yes
- No
- Don't know

Enrolled in school for additional formal training--Graduates were asked if they were enrolled in school after graduation. A response of "yes" indicates enrollment after degree was received.

- Yes
- No

Responding survey questionnaire item

Question 12a. Have you enrolled in school at any time since receiving this degree?

- Yes, currently enrolled
- Yes, but not currently enrolled
- No

Major Field of Study--The Classification of Instructional Programs (CIP) taxonomy was used to code student-reported major field of study. Each major field used in this report is an aggregate field composed of several specific programs. Table B-1 presents the major field of study used, the specific programs that were included in the major field of study, and the CIP taxonomy codes for the specific programs.

Major Fields of Study, By Categories

Professional Major Fields

- Business/management
- Education
- Engineering
- Health professions
- Public affairs/social services

Arts and Sciences Major Fields

- Biological sciences
- Mathematics, computer sciences, and physical sciences
- Social sciences
- Humanities
- Psychology

Other Major Fields

- Agriculture and natural resources
- Architecture and environmental design
- Area studies
- Communications
- Home economics
- Law
- Library science
- Military sciences

Occupations were coded from written responses to the question of "what type of work do you do?" The 1980 Standard Occupational Classification system of the U.S. Bureau of the Census was used. Table B-2 lists the titles of specific occupations and their corresponding codes. Table B-3 presents the occupational areas used in this report and the specific occupational codes that were used to classify graduates into an occupational area.

Table B-1.-- Major fields of study used in this report,
by the two-digit CIP codes classification

<u>Codes</u>	<u>Description</u>
01	Agribusiness and agricultural production
02	Agricultural sciences
03	Renewable natural resources
04	Architecture and environmental design
05	Area and ethnic studies
06	Business and management
07	Business administrative support
08	Marketing and distribution
09	Communications
10	Communications technologies
11	Computer and information sciences
12	Consumer, personal, and miscellaneous services
13	Education
14	Engineering
15	Engineering-related technologies
16	Foreign languages
17	Allied health
18	Health sciences
19	Home economics
20	Vocational home economics
22	Law
23	Letters
25	Library and archival sciences
26	Life sciences
27	Mathematics
28	Military sciences
31	Parks and recreation
32	Basic skills
38	Philosophy and religion
39	Theology
40	Physical sciences
41	Science technologies
42	Psychology
43	Protective services
44	Public affairs
45	Social sciences
46	Construction trades
47	Mechanics and repairers
48	Precision production
49	Transportation and material moving
50	Visual and performing arts

Table B-2.-- Recent College Graduates (RCG) Survey codes and corresponding Census Standard Occupational Classification codes for the occupational areas used in this report

<u>Occupational Title</u>	<u>RCG Code</u>	<u>Corresponding Census</u>
Business/management	01	003-037
Education	02	113-159, 163
Engineering	03	044-059
Health occupations	04	084-089, 095-106
Public affairs/social services	05	174-177
Biological sciences	06	078, 079, 083
Computer specialists	07	064, 065
Communications	08	195-198
Fine arts	09	183-194
Technicians	10	203-235
Clerical	11	303-389
Laborers	12	503-599, 613-699, 703-799, 803-889
Sales	13	243-285
Service	14	403-469
Other	15	NONE

Table B-3.-- Description of Recent College Graduates (RCG) Survey codes for the occupational areas used in this report

<u>RCG Code</u>	<u>Description</u>
01	Executive, administrative and managerial occupations; management-related occupations
02	Teachers
03	Engineers
04	Health diagnosing occupations
05	Social, recreation, and religious workers
06	Biological and life scientists; forestry and conservation scientists; medical scientists
07	Computer systems analysts and scientists; operations and systems researchers and analysts
08	Editors and reporters; public relations specialists; announcers
09	Writers, artists, and entertainers
10	Technicians and related support occupations
11	Administrative support occupations
12	Precision production, craft, and repair occupations; operators, fabricators and laborers
13	Sales and sales-related occupations
14	Service occupations
15	Other

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