

DOCUMENT RESUME

ED 372 691

HE 027 576

AUTHOR Fitzgerald, Robert; And Others
 TITLE Descriptive Summary of 1989-90 Beginning Postsecondary Students: Two Years Later. Contractor Report. Statistical Analysis Report.

INSTITUTION MPR Associates, Berkeley, CA.; Research Triangle Inst., Durham, N.C.

SPONS AGENCY National Center for Education Statistics (ED), Washington, DC.

REPORT NO ISBN-0-16-045083-7; NCES-94-386

PUB DATE Jul 94

NOTE 228p.

AVAILABLE FROM U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328.

PUB TYPE Statistical Data (110) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC10 Plus Postage.

DESCRIPTORS Academic Achievement; Academic Aspiration; Academic Persistence; Citizen Participation; College Freshmen; College Students; *Demography; Employment; Enrollment; Family Characteristics; Followup Studies; Higher Education; *Longitudinal Studies; Married Students; Nontraditional Students; *Postsecondary Education; School Demography; *Student Characteristics; Student Financial Aid; Tables (Data); Two Year Colleges

IDENTIFIERS *Beginning Postsecondary Students Long Study; National Postsecondary Student Aid Study

ABSTRACT

This report is a descriptive summary of data from the first follow-up of the 1990/92 Beginning Postsecondary Students Longitudinal Study (BPS:90/92), a comprehensive examination of information on enrollment, persistence, and attainment in postsecondary education for students who began postsecondary education in 1989-90 regardless of when they completed high school. The BPS data also include detailed information about financial aid, employment, family formation, and civic and political participation of students. The BPS sample of 6,500 students was drawn from first-time students who participated in the 1990 National Postsecondary Student Aid Study (NPSAS). Among these first findings are: (1) about half of the students originally enrolled in 2- to 3-year institutions, 42 percent enrolled in 4-year institutions and 9 percent enrolled in less-than-2-year institutions; (2) 47 percent of those who aspired to 2 or more years of college (but less than a bachelor's degree) when they first enrolled in postsecondary education, did not re-enroll in 1990-91; (3) during the first year of enrollment, 45 percent received some kind of financial aid; (4) of beginning students who worked while enrolled (87 percent of all students), 76 percent considered their primary role that of student; and (5) as of February 1992, 18 percent of the sample were married and an additional 5 percent had been previously married. Detailed data are presented in 41 tables and 17 figures. Appendixes contain technical notes, methodology, and a glossary. (JB)

HE

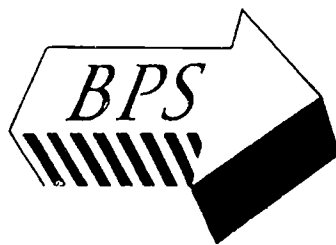
ED 372 691

NATIONAL CENTER FOR EDUCATION STATISTICS

Statistical Analysis Report

July 1994

**Descriptive Summary
of 1989-90
Beginning Postsecondary
Students: Two Years Later**



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

NAE 027 576

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

NCES 94-386



BEST COPY AVAILABLE

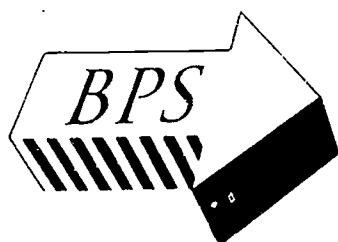
NATIONAL CENTER FOR EDUCATION STATISTICS

Statistical Analysis Report

July 1994

Descriptive Summary of 1989-90 Beginning Postsecondary Students: Two Years Later

Contractor Report



Robert Fitzgerald
Lutz Berkner
Laura Horn
Susan Choy
Gary Hoachlander
MPR Associates, Inc.

Paula R. Knepper
Project Officer
National Center for Education Statistics

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

NCES 94-386

U.S. Department of Education

Richard W. Riley
Secretary

Office of Educational Research and Improvement

Sharon P. Robinson
Assistant Secretary

National Center for Education Statistics

Emerson J. Elliott
Commissioner

National Center for Education Statistics

"The purpose of the Center shall be to collect, Analyze, and disseminate statistics and other data related to education in the United States and in other nations."—Section 406(b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e-1).

July 1994

Contact:

Paula R. Knepp
(202) 219-1914

Highlights

This report is a descriptive summary of the first follow-up data for the 1990/92 Beginning Postsecondary Students Longitudinal Study (BPS:90/92). The BPS Study is a comprehensive source of information on enrollment, persistence, and attainment in postsecondary education for students who began their postsecondary education in 1989–90. The BPS data also include detailed information about financial aid, employment, family formation, and civic and political participation of these students. Unlike previous longitudinal studies of postsecondary students, BPS:90/92 includes all first-time students, regardless of when they completed high school. Among the findings in this report are the following:

Introduction

One-half of all 1989–90 beginning postsecondary students enrolled first in 2- to 3-year institutions, and 42 percent enrolled in 4-year institutions. The remaining 9 percent enrolled in less-than-2-year institutions.

Beginning postsecondary students age 30 or older were especially likely to enroll first in less-than-2-year institutions (19 percent) or 2- to 3-year institutions (68 percent). The same was true for beginning postsecondary students from the bottom socioeconomic status (SES) quartile: 21 percent enrolled first in less-than-2-year institutions and 62 percent enrolled first in 2- to 3-year institutions.

Seventy percent of all 1989–90 beginning postsecondary students were immediate entrants—that is, they enrolled in postsecondary education within 12 months of completing high school.

In February 1992, 55 percent of those who began their postsecondary education in 1989–90 were enrolled in postsecondary education, 35 percent were working (and not enrolled), 3 percent were unemployed, and 7 percent were engaged in other activities.

Educational Experiences

Forty-seven percent of those who aspired to 2 or more years of college (but less than a bachelor's degree) when they first enrolled in postsecondary education in 1989–90 did not re-enroll in 1990–91. Thirty percent of those who aspired to a bachelor's degree and 19 percent of those who aspired to an advanced degree also did not re-enroll in 1990–91.

Of the students who began their postsecondary education in 1989–90, 56 percent were enrolled full time for at least 8 months that year.

Among the beginning postsecondary students who enrolled in a less-than-2-year institution in 1989-90, 57 percent had attained some type of postsecondary award by spring 1992. Another 3 percent were enrolled at some type of postsecondary institution; the rest had left without an award.

By spring 1992, 23 percent of beginning postsecondary students who enrolled in a 2- to 3-year institution in 1989-90 had attained an award, 27 percent were enrolled at a postsecondary institution, and the rest had left without an award.

Sixty-two percent of the beginning postsecondary students who enrolled in a 4-year institution in 1989-90 were still enrolled in June 1992, 5 percent had attained some kind of award, and the rest had left without an award.

Financing Postsecondary Education

During their first year of enrollment, 45 percent of the 1989-90 beginning postsecondary students received some kind of financial aid. At the end of 3 years (as of spring 1992), more than one-half (55 percent) had received financial aid.

Nearly one-half (47 percent) of the students were ever awarded a grant or scholarship, but less than one-third (29 percent) ever used a student loan to meet educational expenses.

The average educational loan debt still owed by the students in early 1992 was about \$5,300, but the amount varied considerably by the level and control of institution attended. This debt ranged from about \$3,300 at public less-than-4-year institutions to more than \$8,000 at private, not-for-profit 4-year institutions.

The receipt of financial aid was directly related to persistence and attainment in postsecondary education: the 1989-90 beginning postsecondary students who received financial aid were less likely to have left postsecondary education by 1992 without completing a program than those who received no aid.

While dependent students from low-income (under \$20,000) families were more likely, overall, than those from high-income (over \$60,000) families to have left postsecondary education by 1992, dependent financial aid recipients from low-income families were no more likely than unaided dependents from high-income families to have left postsecondary education by 1992.

Work Experiences

- Of the 1989–90 beginning postsecondary students who worked while enrolled (87 percent of all students), 76 percent considered their primary role to be that of a student who worked and 24 percent considered their primary role to be an employee who studied.
- The 1989–90 beginning postsecondary students who worked while enrolled and who considered their primary role to be that of a student worked an average of 26 to 28 hours per week during the academic years 1989–90 through 1991–92.
- On-campus jobs were an important source of employment for students who worked while enrolled primarily as students: 43 percent of those at private, not-for-profit 4-year institutions held jobs on campus, as did 28 percent of those enrolled in public 4-year institutions.
- Among the 1989–90 beginning postsecondary students in 2- to 3-year institutions who were primarily students who worked, 37 percent of those who held a job related to their studies attained a postsecondary award by spring 1992, compared with 25 percent of those whose jobs were not related to their studies.
- Among the 1989–90 beginning postsecondary students in 4-year institutions who were primarily students who worked, 74 percent of those who had worked 15 or fewer hours in 1989–90 were enrolled in spring 1992, compared with 66 percent of those who had worked 35 hours or more.
- About one-quarter of the 1989–90 beginning postsecondary students who considered themselves primarily employees held clerical jobs, 17 percent were managers/administrators, and 14 percent were in service occupations.

Marriage, Family Formation, and Civic Participation

- As of February 1992, 18 percent of 1989–90 beginning postsecondary students were married, and an additional 5 percent had been previously married (divorced, widowed, or separated).
- Among beginning postsecondary students who had ever married, most married prior to enrollment (65 percent), while 18 percent married during their enrollment and 17 percent married after their last term.
- About 19 percent of 1989–90 postsecondary students reported having children. Among those with children, 44 percent had one child; 33 percent had two children; and 23 percent had three or more children.

About 63 percent of beginning postsecondary students were registered to vote as of February 1992; 10 percent had been previously registered; and 27 percent had never registered to vote.

As of February 1992, about one-third (35 percent) of beginning postsecondary students had performed volunteer work in the past 2 years, and about one-half (56 percent) planned to do volunteer work in the next 2 years.

Foreword

This report describes the diverse group of students who entered postsecondary education during the academic year 1989–90. It describes their economic and demographic characteristics, their educational aspirations, the types of institutions they attended, their experiences while enrolled, and their persistence and attainment through the spring of 1992. In addition, this report describes the work experiences of these first-time students, both while enrolled and after they left postsecondary education.

The data for this report were drawn from the first followup of the 1990 Beginning Postsecondary Students (BPS) Longitudinal Study conducted in the spring of 1992. The BPS sample was drawn from first-time students who participated in the 1990 National Postsecondary Student Aid Study (NPSAS), a nationally representative cross-sectional survey of graduate and undergraduate students. The BPS Study provides data about enrollment, persistence, and attainment in postsecondary education. The first followup collected information on students' experiences during the period between the 1990 NPSAS and the spring of 1992. The second followup, which will be conducted during the spring of 1994, will update the information reported here.

The 1989–90 BPS Study included not only students who enrolled immediately after high school, but also students who delayed their postsecondary studies. Thus, this study is a departure from previous National Center for Education Statistics (NCES) longitudinal studies of high school cohorts, in that it provides information for a steadily growing segment of the postsecondary student population—those who delay continuation of their education due to family responsibilities, military service, lack of financial resources, or other reasons. Students in all types of programs (e.g., academic, vocational, or technical) are represented in the survey.

Some of these first-time students identified their primary role in postsecondary education as that of an employee attending postsecondary education for career advancement or personal enrichment. In this report, their work experiences are treated separately from those of students who worked to pay educational expenses or to earn extra spending money. In addition to describing the educational and employment experiences of the 1989–90 beginning postsecondary students, this report also contains information on patterns of family formation, political and civic participation, and participation in noncredit educational programs.

The estimates presented in this report were produced using the BPS:90/92 Data Analysis System (DAS). The DAS is a microcomputer application that allows users to specify and generate their own tables from the BPS data. The DAS produces design-adjusted standard errors necessary for testing the statistical significance of differences shown in the tables. (More information about the DAS, and how it may be obtained, is included in appendix B of this report.)

We hope that the information provided in this report will be useful to a wide range of interested readers, and that the results reported here will encourage others to use the BPS data. We welcome recommendations for improving the format, content, and analytic approach to make subsequent descriptive reports more informative and accessible.

Paul D. Planchon
Acting Associate Commissioner
Postsecondary Education Statistics Division

C. Dennis Carroll
Chief, Longitudinal Studies Branch

Acknowledgments

The authors wish to thank the many people who contributed to the production of this report. At MPR Associates we depended on the research assistance of Aziza Khazzoom, Alex McCormick, and Elliot Wilen. The programming of many of the variables in this report was the responsibility of Ellen Liebman and Vicky Dingler. Andrea Livingston and Randy Kim edited the various drafts. Our prose tested their patience, but they responded with grace and many good suggestions. Leslie Retallick produced the figures that appear throughout this report, while Meredith Daane, Jennifer Jones, Phil Pierpont, and Angie Wei formatted the tables and typed the text. Laura Byrne coordinated the production of the report from its beginning through various drafts to the final product. Her hard work, long hours, and sleepless nights made this report possible. We thank Laura and the other staff at MPR for their efforts.

The data collection and analysis of the Beginning Postsecondary Students Longitudinal Study is a joint effort of MPR Associates and Research Triangle Institute, Inc. The project directors at Research Triangle Institute—Graham Burkheimer (now retired), John Riccobono, and Dan Pratt—assisted us at every step in producing the data files necessary for analysis. We appreciate their expert knowledge, helpful criticism, and good humor.

We would like to acknowledge those at the National Center for Education Statistics who reviewed this report, including Peggy Quinn, Nabeel Alsalam, and Bob Burton. Their helpful suggestions significantly improved it. Blanca Rosa Rodriguez of OPE, John Lee of JBL Associates and Carol Fuller of the National Institute of Independent Colleges and Universities also kindly served as reviewers.

Finally, the staff of the Postsecondary Longitudinal Studies Branch who are responsible for the BPS Study, provided guidance to us. We owe special thanks to C. Dennis Carroll, Branch Chief, and Paula Knepper, Project Officer, for their assistance.

Table of Contents

	Page
Highlights	i
Foreword	v
Acknowledgments	vii
List of Tables	xi
List of Figures	xvii
1 Introduction	1
Background	1
Types of Institutions First Attended	3
Interrelationships Among Student and Institutional Characteristics	5
Timing of First Enrollment	6
Status of the 1989-90 Beginning Postsecondary Students in February 1992 ..	7
2 Educational Experiences	15
Introduction	15
Enrollment After 1989-90	15
Enrollment by Institution Level and Control	17
Intensity of Enrollment	20
Enrollment in Academic and Vocational Programs	21
Persistence and Attainment	21
Academic and Social Integration	24
Types of Postsecondary Awards Attained	24
3 Financing Postsecondary Education	47
Introduction	47
Students' Educational Costs and Financial Aid in 1989-90	48
Annual Percentage of Enrolled Beginning Postsecondary Students Receiving Aid	51
Cumulative Proportions Ever Aided	52
Borrowing	53
Assistance from the Family	54
Persistence and Attainment	57
4 Work Experiences	85
Introduction	85
Students Who Worked While Enrolled Primarily as Students	87
Students Who Worked While Enrolled Primarily as Employees	90

Table of Contents - continued

	Page
Additional Information on Employment Experiences of 1989-90 Beginning Postsecondary Students	91
Unemployment Patterns	92
5 Marriage, Family Formation, Civic Participation, and Noncredit Educational Activities	123
Marital Status and Family Formation	123
Civic Participation: Voting and Volunteer Activities	126
Other Educational Experiences	127
Appendix A: Glossary	141
Appendix B: Technical Notes and Methodology	163

List of Tables

Table	Page
1.1	Percentage distribution of 1989-90 beginning postsecondary students by level of first institution attended, by selected student and institutional characteristics 10
1.2	Percentage distribution of 1989-90 beginning postsecondary students by socioeconomic status and age, by selected student and institutional characteristics 11
1.3	Percentage distribution of 1989-90 beginning postsecondary students who were immediate and delayed entrants, by selected student and institutional characteristics 12
1.4	Percentage distribution of 1989-90 beginning postsecondary students by enrollment and employment status as of February 1992, by selected student and institutional characteristics 13
2.1	Percentage distribution of 1989-90 beginning postsecondary students by enrollment status during the academic years 1990-91 and 1991-92, by selected student and institutional characteristics 26
2.2	Percentage distribution of 1989-90 beginning postsecondary students by institution level during the academic years 1990-91 and 1991-92, by selected student and institutional characteristics 28
2.3	Percentage distribution of 1989-90 beginning postsecondary students by institution control during the academic years 1989-90, 1990-91, and 1991-92, by selected student and institutional characteristics 31
2.4	Percentage distribution of 1989-90 beginning postsecondary students by enrollment pattern during the academic years 1989-90, 1990-91, and 1991-92, by selected student and institutional characteristics 34
2.5	Percentage distribution of 1989-90 beginning postsecondary students in 2- to 3-year institutions by enrollment in a vocational or academic course of study during the academic years 1989-90, 1990-91, and 1991-92, by selected student and institutional characteristics 37
2.6	Percentage distribution of 1989-90 beginning postsecondary students by persistence and attainment, by selected student and institutional characteristics 39

List of Tables - continued

Table	Page	
2.7	Percentage distribution of 1989-90 beginning postsecondary students by persistence and attainment, by level of first primary institution attended and by student involvement in selected school activities	43
2.8	Percentage distribution of 1989-90 beginning postsecondary students in 2- to 3-year institutions by educational attainment by June 1992, by selected student and institutional characteristics	44
3.1	Percentage distribution of 1989-90 beginning postsecondary students by level and control of institution attended and students' total cost of attendance in academic year 1989-90, by selected student and institutional characteristics	60
3.2	Average cost of attendance and financial aid awarded in academic year 1989-90 to 1989-90 beginning postsecondary students who either received or did not receive financial aid in that academic year, by selected student and institutional characteristics	62
3.3a	Annual percentage of 1989-90 beginning postsecondary students who received any financial aid, grants, or student loans while enrolled during the academic year 1989-90, by selected student and institutional characteristics	64
3.3b	Annual percentage of 1989-90 beginning postsecondary students who received any financial aid, grants, or student loans while enrolled during the academic year 1990-91, by selected student and institutional characteristics	66
3.3c	Annual percentage of 1989-90 beginning postsecondary students who received any financial aid, grants, or student loans while enrolled during the academic year 1991-92, by selected student and institutional characteristics	68
3.4	Cumulative percentage of all 1989-90 beginning postsecondary students who ever received any financial aid, grants, or student loans during the academic years 1989-90 through 1991-92, by selected student and institutional characteristics	70

List of Tables - continued

Table	Page	
3.5	Percentage of 1989-90 beginning postsecondary students who borrowed in academic year 1989-90, the cumulative percentage who had ever borrowed through academic year 1991-92, and the percentage who still owed educational loan funds in 1990 and 1992, by selected student and institutional characteristics	72
3.6	Average amount borrowed by 1989-90 beginning postsecondary students who borrowed in academic year 1989-90, the cumulative amount borrowed through academic year 1991-92, and the loan amounts still owed in 1990 and 1992, by selected student and institutional characteristics	74
3.7	Percentage of 1989-90 beginning postsecondary students who received financial assistance from their families or used their own savings to meet educational costs in academic year 1989-90, and cumulative percentage who ever received such assistance during the academic years 1989-90 through 1991-92, by selected student and institutional characteristics	76
3.8a	Percentage distribution of 1989-90 beginning postsecondary students who in 1992 were enrolled, had attained some postsecondary award, or had left postsecondary education by whether or not they had ever received financial aid, by selected student and institutional characteristics	78
3.8b	Percentage distribution of 1989-90 beginning postsecondary students initially enrolled in 2- to 3-year institutions who in 1992 were enrolled, had attained some postsecondary award, or had left postsecondary education by whether or not they had ever received financial aid, by selected student and institutional characteristics	80
3.8c	Percentage distribution of 1989-90 beginning postsecondary students initially enrolled in 4-year institutions who in 1992 were enrolled, had attained some postsecondary award, or had left postsecondary education by whether or not they had ever received financial aid, by selected student and institutional characteristics	82

List of Tables - continued

Table	Page	
4.1	Percentage of 1989-90 beginning postsecondary students who reported working at any time while enrolled or after leaving postsecondary education, during the academic years 1989-90, 1990-91, and 1991-92, by selected student and institutional characteristics	93
4.2	Percentage distribution of 1989-90 beginning postsecondary students who worked while enrolled according to their reported primary role in postsecondary education, by selected student and institutional characteristics	96
4.3a	Average number of hours worked per week by 1989-90 beginning postsecondary students who worked while enrolled primarily as students during the academic years 1989-90, 1990-91, and 1991-92, by selected student and institutional characteristics	98
4.3b	Percentage distribution of 1989-90 beginning postsecondary students who worked while enrolled primarily as students by number of hours worked during the academic years 1989-90, 1990-91, and 1991-92, by selected student and institutional characteristics	101
4.4	Percentage of 1989-90 beginning postsecondary students among those who reported their primary role as a student, by type of job, by selected student and institutional characteristics	104
4.5	Percentage distribution of persistence and attainment for 1989-90 beginning postsecondary students whose primary role was as students who worked while enrolled, by characteristics of jobs and by level of primary institution in academic year 1989-90	106
4.6	Occupational classification of 1989-90 beginning postsecondary students who held primary jobs in 1991, by selected student and institutional characteristics	108
4.7	Percentage of 1989-90 beginning postsecondary students whose primary role was as an employee who receiving employer-provided training in 1991, by major occupational classifications	111

List of Tables - continued

Table	Page
4.8	Percentage of 1989-90 beginning postsecondary students who worked at any time while enrolled, the average number of months enrolled but not working, and the average number of months enrolled and working, by selected student and institutional characteristics 112
4.9	Proportion of months employed to months enrolled for 1989-90 beginning postsecondary students who worked while enrolled during the academic years 1989-90, 1990-91, and 1991-92, by primary role, and by selected student and institutional characteristics 116
4.10	Percentage of 1989-90 beginning postsecondary students who reported being unemployed in the calendar years 1990 or 1991 and the duration of unemployment spells, by selected student and institutional characteristics 119
5.1	Percentage distribution of 1989-90 beginning postsecondary students' age and socioeconomic status at time of entry, by marital status and family formation patterns 129
5.2	Percentage distribution of 1989-90 beginning postsecondary students' marital status as of the first week in February 1992, and for those who had ever married, the timing of their first marriage in relation to their postsecondary education, by selected student and institutional characteristics 130
5.3	Percentage of 1989-90 beginning postsecondary students who reported having children, and among those with children, the percentage who had one or more children and the timing of their first child's birth, by selected student and institutional characteristics 132
5.4	Percentage distribution of 1989-90 beginning postsecondary students who were U.S. citizens according to their voter registration status as of February 1992, and the percentage who reported voting practices, by selected student and institutional characteristics 134
5.5	Percentage of 1989-90 beginning postsecondary students who reported doing volunteer or community service work in the past 2 years, and the percentage who plan to do such work over the next 2 years, by selected student and institutional characteristics 136

List of Tables - continued

Table		Page
5.6	Percentage of 1989-90 beginning postsecondary students who reported participating in all other education-related courses and activities, and among those participating, the percentage who reported the courses were job related, by selected student and institutional characteristics	138

List of Figures

Figure

1.1	Percentage distribution of 1989-90 beginning postsecondary students by level of first institution attended	4
1.2	Percentage distribution of 1989-90 beginning postsecondary students by level of first institution attended, by socioeconomic status	5
1.3	Percentage distribution of 1989-90 beginning postsecondary students by timing of first enrollment, by institution level	7
1.4	Percentage distribution of 1989-90 beginning postsecondary students by enrollment and employment status as of February 1992, by institution level	8
2.1	Percentage of 1989-90 beginning postsecondary students enrolled during the academic years 1990-91 and 1991-92, by level of primary institution attended in 1989-90	16
2.2	Percentage of 1989-90 beginning postsecondary students who did not enroll during the 1990-91 academic year, by students' educational aspirations in 1989-90	18
2.3	Percentage distribution of 1989-90 beginning postsecondary students by level of postsecondary institutions during the academic years 1990-91 and 1991-92, by level of primary institution attended the previous year	19
2.4	Percentage distribution of 1989-90 beginning postsecondary students by enrollment and attainment by spring 1992, by institution level	23
2.5	Percentage distribution of 1989-90 beginning postsecondary students by attainment by spring 1992	25
3.1	Average total cost of attendance, and total financial aid in academic year 1989-90 of beginning postsecondary students who received financial aid in academic year 1989-90, by level and control of primary institution attended in 1989-90	50
3.2	Percentage of all 1989-90 beginning postsecondary students who ever received any financial aid, grants, or student loans during the academic years 1989-90 through 1991-92, by level and control of primary institution attended in 1989-90	53

List of Figures - continued

Figure		Page
3.3	Average amount of educational loans from any source owed by 1989-90 beginning postsecondary students in February 1992, by level and control of primary institution attended in 1989-90	55
3.4	Percentage of all 1989-90 beginning postsecondary students who ever received financial assistance from parental contributions, parental loans, or contributions from a spouse or relatives during the academic years 1989-90 through 1991-92, by level of primary institution attended in 1989-90	56
3.5	Percentage of 1989-90 beginning postsecondary students who had left postsecondary education, were enrolled, or had attained a postsecondary award in February 1992, by whether they had or had not ever received financial aid	58
4.1	Percentage of 1989-90 beginning postsecondary students who worked while enrolled sometime during the academic years 1989-90 through 1991-92, by level and control of first primary institution	86
4.2	Average number of hours worked per week by 1989-90 beginning postsecondary students who worked, by level of institution in each year	88
5.1	Percentage of 1989-90 beginning postsecondary students who reported having children as of February 1992, and among those with children, the percentage with one, two, or three or more children	125

Chapter 1

Introduction

Background

More than 2.5 million students enrolled in some type of postsecondary education for the first time during the 1989–90 academic year, choosing from a wide variety of types of public and private institutions, including 4-year colleges and universities, 2- to 3-year community colleges, and less-than-2-year institutions providing vocational training.¹ These students were a diverse group. Historically, the typical first-year postsecondary student was an 18- or 19-year-old who had just graduated from high school who was financially dependent on his or her parents. In contrast, the 1989–90 cohort of beginning postsecondary students included individuals from a wide range of age groups. In addition to recent high school graduates, it included many older students who had delayed entry into postsecondary education in order to work, raise a family, or serve in the military. It also included students who had not completed high school in their teens but later decided to return for additional formal education.² Most of these older students were financially independent of their parents.³

The National Center for Education Statistics (NCES) instituted the Beginning Postsecondary Student Longitudinal Study (BPS) to provide information about the changing composition of postsecondary students and their patterns of persistence, progress, and attainment from initial entry into postsecondary education through leaving and entering the work force. While earlier longitudinal studies, such as the National Longitudinal Study of 1972 (NLS-72) and the High School and Beyond (HS&B) study collected similar information about postsecondary and early labor market experiences, these earlier studies were limited to members of a single high school class. BPS, in contrast, includes first-time postsecondary students of all ages, thus providing the first opportunity to examine the experiences of students who delay entry into postsecondary education.

The sample for BPS consisted of all first-time postsecondary students who were part of the 1990 National Postsecondary Student Aid Study (NPSAS:90), a large, nationally representative study of more than 60,000 undergraduate and graduate students enrolled in postsecondary education.⁴ Thus, the 1989–90 NPSAS served not only as a study of all

¹Full descriptions of the types of institutions included in each category appear in the Glossary in appendix A.

²For a discussion of delayed entry into postsecondary education using information from the National Longitudinal Study of the High School Class of 1972 (NLS-72) and the 1980 High School and Beyond (HS&B) study, see Eva Eagle and Carl Schmitt, *Patterns and Consequences of Delay in Postsecondary Education: 1972, 1980, and 1982 High School Graduates* (Washington, D.C.: National Center for Education Statistics, NCES 90-346, January 1990).

³For financial aid purposes, all students age 24 or older are by definition financially independent. Most undergraduates age 23 or younger are financially dependent, although there are some exceptions. See the Glossary in appendix A for complete definitions of dependent and independent students.

⁴A complete description of the design of the 1990 NPSAS study is found in the Methodology Report for the 1990 National Postsecondary Student Aid Study (Washington, D.C.: National Center for Education Statistics, Longitudinal Studies Branch, NCES 92-080, May 1992).

postsecondary students enrolled in 1989-90 but also as the base year for the longitudinal BPS. Approximately 7,900 first-time postsecondary students met the criteria for participation in BPS, and more than 6,500 of them were surveyed in 1992 for the first BPS followup (BPS:90/92).

For the BPS survey, "beginning postsecondary students" included only students who enrolled in postsecondary education for the first time in 1989-90, not all students who were in their first year of a postsecondary program in 1989-90. For example, an individual who completed a vocational course at a less-than-2-year institution some time before 1989-90 and then enrolled as a freshman in a 4-year baccalaureate program in 1989-90 would not have been considered a beginning postsecondary student. Similarly, an individual who enrolled in a 4-year program some time before 1989-90, dropped out after a few months, and returned in 1989-90 still as a first-year student would not have been included in the BPS sample. A part-time student who was in the second year of postsecondary education in 1989-90, but who had not accumulated enough credits to advance to second-year status, also would not have been included. Throughout this report, the term "beginning postsecondary students" refers only to those who were first-time, beginning postsecondary students in 1989-90. In 1989-90, approximately 14 percent of all undergraduate postsecondary students were beginning postsecondary students; another 37 percent were first-year/freshman students, but they were not enrolled in postsecondary education for the first time in 1989-90.⁵

The BPS:90/92 data provide information on enrollment and attainment of beginning postsecondary students through February 1992. For the beginning postsecondary students who enrolled in 4-year institutions in 1989-90, these data are most valuable for the information they provide on patterns of persistence in postsecondary education, since few students would have earned a baccalaureate degree within the time period covered by the survey. For the beginning postsecondary students who enrolled in less-than-4-year institutions in 1989-90, however, the data also provide valuable information on attainment, because many students would have had time to earn some type of postsecondary credential, such as a certificate, license, or associate's degree. BPS:90/92 also provides information on how beginning postsecondary students financed their education, their experiences in the labor market during their postsecondary studies (and after, if they were not enrolled the entire time), their patterns of marriage and family formation, and their involvement in civic and voluntary organizations.

The purpose of this report is to describe the experiences of the 1989-90 beginning postsecondary students through February 1992 and to examine how these experiences varied according to the students' characteristics and the types of institutions they attended. All variables used in the rows or columns of the tables are defined in the Glossary in appendix A. The statistical methods used for the analysis are described in appendix 7. All tables appear at the end of each chapter.

The rest of this chapter provides a brief overview of the characteristics of 1989-90 beginning postsecondary students, describing the types of institutions they first enrolled in,

⁵U.S. Department of Education, National Center for Education Statistics, 1989-90 National Postsecondary Student Aid Study (NPSAS:90), Data Analysis System.

their age and socioeconomic status (SES), the timing of their first entry into postsecondary education, and what they were doing in 1992. Chapter 2 describes the types of programs the beginning postsecondary students participated in and their patterns of enrollment, persistence, and attainment. Chapter 3 describes the types and amounts of financial aid beginning postsecondary students used to pay for their education and examines the relationship between financial aid and student persistence. Chapter 4 examines their employment experiences while they were enrolled and afterwards (for those who had left postsecondary education). Finally, chapter 5 examines the life course events traditionally associated with completion of education—marriage and family formation and increasing participation in the political and civic systems.

Types of Institutions First Attended

One-half of all 1989–90 beginning postsecondary students enrolled first in 2- to 3-year institutions, and 42 percent enrolled in 4-year institutions (table 1.1 and figure 1.1).⁶ The remaining 9 percent enrolled in less-than-2-year institutions. This pattern varied by race–ethnicity, age, and SES: Hispanics, older students, and students in the bottom SES quartile were especially likely to start in less-than-4-year institutions.

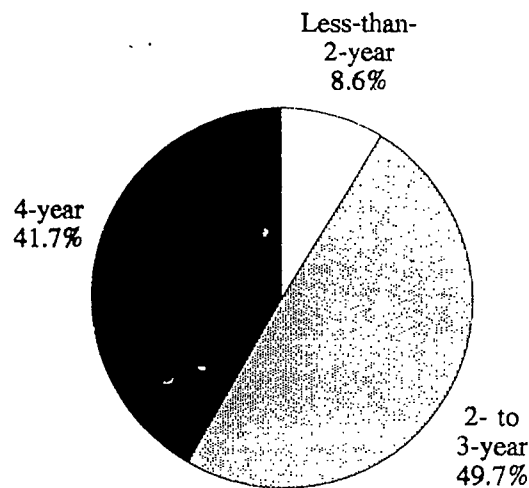
For example, 66 percent of Hispanic beginning postsecondary students enrolled in 2- to 3-year institutions, compared with 48 percent of white, non-Hispanic and 48 percent of black, non-Hispanic beginning postsecondary students. Hispanics were less likely than white, non-Hispanics and Asians to begin their postsecondary education in a 4-year institution (26 percent for Hispanics compared with 44 percent for the other two groups).

Older beginning postsecondary students (age 24 or older) were much more likely than their younger counterparts to enroll first in less-than-2-year institutions (17 percent to 23 percent compared with 6 percent) or 2- to 3-year institutions (67 percent to 73 percent compared with 46 percent). Relatively few beginning postsecondary students age 24 or older started in a 4-year institution (9 percent to 14 percent compared with 48 percent of those age 23 or younger). It is important to keep in mind that this does not mean that older students are unlikely to ever attend a 4-year institution, but simply that they are more likely to start at a less-than-4-year institution. For example, among all students age 30 or older, not just beginning postsecondary students, 27 percent were enrolled in 4-year institutions.⁷

Beginning postsecondary students in the bottom SES quartile were more likely to be enrolled in a 2- to 3-year institution (62 percent) than those in the top quartile (38 percent) (figure 1.2). On the other hand, low SES students were less likely than beginning postsecondary students in the middle and top SES quartiles to enter a 4-year institution (17 percent compared with 35 percent and 59 percent).

⁶Throughout this report references to 4-year institutions include both doctoral and nondoctoral granting institutions.
⁷Special analysis using the U.S. Department of Education, National Center for Education Statistics, 1989–90 National Postsecondary Student Aid Study (NPSAS:90), Data Analysis System.

Figure 1.1—Percentage distribution of 1989–90 beginning postsecondary students by level of first institution attended



NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

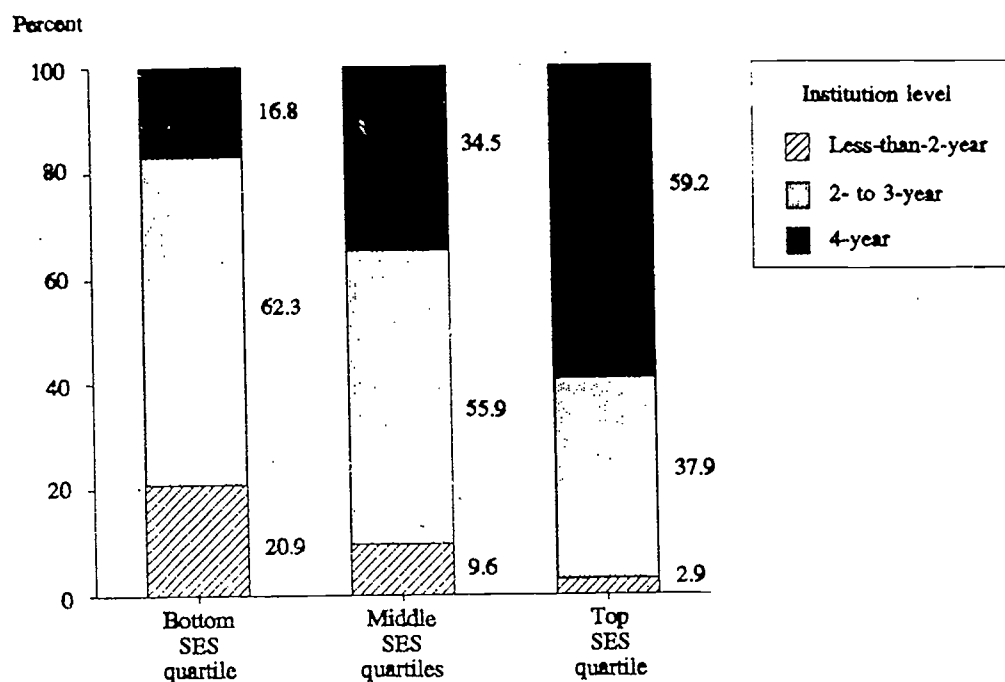
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Beginning postsecondary students in the bottom SES quartile were more likely to be enrolled in a 2- to 3-year institution (62 percent) than those in the top quartile (38 percent) (figure 1.2). On the other hand, low SES students were less likely than beginning postsecondary students in the middle and top SES quartiles to enter a 4-year institution (17 percent compared with 35 percent and 59 percent).

Interrelationships Among Student and Institutional Characteristics

To illustrate how experiences are related to student and institutional characteristics, the tables in this report present data disaggregated by student background characteristics such as race–ethnicity, gender, financial dependency status, age, and SES, and by institutional characteristics such as level and control. However, these characteristics themselves are interrelated in important ways that the reader should keep in mind when interpreting the data. When educational or employment experiences, for example, appear to vary by type of institution, it is important to note that the differences may be attributable at least in part to differences in the characteristics of the students who attend each type of institution. Similarly, when experiences appear to vary by student characteristics, such as SES and age, it is important to remember that the differences may be attributable in part to the type of institution attended, because different types of institutions have different student compositions.

Figure 1.2—Percentage distribution of 1989–90 beginning postsecondary students by level of first institution attended, by socioeconomic status



NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Finally, the fact that student characteristics themselves, such as race-ethnicity and SES, are interrelated is also important to remember. Table 1.1 illustrates how beginning postsecondary students with certain characteristics were distributed among the different types of institutions. Table 1.2 shows the relationships between institutional and student characteristics and SES and age.

As shown in table 1.2, less-than-2-year institutions enrolled the greatest percentage of beginning postsecondary students from the bottom SES quartile (36 percent compared with 19 percent in 2- to 3-year institutions and 6 percent in 4-year institutions) and the greatest percentage of beginning postsecondary students age 30 or older (22 percent compared with 14 percent in 2- to 3-year institutions and 3 percent in 4-year institutions). Four-year institutions had more than one-half (56 percent) of their beginning postsecondary students from the top SES quartile, and 95 percent were age 23 or younger.

Among beginning postsecondary students, race-ethnicity and SES were interrelated. White, non-Hispanics and Asians were more likely than black, non-Hispanics or Hispanics to

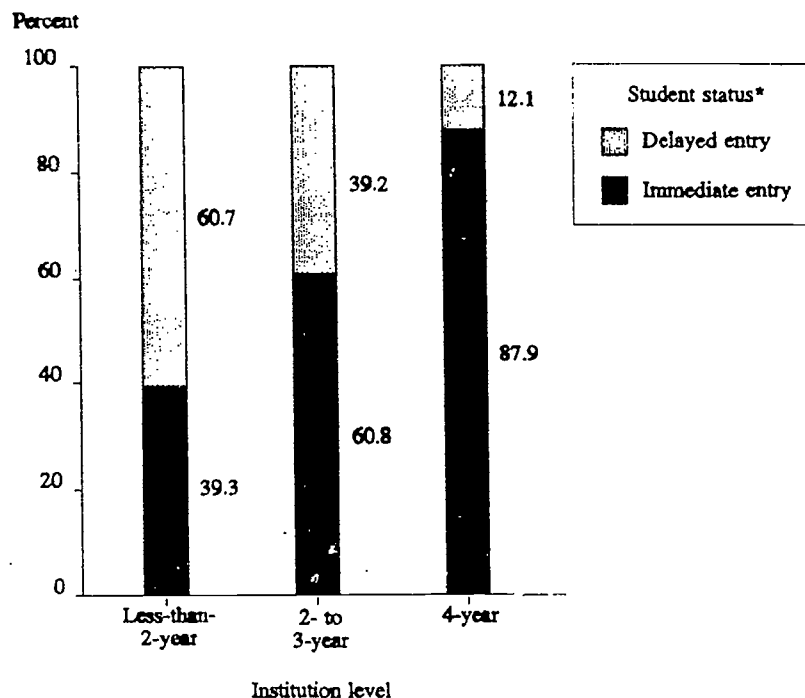
be in the top SES quartile. At the same time, white, non-Hispanics were less likely than black, non-Hispanics, Hispanics, or Asians to be in the bottom SES quartile.

Timing of First Enrollment

Seventy percent of all 1989–90 beginning postsecondary students were immediate entrants—that is, they enrolled in postsecondary education within 12 months of completing high school (table 1.3). The other 30 percent had delayed their entry into postsecondary education for more than 12 months. Among the younger beginning postsecondary students (age 23 or younger), 83 percent were immediate entrants and 17 percent were delayed entrants. As one would expect, almost all of the older students were delayed entrants, although a small percentage (6 percent to 13 percent) were immediate entrants who did not finish high school at the usual 18 or 19 years of age but eventually found their way into the postsecondary education system. Beginning postsecondary students in the bottom SES quartile were considerably more likely than those in the middle and top SES quartiles to be delayed entrants (68 percent compared with 34 percent and 10 percent).

The overwhelming majority (88 percent) of students who began their postsecondary education in 4-year institutions were immediate entrants (figure 1.3), which is not surprising given that students in 4-year institutions tend to be younger and from the higher SES quartiles (see table 1.2). Less-than-2-year and 2- to 3-year institutions had proportionately more delayed entrants, reflecting their older and lower SES student populations.

Figure 1.3—Percentage distribution of 1989–90 beginning postsecondary students by timing of first enrollment, by institution level



*An immediate entrant is a student who began postsecondary education within 12 months of high school completion. A delayed entrant is a student who began more than 12 months after high school.

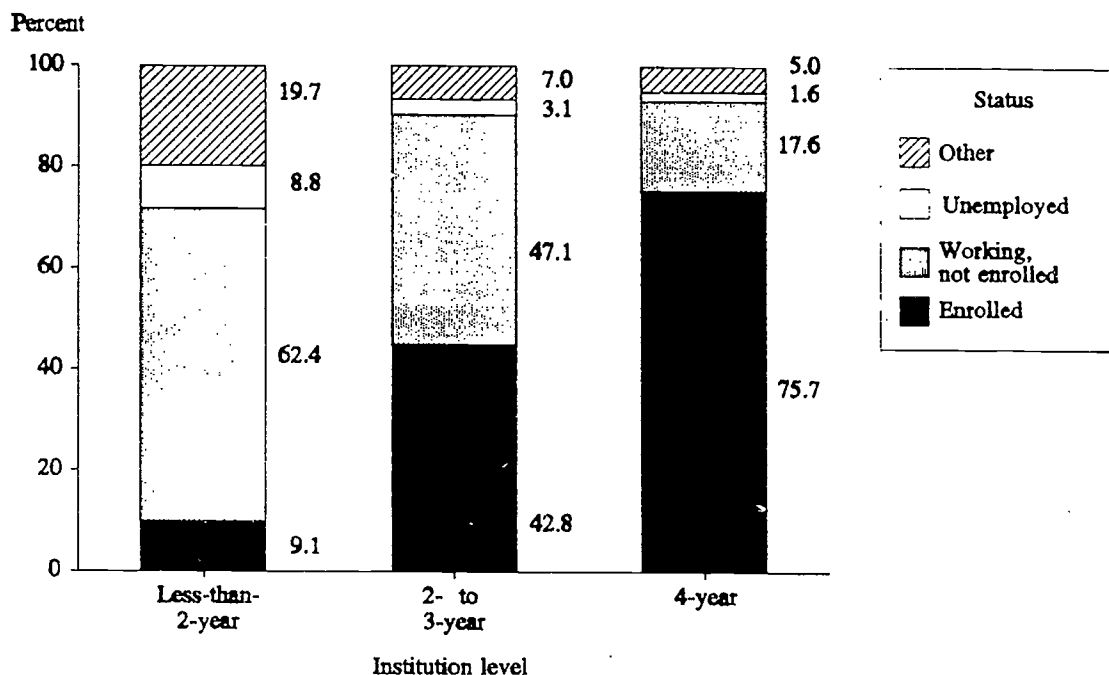
NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Status of 1989–90 Beginning Postsecondary Students in February 1992

In February 1992, 55 percent of the 1989–90 beginning postsecondary students were enrolled in postsecondary education (table 1.4). This percentage included students who were pursuing a bachelor's degree or other degree or certificate that took more than 2 years to complete; students who were in shorter programs but who were enrolled part time and therefore were taking more than 2 years to complete their program; and students who enrolled at some time in 1989–90, stopped out at some point, returned, and were enrolled in February 1992. They may or may not have been still enrolled in the same type of institution and may or may not have been enrolled continuously; these patterns are discussed in chapter 2.

Figure 1.4—Percentage distribution of 1989–90 beginning postsecondary students by enrollment and employment status as of February 1992, by institution level



NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Thirty-five percent of beginning postsecondary students were no longer enrolled, but were employed; 3 percent were unemployed;⁸ and the remaining 7 percent were engaged in other activities. Some of the 1989–90 beginning postsecondary students who were not enrolled in February 1992 would have completed their educational programs, and some would have left without a degree or certificate. Attainment is discussed in chapter 2.

The most important determinant of status in February 1992 was, of course, the level of the institution attended. Over 75 percent of beginning postsecondary students who enrolled in 4-year institutions in 1989–90 were still enrolled in February 1992 (figure 1.4). Of the beginning postsecondary students who enrolled in a 2- to 3-year institution in 1989–90, 45 percent were still enrolled in February 1992. This percentage might seem high given that most programs last 2 years or less, but about one-half (49 percent) of the beginning postsecondary students in 2- to 3-year institutions were enrolled part time and therefore would

⁸The term unemployed infers not working and looking for employment.

have been expected to take more than 2 years to complete their programs.⁹ In addition, some may have stopped out and returned, and some may have completed their programs and enrolled in 4-year institutions for further education (see chapter 2). Of the beginning postsecondary students who enrolled in less-than-2-year institutions in 1989-90, only 10 percent were enrolled in February 1992.

Enrollment status varied by race-ethnicity, age, and SES but these patterns reflect for the most part variations in the types of institutions attended by beginning postsecondary students. For example, beginning postsecondary students who were age 23 or younger and in the top SES quartile were the most likely to be still enrolled as of February 1992, but they were also the most likely to have been enrolled in 4-year institutions in 1989-90 (table 1.4 and table 1.1). However, Asians and white, non-Hispanics were about equally likely to have enrolled in 4-year institutions in 1989-90 (44 percent for both), but Asians were more likely to be enrolled in postsecondary education in February 1992 (80 percent compared with 55 percent).

Beginning postsecondary students who enrolled in 4-year institutions in 1989-90 were the least likely to be unemployed in February 1992. Less than 2 percent were in this category, compared with 3 percent of those who had started in 2- to 3-year institutions and 9 percent of those who had started in less-than-2-year institutions. It should be kept in mind that the percentage of beginning postsecondary students who were unemployed also varied with race-ethnicity and SES, and that both educational experiences and student characteristics affect employment outcomes.

This discussion has provided a brief overview of the status of beginning postsecondary students some 2 years after they first enrolled (the exact amount of time will vary depending on the month during 1989-90 that the students first enrolled). Chapter 2 examines the students' educational experiences in more detail.

⁹1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92), Data Analysis System.

Table 1.1—Percentage distribution of 1989–90 beginning postsecondary students by level of first institution attended, by selected student and institutional characteristics

	Less-than- 2-year	2- to 3-year	4-year
Total	8.6	49.7	41.7
Control of first institution in AY ¹ 1989–90			
Public	2.4	60.3	37.4
Private, not-for-profit	2.5	11.3	86.3
Private, for-profit	62.6	31.0	6.3
Race–ethnicity			
White, non-Hispanic	8.1	48.1	43.8
Black, non-Hispanic	14.6	48.4	37.0
Hispanic	8.4	65.9	25.7
Asian/Pacific Islander	3.9	52.2	44.0
Native American	14.0	46.5	39.4
Gender			
Male	6.8	51.0	42.2
Female	10.3	48.5	41.2
Dependency status in AY ¹ 1989–90			
Dependent	4.6	44.0	51.3
Independent	19.9	65.4	14.7
Age as of 12/31/89			
23 or younger	6.4	45.7	47.9
24–26	17.0	72.7	10.3
27–29	23.4	67.4	9.3
30 or older	18.7	67.8	13.5
Socioeconomic status			
Bottom quartile	20.9	62.3	16.8
Middle quartiles	9.6	55.9	34.5
Top quartile	2.9	37.9	59.2
Educational aspirations in AY ¹ 1989–90			
Trade or vocational school	46.7	47.0	6.3
2 or more years of college	9.5	80.8	9.7
Bachelor's degree	4.5	54.5	41.0
Advanced degree	2.5	35.1	62.5

¹AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 1.2—Percentage distribution of 1989–90 beginning postsecondary students by socioeconomic status and age, by selected student and institutional characteristics

	Socioeconomic status			Age			
	Bottom quartile	Middle quartiles	Top quartile	23 or younger	24–26	27–29	30 or older
Total	14.8	45.5	39.8	82.9	4.2	3.0	9.9
Level and control of primary institution in AY ¹ 1989–90							
Public							
Less-than-4-year	19.2	51.1	29.7	74.4	6.1	4.0	15.2
4-year	6.1	39.1	54.8	95.5	0.8	0.8	2.9
Private, not-for-profit							
Less-than-4-year	15.1	48.8	36.1	84.3	3.2	4.8	7.8
4-year	6.2	33.4	60.4	94.7	1.3	0.7	3.3
Private, for-profit	32.5	55.1	12.4	66.6	9.1	7.8	16.5
Level of primary institution in AY ¹ 1989–90							
Less-than-2-year	35.8	50.7	13.5	62.0	8.4	8.2	21.5
2- to 3-year	18.5	51.1	30.3	76.2	6.2	4.1	13.5
4-year	6.0	37.6	56.4	95.1	1.0	0.7	3.2
Control of primary institution in AY ¹ 1989–90							
Public	13.9	46.3	39.7	82.9	4.2	2.7	10.2
Private, not-for-profit	7.2	35.1	57.7	93.4	1.5	1.2	4.0
Private, for-profit	32.4	54.5	13.1	66.8	8.9	7.7	16.5
Race–ethnicity							
White, non-Hispanic	11.7	43.8	44.4	82.7	4.0	2.8	10.5
Black, non-Hispanic	27.3	54.4	18.3	82.0	6.7	3.5	7.8
Hispanic	24.5	55.8	19.8	84.3	4.3	3.1	8.3
Asian/Pacific Islander	25.3	35.2	39.5	87.1	2.5	6.8	3.6
Native American	27.2	52.4	20.5	84.1	0.2	1.1	14.6
Gender							
Male	12.7	42.7	44.6	85.8	5.1	2.3	6.8
Female	16.6	47.8	35.5	80.3	3.5	3.7	12.5
Dependency status in AY ¹ 1989–90							
Dependent	5.6	42.2	52.2	100.0	0.0	0.0	0.0
Independent	40.5	54.6	4.9	34.7	16.2	11.5	37.6

¹AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study of First Followup (BPS:90/92).

Table 1.3—Percentage distribution of 1989–90 beginning postsecondary students who were immediate and delayed entrants, by selected student and institutional characteristics

	Immediate entrant ¹	Delayed entrant ¹
Total	70.3	29.7
Level and control of primary institution in AY ² 1989–90		
Public		
Less-than-4-year	59.0	41.0
4-year	87.9	12.1
Private, not-for-profit		
Less-than-4-year	67.4	32.6
4-year	88.9	11.1
Private, for-profit	42.8	57.3
Level of primary institution in AY ² 1989–90		
Less-than-2-year	39.3	60.7
2- to 3-year	60.8	39.2
4-year	87.9	12.1
Control of primary institution in AY ² 1989–90		
Public	70.9	29.1
Private, not-for-profit	85.8	14.2
Private, for-profit	42.7	57.3
Race-ethnicity		
White, non-Hispanic	70.9	29.1
Black, non-Hispanic	66.2	33.8
Hispanic	67.7	32.3
Asian/Pacific Islander	74.6	25.4
Native American	68.1	31.9
Gender		
Male	70.1	29.9
Female	70.4	29.5
Dependency status in AY ² 1989–90		
Dependent	89.0	11.0
Independent	17.6	82.4
Age as of 12/31/89		
23 or younger	83.3	16.7
24–26	5.7	94.3
27–29	13.3	86.7
30 or older	6.4	93.6
Socioeconomic status		
Bottom quartile	32.4	67.6
Middle quartiles	65.6	34.4
Top quartile	89.6	10.4

¹An immediate entrant is a student who began postsecondary education within 12 months of high school completion. A delayed entrant is a student who began more than 12 months after high school.

²AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 1.4—Percentage distribution of 1989–90 beginning postsecondary students by enrollment and employment status as of February 1992, by selected student and institutional characteristics

	Enrolled in postsecondary education	Working, not enrolled	Unemployed	Other ¹
Total	55.2	34.9	2.9	7.1
Level and control of primary institution in AY ² 1989–90				
Public				
Less-than-4-year	44.0	46.5	2.6	6.9
4-year	74.5	18.5	1.9	5.0
Private, not-for-profit				
Less-than-4-year	39.5	42.0	3.7	14.8
4-year	78.2	15.7	1.1	5.0
Private, for-profit	11.1	62.9	9.8	16.2
Level of primary institution in AY ² 1989–90				
Less-than-2-year	9.1	62.4	8.8	19.7
2- to 3-year	42.8	47.1	3.1	7.0
4-year	75.7	17.6	1.6	5.0
Control of primary institution in AY ² 1989–90				
Public	56.8	34.8	2.3	6.1
Private, not-for-profit	74.7	18.5	1.4	6.1
Private, for-profit	11.1	62.9	9.8	16.2
Race-ethnicity				
White, non-Hispanic	55.4	35.7	2.4	6.5
Black, non-Hispanic	45.8	34.8	7.1	12.4
Hispanic	51.4	37.4	2.7	8.6
Asian/Pacific Islander	79.8	16.2	1.2	2.8
Native American	55.1	27.9	14.4	2.6
Gender				
Male	55.5	35.8	2.8	6.0
Female	54.9	34.1	3.0	8.0
Dependency status in AY ² 1989–90				
Dependent	64.7	27.3	2.2	5.8
Independent	26.1	58.1	4.8	11.0
Age as of 12/31/89				
23 or younger	61.4	30.1	2.4	6.1
24–26	11.6	69.0	9.7	9.7
27–29	33.3	50.5	5.4	10.8
30 or older	22.9	59.8	3.4	13.9
Socioeconomic status				
Bottom quartile	32.5	47.7	6.2	13.6
Middle quartiles	48.9	41.4	3.1	6.6
Top quartile	70.1	23.1	1.4	5.4

¹Includes all who were not enrolled, not working, and not looking for work.

²AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Chapter 2

Educational Experiences

Introduction

This chapter describes the educational experiences of 1989–90 beginning postsecondary students through spring 1992, including their persistence in postsecondary education, transfers from one type of institution to another, patterns of attendance, and attainment of degrees and certificates. Variation by type of institution attended and student characteristics are examined.¹⁰ Since those enrolled in 4-year institutions would not normally be able to complete a baccalaureate degree within the survey period, the discussion of attainment focuses on the beginning postsecondary students who enrolled in less-than-4-year institutions in 1989–90.

Enrollment After 1989–90

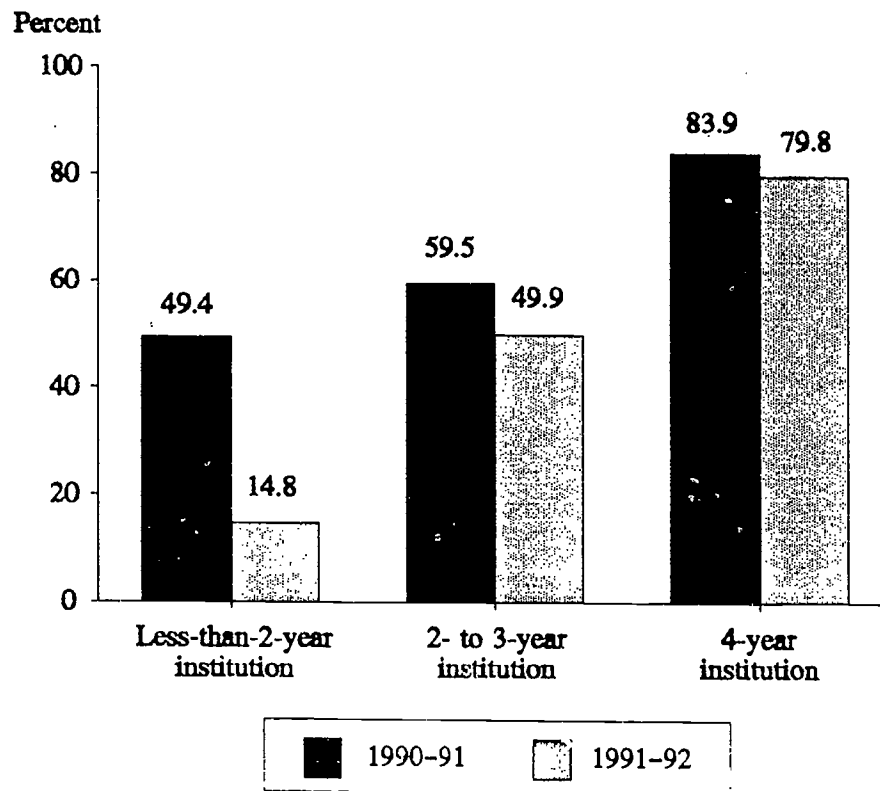
Overall, 69 percent of the students who began their postsecondary education for the first time in 1989–90 enrolled again in 1990–91, and 60 percent enrolled in 1991–92 (table 2.1). Naturally, the likelihood of students enrolling in subsequent academic years depended on the type of institution in which they started, with students in longer programs more likely to continue their enrollment. Thus, continued enrollment is best examined by institution type.

About one-half (49 percent) of the beginning postsecondary students who enrolled in a less-than-2-year institution in 1989–90 enrolled again in 1990–91, and 15 percent enrolled in 1991–92 (figure 2.1). Although less-than-2-year institutions offer primarily short-term vocational programs that can be completed within a year, there are a number of reasons why students might have re-enrolled. First, some programs do take longer than a year to complete, and students enrolled in these programs would have re-enrolled in 1990–91. Second, 12 percent of 1989–90 beginning postsecondary students who enrolled in less-than-2-year institutions attended part time in 1989–90, and therefore may well have needed more than a year to finish.¹¹ Third, some students may have left before completing their program and returned later. Finally, some of the students who enrolled in a less-than-2-year institution in 1989–90 may have completed the program they started and enrolled in another program, such as an associate's or bachelor's degree program. The group of beginning postsecondary students who enrolled in a less-than-2-year institution in 1989–90 but were not enrolled in subsequent years would have included some who completed their program and some who left without a degree or certificate. (Attainment of certificates and degrees is discussed later in this chapter.)

¹⁰All references to institution in this and succeeding chapters refer to students' "primary" institution. The "primary" institution level was the highest level of institution attended during an academic year. See appendix A for more detail. For about 94 percent of students, the level of the primary institution in 1989–90 was the same as that of the first institution attended.

¹¹1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92), Data Analysis System.

Figure 2.1—Percentage of 1989–90 beginning postsecondary students enrolled during the academic years 1990–91 and 1991–92, by level of primary institution attended in 1989–90



NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Among the beginning postsecondary students who enrolled in 2- to 3-year institutions in 1989–90, 60 percent were enrolled the following year (1990–91) and 50 percent the year after that (1991–92). Although most programs in this type of institution are 2 years or less, one reason that so many 1989–90 beginners were enrolled in 1991–92 (three years after entry) is that 49 percent of them began their enrollment in 1989–90 on a part-time basis.¹² Also, some may have stopped out and returned, and still others may have completed an associate's degree or certificate and enrolled in another program. Transfers among institution types and intensity of enrollment are discussed later in this chapter.

¹²1990 Beginning Postsecondary Students Longitudinal Study First Followup [BPS:90/92], Data Analysis System.

In 1990-91, 84 percent of the beginning postsecondary students who had enrolled in a 4-year institution in 1989-90 were enrolled, and in 1991-92, 80 percent were enrolled. The drop in enrollment was greatest in the first year: 16 percent did not enroll in 1990-91, and 4 percent more (for a total of 20 percent) did not enroll in 1991-92. Among beginning postsecondary students who enrolled in a 4-year institution in 1989-90, those enrolled in a private, not-for-profit institution were more likely than those enrolled in a public institution to be enrolled in 1990-91 (87 percent compared with 83 percent).

Many students apparently either changed or delayed their educational plans after enrolling in postsecondary education. Of the 1989-90 beginning postsecondary students who reported in 1989-90 that they aspired to 2 or more years of college (but not a baccalaureate degree), 47 percent did not enroll for a second year in 1990-91 (figure 2.2). Many of those who aspired to a bachelor's or advanced degree left postsecondary education within a year as well: 30 percent and 19 percent, respectively, did not enroll in 1990-91.

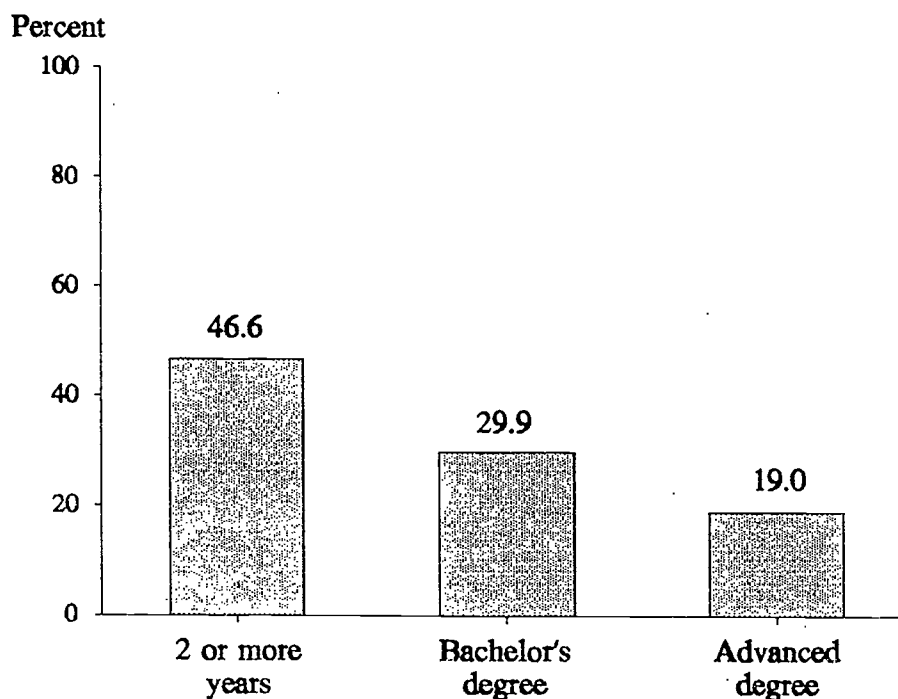
Table 2.1 shows that the likelihood of being enrolled in 1990-91 and 1991-92 varied according to the background characteristics of the 1989-90 beginning postsecondary students, but much of this variation is also reflective of the types of institutions they attended. Variation in persistence and attainment by student characteristics controlling for institution level is discussed later (see table 2.6).

Enrollment by Institution Level and Control

The enrollment of 1989-90 beginning postsecondary students at different types of institutions shifted over the period of the survey as students completed, stopped out, or dropped out of programs and transferred among types of institutions. Most of the 1989-90 beginning postsecondary students who were enrolled in 1990-91 remained at the same level, and most of those who were enrolled in 1991-92 remained at the same level as the one they were in during 1990-91 (table 2.2 and figure 2.3).¹³ However, some transferred from one level to another, most often from a lower level to a higher level. For example, 14 percent of the 1989-90 beginning postsecondary students who enrolled in a 2- to 3-year institution in 1990-91 enrolled in a 4-year institution in 1991-92. Nevertheless, some transferred to a lower level institution. For instance, 7 percent of those who enrolled in a 4-year institution in 1989-90 enrolled in a 2- to 3-year institution the following year, and 4 percent of the 1989-90 beginners who enrolled in a 4-year institution in 1990-91 enrolled in a 2- to 3-year institution in 1991-92. About 20 percent of the 1989-90 beginning postsecondary students who did not enroll in 1990-91 returned the following year, primarily to 2- to 3-year institutions (12 percent returned to this type of institution).

¹³Table 2.2 does not provide a complete picture of postsecondary transfers because it shows only sector transfers, not institutional transfers at the same level.

Figure 2.2—Percentage of 1989–90 beginning postsecondary students who did not enroll during the 1990–91 academic year, by students' educational aspirations in 1989–90

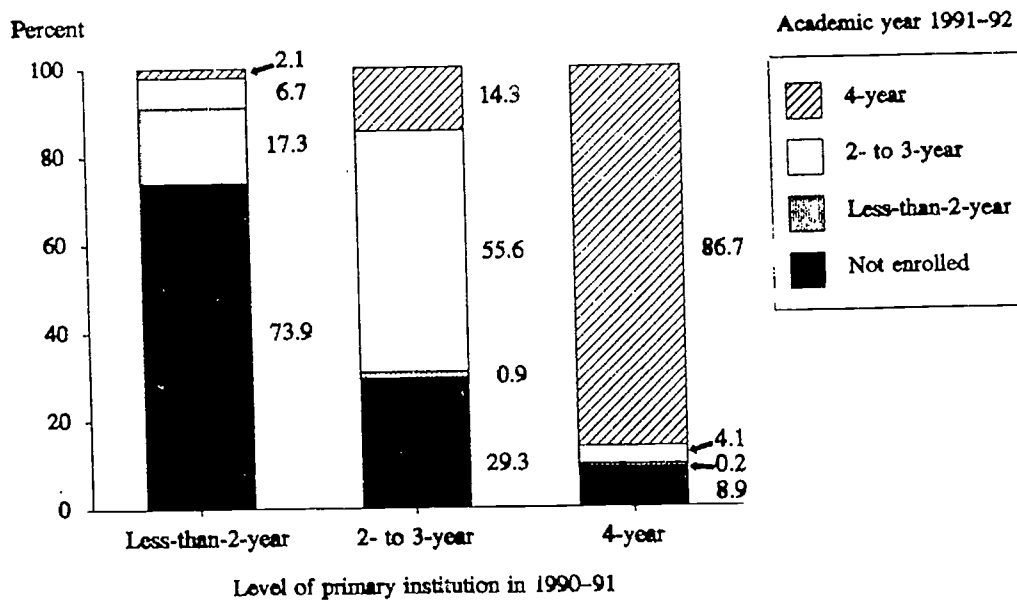
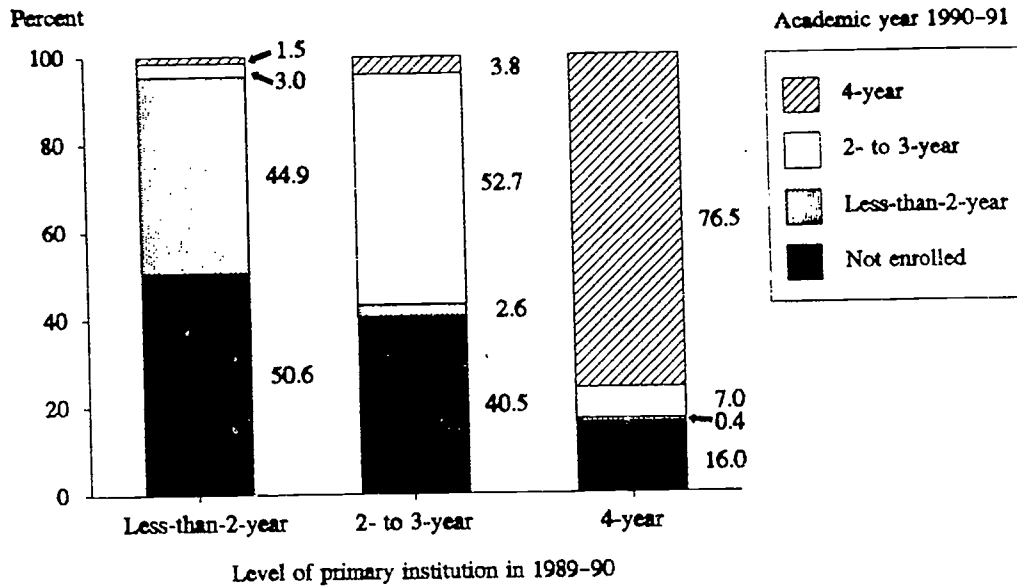


SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Although some students may have transferred because their aspirations changed and some may have transferred for financial or personal reasons, some also transferred because the institution they attended in 1989–90 was not the highest level that they expected to attend. For example, as shown in chapter 1 (table 1.1), 55 percent of the students who aspired to a bachelor's degree and 35 percent of those who aspired to an advanced degree when they began their postsecondary education in 1989–90 enrolled first in a 2- to 3-year institution.

The majority of beginning postsecondary students enrolled in public institutions in 1989–90 (table 2.3). About three-quarters (74 percent) attended public institutions; 16 percent attended private, not-for-profit institutions; and 10 percent attended private, for-profit institutions. These proportions varied markedly by level. At the less-than-2-year level, beginning postsecondary students were concentrated in private, for-profit institutions (76 percent), and at the 2- to 3-year level, in public institutions (89 percent). At the 4-year level, more beginning postsecondary students enrolled in a public institution (69 percent) than in a private, not-for-profit one (32 percent).

Figure 2.3—Percentage distribution of 1989–90 beginning postsecondary students by level of postsecondary institutions during the academic years 1990–91 and 1991–92, by level of primary institution attended the previous year



NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Almost all of the beginning postsecondary students who enrolled in a public institution in 1989–90 either stayed in a public institution the following year (65 percent) or left postsecondary education (32 percent). Only 1 percent transferred to a private, not-for-profit institution, and only 2 percent transferred to a private, for-profit institution. Transferring from the private, not-for-profit sector to the public sector was much more common. Among those who enrolled in a private, not-for-profit institution in 1989–90, 14 percent enrolled in a public institution in 1990–91; and among those who were enrolled in a private, not-for-profit institution in 1990–91, 11 percent transferred to a public institution in 1991–92. About 20 percent of the 1989–90 beginners who did not enroll in 1990–91 enrolled again in 1991–92. Most (16 percent) enrolled in public institutions.

Intensity of Enrollment

The intensity of student enrollment affects the time it takes students to earn a degree, the likelihood of earning a credential, and the cost of postsecondary education.¹⁴ For the purposes of this analysis, the measure of intensity of enrollment takes into account whether students attended full time or less than full time and whether they attended for all or only part of an academic year. The categories used to classify intensity of enrollment were “continuous full-time,” defined as continuous, full-time enrollment for at least 8 months during the academic year (September to May); “other continuous,” defined as at least 8 months of continuous enrollment, but less than full time for some or all of their attendance; and “noncontinuous,” a residual category that includes students who were enrolled for less than 8 months. These noncontinuous students might have been enrolled full time, part time, or a mix of full and part time.

More than one-half (56 percent) of the beginning postsecondary students were enrolled continuously full time in 1989–90. Another 16 percent were enrolled continuously less than full time, and 28 percent were noncontinuously enrolled (table 2.4). This pattern varied by institution level. Among the 1989–90 beginning postsecondary students, those in 4-year institutions were more likely than those in 2- to 3-year and less-than-2-year institutions to be enrolled continuously full time (77 percent compared with 41 percent and 28 percent, respectively). Among the beginning postsecondary students who enrolled in 4-year institutions in 1989–90, those in private, not-for-profit institutions were more likely than those in public institutions to be continuous full time (82 percent compared with 75 percent). More than one-half (57 percent) of the 1989–90 beginning postsecondary students in private, for-profit institutions (which offer mainly short-term vocational programs) were noncontinuously enrolled by the definition used here.

¹⁴The relationship between attendance patterns and degree attainment using the High School and Beyond data is presented in C. Dennis Carroll, *College Persistence and Degree Attainment for 1980 High School Graduates: Hazards for Transfers, Stopouts, and Part-Timers* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, CS 89-302, January 1989), and James C. Hearn, “Emerging Variations in Postsecondary Attendance Patterns: An Investigation of Part-Time, Delayed, and Nondegree Enrollment”, *Research in Higher Education* 33 (1992) 657–687.

Enrollment in Academic and Vocational Programs

This description of enrollment in academic and vocational programs is limited to students in 2- to 3-year institutions. One-third of the beginning postsecondary students who enrolled in a 2- to 3-year institution in 1989-90 reported that they were enrolled in a vocational program (table 2.5). In private, for-profit institutions, however, 66 percent were in vocational programs.

The percentages enrolled in academic and vocational programs varied with student characteristics. For example, those who aspired to an advanced degree and those who were in the top SES quartile were less likely than those with lower aspirations and from other SES quartiles to choose a vocational program in 1989-90. Older students were more likely than younger students to choose a vocational course of study. Fifty percent of the beginning postsecondary students age 30 or older enrolled in a vocational program in 1989-90, compared with 28 percent of those age 23 or younger.

Persistence and Attainment

At the time of the first BPS followup in spring 1992, 41 percent of the 1989-90 beginning postsecondary students were enrolled in postsecondary education, either having been continuously enrolled or having left and returned (table 2.6). Another 18 percent had left by that time with a degree or certificate. The rest had left—either permanently or temporarily—without any kind of postsecondary award. Approximately one-half of those who left without a degree or certificate left during their first year (that is, before July 1990). The 1989-90 beginning postsecondary students who earned a degree or certificate and then enrolled in another postsecondary program appear in table 2.6 in the “attained” column, not the “still enrolled” column.¹⁵

Attainment was, of course, closely related to institution type. One would expect a relatively large proportion of the beginners who enrolled in a less-than-2-year institution in 1989-90 to have completed their studies, but would expect a relatively small proportion of those in 4-year institutions to have done so. That was indeed the case. Among the beginning postsecondary students who enrolled in a less-than-2-year institution in 1989-90, 57 percent had earned a degree or certificate by spring 1992, while among those who enrolled in a 4-year institution in 1989-90, only 5 percent had done so (figure 2.4). However, it should be noted that some 4-year institutions offer certificates and degrees below a baccalaureate, and that 27 percent of the beginners who enrolled in a 4-year institution were enrolled in

¹⁵The categories shown in table 2.6 were constructed as follows: Students were first divided into those who reported that they had earned any type of postsecondary credential and those who reported they had not. Among those who reported that they had not earned a credential, students who were still enrolled were separated from those who were no longer enrolled. This latter group was then allocated to one of three categories based upon their last month of enrollment in postsecondary education. For more information on this variable and additional tabulations, see U.S. Department of Education, National Center for Education Statistics, *Persistence and Attainment in Postsecondary Education for Beginning AY 1989-90 Students as of Spring 1992*, NCES 94-477 (Washington, D.C.: October 1993).

nonbaccalaureate programs.¹⁶ Of those enrolled in associate degree programs, 14 percent had earned a postsecondary award. Among beginning postsecondary students who chose a 2- to 3-year institution in 1989-90, 23 percent had earned some type of postsecondary award.

The beginning postsecondary students who enrolled in a 4-year institution in 1989-90 were less likely than those who enrolled in a less-than-4-year institution to leave during the first year (table 2.6). Twelve percent left in their first year without completing, compared with 28 percent of those who started in a 2- to 3-year institution and 25 percent of those who started in a less-than-2-year institution.

Variation by student characteristics could not be examined in less-than-2-year institutions because relatively few beginning postsecondary students attended less-than-2-year institutions (9 percent) and, because of the short length of most of the programs, 57 percent had completed by 1992. In 2- to 3-year institutions, 23 percent of the beginning postsecondary students who enrolled in a 2- to 3-year institution in 1989-90 had attained some postsecondary award by spring 1992, and 27 percent were still enrolled. Another 28 percent had left in the first year, and the rest left later. This pattern varied with student and institutional characteristics. For example, females were more likely than males to have earned a degree or certificate (28 percent compared with 18 percent), as were students who had received mostly As (36 percent) compared with those who had received mostly Bs and Cs or lower (5 percent to 18 percent). Beginning postsecondary students who enrolled in 2- to 3-year public institutions in 1989-90 were less likely to have earned a degree or certificate (20 percent) than were those who enrolled in private, not-for-profit institutions (40 percent) or private, for-profit institutions (51 percent).

Age and SES affected the likelihood of leaving in the first year. Beginning postsecondary students age 30 or older were more likely than those age 23 or younger to have left postsecondary education by July 1990 (43 percent compared with 23 percent), as were those from the bottom SES quartile when compared with those in the top SES quartile (37 percent compared with 21 percent).

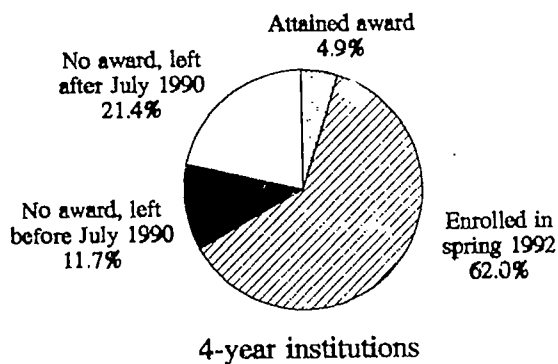
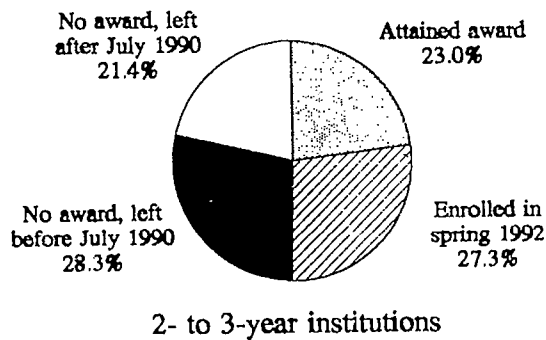
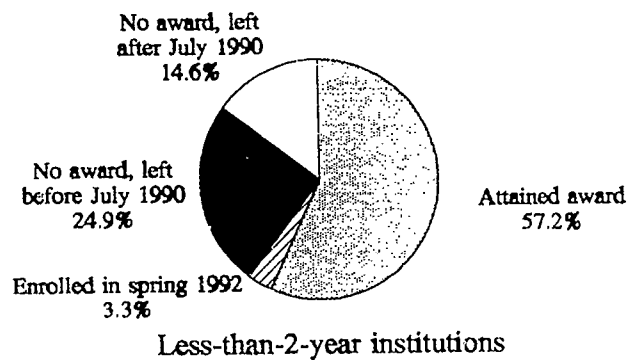
The majority (62 percent) of the beginning postsecondary students who enrolled in a 4-year institution in 1989-90 were enrolled in spring 1992.¹⁷ Twelve percent had left in their first year (before July 1990), 7 percent in their second year (before July 1991), and 14 percent during their third year (between July 1991 and spring 1992).

As was true for beginning postsecondary students who enrolled in a 2- to 3-year institution in 1989-90, the educational experiences of those who enrolled in a 4-year institution varied with student and institutional characteristics. Asians were more likely than white or black, non-Hispanics to be enrolled in spring 1992 (79 percent compared with 62

¹⁶BPS:90/92 Data Analysis System.

¹⁷This percentage differs from the 80 percent of 1989-90 beginning postsecondary students shown in table 2.1 who were enrolled in a 4-year institution at some time in 1991-92 because, as table 2.6 shows, some students attained an award by spring 1992 (5 percent) and some left during 1991-92 (14 percent).

Figure 2.4—Percentage distribution of 1989–90 beginning postsecondary students by enrollment and attainment by spring 1992, by institution level



NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

percent and 58 percent, respectively).¹⁸ Those with the lowest grades in 4-year institutions (less than Cs) were the least likely to be enrolled in spring 1992 (17 percent, compared with at least 50 percent for those with higher grades). As was true in 2- to 3-year institutions, beginning postsecondary students who were in the oldest age group and from the bottom SES quartile were more likely to leave postsecondary education by July 1990. While the beginning postsecondary students who enrolled in public and private, not-for-profit institutions in 1989-90 were equally likely to be enrolled in spring 1992 (62 percent), those who selected a public institution in their first year were more likely to leave during their first year than those who chose a private, not-for-profit institution (13 percent compared with 9 percent).

Academic and Social Integration

One of the unique strengths of BPS is the inclusion of a number of items that are related to assessing academic and social integration.¹⁹ While most empirical studies of academic and social integration have been based on either a single institution or a limited number of institutions, BPS contains data on all types of postsecondary institutions.

In both 2- to 3-year and 4-year institutions, beginning postsecondary students who reported never participating in study groups, socializing with faculty members or advisors, or talking to faculty members outside of class were more likely to leave in the first year than were those who reported doing so several times per term or more often (table 2.7). Among beginning postsecondary students who enrolled in a 4-year institution in 1989-90, those who never participated in these activities were less likely than those who participated several times or more to be enrolled in spring 1992. Among those who enrolled in 2- to 3-year institutions in 1989-90, students who never participated in study groups or socialized with faculty or an advisor were less likely than those who participated in these activities often each term to attain some postsecondary award.

Types of Postsecondary Awards Attained

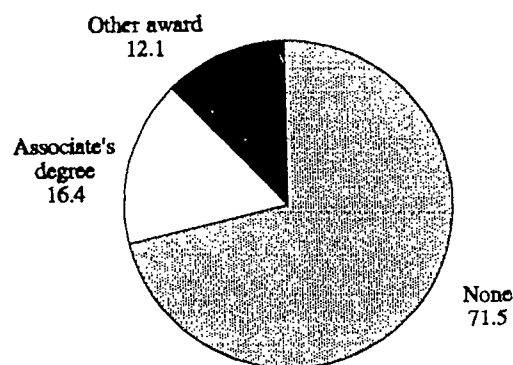
Of the 1989-90 beginning postsecondary students who enrolled in a 2- to 3-year institution in 1989-90, 72 percent had not earned any type of postsecondary award by spring 1992 (table 2.8 and figure 2.5).²⁰ This includes students who had left and those who were still enrolled (see table 2.6). These students might be still enrolled if they were attending part time, if they stopped out at some point and returned, or if they transferred to a 4-year

¹⁸The difference between Asians and Hispanics was not statistically significant.

¹⁹The best known work on the effects of academic and social integration is Vincent Tinto's *Leaving College* (Chicago: University of Chicago Press, 1987). Tinto argued that increasing academic and social integration is associated with a higher likelihood of persistence within an institution. His theoretical model attempts to account for students leaving a particular postsecondary institution, but not for leaving postsecondary education in general. The BPS data may be useful in evaluating whether or not the Tinto model is helpful in explaining this type of postsecondary departure.

²⁰The attainment data in table 2.8 differ from those in tables 2.6 and 2.7 due to different numbers of missing cases. Fewer students in the sample reported the actual type of award they received than those who reported receiving any award.

Figure 2.5—Percentage distribution of 1989–90 beginning postsecondary students by attainment by spring 1992



NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

institution. However, 16 percent had earned an associate's degree, and 9 percent had received a certificate that took less than 2 years to complete (table 2.8).

Some students appeared to have changed their goals after enrolling. Of the beginning postsecondary students who enrolled in associate's degree programs in 1989–90, 19 percent had earned an associate's degree, but another 7 percent had instead earned a less-than-2-year certificate, 2 percent had earned a 2- or 3-year vocational certificate, and 1 percent had earned a less-than-2-year license²¹. In addition, 16 percent of those who originally entered a certificate program had earned an associate's degree instead. Some of these students may have always aspired to an associate's degree but started in a certificate program, while others may have changed their goal while enrolled.

There were some gender differences in attainment. Females were more likely than males to have earned any award and were more likely to have earned an associate's degree. Twenty-one percent of females had earned an associate's degree, compared with 12 percent of males. There were also differences by type of institution. Beginning postsecondary students who enrolled in a private, for-profit 2- to 3-year institution in 1989–90 were considerably more likely than those in a public or private, not-for-profit institution to earn a less-than-2-year certificate (27 percent compared with 7 percent and 9 percent, respectively).

²¹Certificates are awarded by the institution and indicate program completion. Licenses are permission to practice in a field and award is from a governing body other than the institution. In some fields, e.g., cosmetology, a license is required to practice in addition to program completion.

Table 2.1—Percentage distribution of 1989–90 beginning postsecondary students by enrollment status during the academic years 1990–91 and 1991–92, by selected student and institutional characteristics

	AY ¹ 1990–91		AY ¹ 1991–92	
	Enrolled	Not enrolled	Enrolled	Not enrolled
Total	69.4	30.6	60.1	39.9
Level and control of primary institution in AY ¹ 1989–90				
Public				
Less-than-4-year	58.6	41.4	50.6	49.4
4-year	82.5	17.5	78.7	21.3
Private, not-for-profit				
Less-than-4-year	69.2	30.8	47.0	53.0
4-year	87.0	13.0	82.0	18.0
Private, for-profit	53.5	46.4	19.0	81.0
Level of primary institution in AY ¹ 1989–90				
Less-than-2-year	49.4	50.6	14.8	85.2
2- to 3-year	59.5	40.5	49.9	50.1
4-year	83.9	16.0	79.8	20.2
Control of primary institution in AY ¹ 1989–90				
Public	68.3	31.7	62.0	38.0
Private, not-for-profit	84.9	15.1	77.8	22.1
Private, for-profit	53.6	46.4	19.0	81.0
Race–ethnicity				
White, non-Hispanic	70.1	29.9	60.6	39.4
Black, non-Hispanic	58.1	41.9	50.3	49.7
Hispanic	67.0	33.0	58.5	41.5
Asian/Pacific Islander	87.9	12.1	80.1	19.9
Native American	69.2	30.8	50.1	49.9
Gender				
Male	68.3	31.7	60.6	39.4
Female	70.4	29.6	59.7	40.3
Parent's education				
Less than high school graduate	54.5	45.5	39.1	60.9
High school graduate	64.0	36.0	52.3	47.7
Trade or vocational school	70.3	29.7	64.8	35.2
Less than 2 years of college	67.8	32.2	65.0	35.0
2 or more years of college	72.3	27.7	62.3	37.7
Bachelor's degree	79.2	20.8	74.1	25.9
Postgraduate/professional	84.1	15.9	79.9	20.1
Age as of 12/31/89				
23 or younger	74.1	25.9	66.9	33.1
24–26	45.2	54.8	17.2	82.8
27–29	50.2	49.8	38.9	61.1
30 or older	45.3	54.8	28.1	71.9
Socioeconomic status				
Bottom quartile	54.0	46.0	37.4	62.6
Middle quartiles	65.4	34.6	55.2	44.8
Top quartile	79.8	20.3	74.3	25.8

Table 2.1—Percentage distribution of 1989–90 beginning postsecondary students by enrollment status during the academic years 1990–91 and 1991–92, by selected student and institutional characteristics—Continued

	AY ¹ 1990–91		AY ¹ 1991–92	
	Enrolled	Not enrolled	Enrolled	Not enrolled
Dependency status in AY ¹ 1989–90				
Dependent	76.2	23.8	70.5	29.5
Independent	50.2	49.8	30.7	69.3
Educational aspirations in AY ¹ 1989–90				
Trade or vocational school	44.5	55.5	15.6	84.4
2 or more years of college	53.4	46.6	36.9	63.1
Bachelor's degree	70.1	29.9	61.5	38.5
Advanced degree	81.0	19.0	77.2	22.8

¹AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 2.2—Percentage distribution of 1989–90 beginning postsecondary students by institution level during the academic years 1990–91 and 1991–92, by selected student and institutional characteristics

	AY ¹ 1990–91				AY ¹ 1991–92					
	Less-than-2-year institution	2- to 3-year institution	4-year institution	Other institution	Not enrolled	Less-than-2-year institution	2- to 3-year institution	4-year institution	Other institution	Not enrolled
Total	5.2	28.5	35.5	0.2	30.6	1.6	21.3	36.8	0.3	39.9
Level and control of primary institution in previous AY ¹										
Public										
Less-than-4-year	3.9	50.5	3.7	0.4	41.4	1.9	55.5	14.4	0.0	27.9
4-year	0.6	6.7	75.3	0.0	17.5	0.3	3.8	86.0	0.0	10.0
Private, not-for-profit										
Less-than-4-year	6.9	56.0	6.4	0.0	30.8	1.7	39.8	22.6	0.4	35.5
4-year	0.2	7.6	79.2	0.1	13.0	0.1	4.7	88.5	0.1	6.6
Private, for-profit	30.3	21.3	1.9	0.0	46.4	9.7	16.2	3.0	0.0	71.2
Level of primary institution in previous AY ¹										
Less-than-2-year	44.9	3.0	1.5	0.0	50.6	17.3	6.7	2.1	0.0	73.9
2- to 3-year	2.6	52.7	3.8	0.4	40.5	0.9	55.6	14.3	0.0	29.3
4-year	0.4	7.0	76.5	0.0	16.0	0.2	4.1	86.7	0.0	8.9
Other institution	(*)	(*)	(*)	(*)	(*)	—	—	—	—	—
Not enrolled	(*)	(*)	(*)	(*)	(*)	1.2	12.0	5.7	0.9	80.2
Control of primary institution in previous AY ¹										
Public	2.6	32.7	32.7	0.3	31.7	1.1	30.6	48.9	0.1	19.2
Private, not-for-profit	1.0	13.4	70.5	0.1	15.1	0.3	8.4	81.6	0.1	9.6
Private, for-profit	30.3	21.3	1.9	0.0	46.4	9.7	16.1	3.0	0.0	71.2
Not enrolled	(*)	(*)	(*)	(*)	(*)	1.2	12.0	5.7	0.9	80.2
Race-ethnicity										
White, non-Hispanic	4.8	28.4	36.7	0.2	29.9	1.2	21.2	37.9	0.3	39.4
Black, non-Hispanic	8.3	19.8	30.1	0.0	41.9	2.7	15.0	31.1	1.5	49.7
Hispanic	5.9	39.3	21.7	0.0	33.1	5.3	29.3	23.8	0.0	41.6
Asian/Pacific Islander	1.8	32.5	53.6	0.0	12.1	0.2	24.3	55.6	0.0	19.9
Native American	8.7	22.6	37.9	0.0	30.8	0.0	15.1	35.0	0.0	49.9



Table 2.2—Percentage distribution of 1989–90 beginning postsecondary students by institution level during the academic years 1990–91 and 1991–92, by selected student and institutional characteristics—Continued

	AY ¹ 1990–91				AY ¹ 1991–92					
	Less-than-2-year institution	2- to 3-year institution	4-year institution	Other institution	Not enrolled	Less-than-2-year institution	2- to 3-year institution	4-year institution	Other institution	Not enrolled
Gender										
Male	4.2	28.5	35.5	0.1	31.7	1.9	22.7	35.8	0.3	39.4
Female	6.0	28.6	35.5	0.2	29.6	1.4	20.2	37.7	0.4	40.4
Parent's education										
Less than high school graduate	9.9	30.6	14.0	0.0	45.5	3.2	21.8	14.2	0.0	50.9
High school graduate	6.5	31.6	25.9	0.0	36.0	1.7	22.5	27.9	0.3	47.7
Trade or vocational school	4.4	25.0	40.9	0.0	29.7	1.0	25.0	38.8	0.0	35.2
Less than 2 years of college	3.7	30.5	33.6	0.0	32.2	2.2	28.5	34.3	0.0	35.0
2 or more years of college	5.5	26.4	40.0	0.4	27.7	0.9	20.4	41.0	0.0	37.7
Bachelor's degree	1.6	28.8	48.3	0.4	20.9	1.0	22.5	49.5	1.0	25.9
Postgraduate/professional	2.2	21.9	59.4	0.6	15.9	0.9	16.7	61.8	0.6	20.1
Age as of 12/31/89										
23 or younger	4.2	28.2	41.6	0.2	25.9	1.5	21.7	43.3	0.3	33.2
24-26	8.0	32.0	5.2	0.0	54.8	0.3	10.9	6.0	0.0	82.8
27-29	13.3	32.1	4.8	0.0	49.8	4.1	24.7	8.0	2.0	61.1
30 or older	9.4	28.3	7.6	0.0	54.8	1.8	21.6	4.7	0.0	71.9
Socioeconomic status										
Bottom quartile	10.5	29.1	14.3	0.0	46.0	2.1	20.6	14.2	0.4	62.7
Middle quartiles	6.1	31.5	27.8	0.1	34.6	2.0	23.3	29.4	0.5	44.8
Top quartile	2.1	25.0	52.3	0.4	20.3	0.9	19.3	53.8	0.2	25.8
Dependency status in AY ¹ in 1989-90										
Dependent	3.6	27.7	44.7	0.2	23.8	1.6	21.7	46.8	0.4	29.5
Independent	9.7	30.8	9.6	0.2	49.8	1.4	20.3	8.6	0.3	69.4

Table 2.2—Percentage distribution of 1989-90 beginning postsecondary students by institution level during the academic years 1990-91 and 1991-92, by selected student and institutional characteristics—Continued

	AY ¹ 1990-91				AY ¹ 1991-92					
	Less-than-2-year institution	2- to 3-year institution	4-year institution	Other institution	Not enrolled	Less-than-2-year institution	2- to 3-year institution	4-year institution	Other institution	Not enrolled
Income and dependency status in AY¹ 1989-90										
Dependent student										
Less than \$20,000	4.7	27.3	37.2	0.0	30.8	3.0	24.0	37.8	0.1	35.1
\$20,000-\$39,999	4.4	31.9	39.0	0.3	24.3	1.4	23.4	43.8	0.8	30.6
\$40,000-\$59,999	3.2	28.6	47.0	0.0	21.2	1.3	21.0	48.7	0.4	28.6
\$60,000 or more	1.7	21.3	57.0	0.5	19.4	1.0	17.9	57.3	0.0	23.7
Independent student										
Less than \$10,000	11.1	30.1	12.6	0.4	45.9	1.2	21.7	11.1	0.6	65.3
\$10,000-\$19,999	10.6	34.8	8.1	0.0	46.6	1.3	18.8	7.5	0.1	72.3
\$20,000 or more	7.3	28.3	7.2	0.0	57.2	1.8	19.8	6.4	0.0	72.0
Educational aspirations in AY² 1989-90										
Trade or vocational school	24.6	16.9	3.0	0.0	55.5	3.6	9.7	1.9	0.2	84.5
2 or more years of college	6.9	42.7	3.6	0.0	46.7	1.1	32.5	3.2	0.0	63.2
Bachelor's degree	3.4	33.9	32.6	0.3	29.9	1.5	25.2	34.5	0.4	38.5
Advanced degree	1.9	22.5	56.5	0.2	19.0	1.1	17.2	58.4	0.5	22.8

Too few cases for a reliable estimate.

*Not applicable.

¹AY Academic year. Previous AY refers to the year that precedes the academic year shown in the respective column headings. For 1990-91, previous AY=1989-90; for 1991-92, previous AY=1990-91.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).



Table 2.3—Percentage distribution of 1989–90 beginning postsecondary students by institution control during the academic years 1989–90, 1990–91, and 1991–92, by selected student and institutional characteristics

	AY ¹ 1989–90 ²		AY ¹ 1990–91		AY ¹ 1991–92						
	Public	Private, not-for-profit	Public	Private, not-for-profit	Public	Private, not-for-profit					
Total	74.3	15.6	10.1	51.2	12.1	6.2	30.6	46.7	11.1	2.3	39.9
Level of primary institution in current AY											
Less than 2-year	20.6	3.4	76.0	19.7	3.8	76.5	0.0	26.4	2.6	71.0	0.0
2- to 3-year	88.6	3.3	8.1	88.8	3.8	7.4	0.0	91.6	3.2	5.3	0.0
4-year	68.5	31.5	0.0	69.4	30.5	0.1	0.0	71.6	28.3	0.2	0.0
Other institution	(*)	(*)	(*)	—	—	—	—	—	—	—	—
Not enrolled	(*)	(*)	(*)	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0
Control of primary institution in previous AY											
Public	(*)	(*)	(*)	65.4	1.3	1.5	31.7	78.1	2.0	0.7	19.2
Private, not-for-profit	(*)	(*)	(*)	14.0	70.4	0.5	15.1	11.2	78.8	0.4	9.6
Private, for-profit	(*)	(*)	(*)	4.8	0.5	48.3	46.4	4.8	1.0	23.0	71.2
Not enrolled	(*)	(*)	(*)	(*)	(*)	(*)	(*)	16.4	1.7	4.6	80.2
Race-ethnicity											
White, non-Hispanic	74.4	16.7	8.8	51.4	13.0	5.8	29.9	46.7	11.9	2.0	39.4
Black, non-Hispanic	68.8	11.1	20.2	38.7	8.9	10.6	41.9	37.7	8.5	4.2	49.7
Hispanic	77.7	9.8	12.5	55.5	6.5	4.9	33.1	48.2	6.6	3.6	41.6
Asian/Pacific Islander	78.9	16.1	5.0	70.3	13.2	4.4	12.1	66.4	12.5	1.1	19.9
Native American	68.3	13.5	18.2	50.0	7.8	11.4	30.8	43.0	6.8	0.2	49.9
Gender											
Male	77.0	15.6	7.3	51.1	12.4	4.8	31.7	46.1	11.9	2.7	39.4
Female	71.8	15.6	12.6	51.2	11.8	7.4	29.6	47.2	10.5	2.0	40.4
Parent's education											
Less than high school graduate	74.7	5.9	19.4	40.1	3.7	10.7	45.5	31.4	3.1	4.6	60.9
High school graduate	74.4	12.0	13.6	47.3	8.7	8.0	36.0	41.7	8.1	2.5	47.7
Trade or vocational school	70.0	17.6	12.4	51.9	12.3	6.1	29.7	51.9	11.2	1.8	35.2
Less than 2 years of college	79.2	12.5	8.3	52.6	9.2	5.9	32.2	52.0	8.5	4.5	35.0
2 or more years of college	75.8	16.4	7.8	53.5	12.1	6.6	27.7	49.9	11.1	1.3	37.7
Bachelor's degree	76.3	19.6	4.1	61.6	15.0	2.5	20.9	59.0	13.9	1.1	25.9
Postgraduate/professional	68.4	29.7	1.9	56.7	26.0	1.4	15.9	54.5	24.0	1.4	20.1

Table 2.3—Percentage distribution of 1989–90 beginning postsecondary students by institution control during the academic years 1989–90, 1990–91, and 1991–92, by selected institutional and student characteristics—Continued

	AY ¹ 1989–90 ²			AY ¹ 1990–91			AY ¹ 1991–92		
	Public	Private, not-for-profit	Private, for-profit	Public	Private, not-for-profit	Private, for-profit	Public	Private, not-for-profit	Private, for-profit
Socioeconomic status									
Bottom quartile	70.1	7.7	22.2	36.8	5.6	11.6	30.7	4.0	2.6
Middle quartiles	75.6	12.1	12.3	49.2	8.8	7.4	43.8	8.5	2.9
Top quartile	74.3	22.6	3.2	58.8	18.3	2.6	55.9	16.8	1.5
Age as of 12/31/89									
23 or younger	74.3	17.6	8.1	55.3	13.8	5.1	52.1	12.7	2.0
24–26	72.7	5.5	21.8	31.2	2.6	11.4	10.7	2.5	3.9
27–29	67.5	6.2	26.2	29.6	4.4	16.1	28.8	3.3	6.8
30 or older	77.0	6.0	17.0	32.1	5.5	9.6	22.7	2.8	2.6
Dependency status in AY¹ 1989–90									
Dependent	75.1	18.8	6.1	57.1	14.9	4.2	54.8	13.7	2.0
Independent	71.9	6.6	21.4	34.4	4.1	11.7	23.6	3.7	3.3
Income and dependency status in AY¹ 1989–90									
Dependent student	73.8	15.9	10.3	53.0	11.0	5.2	51.4	10.6	3.0
Less than \$20,000	76.3	16.5	7.1	57.4	12.7	5.6	55.6	11.6	2.2
\$20,000–\$39,999	77.2	18.6	4.2	60.1	15.0	3.7	56.8	13.3	1.3
\$40,000–\$59,999	72.4	24.9	2.7	57.2	21.5	1.9	54.6	20.1	1.5
\$60,000 or more	65.9	7.2	26.9	36.6	3.5	14.1	27.3	2.7	4.8
Independent student	70.2	6.1	23.7	34.6	5.8	13.0	20.0	5.1	2.6
Less than \$10,000	80.5	6.4	13.1	31.6	3.3	7.8	22.3	3.6	2.1
\$10,000–\$19,999									
\$20,000 or more									

Table 2.3—Percentage distribution of 1989–90 beginning postsecondary students by institution control during the academic years 1989–90, 1990–91, and 1991–92, by selected institutional and student characteristics—Continued

Educational aspirations in AY ¹ 1989–90	AY ¹ 1989–90 ²			AY ¹ 1990–91			AY ¹ 1991–92			
	Public	Private, not-for-profit	Private, for-profit	Public	Private, not-for-profit	Private, for-profit	Public	Private, not-for-profit	Private, for-profit	Not enrolled
Trade or vocational school	51.2	3.8	45.0	17.0	2.6	24.9	10.7	1.5	3.3	84.5
2 or more years of college	80.7	5.5	13.9	41.5	2.8	8.9	31.6	1.9	3.3	63.2
Bachelor's degree	79.7	13.8	6.5	56.1	9.3	4.8	50.5	9.0	2.1	38.5
Advanced degree	72.5	23.9	3.6	58.8	19.9	2.3	57.1	18.3	1.8	22.8

¹Too few cases for a reliable estimate.
²Not applicable.

³AY=Academic year. Current AY refers to the year shown in the respective column headings. Previous AY refers to the year that precedes the academic year shown in the respective column headings.

⁴All students enrolled in 1989–90.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Perc. stages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).



Table 2.4—Percentage distribution of 1989–90 beginning postsecondary students by enrollment pattern during the academic years 1989–90, 1990–91, and 1991–92, by selected student and institutional characteristics

	Enrollment AY ¹ 1989–90 ²		Enrollment AY ¹ 1990–91		Enrollment AY ¹ 1991–92						
	Continuous full-time	Other non-continuous	Continuous full-time	Other non-continuous	Continuous full-time	Other non-continuous					
Total	55.9	16.1	28.0	42.2	8.2	19.0	30.6	35.0	7.4	17.7	39.9
Level and control of primary institution in current AY ¹ :											
Public											
Less-than-4-year	39.5	22.5	38.0	43.1	21.0	35.9	0.0	33.4	21.9	44.7	0.0
4-year	75.3	12.2	12.5	78.5	7.2	14.3	0.0	73.3	9.1	17.6	0.0
Private, not-for-profit											
Less-than-4-year	52.0	10.5	37.5	61.5	10.0	28.5	0.0	38.1	6.1	55.9	0.0
4-year	82.1	10.0	8.0	84.6	4.5	10.9	0.0	78.1	5.2	16.6	0.0
Private, for-profit	32.6	10.0	57.4	24.6	3.5	71.9	0.0	22.1	0.9	77.0	0.0
Level of primary institution in current AY											
Less-than-2-year	28.3	9.3	62.4	14.9	4.8	80.2	0.0	14.4	2.4	83.2	0.0
2- to 3-year	40.5	21.6	37.9	45.0	19.8	35.2	0.0	34.0	20.9	45.1	0.0
4-year	77.4	11.5	11.1	80.4	6.4	13.2	0.0	74.6	8.0	17.4	0.0
Other institution	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Not enrolled	(*)	(*)	(*)	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0
Control of primary institution in current AY											
Public	54.2	18.3	27.5	60.2	14.3	25.5	0.0	56.0	14.6	29.4	0.0
Private, not-for-profit	78.5	10.0	11.5	82.2	5.1	12.7	0.0	75.5	5.3	19.2	0.0
Private, for-profit	32.6	10.0	57.4	24.6	3.5	71.9	0.0	22.1	0.9	77.0	0.0
Not enrolled	(*)	(*)	(*)	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0
Race ethnicity											
White, non-Hispanic	58.0	15.5	26.5	43.3	7.7	19.0	29.9	35.4	7.3	17.9	39.4
Black, non-Hispanic	47.8	12.4	39.7	33.8	4.7	19.7	41.9	29.5	2.8	18.1	49.7
Hispanic	40.4	26.6	32.9	34.0	13.6	19.4	33.0	28.7	11.1	18.8	41.5
Asian/Pacific Islander	65.7	18.6	15.8	57.0	13.8	16.2	12.1	54.8	13.1	12.2	19.9
Native American	47.8	12.0	40.2	43.9	12.2	13.1	30.8	26.1	11.2	12.8	49.9



Table 2.4—Percentage distribution of 1989–90 beginning postsecondary students by enrollment pattern during the academic years 1989–90, 1990–91, and 1991–92, by selected student and institutional characteristics—Continued

	Enrollment AY ¹ 1989–90 ²		Enrollment AY ¹ 1990–91		Enrollment AY ¹ 1991–92	
	Continuous full-time	Other continuous	Continuous full-time	Other continuous	Continuous full-time	Other continuous
Gender						
Male	55.1	16.4	42.3	8.1	17.9	31.7
Female	56.6	16.0	42.2	8.3	19.9	29.6
			35.5	7.1	18.1	39.4
			34.6	7.8	17.3	40.3
Parent's education						
Less than high school graduate	34.0	19.9	21.8	11.5	21.1	45.5
High school graduate	47.5	17.5	34.1	8.5	21.3	36.0
Trade or vocational school	61.7	14.3	47.1	9.1	14.0	29.7
Less than 2 years of college	52.0	13.1	41.8	7.9	18.1	32.2
2 or more years of college	64.1	16.8	47.6	4.1	20.6	27.7
Bachelor's degree	68.7	14.4	55.1	8.4	15.7	20.8
Postgraduate/professional	75.1	12.1	62.5	6.6	15.0	15.9
			18.2	6.9	13.9	60.9
			26.1	7.7	18.5	47.7
			39.4	7.6	17.9	35.2
			34.0	8.3	22.7	35.0
			37.7	8.2	16.5	37.7
			47.6	8.0	18.6	25.9
			55.9	6.9	17.1	20.1
Age as of 12/31/89						
23 or younger	63.2	13.9	49.1	7.4	17.6	25.9
24–26	15.2	29.8	9.6	9.4	26.2	54.8
27–29	23.6	26.9	11.0	16.1	23.0	49.8
30 or older	21.2	27.0	8.4	11.2	25.7	54.8
			41.3	7.6	18.0	33.1
			3.3	3.5	10.4	82.8
			5.0	15.4	18.5	61.1
			5.2	5.1	17.8	71.9
Socioeconomic status						
Bottom quartile	30.8	19.1	21.6	8.3	24.0	46.0
Middle quartiles	50.2	17.6	36.7	9.2	19.5	34.6
Top quartile	71.5	13.5	56.3	6.9	16.5	20.3
			14.9	6.4	16.1	62.6
			28.0	8.1	19.1	44.8
			50.6	7.1	16.6	25.8
Dependency status in AY¹ 1989–90						
Dependent	66.5	12.9	52.5	7.3	16.4	23.8
Independent	25.4	25.5	13.2	10.8	26.2	49.8
			44.3	7.6	18.6	29.5
			8.6	7.0	15.1	69.3
Income and dependency status in AY¹ 1989–90						
Dependent student						
Less than \$20,000	58.6	12.5	44.7	8.4	16.0	30.8
\$20,000–\$39,999	66.5	12.1	51.7	6.3	17.8	24.3
\$40,000–\$59,999	68.7	14.3	54.0	8.1	16.7	21.2
\$60,000 or more	71.6	12.8	59.4	6.5	14.6	19.4
			36.8	6.1	22.0	35.0
			41.8	8.2	19.4	30.6
			43.5	9.9	17.9	28.6
			55.7	5.5	15.0	23.7

Table 2.4—Percentage distribution of 1989–90 beginning postsecondary students by enrollment pattern during the academic years 1989–90, 1990–91, and 1991–92, by selected student and institutional characteristics—Continued

	Enrollment AY ¹ 1989–90 ²		Enrollment AY ¹ 1990–91		Enrollment AY ¹ 1991–92	
	Continuous full-time	Other non-continuous ³	Continuous full-time	Other non-continuous ³	Continuous full-time	Other non-continuous ³
Income and dependency status in AY¹ 1989–90—Continued						
Independent student						
Less than \$10,000	37.2	16.7	19.0	9.0	14.4	5.9
\$10,000–\$19,999	19.1	26.3	13.0	10.4	6.7	6.2
\$20,000 or more	16.5	35.6	6.4	13.3	3.2	8.9
45.8			26.2		14.6	
46.6			30.0		14.8	
57.2			23.0		15.9	
55.5			31.3		9.2	
46.6			23.2		19.3	
29.9			20.1		19.9	
19.0			14.1		17.3	
64.4			14.3		6.3	
14.9			23.5		36.6	
12.1			25.8		5.4	
(*)			(*)		25.4	
(*)			(*)		11.3	
(*)			(*)		80.2	

Too few cases for a reliable estimate.
*Not applicable.

¹AY=Academic year. Current AY refers to the year shown in the respective column headings.

²All students enrolled in 1989–90. "Continuous full-time" means continuous, full-time enrollment for at least 8 months; "other continuous" means 8 months of continuous enrollment, but less than full time for some or all of the year; all other enrollment patterns were considered "noncontinuous."

³Students with noncontinuous enrollment may have completed a program and received an award.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 2.5—Percentage distribution of 1989–90 beginning postsecondary students in 2- to 3-year institutions by enrollment in a vocational or academic course of study during the academic years 1989–90, 1990–91, and 1991–92, by selected student and institutional characteristics

	AY ¹ 1989–90 ²		AY ¹ 1990–91		AY ¹ 1991–92	
	Vocational ³	Academic ³	Vocational ³	Academic ³	Vocational ³	Academic ³
Total	33.3	66.7	19.8	39.5	13.1	36.4
Control of primary institution in current						
Public	30.7	69.3	18.1	41.0	13.1	38.5
Private, not-for-profit	29.7	70.3	25.2	47.7	15.3	36.3
Private, for-profit	65.7	34.3	35.3	19.0	12.7	14.1
Race-ethnicity						
White, non-Hispanic	31.8	68.2	19.7	40.0	12.0	37.2
Black, non-Hispanic	47.1	52.9	17.9	26.8	18.1	21.7
Hispanic	38.3	61.7	22.7	40.0	18.2	37.7
Asian/Pacific Islander	—	—	19.5	62.5	11.3	61.1
Native American	—	—	—	—	—	—
Gender						
Male	35.9	64.1	19.2	38.8	16.0	33.3
Female	30.9	69.1	20.3	40.1	10.5	39.3
Parent's education						
Less than high school graduate	48.7	51.3	23.5	26.7	16.2	21.4
High school graduate	36.9	63.1	20.8	36.5	11.1	34.7
Trade or vocational school	38.8	61.2	23.8	39.1	25.3	37.6
Less than 2 years of college	36.0	64.0	13.6	41.7	23.1	39.0
2 or more years of college	32.9	67.1	21.1	38.7	8.2	40.4
Bachelor's degree	17.7	82.3	16.0	53.2	14.5	48.5
Postgraduate/professional	11.1	88.8	16.1	58.7	8.0	57.9
Age as of 12/31/89						
23 or younger	28.2	71.8	19.6	44.7	13.1	42.9
24–26	45.1	54.9	21.8	21.9	12.2	4.5
27–29	52.4	47.6	22.7	26.1	21.1	22.6
30 or older	49.7	50.3	17.1	24.4	11.4	21.2
Not enrolled						
Total			40.8			
Control of primary institution in current						
Public			40.8			
Private, not-for-profit			27.1			
Private, for-profit			45.8			
Race-ethnicity						
White, non-Hispanic			40.3			
Black, non-Hispanic			55.3			
Hispanic			37.3			
Asian/Pacific Islander			18.0			
Native American			—			
Gender						
Male			42.0			
Female			39.7			
Parent's education						
Less than high school graduate			49.8			
High school graduate			42.7			
Trade or vocational school			37.1			
Less than 2 years of college			44.7			
2 or more years of college			40.2			
Bachelor's degree			30.8			
Postgraduate/professional			25.2			
Age as of 12/31/89						
23 or younger			35.6			
24–26			56.3			
27–29			51.2			
30 or older			58.5			
Not enrolled						
Total						50.4

Table 2.5—Percentage distribution of 1989–90 beginning postsecondary students in 2- to 3-year institutions by enrollment in a vocational or academic course of study during the academic years 1989–90, 1990–91, and 1991–92, by selected student and institutional characteristics—Continued

	AY ¹ 1989–90 ²		AY ¹ 1990–91		AY ¹ 1991–92	
	Vocational ³	Academic ³	Vocational ³	Academic ³	Vocational ³	Academic ³
						Not enrolled
Socioeconomic status						
Bottom quartile	52.1	47.9	23.9	24.4	20.0	17.9
Middle quartiles	35.3	64.7	19.7	38.2	13.1	34.9
Top quartile	19.1	80.8	17.1	51.9	8.6	51.6
Dependency status in AY¹ 1989–90						
Dependent	25.3	74.7	18.7	47.4	13.6	45.9
Independent	49.2	50.8	21.4	25.4	12.1	19.6
Income and dependency status in AY¹ 1989–90						
Dependent student						
Less than \$20,000	32.0	68.0	21.7	36.4	17.8	39.3
\$20,000–\$39,999	27.4	72.6	21.7	46.7	15.6	46.9
\$40,000–\$59,999	22.1	77.9	15.1	55.7	12.0	47.9
\$60,000 or more	16.6	83.4	13.6	52.9	5.7	50.7
Independent student						
Less than \$10,000	45.4	54.6	19.6	31.4	11.8	25.7
\$10,000–\$19,999	53.0	47.0	26.4	24.4	13.6	13.4
\$20,000 or more	50.5	49.5	19.3	20.4	11.2	18.6
Educational aspirations in AY¹ 1989–90						
Trade or vocational school	82.9	17.1	29.1	8.6	13.2	3.9
2 or more years of college	41.9	58.1	24.4	28.5	17.5	20.0
Bachelor's degree	29.6	70.4	21.0	43.8	13.0	42.8
Advanced degree	18.2	81.8	12.1	54.4	10.1	52.9
						37.0

Too few cases for a reliable estimate.

¹AY: Academic year. Current AY refers to the year shown in the respective column headings.

²All students enrolled in 1989–90.

³Based on student report.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 2.6—Percentage distribution of 1989–90 beginning postsecondary students by persistence and attainment, by selected student and institutional characteristics

	No postsecondary award				Attained some post-secondary award ¹
	Last enrolled before July 1990	Last enrolled before July 1991	Last enrolled after June 1991	Still enrolled during BPS:92	
Total	20.7	10.1	10.7	40.6	18.0
Less-than-2-year institutions (1989–90)²					
Total	24.9	11.4	3.2	3.3	57.2
2- to 3-year institutions (1989–90)					
Total	28.3	12.5	8.9	27.3	23.0
Control of primary institution in AY ³ 1989–90					
Public	28.6	12.7	9.3	29.6	19.8
Private, not-for-profit	17.4	15.8	11.5	15.3	40.0
Private, for-profit	29.1	9.1	4.2	6.8	50.9
Race-ethnicity					
White, non-Hispanic	28.8	12.5	8.4	26.6	23.7
Black, non-Hispanic	33.0	11.5	8.2	19.6	27.8
Hispanic	22.8	15.4	14.3	31.5	16.0
Asian/Pacific Islander	14.1	4.4	7.2	53.2	21.0
Native American	—	—	—	—	—
Gender					
Male	30.3	12.9	10.0	28.8	18.0
Female	26.4	12.2	7.9	25.9	27.7
Parent's education					
Less than high school graduate	39.3	12.5	3.9	24.4	19.9
High school graduate	29.8	12.1	10.9	22.6	24.6
Trade or vocational school	25.4	1.2	11.2	29.6	32.6
Less than 2 years of college	27.8	2.8	18.2	25.9	25.3
2 or more years of college	26.5	18.0	7.8	28.1	19.5
Bachelor's degree	19.2	11.5	7.4	38.9	23.0
Postgraduate/professional	13.8	14.9	7.8	42.7	20.8
Age as of 12/31/89					
23 or younger	23.4	11.9	9.5	31.0	24.3
24–26	48.1	21.8	4.7	6.2	19.2
27–29	38.1	8.7	7.9	30.7	14.7
30 or older	43.2	12.6	8.2	16.6	19.4
Socioeconomic status					
Bottom quartile	37.2	14.4	7.3	21.8	19.3
Middle quartiles	28.9	12.0	9.6	24.8	24.7
Top quartile	21.2	12.1	8.8	35.5	22.5

Table 2.6—Percentage distribution of 1989–90 beginning postsecondary students by persistence and attainment, by selected student and institutional characteristics—Continued

	No postsecondary award				Attained some post-secondary award ¹
	Last enrolled before July 1990	Last enrolled before July 1991	Last enrolled after June 1991	Still enrolled during BPS:92	
Dependency status in AY³ 1989–90					
Dependent	20.9	11.7	10.2	32.3	24.9
Independent	41.9	13.9	6.7	18.0	19.4
Income and dependency status in AY³ 1989–90					
Dependent student					
Less than \$20,000	25.8	9.6	9.7	34.7	20.2
\$20,000–\$39,999	19.7	9.6	11.0	30.5	29.2
\$40,000–\$59,999	16.9	14.4	10.8	29.8	28.2
\$60,000 or more	21.7	15.3	8.3	36.4	18.4
Independent student					
Less than \$10,000	38.0	10.4	3.7	21.8	26.1
\$10,000–\$19,999	40.2	19.6	10.8	11.9	17.6
\$20,000 or more	46.9	13.2	6.5	19.1	14.3
Educational aspirations in AY³ 1989–90					
Trade or vocational school	48.5	13.0	2.0	8.6	27.9
2 or more years of college	36.0	13.9	9.0	20.7	20.4
Bachelor's degree	24.2	12.0	10.6	30.4	22.9
Advanced degree	21.5	11.8	9.5	35.3	21.9
Degree program in AY³ 1989–90					
Associate's degree	23.5	13.8	10.2	28.0	24.5
Bachelor's degree	39.9	18.7	3.9	32.8	4.8
Undergraduate certificate	35.2	12.6	7.1	15.3	29.7
Other undergraduate program	37.3	7.5	6.5	34.0	14.7
Postsecondary grades					
Mostly As	29.7	9.0	4.2	21.1	36.0
As and Bs	14.3	15.0	12.6	30.3	27.8
Mostly Bs	24.0	11.7	8.3	31.0	25.0
Bs and Cs	29.6	11.6	12.1	28.3	18.4
Mostly Cs	31.6	16.1	6.7	31.8	13.8
Less than Cs	50.4	18.4	8.1	18.6	4.6
4-year institutions (1989–90)					
Total	11.7	7.3	14.1	62.0	4.9
Control of primary institution in AY³ 1989–90					
Public	12.8	7.3	13.4	61.9	4.6
Private, not-for-profit	9.3	7.2	15.4	62.4	5.7
Private, for-profit	—	—	—	—	—
Race-ethnicity					
White, non-Hispanic	11.8	7.4	14.0	61.6	5.3
Black, non-Hispanic	15.1	6.5	17.9	57.5	2.9
Hispanic	12.8	9.7	11.0	62.5	4.0
Asian/Pacific Islander	4.5	4.2	10.0	79.3	2.0
Native American	—	—	—	—	—

Table 2.6—Percentage distribution of 1989–90 beginning postsecondary students by persistence and attainment, by selected student and institutional characteristics—Continued

	No postsecondary award				Attained some postsecondary award ¹
	Last enrolled before July 1990	Last enrolled before July 1991	Last enrolled after June 1991	Still enrolled during BPS:92	
Gender					
Male	12.8	6.6	14.0	63.1	3.5
Female	10.7	7.8	14.1	61.1	6.2
Parent's education					
Less than high school graduate	15.4	3.9	12.6	56.9	11.3
High school graduate	15.1	9.6	14.8	53.5	7.0
Trade or vocational school	17.8	5.6	11.4	61.0	4.2
Less than 2 years of college	10.9	10.9	13.9	60.6	3.7
2 or more years of college	10.6	7.8	14.4	64.4	2.7
Bachelor's degree	8.0	5.9	15.4	65.9	4.9
Postgraduate/professional	8.1	5.2	13.0	70.2	3.4
Age as of 12/31/89					
23 or younger	10.5	6.8	14.3	64.1	4.4
24–26	40.9	10.4	4.4	37.1	7.1
27–29	—	—	—	—	—
30 or older	38.1	21.7	9.3	16.0	14.8
Socioeconomic status					
Bottom quartile	20.9	13.1	13.9	45.0	7.1
Middle quartiles	13.6	7.8	14.3	58.4	5.8
Top quartile	9.4	6.3	13.9	66.3	4.1
Dependency status in AY³ 1989–90					
Dependent	9.9	6.5	14.4	64.9	4.3
Independent	29.3	14.4	10.4	34.2	11.7
Income and dependency status in AY³ 1989–90					
Dependent student					
Less than \$20,000	10.0	8.7	15.9	61.0	4.4
\$20,000–\$39,999	10.6	6.0	12.4	66.6	4.4
\$40,000–\$59,999	11.0	6.8	15.0	62.9	4.3
\$60,000 or more	8.1	5.4	14.9	67.7	4.0
Independent student					
Less than \$10,000	24.6	16.3	6.7	44.7	7.8
\$10,000–\$19,999	27.8	7.4	13.9	40.1	10.8
\$20,000 or more	37.5	16.3	13.7	14.1	18.4
Educational aspirations in AY³ 1989–90					
Trade or vocational school	40.6	11.4	10.3	15.7	22.0
2 or more years of college	34.8	17.8	15.3	17.5	14.6
Bachelor's degree	15.8	9.9	14.7	54.3	5.2
Advanced degree	7.8	5.4	13.6	69.3	4.1
Degree program in AY³ 1989–90					
Associate's degree	20.0	13.6	10.2	42.8	13.5
Bachelor's degree	10.2	7.0	14.4	64.4	4.0
Undergraduate certificate	10.7	2.7	16.3	62.8	7.4
Other undergraduate program	16.8	7.8	12.8	58.7	3.9

Table 2.6—Percentage distribution of 1989–90 beginning postsecondary students by persistence and attainment, by selected student and institutional characteristics—Continued

	No postsecondary award				Attained some postsecondary award ¹
	Last enrolled before July 1990	Last enrolled before July 1991	Last enrolled after June 1991	Still enrolled during BPS:92	
Postsecondary grades					
Mostly As	8.9	5.8	13.2	63.3	8.8
As and Bs	7.8	4.4	11.6	67.9	8.2
Mostly Bs	7.5	5.2	12.6	71.6	3.1
Bs and Cs	12.1	8.9	13.9	60.7	4.5
Mostly Cs	16.8	12.6	17.8	49.8	3.0
Less than Cs	35.9	29.0	17.7	17.4	0.0

-Too few cases for a reliable estimate.

¹Includes those who attained some postsecondary award but were also still enrolled (e.g., those who completed an associate's degree who were working on a bachelor's degree).

²Only the total is shown for less-than-2-year institutions because relatively few beginning postsecondary students attended less-than-2-year institutions (9%), and, because of the short length of most of the programs, 57 percent had completed by 1992.

³AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 2.7—Percentage distribution of 1989–90 beginning postsecondary students by persistence and attainment, by level of first primary institution attended and by student involvement in selected school activities

	2- to 3-year institution				4-year institution					
	Last enrolled before July 1990	Last enrolled before July 1991	Last enrolled after June 1991	Still enrolled during BPS-92	Attained some post-secondary award ¹	Last enrolled before July 1990	Last enrolled before July 1991	Last enrolled after June 1991	Still enrolled during BPS-92	Attained some post-secondary award ¹
Total	28.3	12.5	8.9	27.3	23.0	11.7	7.3	14.1	62.	4.9
Ever participate in study groups										
Never	39.3	12.7	8.0	20.1	19.9	19.8	11.4	16.7	46.1	6.0
Once per term	22.5	16.3	8.6	25.6	27.1	11.6	6.6	13.6	64.3	4.0
Several times per term	20.0	10.9	11.1	35.0	23.0	9.3	6.1	12.7	67.5	4.5
Often per term	15.6	12.1	8.1	32.5	31.7	6.7	6.3	12.5	68.5	5.9
Ever socialize with faculty or advisor										
Never	34.1	13.0	9.0	24.5	19.4	16.7	9.6	13.9	54.5	5.3
Once per term	21.4	8.4	6.0	36.8	27.4	11.6	5.5	11.9	67.7	3.4
Several times per term	19.5	12.5	11.4	29.6	27.0	5.6	6.5	14.0	68.5	5.4
Often per term	14.5	13.2	7.4	29.0	35.8	7.0	4.8	12.6	69.7	5.8
Ever talk with faculty out of class										
Never	45.2	10.2	5.3	17.2	22.1	20.0	10.9	14.7	46.8	7.7
Once per term	28.6	13.2	9.3	30.4	18.5	18.1	7.7	10.0	59.0	5.1
Several times per term	16.5	16.1	11.9	32.7	22.8	8.5	7.0	13.9	66.4	4.2
Often per term	13.3	9.6	9.9	35.4	31.8	6.8	5.5	13.3	69.0	5.4

¹Includes those who attained some postsecondary award but were also still enrolled (e.g., those who completed an associate's degree who were working on a bachelor's degree).

NOTE: Four year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS-90/92).

Table 2.8—Percentage distribution of 1989–90 beginning postsecondary students in 2- to 3-year institutions by educational attainment by June 1992, by selected student and institutional characteristics

	None	Less-than- 2-year vocational certificate ¹	Less-than- 2-year license ¹	2- to 3- year vocational diploma	2- to 3- year associate's degree
Total	71.5	8.8	1.5	1.8	16.4
Control of primary institution in AY ² 1989–90					
Public	75.6	7.3	1.3	1.4	14.4
Private, not-for-profit	53.6	9.4	1.1	4.3	31.6
Private, for-profit	30.9	26.6	3.9	4.9	32.7
Race–ethnicity					
White, non-Hispanic	71.2	7.6	1.5	1.7	17.9
Black, non-Hispanic	60.3	17.6	3.3	4.7	13.9
Hispanic	80.3	8.7	0.0	0.0	11.0
Asian/Pacific Islander	—	—	—	—	—
Native American	—	—	—	—	—
Gender					
Male	77.7	7.4	1.5	1.5	11.8
Female	65.8	10.0	1.4	2.1	20.6
Parent's education					
Less than high school graduate	72.7	13.9	0.1	2.4	10.9
High school graduate	70.2	9.3	1.4	2.5	16.5
Trade or vocational school	61.0	3.7	0.4	8.3	26.6
Less than 2 years of college	65.7	7.2	6.7	0.2	20.1
2 or more years of college	76.1	6.0	0.2	0.9	16.8
Bachelor's degree	73.8	7.1	1.1	1.1	16.6
Postgraduate/professional	76.7	3.6	1.1	0.0	18.6
Age as of 12/31/89					
23 or younger	70.9	7.4	1.7	2.0	17.9
24–26	69.3	13.7	1.1	2.2	13.7
27–29	79.4	13.3	0.3	1.5	5.5
30 or older	75.0	12.3	0.4	0.5	11.6
Socioeconomic status					
Bottom quartile	72.1	12.7	0.6	2.6	12.0
Middle quartiles	69.6	10.4	1.6	2.0	16.3
Top quartile	74.4	4.0	1.7	1.0	18.8
Dependency status in AY ² 1989–90					
Dependent	70.7	6.3	1.9	2.2	18.9
Independent	73.4	14.1	0.6	1.0	10.8

Table 2.8—Percentage distribution of 1989–90 beginning postsecondary students in 2- to 3-year institutions by educational attainment by June 1992, by selected student and institutional characteristics—Continued

	None	Less-than-2-year vocational certificate ¹	Less-than-2-year license ¹	2- to 3-year vocational diploma	2- to 3-year associate's degree
Income and dependency status in AY ² 1989–90					
Dependent student					
Less than \$20,000	74.3	7.5	1.4	2.5	14.3
\$20,000–\$39,999	66.6	7.1	1.3	4.2	20.8
\$40,000–\$59,999	67.6	7.2	3.9	0.3	20.7
\$60,000 or more	78.9	1.8	0.4	0.4	18.4
Independent student					
Less than \$10,000	67.4	20.9	1.0	0.9	9.8
\$10,000–\$19,999	74.4	11.7	0.7	2.2	10.4
\$20,000 or more	79.3	8.1	0.1	0.3	12.1
Educational aspirations in AY ² 1989–90					
Trade or vocational school	45.7	34.9	2.2	7.3	9.9
2 or more years of college	73.6	8.6	1.0	1.9	14.9
Bachelor's degree	73.1	6.3	0.7	1.6	18.1
Advanced degree	75.0	5.9	1.3	1.2	16.3
Degree program in AY ² 1989–90					
Associate's degree	70.9	6.8	1.0	2.0	19.3
Undergraduate certificate	59.9	18.6	3.5	1.9	16.1
Other undergraduate program	80.7	9.2	1.7	1.1	7.3

¹Certificates are awarded by the institution and indicate program completion. Licenses are permission to practice in a field and award is from a governing body other than the institution. In some fields, e.g., cosmetology, a license is required to practice in addition to program completion.

²AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Chapter 3

Financing Postsecondary Education

Introduction

Financing the cost of postsecondary education may involve the use of various sources of funds:²² contributions from parents, spouses, or relatives; the student's own earnings and savings; personal loans from parents or other family members; and funds awarded through formal programs of financial aid administered by the federal and state governments, the institution attended, or some other foundation or organization. This chapter will examine all these aspects of financing educational costs, with a special emphasis on how the funds available through programs of financial aid were distributed among the 1989-90 beginning postsecondary students.

In this chapter, the term "financial aid" will only be used to refer to federal, state, institutional, or other programs that provide educational funds to students, primarily through grants, scholarships, and student loans.²³ The term "student loan" will refer to funds borrowed through these programs, as opposed to loans from parents or relatives. Financial assistance through contributions from parents, spouses, or relatives will be discussed separately, and this kind of assistance is not included in references to "financial aid."

In 1989-90, the total amount of financial aid available to all students in postsecondary education was approximately \$27 billion. The federal government provided by far the largest share, including \$12 billion in federally guaranteed student loans, nearly \$5 billion in Pell grants, and about \$3 billion through other programs. The institutions themselves (primarily private, not-for-profit institutions) awarded another \$5 billion in grants and scholarships, and the states appropriated almost \$2 billion in grants and scholarships. Overall, the federal government provided nearly all of the student loan funds and about half of the grant and scholarship funds available to students in postsecondary education during the academic years 1989-90 through 1991-92.²⁴

Nearly all of the federal financial aid and most of the institutional and state funds are awarded on the basis of financial need—that is, they take into account the ability of the student and the student's family to pay in relation to the cost of attending a particular postsecondary institution. Although some of the institutional and state funds are awarded as merit scholarships (usually based on academic or athletic achievement), the majority of students who receive financial aid must demonstrate need by filing an application that discloses family income and other relevant information about the family's circumstances.

²²All references to "costs" or "educational costs" correspond to costs to students as opposed to costs to the institutions for educating the student. Cost of attendance refers to cost to the student before receipt of any financial aid.

²³Work-study was not included as a separate category of aid in the 1992 BPS survey, although it was included in 1989-90. Of those students who received work-study in 1989-90, 93 percent also received some other type of aid.

²⁴College Board, *Trends in Student Aid: 1983 to 1993* (New York: September 1993), table 1.

This chapter begins by describing the distribution of the 1989-90 beginning postsecondary students by the type of institution attended and students' total cost of attendance during their first year of enrollment according to a selected set of student and institutional characteristics. This section includes a discussion of the average cost of attendance and the average amount of financial aid these students received during the 1989-90 academic year, which is the only year for which institutional data on tuition and financial aid were collected. The proportion of the students who received financial aid during the 1989-90 academic year is then described. Next, the changes that occurred in the beginning postsecondary students' participation in financial aid programs over the next 2 academic years are discussed first by presenting the percentages of enrolled students who received financial aid in each of the following 2 years (annual participation rates), and second by showing the cumulative percentages of all the 1989-90 beginning postsecondary students who ever received financial aid. The next section looks at student borrowing in general, focusing not only on student loans from financial aid programs but also on borrowing from parents and others over the 3 academic years. Financial assistance from parents, spouses, and relatives (which is not included in "financial aid") and the reported use of personal savings are then described. The last section of this chapter examines the relationship between financial aid and persistence by comparing the proportions of aided and unaided beginning postsecondary students who had either attained a credential, were still enrolled, or had left postsecondary education by 1992.

Students' Educational Costs and Financial Aid in 1989-90

The distribution of the beginning postsecondary students among the types of institutions attended and by their total cost of attendance reported in 1989-90 is shown in table 3.1. In general, student costs were higher in public 4-year institutions than in public institutions offering less-than-4-year programs; they were also usually higher in privately controlled institutions than in public institutions. Students attending public less-than-4-year institutions were the most likely to report costs under \$4,000, and those attending public 4-year institutions were the most likely to report costs of \$4,000-\$7,999. However, those attending private, not-for-profit 4-year institutions were the most likely to report costs of \$12,000 or more.

In addition to the tuition and fees charged directly by the institution attended, the cost of attending a postsecondary institution includes the costs required to meet living expenses while enrolled, such as rent, food, transportation, books, and miscellaneous other personal expenses. Independent students, who often live off campus and may have dependent children to support, typically report living expenses that are higher than the amount reported by dependent students. For example, although independent students were more likely to attend public less-than-4-year institutions, which charge relatively low tuition, than were dependent students (61 percent compared with 38 percent), they were less likely to report total costs under \$4,000 (17 percent of the independent students compared with 34 percent of the dependent students). As shown in table 3.2, the average total costs reported in 1989-90 by independent students were about \$3,000 higher than those reported by dependent students, both for beginning postsecondary students who received no financial aid (\$8,696 compared with \$5,683) and for those who were aided (\$10,528 compared with \$7,793).

Family income was related to the level and control of the institution attended and to the students' total cost of attendance. Dependent students from families with incomes of \$60,000 or more were more likely to attend public 4-year and private, not-for-profit 4-year institutions than were those from families with incomes under \$20,000. This pattern is also reflected in the distribution of the dependent students by their total costs. Low income (under \$20,000) dependent students were more likely to have costs under \$4,000 than were high income (\$60,000 or more) students, while high income students were more likely to have total costs of \$12,000 or more than low income students. As shown in table 3.2, the average educational costs for high income dependent students were approximately \$3,000 more than for the low income dependent students (\$7,143 compared with \$4,325 for unaided students; \$10,183 compared with \$6,997 for aided students).

High income dependent students also paid higher tuition and fees than low income dependents (\$3,173 compared with \$935 for the unaided; \$6,080 compared with \$3,239 for the aided), but this was not true for independent students. Among aided independent students, for example, the average tuition and fees for high income students (\$20,000 or more) were about \$1,400 less than for low income students (under \$10,000). As shown in table 3.1, more than 40 percent of independent students with incomes of \$20,000 or more reported attendance costs of \$12,000 or more, even though over 70 percent of them were attending public less-than-4-year institutions. Unlike the dependent students, higher income independent students were more likely to attend public less-than-4-year institutions than were low income independent students (71 percent compared with 52 percent).

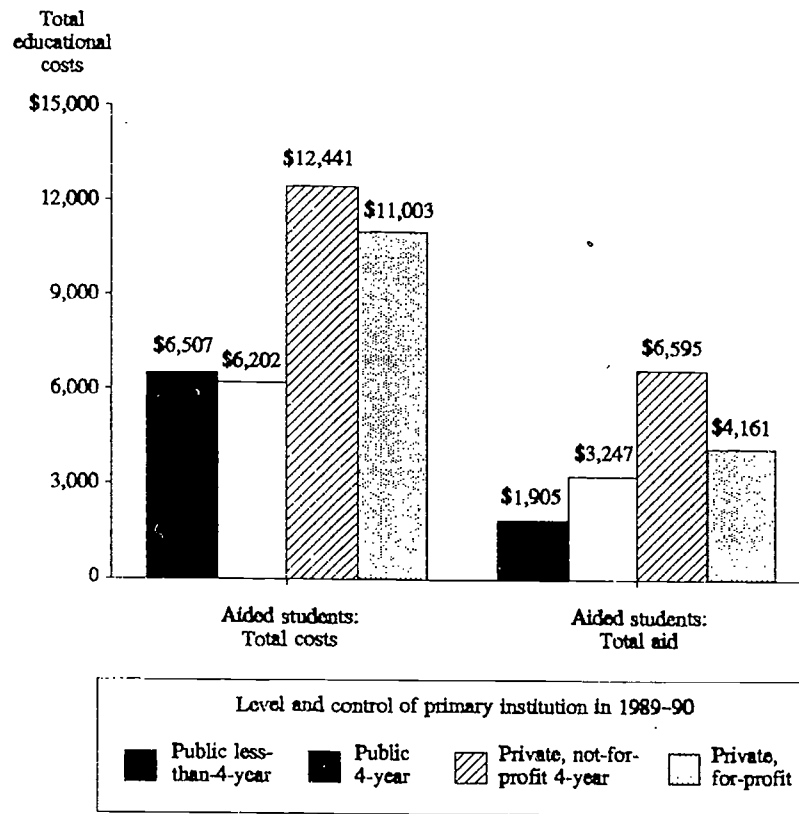
Table 3.2 shows the average tuition and fees and total costs of attendance in 1989-90 for those beginning postsecondary students who received no financial aid in the first year of enrollment compared with those who were awarded aid. Overall, the average total cost for those students who received financial aid was about \$2,200 higher than it was for those who received no aid (\$8,562 compared with \$6,407). Aided students had higher educational costs at all income levels than did unaided students, except for independent students with family incomes of \$20,000 or more.

The average total amount of aid students received was directly related to the level of tuition and fees and to their total cost of attendance. In 1989-90, the average grant or scholarship awarded to beginning postsecondary students was \$2,478; the average student loan amount was \$2,528; and the average total amount of financial aid awarded was \$3,795. The average amount of grant and scholarship aid awarded at private, not-for-profit institutions (\$4,232) was twice as much as that awarded at public or private, for-profit institutions (\$1,791 and \$1,982, respectively). The average amount of aid and the average costs for aided students is shown by type of institution attended in Figure 3.1.

The ratio of total aid to total costs is shown in the last column of table 3.2. In 1989-90, financial aid covered nearly one-half (48 percent) of the average cost of attendance for those who received financial aid, ranging from 36 percent at public less-than-4-year institutions to 56 percent at public 4-year institutions. The percentage of total costs covered by aid at 4-year private, not-for-profit institutions (54 percent) was about the same as that at 4-year public institutions.

Although the average amount of financial aid increased at each higher level of total costs, the percentage of total costs covered by the aid decreased. Aided students with total costs under \$4,000 were able to cover 62 percent of their educational costs with financial aid, while those with total costs of \$12,000 or more received enough aid to cover an average of 36 percent of costs. The ratio of aid to costs was inversely related to income for both dependent and independent students. For dependent students with family incomes under \$20,000, financial aid covered nearly two-thirds (65 percent) of the costs of attendance, compared with 38 percent of the costs for aided students with family incomes of \$60,000 or more.

Figure 3.1—Average total cost of attendance and total financial aid in academic year 1989–90 of beginning postsecondary students who received financial aid in academic year 1989–90, by level and control of primary institution attended in 1989–90



NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Annual Percentage of Enrolled Beginning Postsecondary Students Receiving Aid

The proportion of beginning postsecondary students who received financial aid in the 1989-90 academic year is shown in table 3.3a. This table includes the percentages of enrolled students who received any kind of financial aid, those who specifically received a grant or scholarship, and those who took a student loan. During their first year of enrollment, nearly one-half (45 percent) of the 1989-90 beginning postsecondary students received some kind of financial aid, and they were almost twice as likely to receive a grant or scholarship (38 percent) as they were to take a student loan (20 percent).

The need analysis that is used to award financial aid in most programs takes into account both the student's financial circumstances and the educational costs at the postsecondary institution that the student attends. The higher the cost, the more likely it is that a student will qualify for some financial aid. The percentage of beginning postsecondary students receiving financial aid during their first year of enrollment was directly related to the level of tuition and fees in 1989-90: less than 20 percent of students who were charged under \$500 in tuition and fees received any financial aid compared with more than 70 percent of those charged \$4,000 or more.

A direct relationship between the level of tuition and fees and the receipt of financial aid existed for both grants and loans, but students were much more likely to receive grants than loans at lower tuition institutions. For example, at institutions charging between \$500-\$999 in tuition and fees in 1989-90, 31 percent of the students received grants or scholarships, but only 7 percent had student loans. There were similar direct relationships between financial aid and total educational costs.

The proportion of beginning postsecondary students receiving financial aid in their first year was strongly related to the type of institution they attended. More than 70 percent of students at 4-year private, not-for-profit and at private, for-profit institutions received some financial aid, compared with 47 percent of those at public 4-year institutions and 28 percent at public less-than-4-year institutions. There was a large difference between the proportions of students attending private, not-for-profit and private, for-profit institutions who used student loans to finance their education. For example, at the 4-year private, not-for-profit institutions, 41 percent of the students took out student loans, a much smaller percentage than the 67 percent who received grants or scholarships. On the other hand, at the private, for-profit institutions, 58 percent of the students borrowed, which was virtually the same as the percentage receiving grants or scholarships at those institutions.

There was an inverse relationship between family income and the receipt of financial aid among beginning postsecondary students. In 1989-90, 66 percent of the dependent students from families with incomes under \$20,000 received financial aid. The percentage of dependents receiving any aid dropped in each successively higher income category to 21 percent for the students from families with incomes of \$60,000 or more. A similar pattern existed for the awarding of grants and scholarships, but not for student loans. Dependent students in the \$20,000-\$40,000 income category were just as likely to borrow as those with family incomes under \$20,000 (26 percent and 28 percent, respectively).

The receipt of financial aid in 1989-90 was also related to the enrollment patterns of the beginning postsecondary students during their first year. Those enrolled full time for a full academic year (at least 8 months) are classified as "continuous full-time" students; those enrolled for a full academic year but not always full time are classified as "other continuous" students; those enrolled for less than 8 months, either full time or part time, are classified as "noncontinuous" students. Continuous full-time students were much more likely to receive any aid (53 percent) than were other continuous (part-time) students (32 percent) or noncontinuous students (38 percent). This may reflect the full-time enrollment eligibility requirement for most state and institutional grant and scholarship programs, as well as the fact that about 60 percent of the students who were not enrolled continuously full time attended the lower cost public less-than-4-year institutions (table 3.1).

The percentage of beginning postsecondary students receiving financial aid in their second and third years of enrollment, which is shown in tables 3.3b and 3.3c, was about the same as that in the first year. In the 1990-91 academic year, 43 percent of the enrolled beginning postsecondary students were awarded financial aid, 33 percent with grants or scholarships and 22 percent with student loans. The percentages were similar for those enrolled in the following academic year.

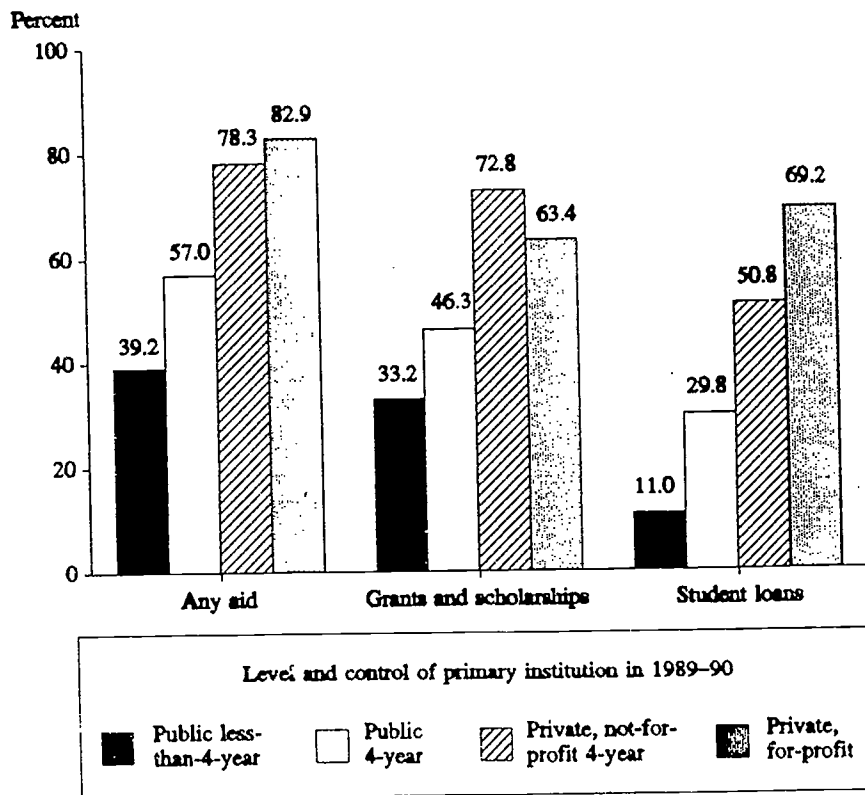
Because the annual financial aid award rates shown in tables 3.3a, b, and c are based on the number of enrolled students during the given academic year, the size and composition of the sample under consideration change each year. In chapter 2 it was shown that in the second year only about 70 percent of the beginning postsecondary students in the original cohort were enrolled, while in the third year about 60 percent were enrolled.

Cumulative Proportions Ever Aided

Another measure of the amount of participation in financial aid programs is the cumulative percentage of beginning postsecondary students who were aided at any time throughout the 3 academic years. Using this approach, the denominator is all beginning postsecondary students in 1989-90 whose financial aid and enrollment status is known for all 3 academic years (95 percent of the 1989-90 beginning postsecondary students). The cumulative rates will increase whenever a student receives aid for the first time in the second or third year of enrollment. Table 3.4 shows the cumulative percentage of beginning postsecondary students who had received any aid, any grants or scholarships, and any student loans at some time while enrolled. By 1992, more than one-half (55 percent) of the beginning postsecondary students had received financial aid at some time since 1989; 46 percent had received grants or scholarships; and 29 percent had received student loans.

The cumulative percentages of beginning postsecondary students who had ever received aid throughout the 3 academic years varied by the level and control of the primary institution they attended (figure 3.2), which in turn reflected the distribution of educational costs shown in table 3.1. Students at 4-year private, not-for-profit or private, for-profit institutions (78 percent and 83 percent) were much more likely to ever receive any aid than those at public 4-year institutions (57 percent) or those at public less-than-4-year institutions (39 percent). However, beginning postsecondary students at private, for-profit 4-year institutions were more

Figure 3.2—Percentage of all 1989–90 beginning postsecondary students who ever received any financial aid, grants, or student loans during the academic years 1989–90 through 1991–92, by level and control of primary institution attended in 1989–90



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

likely to receive student loans than those attending private, not-for-profit 4-year institutions (69 percent compared with 51 percent).

Borrowing

Although student loans from federal, state, and institutional financial aid programs were the major source of borrowed funds for the beginning postsecondary students, loans from parents and others were also an important source. During the first year of enrollment, 20 percent of the beginning postsecondary students took out loans through one of the financial aid programs, and 14 percent reported borrowing from their parents to meet educational costs (table 3.5). Dependent beginning postsecondary students were twice as likely to borrow from their parents as those who were independent (15 percent compared with 8 percent).

In mid-1990, 31 percent of 1989-90 beginning postsecondary students reported that they had borrowed to meet expenses for the first year of enrollment, and 26 percent reported that they still owed some amount of the loan. In early 1992, nearly one-half (49 percent) of those interviewed had borrowed during the previous 3 years, and 32 percent reported an outstanding debt.

As shown in table 3.5, the percentage of 1989-90 beginning postsecondary students who had ever borrowed by early 1992 was directly related to the control of the institution they attended and to the cost of attendance. At the public institutions, 41 percent had borrowed some time in the 1989-92 period, while 60 percent of those attending private, not-for-profit institutions and 83 percent of those attending private, for-profit institutions had done so. Thirty percent of beginning postsecondary students at institutions with very low tuition charging under \$500 in 1989-90 had borrowed; one-half (49 percent) of those at institutions with tuition between \$1,000 and \$2,000 had borrowed; and 69 percent of those at high tuition institutions charging over \$4,000 had borrowed. Cumulative borrowing was inversely related to family income. Dependent beginning postsecondary students with family incomes under \$20,000 in 1989-90 were twice as likely to have borrowed as those with incomes of \$60,000 or more (62 percent compared with 32 percent).

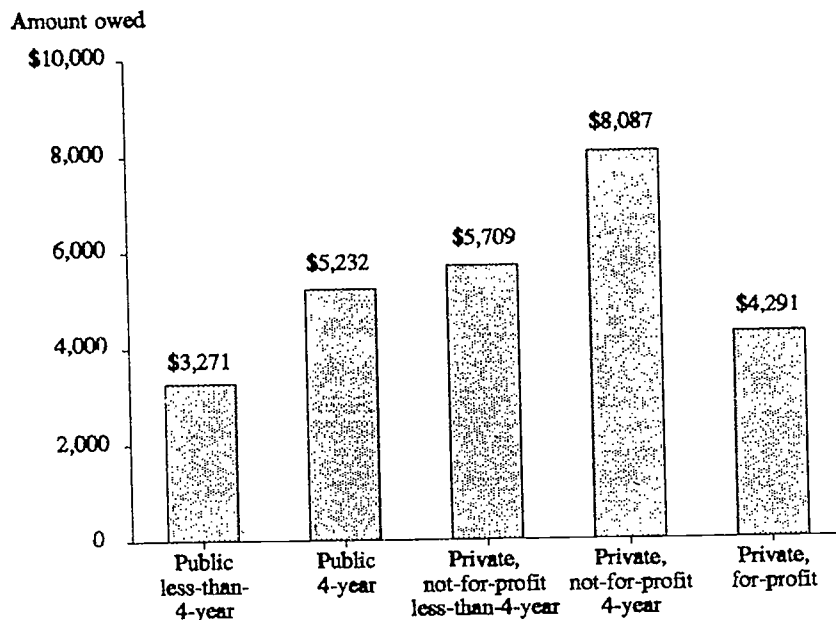
The average amount beginning postsecondary students had borrowed from all sources in the first year was almost \$2,800; by the third year of enrollment, the average amount they had borrowed doubled to \$5,700 (table 3.6). The average amount still owed by those who had an educational loan debt outstanding was \$2,617 in 1991 and \$5,345 in 1992.

The major differences in the amount borrowed and owed by 1992 were related to the type of institution attended, the duration of the programs, and the cost of education. Figure 3.3 shows the average debt for educational loans from both family and nonfamily sources by the level and control of the institution students attended in the first year of enrollment. The average amount owed in 1992 by those formerly or currently enrolled at public less-than-4-year institutions was \$3,271; \$4,291 at private, for-profit institutions; \$5,232 at public 4-year institutions; and \$8,087 at private, not-for-profit 4-year institutions. As shown in table 3.6, the average amount beginning postsecondary students had borrowed was also directly related to the amount of tuition and fees charged in 1989-90 and to the total educational costs. Beginning postsecondary students with tuition and fee charges between \$500-\$999 in 1989-90 had borrowed about \$4,000 during the years 1991-92, while those attending institutions with tuition of \$4,000 or more had borrowed nearly double that amount (\$7,857).

Assistance from the Family

The parents of the 1989-90 beginning postsecondary students were a major source of the funds used to meet educational costs, but there was a large difference in parental financial support by dependency status. In the first year, 73 percent of the dependent students reported assistance from parents compared with only 13 percent of the independent students; after 3 years, 87 percent of the dependent and 26 percent of the independent beginning postsecondary students reported ever receiving parental assistance to meet educational costs (table 3.7).

Figure 3.3—Average amount of educational loans from any source owed by 1989–90 beginning postsecondary students in February 1992, by level and control of primary institution attended in 1989–90



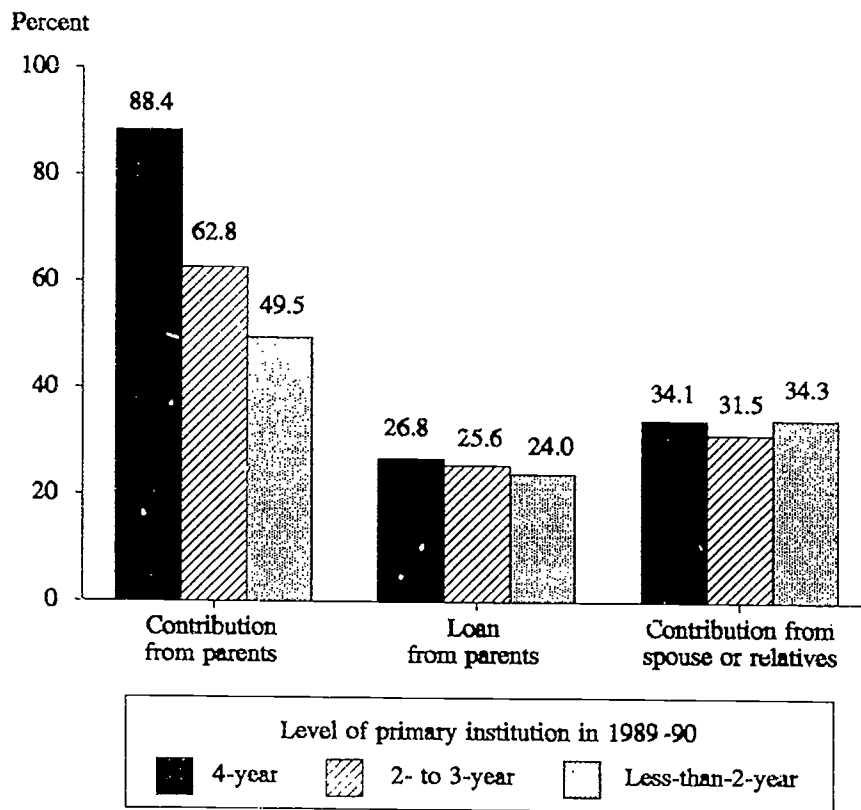
NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

As would be expected, among dependent beginning postsecondary students, the percentage who received parental assistance through 1991–92 was directly related to their parents' income. Nevertheless, more than three-quarters (77 percent) of dependents from families with incomes under \$20,000 reported some parental assistance. For dependents from families with incomes of \$40,000 or more, over 90 percent reported parental assistance. Independent students whose own incomes were under \$10,000 were much more likely to receive some parental financial assistance (39 percent) than were those with incomes of \$10,000–\$20,000 (20 percent).

Because the difference in the extent of parental assistance by dependency status is so large, institutions that enroll large proportions of independent students will have a lower percentage of students receiving parental assistance. Figure 3.4 shows that at 4-year institutions, where a majority of the beginning postsecondary students were dependent, nearly

Figure 3.4—Percentage of all 1989–90 beginning postsecondary students who ever received financial assistance from parental contributions, parental loans, or contributions from a spouse or relatives during the academic years 1989–90 through 1991–92, by level of primary institution attended in 1989–90



NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

90 percent received parental assistance; at less-than-2-year institutions, where the majority were independent, only one-half received parental assistance.

In addition to direct (non-loan) financial assistance, about one-quarter (26 percent) of the beginning postsecondary students reported receiving a loan from their parents at some time during the 3 academic years to pay educational expenses (table 3.7). Dependents were almost twice as likely to borrow from their parents as independents (29 percent compared with 15 percent). Even though the proportions of beginning postsecondary students receiving parental assistance varied widely, there was very little difference in the proportions reporting loans from parents at various institutions by either level or control.

Seventeen percent of all students (married and unmarried) reported that spouses or relatives other than parents were a source of financial assistance in their first year, and 33 percent of all beginning postsecondary students reported spouses or other relatives as a source by their third year of enrollment. Females were more likely than males to have received assistance from spouses or relatives by 1992 (36 percent compared with 29 percent), and independent beginning postsecondary students were more likely to have received such assistance than were those who were dependent (42 percent compared with 30 percent). The latter reflects the higher proportion of married beginning postsecondary students among those who were independent.

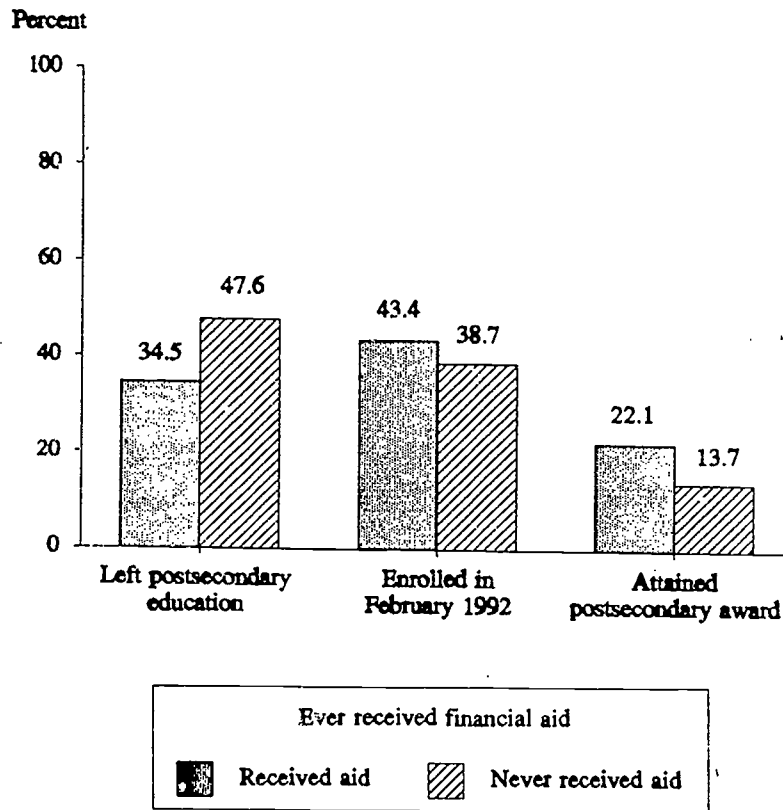
About one-third (36 percent) of students reported that they had used personal savings for their education in 1989-90. Twice as many dependent students as independent students used personal savings to pay for their educational costs in the first year (42 percent compared with 18 percent). By 1992, however, 86 percent of all beginning postsecondary students reported having used personal savings, including 80 percent of those who were independent. This could have included savings accumulated either before the first year or any time after beginning enrollment.

Persistence and Attainment

Beginning postsecondary students who received any kind of financial aid during the 3 academic years under consideration were less likely to leave postsecondary education before 1992 without completing a program and were more likely to attain a certificate or degree than those who never received any financial aid (table 3.8a and figure 3.5). Overall, nearly one-half (48 percent) of the beginning postsecondary students who never received any financial aid left postsecondary education, compared with about one-third (35 percent) of those who did receive financial aid at some time while enrolled. In addition, beginning postsecondary students who received aid were more likely to attain a credential or degree than those who never received any aid (22 percent compared with 14 percent), and those who were aided were also somewhat more likely to be enrolled in postsecondary education during the spring of 1992 (43 percent compared with 39 percent).

Both being enrolled and having attained a degree or other credential are positive indicators of persistence; classification in one category or the other largely depends on the duration of the programs offered by the institution and whether or not the student is maintaining a full-time enrollment status. Regardless of the type of institution attended, the beginning postsecondary students who received financial aid had higher rates of persistence and attainment than did those who never received such aid. At the institutions offering less-than-2-year programs (which are primarily private, for-profit), 62 percent of those who received aid had attained a credential by 1992, compared with only 46 percent of the unaided, and a higher percentage of those who were unaided had left without completing a program (52 percent of the unaided compared with 36 percent of the aided). At 2- to 3-year institutions (which are primarily public community colleges), the aided beginning postsecondary students were twice as likely to have attained a degree or certificate as the unaided (33 percent compared with 16 percent), and those who were unaided were also more likely to have left prior to the spring of 1992 (55 percent of the unaided compared with 40

Figure 3.5—Percentage of 1989–90 beginning postsecondary students who had left postsecondary education, were enrolled, or had attained a postsecondary award in February 1992, by whether they had or had not ever received financial aid



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

percent of the aided). At 4-year institutions, on the other hand, the differences in persistence between aided and unaided beginning postsecondary students were quite small, although those who were unaided were somewhat less likely to persist. By the third year, 30 percent of the aided beginning postsecondary students had left postsecondary education at the time of the interview in 1992, compared with 35 percent of those who had never received aid.

The pattern that aided beginning postsecondary students were less likely to have left postsecondary education than those who never received aid held for both males and females, for dependents and independents, and for all dependent student family income levels below \$60,000. The impact of financial aid in reducing attrition among dependents with the lowest incomes was especially evident. After 3 years, about one-third (34 percent) of the dependent beginning postsecondary students with family incomes under \$20,000 who received financial aid had left postsecondary education without attaining a credential; this was the same rate of attrition as that of the unaided from families with incomes over \$60,000 (34 percent).

For the 1989-90 beginning postsecondary students at 2- to 3-year institutions, the effect of financial aid on the attainment of a certificate or degree by early 1992 is of special interest, and overall the effect was positive (table 3.8b). Attainment for those receiving financial aid was 33 percent compared with 16 percent for those who received no financial aid at any time.

Most of the beginning postsecondary students at 2- to 3-year institutions were enrolled in public institutions (89 percent), but some attended private, for-profit (8 percent) and private, not-for-profit (3 percent) institutions (table 3.1). At the public and the private, not-for-profit institutions, those who received financial aid were more likely to have attained a credential than those who did not, while at the private, for-profit institutions there was no difference in attainment between the aided and the unaided.

Among beginning postsecondary students at 2- to 3-year institutions, the overall rates of attainment for those with low and moderate incomes were about twice as high for those who received aid as for those who did not receive financial aid. This included dependents with family incomes under \$20,000 (28 percent compared with 11 percent) and with family incomes of \$20,000-\$39,999 (40 percent compared with 22 percent), as well as independents with incomes under \$10,000 (38 percent compared with 14 percent) and with incomes of \$10,000-\$19,999 (37 percent compared with 4 percent).

The rates of persistence for the 1989-90 beginning postsecondary students who were enrolled in 4-year institutions are shown in table 3.8c. Since the beginning postsecondary students would not normally have completed a 4-year degree program by early 1992, the percentage enrolled at that time is especially relevant to assessing the effect of financial aid. At the 4-year public institutions, those who had received financial aid were somewhat more likely to be enrolled in 1992 than those who had received no aid (66 percent compared with 59 percent). There was no difference between the percentages of the aided and unaided who were enrolled in 1992 at the 4-year private, not-for-profit institutions (63 percent for both).

The positive effect of financial aid on persistence at 4-year institutions was greatest for dependent students from low income families (under \$20,000): nearly two-thirds (64 percent) who received financial aid were enrolled in 1992, compared with less than half (44 percent) of the low income dependents who never received financial aid. Moreover, aided and unaided beginning postsecondary students were equally likely to be enrolled after 3 years regardless of tuition and fees or total cost of \$4,000 or more. Financial aid therefore appears to have offset the potentially adverse effect on persistence of the higher costs of 4-year institutions.

Table 3.1—Percentage distribution of 1989-90 beginning postsecondary students by level and control of institution attended and students' total cost of attendance in academic year 1989-90, by selected student and institutional characteristics

	Level and control of primary institution in AY ¹ 1989-90				Total cost in AY ¹ 1989-90			
	Public, less-than-4-year	Public, 4-year	Private, not-for-profit less-than-4-year	Private, not-for-profit 4-year	Less than \$4,000	\$4,000-\$7,999	\$8,000-\$11,999	\$12,000 or more
Total	44.4	29.9	1.9	13.7	29.7	36.0	17.1	17.2
Level and control of primary institution in AY¹ 1989-90								
Public								
Less-than-4-year	100.0	—	—	—	43.7	34.4	11.3	10.6
4-year	—	100.0	—	—	29.1	48.8	15.0	7.1
Private, not-for-profit								
Less-than-4-year	—	—	100.0	—	23.0	31.5	23.8	21.6
4-year	—	—	—	100.0	3.2	17.7	28.8	50.3
Private, for-profit	—	—	—	—	7.5	31.3	31.5	30.7
Level of primary institution in AY¹ 1989-90								
Less-than-2-year	20.6	—	3.4	—	14.9	27.7	28.3	29.1
2- to 3-year	88.6	—	3.3	—	40.2	34.6	13.1	12.1
4-year	—	68.5	—	31.5	21.0	39.1	19.3	20.6
Control of primary institution in AY¹ 1989-90								
Public	59.8	40.2	—	—	37.8	40.2	12.8	9.1
Private, not-for-profit	—	—	12.0	88.0	5.5	19.4	28.2	46.9
Private, for-profit	—	—	—	—	7.5	30.3	31.5	30.7
Tuition and fees in AY¹ 1989-90								
Less than \$500	91.4	6.9	0.3	0.8	49.2	29.8	11.2	9.8
\$500-\$999	67.3	28.6	1.8	1.5	41.9	38.0	10.2	9.9
\$1,000-\$1,999	33.1	59.8	1.6	2.4	34.5	47.5	12.1	5.9
\$2,000-\$3,999	6.0	60.8	2.1	10.2	15.1	57.8	16.4	10.7
\$4,000 or more	1.9	12.8	3.9	52.6	—	17.9	34.8	47.3
Total cost in AY¹ 1989-90								
Less than \$4,000	65.0	29.6	1.4	1.5	100.0	—	—	—
\$4,000-\$7,999	42.2	40.9	1.6	6.8	—	100.0	—	—
\$8,000-\$11,999	29.2	26.5	2.6	23.2	—	—	100.0	—
\$12,000 or more	27.1	12.4	2.3	40.3	—	—	—	100.0



Table 3.1—Percentage distribution of 1989-90 beginning postsecondary students by level and control of institution attended and students' total cost of attendance in academic year 1989-90, by selected student and institutional characteristics—Continued

	Level and control of primary institution in AY ¹ 1989-90				Total cost in AY ¹ 1989-90				
	Public, less- than-4-year	Public, 4-year	Private, not- for-profit less-than- 4-year	Private, not- for-profit 4-year	Private, for- profit	Less than \$4,000	\$4,000 \$7,999	\$8,000 \$11,999	\$12,000 or more
Enrollment pattern in AY¹ 1989-90									
Continuous full-time	30.9	41.0	1.8	20.5	5.8	23.7	38.4	17.6	20.3
Other continuous	61.0	23.0	1.2	8.6	6.2	22.4	35.3	19.9	22.3
Noncontinuous	59.4	13.6	2.5	4.0	20.5	44.5	32.5	14.7	8.4
Race-ethnicity									
White, non-Hispanic	44.4	29.9	1.9	13.7	10.1	27.8	36.2	18.2	17.7
Black, non-Hispanic	43.7	30.7	2.0	14.7	8.8	35.7	35.7	14.6	14.0
Hispanic	59.4	18.3	1.1	8.7	12.5	42.0	34.1	10.4	13.5
Asian/Pacific Islander	38.7	40.2	0.9	15.2	5.0	31.8	35.4	11.7	21.1
Native American	32.8	35.5	1.4	12.1	18.2	23.0	41.9	21.3	13.8
Gender									
Male	47.6	29.4	1.7	13.9	7.3	31.1	36.4	16.6	15.9
Female	41.6	30.3	2.0	13.6	12.6	28.5	35.6	17.5	18.4
Dependency status in AY¹ 1989-90									
Dependent	38.5	36.7	1.8	17.0	6.1	34.2	37.5	15.4	12.9
Independent	60.9	11.0	1.9	4.7	21.4	16.8	31.7	22.0	29.5
Income and dependency status in AY¹ 1989-90									
Dependent student	42.5	31.3	2.0	13.8	10.3	40.7	32.7	14.8	11.8
Less than \$20,000	43.3	33.0	1.9	14.6	7.1	34.2	41.9	14.8	9.1
\$20,000-\$39,999	37.8	39.4	1.5	17.0	4.2	35.0	37.4	15.8	11.8
\$40,000-\$59,999	28.8	43.5	1.8	23.1	2.7	27.1	35.9	16.3	20.6
\$60,000 or more	52.3	13.6	2.6	4.6	26.9	19.5	34.4	24.6	21.5
Independent student	61.6	8.6	1.5	4.5	23.7	22.9	32.2	19.8	25.1
Less than \$10,000	70.6	9.9	1.4	5.0	13.1	8.5	28.0	20.7	42.8
\$10,000-\$19,999									
\$20,000 or more									

Too few cases for a reliable estimate.

¹AY = academic year
NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 3.2—Average cost of attendance and financial aid awarded in academic year 1989–90 to 1989–90 beginning postsecondary students who either received or did not receive financial aid in that academic year, by selected student and institutional characteristics

	Unaided students		Aided students				Ratio of aid to cost	
	Tuition & fees	Total costs	Tuition & fees	Total costs	Grants	Loans		Total aid
Total	\$1,661	\$6,407	\$3,663	\$8,562	\$2,478	\$2,528	\$3,795	47.9
Level and control of primary institution in AY ¹ 1989–90								
Public								
Less-than-4-year	\$483	\$5,574	\$887	\$6,507	\$1,322	\$2,167	\$1,905	36.2
4-year	1,989	5,984	2,087	6,202	2,246	2,010	3,247	55.7
Private, not-for-profit								
Less-than-4-year	3,036	7,235	4,519	9,382	2,561	2,680	3,955	47.6
4-year	8,575	13,676	8,036	12,441	4,420	2,761	6,595	54.2
Private, for-profit	4,043	8,742	5,168	11,003	1,982	2,932	4,161	44.5
Level of primary institution in AY ¹ 1989–90								
Less-than-2-year	2,716	7,768	4,750	10,783	1,843	2,977	3,823	41.3
2- to 3-year	617	5,671	1,873	7,397	1,540	2,515	2,483	39.3
4-year	3,262	7,443	4,560	8,792	3,230	2,381	4,638	55.1
Control of primary institution in AY ¹ 1989–90								
Public	982	5,712	1,525	6,344	1,791	2,053	2,619	46.6
Private, not-for-profit	7,693	12,624	7,683	12,132	4,232	2,755	6,324	53.5
Private, for-profit	4,043	8,742	5,168	11,003	1,982	2,932	4,161	44.5
Tuition and fees in AY ¹ 1989–90								
Less than \$500	204	5,346	237	5,782	984	—	1,282	31.6
\$500–\$999	719	5,583	737	6,166	1,455	1,645	2,023	40.9
\$1,000–\$1,999	1,419	5,492	1,448	6,056	1,920	2,082	2,860	53.0
\$2,000–\$3,999	2,720	7,003	2,873	7,421	2,312	2,267	3,596	53.1
\$4,000 or more	8,399	13,046	7,703	12,624	3,825	2,941	6,003	50.0
Total cost in AY ¹ 1989–90								
Under \$4,000	624	2,381	1,077	2,623	1,509	1,686	2,013	62.2
\$4,000–\$7,999	1,300	5,746	2,275	5,890	2,027	2,234	3,144	50.4
\$8,000–\$11,999	2,372	9,871	4,603	9,782	2,622	2,678	4,320	43.3
\$12,000 or more	5,138	16,555	7,213	16,898	3,870	2,999	5,934	35.6
Enrollment pattern in AY ¹ 1989–90								
Continuous full-time	2,542	7,009	4,125	8,891	2,921	2,447	4,314	51.7
Other continuous	1,098	7,843	2,842	9,843	2,001	2,734	3,099	38.4
Noncontinuous	781	4,715	2,793	7,051	1,424	2,550	2,642	41.3
Race–ethnicity								
White, non-Hispanic	1,798	6,623	3,741	8,706	2,424	2,475	3,707	45.4
Black, non-Hispanic	1,239	5,028	3,378	7,541	2,625	2,624	4,318	60.3
Hispanic	568	4,989	3,225	8,268	2,386	2,752	3,549	48.2
Asian/Pacific Islander	1,990	6,874	3,640	9,411	3,028	2,844	4,132	56.6
Native American	—	—	4,155	7,837	2,911	—	4,549	54.7

Table 3.2—Average cost of attendance and financial aid^d awarded in academic year 1989–90 to 1989–90 beginning postsecondary students who either received or did not receive financial aid in that academic year, by selected student and institutional characteristics—Continued

	Unaided students		Aided students				Ratio of aid to cost	
	Tuition & fees	Total costs	Tuition & fees	Total costs	Grants	Loans		Total aid
Gender								
Male	1,653	6,199	3,885	8,575	2,542	2,506	3,855	46.3
Female	1,670	6,624	3,504	8,552	2,434	2,544	3,752	49.1
Dependency status in AY ¹ 1989–90								
Dependent	1,956	5,683	4,029	7,793	2,723	2,366	4,031	53.4
Independent	737	8,696	2,731	10,528	1,877	2,945	3,195	34.0
Income and dependency status in AY ¹ 1989–90								
Dependent student								
Less than \$20,000	935	4,225	3,239	6,997	2,996	2,209	4,373	64.6
\$20,000–\$39,999	1,343	4,894	3,867	7,682	2,631	2,369	4,129	53.1
\$40,000–\$59,999	1,696	5,490	4,372	7,913	2,358	2,403	3,619	45.9
\$60,000 or more	3,173	7,143	6,080	10,180	2,766	3,009	3,629	38.1
Independent student								
Less than \$10,000	920	6,467	3,231	10,108	2,187	2,721	3,625	41.4
\$10,000–\$19,999	734	7,121	2,725	10,003	1,964	2,919	3,187	33.5
\$20,000 or more	589	11,687	1,862	11,787	1,155	3,596	2,447	21.5

^d Too few cases for a reliable estimate.

¹AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education; National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 3.3a—Annual percentage of 1989–90 beginning postsecondary students who received any financial aid, grants, or student loans while enrolled during the academic year 1989–90, by selected student and institutional characteristics

	AY ¹ 1989–90		
	Any aid	Grants	Loans
Total	45.2	37.9	20.0
Level and control of primary institution in AY ¹ 1989–90			
Public			
Less-than-4-year	27.7	24.2	5.0
4-year	46.8	37.2	19.3
Private, not-for-profit			
Less-than-4-year	60.5	55.4	25.4
4-year	72.4	66.7	40.9
Private, for-profit	77.4	58.4	58.5
Level of primary institution in AY ¹ 1989–90			
Less-than-2-year	70.2	54.3	47.0
2- to 3-year	32.2	27.5	9.8
4-year	54.8	46.5	26.1
Control of primary institution in AY ¹ 1989–90			
Public	35.4	29.4	10.7
Private, not-for-profit	71.0	65.4	39.0
Private, for-profit	77.4	58.4	58.5
Tuition and fees in AY ¹ 1989–90			
Less than \$500	18.8	17.1	1.2
\$500–\$999	38.0	31.3	7.4
\$1,000–\$1,999	47.7	40.9	17.3
\$2,000–\$3,999	60.7	47.2	33.7
\$4,000 or more	73.0	61.7	47.8
Total cost in AY ¹ 1989–90			
Less than \$4,000	31.4	25.6	6.6
\$4,000–\$7,999	44.7	37.2	18.7
\$8,000–\$11,999	56.0	47.5	30.4
\$12,000 or more	60.4	51.7	35.8
Enrollment pattern in AY ¹ 1989–90			
Continuous full-time	53.3	45.5	24.3
Other continuous	31.8	25.8	12.5
Noncontinuous	38.1	30.6	16.2
Race–ethnicity			
White, non-Hispanic	43.5	35.8	19.3
Black, non-Hispanic	60.3	53.5	32.2
Hispanic	42.3	38.6	15.3
Asian/Pacific Islander	49.2	42.0	16.0
Native American	54.5	53.2	17.2
Gender			
Male	40.1	33.1	18.1
Female	49.6	42.2	21.6

Table 3.3a—Annual percentage of 1989–90 beginning postsecondary students who received any financial aid, grants, or student loans while enrolled during the academic year 1989–90, by selected student and institutional characteristics—Continued

	AY ¹ 1989–90		
	Any aid	Grants	Loans
Dependency status in AY ¹ 1989–90			
Dependent	44.0	36.5	19.5
Independent	48.5	41.8	21.2
Income and dependency status in AY ¹ 1989–90			
Dependent student			
Less than \$20,000	66.1	64.3	28.1
\$20,000–\$39,999	48.1	38.7	26.3
\$40,000–\$59,999	40.5	29.1	16.7
\$60,000 or more	21.5	15.5	5.3
Independent student			
Less than \$10,000	57.6	54.3	27.9
\$10,000–\$19,999	46.4	36.4	22.3
\$20,000 or more	39.2	31.5	12.2

¹AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 3.3b—Annual percentage of 1989–90 beginning postsecondary students who received any financial aid, grants, or student loans while enrolled during the academic year 1990–91, by selected student and institutional characteristics

	AY ¹ 1990–91		
	Any aid	Grants	Loans
Total	42.6	33.1	21.9
Level and control of primary institution in AY ¹ 1990–91			
Public			
Less-than-4-year	28.2	21.3	5.6
4-year	41.5	32.6	22.6
Private, not-for-profit			
Less-than-4-year	57.7	41.1	33.8
4-year	63.8	55.2	39.5
Private, for-profit	69.3	45.7	56.1
Level of primary institution in AY ¹ 1990–91			
Less-than-2-year	63.3	44.6	48.1
2- to 3-year	31.9	23.2	10.0
4-year	48.4	39.5	27.8
Control of primary institution in AY ¹ 1990–91			
Public	34.5	26.7	13.8
Private, not-for-profit	63.2	53.8	38.9
Private, for-profit	69.6	46.1	55.9
Tuition and fees in AY ¹ 1989–90			
Less than \$500	23.2	15.1	4.4
\$500–\$999	37.8	29.3	12.2
\$1,000–\$1,999	39.5	32.3	18.6
\$2,000–\$3,999	47.8	38.2	28.0
\$4,000 or more	61.1	48.3	42.0
Total cost in AY ¹ 1989–90			
Less than \$4,000	31.1	24.8	11.2
\$4,000–\$7,999	38.3	29.5	19.1
\$8,000–\$11,999	51.7	39.8	29.4
\$12,000 or more	59.2	45.9	36.2
Enrollment pattern in AY ¹ 1990–91			
Continuous full-time	47.2	39.9	24.8
Other continuous	30.3	15.4	8.9
Noncontinuous	37.7	25.6	21.1
Race-ethnicity			
White, non-Hispanic	41.3	31.5	21.1
Black, non-Hispanic	58.9	49.5	33.1
Hispanic	41.1	34.4	18.6
Asian/Pacific Islander	38.6	29.6	20.2
Native American	53.8	48.2	32.1
Gender			
Male	39.1	30.5	20.6
Female	45.6	35.3	23.0

Table 3.3b—Annual percentage of 1989–90 beginning postsecondary students who received any financial aid, grants, or student loans while enrolled during the academic year 1990–91, by selected student and institutional characteristics—Continued

	AY ¹ 1990–91		
	Any aid	Grants	Loans
Dependency status in AY ¹ 1989–90			
Dependent	39.9	32.1	21.4
Independent	53.9	37.5	23.9
Income and dependency status in AY ¹ 1989–90			
Dependent student			
Less than \$20,000	60.3	55.0	33.2
\$20,000–\$39,999	48.6	39.3	28.9
\$40,000–\$59,999	32.5	21.8	17.1
\$60,000 or more	20.1	15.3	6.7
Independent student			
Less than \$10,000	58.4	48.0	30.2
\$10,000–\$19,999	51.7	38.6	24.5
\$20,000 or more	49.3	20.6	13.7

¹AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 3.3c—Annual percentage of 1989–90 beginning postsecondary students who received any financial aid, grants, or student loans while enrolled during the academic year 1991–92, by selected student and institutional characteristics

	AY ¹ 1991–92		
	Any aid	Grants	Loans
Total	42.2	33.8	21.4
Level and control of primary institution in AY ¹ 1991–92			
Public			
Less-than-4-year	24.6	19.1	3.4
4-year	43.2	35.0	23.1
Private, not-for-profit			
Less-than-4-year	58.9	43.3	48.5
4-year	66.4	56.9	42.2
Private, for-profit	72.0	45.1	58.1
Level of primary institution in AY ¹ 1991–92			
Less-than-2-year	57.5	45.7	42.8
2- to 3-year	28.4	20.6	7.8
4-year	49.9	41.3	28.6
Control of primary institution in AY ¹ 1991–92			
Public	35.0	28.0	14.4
Private, not-for-profit	65.9	56.0	42.6
Private, for-profit	72.5	45.1	58.8
Tuition and fees in AY ¹ 1989–90			
Less than \$500	31.0	22.4	8.3
\$500–\$999	35.2	28.5	13.5
\$1,000–\$1,999	41.8	33.8	19.8
\$2,000–\$3,999	45.1	35.3	26.8
\$4,000 or more	55.4	46.8	37.2
Total cost in AY ¹ 1989–90			
Less than \$4,000	34.4	28.1	14.6
\$4,000–\$7,999	39.6	32.0	18.1
\$8,000–\$11,999	47.6	37.6	26.9
\$12,000 or more	56.2	44.3	34.7
Enrollment pattern in AY ¹ 1991–92			
Continuous full-time	48.0	40.8	26.0
Other continuous	29.2	19.3	6.8
Noncontinuous	36.1	26.1	18.2
Race–ethnicity			
White, non-Hispanic	40.9	31.7	20.6
Black, non-Hispanic	54.2	48.4	31.1
Hispanic	40.6	37.6	18.5
Asian/Pacific Islander	42.8	35.9	22.1
Native American	—	—	—
Gender			
Male	39.8	31.3	21.0
Female	44.3	36.1	21.7

Table 3.3c—Annual percentage of 1989–90 beginning postsecondary students who received any financial aid, grants, or student loans while enrolled during the academic year 1991–92, by selected student and institutional characteristics—Continued

	AY ¹ 1991–92		
	Any aid	Grants	Loans
Dependency status in AY ¹ 1989–90			
Dependent	40.3	33.3	21.6
Independent	54.2	36.8	19.9
Income and dependency status in AY ¹ 1989–90			
Dependent student			
Less than \$20,000	61.3	57.8	30.4
\$20,000–\$39,999	47.3	39.0	30.3
\$40,000–\$59,999	31.3	22.2	16.4
\$60,000 or more	23.9	18.3	8.9
Independent student			
Less than \$10,000	57.1	44.9	25.7
\$10,000–\$19,999	55.7	41.9	24.2
\$20,000 or more	48.7	20.5	7.7

..—Too few cases for a reliable estimate.

¹AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 3.4—Cumulative percentage of all 1989–90 beginning postsecondary students who ever received any financial aid, grants, or student loans during the academic years 1989–90 through 1991–92, by selected student and institutional characteristics

	Aided AY ¹ 1989–90 through 1991–92 ²		
	Any aid	Grants	Loans
Total	55.2	46.5	28.9
Level and control of institution in AY ¹ 1989–90			
Public			
Less-than-4-year	39.2	33.2	11.0
4-year	57.0	46.3	29.8
Private, not-for-profit			
Less-than-4-year	69.1	63.8	35.9
4-year	78.3	72.8	50.8
Private, for-profit	82.9	63.4	69.2
Level of primary institution in AY ¹ 1989–90			
Less-than-2-year	76.7	60.1	58.4
2- to 3-year	43.5	36.4	16.6
4-year	63.8	54.8	36.5
Control of primary institution in AY ¹ 1989–90			
Public	46.5	38.5	18.7
Private, not-for-profit	77.2	71.7	49.0
Private, for-profit	82.9	63.4	69.2
Tuition and fees in AY ¹ 1989–90			
Less than \$500	30.2	24.7	5.6
\$500–\$999	51.5	42.2	16.7
\$1,000–\$1,999	57.8	50.7	27.6
\$2,000–\$3,999	68.4	55.2	43.0
\$4,000 or more	77.8	66.9	58.2
Total cost in AY ¹ 1989–90			
Less than \$4,000	43.2	35.8	14.7
\$4,000–\$7,999	54.2	45.5	26.8
\$8,000–\$11,999	60.5	53.8	39.7
\$12,000 or more	70.4	59.6	46.3
Enrollment pattern in AY ¹ 1989–90			
Continuous full-time	61.9	53.8	33.8
Other continuous	43.7	34.4	18.9
Noncontinuous	47.8	37.7	23.8
Race-ethnicity			
White, non-Hispanic	54.0	44.6	27.9
Black, non-Hispanic	66.7	59.2	41.9
Hispanic	53.1	48.0	23.9
Asian/Pacific Islander	56.4	50.0	26.4
Native American	60.8	56.5	31.8
Gender			
Male	51.0	42.6	26.6
Female	58.9	49.8	30.8

Table 3.4—Cumulative percentage of all 1989–90 beginning postsecondary students who ever received any financial aid, grants, or student loans during the academic years 1989–90 through 1991–92, by selected student and institutional characteristics—Continued

	Aided AY ¹ 1989–90 through 1991–92 ²		
	Any aid	Grants	Loans
Dependency status in AY ¹ 1989–90			
Dependent	54.1	45.8	29.2
Independent	58.4	48.2	27.9
Income and dependency status in AY ¹ 1989–90			
Dependent student			
Less than \$20,000	74.1	72.3	41.1
\$20,000–\$39,999	60.2	51.5	37.6
\$40,000–\$59,999	48.4	35.4	24.6
\$60,000 or more	32.2	23.5	11.0
Independent student			
Less than \$10,000	64.7	58.8	35.4
\$10,000–\$19,999	57.0	46.1	30.9
\$20,000 or more	51.6	36.7	15.8

¹AY=Academic year.

²Received aid at any time during the period. Only includes students whose financial aid and enrollment status is known for all 3 years (95 percent of the sample).

NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 3.5—Percentage of 1989–90 beginning postsecondary students who borrowed in academic year 1989–90, the cumulative percentage who had ever borrowed through academic year 1991–92, and the percentage who still owed educational loan funds in 1990 and 1992, by selected student and institutional characteristics

	Student loan in AY ¹ 1989–90	Loan from parents in AY ¹ 1989–90	Any ² loan in AY ¹ 1989–90	Owe any ² amount in 1990	Any ² loan through AY ¹ 1991–92	Owe any ² amount in 1992
Total	20.0	13.9	31.2	25.7	48.9	32.1
Level and control of primary institution in AY ¹ 1989–90						
Public						
Less-than-4-year	5.0	14.2	20.4	14.3	35.2	14.4
4-year	19.3	13.8	31.6	25.6	49.9	36.0
Private, not-for-profit						
Less-than-4-year	25.4	8.8	31.4	26.9	50.2	34.7
4-year	40.9	12.3	42.9	39.8	61.6	52.6
Private, for-profit	58.5	16.2	61.6	57.6	82.8	68.7
Level of primary institution in AY ¹ 1989–90						
Less-than-2-year	47.0	16.0	53.3	49.1	75.0	57.6
2- to 3-year	9.8	14.1	23.9	17.9	39.7	19.3
4-year	26.1	13.3	35.2	30.1	53.6	41.2
Control of primary institution in AY ¹ 1989–90						
Public	10.7	14.1	24.9	18.8	41.4	23.5
Private, not-for-profit	39.0	11.9	41.5	38.2	60.3	50.5
Private, for-profit	58.5	16.2	61.6	57.6	82.8	68.7
Tuition and fees in AY ¹ 1989–90						
Less than \$500	1.2	13.9	16.6	10.8	30.1	10.4
\$500–\$999	7.4	12.7	22.6	14.8	39.2	17.8
\$1,000–\$1,999	17.3	15.6	32.2	26.1	49.3	32.6
\$2,000–\$3,999	33.7	14.7	40.6	36.1	60.2	46.3
\$4,000 or more	47.8	12.6	50.1	46.8	69.3	58.6
Total cost in AY ¹ 1989–90						
Less than \$4,000	6.6	14.5	18.5	13.0	37.2	20.3
\$4,000–\$7,999	18.7	15.1	32.2	25.7	49.0	29.5
\$8,000–\$11,999	30.4	12.2	39.5	34.6	57.0	41.6
\$12,000 or more	35.8	12.6	44.2	39.9	59.7	47.4
Enrollment pattern in AY ¹ 1989–90						
Continuous full-time	24.3	14.0	33.7	28.7	50.9	37.6
Other continuous	12.5	13.1	29.3	21.9	40.8	18.5
Noncontinuous	16.2	13.5	27.9	22.9	48.0	27.6
Race-ethnicity						
White, non-Hispanic	19.3	13.4	29.3	24.5	46.7	31.6
Black, non-Hispanic	32.2	11.7	37.2	30.6	61.0	41.3
Hispanic	15.3	21.5	41.4	31.0	55.5	25.1
Asian/Pacific Islander	16.0	14.8	37.1	29.4	50.0	36.0
Native American	17.2	—	33.4	24.6	53.6	35.6

Table 3.5—Percentage of 1989–90 beginning postsecondary students who borrowed in academic year 1989–90, the cumulative percentage who had ever borrowed through academic year 1991–92, and the percentage who still owed educational loan funds in 1990 and 1992, by selected student and institutional characteristics—Continued

	Student loan in AY ¹ 1989–90	Loan from parents in AY ¹ 1989–90	Any ² loan in AY ¹ 1989–90	Owe any ² amount in 1990	Any ² loan through AY ¹ 1991–92	Owe any ² amount in 1992
Gender						
Male	18.1	14.7	30.3	24.5	49.0	30.8
Female	21.6	13.2	32.0	26.9	48.8	33.3
Dependency status in AY ¹ 1989–90						
Dependent	19.5	15.3	32.3	26.1	50.5	33.6
Independent	21.2	8.1	28.3	24.7	44.2	27.4
Income and dependency status in AY ¹ 1989–90						
Dependent student						
Less than \$20,000	28.1	17.8	41.7	37.6	62.4	43.9
\$20,000–\$39,999	26.3	16.7	38.0	30.3	57.7	41.3
\$40,000–\$59,999	16.7	16.0	29.6	23.5	48.2	32.2
\$60,000 or more	5.3	11.4	18.5	12.0	31.7	15.2
Independent student						
Less than \$10,000	27.9	9.6	31.9	28.4	51.4	34.6
\$10,000–\$19,999	22.3	9.4	33.2	29.2	52.1	32.2
\$20,000 or more	12.2	5.4	19.8	16.4	27.7	13.5

¹AY=Academic year.

²Any includes financial aid student loans and loans from parents, relatives, or friends.

NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 3.6—Average amount borrowed by 1989–90 beginning postsecondary students who borrowed in academic year 1989–90, the cumulative amount borrowed through academic year 1991–92, and the loan amounts still owed in 1990 and 1992, by selected student and institutional characteristics

	Student loan in AY ¹ 1989–90	Loan from parents in AY ¹ 1989–90	Any ² loan in AY ¹ 1989–90	Any ² amount owed in 1990	Any ² amount borrowed through AY ¹ 1991–92	Any ² amount owed in 1992
Total	\$2,528	\$1,661	\$2,758	\$2,617	\$5,705	\$5,345
Level and control of primary institution in AY ¹ 1989–90						
Public						
Less-than-4-year	\$2,167	\$819	\$1,284	\$1,264	\$3,125	\$3,271
4-year	2,010	1,992	2,516	2,264	5,612	5,232
Private, not-for-profit						
Less-than-4-year	2,680	—	4,101	3,323	6,971	5,709
4-year	2,761	3,463	4,064	3,664	9,179	8,087
Private, for-profit	2,932	1,830	3,907	3,525	5,075	4,291
Level of primary institution in AY ¹ 1989–90						
Less-than-2-year	2,977	1,431	3,505	3,155	4,127	3,484
2- to 3-year	2,515	963	2,004	2,021	4,100	4,042
4-year	2,381	2,420	3,110	2,847	6,990	6,363
Control of primary institution in AY ¹ 1989–90						
Public	2,053	1,317	1,913	1,806	4,581	4,536
Private, not-for-profit	2,755	3,364	4,067	3,635	8,990	7,900
Private, for-profit	2,932	1,830	3,907	3,525	5,074	4,291
Tuition and fees in AY ¹ 1989–90						
Less than \$500	—	963	1,124	1,065	2,836	3,039
\$500–\$999	1,645	1,492	1,395	1,323	3,938	4,323
\$1,000–\$1,999	2,082	1,033	2,169	1,928	4,188	4,079
\$2,000–\$3,999	2,267	1,905	2,815	2,491	5,822	5,174
\$4,000 or more	2,941	3,273	4,232	3,811	7,857	6,835
Total cost in AY ¹ 1989–90						
Less than \$4,000	1,686	994	1,690	1,669	3,730	3,605
\$4,000–\$7,999	2,234	1,283	2,154	1,987	4,599	4,549
\$8,000–\$11,999	2,678	2,600	3,242	2,943	6,532	5,752
\$12,000 or more	2,999	3,091	4,013	3,708	8,074	7,155
Enrollment pattern in AY ¹ 1989–90						
Continuous full-time	2,447	2,151	3,114	2,912	6,373	5,889
Other continuous	2,734	1,130	2,066	2,089	4,795	4,471
Noncontinuous	2,550	749	2,293	2,114	3,987	3,800
Race–ethnicity						
White, non-Hispanic	2,475	1,755	2,844	2,658	5,907	5,461
Black, non-Hispanic	2,624	1,302	2,744	2,593	4,991	4,583
Hispanic	2,752	740	1,930	1,928	3,876	4,545
Asian/Pacific Islander	2,843	—	3,401	3,479	7,150	6,159
Native American	—	—	—	—	—	—

Table 3.6—Average amount borrowed by 1989–90 beginning postsecondary students who borrowed in academic year 1989–90, the cumulative amount borrowed through academic year 1991–92, and the loan amounts still owed in 1990 and 1992, by selected student and institutional characteristics—Continued

	Student loan in AY ¹ 1989–90	Loan from parents in AY ¹ 1989–90	Any ² loan in AY ¹ 1989–90	Any ² amount owed in 1990	Any ² amount borrowed through AY ¹ 1991–92	Any ² amount owed in 1992
Gender						
Male	2,506	1,678	2,820	2,730	6,006	5,728
Female	2,544	1,644	2,706	2,527	5,439	5,030
Dependency status in AY¹ 1989–90						
Dependent	2,366	1,767	2,724	2,578	6,027	5,626
Independent	2,945	851	2,843	2,731	4,437	4,230
Income and dependency status in AY¹ 1989–90						
Dependent student						
Less than \$20,000	2,209	1,464	2,510	2,333	5,328	5,063
\$20,000–\$39,999	2,369	1,408	2,560	2,603	5,510	5,263
\$40,000–\$59,999	2,403	1,797	3,014	2,772	6,721	6,103
\$60,000 or more	3,009	2,624	3,110	2,791	7,773	7,317
Independent student						
Less than \$10,000	2,721	881	2,694	2,542	4,372	4,115
\$10,000–\$19,999	2,919	—	3,027	3,021	4,417	4,305
\$20,000 or more	3,596	—	2,872	2,690	4,705	4,481

— Too few cases for a reliable estimate.

¹AY=Academic year.

²Any includes financial aid student loans and loans from parents, relatives, or friends.

NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 3.7—Percentage of 1989–90 beginning postsecondary students who received financial assistance from their families or used their own savings to meet educational costs in academic year 1989–90, and cumulative percentage who ever received such assistance during the academic years 1989–90 through 1991–92, by selected student and institutional characteristics

Academic years:	Assistance from parents		Loan from parents		Assistance from spouse or relatives ¹		Used personal savings	
	in 1989–90	through 1991–92	in 1989–90	through 1991–92	in 1989–90	through 1991–92	in 1989–90	through 1991–92
Total	58.3	73.8	13.9	26.1	16.7	32.9	35.5	86.0
Level and control of institution in AY ² 1989–90								
Public								
Less-than-4-year	44.3	62.0	14.2	25.3	15.3	31.3	26.9	86.4
4-year	76.2	87.9	13.8	26.5	19.3	33.8	45.7	88.1
Private, not-for-profit								
Less-than-4-year	54.2	70.5	8.8	23.4	16.8	32.8	39.4	82.9
4-year	79.2	89.5	12.3	27.6	17.6	34.9	47.7	88.2
Private, for-profit	37.1	54.5	16.2	26.3	13.9	34.1	26.3	74.8
Level of primary institution in AY ² 1989–90								
Less-than-2-year	32.1	49.5	16.0	24.0	14.0	34.3	24.3	75.3
2- to 3-year	45.2	62.8	14.1	25.6	15.3	31.5	27.7	85.7
4-year	77.1	88.4	13.3	26.8	18.7	34.1	46.3	88.1
Control of primary institution in AY ² 1989–90								
Public	57.3	73.1	14.1	25.9	16.9	32.3	34.5	87.1
Private, not-for-profit	76.2	87.4	11.9	27.2	17.5	34.6	46.7	87.6
Private, for-profit	37.1	54.5	16.2	26.3	13.9	34.1	26.3	74.8
Tuition and fees in AY ² 1989–90								
Less than \$500	36.2	54.4	13.9	23.4	14.4	31.8	23.7	87.8
\$500–\$999	58.4	75.8	12.7	23.0	18.6	36.5	31.8	83.9
\$1,000–\$1,999	68.7	82.1	15.6	27.7	16.0	29.7	41.0	87.0
\$2,000–\$3,999	69.8	81.1	14.7	30.6	18.2	33.1	45.1	87.1
\$4,000 or more	70.3	82.2	12.6	26.9	17.6	34.0	42.6	84.1
Total cost in AY ² 1989–90								
Less than \$4,000	60.2	78.6	14.5	25.5	13.3	26.9	33.3	84.8
\$4,000–\$7,999	61.0	76.4	15.1	27.7	17.3	32.3	36.0	87.4
\$8,000–\$11,999	56.5	69.7	12.2	24.6	17.5	34.7	39.6	85.3
\$12,000 or more	53.1	65.3	12.6	25.3	20.7	41.8	35.4	86.4
Enrollment pattern in AY ² 1989–90								
Continuous full-time	72.6	84.7	14.0	26.9	18.7	32.1	43.5	86.8
Other continuous	46.8	61.4	13.1	21.8	13.1	32.5	32.3	85.4
Noncontinuous	36.0	54.4	13.5	25.1	14.4	33.7	23.6	85.4
Race-ethnicity								
White, non-Hispanic	60.0	74.8	13.4	26.0	16.9	32.7	36.2	87.1
Black, non-Hispanic	55.0	71.5	11.7	22.9	16.5	37.1	26.7	74.6
Hispanic	49.2	64.9	21.5	29.2	14.8	28.6	33.9	87.4
Asian/Pacific Islander	51.6	76.7	14.8	31.2	19.7	39.6	48.5	85.8
Native American	46.8	68.8	—	11.8	4.2	13.8	31.8	88.6

Table 3.7—Percentage of 1989–90 beginning postsecondary students who received financial assistance from their families or used their own savings to meet educational costs in academic year 1989–90, and cumulative percentage who ever received such assistance during the academic years 1989–90 through 1991–92, by selected student and institutional characteristics—Continued

Academic years:	Assistance from parents		Loan from parents		Assistance from spouse or relatives ¹		Used personal savings	
	in 1989–90	through 1991–92	in 1989–90	through 1991–92	in 1989–90	through 1991–92	in 1989–90	through 1991–92
Gender								
Male	60.6	76.5	14.7	29.6	14.2	28.9	39.3	88.8
Female	56.3	71.4	13.2	23.0	18.9	36.3	32.3	83.6
Dependency status in AY² 1989–90								
Dependent	73.0	86.8	15.3	28.7	16.0	30.1	41.7	87.9
Independent	12.9	26.1	8.1	14.9	18.6	41.5	18.3	80.1
Income and dependency status in AY² 1989–90								
Dependent student								
Less than \$20,000	56.3	76.9	17.8	28.1	19.0	32.6	40.0	88.7
\$20,000–\$39,999	67.9	84.6	16.7	30.2	17.5	32.5	41.7	89.5
\$40,000–\$59,999	82.7	91.1	16.0	30.9	15.5	28.9	45.6	89.2
\$60,000 or more	84.2	93.7	11.4	24.5	11.8	25.8	38.7	83.4
Independent student								
Less than \$10,000	20.5	38.5	9.6	20.0	17.4	37.9	25.4	77.5
\$10,000–\$19,999	10.3	19.9	9.4	13.6	15.2	35.7	14.9	81.8
\$20,000 or more	6.1	14.4	5.4	8.8	22.7	51.3	12.8	82.0

..Too few cases for a reliable estimate.

¹Relatives other than parents.

²AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 3.8a—Percentage distribution of 1989–90 beginning postsecondary students who in 1992 were enrolled, had attained some postsecondary award, or had left postsecondary education by whether or not they had ever received financial aid, by selected student and institutional characteristics

	Aided			Not aided		
	Left PSE ¹	Enrolled 1992	Attained award	Left PSE ¹	Enrolled 1992	Attained award
Total	34.5	43.4	22.1	47.6	38.7	13.7
Level and control of primary institution in AY ² 1989–90						
Public						
Less-than-4-year	40.7	30.2	29.0	55.2	28.8	16.0
4-year	29.4	65.7	4.9	35.8	59.3	4.9
Private, not-for-profit						
Less-than-4-year	35.8	16.1	48.1	59.4	9.5	31.1
4-year	31.2	63.0	5.8	31.3	63.0	5.7
Private, for-profit	36.4	3.8	59.8	44.8	4.1	51.1
Level of primary institution in AY ² 1989–90						
Less-than-2-year	35.8	2.2	62.0	51.5	2.3	46.2
2- to 3-year	40.2	27.0	32.9	54.8	28.7	16.5
4-year	30.1	64.6	5.3	34.9	60.0	5.1
Control of primary institution in AY ² 1989–90						
Public	35.1	48.0	17.0	48.8	38.9	12.3
Private, not-for-profit	31.7	58.0	10.3	35.8	54.3	9.8
Private, for-profit	36.4	3.8	59.8	44.8	4.1	51.1
Tuition and fees in AY ² 1989–90						
Less than \$500	45.7	33.7	20.7	60.3	26.9	12.9
\$500–\$999	36.8	40.8	22.5	47.1	38.5	14.4
\$1,000–\$1,999	36.1	48.0	15.9	38.9	47.3	13.9
\$2,000–\$3,999	32.6	47.8	19.6	31.8	56.6	11.5
\$4,000 or more	28.4	43.7	27.9	27.9	54.9	17.2
Total cost in AY ² 1989–90						
Less than \$4,000	38.3	43.6	18.1	50.3	35.7	14.0
\$4,000–\$7,999	36.8	44.2	19.0	43.4	44.3	12.4
\$8,000–\$11,999	34.0	40.8	25.2	48.5	34.5	17.0
\$12,000 or more	27.6	44.8	27.5	46.5	39.2	14.3
Enrollment pattern in AY ² 1989–90						
Continuous full-time	25.6	55.3	19.1	28.7	56.1	15.3
Other continuous	40.3	34.5	25.1	59.6	29.2	11.3
Noncontinuous	54.7	16.5	28.8	67.1	19.8	13.1
Race–ethnicity						
White, non-Hispanic	34.1	43.6	22.3	46.9	38.9	14.2
Black, non-Hispanic	43.2	35.3	21.5	54.4	26.5	19.0
Hispanic	35.8	40.7	23.4	55.6	36.0	8.4
Asian/Pacific Islander	14.3	69.2	16.5	24.1	67.7	8.3
Native American	46.1	34.8	19.0	—	—	—
Gender						
Male	37.9	45.1	17.0	48.7	40.5	10.8
Female	32.0	42.1	26.0	46.4	36.9	16.7

Table 3.8a—Percentage distribution of 1989–90 beginning postsecondary students who in 1992 were enrolled, had attained some postsecondary award, or had left postsecondary education by whether or not they had ever received financial aid, by selected student and institutional characteristics—Continued

	Aided			Not aided		
	Left PSE ¹	Enrolled 1992	Attained award	Left PSE ¹	Enrolled 1992	Attained award
Dependency status in AY ² 1989–90						
Dependent	29.7	53.2	17.1	40.5	45.6	13.9
Independent	47.2	17.7	35.1	69.8	17.3	12.9
Income and dependency status in AY ² 1989–90						
Dependent student						
Less than \$20,000	34.3	47.7	18.0	50.8	38.2	10.9
\$20,000–\$39,999	28.3	52.3	19.5	42.7	39.4	17.9
\$40,000–\$59,999	27.6	56.8	15.6	40.7	42.1	17.2
\$60,000 or more	26.9	61.5	11.6	34.4	56.9	8.7
Independent student						
Less than \$10,000	45.2	18.4	36.4	58.2	26.8	15.1
\$10,000–\$19,999	44.3	11.0	44.7	75.7	15.8	8.5
\$20,000 or more	52.7	22.4	24.9	75.7	10.0	14.3

—Too few cases for a reliable estimate.

¹PSE=Postsecondary education. This category includes all students who left prior to the spring of 1992.

²AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 3.8b—Percentage distribution of 1989–90 beginning postsecondary students initially enrolled in 2- to 3-year institutions who in 1992 were enrolled, had attained some postsecondary award, or had left postsecondary education by whether or not they had ever received financial aid, by selected student and institutional characteristics

	2- to 3-year institutions					
	Aided			Not aided		
	Left PSE ¹	Enrolled 1992	Attained award	Left PSE ¹	Enrolled 1992	Attained award
Total	40.2	27.0	32.9	54.8	28.7	16.5
Control of primary institution in AY ² 1989–90						
Public	40.4	31.3	28.3	55.2	29.8	15.0
Private, not-for-profit	33.8	18.7	47.5	62.0	9.9	28.1
Private, for-profit	41.3	7.0	51.7	42.4	6.5	51.0
Tuition and fees in AY ² 1989–90						
Less than \$500	44.8	32.5	22.7	60.4	27.2	12.4
\$500–\$999	36.2	36.4	27.4	51.3	29.9	18.7
\$1,000–\$1,999	41.7	20.6	37.7	40.0	34.2	25.8
\$2,000–\$3,999	49.0	13.3	37.7	34.9	40.6	24.4
\$4,000 or more	30.7	8.1	61.2	30.1	14.2	55.7
Total cost in AY ² 1989–90						
Less than \$4,000	42.2	31.9	25.9	50.3	32.3	17.4
\$4,000–\$7,999	44.2	23.1	32.7	54.7	30.4	14.9
\$8,000–\$11,999	37.9	21.6	40.5	59.4	18.5	22.1
\$12,000 or more	31.6	31.0	37.5	66.8	21.1	12.2
Enrollment pattern in AY ² 1989–90						
Continuous full-time	29.2	31.3	39.5	31.4	42.8	25.8
Other continuous	34.4	33.3	32.3	62.1	26.6	11.3
Noncontinuous	58.7	17.9	23.3	68.5	19.3	12.2
Race–ethnicity						
White, non-Hispanic	39.9	26.6	33.5	55.4	27.4	17.1
Black, non-Hispanic	51.8	18.4	29.8	51.0	23.7	25.2
Hispanic	39.9	29.4	30.7	58.5	34.0	7.5
Asian/Pacific Islander	—	—	—	—	—	—
Native American	—	—	—	—	—	—
Gender						
Male	45.9	27.0	27.2	56.1	31.1	12.8
Female	36.1	26.9	37.0	53.7	26.0	20.3
Dependency status in AY ² 1989–90						
Dependent	33.8	31.6	34.6	46.3	34.4	19.3
Independent	49.6	20.1	30.2	73.3	16.8	9.9

Table 3.8b—Percentage distribution of 1989–90 beginning postsecondary students initially enrolled in 2- to 3-year institutions who in 1992 were enrolled, had attained some postsecondary award, or had left postsecondary education by whether or not they had ever received financial aid, by selected student and institutional characteristics—Continued

	2- to 3-year institutions					
	Aided			Not aided		
	Left PSE ¹	Enrolled 1992	Attained award	Left PSE ¹	Enrolled 1992	Attained award
Income and dependency status in AY ² 1989–90						
Dependent student	38.9	33.0	28.1	50.5	39.0	10.6
Less than \$20,000	32.2	27.8	40.0	45.1	33.1	21.9
\$20,000–\$39,999	30.0	35.5	34.5	44.5	29.5	26.0
\$40,000–\$59,999	26.8	33.7	39.5	47.2	38.7	14.1
\$60,000 or more						
Independent student	42.8	19.4	37.8	61.1	25.0	14.0
Less than \$10,000	52.0	11.3	36.7	83.0	13.4	3.6
\$10,000–\$19,999	55.1	26.9	18.0	76.9	12.0	11.1
\$20,000 or more						

—Too few cases for a reliable estimate.

¹PSE=Postsecondary education. This category includes all students who left prior to the spring of 1992.

²AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 3.8c—Percentage distribution of 1989–90 beginning postsecondary students initially enrolled in 4-year institutions who in 1992 were enrolled, had attained some postsecondary award, or had left postsecondary education by whether or not they had ever received financial aid, by selected student and institutional characteristics

	4-year institutions					
	Aided			Not aided		
	Left PSE ¹	Enrolled 1992	Attained award	Left PSE ¹	Enrolled 1992	Attained award
Total	30.1	64.6	5.3	34.9	60.0	5.1
Control of primary institution in AY ² 1989–90						
Public	29.4	65.7	4.9	35.8	59.3	4.9
Private, not-for-profit	31.2	63.0	5.8	31.3	63.0	5.7
Private, for-profit	—	—	—	—	—	—
Tuition and fees in AY ² 1989–90						
Less than \$500	44.6	53.8	1.6	56.9	38.2	4.9
\$500–\$999	39.1	55.7	5.2	38.8	58.0	3.2
\$1,000–\$1,999	32.6	63.7	3.7	37.5	56.4	6.1
\$2,000–\$3,999	27.2	65.6	7.2	30.8	66.0	3.3
\$4,000 or more	26.8	68.2	5.0	25.7	68.9	5.4
Total cost in AY ² 1989–90						
Less than \$4,000	31.5	63.1	5.4	46.8	50.2	3.1
\$4,000–\$7,999	30.7	65.2	4.1	27.9	66.8	5.3
\$8,000–\$11,999	32.3	62.8	4.9	34.0	60.0	5.9
\$12,000 or more	26.7	67.0	6.3	34.5	59.8	5.7
Enrollment pattern in AY ² 1989–90						
Continuous full-time	24.6	70.4	5.0	26.7	68.6	4.7
Other continuous	51.3	43.2	5.5	51.9	43.1	5.0
Noncontinuous	61.9	33.9	4.2	64.4	30.7	4.9
Race–ethnicity						
White, non-Hispanic	30.4	64.2	5.5	34.3	60.4	5.3
Black, non-Hispanic	33.3	63.4	3.2	58.2	41.8	0.0
Hispanic	31.1	66.7	2.2	41.2	49.3	9.5
Asian/Pacific Islander	19.5	77.7	2.8	16.7	82.7	0.6
Native American	—	—	—	—	—	—
Gender						
Male	31.8	64.7	3.5	33.8	62.7	3.5
Female	28.8	64.9	6.3	36.1	57.7	6.2
Dependency status in AY ² 1989–90						
Dependent	27.9	67.5	4.6	32.8	63.2	4.0
Independent	52.6	37.7	9.7	55.8	29.7	14.5

Table 3.8c—Percentage distribution of 1989–90 beginning postsecondary students initially enrolled in 4-year institutions who in 1992 were enrolled, had attained some postsecondary award, or had left postsecondary education by whether or not they had ever received financial aid, by selected student and institutional characteristics—Continued

	4-year institutions					
	Aided			Not aided		
	Left PSE ¹	Enrolled 1992	Attained award	Left PSE ¹	Enrolled 1992	Attained award
Income and dependency status in AY ² 1989–90						
Dependent student						
Less than \$20,000	31.5	63.9	4.6	52.9	43.8	3.4
\$20,000–\$39,999	25.9	69.8	4.2	34.2	60.5	5.4
\$40,000–\$59,999	27.5	67.7	4.8	38.1	58.1	3.8
\$60,000 or more	27.0	68.1	4.9	26.3	70.1	3.6
Independent student						
Less than \$10,000	49.2	43.2	7.6	43.5	51.2	5.3
\$10,000–\$19,999	51.5	38.2	10.3	—	—	—
\$20,000 or more	61.4	24.6	14.0	71.6	4.7	23.7

—Too few cases for a reliable estimate.

¹PSE=Postsecondary education. This category includes all students who left prior to the spring of 1992.

²AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentage may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Chapter 4

Work Experiences

Introduction

Almost 90 percent of 1989–90 beginning postsecondary students worked at one time or another while enrolled in postsecondary education during the 3 academic years 1989–90 through 1991–92. Work, however, served different purposes for these students. For some, work was mainly a means to pay for postsecondary education expenses or to earn spending money. These individuals viewed their primary role in postsecondary education as that of students; work was a secondary activity. For others, work represented a more important focus in their lives, and enrollment in postsecondary education was often a way to improve job skills, enhance career opportunities, or simply further develop personal interests. These individuals viewed their primary role in postsecondary education as that of employees, and postsecondary education was a secondary function.

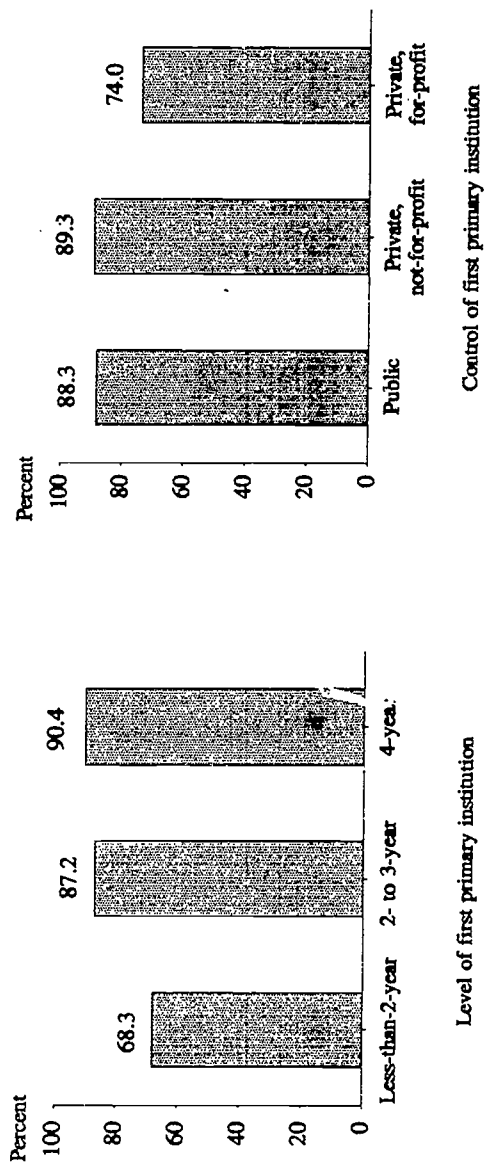
This chapter describes the work experiences of both types of students. It begins with some general information about both groups. Then, it reports selected information for those enrolled primarily as students, followed by a section with data on those enrolled primarily as employees. The final section presents additional information on all students who worked, as well as unemployment rates for all 1989–90 beginning postsecondary students during the 1990 and 1991 calendar years.

Working While Enrolled in Postsecondary Education and After Leaving

During the 3 academic years 1989–90 through 1991–92, 87 percent of the 1989–90 beginning postsecondary students worked at least some of the time they were enrolled (table 4.1). As displayed in figure 4.1, those who enrolled in less-than-2-year institutions in 1989–90 were much less likely to work than students attending 2- to 3-year or 4-year institutions (68 percent compared with 87 and 90 percent, respectively). Despite the strong occupational focus of most less-than-2-year institutions, this pattern probably reflects at least two factors. First, students attending less-than-2-year institutions often do so because they lack specific job skills and have not had much success in the labor market. Hence, they are less likely to find employment while enrolled. Second, students attending less-than-2-year institutions are probably more likely to devote a shorter, more concentrated time to attending school, suspending or postponing work until completion of their short-term studies.

The percentage of beginning postsecondary students working while enrolled did not differ markedly between 2- to 3-year institutions and 4-year institutions. Nor was there much difference between public and private, not-for-profit institutions. Students in the lowest socioeconomic status (SES) quartile were less likely to work while enrolled than were those in the middle and high SES quartiles. This result could reflect a number of factors, including greater likelihood among low SES students of receiving financial aid, as well as the higher

Figure 4.1—Percentage of 1989–90 beginning postsecondary students who worked while enrolled sometime during the academic years 1989–90 through 1991–92, by level and control of first primary institution



NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

concentrations of low SES students in less-than-2-year institutions (see table 1.1) where the short-term nature of attendance makes working while enrolled less likely.

Of those 1989–90 beginning postsecondary students who left school sometime between 1989–90 and 1991–92, 76 percent worked after leaving. Students who had worked while enrolled in postsecondary education were especially likely to work after leaving: 89 percent of students who had worked to pay expenses, 83 percent of students who had worked for spending money, and 94 percent of students who had considered their primary role that of an employee worked after leaving postsecondary education.

Students Who Work And Employees Who Study

Of the 1989–90 beginning postsecondary students who worked while enrolled (87 percent of all students), 76 percent considered their primary role to be that of a student who worked and 24 percent considered their primary role to be that of an employee who studied (table 4.2). Among those working who considered their primary role to be a student, about two-thirds worked to pay expenses and one-third worked to earn spending money. Among students working while enrolled at less-than-2-year institutions, 50 percent considered their primary role to be an employee, compared with 37 percent at 2- to 3-year institutions and 10 percent at 4-year institutions. This pattern, of course, reflects the greater occupational focus of most of the less-than-2-year institutions—especially the private, for-profit sector—as well as the emphasis on vocational education at many of the 2- to 3-year institutions.

As one would expect, older students were much more likely to view their primary role in postsecondary education as that of an employee rather than a student. Thus, 82 percent of 1989–90 beginning postsecondary students age 30 or older considered their primary role while enrolled to be an employee, compared with 17 percent of students age 23 or younger. Similarly, 64 percent of independent students who worked while enrolled considered themselves primarily employees, in contrast to 14 percent of dependent students.

Students Who Worked While Enrolled Primarily as Students

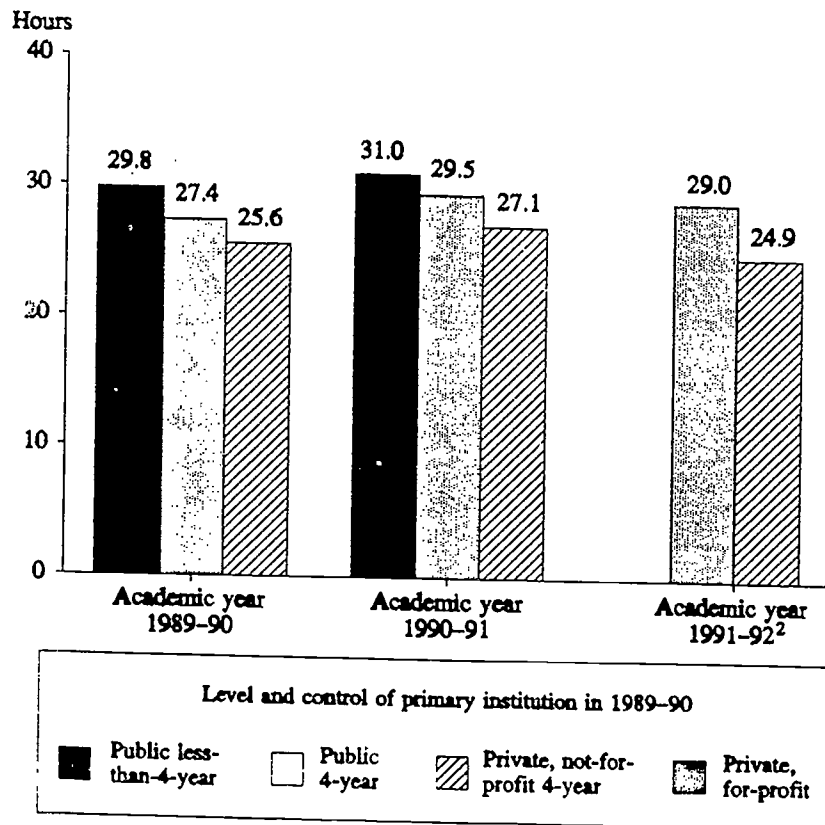
As previously noted, 76 percent of the 1989–90 beginning postsecondary students who worked while enrolled considered their primary role to be that of a student. Tables 4.3a and b through 4.5 present selected information for this group of students who worked.

Average Hours Worked by Those Who Worked While Enrolled Primarily as Students

The 1989–90 beginning postsecondary students who worked while enrolled and who also considered their primary role to be that of a student worked, on average, between 26 and 28 hours per week during the academic years 1989–90 through 1991–92 (table 4.3a). In 1989–90, 28 percent of these students reported working 20 hours or less during a typical week; 49 percent said they worked between 21 and 35 hours; and 24 percent worked more than 35 hours (table 4.3b).

As displayed in figure 4.2, 1989–90 beginning postsecondary students in 4-year institutions who worked while enrolled worked fewer hours per week on average (26), than did students who enrolled in less-than-2-year institutions (30 hours) or 2- to 3-year institutions (27 hours). Students who worked while enrolled in 4-year institutions were more likely than their counterparts in 2- to 3-year institutions to work no more than 20 hours per week (and were less likely to work 21 to 35 hours per week). In part, this pattern reflects the fact that beginning postsecondary students in 4-year institutions were more likely than those in 2- to 3-year institutions to be enrolled full time (88 percent compared with 51 percent).²⁵ Beginning postsecondary students in less-than-2-year institutions and 4-year institutions were about equally likely to be enrolled full time (83 percent and 88 percent), but those in less-than-2-year institutions were considerably less likely to work 20 hours or less per week (14 percent compared with 33 percent).

Figure 4.2—Average number of hours worked per week by 1989–90 beginning postsecondary students who worked, by level of institution in each year¹



¹Includes only those who indicated that their primary role in postsecondary education was as a student.

²Too few cases for less-than-2-year institutions in academic year 1991-92.

NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

²⁵1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92), Data Analysis System.

Types of Jobs Held by Those Who Worked While Enrolled Primarily as Students

Table 4.4 displays the types of jobs held by 1989–90 beginning postsecondary students who worked at any time while enrolled primarily as students. The table summarizes the work experiences of students enrolled at any time during the 3 academic years 1989–90 through 1991–92. Although these students worked mainly to cover expenses or to earn spending money, about one-fifth held jobs that were in some way related to their course of study. Twelve percent of the students participated in cooperative programs, internships, or apprenticeships—more formal efforts to link classroom instruction with work-based learning.

On-campus jobs were an important source of employment for students at 4-year institutions. About 4 in 10 students at private, not-for-profit 4-year institutions held jobs on-campus, as did 28 percent of the students enrolled in public 4-year colleges and universities. On-campus employment was a less frequent type of job for students at 2- to 3-year institutions; 11 percent of the students attending these institutions worked on-campus.

Additionally, lowest income dependent students were more likely than the highest income dependent students to have an on-campus job. This finding is consistent with the practice at many institutions of using on-campus employment as one form of financial aid through work-study programs.

Females were more likely than males to have worked in a job related to their course of study (26 percent compared with 19 percent), and they were also more likely to have had at least one on-campus job (26 percent compared with 21 percent). Students who were considered independent for financial aid purposes were also more likely than those who were dependent to have held jobs related to their areas of study. About 32 percent of independent students held jobs related to their studies, compared with 22 percent of dependent students.

Virtually all (95 percent) of the students who worked while enrolled primarily as students held a job off-campus during their tenure as students. Additionally, 18 percent held more than one job at a time while enrolled.

Persistence and Attainment by Type of Work Experience of Those Who Worked While Primarily Enrolled as Students

Table 4.5 displays information about the relationship between different types of work experience and persistence and attainment of selected 1989–90 beginning postsecondary students who worked.

Among the beginning postsecondary students enrolled in 2- to 3-year institutions who worked and considered their primary role to be that of a student, 40 percent were enrolled in 1992 and 28 percent had attained some postsecondary award. The data suggest that the relationships between working and these two types of postsecondary outcomes are complex. For example, 5 percent of students who worked 15 hours or less when enrolled in 1989–90 left before July 1990 without an award, compared with 14 percent of those who worked more than 35 hours. Similarly, 11 percent of students who worked 15 hours or less in 1989–90 left

between July 1990 and July 1991 without an award, compared with 18 percent of students who worked more than 35 hours per week. Finally, 42 percent of those who worked 15 hours or less in 1989-90 attained an award by spring 1992, compared with 21 percent who worked more than 35 hours. If in fact the pattern is true, it suggests that working long hours while enrolled in 2- to 3-year institutions may be incompatible with persistence and timely attainment.

On the other hand, the type of job a student held, in some instances, appeared to have a positive association with attainment. For example, 37 percent of beginning postsecondary students at 2- to 3-year institutions who held a job related to their studies attained a postsecondary award by spring 1992, compared with 25 percent of students who also worked but not in a studies-related position. Similarly, 41 percent of students who had at least one co-op or apprentice job attained an award by June 1992, while 26 percent of those with no co-op or apprenticeship position did so. Students who had at least one on-campus job were also appeared more likely to attain an award than were those who did not. These last two comparisons, however, were not statistically significant.

With regard to students enrolled at 4-year institutions, insufficient time had passed by the time of the 1992 survey to make useful analyses of the relationship between attainment and working. Only 5 percent of 1989-90 beginning postsecondary students at 4-year institutions who worked and considered their primary role as that of a student had attained some award by 1992.

However, with respect to persistence, 78 percent of students with an on-campus job were enrolled in 1992, compared with 68 percent who had not worked on-campus. Furthermore, 80 percent of students who had at least one co-op or apprentice job were still enrolled in 1992, compared with 70 percent of those who did not have such positions.

Students Who Worked While Enrolled Primarily as Employees

Among the 1989-90 beginning postsecondary students who worked while enrolled, 24 percent considered their primary role to be that of an employee. Tables 4.6 and 4.7 present selected information for this group of working students.

Types of Jobs Held by Those Who Worked While Enrolled Primarily as Employees

Beginning postsecondary students who regarded their primary role in postsecondary education as that of an employee were most often attending to further particular occupational goals such as enhancement of job-specific skills or advancement of career interests. Table 4.6 displays the types of jobs held by these students in 1991.²⁶ Overall, about one in four students who considered themselves primarily employees held clerical jobs; 14 percent were in sales or

²⁶The table is based on the "primary" job held by these students. If students held more than one job, the second job may have been in a different occupational area.

service occupations; and 17 percent were managers/administrators. Each of the other occupational categories accounted for less than 10 percent of the students. Although the distribution of students by type of occupation appeared to differ somewhat by level of institution in ways that one would expect (salesworkers and craftsmen more heavily concentrated in less-than-2-year institutions, for example), these differences were not statistically significant.

Receipt of Employer-Provided Training by Students Who Worked While Enrolled Primarily as Employees

As displayed in table 4.7, 22 percent of the beginning postsecondary students who worked while enrolled primarily as employees reported that they also received training provided by their employers in 1991. About 41 percent who were employed in technical/computer positions reported receiving employer-provided training, as did about 15 percent working in professional occupations. About one-third of those in clerical and services occupations reported getting some employer-provided training. Less than 15 percent of sales workers and skilled operators said their employers provided training.

Additional Information on the Employment Experiences of 1989-90 Beginning Postsecondary Students

Tables 4.8 through 4.10 present additional information about all 1989-90 beginning postsecondary students during the academic years 1989-90 through 1991-92. Tables 4.8 and 4.9 provide data on all students who worked while enrolled, while table 4.10 reports on unemployment patterns for all 1989-90 beginning postsecondary students who were not enrolled, not working, and actively looking for work during this period.

Average Number of Months Enrolled But Not Working, and Working and Enrolled

In the academic year 1989-90, beginning postsecondary students spent about 3.5 months enrolled but not working, and about 4.8 months working and enrolled. The patterns for the subsequent 2 academic years were similar.

Beginning postsecondary students who were enrolled in 2- to 3-year institutions in 1989-90 averaged 5.2 months working and enrolled, compared with 4.7 months for students enrolled in 4-year institutions and 3.1 months for students at less-than-2-year institutions. Students who worked to pay expenses and students who considered their primary role to be that of an employee were both enrolled and working for just over 6 months in 1989-90. Students who worked for spending money worked less during their enrollment, an average of 4.9 months.

Ratio of Months Employed to Months Enrolled

The duration of enrollment varies by level and control of institution, and it is therefore useful to construct a measure of the "intensity" of employment while enrolled in postsecondary education. Table 4.9 presents information for such a measure, the ratio of the number of months enrolled and employed to the number of months enrolled. The ratios are displayed separately for those enrolled primarily as students and those enrolled primarily as employees. In 1989-90, for example, those enrolled primarily as students worked an average of 62 percent of their time while enrolled; those enrolled primarily as employees worked an average of 82 percent of their time while enrolled.

As one would expect, part-time students averaged a much higher percentage of time working than did full-time students. In 1989-90, those enrolled part time primarily as students spent 73 percent of the time they were enrolled working, compared with 58 percent for continuous full-time students. Those enrolled part time primarily as employees worked 87 percent of the time they were enrolled, while continuous full-time students who were primarily employees worked 68 percent of the time they were enrolled.

With respect to level of institution, in 1989-90 those working and enrolled primarily as students at 4-year institutions worked on average 54 percent of time they were enrolled, compared with 74 percent for their counterparts at 2- to 3-year institutions and 64 percent for those at less-than-2-year institutions.

Unemployment Patterns

Table 4.10 displays information on the unemployment patterns of 1989-90 beginning postsecondary students during the calendar years 1990 and 1991. In 1990, 8 percent of the 1989-90 beginning postsecondary students were unemployed at some time, while 5 percent were unemployed at some time in 1991.²⁷ The percentage reporting more than one spell of unemployment in a calendar year was low during both years, less than half of 1 percent. The average spell of unemployment was 5 months.

Among students enrolled at less-than-2-year institutions, 21 percent reported being unemployed in 1989-90, and 14 percent in 1991. For these students, the duration of unemployment averaged 7.2 months during the 2 calendar years. Among students at 2- to 3-year institutions, 9 percent were unemployed in 1990, and 6 percent in 1991. For them, the average duration of unemployment during this period was 5.8 months.

Of those beginning postsecondary students attaining less-than-2-year licenses or certificates, 18 percent were unemployed in 1990 and 13 percent were unemployed in 1991. Among those completing a 2- to 3-year vocational diploma, the unemployment rate was 5 percent in 1990 and 7 percent in 1991. Students completing a 2- to 3-year associate's degree had an unemployment rate of 4 percent in 1990 and 3 percent in 1991.

²⁷The term unemployed implies not working and looking for employment.

Table 4.1—Percentage of 1989–90 beginning postsecondary students who reported working at any time while enrolled or after leaving postsecondary education, during the academic years 1989–90, 1990–91, and 1991–92, by selected student and institutional characteristics

	Percent worked while students			Percent worked after leaving				
	Worked while enrolled in any of the 3 years	Worked while enrolled in AY' 1989–90	Worked while enrolled in AY' 1990–91	Worked while enrolled in AY' 1991–92	Worked after leaving in any of the 3 years	Worked after leaving in AY' 1989–90	Worked after leaving in AY' 1990–91	Worked after leaving in AY' 1991–92
Total	87.1	82.2	78.5	76.4	76.2	56.2	70.6	71.1
Level and control of primary institution ²								
Public								
Less-than-4-year	87.0	84.6	80.0	76.7	80.2	60.6	63.8	78.6
4-year	90.3	83.5	80.9	77.6	70.5	51.9	63.8	62.1
Private, not-for-profit								
Less-than-4-year	80.7	71.9	69.0	71.8	69.5	51.2	60.3	61.2
4-year	90.5	82.8	79.7	75.2	69.6	57.8	60.0	58.5
Private, for-profit								
Less-than-4-year	74.0	68.9	63.1	69.7	75.5	46.0	67.2	64.2
Level of primary institution ²								
Less-than-2-year	68.3	62.5	59.2	65.4	74.5	48.0	69.2	66.6
2- to 3-year	87.2	84.6	79.6	77.3	79.7	59.3	62.7	76.5
4-year	90.4	83.3	80.5	76.9	70.2	53.4	63.0	60.7
Control of primary institution ²								
Public	88.3	84.2	80.4	77.2	77.4	58.7	63.8	71.8
Private, not-for-profit	89.3	81.5	78.5	74.9	69.6	56.1	60.1	58.9
Private, for-profit	74.0	68.9	63.1	69.7	75.5	46.0	67.2	64.2
Race-ethnicity								
White, non-Hispanic	87.9	83.4	80.2	77.9	79.1	59.4	73.5	74.0
Black, non-Hispanic	80.6	76.1	73.3	66.9	60.8	49.7	60.0	54.3
Hispanic	87.2	82.8	79.0	74.2	75.4	39.8	62.7	70.8
Asian/Pacific Islander	85.5	69.4	69.4	70.0	64.8	—	57.3	58.2
Native American	88.4	87.0	83.2	—	—	—	—	—
Gender								
Male	89.3	84.6	80.9	76.6	78.2	60.5	72.9	73.4
Female	85.1	80.1	76.5	76.3	74.5	52.3	68.6	69.1

Table 4.1—Percentage of 1989–90 beginning postsecondary students who reported working at any time while enrolled or after leaving postsecondary education, during the academic years 1989–90, 1990–91, and 1991–92, by selected student and institutional characteristics—Continued

	Percent worked while students			Percent worked after leaving				
	Worked while enrolled in any of the 3 years	Worked while enrolled in AY ¹ 1989–90	Worked while enrolled in AY ¹ 1990–91	Worked while enrolled in AY ¹ 1991–92	Worked after leaving in any of the 3 years	Worked after leaving in AY ¹ 1989–90	Worked after leaving in AY ¹ 1990–91	Worked after leaving in AY ¹ 1991–92
Dependency status in AY ¹ 1989–90								
Dependent	90.2	84.5	80.8	77.2	75.7	54.0	70.3	71.2
Independent	78.0	75.6	68.5	71.6	77.1	58.8	71.0	70.9
Parent's education								
Less than high school graduate	81.7	78.8	69.9	73.0	74.5	59.1	70.5	66.9
High school graduate	86.3	81.8	79.3	79.0	80.6	56.0	73.7	76.2
Trade or vocational school	89.9	83.0	75.9	80.6	78.0	49.2	76.1	66.7
Less than 2 years of college	82.8	80.0	82.1	80.4	76.2	46.1	63.9	67.1
2 or more years of college	88.9	83.7	79.9	81.2	72.0	56.4	69.5	68.8
Bachelor's degree	91.8	86.0	80.3	73.1	73.3	59.3	68.3	69.5
Postgraduate/professional	90.0	83.2	80.6	74.4	72.2	53.7	65.3	67.6
Age as of 12/31/89								
23 or younger	89.3	84.0	80.5	76.9	76.9	56.4	71.5	71.9
24–26	86.3	83.6	75.3	74.9	79.0	60.3	71.5	71.7
27–29	73.4	68.2	55.6	70.6	73.5	41.8	67.4	68.6
30 or older	72.3	70.7	60.4	69.1	72.2	57.6	67.3	67.2
Socioeconomic status								
Bottom quartile	77.6	72.8	61.8	69.2	72.1	55.9	68.2	65.1
Middle quartiles	87.0	83.2	79.4	78.9	80.3	56.5	72.3	74.4
Top quartile	90.7	84.5	81.9	75.7	72.4	56.1	69.3	69.6
Income and dependency status in AY ¹ 1989–90								
Dependent student	88.9	82.1	77.8	76.6	76.0	52.7	68.5	68.8
Less than \$20,000	91.6	86.7	82.2	80.8	79.7	62.7	76.8	76.8
\$20,000–\$39,999	90.4	86.0	82.9	77.3	75.9	49.4	70.7	71.5
\$40,000–\$59,999	89.3	82.2	79.2	73.0	68.6	46.6	60.8	64.6
\$60,000 or more								

Table 4.1—Percentage of 1989–90 beginning postsecondary students who reported working at any time while enrolled or after leaving postsecondary education, during the academic years 1989–90, 1990–91, and 1991–92, by selected student and institutional characteristics—Continued

	Percent worked while students			Percent worked after leaving				
	Worked while enrolled in any of the 3 years	Worked while enrolled in AY ¹ 1989–90	Worked while enrolled in AY ¹ 1990–91	Worked while enrolled in AY ¹ 1991–92	Worked after leaving in any of the 3 years	Worked after leaving in AY ¹ 1989–90	Worked after leaving in AY ¹ 1990–91	Worked after leaving in AY ¹ 1991–92
Income and dependency status in AY¹ 1989–90—Continued								
Independent student	75.2	71.0	64.2	69.1	74.2	53.6	68.5	66.7
Less than \$10,000	80.2	78.3	74.6	77.9	77.0	58.6	70.8	70.5
\$10,000–\$19,999	79.7	78.8	69.0	70.3	80.4	63.9	74.0	76.0
\$20,000 or more								
Primary role in postsecondary education								
Student works to pay expenses	99.2	93.3	92.7	88.3	88.9	58.5	84.8	85.7
Student works for spending	97.4	86.5	86.2	80.5	83.0	58.7	78.1	77.7
Employee ²	99.3	96.4	96.3	91.6	93.8	79.1	88.2	91.0
Degree program in AY¹ 1989–90								
Associate's degree	87.9	84.7	79.6	76.0	80.6	55.4	70.7	75.4
Bachelor's degree	89.8	83.0	80.0	77.0	70.2	56.6	70.4	66.9
Undergraduate certificate	80.4	75.3	73.7	74.8	76.3	52.4	72.8	69.2
Other undergraduate program	86.7	82.6	76.3	77.0	73.7	62.1	67.3	69.2
Degree attainment								
None	91.4	85.7	81.6	79.1	77.8	54.0	73.9	74.5
Less-than-2-year license/certificate	74.2	67.4	60.4	58.2	75.5	33.4	70.4	71.2
2- to 3-year voc/occ diploma	93.8	86.1	80.2	68.3	79.8	—	53.8	72.3
2- to 3-year associate's	93.6	89.7	83.6	77.3	79.2	56.8	62.7	78.3
4- to 5-year bachelor's	92.0	87.0	78.9	77.7	—	—	—	—

—Too few cases for a reliable estimate.

¹AY=Academic year.

²For the 3-year period, level and control refers to the level and control of the institution attended in 1989–90, and for specific years, level and control refers to the level and control of the primary institution attended in the current AY.

³Students who consider their primary role that of an employee who happens to be enrolled.

NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 4.2—Percentage distribution of 1989–90 beginning postsecondary students who worked while enrolled according to their reported primary role in postsecondary education, by selected student and institutional characteristics

	Student works to pay expenses	Student works to earn spending money	Employee who is enrolled
Total	50.6	25.2	24.2
Level and control of primary institution in AY ¹ 1989–90			
Public			
Less-than-4-year	43.8	18.6	37.7
4-year	57.8	32.2	10.1
Private, not-for-profit			
Less-than-4-year	60.3	20.7	19.0
4-year	55.5	34.4	10.1
Private, for-profit	44.0	12.6	43.5
Level of primary institution in AY ¹ 1989–90			
Less-than-2-year	40.8	9.3	49.9
2- to 3-year	44.7	18.7	36.6
4-year	57.0	32.9	10.1
Control of primary institution in AY ¹ 1989–90			
Public	50.0	24.6	25.4
Private, not-for-profit	56.0	33.1	10.9
Private, for-profit	44.0	12.6	43.5
Race–ethnicity			
White, non-Hispanic	49.4	26.6	24.0
Black, non-Hispanic	49.5	22.9	27.6
Hispanic	55.2	13.3	31.5
Asian/Pacific Islander	66.0	28.0	6.0
Native American	54.8	20.0	25.2
Gender			
Male	48.3	25.2	26.5
Female	52.7	25.3	22.0
Parent's education			
Less than high school graduate	40.7	7.3	52.0
High school graduate	53.3	18.4	28.3
Trade or vocational school	53.1	30.4	16.5
Less than 2 years of college	53.3	20.3	26.5
2 or more years of college	56.3	27.6	16.0
Bachelor's degree	51.6	33.3	15.1
Postgraduate/professional	49.2	39.2	11.7
Age as of 12/31/89			
23 or younger	54.7	28.6	16.7
24–26	29.4	0.7	69.9
27–29	31.4	1.7	66.9
30 or older	14.6	3.8	81.6
Socioeconomic status			
Bottom quartile	40.8	6.9	52.3
Middle quartiles	55.2	17.2	27.6
Top quartile	48.5	38.2	13.3

Table 4.2—Percentage distribution of 1989–90 beginning postsecondary students who worked while enrolled according to their reported primary role in postsecondary education, by selected student and institutional characteristics—Continued

	Student works to pay expenses	Student works to earn spending money	Employee who is enrolled
Dependency status in AY ¹ 1989–90			
Dependent	55.8	30.4	13.8
Independent	30.4	5.3	64.3
Income and dependency status in AY ¹ 1989–90			
Dependent student			
Less than \$20,000	66.9	16.3	16.8
\$20,000–\$39,999	60.9	25.0	14.0
\$40,000–\$59,999	54.8	30.7	14.6
\$60,000 or more	40.2	49.7	10.1
Independent student			
Less than \$10,000	49.7	10.4	39.8
\$10,000–\$19,999	21.5	3.2	75.2
\$20,000 or more	14.4	0.9	84.8
Degree program in AY ¹ 1989–90			
Associate's degree	47.0	21.9	31.1
Bachelor's degree	57.6	33.1	9.4
Undergraduate certificate	44.2	19.5	36.3
Other undergraduate program	47.3	18.8	33.9
Degree attainment			
None	51.4	27.3	21.3
Less-than-2-yr license/certificate	42.0	16.0	42.0
2- to 3-yr voc/occ diploma	52.0	24.9	23.1
2- to 3-yr associate's degree	54.0	22.6	23.4
4- to 5-yr bachelor's degree	72.3	21.1	6.6

¹AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 4.3a—Average number of hours worked per week by 1989–90 beginning postsecondary students who worked while enrolled primarily as students during the academic years 1989–90, 1990–91, and 1991–92, by selected student and institutional characteristics

	AY ¹ 1989–90 Average hours worked while enrolled	AY ¹ 1990–91 Average hours worked while enrolled	AY ¹ 1991–92 Average hours worked while enrolled
Total	26.4	28.1	26.1
Level and control of primary institution in current AY ¹			
Public			
Less-than-4-year	27.5	29.8	29.1
4-year	25.9	27.9	25.6
Private, not-for-profit			
Less-than-4-year	27.4	27.3	26.7
4-year	24.9	25.3	22.8
Private, for-profit	27.9	29.0	29.0
Level of primary institution in current AY ¹			
Less-than-2-year	29.8	31.0	—
2- to 3-year	27.4	29.5	29.0
4-year	25.6	27.1	24.9
Control of primary institution in current AY ¹			
Public	26.7	28.7	26.9
Private, not-for-profit	25.1	25.5	23.0
Private, for-profit	27.9	29.0	29.0
Race—ethnicity			
White, non-Hispanic	26.9	28.2	26.4
Black, non-Hispanic	23.0	25.4	24.7
Hispanic	26.1	30.2	26.0
Asian/Pacific Islander	23.6	28.3	25.0
Native American	—	—	—
Gender			
Male	28.1	29.8	27.2
Female	25.0	26.7	25.2

Table 4.3a—Average number of hours worked per week by 1989-90 beginning postsecondary students who worked while enrolled primarily as students during the academic years 1989-90, 1990-91, and 1991-92, by selected student and institutional characteristics—Continued

	AY ¹ 1989-90 Average hours worked while enrolled	AY ¹ 1990-91 Average hours worked while enrolled	AY ¹ 1991-92 Average hours worked while enrolled
Dependency status in AY ¹ 1989-90			
Dependent	26.3	28.0	26.1
Independent	27.7	29.7	26.9
Age as of 12/31/89			
23 or younger	26.4	28.1	26.1
24-26	32.8	36.2	—
27-29	—	—	—
30 or older	24.3	26.5	—
Socioeconomic status			
Bottom quartile	24.5	26.7	24.4
Middle quartiles	26.4	28.5	26.1
Top quartile	26.7	27.9	26.4
Income and dependency status in AY ¹ 1989-90			
Dependent student	25.1	27.9	25.3
Less than \$20,000	25.4	27.6	25.9
\$20,000-\$39,999	26.4	27.9	26.6
\$40,000-\$59,999	28.4	28.6	26.4
\$60,000 or more	—	—	—
Independent student	26.6	29.1	27.3
Less than \$10,000	28.6	31.3	—
\$10,000-\$19,999	31.5	—	—
\$20,000 or more	—	—	—
Degree program in AY ¹ 1989-90			
Associate's degree	26.8	29.2	27.8
Bachelor's degree	25.4	27.0	24.6
Undergraduate certificate	27.8	28.6	26.8
Other undergraduate program	27.6	29.2	28.1

Table 4.3a—Average number of hours worked per week by 1989–90 beginning postsecondary students who worked while enrolled primarily as students during the academic years 1989–90, 1990–91, and 1991–92, by selected student and institutional characteristics—Continued

Degree attainment	AY ¹ 1989–90	AY ¹ 1990–91	AY ¹ 1991–92
	Average hours worked while enrolled	Average hours worked while enrolled	Average hours worked while enrolled
None	26.4	28.0	25.9
Less-than-2-yr license/certificate	27.1	28.8	25.2
2- to 3-yr voc/occ diploma	25.3	24.4	—
2- to 3-yr associate's	24.9	27.1	27.6
4- to 5-yr bachelor's	24.3	25.1	23.2

—Too few cases for a reliable estimate.

¹AY=Academic year. Current AY refers to the year shown in the respective column headings.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 4.3b—Percentage distribution of 1989–90 beginning postsecondary students who worked while enrolled primarily as students by number of hours worked during the academic years 1989–90, 1990–91, and 1991–92, by selected student and institutional characteristics

	AY ¹ 1989–90		AY ¹ 1990–91		AY ¹ 1991–92				
	20 hours or less	21–35 hours	20 hours or less	21–35 hours	20 hours or less	21–35 hours			
Total	27.7	48.8	23.5	31.6	38.7	29.6	38.3	35.7	26.0
Level and control of primary institution in current AY ¹									
Public	20.2	56.7	23.1	22.4	46.0	31.6	24.4	43.9	31.6
Less-than-4-year	30.9	45.3	23.9	33.7	36.8	29.5	41.3	33.5	25.2
Private, not-for-profit	31.2	40.6	28.1	32.7	41.5	25.9	53.1	21.1	25.8
Less-than-4-year	38.6	38.3	23.1	45.4	28.3	26.3	51.7	28.4	19.9
4-year	16.6	59.7	23.7	25.8	41.7	32.4	20.9	47.9	31.3
Private, for-profit									
Level of primary institution in current AY ¹									
Less-than-2-year	13.8	55.6	30.7	14.5	45.7	39.8			
2- to 3-year	20.7	56.5	22.8	24.1	45.3	30.6	25.0	43.5	31.5
4-year	33.3	43.1	23.6	37.3	34.2	28.5	44.2	32.1	23.7
Control of primary institution in current AY ¹									
Public	25.8	50.7	23.5	28.6	41.0	30.4	35.3	37.3	27.4
Private, not-for-profit	38.0	38.5	23.5	44.4	29.3	26.2	51.8	28.0	20.2
Private, for-profit	16.6	59.7	23.7	25.8	41.7	32.4	20.9	47.9	31.3
Race-ethnicity									
White, non-Hispanic	36.8	48.1	25.1	30.8	40.0	29.3	36.9	36.4	26.7
Black, non-Hispanic	37.5	50.2	12.3	40.1	36.8	23.0	47.5	29.6	22.9
Hispanic	27.1	52.7	20.3	25.0	38.8	36.3	38.2	39.1	22.8
Asian/Pacific Islander	31.0	53.9	15.1	39.6	21.7	38.7	42.8	30.0	27.2
Native American									
Gender									
Male	22.6	49.3	28.1	28.0	36.8	35.3	36.1	33.4	30.5
Female	32.2	48.3	19.5	34.7	40.4	24.9	40.1	37.5	22.4

Table 4.3b—Percentage distribution of 1989–90 beginning postsecondary students who worked while enrolled primarily as students by number of hours worked during the academic years 1989–90, 1990–91, and 1991–92, by selected student and institutional characteristics—Continued

	AY' 1989-90		AY' 1990-91		AY' 1991-92	
	20 hours or less	21-35 hours	20 hours or less	21-35 hours	20 hours or less	21-35 hours
Dependency status in AY' 1989-90						
Dependent	28.3	48.8	32.3	38.6	38.8	34.9
Independent	22.5	47.8	23.8	40.2	28.6	48.5
Age as of 12/31/89						
23 or younger	27.7	48.8	31.8	38.6	38.6	35.2
24-26	2.5	57.7	20.9	15.5	—	—
27-29	—	—	—	—	—	—
30 or older	48.0	29.9	22.8	59.5	—	—
Socioeconomic status						
Bottom quartile	35.6	43.1	34.8	39.0	40.6	42.7
Middle quartiles	25.7	51.8	29.7	40.7	38.4	36.4
Top quartile	28.4	47.0	32.9	37.1	38.0	34.4
Income and dependency status in AY' 1989-90						
Dependent student						
Less than \$20,000	31.3	48.2	34.3	37.7	41.2	38.3
\$20,000-\$39,999	30.5	48.8	32.6	42.2	39.1	35.1
\$40,000-\$59,999	25.7	52.1	32.2	38.0	38.9	31.1
\$60,000 or more	25.9	45.2	30.3	35.2	36.6	36.0
Independent student						
Less than \$10,000	20.9	55.6	25.3	40.6	27.1	46.1
\$10,000-\$19,999	30.5	28.6	21.1	41.0	—	—
\$20,000 or more	18.3	40.9	—	—	—	—
Degree program in AY' 1989-90						
Associate's degree	23.5	54.4	26.1	43.0	28.1	44.9
Bachelor's degree	33.8	43.1	36.7	35.2	45.7	30.8
Undergraduate certificate	23.8	48.4	27.9	40.8	40.2	31.6
Other undergraduate program	21.2	54.3	28.4	40.4	29.5	38.7

Table 4.3b—Percentage distribution of 1989–90 beginning postsecondary students who worked while enrolled primarily as students by number of hours worked during the academic years 1989–90, 1990–91, and 1991–92, by selected student and institutional characteristics—Continued

	AY ¹ 1989–90		AY ¹ 1990–91		AY ¹ 1991–92	
	20 hours or less	21–35 hours	20 hours or less	21–35 hours	20 hours or less	21–35 hours
Degree attainment						
None	28.8	47.1	33.0	37.5	39.2	35.6
Less-than-2-yr license/certificate	17.4	60.9	29.8	32.9	40.3	29.7
2- to 3-yr voc/occ diploma	34.1	47.1	40.7	45.4	—	—
2- to 3-yr associate's	31.6	51.6	27.1	53.0	33.1	36.2
4- to 5-yr bachelor's	30.3	47.4	32.4	49.2	39.2	41.7

---Too few cases for a reliable estimate.

¹AY=Academic year. Current AY refers to the year shown in the respective column headings.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 4.4—Percentage of 1989–90 beginning postsecondary students among those who reported their primary role as a student, by type of job, by selected student and institutional characteristics

	Job related to area of study	Co-op/internship/apprenticeship	At least one on-campus job	Off-campus job	More than one job at a time
Total	22.8	12.3	23.4	94.9	18.3
Level and control of primary institution in AY ¹ 1989–90					
Public					
Less-than-4-year	24.7	10.9	9.6	95.9	19.4
4-year	19.1	11.5	27.9	94.7	17.1
Private, not-for-profit					
Less-than-4-year	30.2	11.4	30.1	94.4	19.0
4-year	25.5	16.1	43.0	92.9	20.7
Private, for-profit	26.4	13.5	6.9	96.6	11.6
Level of primary institution in AY ¹ 1989–90					
Less-than-2-year	25.4	7.5	4.7	96.9	10.4
2- to 3-year	25.1	11.6	10.6	95.9	19.1
4-year	21.1	13.0	32.7	94.1	18.3
Control of primary institution in AY ¹ 1989–90					
Public	21.7	11.2	19.4	95.3	18.2
Private, not-for-profit	25.9	15.7	41.9	93.0	20.6
Private, for-profit	26.4	13.5	6.9	96.6	11.6
Race-ethnicity					
White, non-Hispanic	23.0	11.1	22.1	96.3	18.1
Black, non-Hispanic	20.3	19.9	34.9	87.9	19.0
Hispanic	26.9	17.5	15.4	94.8	24.6
Asian/Pacific Islander	19.5	13.3	35.4	84.1	13.2
Native American	—	—	—	—	—
Gender					
Male	19.0	11.9	20.8	96.0	16.8
Female	26.1	12.6	25.5	94.0	19.6
Parent's education					
Less than high school graduate	26.9	18.5	26.8	87.7	14.3
High school graduate	21.8	11.8	18.1	96.4	18.6
Trade or vocational school	21.4	9.9	28.6	95.8	17.7
Less than 2 years of college	18.3	11.0	19.1	97.1	24.9
2 or more years of college	26.0	12.8	21.1	95.9	15.2
Bachelor's degree	22.3	10.2	25.4	93.9	17.6
Postgraduate/professional	22.5	14.4	29.8	94.3	20.3
Age as of 12/31/89					
23 or younger	22.4	12.0	23.5	95.4	18.8
24–26	18.6	5.1	14.6	86.6	6.0
27–29	—	—	—	—	—
30 or older	20.8	15.6	17.5	86.6	11.6

Table 4.4—Percentage of 1989-90 beginning postsecondary students among those who reported their primary role as a student, by type of job, by selected student and institutional characteristics—Continued

	Job related to area of study	Co-op/ internship/ apprenticeship	At least one on-campus job	Off- campus job	More than one job at a time
Socioeconomic status					
Bottom quartile	21.3	14.0	32.1	83.5	17.9
Middle quartiles	22.8	12.9	24.1	95.1	19.4
Top quartile	23.1	11.5	21.5	96.4	17.5
Dependency status in AY¹ 1989-90					
Dependent	21.8	12.3	24.1	95.4	18.8
Independent	31.7	11.8	16.2	89.9	14.4
Income and dependency status in AY¹ 1989-90					
Dependent student					
Less than \$20,000	22.5	15.4	29.2	92.2	19.6
\$20,000-\$39,999	25.0	11.9	27.0	94.7	20.7
\$40,000-\$59,999	20.1	10.8	22.3	97.3	18.8
\$60,000 or more	19.1	11.9	18.2	96.8	15.5
Independent student					
Less than \$10,000	29.9	11.1	17.6	90.8	15.7
\$10,000-\$19,999	39.2	12.3	15.5	86.6	16.7
\$20,000 or more	29.8	14.7	10.1	90.5	4.5
Degree program in AY¹ 1989-90					
Associate's degree	26.4	11.1	12.6	96.3	17.7
Bachelor's degree	20.8	12.9	33.7	93.7	18.3
Undergraduate certificate	21.9	10.6	19.6	94.4	16.1
Other undergraduate program	22.4	14.3	16.6	96.3	22.1
Degree attainment					
None	20.6	11.6	25.5	94.8	19.2
Less-than-2-yr license/certificate	32.1	14.7	9.7	96.6	11.7
2- to 3-yr voc/occ diploma	34.2	9.1	30.1	81.0	15.0
2- to 3-yr associate's	34.5	17.7	16.9	97.4	18.5
4- to 5-yr bachelor's	32.8	13.1	38.6	88.3	17.5

—Too few cases for a reliable estimate.

¹AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. These job characteristics are not mutually exclusive, and therefore totals do not add to 100 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 4.5—Percentage distribution of persistence and attainment for 1989–90 beginning postsecondary students whose primary role was as students who worked while enrolled, by characteristics of jobs and by level of primary institution in academic year 1989–90¹

	Last enrolled before July 1990	Last enrolled before July 1991	Last enrolled after June 1991	Still enrolled during BPS:92	Attained some postsecondary award
All institutions					
Total	7.1	9.1	11.2	56.8	15.8
Had at least one job related to studies					
Yes	5.6	7.7	9.5	54.0	23.2
No	7.5	9.4	11.7	57.8	13.6
Had at least one on-campus job					
Yes	4.6	4.7	10.7	69.0	11.1
No	7.8	10.3	11.4	53.3	17.2
Had at least one co-op/apprentice job					
Yes	5.3	7.7	8.3	58.2	20.5
No	7.3	9.2	11.5	56.8	15.2
Had at least one off-campus job					
Yes	6.6	9.1	11.1	57.2	15.9
No	15.3	8.5	10.6	52.2	13.4
Average hours worked while enrolled 1989–90					
15 or less	4.4	6.6	10.3	63.1	15.6
16–24	7.7	9.8	8.8	55.9	17.8
25–35	8.4	8.2	13.4	53.3	16.8
More than 35	9.8	11.8	11.4	53.1	13.9
2- to 3-year institutions					
Total	10.9	13.2	8.5	39.9	27.5
Had at least one job related to studies					
Yes	10.6	12.7	6.8	33.0	36.9
No	10.8	13.1	9.2	42.5	24.5
Had at least one on-campus job					
Yes	14.8	10.5	5.3	29.2	40.2
No	10.3	13.3	9.0	41.4	26.1
Had at least one co-op/apprentice job					
Yes	14.1	15.1	4.8	25.4	40.6
No	10.3	12.8	8.9	42.2	25.9
Had at least one off-campus job					
Yes	10.0	13.1	8.6	40.8	27.5
No	27.6	16.9	3.8	23.3	28.4

Table 4.5—Percentage distribution of persistence and attainment for 1989–90 beginning postsecondary students whose primary role was as students who worked while enrolled, by characteristics of jobs and by level of primary institution in academic year 1989–90¹—Continued

	Last enrolled before July 1990	Last enrolled before July 1991	Last enrolled after June 1991	Still enrolled during BPS:92	Attained some postsecondary award
2- to 3-year institutions—Continued					
Average hours worked while enrolled 1989–90					
15 or less	4.5	10.5	5.7	37.8	41.6
16–24	14.1	11.3	3.9	41.0	29.8
25–35	11.8	10.4	13.3	41.0	23.5
More than 35	13.5	18.4	8.0	39.1	21.0
4-year institutions					
Total	4.7	6.2	13.4	70.8	4.9
Had at least one job related to studies					
Yes	2.1	4.1	12.0	74.1	7.7
No	5.4	6.7	13.7	76.0	4.2
Had at least one on-campus job					
Yes	2.5	3.5	11.9	77.8	4.3
No	5.8	7.5	14.1	67.5	5.1
Had at least one co-op/apprentice job					
Yes	0.4	3.2	10.8	79.5	6.1
No	5.3	6.6	13.8	69.6	4.7
Had at least one off-campus job					
Yes	4.4	6.3	13.3	71.1	4.9
No	10.1	4.9	14.0	67.0	4.1
Average hours worked while enrolled 1989–90					
15 or less	4.5	5.2	12.2	74.3	3.8
16–24	3.4	9.2	12.1	68.2	7.0
25–35	4.9	5.1	14.9	70.3	4.8
More than 35	7.3	6.4	14.4	66.3	5.6

¹“Students who worked” are those who said their primary role in postsecondary education was as a student who worked to pay expenses or to earn extra spending money.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 4.6—Occupational classification of 1989–90 beginning postsecondary students who held primary jobs in 1991, by selected student and institutional characteristics¹

	Clerical	Craftsman/ repair	Laborer	Manager/ administrator	Skilled operator	Professional	Sales	Service	Technical	Other
Total	22.8	6.7	7.1	17.0	8.3	4.1	8.2	14.0	3.8	8.2
Level and control of primary institution in AY ² 1989–90										
Public	21.8	8.1	7.6	16.4	8.1	3.5	7.4	15.0	3.4	8.6
Less-than-4-year 4-year	23.5	2.8	5.0	20.0	3.8	5.7	13.1	12.6	2.9	10.6
Private, not-for-profit	3.3	2.3	5.8	20.6	2.3	1.0	5.7	29.0	3.1	27.0
Less-than-4-year 4-year	29.6	2.7	5.7	19.5	2.6	14.4	5.7	5.5	4.2	10.1
Private, for-profit	25.1	5.6	7.5	15.3	17.5	0.1	8.8	13.3	6.4	0.6
Level of primary institution in AY ² 1989–90										
Less-than-2-year 2- to 3-year 4-year	24.4	8.5	7.2	16.4	18.1	0.2	4.8	17.6	2.7	9.0
	21.7	7.5	7.5	16.3	8.4	3.3	8.0	14.6	4.1	8.6
	25.5	2.8	5.3	19.8	3.4	8.6	10.7	10.3	3.3	10.4
Control of primary institution in AY ² 1989–90										
Public	22.1	7.2	7.1	17.0	7.4	3.9	8.4	14.6	3.3	8.9
Private, not-for-profit	25.7	2.6	5.7	19.6	2.6	12.4	5.7	9.0	4.0	12.6
Private, for-profit	25.1	5.6	7.5	15.3	17.5	0.1	8.8	13.3	6.4	0.6
Race-ethnicity										
White, non-Hispanic	23.1	7.8	6.5	17.2	8.9	3.8	7.7	13.0	4.2	7.7
Black, non-Hispanic	16.7	0.0	5.9	6.7	7.3	11.2	11.2	24.8	1.4	14.7
Hispanic	24.0	9.6	11.2	24.2	4.2	1.2	11.1	13.7	1.4	8.3
Asian/Pacific Islander	—	—	—	—	—	—	—	—	—	—
Native American	—	—	—	—	—	—	—	—	—	—
Gender										
Male	8.7	12.5	10.5	21.4	12.5	2.8	4.7	11.9	3.0	12.0
Female	38.2	0.2	3.3	12.2	3.7	5.4	12.0	16.4	4.7	4.0

Table 4.6—Occupational classification of 1989-90 beginning postsecondary students who held primary jobs in 1991, by selected student and institutional characteristics¹—Continued

	Clerical	Craftsman/ repair	Laborer	Manager/ administrator	Skilled operator	Professional	Sales	Service	Technical	Other
Dependency status in AY ² 1989-90										
Dependent	22.5	7.1	7.7	10.6	6.8	5.6	10.9	17.4	1.7	9.7
Independent	23.0	6.3	6.5	22.3	9.5	2.9	6.0	11.2	5.4	6.9
Degree program										
Associate's degree	24.6	7.3	8.0	16.2	7.9	2.1	6.2	17.8	3.1	6.8
Bachelor's degree	26.8	1.7	5.0	19.1	3.6	8.3	9.1	12.3	1.6	12.6
Undergraduate certificate	21.6	9.0	7.3	19.3	10.8	3.6	6.8	11.5	6.4	3.7
Other undergraduate program	17.6	6.5	6.3	15.0	9.6	5.7	12.8	10.3	3.9	12.2
Age as of 12/31/89										
23 or younger	19.9	7.3	7.4	12.5	7.7	4.6	10.1	16.9	2.6	9.1
24-26	21.9	3.8	13.7	22.3	8.0	1.2	3.3	9.1	10.1	6.5
27-29	13.4	15.1	3.5	24.5	8.1	0.8	12.8	12.7	7.8	1.2
30 or older	32.8	4.0	3.3	19.7	10.0	4.8	4.2	9.3	3.4	8.4
Socioeconomic status										
Bottom quartile	25.1	4.3	4.7	19.1	9.5	1.1	8.9	10.1	9.5	7.7
Middle quartiles	19.6	7.7	7.2	16.2	9.1	5.4	8.2	17.3	2.2	7.1
Top quartile	26.9	7.0	9.2	16.5	5.3	4.4	7.4	11.1	1.4	10.8
Income and dependency status in AY ² 1989-90										
Dependent student										
Less than \$20,000	18.3	2.6	5.1	9.7	10.8	8.1	14.4	14.9	4.4	11.6
\$20,000-\$39,999	14.1	9.4	8.6	7.4	11.1	6.3	12.6	26.6	0.2	3.6
\$40,000-\$59,999	32.9	10.1	10.7	2.7	2.2	3.7	7.3	16.8	0.7	12.8
\$60,000 or more	25.0	4.3	4.7	32.5	1.1	3.7	9.1	5.5	2.2	12.0
Independent student										
Less than \$10,000	22.9	6.2	20.5	21.2	4.0	1.0	7.4	11.4	0.9	4.5
\$10,000-\$19,999	19.4	2.8	2.0	27.2	14.4	1.6	5.9	12.6	6.1	8.1
\$20,000 or more	25.7	9.0	2.0	19.1	8.9	4.9	5.3	10.1	7.6	7.4

Table 4.6—Occupational classification of 1989–90 beginning postsecondary students who held primary jobs in 1991, by selected student and institutional characteristics¹—Continued

Degree attainment	Craftsman/repair		Laborer		Manager/administrator		Skilled operatives		Professional		Sales		Service		Technical		Other	
	Clerical	repair	Laborer	administrator	Skilled operatives	Professional	Sales	Service	Technical	Other								
None	22.0	6.2	6.5	18.3	7.9	5.7	9.7	12.1	3.2	8.5								
Less than 2-year license/certificate	20.5	5.6	18.1	8.0	14.1	0.1	3.8	26.8	3.6	0.0								
2- to 3-year voc/occ diploma	38.0	7.7	0.3	25.4	4.4	1.3	1.7	2.4	8.8	10.0								
2 to 3-year associate's																		
4 to 5-year bachelor's																		

¹Too few cases for a reliable estimate

²Primary jobs are those held after the last term of enrollment or by students who said their primary role in postsecondary education was as an employee.

³AY Academic year

⁴NOTE: Four year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

⁵SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 4.7—Percentage of 1989–90 beginning postsecondary students whose primary role was as an employee who reported receiving employer-provided training in 1991, by major occupational classifications

	Employer provided training
Total	28.0
Employment: primary occupation	
Clerical	30.0
Craftsman/repair	19.6
Laborer	12.5
Manager/administrator	40.1
Skilled operator	11.1
Professional	15.3
Sales	14.8
Service	34.9
Technical	41.3
Other	—

—Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 4.8—Percentage of 1989–90 beginning postsecondary students who worked at any time while enrolled, the average number of months enrolled but not working, and the average number of months enrolled and working, by selected student and institutional characteristics¹

	AY ² 1989–90			AY ² 1990–91			AY ² 1991–92		
	% working while enrolled	Average number of months not working	Average number of months working and enrolled	% working while enrolled	Average number of months not working	Average number of months working and enrolled	% working while enrolled	Average number of months not working	Average number of months working and enrolled
Total	82.2	3.5	4.8	78.5	3.3	5.3	76.4	3.4	5.1
Primary role in postsecondary education									
Student works to pay expenses	93.3	2.8	6.1	92.7	2.3	6.4	88.3	2.4	6.3
Student works for spending	86.5	4.4	4.9	86.2	4.0	5.3	80.5	4.3	4.9
Employee ³	96.4	1.3	6.3	96.3	1.1	6.6	91.6	1.1	6.0
Level and control of primary institution in current AY ²									
Public									
Less-than-4-year	84.6	2.4	5.2	80.0	2.3	5.8	76.7	2.4	5.2
4-year	83.5	4.4	4.7	80.9	4.2	5.2	77.6	3.9	5.3
Private, not-for-profit									
Less-than-4-year	71.9	4.3	3.5	69.0	3.6	4.7	71.8	2.5	4.7
4-year	82.8	4.5	4.7	79.7	4.1	5.2	75.2	4.0	5.0
Private, for-profit	68.9	3.4	3.7	63.1	2.8	3.3	69.7	2.6	3.8
Level of primary institution in current AY ²									
Less-than-2-year	62.5	3.7	3.1	59.2	2.6	2.8	65.4	3.2	2.8
2- to 3-year	84.6	2.5	5.2	79.6	2.5	5.8	77.3	2.4	5.2
4-year	83.3	4.4	4.7	80.5	4.1	5.2	76.9	4.0	5.2
Control of primary institution in current AY ²									
Public	84.2	3.3	5.0	80.4	3.2	5.5	77.2	3.3	5.2
Private, not-for-profit	81.5	4.4	4.5	78.5	4.0	5.2	74.9	3.9	5.0
Private, for-profit	68.9	3.4	3.7	63.1	2.8	3.3	69.7	2.6	3.8

Table 4.8—Percentage of 1989–90 beginning postsecondary students who worked at any time while enrolled, the average number of months enrolled but not working, and the average number of months enrolled and working, by selected student and institutional characteristics¹—Continued

	AY ² 1989–90			AY ² 1990–91			AY ² 1991–92		
	% working while enrolled	Average number of months not working enrolled	Average number of months working and enrolled	% working while enrolled	Average number of months not working enrolled	Average number of months working and enrolled	% working while enrolled	Average number of months not working enrolled	Average number of months working and enrolled
Race-ethnicity									
White, non-Hispanic	83.4	3.4	4.9	80.2	3.3	5.3	77.9	3.3	5.2
Black, non-Hispanic	76.1	3.7	3.9	67.8	3.8	4.5	66.9	3.5	4.5
Hispanic	82.8	3.0	5.0	77.6	2.9	5.8	74.2	3.3	5.2
Asian/Pacific Islander	69.4	5.0	4.0	69.4	4.4	5.2	70.0	4.5	5.2
Native American	87.0	3.2	4.4	83.2	2.7	5.7	—	—	—
Gender									
Male	84.6	3.4	4.8	80.9	3.5	5.1	76.6	3.5	5.0
Female	80.1	3.5	4.8	76.5	3.2	5.3	76.3	3.3	5.3
Dependency status in AY² 1989–90									
Dependent	84.5	3.7	4.9	80.8	3.5	5.4	77.2	3.5	5.2
Independent	75.6	2.7	4.4	68.5	2.7	4.5	71.6	2.5	5.0
Parent's education									
Less than high school graduate	78.8	2.8	4.6	69.9	2.9	5.0	73.0	3.0	5.2
High school graduate	81.8	3.1	4.8	79.3	2.9	5.3	79.0	2.8	5.4
Trade or vocational school	83.0	3.5	5.3	75.9	3.4	5.7	80.6	2.9	5.7
Less than 2 years of college	80.0	3.1	4.8	82.1	2.3	6.1	80.4	2.5	5.7
2 or more years of college	83.7	3.8	4.9	79.9	3.3	5.0	81.2	3.3	5.3
Bachelor's degree	86.0	3.9	4.9	80.3	3.9	5.1	73.1	3.9	4.8
Postgraduate/professional	83.2	4.4	4.6	80.6	4.0	5.3	74.3	4.3	4.7
Age as of 12/31/89									
23 or younger	84.0	3.6	4.9	80.5	3.4	5.4	76.9	3.5	5.2
24–26	83.6	2.0	4.8	75.3	2.3	4.3	74.9	2.3	5.0
27–29	68.2	3.4	3.9	55.6	3.8	4.1	70.6	2.4	5.2
30 or older	70.7	3.0	4.0	60.4	3.1	4.0	69.1	2.6	4.2

Table 4.8—Percentage of 1989–90 beginning postsecondary students who worked at any time while enrolled, the average number of months enrolled but not working, and the average number of months enrolled and working, by selected student and institutional characteristics¹—Continued

	AY ² 1989–90			AY ² 1990–91			AY ² 1991–92		
	% working while enrolled	Average number of months enrolled, not working	Average number of months working and enrolled	% working while enrolled	Average number of months enrolled, not working	Average number of months working and enrolled	% working while enrolled	Average number of months enrolled, not working	Average number of months working and enrolled
Socioeconomic status									
Bottom quartile	72.8	3.1	4.1	61.8	3.5	4.3	69.2	2.8	5.0
Middle quartiles	83.2	3.1	4.9	79.4	2.9	5.5	78.9	2.9	5.4
Top quartile	84.5	4.1	4.8	81.9	3.7	5.2	75.7	3.9	5.0
Income and dependency status in AY² 1989–90									
Dependent student									
Less than \$20,000	82.1	3.5	4.7	77.8	3.4	5.5	76.6	3.2	5.1
\$20,000–\$39,999	86.7	3.4	5.1	82.2	3.1	5.8	80.8	2.9	5.6
\$40,000–\$59,999	86.0	3.6	5.3	82.9	3.3	5.5	77.3	3.4	5.2
\$60,000 or more	82.2	4.4	4.4	79.2	4.2	4.8	73.0	4.6	4.6
Income and dependency status in AY² 1989–90—Continued									
Independent student									
Less than \$10,000	71.0	3.5	4.0	64.2	3.2	4.2	69.1	2.8	5.0
\$10,000–\$19,999	78.3	2.2	4.6	74.6	2.2	4.9	77.9	1.9	5.3
\$20,000 or more	78.8	2.3	4.7	69.0	2.4	4.6	70.3	2.6	4.6
Degree program									
Associate's degree	84.7	2.7	5.3	79.6	2.6	5.8	76.0	2.7	5.2
Bachelor's degree	83.0	4.5	4.6	80.0	4.1	5.1	77.0	3.9	5.2
Undergraduate certificate	75.3	3.4	4.1	73.7	2.9	4.3	74.8	3.2	4.6
Other undergraduate program	82.6	2.8	4.8	76.3	3.1	5.3	77.0	3.4	5.3

Table 4.8—Percentage of 1989–90 beginning postsecondary students who worked at any time while enrolled, the average number of months enrolled but not working, and the average number of months enrolled and working, by selected student and institutional characteristics¹—Continued

	AY ² 1989–90		AY ² 1990–91		AY ² 1991–92	
	% working while enrolled	Average number of months not working and enrolled	% working while enrolled	Average number of months not working and enrolled	% working while enrolled	Average number of months not working and enrolled
Degree attainment						
None	85.7	3.6	81.6	3.4	79.1	3.4
Less-than-2-year license/certificate	67.4	4.0	60.4	3.0	58.2	2.8
2- to 3-year voc/occ diploma	86.1	3.8	80.2	3.8	68.3	3.3
2- to 3-year associate's	89.7	3.0	83.6	2.7	77.3	2.9
4- to 5-year bachelor's	87.0	4.3	78.9	3.9	77.7	3.7

—Too few cases for a reliable estimate.

¹The first row and first three columns of the table read "among students enrolled in 1989–90, 82.2 percent worked at some time during their enrollment" (column 1); "students enrolled in 1989–90 spent an average of 3.5 months not working during their enrollment" (column 2) and "students enrolled in 1989–90 spent an average of 4.8 months working during their enrollment" (column 3). Columns 4–6 and 7–9 are the same for 1990–91 and 1991–92 academic years, respectively.

²AY=Academic year. Current AY refers to the year shown in the respective column headings.
³Students who consider their primary role that of an employee who happens to be enrolled.

NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 4.9—Proportion of months employed to months enrolled for 1989–90 beginning postsecondary students who worked while enrolled during the academic years 1989–90, 1990–91, and 1991–92, by primary role, and by selected student and institutional characteristics

	Primarily students			Primarily employees		
	Ratio of months employed to months enrolled		Ratio of months employed to months enrolled	Ratio of months employed to months enrolled		Ratio of months employed to months enrolled
	AY ¹ 1989–90	AY ¹ 1990–91		AY ¹ 1991–92	AY ¹ 1989–90	
Total	61.8	68.6	66.7	81.5	86.8	85.7
Level and control of primary institution in current AY ¹						
Public						
Less-than-4-year	74.8	79.0	77.5	86.5	92.7	91.1
4-year	53.9	62.5	63.2	72.6	69.6	74.1
Private, not-for-profit						
Less-than-4-year	55.1	68.7	76.3	69.8	—	—
4-year	53.8	61.6	61.2	73.5	73.7	77.8
Private, for-profit	66.4	76.1	66.3	70.6	90.2	81.4
Level of primary institution in current AY ¹						
Less-than-2-year	64.4	78.8	55.0	70.8	89.6	—
2- to 3-year	73.6	78.2	77.6	85.6	92.3	91.5
4-year	53.9	62.3	62.6	72.9	71.0	74.6
Control of primary institution in current AY ¹						
Public	63.6	69.9	67.9	84.1	87.5	86.9
Private, not-for-profit	54.0	62.2	62.0	72.9	75.3	79.6
Private, for-profit	66.4	76.1	66.3	70.6	90.2	81.4
Race-ethnicity						
White, non-Hispanic	61.9	68.0	66.7	83.6	87.6	87.5
Black, non-Hispanic	59.6	69.4	65.1	60.0	77.1	68.3
Hispanic	71.8	77.0	66.2	81.5	86.3	85.6
Asian/Pacific Islander	45.8	66.9	67.7	—	—	—
Native American	—	—	—	—	—	—
Gender						
Male	60.7	65.8	63.8	83.5	84.3	85.0
Female	62.8	71.0	69.1	79.2	89.7	86.6

Table 4.9—Proportion of months employed to months enrolled for 1989–90 beginning postsecondary students who worked while enrolled during the academic years 1989–90, 1990–91, and 1991–92, by primary role, and by selected student and institutional characteristics—Continued

	Primarily students		Primarily employees			
	Ratio of months employed to months enrolled		Ratio of months employed to months enrolled			
	AY ¹ 1989–90	AY ¹ 1990–91	AY ¹ 1991–92	AY ¹ 1989–90	AY ¹ 1990–91	AY ¹ 1991–92
Dependency status in AY ¹ 1989–90						
Dependent	61.7	68.3	66.2	73.4	81.9	81.8
Independent	63.0	72.7	73.4	88.2	91.5	91.6
Parent's education						
Less than high school graduate	70.5	81.6	81.2	84.4	88.4	82.5
High school graduate	66.2	70.8	71.4	89.6	93.7	93.4
Trade or vocational school	59.4	70.0	75.1	—	—	—
Less than 2 years of college	72.3	76.8	72.5	79.9	89.6	88.9
2 or more years of college	61.3	68.2	68.8	70.5	84.9	86.5
Bachelor's degree	57.3	64.7	63.0	74.5	75.3	71.6
Postgraduate/professional	54.3	62.9	56.6	65.9	67.8	73.8
Age as of 12/31/89						
23 or younger	61.9	68.8	66.3	77.0	84.0	82.8
24–26	68.1	82.6	—	92.5	85.9	—
27–29	—	—	—	83.9	90.2	—
30 or older	53.5	64.6	—	87.6	95.2	91.2
Socioeconomic status						
Bottom quartile	63.8	63.8	72.9	84.4	90.2	88.3
Middle quartiles	64.9	74.6	72.2	83.7	90.2	89.2
Top quartile	58.9	64.6	61.9	73.4	78.5	78.1
Income and dependency status in AY ¹ 1989–90						
Dependent student						
Less than \$20,000	61.6	70.7	70.4	67.8	85.5	78.1
\$20,000–\$39,999	65.1	73.1	71.4	77.9	83.3	87.9
\$40,000–\$59,999	64.4	67.8	66.0	79.3	86.8	85.8
\$60,000 or more	54.1	60.9	56.9	62.8	66.5	72.7
Independent student						
Less than \$10,000	62.5	75.1	73.4	83.5	87.7	85.9
\$10,000–\$19,999	69.0	67.9	—	87.3	90.8	92.2
\$20,000 or more	56.8	68.6	—	91.5	94.8	94.8

Table 4.9—Proportion of months employed to months enrolled for 1989–90 beginning postsecondary students who worked while enrolled during the academic years 1989–90, 1990–91, and 1991–92, by primary role, and by selected student and institutional characteristics—Continued

	Primarily students			Primarily employees		
	Ratio of months employed to months enrolled			Ratio of months employed to months enrolled		
	AY ¹ 1989–90	AY ¹ 1990–91	AY ¹ 1991–92	AY ¹ 1989–90	AY ¹ 1990–91	AY ¹ 1991–92
Current enrollment pattern ²						
Continuous full-time	58.0	65.3	63.0	68.4	74.3	70.6
Part-time	73.3	76.8	73.9	87.2	92.2	89.6
Not enrolled	(*)	—	—	(*)	—	—
Degree program						
Associate's degree	71.7	77.5	73.2	86.9	91.3	90.9
Bachelor's degree	53.6	62.2	63.9	70.7	75.1	77.2
Undergraduate certificate	61.5	70.3	64.0	77.6	88.2	91.9
Other undergraduate program	67.0	70.9	66.6	81.6	84.2	74.9
Degree attainment						
None	59.9	66.7	66.1	82.2	85.1	84.8
Less-than-2-year license/certificate	65.8	68.8	50.8	77.6	87.4	95.9
2- to 3-year voc/occ diploma	65.3	72.5	—	—	—	—
2- to 3-year associate's	71.4	80.2	77.4	82.1	87.2	—
4- to 5-year bachelor's	47.1	59.9	60.2	—	—	—

—Too few cases for a reliable estimate.

*Not applicable.

¹AY=Academic year. Current AY refers to the year shown in the respective column headings.

²All enrollment patterns other than continuous full-time are combined into the part-time category.

NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 4.10—Percentage of 1989–90 beginning postsecondary students who reported being unemployed in the calendar years 1990 or 1991 and the duration of unemployment spells, by selected student and institutional characteristics

	Calendar year 1990				Calendar year 1991				Duration of unemployment spells (in months)			
	Percent ever unemployed	Number of times			Percent ever unemployed	Number of times			First spell	Second spell	Average of all spells	Average total duration.
		None	One	Two or more		None	One	Two or more				
Total	8.2	91.8	7.8	0.4	5.3	94.8	5.0	0.2	5.1	4.6	5.0	5.8
Level and control of primary institution												
in AY ¹ 1989–90												
Public	9.1	90.9	8.6	0.4	4.7	95.3	4.5	0.2	5.2	4.7	5.1	6.0
Less-than-4-year 4-year	5.3	94.7	5.1	0.2	3.3	96.7	3.2	0.1	4.4	4.1	4.4	4.9
Private, not-for-profit	8.4	91.6	7.2	1.2	9.4	90.6	8.4	1.0	4.0	—	4.2	5.5
Less-than-4-year 4-year	4.4	95.6	4.2	0.2	3.0	97.1	2.8	0.2	5.0	—	4.8	5.2
Private, for-profit	17.9	82.1	16.7	1.2	15.8	84.2	15.3	0.6	5.5	4.7	5.5	6.6
Level of primary institution												
in AY ¹ 1989–90												
Less-than-2-year 2- to 3-year 4-year	20.9	79.1	19.3	1.6	13.6	86.4	13.1	0.4	5.8	5.1	6.0	7.2
	8.9	91.1	8.5	0.4	5.7	94.3	5.4	0.2	5.0	4.6	4.9	5.8
	5.0	95.0	4.8	0.2	3.2	96.8	3.1	0.1	4.5	3.9	4.5	5.0
Control of primary institution												
in AY ¹ 1989–90												
Public	7.5	92.5	7.2	0.3	4.1	95.9	4.0	0.2	4.9	4.6	4.9	5.7
Private, not-for-profit	4.8	95.2	4.5	0.3	3.7	96.3	3.4	0.3	4.7	3.8	4.6	5.3
Private, for-profit	17.9	82.1	16.7	1.2	15.8	84.2	15.3	0.6	5.5	4.7	5.5	6.6
Race-ethnicity												
White, non-Hispanic	8.0	92.0	7.7	0.3	5.1	94.9	4.9	0.2	4.8	4.4	4.8	5.6
Black, non-Hispanic	11.7	88.3	10.7	1.0	8.5	91.5	8.1	0.3	6.4	7.6	6.7	7.7
Hispanic	8.2	91.8	7.4	0.8	3.7	96.3	3.6	0.1	4.8	—	4.3	5.6
Asian/Pacific Islander	1.9	98.2	1.9	0.0	2.0	98.0	1.8	0.2	—	—	—	—
Native American	17.5	82.5	17.5	0.0	17.5	82.5	16.6	0.9	—	—	—	—
Gender												
Male	7.8	92.2	7.3	0.5	5.5	94.5	5.3	0.2	4.8	4.7	4.8	5.7
Female	8.5	91.5	8.1	0.4	5.0	95.0	4.8	0.2	5.2	4.4	5.1	6.0

Table 4.10—Percentage of 1989–90 beginning postsecondary students who reported being unemployed in the calendar years 1990 or 1991 and the duration of unemployment spells, by selected student and institutional characteristics—Continued

	Calendar year 1990				Calendar year 1991				Duration of unemployment spells (in months)			
	Percent ever unemployed	Number of times			Percent ever unemployed	Number of times			First spell	Second spell	Average of all spells	Average total duration
		None	One	Two or more		None	One	Two or more				
Dependency status in AY¹ 1989–90												
Dependent	7.4	92.6	7.1	0.3	4.6	95.4	4.4	0.2	4.3	4.8	4.4	5.2
Independent	10.3	89.8	9.6	0.7	7.1	92.9	6.8	0.3	6.5	4.1	6.2	7.1
Parent's education												
Less than high school graduate	13.4	86.6	13.2	0.3	7.4	92.6	7.3	0.1	5.3	4.8	5.1	6.0
High school graduate	9.6	90.4	9.1	0.5	6.7	93.3	6.5	0.2	4.6	4.3	4.5	5.4
Trade or vocational school	8.2	91.8	7.5	0.7	11.0	89.0	9.7	1.3	4.2	—	4.3	5.4
Less than 2 years of college	9.4	90.6	9.3	0.2	4.7	95.3	4.6	0.1	8.6	—	8.4	10.0
2 or more years of college	4.5	95.5	4.5	0.0	2.8	97.2	2.6	0.2	4.0	—	4.0	4.1
Bachelor's degree	6.4	93.6	5.7	0.7	3.9	96.1	3.8	0.1	4.7	—	5.0	5.6
Postgraduate/professional	5.5	94.5	5.4	0.1	2.5	97.5	2.5	0.0	4.6	—	4.4	4.7
Age as of 12/31/89												
23 or younger	8.1	91.9	7.6	0.5	4.9	95.1	4.7	0.2	4.5	4.6	4.4	5.3
24–26	7.9	92.1	7.9	0.0	9.7	90.3	9.7	0.0	9.7	—	9.6	10.2
27–29	6.3	93.8	5.8	0.5	6.8	93.2	6.8	0.0	7.2	—	7.2	7.6
30 or older	9.6	90.4	9.4	0.2	5.8	94.2	5.4	0.5	6.3	—	6.1	7.1
Socioeconomic status												
Bottom quartile	13.3	86.7	12.8	0.5	8.2	91.8	7.7	0.5	7.5	4.7	7.1	8.4
Middle quartiles	8.8	91.2	8.2	0.6	5.5	94.5	5.3	0.3	4.8	4.8	4.8	5.7
Top quartile	5.5	94.5	5.4	0.1	3.8	96.2	3.8	0.1	3.7	3.8	3.7	4.2
Income and dependency status in AY¹ 1989–90												
Dependent student	10.5	89.5	9.5	1.0	7.1	92.9	6.9	0.2	5.1	6.2	5.2	6.7
Less than \$20,000	8.6	91.4	8.4	0.2	5.0	95.0	4.7	0.3	4.4	4.3	4.3	5.0
\$20,000–\$39,999	6.8	93.2	6.7	0.1	4.2	95.8	4.1	0.2	3.8	—	3.8	4.3
\$40,000–\$59,999	3.5	96.4	3.5	0.1	2.1	97.9	2.0	0.1	3.4	—	3.4	3.7
\$60,000 or more												

Table 4.10—Percentage of 1989–90 beginning postsecondary students who reported being unemployed in the calendar years 1990 or 1991 and the duration of unemployment spells, by selected student and institutional characteristics—Continued

	Calendar year 1990				Calendar year 1991				Duration of unemployment spells (in months)			
	Percent ever unemployed	Number of times			Percent ever unemployed	Number of times			First spell	Second spell	Average of all spells	Average total duration
		None	One	Two or more		None	One	Two or more				
Income and dependency status in AY ¹ 1989–90—Continued												
Independent student												
Less than \$10,000	10.9	89.1	10.0	0.9	8.1	91.9	7.9	0.3	6.6	4.5	6.2	7.6
\$10,000–\$19,999	11.7	88.3	10.6	1.1	8.6	91.4	8.5	0.1	5.0	—	5.0	5.4
\$20,000 or more	8.2	91.8	8.1	0.1	4.7	95.3	4.3	0.4	8.2	—	8.0	8.5
Degree program in AY ¹ 1989–90												
Associate's degree	8.6	91.4	8.0	0.5	5.7	94.3	5.5	0.2	4.4	5.2	4.4	5.4
Bachelor's degree	4.9	95.1	4.7	0.2	3.2	96.8	3.0	0.1	4.9	4.1	4.9	5.3
Undergraduate certificate	14.1	85.9	13.3	0.9	9.7	90.3	9.4	0.3	5.0	4.5	5.0	5.8
Other undergraduate program	7.9	92.1	7.6	0.3	3.8	96.2	3.5	0.3	6.9	3.8	6.7	7.8
Degree attainment												
None	5.7	94.3	5.4	0.3	4.1	95.9	3.9	0.2	4.8	4.1	4.8	5.4
Less-than-2-yr license/certificate	18.4	81.6	17.5	0.9	13.0	87.0	12.5	0.5	4.6	3.6	4.5	5.2
2- to 3-yr voc/occ diploma	5.4	94.6	5.4	0.0	6.5	93.5	2.2	4.3	—	—	—	—
2- to 3-yr associate's	4.1	95.9	4.1	0.0	2.9	97.1	2.8	0.1	4.3	—	4.0	4.1
4- to 5-yr bachelor's	1.9	98.1	1.9	0.0	0.0	100.0	0.0	0.0	—	—	—	—

... Too few cases for a reliable estimate.

¹AY=Academic year

NOTE: Four-year institutions include institutions offering 4-year and higher programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).



Chapter 5

Marriage, Family Formation, Civic Participation, and Noncredit Educational Activities

This chapter examines family formation patterns, civic participation, and educational activities outside of formal degree or college programs for 1989–90 beginning postsecondary students 2 years after their initial enrollment (as of February 1992). It describes their marital status in February 1992, timing of marriages relative to their postsecondary education, and the number of children 1989–90 first-time students reported having. In relation to civic participation, this chapter examines the voting behavior and participation in volunteer activities of students who began their postsecondary education in 1989–90. Finally, this chapter ends with a discussion of educational activities outside of formal postsecondary education programs including noncredit college courses, television, radio, or correspondence courses, and courses offered through community organizations, churches, trade unions, and so on.

Marital Status and Family Formation

When discussing the timing of marital status and family formation relative to students' postsecondary education experiences, it is important to first understand the interrelationships of age and socioeconomic status (SES) with marriage and childbearing. Clearly, the likelihood of being married and having children will be higher for older students. Therefore, the types of institutions that older students enroll in, and the education programs in which they participate (in greater proportions than younger students), will reflect the age association with marriage and family formation.

Table 5.1 demonstrates how age and SES are related to marital status and family formation. In this table, it is apparent that among 1989–90 beginning postsecondary students who had not married by February 1992, almost all (96 percent) were 23 or younger. The same was true for those who had never had a child: 94 percent were 23 or younger. At the same time, older individuals (more likely to be married and to have children) were less economically advantaged than those who were younger. For example, nearly one-half (47 percent) of younger 1989–90 beginning postsecondary students (23 or younger) were in the top SES quartile, compared with about 3 percent of those 24 or older.

Current Marital Status

As of February 1992, about 18 percent of 1989–90 beginning postsecondary students were currently married and an additional 5 percent had been married previously (divorced, separated, or widowed) (table 5.2). Their marital status tended to vary with the level of

institution in which 1989–90 beginning students first enrolled.²⁸ That is, the higher the level of institution in which they enrolled, the lower was the likelihood of their being married. About one-third (35 percent) who first enrolled in less-than-2-year institutions were currently married, compared with 24 percent of those who enrolled in 2- to 3-year institutions and 8 percent who enrolled in 4-year institutions. However, it is also true that older students (who are more likely to be married) enrolled in less-than-4-year institutions in 1989–90 in higher proportions than did younger individuals (see chapter 1).

With respect to racial–ethnic group differences, non-Hispanic whites were more likely than non-Hispanic blacks to be currently married (19 percent versus 10 percent).²⁹ However, non-Hispanic whites were equally as likely as non-Hispanic blacks to be divorced, separated, or widowed (5 percent of both groups).

Females were somewhat more likely than males to be married: 21 percent of females compared with 14 percent of males were currently married (as of February 1992), and 8 percent compared with 2 percent had been married in the past. However, this difference may partly reflect the fact that more older women (for example, 30 or older) began their postsecondary education in 1989–90 than did older men.³⁰

Timing of Marriage Relative to Postsecondary Education

Most individuals who reported being married as of February 1992 had married before entering postsecondary education in 1989–90 (65 percent) (table 5.2). Among the remaining married students, they were equally as likely (about 17 percent) to have married either while enrolled or after their last term of attendance.

Primarily because they were older (as shown in table 1.3), students who began their postsecondary education in 2- to 3-year or less-than-2-year institutions were more likely than those who began in 4-year institutions to have married before entering postsecondary education. Those beginning in 4-year institutions, on the other hand, were more likely to have married while attending than individuals who began in either 2- to 3-year or less-than-2-year institutions.

There were no apparent differences in the timing of marriage among different racial–ethnic groups. With respect to gender, females were somewhat more likely than males to have married before entering postsecondary education (69 percent versus 59 percent).

²⁸All references to institutions in this chapter are to “primary” institutions. If a student attended more than one institution in a given year, the highest level institution was considered primary (see the Glossary in appendix A for a detailed description).

²⁹Due in part to small sample sizes, differences among other groups were not statistically significant with regard to the proportion of students who were married.

³⁰Approximately 13 percent of entering females were aged 30 or older, compared with 7 percent of entering males (table 1.3).

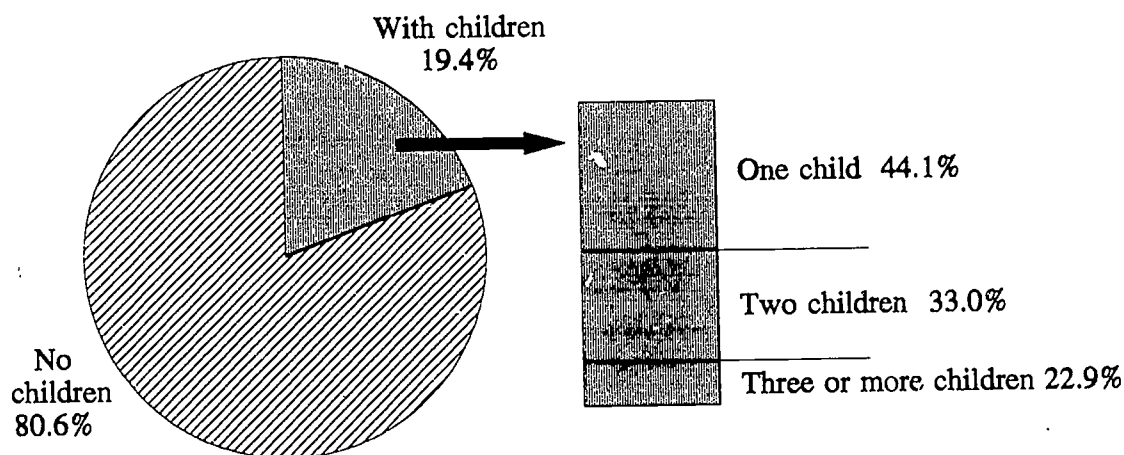
Students With Children

About one-fifth (19 percent) of 1989–90 beginning postsecondary students reported having children by February 1992. Among those with children, 44 percent had one child, 33 percent had two children, and 23 percent had three or more children (figure 5.1).

Individuals who began their postsecondary education in less-than-2-year institutions were more likely to have children (45 percent) than those beginning in either 2- to 3-year institutions (27 percent) or 4-year institutions (7 percent) (table 5.3). Again, this is partially related to age, since younger first-time students (under 23) were less likely to have started in less-than-2-year institutions (61 percent) than in higher levels: 76 percent and 95 percent, respectively, of those who began in 2- to 3-year and 4-year institutions (table 1.3).

Whether or not 1989–90 beginning postsecondary students had children and the number of children they had tended to vary with SES, gender, and race–ethnicity. Low SES 1989–90 first-time students (more likely to be older) were far more likely to have children (53 percent)

Figure 5.1—Percentage of 1989–90 beginning postsecondary students who reported having children as of February 1992, and among those with children, the percentage with one, two, or three or more children



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

than were those in higher SES levels (22 percent and 4 percent, respectively, in the middle and high quartiles). Among 1989-90 beginning students with children, those in the high SES quartile were more likely than those in either middle or low SES quartiles to have only one child (70 percent compared with 42 and 41 percent, respectively).

With respect to gender and racial-ethnic group differences, females were more likely than were males to have children (25 percent versus 13 percent). However, among 1989-90 first-time students who had children, there were no significant gender differences in relation to the number of children they had. Non-Hispanic blacks were more likely to have children (30 percent) than were non-Hispanic whites, Asians, or Native Americans (19 percent, 11 percent, and 8 percent, respectively). On the other hand, non-Hispanic whites were more likely than non-Hispanic blacks to have three or more children (25 percent versus 11 percent).

Timing of First Child Relative to Postsecondary Education

The patterns of when 1989-90 beginning postsecondary students had their first child were similar to those found for the timing of marriages. For example, those who began their postsecondary education in 4-year institutions (who were younger) were less likely to have had a child before their enrollment than were those who began in either 2- to 3-year or less-than-2-year institutions. At the same time, 1989-90 first-time students in 4-year institutions were more likely to have had a child during their enrollment than their peers in less-than-4-year institutions (table 5.3).

Also related to age, females were more likely than males to have had their first child before entering postsecondary education (82 percent compared with 69 percent), and low SES 1989-90 first-time students were more likely than those in the high SES quartile to have had their first child before entering postsecondary education (87 percent compared with 35 percent). High SES individuals, on the other hand, were more likely to have waited to have their first child until after their last term of enrollment (45 percent compared with 9 percent).

One difference between the timing of marriage and that of childbearing was in relation to persistence: those who left postsecondary education were more likely to have had a child after their last term of enrollment (18 percent) than were those who earned an award (9 percent). This pattern was not observed for first marriage timing where no significant difference between individuals who left postsecondary education and those who had attained an award was found (table 5.2).

Civic Participation: Voting and Volunteer Activities

As of February 1992, 27 percent of 1989-90 beginning postsecondary students who were U.S. citizens had never registered to vote (table 5.4). Those who enrolled in less-than-2-year institutions were more likely to have a lapsed registration status (17 percent were formerly registered, but not currently) than were those in either 2- to 3-year or 4-year institutions (11 and 8 percent, respectively).

Overall, voting registration status varied only slightly in relation to 1989-90 first-time student characteristics. For example, non-Hispanic blacks were more likely to be currently registered to vote (71 percent) than were either Hispanics (54 percent) or Asians (43 percent).³¹

A higher percentage of 1989-90 first-time students reported that they planned to vote in the 1992 presidential election (82 percent) than were currently registered to vote (63 percent). On the other hand, fewer than those who were registered (58 percent) reported ever voting in a state or local election.

About one-third (35 percent) of 1989-90 beginning postsecondary students reported that they had done volunteer work in the last 2 years (table 5.5). While females and males were about equally likely to have done volunteer work in the past 2 years (36 percent and 33 percent, respectively), females were more likely to report that they planned to do such service in the next 2 years (61 percent compared with 52 percent).

The 1989-90 first-time students enrolled in 4-year institutions were more likely than those in less-than-4-year institutions to have volunteered in the past 2 years (43 percent versus 29 percent and 21 percent, respectively, for 2- to 3-year and less-than-2-year institutions). They were also more likely to report plans for volunteer work in the next 2 years (63 percent compared with 53 percent and 43 percent). Similarly, 1989-90 first-time students who aspired to an advanced degree (44 percent) were more likely than those with other aspirations to have volunteered in the past 2 years (31 percent, 23 percent, and 19 percent, respectively, for those aspiring to a bachelor's degree, some college but less than a bachelor's degree, or a vocational award). Moreover, 1989-90 first-time students with aspirations for an advanced degree were also more likely to have volunteer plans for the next 2 years than were those with other aspirations.

Finally, with regard to persistence, 1989-90 beginning postsecondary students who were still enrolled in postsecondary education in 1992 were more likely to have performed volunteer work in the last 2 years (40 percent) than were either students who received a postsecondary award (30 percent) or those who left school (31 percent). Similar patterns were found for those who had plans for volunteer work in the next 2 years.

Other Educational Experiences

Regardless of their enrollment or employment status, the 1989-90 first-time students may have participated in a range of other kinds of education-related courses and activities, including noncredit college courses; courses offered by community, religious, union, and other types of organizations; courses offered on TV or on the radio; and so on. The extent of participation in such offerings and whether or not they were job related are shown in table 5.6.

³¹While there appeared to be a difference between Asian and either non-Hispanic white or Native American students, the sample size of Asian and Native American students was not sufficiently large to find statistical significance.

Noncredit college courses were the most popular form of educational participation. Eight percent of 1989-90 first-time students took a noncredit college course; 6 percent participated in a course offered by a community group, labor union, or church; and 5 percent took a course from a private instructor.

There were no consistent differences in participation rates in any of the educational activities shown in table 5.6 by age, SES, or gender.³² Participants in each type of educational activity were asked whether or not the activity was job related. Proportionately more participants in federal, state, or local government courses or programs said their educational activity was job related than did participants in the other programs. Finally, participants in job-related educational courses or programs were also asked if their participation was voluntary or required by their employer. About one-third (38 percent) of participants in job-related courses said their participation was required.

³²The one exception was for the difference between males and females participating in community, labor, or religious organization courses, where females were somewhat more likely than males to participate (7 percent versus 4 percent).

Table 5.1—Percentage distribution of 1989–90 beginning postsecondary students' age and socioeconomic status at time of entry, by marital status and family formation patterns

	Age as of 12/31/89			Socioeconomic status		
	23 or younger	24–29	30 or older	Bottom quartile	Middle quartiles	Top quartile
Total	82.9	7.3	9.9	14.8	45.5	39.8
Age as of 12/31/89						
23 or younger	100.0	—	—	8.9	43.6	47.4
24–29	—	100.0	—	45.0	51.9	3.1
30 or older	—	—	100.0	42.1	55.0	2.9
Socioeconomic status						
Bottom quartile	49.9	22.0	28.1	100.0	—	—
Middle quartiles	79.7	8.3	12.0	—	100.0	—
Top quartile	98.7	0.6	0.7	—	—	100.0
Marital status February 1992						
Never married	95.7	2.9	1.5	9.0	43.3	47.6
Currently married	44.0	21.4	34.6	30.4	57.4	12.2
Divorced, widowed, separated	25.5	26.0	48.5	45.9	49.7	4.4
First marriage timing						
Married before postsecondary education	17.8	27.7	54.4	41.7	54.7	3.6
Married while attending	83.5	11.9	4.7	16.6	63.2	20.2
Married after last term	84.3	10.3	5.4	18.8	52.8	28.3
Number of children						
None	94.4	3.5	2.0	8.5	44.7	46.9
One	65.3	17.3	17.5	37.4	50.1	12.5
More than one	13.3	27.1	59.6	42.1	53.7	4.2

—Too few cases for a reliable estimate.

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 5.2—Percentage distribution of 1989–90 beginning postsecondary students' marital status as of the first week in February 1992, and for those who had ever married, the timing of their first marriage in relation to their postsecondary education, by selected student and institutional characteristics

	Marital status as of February 1992			Among those ever married: Timing of first marriage		
	Never married	Currently married	Divorced, widowed, separated	Married before postsecondary education	Married while attending	Married after last term
Total	77.6	17.5	4.9	65.4	17.6	17.0
Level and control of primary institution in AY ¹ 1989–90						
Public						
Less-than-4-year	68.9	24.4	6.7	72.3	13.3	14.4
4-year	90.5	8.0	1.5	44.2	35.4	20.5
Private, not-for-profit						
Less-than-4-year	75.8	21.6	2.5	44.3	27.6	28.1
4-year	92.0	6.9	1.1	49.8	33.5	16.6
Private, for-profit	57.7	29.5	12.8	64.0	14.2	21.8
Level of primary institution in AY ¹ 1989–90						
Less-than-2-year	51.4	35.0	13.6	66.7	10.5	22.8
2- to 3-year	69.7	23.6	6.7	70.5	14.7	14.8
4-year	91.0	7.7	1.4	45.8	34.9	19.4
Control of primary institution in AY ¹ 1989–90						
Public	77.7	17.7	4.6	67.4	17.1	15.5
Private, not-for-profit	90.1	8.6	1.3	48.3	31.9	19.9
Private, for-profit	57.7	29.5	12.8	64.0	14.2	21.8
Race-ethnicity						
White, non-Hispanic	75.9	18.8	5.3	65.0	17.6	17.4
Black, non-Hispanic	85.2	9.7	5.1	71.0	18.4	10.6
Hispanic	81.1	16.1	2.8	60.6	20.2	19.2
Asian/Pacific Islander	86.6	12.4	1.1	—	—	—
Native American	80.2	16.7	3.2	—	—	—
Gender						
Male	84.0	14.0	2.0	59.3	21.8	18.9
Female	72.0	20.5	7.5	68.5	15.5	16.0
Age as of 12/31/89						
23 or younger	89.2	9.3	1.5	28.7	36.0	35.3
24–29	30.8	51.7	17.5	82.5	9.5	8.0
30 or older	11.9	63.3	24.7	95.3	2.2	2.5
Socioeconomic status						
Bottom quartile	48.0	36.5	15.5	81.7	8.8	9.6
Middle quartiles	72.9	21.8	5.3	64.0	19.9	16.1
Top quartile	94.0	5.4	0.6	22.1	33.1	44.8
Educational aspirations in AY ¹ 1989–90						
Trade or vocational school	52.9	36.6	10.4	76.2	8.8	18.6
2 or more years of college	56.4	31.5	12.1	71.9	9.2	18.9
Bachelor's degree	79.6	16.7	3.7	62.3	18.5	19.3
Advanced degree	87.8	9.7	2.5	57.4	32.1	10.5

Table 5.2—Percentage distribution of 1989–90 beginning postsecondary students' marital status as of the first week in February 1992, and for those who had ever married, the timing of their first marriage in relation to their postsecondary education, by selected student and institutional characteristics—Continued

Married	Marital status as of February 1992			Among those ever married: Timing of first marriage		
	Never married	Currently married	Divorced, widowed, separated	Married before postsecondary education	Married while attending	Married after last term
Degree program in AY ¹ 1989–90						
Associate's degree	75.9	19.2	4.9	71.3	13.1	15.6
Bachelor's degree	91.6	7.7	0.8	35.0	40.9	24.2
Undergraduate certificate	62.6	26.9	10.5	62.3	18.3	19.3
Other undergraduate program	67.7	24.5	7.7	77.0	10.7	12.3
Persistence/attainment						
Left postsecondary education ²	67.3	24.5	8.1	66.6	12.3	21.1
Still enrolled 1992	91.3	7.1	1.6	63.9	35.9	(*)
Attained postsecondary award	68.8	25.6	5.6	65.1	16.8	18.1

—Too few cases for a reliable estimate.

*Not applicable.

¹AY=Academic year.

²This category includes all students who left prior to the spring of 1992.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 5.3—Percentage of 1989–90 beginning postsecondary students who reported having children, and among those with children, the percentage who had one or more children and the timing of their first child's birth, by selected student and institutional characteristics

	Percent with children	Number of children			Timing of first child's birth		
		One child	Two children	Three or more children	Before postsecondary education	While attending school	After last term
Total	19.4	44.1	33.0	22.9	78.3	8.5	13.2
Level and control of primary institution in AY ¹ 1989–90							
Public							
Less-than-4-year	26.9	41.7	33.0	25.3	82.0	6.3	11.7
4-year	7.0	55.2	28.1	16.7	58.7	23.0	18.3
Private, not-for-profit							
Less-than-4-year	19.2	37.3	47.6	15.1	77.1	14.9	8.1
4-year	6.5	60.6	24.7	14.7	66.5	24.4	9.0
Private, for-profit	41.1	42.4	35.8	21.8	80.3	3.6	16.1
Level of primary institution in AY ¹ 1989–90							
Less-than-2-year	45.3	39.4	38.5	22.1	82.4	2.6	14.9
2- to 3-year	26.6	42.5	32.8	24.7	81.2	6.7	12.1
4-year	6.8	56.8	27.0	16.1	61.1	23.4	15.5
Control of primary institution in AY ¹ 1989–90							
Public	18.8	43.7	32.3	24.0	78.5	8.8	12.7
Private, not-for-profit	7.9	54.1	31.1	14.8	69.5	21.7	8.8
Private, for-profit	41.1	42.4	35.8	21.8	80.3	3.6	16.1
Race-ethnicity							
White, non-Hispanic	18.7	40.2	34.6	25.3	80.5	6.9	12.6
Black, non-Hispanic	29.6	55.9	33.2	10.9	73.3	9.7	17.0
Hispanic	20.4	62.0	18.6	19.4	69.0	17.9	13.1
Asian/Pacific Islander	11.1	—	—	—	—	—	—
Native American	8.4	—	—	—	—	—	—
Gender							
Male	12.6	48.6	29.8	21.6	69.3	11.5	19.2
Female	25.4	42.2	34.4	23.5	82.2	7.2	10.6
Age as of 12/31/89							
23 or younger	8.4	79.6	16.1	4.3	48.7	20.3	31.0
24–29	60.8	33.7	45.7	20.6	91.2	3.8	5.1
30 or older	82.9	18.9	40.2	41.0	97.9	0.5	1.6
Socioeconomic status							
Bottom quartile	53.2	41.3	31.1	27.7	87.2	3.6	9.2
Middle quartiles	21.9	42.4	36.5	21.1	78.0	10.6	11.4
Top quartile	3.9	69.9	19.6	10.5	35.1	20.1	44.8
Marital status February 1992							
Never married	4.9	78.8	17.1	4.1	60.0	21.9	18.0
Currently married	67.9	37.8	34.1	28.1	78.5	6.5	15.0
Divorced, widowed, separated	74.8	28.4	45.8	25.8	97.1	0.8	2.2

Table 5.3—Percentage of 1989–90 beginning postsecondary students who reported having children, and among those with children, the percentage who had one or more children and the timing of their first child's birth, by selected student and institutional characteristics—Continued

	Percent with children	Number of children			Timing of first child's birth		
		One child	Two children	Three or more children	Before postsecondary education	While attending school	After last term
Educational aspirations in AY¹ 1989–90							
Trade or vocational school	46.2	38.1	37.7	24.2	77.2	3.2	19.6
2 or more years of college	36.0	33.4	39.8	26.9	90.6	3.8	5.6
Bachelor's degree	17.8	50.8	26.4	22.9	71.3	13.5	15.2
Advanced degree	10.1	50.5	32.2	17.3	75.7	12.9	11.3
Degree program in AY¹ 1989–90							
Associate's degree	22.0	42.6	32.0	25.4	80.9	6.8	12.3
Bachelor's degree	5.8	64.3	21.6	14.1	51.6	30.8	17.6
Undergraduate certificate	32.7	42.8	33.9	23.3	77.0	5.0	18.0
Other undergraduate program	28.2	39.5	38.4	22.2	87.2	6.0	6.8
Persistence/attainment							
Left postsecondary education ²	28.3	45.5	34.5	20.0	77.8	3.7	18.4
Still enrolled 1992	7.0	52.8	26.6	20.6	71.5	28.5	(*)
Attained postsecondary award	28.3	35.8	33.7	30.5	84.0	7.2	8.8

—Too few cases for a reliable estimate.

*Not applicable.

¹AY=Academic year.

²This category includes all students who left prior to the spring of 1992.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 5.4—Percentage distribution of 1989–90 beginning postsecondary students who were U.S. citizens according to their voter registration status as of February 1992, and the percentage who reported voting practices, by selected student and institutional characteristics

	Voter registration status			Voting practice	
	Currently registered to vote	Formerly registered, not currently	Never registered to vote	Will vote in 1992 presidential election	Voted in state/local election
Total	63.2	10.1	26.7	81.6	57.9
Level and control of primary institution in AY ¹ 1989–90					
Public					
Less-than-4-year	65.0	10.8	24.2	80.1	57.7
4-year	64.4	8.7	26.9	84.8	60.5
Private, not-for-profit					
Less-than-4-year	57.5	9.2	33.3	77.9	49.3
4-year	64.7	7.0	28.3	87.8	59.6
Private, for-profit	51.1	15.5	33.4	70.6	49.5
Level of primary institution in AY ¹ 1989–90					
Less-than-2-year	52.9	16.5	30.7	71.9	52.3
2- to 3-year	63.8	10.8	25.4	79.3	56.7
4-year	64.5	8.2	27.4	85.8	60.2
Control of primary institution in AY ¹ 1989–90					
Public	64.7	10.0	25.3	82.0	58.8
Private, not-for-profit	63.8	7.3	28.9	86.7	58.5
Private, for-profit	51.1	15.5	33.4	70.6	49.5
Race-ethnicity					
White, non-Hispanic	63.7	9.9	26.4	81.9	57.9
Black, non-Hispanic	70.8	7.8	21.5	81.4	59.7
Hispanic	53.6	11.5	34.9	78.9	61.0
Asian/Pacific Islander	43.2	22.1	34.7	77.4	49.0
Native American	72.0	6.2	21.8	87.8	—
Gender					
Male	64.9	10.4	24.6	83.6	57.4
Female	61.7	9.8	28.5	79.9	58.4
Age as of 12/31/89					
23 or younger	61.6	8.9	29.5	81.2	56.0
24–29	63.0	17.0	19.9	75.8	57.5
30 or older	77.3	14.6	8.1	90.0	71.0
Socioeconomic status					
Bottom quartile	62.0	13.7	24.3	77.0	56.8
Middle quartiles	62.4	11.1	26.4	80.9	57.5
Top quartile	64.5	7.7	27.8	83.9	58.7
Educational aspirations in AY ¹ 1989–90					
Trade or vocational school	56.3	12.8	30.9	72.5	48.0
2 or more years of college	60.1	11.4	28.5	76.3	62.2
Bachelor's degree	64.3	9.5	26.2	82.2	56.8
Advanced degree	65.4	9.1	25.5	85.8	60.4

Table 5.4—Percentage distribution of 1989–90 beginning postsecondary students who were U.S. citizens according to their voter registration status as of February 1992, and the percentage who reported voting practices, by selected student and institutional characteristics—Continued

	Voter registration status			Voting practice	
	Currently registered to vote	Formerly registered, not currently	Never registered to vote	Will vote in 1992 presidential election	Voted in state/local election
Degree program in AY ¹ 1989–90					
Associate's degree	63.0	9.4	27.6	78.3	58.4
Bachelor's degree	64.3	8.5	27.2	86.4	60.3
Undergraduate certificate	57.8	12.5	29.7	74.9	50.5
Other undergraduate program	67.3	12.4	20.3	85.5	59.5
Persistence/attainment					
Left postsecondary education ²	62.7	11.3	26.0	80.7	56.2
Still enrolled 1992	63.8	8.6	27.6	85.1	58.8
Attained postsecondary award	63.1	10.8	26.1	75.4	59.6

—Too few cases for a reliable estimate.

¹AY=Academic year.

²This category includes all students who left prior to the spring of 1992.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 5.5—Percentage of 1989–90 beginning postsecondary students who reported doing volunteer or community service work in the past 2 years, and the percentage who plan to do such work over the next 2 years, by selected student and institutional characteristics

	Volunteer work in past 2 years	Plan to volunteer in next 2 years
Total	34.5	56.3
Level and control of primary institution in AY ¹ 1989–90		
Public		
Less-than-4-year	29.8	52.8
4-year	38.4	58.8
Private, not-for-profit		
Less-than-4-year	35.4	59.1
4-year	52.6	70.6
Private, for-profit	18.7	43.3
Level of primary institution in AY ¹ 1989–90		
Less-than-2-year	20.7	42.5
2- to 3-year	29.1	52.8
4-year	43.0	62.6
Control of primary institution in AY ¹ 1989–90		
Public	33.3	55.3
Private, not-for-profit	50.6	69.3
Private, for-profit	18.7	43.3
Race–ethnicity		
White, non-Hispanic	35.7	56.3
Black, non-Hispanic	33.4	57.0
Hispanic	27.4	54.9
Asian/Pacific Islander	29.4	61.2
Native American	32.1	44.3
Gender		
Male	33.2	51.5
Female	35.7	60.5
Age as of 12/31/89		
23 or younger	33.7	55.9
24–29	34.1	59.1
30 or older	42.5	57.2
Socioeconomic status		
Bottom quartile	31.3	55.6
Middle quartiles	31.2	53.8
Top quartile	39.6	59.5
Marital status February 1992		
Never married	34.4	56.5
Currently married	35.3	53.0
Divorced, widowed, separated	34.2	64.2
Educational aspirations in AY ¹ 1989–90		
Trade or vocational school	18.9	46.0
2 or more years of college	23.2	49.6
Bachelor's degree	31.4	50.0
Advanced degree	44.2	65.9

Table 5.5—Percentage of 1989–90 beginning postsecondary students who reported doing volunteer or community service work in the past 2 years, and the percentage who plan to do such work over the next 2 years, by selected student and institutional characteristics—Continued

	Volunteer work in past 2 years	Plan to volunteer in next 2 years
Degree program in AY ¹ 1989–90		
Associate's degree	29.1	53.8
Bachelor's degree	43.9	62.2
Undergraduate certificate	28.8	50.5
Other undergraduate program	32.3	55.5
Persistence/attainment		
Left postsecondary education ²	30.7	53.0
Still enrolled 1992	40.2	61.3
Attained postsecondary award	29.5	51.9

¹AY=Academic year.

²This category includes all students who left prior to the spring of 1992.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Table 5.6—Percentage of 1989–90 beginning postsecondary students who reported participating in all other education-related courses and activities, and among those participating, the percentage who reported the courses were job related, by selected student and institutional characteristics¹

	Percentage taking other education-related courses					Of those taking education-related courses percentage taking job-related courses					
	Noncredit college	Community, church, or labor organization	TV/ radio/ newspaper	Government-sponsored	Private instructor	Noncredit college	Community, church, or labor organization	TV/ radio/ newspaper	Government-sponsored	Private instruction	Any employer required
Total	8.1	5.6	4.3	3.7	5.2	31.9	33.6	—	63.9	40.4	38.2
Level and control of primary institution in AY ² 1989–90											
Public											
Less-than-4-year	9.3	5.3	4.9	5.1	5.1	34.7	36.5	—	62.9	36.2	39.0
4-year	7.8	6.0	4.7	2.7	5.1	24.6	33.0	—	67.9	41.6	39.1
Private, not-for-profit											
Less-than-4-year	6.2	5.4	1.3	1.3	5.9	—	—	—	—	—	—
4-year	8.9	7.9	2.8	3.7	6.7	32.5	29.9	—	65.7	42.8	31.1
Private, for-profit	3.2	2.9	2.7	1.7	3.6	50.0	29.9	—	52.1	52.1	43.1
Level of primary institution in AY ² 1989–90											
Less-than-2-year	4.2	2.7	3.0	2.2	3.3	51.3	—	—	—	59.8	37.0
2- to 3-year	8.7	5.2	4.6	4.7	5.1	34.2	36.0	—	63.3	36.7	39.9
4-year	8.2	6.6	4.1	3.0	5.6	27.4	31.8	—	67.1	42.0	36.1
Control of primary institution in AY ² 1989–90											
Public	8.7	5.6	4.8	4.1	5.1	31.0	35.0	—	64.3	38.4	39.0
Private, not-for-profit	8.6	7.6	2.6	3.4	6.6	31.6	29.9	—	66.3	43.5	32.4
Private, for-profit	3.2	2.9	2.7	1.7	3.6	50.0	29.9	—	—	52.1	43.1
Race-ethnicity											
White, non-Hispanic	7.8	5.4	4.0	3.8	5.3	32.0	35.8	—	65.3	41.5	38.3
Black, non-Hispanic	11.5	7.0	5.7	3.6	3.2	25.8	—	—	—	—	—
Hispanic	4.7	6.3	3.1	3.7	4.96	—	—	—	—	—	—
Asian/Pacific Islander	15.1	6.4	8.8	2.7	8.4	—	—	—	—	—	—
Native American	0.9	3.5	0.6	0.0	0.5	—	—	—	—	—	—



Table 5.6—Percentage of 1989–90 beginning postsecondary students who reported participating in all other education-related courses and activities, and among those participating, the percentage who reported the courses were job related, by selected student and institutional characteristics¹—Continued

	Percentage taking other education-related courses					Of those taking education-related courses percentage taking job-related courses					
	Noncredit college	Community, church, or labor organization	TV/ radio/ newspaper	Government- sponsored	Private instructor	Noncredit college	Community, church, or labor organization	TV/ radio/ newspaper	Government- sponsored	Private instruction	Any employer required
Gender											
Male	8.0	4.3	3.9	3.8	5.6	31.2	28.1	—	57.0	43.1	37.9
Female	8.2	6.8	4.6	3.6	4.9	32.5	36.7	—	70.2	37.7	38.5
Age as of 12/31/89											
23 or younger	8.2	5.6	4.1	3.2	5.1	25.7	31.3	—	60.3	39.3	38.2
24–26	6.3	5.5	6.1	5.5	4.5	—	—	—	—	—	—
27–29	11.3	5.6	4.8	2.1	7.4	—	—	—	—	—	—
30 or older	7.2	6.0	5.0	7.9	5.0	—	—	—	—	—	32.8
Socioeconomic status											
Bottom quartile	8.2	3.5	4.3	4.0	4.9	49.2	43.8	—	—	50.3	23.8
Middle quartiles	6.5	5.9	3.9	3.8	4.0	34.0	37.1	—	65.6	32.5	45.3
Top quartile	10.0	6.0	4.6	3.5	6.8	25.0	27.4	—	62.2	43.2	37.2
Degree program in AY ² 1989–90											
Associate's degree	8.9	5.4	5.8	5.2	4.3	24.4	41.7	—	61.5	37.6	28.8
Bachelor's degree	8.5	6.8	2.9	2.7	5.8	27.6	32.0	—	64.9	41.4	45.3
Undergraduate certificate	5.7	3.0	3.3	2.9	4.9	42.0	35.5	—	83.2	60.3	35.2
Other undergraduate program	8.3	6.5	4.9	3.6	6.3	50.4	22.3	—	—	26.3	48.5

—Too few cases for a reliable estimate.

¹Other education-related courses and activities include noncredit college courses; courses from a community, church, or labor organization; correspondence courses or courses on TV/radio, government-sponsored courses; and courses offered by a private instructor.

²AY=Academic year.

NOTE: Four-year institutions include institutions offering 4-year and higher programs. Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Appendix A

Glossary

This glossary describes the variables used in this report, all of which come from the BPS:90/92 Data Analysis System (DAS) (see appendix B for a description of the DAS). These variables were either items taken directly from the 1989-90 National Postsecondary Student Aid Study (NPSAS:90) which served as the base year for BPS, or from the 1992 BPS follow-up; or they were derived by combining one or more items in the surveys. For all variables in this glossary, the variable label is followed by the 8-character variable name (contained in the DAS). The variable name is followed by the creator (MPR or NCES) and data source (NPSAS or BPS). A brief description of each variable is included.

Variables are listed in the general order in which they are introduced in the report, grouping related items together (e.g., demographic characteristics, institutional characteristics, and so on).³³ For each section of related items, the chapter in which they appear is indicated.

General Definitions

In the BPS survey, "beginning postsecondary students" included only students who enrolled in postsecondary education for the very first time in 1989-90, not all students who were in their first year of a postsecondary program. Thus, an individual who started postsecondary education earlier, left, and then returned was not included in BPS. Similarly, students who attended part time the previous year but did not accumulate enough credits to advance to second-year status would also not be included. Throughout this report the reference to "beginning postsecondary students" or "first-time students" refers only to those who enrolled in postsecondary education for the first time in the 1989-90 academic year.

It is important to remember that while BPS participants were all students in the 1989-90 academic year, they may or may not have been enrolled in subsequent years. For simplicity and ease of reading, this glossary refers to survey participants as "students." However, this term should always be interpreted as "1989-90 beginning postsecondary students."

Several variables were created for each academic year represented in the BPS survey (e.g. institution, enrollment, and employment indicators). The academic years were defined as:

AY 1989-90: July 1, 1989 through June 30, 1990

AY 1990-91: July 1, 1990 through June 30, 1991

AY 1991-92: July 1 1991 through June 30, 1992

In some instances, postsecondary education is abbreviated as PSE in the glossary.

³³One exception is the financial aid section where variables are grouped according to costs, aid, and borrowing.

Variable name

Source

STUDENT CHARACTERISTICS (All chapters)*Race-ethnicity*

BPSRACE

NPSAS/BPS

Asian / Black, non-Hispanic / Hispanic / Native American / White, non-Hispanic

Students were classified as Asian if they reported being Asian or Pacific Islander; Native American if they were American Indian or Alaskan Native; Hispanic if they were Mexican American, Puerto Rican, Cuban, or other Hispanic; and black or white if they were not of Hispanic origin.

Gender

H_GENDR

NPSAS/BPS

Female / Male

Dependency status (AY 1989-90)

DEPEND

NPSAS

Dependent / Independent

Students were considered financially dependent if they did not meet any of the criteria for independence. A student was considered independent by meeting one of the following criteria:

- 24 years of age by December 31 of the academic year;
- a military veteran;
- a ward of the court or both parents are deceased;
- had legal dependents other than a spouse;
- was married or a graduate student and not claimed as a tax exemption for the calendar year coinciding with the beginning of the academic year; or
- was a single undergraduate but not claimed as a tax exemption for the 2 years previous to the beginning of the academic year and had at least \$4,000 in financial resources.

	Variable name	Source
<i>Parent's education</i>	PAREduc	MPR:NPSAS
<p>Recoded to: Less than high school / High school grad-GED / Postsecondary vocational training / Some college-Associate's degree / Bachelor's degree / Advanced degree</p> <p>Highest level of education completed by either parent. Parents were placed in a postsecondary vocational training category if one or both parents' highest level of education was either a vocational certificate or license or less than 4 years of vocational education.</p>		
<i>Age as of 12/31/89</i>	AGE	NPSAS
<p>23 years old or younger / 24-26 years old / 27-29 years old / 30 years old or older</p>		
<i>Socioeconomic status</i>	SESPERC	NPSAS
<p>High quartile/ Middle quartiles / Low quartiles</p> <p>Composite variable combining parents' occupations, dependent students' family income, and the existence of a series of material possessions in respondent's childhood home, such as a dishwasher, personal computer, more than 50 books, or a specific place for the respondent to study.</p>		
<i>Income and dependency status</i>	INCOME	NPSAS
<p>Dependent students: Less than \$20,000 / \$20,000-\$39,999 / \$40,000-\$59,999 / \$60,000 or more</p> <p>Independent students: Less than \$10,000 / \$10,000-\$19,999 / \$20,000 or more</p> <p>The source of income for dependent students was their parents or guardians, whereas the source of independent students' income was their own earnings including those of their spouse if they were married. Incomes in NPSAS:90 were derived from three sources: institutional records, parental reports, and student reports (in priority order).</p>		

INSTITUTIONAL CHARACTERISTICS AND DEGREE PROGRAMS (All chapters)

The institutional characteristics such as level (i.e., 4-year, 2- to 3-year, less-than-2-year); control (public or private); and program type (academic or vocational) were determined for each of the 3 academic years of the BPS survey —1989–90, 1990–91, and 1991–92. In some instances, students attended more than one institution in a given year. For these cases, only the “primary” institutional characteristics were reported. The primary institution was defined as the highest *level* institution students attended. If they attended two institutions at the same level, the institution where they attended the longest was defined as primary. In some instances it was important to examine the very first institution students attended (e.g. chapter 1). In almost all cases, this was the primary institution, however, in a very small percentage of cases the primary and the first institution were not the same. The tables are clearly specified when the first institution (as opposed to the primary) was used. The variables used for the first institution attended were from the NPSAS survey: LEVEL, CONTROL, and OFCON2 (level and control).

Control of primary institution attended

1989–90	CTRL8990	MPR:NPSAS
1990–91	CTRL9091	MPR:BPS
1991–92	CTRL9192	MPR:BPS

This variable refers to the control of primary institution at which student was enrolled in each academic year. The 1990–91 and 1991–92 variables include a “not enrolled” category for students who left postsecondary education after their 1989–90 enrollment.

Public

A postsecondary educational institution operated by publicly elected or appointed school officials in which the program and activities are under the control of these officials and that is supported primarily by public funds.

Private, not-for-profit

A postsecondary educational institution that is controlled by an independent governing board and incorporated under Section 501(c)(3) of the Internal Revenue Code.

Private, for-profit

A postsecondary educational institution that is privately owned and operated as a profit-making enterprise. These institutions include career colleges and proprietary institutions.

	Variable name	Source
<i>Level of primary institution attended</i>		
	1989-90	SCHL8990
	1990-91	SCHL9091
	1991-92	SCHL9192
		MPR:NPSAS
		MPR:BPS
		MPR:BPS

This variable refers to the level of primary institution at which student was enrolled in each academic year.

Less-than-2-year

An institution whose normal program of study is less than 2 years in duration.

2- to 3-year

An institution whose program of study results in an award or degree below the baccalaureate level, and is at least 2 years but less than 4 years in duration. These institutions include many community and junior colleges.

4-year

An institution that offers 4-year baccalaureate degrees. These institutions may or may not also offer master's, doctoral, or first-professional degrees in one or more programs as the highest degree awarded.

Other

An institution whose level could not be determined either because the institution did not appear in the Integrated Postsecondary Education Data System (IPEDS)—for example, foreign institutions—or the information was not included in IPEDS for a particular institution.

	Variable name	Source
<i>Level and control of primary institution</i>		
1989-90	LVLCTL89	MPR:NPSAS
1990-91	LVCT90	MPR:BPS
1991-92	LVCT91	

Recoded to : Public less-than-4-year / Public 4-year / Private, not-for-profit less-than-4-year / Private, not-for-profit 4-year / Private, for-profit. (Separate variables were constructed for AY 1989-90, AY 1990-91, and AY 1991-92).

Combined level and control of the primary institution at which student was enrolled in AY 1989-90, AY 1990-91, and AY 1991-92.

<i>Degree program student first enrolled</i>	PROGTYPE	NPSAS
--	----------	-------

Associate's degree / Bachelor's degree / Undergraduate certificate / Other undergraduate program

Type of degree student reported as being current program's immediate objective in 1989-90.

<i>Aspirations in first year of PSE (1989-90)</i>	ASPIRE	MPR:NPSAS
---	--------	-----------

Trade or vocational school / 2-year / Bachelor's degree / Advanced degree

Recoded from student's reported educational goal in the NPSAS survey. The "2-year" designation refers to those students who aspire to less than a bachelor's degree, but who plan to attend at least 2 years (including those who aspire to earn an associate's degree).

STUDENT EDUCATIONAL EXPERIENCES (Chapters 1 and 2)

1992 Status (as of first week of February 1992)

FEB92	MPR:BPS
-------	---------

Enrolled in PSE / Working / Unemployed / Other

Students were classified as enrolled in postsecondary education whether or not they were also working while enrolled; as working only if working and not enrolled; and as unemployed and if neither employed nor enrolled, and students reported looking for a job during that month. Any other status was designated as "other" (e.g. not enrolled and not looking for employment).

	Variable name	Source
--	---------------	--------

Timing of enrollment

	STUDTYPE	BPS
--	----------	-----

Immediate entry / Delayed entry

Students who entered PSE within 12 months after completing high school were classified as immediate entrants. Students who entered more than 12 months after completing high school were classified as delayed entrants.

Enrollment indicator

1990-91	ENAY9091	MPR:BPS
1991-92	ENAY9192	

Enrolled / Not enrolled

Students reported whether they were enrolled in a qualified postsecondary institution. No such variable was constructed for AY 1989-90 because all students were enrolled at some point during the academic year.

Enrollment pattern

1989-90	ST8990	NCES:BPS
1990-91	ST9091	
1991-92	ST9192	

Continuous full time / Other continuous / Noncontinuous / Not enrolled

Students were considered "continuous" if their attendance status was continuous from September to May for 8 months, whether they were attending full time, part time or a mix of the two. If the students did not attend 8 months, they were assigned to the "noncontinuous" category. "Other continuous" refers to students who attended continuously, but less than full time.

	Variable name	Source
<i>Persistence and attainment</i>	CPERSIST	NCES:BPS
Last enrolled before July 1990 / Last enrolled before July 1991 / Last enrolled after June 1991 / Still enrolled during BPS:92 / Attained some postsecondary award		
<p>“Last enrolled” refers to students' last month of enrollment if they were not enrolled as of June 1992. If students were still enrolled but had not yet attained an award, they were “still enrolled.” If students had attained an award (most awards at this time are vocational certificates, licenses, or associate's degrees), they were placed in the “attained award” category. For a small percentage of cases, students were both enrolled and had attained an award; these students were defined as the latter. Note that the first three categories of this variable were often collapsed to “left postsecondary education.”</p>		

<i>Cumulative grade point average (GPA)</i>	REI_GRAL	BPS
---	----------	-----

Mostly As / As and Bs / Mostly Bs / Bs and Cs / Mostly Cs / Less than Cs / Other

Students reported their overall grades between July 1989 and the time of the interview. The category “less than Cs” is a composite of several categories presented to students. Students were classified as “other” if they could not categorize themselves (for example, if they attended a nongraded program).

<i>Highest postsecondary degree attained</i>	EI_HDEG	BPS
--	---------	-----

None / Less-than-2-year certificate or diploma / Less-than-2-year license / 2- to 3-year vocational degree or diploma / 2- to 3-year associate's degree / 4- to 5-year bachelor's degree.

The highest degree attained within the 3 academic years surveyed as reported by the student. Certificates, diplomas, and degrees are awarded by the institution and indicate program completion. Licenses are permission to practice in a field and award is from a governing body other than the institution. In some fields, e.g., cosmetology, a license is required to practice in addition to program completion.

Variable name

Source

FINANCING POSTSECONDARY EDUCATION (Chapter 3)

Tuition and fees, 1989-90

TUITCOST

NPSAS

This variable describes the total amount of tuition and fees charged in AY 1989-90 reported by the institution or the student. The maximum was set at \$25,000. Tuition amounts from other sources (Pell budget, congressional methodology budget, other students at same institution) were examined if the tuition for full-time students seemed extremely low.

Total costs, 1989-90

TOTCOST

NPSAS

This variable represents the total student costs for AY 1989-90, including the sum of tuition and fees, room and board, books and supplies, and other educational, room, or off-campus costs. Room, board, and other living costs for off-campus students is derived by multiplying the student-reported average monthly household expenses by the number of months enrolled.

Ratio of aid to costs

AIDRATIO

NCES:NPSAS

This variable represents the ratio of total financial aid to total costs of attendance in 1989-90 (TOTAID/TOTCOST)

Total aid, 1989-90

TOTAID

NPSAS

Total nonfamily financial aid from all sources for AY 1989-90 includes aid from federal, state, institutional, and other sources; and aid in the form of grants, loans, work-study, or other, including PLUS loans.

Received any aid

1989-90

TOTAID

MPR:NPSAS

1990-91

AID9091

MPR:BPS

1991-92

AID9192

MPR:BPS

Yes / No

Student received any nonfamily financial aid from any source for each academic year. This includes aid from federal, state, institutional, and other sources; and aid in the form of grants, loans, work-study, or other, including PLUS loans. Aid in 1989-90 includes work-study and PLUS loans; later years do not. TOTAID was recoded.

	Variable name	Source
<i>Received any aid through 1991-92 (cumulative)</i>		
	ANYAID91	MPR:BPS, NPSAS

Yes / No

Student received any nonfamily financial aid from any source or of any type at any time from AY 1989-90 through AY 1991-92. Aid in 1989-90 includes PLUS loans and work-study; later years do not.

<i>Grant amount, 1989-90</i>	TOTGRT	NPSAS
-------------------------------------	--------	-------

This variable represents the total of all grants and scholarships from all sources for AY 1989-90.

Received grants

1989-90	GRSCHL89	MPR:NPSAS
1990-91	GR1SCHL1	MPR:BPS
1991-92	GR2SCHL2	MPR:BPS

Yes / No

Student received grants or scholarships for each academic year.

Received grants through 1991-92 (cumulative)

GOTGRANT	MPR:BPS, NPSAS
----------	----------------

Yes / No

Student received a grant or scholarship at any time from AY 1989-90 through AY 1991-92.

<i>Student loans in AY 1989-90</i>	TOTLOAN	NPSAS
---	---------	-------

This variable represents the total of loans from all nonfamily sources for AY 1989-90, including summer months; it does not include PLUS loans.

Variable name **Source**

Student loans through 1991-92 (cumulative)

GOTLOAN MPR:BPS, NPSAS

Yes / No

Student received a nonfamily student loan at any time in AY 1989-90 through AY 1991-92, not including PLUS loans.

Any loan through 1991-92 (cumulative) EVERBOR MPR:BPS, NPSAS

Yes / No

Student received any loan, including a family loan, in AY 1989-90, AY 1990-91, or AY 1991-92.

Owe any amount in 1990 OWEAMT NPSAS

This variable represents the amount student still owed for education loans from any source including friends and relatives at time of NPSAS:90 interview. It was set to zero if all loans were repaid, or if student never borrowed.

Owe any amount in 1992 DRVOWEAM BPS

This is the amount student still owed on postsecondary education loans from any source, including friends and relatives at time of BPS:90/92 interview.

Loan amount from parents in AY 1989-90

PARLOAN NPSAS

This represents the amount of loans student received from either referent (parent of primary support) or nonreferent parent.

Variable name**Source*****Loan from parents through 1991-92 (cumulative)***

FROMPARS

MPR:BPS, NPSAS

Yes / No

Student received loans for education from parents at any time during AY 1989-90, AY 1990-91, or AY 1991-92.

Any loan in 1989-90

BORAMT1

NPSAS

This is the amount student borrowed for undergraduate education as of June 1990. It includes loans from all sources, including friends and relatives, and also includes loans that have been repaid.

Any loan through 1991-92 (cumulative)

DRVBORAM

BPS

This is the amount student borrowed for postsecondary education from its beginning through interview date in 1992 from all sources, including family. It was set to zero if student never borrowed (MPR change) and does not include PLUS loans.

Received loans

1989-90	NFLOAN89	MPR:NPSAS
1990-91	EC_LOAN1	BPS
1991-92	EC_LOAN2	BPS

Yes / No

Student received student loans from any nonfamily source in each academic year, including summer months. These do not include PLUS loans.

Assistance from parents in 1989-90

PARCONTR

MPR:NPSAS

This is the total amount of assistance student received from both referent (parent of primary support) and nonreferent parents in AY 1989-90.

	Variable name	Source
<i>Assistance from parents through 1991-92 (cumulative)</i>		
	CNTRBPAR	MPR:BF, NPSAS

Yes / No

Parents contributed money for education at any time from AY 1989-90 through AY 1991-92. No distinction was made in BPS data between referent (parent of primary support) and nonreferent parents.

Assistance from spouse or relatives in 1989-90

SPSREL90	MPR:NPSAS
----------	-----------

Yes / No

Student received assistance for education from spouse or relatives other than parents in AY 1989-90. Where the value was missing but student was not married, spouse assistance amount was set to zero.

Assistance from spouse or other relatives through 1991-92 (cumulative)

SPSOTHER	MPR:BPS, NPSAS
----------	----------------

Yes / No

Student received assistance for education from spouse or relatives other than parents from AY 1989-90 through AY 1991-92. Where "not applicable," the amount was set to zero.

<i>Used personal savings in 1989-90</i>	SAVESCHL	NPSAS
---	----------	-------

Yes / No

Students reported how much of the money they had saved prior to July 1, 1989 was or would be used to pay for 1989-90 school expenses. Positive amounts were coded to "yes."

Variable name	Source
<i>Used personal savings through 1991-92 (cumulative)</i>	
PRSNSAVE	MPR:BPS, NPSAS
Yes / No	

Students reported using their own savings for education or associated living expenses for the entire time in postsecondary education since 1989.

STUDENT WORK EXPERIENCES (Chapter 4)

Many of the work experience variables were based on a set of monthly status variables created by MPR (JOBxxxx series). The BPS variable, JI_HOURS, records the student-reported number of hours per week at a given job, often with many job records per student. For a given month, JOBxxxx is the sum of hours per week for all jobs held that month. If the number of hours in each job exceeds 35, JOBxxxx is set to the job with the most hours. The NPSAS XEMPLxx series and the BPS M_MNTHxx series, sets of monthly enrollment/work status variables, were used to determine which months the student was both working and/or enrolled.

A number of derived variables were also based on the MPR-derived variable STOP, which identifies the last month in which the student reported being enrolled, using the monthly enrollment/work status variables.

Worked while student

1989-90	SWORK89	MPR:BPS, NPSAS
1990-91	SWORK90	
1991-92	SWORK91	

Yes / No

Student spent at least 1 month both working and enrolled at any time during the academic year.

Variable name	Source
<i>Worked while student through 1991-92 (cumulative)</i>	
SWORKAT	MPR:BPS, NPSAS

Yes / No

Student spent at least 1 month both working and enrolled at any time from AY 1989-90 through 1991-92.

Worked any time after leaving PSE (cumulative)

NSWORKAT	MPR:BPS, NPSAS
----------	----------------

Yes / No

Student worked during any month after last month of enrollment from AY 1989-90 through 1991-92. Note that the variable was set to missing if enrollment/work status was missing, and that students who were still enrolled in the last interview month would not have had a chance to work after their last month of enrollment.

Worked after leaving PSE

1989-90	NSWORK89	MPR:BPS, NPSAS
1990-91	NSWORK90	MPR:BPS, NPSAS
1991-92	NSWORK91	MPR:BPS, NPSAS

Yes / No

Student worked any time after leaving postsecondary education for each academic year. The variable was set to missing if enrollment/work status was missing. Note that students who were still enrolled in June 1992 would not have had a chance to work after their last month of enrollment.

	Variable name	Source
<i>Number of hours worked per week</i>		
1989-90	EMWKHR3	MPR:BPS, NPSAS
1990-91	HRS9091	MPR:BPS
1991-92	HRS9192	MPR:BPS

Students reported the average number of hours they worked per week (including work-study and assistantships) during those months when they were enrolled for at least part of the month. If students reported being employed during the month, the average number of hours worked per week was derived based on the starting and ending dates and the hours they reported for each job during the survey interview. Note that this variable only represents the average hours students worked *while both working and enrolled*.

<i>Primary role in PSE</i>	J12ROLE	BPS
-----------------------------------	---------	-----

Student who works to pay expenses / Student who works to earn spending money / Employee gaining skills for job advancement / Employee expanding career options / Employee expanding own knowledge or skills.

Self-identified role of student who was both working and enrolled at the same time.

<i>Had at least one co-op job</i>	COOP	MPR:BPS
--	------	---------

Yes / No

Working students who identified their primary role in postsecondary education as a student were asked the co-op status of all jobs held prior to date of last enrollment. Of those jobs, at least one was a co-op job (i.e., one in which students receive vocational training through the cooperation of employers and the PSE institution).

<i>Had at least one job related to field</i>	RFOS	MPR:BPS
---	------	---------

Yes / No

Working students who identified their primary role in postsecondary education as a student were asked whether any jobs held prior to date of last enrollment were related to field of study. Of those jobs, at least one was "closely" related to their field of study. A job was considered unrelated if it was reported to be either "somewhat" or "not" related to their field of study. (J1_RFOS)

	Variable name	Source
<i>Had at least one on-campus job</i>	ONCAMP	MPR:BPS

Yes / No

Working students who identified their primary role in postsecondary education as a student were asked the on-campus status of all jobs held prior to date of last enrollment. Of those jobs, at least one was on campus.

<i>Had at least one off-campus job</i>	OFFCAMP	BPS
--	---------	-----

Yes / No

Working students who identified their primary role in postsecondary education as a student were asked the off-campus status of all jobs held prior to date of last enrollment. Of those jobs, at least one was off campus.

Two or more months with more than one job

DUPJOBS	MPR:BPS, NPSAS
---------	----------------

Yes / No

Across all months during which students were both enrolled and working, students reported more than one job per month for at least 2 months (months were not necessarily sequential).

Number of months enrolled and not working

1989-90	SCHNWK89	MPR:BPS, NPSAS
1990-91	SCHNWK90	MPR:BPS
1991-92	SCHNWK91	

This is the sum of the months in each academic year that students reported being enrolled and not working.

Variable name**Source*****Number of months both enrolled and working***

1989-90	SCHWRK89	MPR:BPS, NPSAS
1990-91	SCHWRK90	MPR:BPS
1991-92	SCHWRK91	

This is the sum of the months in each academic year that students were both enrolled and working. Note that this variable is by definition constrained to months prior to and including the last month of enrollment.

Number of months working and not enrolled

1989-90	WRKNS89	MPR:BPS, NPSAS
1990-91	WRKNS90	MPR:BPS
1991-92	WRKNS91	

This is the sum of the months students reported that they were working each year but not enrolled in the same month, up to the time of leaving PSE. Note that this variable is by definition constrained to months prior to and including the last month of enrollment.

Ratio of number of months working and enrolled over total months enrolled

1989-90	S_PROP89	MPR:BPS, NPSAS
1990-91	S_PROP90	MPR:BPS
1991-92	S_PROP91	

Among working students whose primary role in postsecondary education was as a student, the number of months they were enrolled and working was divided by the total number of months they were enrolled (working or not).

Occupational classification of 1991 primary job

OCCUP2

MPR:BPS

Clerical / Craftsman, repair / Laborer / Manager, Administrative / Skilled operatives / Professional / Sales / Service, including protective service / Technical / Other

Occupational classification of 1991 primary jobs. A primary job was one held after the last enrollment period or one held by a student whose primary role in secondary education was as an employee.

	Variable name	Source
<i>Employer-provided training 1991</i>	J12TRN2	BPS

Yes / No

Students reported whether they participated in any employer-provided education/training from their primary employer during 1991.

<i>Total duration of unemployment spells</i>	TOTDUR	MPR:BPS
--	--------	---------

This is the total number of months students were unemployed.

<i>Average duration of unemployment spells</i>	MEANDUR	MPR:BPS
--	---------	---------

This variable represents the average number of months students reported being unemployed in each unemployment spell.

<i>Duration of unemployment</i>		
Spell 1	UNDUR1	MPR:BPS
Spell 2	UNDUR2	MPR:BPS

This is the sum of the months students reported they were unemployed during each spell of unemployment.

Number of separate periods of unemployment

1990	NUNEMP90	MPR:BPS
1991	NUNEMP91	

Unemployment periods may be counted more than once. Any periods that started, for example, before January 1991 and that ended after December 1990 were classified as having occurred both in 1990, and in 1991 (for that part of the period that occurred in that year).

MARRIAGE AND FAMILY FORMATION (Chapter 5)

	Variable name	Source
<i>Marital status as of February 1992</i>	F_MARITL	BPS
Never married / Currently married / Separated, divorced, or widowed		
Students reported their marital status as of February 1992. A small percentage (1.6 percent) of students who indicated that they were single but living as married, were categorized as single.		

<i>Timing of marriage</i>	WHEN_MAR	MPR:BPS
---------------------------	----------	---------

Before PSE / While attending PSE / After last term

Student's reported date of marriage was compared with student's reported dates of first and last enrollment to determine the timing relative to enrollment.

<i>Number of children</i>	F_CHLDNM	BPS
---------------------------	----------	-----

None / One / Two / Three or more

<i>Timing of children</i>	HADKID	MPR:BPS
---------------------------	--------	---------

Before PSE / While attending PSE / After last term

Birth date of first child was compared with dates of student's enrollment.

CIVIC PARTICIPATION (Chapter 5)

<i>Voting practices</i>	PS_VOTRG	BPS
-------------------------	----------	-----

Currently registered / Formerly registered, not currently / Never registered to vote

Students reported their voter registration status. Note that a small percentage (1.7 percent) were not eligible to vote. They were included in the "never registered" group.

<i>Will vote in 1992 Presidential election</i>	PS_VOTPR	BPS
--	----------	-----

Yes / No

Variable name**Source**

Students reported expecting to vote in the 1992 presidential election. Those who answered that they did not know whether or not they would vote were counted as missing.

Voted in state/local election

PS_VOTLS

BPS

Yes / No

Students reported having voted in a local or state election in 1990 or 1991.

Volunteered in last 2 years

PS_SERV

BPS

Yes / No

Students reported performing volunteer or community service work during the past 2 years, such as PTA, little league, scouts, service clubs, church groups, or social action groups.

Plan to volunteer next 2 years

PS_NEXT2

BPS

Yes / No

Students reported that they expected to perform volunteer or community work during the next 2 years.

NONCREDIT EDUCATION ACTIVITIES (Chapter 5)***Participated in "other" educational activities since February 1990***

Noncredit college courses

OT_NOCRD

BPS

Community, church, or labor organization

OT_COMUN

Radio, TV, or newspaper

OT_MEDIA

Government-sponsored

OT_GOV

Private instructor

OT_PRIVT

Yes / No

Student reported participating in each type of "other" educational activity as listed above.

Variable name**Source*****Course was job related*****Job related:**

Noncredit college courses	OT_NOCJR	BPS
Community, church, or labor organization	OT_COMJR	
Radio, TV, or newspaper	OT_MEDJR	
Government-sponsored	OT_GOVJR	
Private instructor	OT_PRIJR	

Yes / No

Student reported participating in "other" educational activities since February 1990 that were job related (i.e., required by or useful in job held at the time of the course; or to a job the individual was seeking to gain at the time of the course).

Participated in employer-required course ANYTRNRQ MPR:BPS

Yes / No

Some or all of the "other" educational courses or activities (see above) were required by the employer.

Appendix B

Technical Notes and Methodology

Survey Content

The need for a nationally representative database on postsecondary student financial aid prompted the U.S. Department of Education to conduct the 1990 National Postsecondary Student Aid Study (NPSAS:90). To provide the full range of information on financing postsecondary education, NPSAS included both aided and nonaided students. The 1990/92 Beginning Postsecondary Students Longitudinal Study (BPS:90/92) followed students identified as first-time beginning (FTB) students in the academic year 1989–90 from the NPSAS:90 sample. A computer-assisted telephone interview (CATI) was conducted 2 years after the NPSAS:90 survey that obtained information concerning enrollment, program completion, education financing, employment, and family formation; expectations for graduate school; participation in additional education (provided by an employer or other non-postsecondary provider); family income and expenditures; goals and aspirations; and civic participation. The data derived from this survey permit a variety of analyses concerning postsecondary persistence and completion, entry into the work force, and civic participation.

BPS data are made available in two formats: public use Data Analysis Systems (DAS) and restricted use files. Each DAS contains numerous variables relevant to a particular research topic, but not all data available in the full BPS system. The DAS used to generate this descriptive report contains all the variables reported here, but is not limited to these variables. The DAS used to generate this report is available on compact disc. For more information, contact Arlie Gordon at (202) 219-1367 or via Internet (AGORDON@INET.ED.GOV).

Target Population

The target population of BPS is all students who entered postsecondary education for the first time in academic year 1989–90. In defining the cohort as students who began postsecondary education—regardless of when they graduated from high school—BPS represents a departure from previous longitudinal studies of high school cohorts. The sample was designed to include students enrolled in all types of postsecondary education. Thus, it included students enrolled in public institutions; private, not-for-profit institutions; and private, for-profit institutions. The sample included students at 2- to 3-year and 4-year institutions,³⁴ as well as students enrolled in occupationally specific programs that lasted for less than two years. The BPS sample is more likely than previous longitudinal studies to include some of the increasing numbers of “nontraditional” postsecondary students, such as those who have delayed their education due to financial needs or family responsibilities. Students who began

³⁴Four-year institutions include all institutions offering 4-year baccalaureate degrees.

their postsecondary studies during some other period and then returned to them in 1989-90 were not included nor were those who were still enrolled in high school. Similarly, institutions offering only correspondence courses, institutions enrolling only their own employees, and U.S. service academies were not eligible for NPSAS or BPS. Students eligible for BPS were identified in two stages. The first stage involved selection for the NPSAS:90 sample, identified as being representative of all students enrolled in postsecondary education between July 1, 1989 and June 30, 1990. Of the NPSAS:90 sample, those who were identified as being first-time enrollees were eligible for BPS and were retained in the 1992 interview. BPS data are nationally representative by institution level and control, but like NPSAS are not representative at the state level.

Sample Design

A database of 11,700 NPSAS:90 participants that was believed to contain all possible FTB students in the NPSAS:90 sample was used as the basis for selecting the BPS:90/92 sample.

The initial set of 11,700 potential FTB students contained 10,566 students who had been identified as probable undergraduate students, and 1,134 students who had been identified as probable graduate or first-professional students. (Undergraduates in vocational programs sometimes consider themselves as participants in a first-level professional program, and if they have completed the program, they consider themselves as graduates of that program. However, this is not the same as being in first-professional programs such as medicine or dentistry, or as having graduated from a baccalaureate-level program. Hence, some students were improperly classified. Other non-FTB students were included as part of the potential BPS sample because they were identified as being first-time students in the NPSAS institution—for example, transfer students.)

Considerable effort was directed toward ensuring that the sample for BPS:90/92 contained appropriate members. Since the preliminary sample contained fairly large numbers of individuals with questionable status as FTB students, non-FTB students were identified in almost every phase of the data collection process. After the completion of the BPS:90/92 survey there were 62 percent of the potential sample identified as FTB students and an additional 13 percent for which eligibility had not yet been determined.

Data Collection Procedures

In order to minimize the locating effort needed at time of interview, student locating began in October 1991. Mailouts to parents of all students identified through NPSAS as potential FTB students introduced the BPS survey and requested current locating information for the potential respondents. In January 1992, information packets were mailed to the 10,724 students considered to be possible FTB students. Data collection for BPS:90/92 took place between late April and the end of August 1992. Data were collected using a CATI.

Response Rates and Weighting

Since BPS:90/92 is a longitudinal follow-up of the first-time beginning students identified in the 1990 NPSAS, the initial weights for the BPS sample were the final analysis weights for NPSAS:90. Thus, the first part of this section briefly reviews the NPSAS:90 weights. The next part discusses development of weight adjustment cells for BPS that compensate for the potential bias due to ineligibility and nonresponse among the 11,700 potential FTB students that formed the basis for the BPS sample.

Weighting for NPSAS:90

The initial sampling weight for each student selected for NPSAS:90 was based on the student's overall probability of selection. The probability of selection accounted for the probability of selecting the institution, subsampling the institutions and requesting lists of students for the four time points in the academic year, and selecting students from the lists obtained. A multiplicity adjustment was incorporated into the weight for students that attended more than one institution during the 1989-90 academic year. Weight adjustments were implemented to compensate for nonresponse of sample institutions to the request for students lists, for nonresponse of institutions in the student record abstractions, and for nonresponse by the students themselves in the telephone survey. The final step in the weight adjustment process was a post-stratification adjustment based on the number of Pell grant recipients.

Defining Weight Adjustment Cells

NPSAS:90 yielded an initial set of 11,700 potential FTB students, which contained 10,566 students who had been selected as undergraduate students, and 1,134 students who were later identified as graduate or first-professional students as discussed above.

The fielded BPS:90/92 sample consisted of 10,624 members. Response and eligibility status were defined for each of the 10,624 members of the fielded BPS sample as shown in table 1. Sample-based adjustment cell weighting was used to compensate for BPS nonresponse and ineligibility. Population-based adjustment cell weighting was not proposed because there were no external population totals for FTB students that were believed to be more accurate than the BPS estimates.

BPS sample members were classified as eligible if they were found to satisfy all of the following conditions:

- (1) first-time, beginning student during the 1989-90 academic year;
- (2) eligible for NPSAS:90 (i.e., enrolled in a course for credit in a qualifying postsecondary institution during the 1989-90 academic year); and
- (3) not deceased at the time of the 1992 BPS follow-up survey.

Table B.1—Distribution of final response status

Final survey result	Percent
Eligible	61.54
Responded	61.37
Refused	0.12
Ran out of time	0.04
All tracing leads exhausted	0.01
Ineligible	23.90
Not FTB	21.12
Deceased	0.13
Other	0.73
Undetermined eligibility	14.56
Refused	3.43
Hostile refusal	0.02
Ran out of time	2.06
Unavailable during BPS:92	1.85
No phone	0.43
Institutionalized	0.08
Language barrier	0.02
Predicted not FTB	1.59
All tracing leads exhausted	5.08
TOTAL	100.00

Any student who was found to not satisfy any one of the above conditions was classified as ineligible for BPS. Those students for whom the eligibility determination process could not be completed were classified as having undetermined eligibility status.

BPS sample members were classified as respondents if they completed at least one question beyond those needed to determine eligibility status. Because tracing students and determining their eligibility for BPS was a complex process and because the response rule was quite liberal, most of the BPS nonrespondents were sample students whose eligibility status could not be determined. The distribution of students with known eligibility status at the conclusion of BPS data collection (eligible or ineligible) is shown in table B.1. Thus, the unweighted percent of the BPS sample who were respondents for eligibility determination was 85.4 percent (61.5 percent eligibles plus 23.9 percent ineligibles). The weighted percent responding at this phase of data collection (i.e., the estimated percent of the population represented by the sample of students for whom eligibility could be determined using the BPS procedures) was 85.8 percent. Both the weighted and unweighted percentages of respondents among the sample students known to be eligible for BPS were 99.7 percent. Therefore, the weighted and unweighted BPS response rates (products of the above response rates for eligibility determination and BPS interviewing) were 85.5 percent and 85.2 percent, respectively. Since nonresponse occurs primarily at the stage of eligibility determination, that was the focus of the nonresponse adjustments.

Because BPS nonresponse occurs at two stages—determination of eligibility and survey response among those who were eligible—weight adjustments for nonresponse were implemented in two corresponding stages. Since over 99 percent of students who were determined to be eligible were also classified as respondents, the adjustment for nonresponse

among students known to be eligible was a single overall weight adjustment. Weight adjustment classes were used to compensate for nonresponse regarding the determination of eligibility.

BPS Item Response

In a data analysis system such as the one used to prepare this report, a number of variables have been computed for analytic purposes and to reduce the amount of missing data. Further, many of the computed variables are based in part on data previously collected. Therefore, missing data, when it exists, represents one of two things, either the question was inappropriate for the respondent (e.g., WHEN_MAR - timing of marriage, is not applicable if the respondent was never married) or data that is missing because the respondent didn't supply it (e.g., didn't know, refused, partial interview). As a result, it is not always possible to determine which form of non-response is reflected in missing data. However, to help the reader of this report understand the extent of missing data in this data base, and the relative impact, the following table suggests an interpretation for selected representative variables.

Table B.2—Response rates for selected variables

Variable name	Variable label	Weighted percent	
		Q not applicable	Total percent of data missing
LVLCTL89	Institution level/control AY89-90	*	0%
BPSRACE	Derived race/ethnicity from BPS	*	.1%
H_GENDR	Gender BPS First Follow-up	*	0%
DEPEND	Dependency status - 1990	*	—
FEB92	Enrollment/employment Feb 1992	*	11.1%
PROGTYP	Ed program: Degree program AY89-90	*	0%
CPERSIST	Persistence and attainment	*	4.2%
EI_HDEG	Highest degree attained by Feb 1992	*	18.3%
GOTGRANT	Used grant or scholarship aid 1992	*	5.6%
GOTLOAN	Used non-family loan aid 1992	*	6.6%
SWORKAT	Enrolled & worked sometime in 1989-92	*	2.6%
SWORK89	Enrolled and worked AY89-90	*	2.7%
OT_NOCRD	Took non-credit courses at college 1992	*	8.2%
F_MARITL	Marital status Feb 1992	*	8.2%
LVCT90	Institution level/control AY90-91	29.4%	33.3%
LVCT91	Institution level/control AY91-92	38.4%	42.3%
REI_GRAL	Overall grades in PSE	1.2%	9.1%
J12ROLE	Primary role in postsecondary education	21.5%	29.8%
SWORK90	Enrolled and worked AY90-91	19.8%	33.4%
SWORK91	Enrolled and worked AY91-92	29.5%	42.3%
WHEN_MAR	Timing of marriage relative to education	71.3%	79.9%

*Question applicable to all respondents.

—Less than .1% missing.

For more information on the BPS:90/92 survey, consult the Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92) Final Technical Report, Postsecondary Longitudinal Studies Branch, Postsecondary Education Statistics Division, National Center for Education Statistics, U.S. Department of Education, 555 New Jersey Avenue NW, Washington, DC 20208-5652.

Accuracy of Estimates

The statistics in this report are estimates derived from a sample. Two broad categories of error occur in such estimates: sampling and nonsampling errors. Sampling errors arise because observations are made only on samples of students, not on entire populations. Nonsampling errors occur not only in sample surveys but also in censuses of entire populations.

Nonsampling errors can be attributed to a number of sources: inability to obtain complete information about all students in all institutions in the sample (some students and institutions refused to participate, and some students participated but answered only certain items); ambiguous definitions; differences in interpretation of questions; inability or unwillingness to give correct information; mistakes in recording or coding data; and other errors in collecting, processing, sampling, and estimating missing data.

The accuracy of a survey result is determined by the effect of sampling and nonsampling errors. In surveys with sample sizes as large as those in the BPS:90/92 study, sampling errors generally are not the primary concern, except where separate estimates are made for relatively small subpopulations such as Asian Americans or Native Americans.

Statistical Procedures

The descriptive comparisons in this report were based on Student's *t* statistics. Comparisons based on the estimates of the proportions include the estimates of the probability of a Type I error, or significance level. The significance levels were determined by calculating the Student's *t* values for the differences between each pair of means or proportions and comparing these to published tables of significance levels for two-tailed hypothesis testing.

The 1990 NPSAS survey, while representative and statistically accurate, was not a simple random sample. Instead, the survey sample was selected using a more complex three-step procedure with stratified samples and differential probabilities of selection at each level. First, postsecondary institutions were listed within geographical strata. Once institutions were organized by zip code and state, they were further stratified by control (public; private, not-for-profit; or private, for-profit) and offering (less-than-2-year, 2- to 3-year, 4-year nondoctoral-granting, and 4-year doctoral-granting). Sampling rates for students enrolled at different institutions and levels (undergraduate or other) varied, resulting in better data for policy purposes, but at a cost to statistical efficiency. BPS:90/92, because it is a subsample of the 1990 NPSAS sample, is similar in structure.

All of the estimates presented in this report were produced using the BPS:90/92 DAS for beginning postsecondary students. The DAS software offers users the capability to specify and generate their own tables from the BPS data, and it calculates proper standard errors and weighted sample sizes for estimates.³⁵ The data within the DAS are compressed, with a number of tamper-detecting safeguards to protect the confidentiality of survey participants and to improve processing speed. Table B.3 presents illustrative standard errors for a table of estimates produced by the BPS:90/92 DAS. If the number of valid cases is too small to produce an estimate, the DAS prints the message "low-N" instead of the estimate.

For more information about the BPS:90/92 DAS, contact:

Arlie Gordon
NCES Longitudinal Studies Branch
555 New Jersey Avenue NW
Washington DC, 20208-5652
(202) 219-1367

Internet address: AGORDON@INET.ED.GOV

Students' t values may be computed for comparisons using these tables' estimates with the following formula:

$$t = (P_1 - P_2) / \sqrt{(se_1^2 + se_2^2)}$$

where P_1 and P_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors. This formula is valid only for independent estimates. When the estimates for columns are not independent (for example, when comparing the percentages of students across a percent distribution such as those in different age groups), a covariance term is added to the denominator of the t -test formula.

There are hazards in reporting statistical tests for each comparison. First, large t statistics appear to merit special attention. This can be misleading, since the magnitude of the t statistic is related not only to the observed differences in means or percentages but also to the number of students in the specific categories used for comparison. Hence, a small difference compared across a large number of students would produce a large t statistic.

A second hazard in reporting statistical tests for each comparison is that, when making multiple comparisons among categories of an independent variable (for example, different levels of income), the probability of a Type I error for these comparisons taken as a group is larger than the probability of error for a single comparison. When more than one difference between groups of related characteristics or "families" are tested for statistical significance, a standard that assures a level of significance for all of those comparisons taken together must be applied.

³⁵The BPS sample is also not a simple random sample; therefore, simple random sample techniques for estimating sampling error cannot be applied to these data. The DAS takes into account the complexity of the sampling procedures and calculates standard errors appropriate for such samples. The method for computing sampling errors used by the DAS involves approximating the estimator by the linear terms of a Taylor series expansion. The procedure is typically referred to as the Taylor series method.

Table B.3—Standard errors for table 1.4: Percentage distribution of 1989–90 beginning postsecondary students by enrollment and employment status as of February 1992, by selected student and institutional characteristics

	Enrolled in postsecondary education	Working, not enrolled	Unemployed	Other
Total	1.27	1.25	0.31	0.50
Level and control of primary institution in AY* 1989–90				
Public				
Less-than-4-year	2.33	2.41	0.55	0.93
4-year	1.38	1.17	0.35	0.64
Private, not-for-profit				
Less-than-4-year	3.52	3.79	1.11	2.84
4-year	1.55	1.51	0.26	0.57
Private, for-profit	1.59	2.25	1.52	1.76
Level of first institution attended				
Less-than-2-year	1.87	2.85	1.67	2.19
2- to 3-year	2.15	2.22	0.53	0.86
4-year	1.07	0.94	0.25	0.47
Control of first institution attended				
Public	1.60	1.59	0.35	0.60
Private, not-for-profit	1.54	1.46	0.26	0.61
Private, for-profit	1.59	2.25	1.52	1.76
Race-ethnicity				
White, non-Hispanic	1.45	1.40	0.32	0.54
Black, non-Hispanic	3.35	3.31	1.49	2.32
Hispanic	3.92	4.15	1.21	2.11
Asian/Pacific Islander	4.52	4.28	1.21	1.57
Native American	11.98	11.58	9.02	1.48
Gender				
Male	1.57	1.58	0.48	0.68
Female	1.68	1.65	0.41	0.69
Dependency status				
Dependent	1.33	1.27	0.30	0.52
Independent	1.84	2.20	0.83	1.25
Age as of 12/31/89				
23 or younger	1.27	1.24	0.31	0.49
24–26	3.09	4.90	3.10	3.31
27–29	6.49	6.78	2.80	3.60
30 or older	3.09	3.51	1.10	2.26
Socioeconomic status				
Bottom quartile	2.80	2.85	1.34	1.74
Middle quartiles	1.78	1.73	0.46	0.69
Top quartile	1.48	1.44	0.33	0.63

*AY=Academic year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup (BPS:90/92).

Comparisons were made in this report only when $p \leq .05/k$ for a particular pairwise comparison, where that comparison was one of k tests within a family. This guarantees both that the individual comparison would have $p \leq .05$ and that when k comparisons were made within a family of possible tests, the significance level of the comparisons would sum to $p \leq .05$.³⁶

For example, in a comparison of enrollment for males and females, only one comparison is possible (males versus females). In this family, $k=1$, and the comparison can be evaluated with a Student's t test. When comparisons are made between three different classifications, then $k=3$, and the significance level of each test must be $p \leq .05/3$, or .0167, in order to be considered statistically significant.

³⁶The standard that $p \leq .05/k$ for each comparison is more stringent than the criterion specifying that the significance level of the comparisons should sum to $p \leq .05$. For tables showing the t statistic required to ensure that $p \leq .05/k$ for a particular family size and degrees of freedom, see Olive Jean Dunn, "Multiple Comparisons Among Means," *Journal of the American Statistical Association*, 56: 52-64.

ISBN 0-16-045083-7



9 780160 450839

90000

227

United States
Department of Education
Washington, DC 20208-5652

Official Business
Penalty for Private Use, \$300

Postage and Fees Paid
U.S. Department of Education
Permit No. G-17

**Fourth Class Special
Special Handling**

BEST COPY AVAILABLE

