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**Postsecondary Education Descriptive Analysis Reports**

**Progress Through the Teacher  
Pipeline: 1992–93 College Graduates  
and Elementary/Secondary School  
Teaching as of 1997**

Robin R. Henke  
Xianglei Chen  
Sonya Geis

MPR Associates, Inc.

Paula Knepper  
National Center for Education Statistics

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## Executive Summary

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As the school-aged population in the United States grows and teachers from the baby-boom generation begin to retire, school administrators and policymakers anticipate an increasing shortage of elementary and secondary school teachers. Although some reports indicate that in the late 1990s relatively more college students have been interested in teaching than were in the early 1980s (Feistritzer 1999; Tabor 1999), increasing anecdotal evidence also suggests that schools and districts are finding it difficult to locate teachers to staff their classrooms (Colvin 1998; Mundy 1999; Schultze and Zahn 1998a). In times of teacher shortage, administrators may not feel that they can wait to find well-qualified graduates.

First-time teachers are a large source of newly hired teachers for both public and private schools, accounting for 53 percent of new hires in public schools and 42 percent in private schools in 1990–91. In particular, one-third of new hires in public schools and one-fifth of new hires in private schools entered teaching straight out of college. Another 20 percent of both public and private school new hires were college graduates who had been doing other work between graduating from college and becoming teachers (Rollefson and Broughman 1995). Thus, new graduates are an important source of the teacher supply, and the rate at which they become teachers is important to those who staff U.S. classrooms.

Which new college graduates become teachers, however? Persistent discrepancies between the demographics of the teacher and student popula-

tions—with teachers considerably less likely than students to be of racial/ethnic minority backgrounds—concern some parents, educators, and policymakers. Currently, there is limited empirical evidence regarding the question of whether student achievement would improve if teacher demographics more closely resembled student demographics. However, some researchers have identified teachers who have been particularly effective with African-American children and have found that they tend “... to contextualize teaching, helping students build bridges linking their everyday experiences to new knowledge” (Darling-Hammond, Dilworth, and Bullmaster 1997). Another noted characteristic of these teachers is their tendency to use teaching practices that are consistent with African-American cultural norms (Ladson-Billings 1994, cited in Darling-Hammond, Dilworth, and Bullmaster 1997). Such researchers argue that increasing the proportion of teachers who have direct knowledge of minority group cultural norms will enhance the achievement of minority children both through their teaching and by informing nonminority teachers’ practice.

In addition to the issue of teacher race/ethnicity, policymakers and school administrators at all levels are concerned about the quality of teachers’ subject matter knowledge and preparation in pedagogical techniques. Staffing classrooms with teachers who lack preparation in either subject matter or pedagogy may impede progress toward achieving national education goals for student achievement (American Council on Educa-

tion [ACE] 1999; Murray 1997; National Commission on Teaching and America's Future [NCTAF] 1996, 1997). Researchers have found that teachers' verbal aptitude test scores are associated with their students' verbal achievement (Ehrenberg and Brewer 1995; Ferguson 1998 and Ferguson and Ladd 1996, cited in ACE 1999), and that teachers' mathematics expertise is associated with their students' mathematics achievement (Monk 1994; and Rowan et al. 1997, cited in ACE 1999).

However, research conducted in the 1980s and 1990s indicated that college graduates with higher standardized test scores were less likely than lower scoring graduates to teach, and that higher scoring graduates who did teach were more likely than their lower scoring counterparts to leave teaching (Murnane, Singer, Willett, Kemple, and Olson 1991; Schlechy and Vance 1983). Research into this issue has continued, with somewhat mixed results (Bruschi and Coley 1999; Gitomer, Latham, and Ziomek 1999). This report describes teachers' preparation in terms of their undergraduate grade-point averages overall and in their major field of study, whether they completed pedagogical training required for teacher certification, and the degree to which they studied the academic fields they teach as well as their college entrance examination test scores.

This report is the second in a series of reports that follows 1992–93 college graduates' progress through the teacher pipeline using data from the Second Follow-up of the Baccalaureate and Beyond Longitudinal Study (B&B:93/97). The first report, entitled *Out of the Lecture Hall and Into the Classroom: 1992–93 College Graduates and Elementary/Secondary School Teaching* (NCES 96–899), focused on graduates' forays into teaching as of 1 year after college graduation.

Like *Out of the Lecture Hall*, this second report focuses on the academic characteristics and preparation for teaching of those who took various steps toward teaching and is organized by a conceptual “teacher pipeline” that represents a teacher's career. The pipeline includes preparatory activities—considering teaching, student teaching as an undergraduate, becoming certified to teach, applying for teaching jobs—as well as teaching experiences and plans for teaching in the future. The report first examines the rate at which graduates with varying demographic and academic characteristics entered the teacher pipeline and continues by describing the steps that pipeline entrants took toward teaching and the experiences of those who taught. The final section discusses both the rate at which those who had taught since completing the 1992–93 degree had stopped teaching and all pipeline members' expectations for teaching in the future. Future reports will continue to follow this cohort into and out of teaching, studying how many graduates enter the pipeline after 1997, how long those who teach remain in the profession, and whether those who teach and leave return to the classroom later in their working lives.

## Entering the Teacher Pipeline

For some 1992–93 college graduates, the 1992–93 degree was a second bachelor's degree. Among such graduates were those who had prepared to teach or taught without preparing prior to receiving the 1992–93 degree. For the purposes of this analysis, the 3 percent of graduates who had taught before receiving the degree or had become certified 1 year or more before receiving the degree were excluded from the population of graduates under study. The remaining 97 percent of 1992–93 college graduates, who were eligible to enter the teacher pipeline, are referred to as “graduates” or “bachelor's degree recipients.”

Graduates were identified as having entered the teacher pipeline when they reported that they had taught in an elementary or secondary school, had become certified to teach, had applied for a teaching position, or were considering teaching at the time of either the 1994 or the 1997 interview. In 1994, 1 year after completing the 1992–93 degree, one-quarter of 1992–93 bachelor’s degree recipients had entered the teacher pipeline (figure A). By 1997, 4 years after completing the degree, more than one-third (36 percent) had done so. The proportion of graduates who had taught also in-

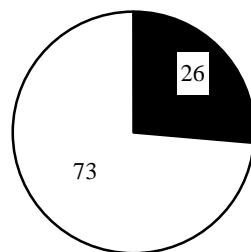
creased between 1994 and 1997: by 1994, 8 percent of graduates had taught, and by 1997, 13 percent had done so.

As has been true historically (Murnane et al. 1991), men were less inclined than women to enter the pipeline. In addition, Asian/Pacific Islander graduates were less inclined to do so than were graduates of other racial/ethnic backgrounds.

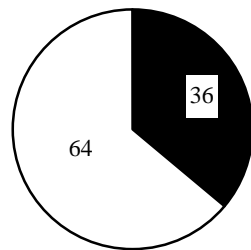
Graduates who had majored in education were highly likely to enter the pipeline, and the majority had taught: 84 percent of education majors had entered the pipeline, and 58 percent of education majors had taught by 1997. About one-fifth to nearly one-half of graduates who had majored in other fields as undergraduates had entered the pipeline.

Graduates whose college entrance examination (CEE) scores fell in the top quartile among 1992–93 college graduates were less likely than those in the bottom quartile to enter the teacher pipeline (32 percent versus 41 percent). In particular, whereas 3 percent of graduates in the top quartile had prepared to teach but not taught, 6 percent of graduates in the bottom quartile had done so. Similarly, 6 percent of graduates in the top quartile had prepared and taught, compared with 12 percent in the bottom quartile.<sup>1</sup> Graduates in the top quartile were about twice as likely as those in the bottom quartile to teach without having prepared, however.

**Figure A—Percentage distribution of pipeline-eligible 1992–93 bachelor’s degree recipients according to whether they entered the teacher pipeline: 1994 and 1997**



1994



1997

■ Entered teacher pipeline  
□ Did not enter teacher pipeline

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

<sup>1</sup>For the purposes of this report, graduates were defined as having prepared to teach if their undergraduate transcripts indicated they had completed a student teaching assignment or if they reported having earned a teaching certificate at the probationary level or higher. This definition does not include majoring in education, nor does it indicate any relationship between the graduate’s field of undergraduate or graduate study and the fields in which s/he taught.

In contrast to the relationships between CEE scores and teaching in this cohort, the pipeline entry rate was positively related to graduates' grade-point averages (GPAs), both cumulative and in their undergraduate majors. Whereas 40 percent of graduates with GPAs of 3.75 or higher, both cumulative and in their majors, entered the pipeline, 32 percent of graduates with GPAs lower than 2.75 did so. Furthermore, graduates with top GPAs were more likely than graduates with GPAs of less than 2.75 to have prepared to teach (whether or not they had taught). This is at least partly a function of differences in GPAs among graduates who had majored in different fields. Education majors, who were more inclined to prepare to teach and actually teach, also had higher undergraduate GPAs, both overall and in their majors, than those who had majored in business/management; mathematics, computer science, or the natural sciences; and the social sciences (Henke, Geis, Giambattista, and Knepper 1996b).

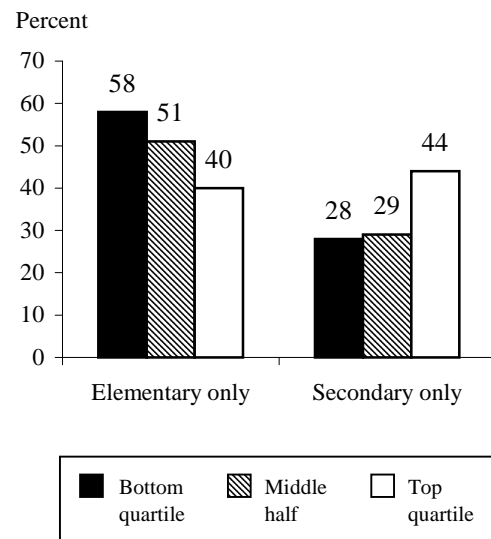
### Working in Schools and Classrooms

By 1997, 1992–93 college graduates who first taught within 4 years of receiving their bachelor's degree could have taught in several schools, and they were asked about as many as six different schools. Between receiving their bachelor's degrees and the 1997 interview, most (83 percent) had worked only in public schools, far fewer (13 percent) in private schools, and a small percentage (4 percent) in both public and private schools. Graduates with CEE scores in the top quartile were more likely than those with scores in the bottom quartile to teach only in private schools (26 percent versus 10 percent).

Previous research indicates that graduates with higher CEE scores were more likely to have taught

only at the secondary level (Gitomer, Latham, and Ziomek 1999), and B&B:93/97 data are consistent with those findings. Graduates in the top quartile of scores were more likely than their peers in the bottom quartile to have taught only at the secondary level and less likely to have taught only at the elementary level (figure B). However, grades in college, both overall and within graduates' major fields of study, were not associated with the level at which graduates taught.

**Figure B—Percentage of 1992–93 bachelor's degree recipients who had taught only at the elementary or secondary levels since graduation, by college entrance examination (CEE) score quartile\*: 1997**



\*Includes SAT quartile among B&B:93 graduates for those who had SAT scores. If no SAT score was available, the ACT quartile among B&B:93 graduates was used.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Some policy analysts (NCTAF 1996, 1997) have noted that new teachers are more likely than experienced teachers to teach in schools that serve disadvantaged students, and the B&B:93/97 data

are somewhat consistent with this claim. As of 1993–94, one-fifth of the nation’s teachers worked in high-minority enrollment schools—that is, schools where at least one-half of the enrolled students were of minority backgrounds (Henke, Choy, Chen, Geis, Alt, and Broughman 1997). In contrast, the B&B:93/97 data indicate that between 1992 and 1997, about one-third of new teachers worked in high-minority enrollment schools during their most recent semester of teaching. However, although 40 percent of schools serve large concentrations of children who receive free or reduced-price lunch, the B&B:93/97 data indicate that 26 percent of 1992–93 graduates taught in schools where at least one-half of the students do so.

Graduates in the top quartile of the CEE score distribution were about one-third as likely as graduates in the bottom quartile to teach mainly general elementary classes. On the other hand, compared with those in the bottom quartile, top-quartile graduates were nearly twice as likely to teach science or mathematics, and about four times as likely to teach English.

Among 1992–93 bachelor’s degree recipients who were teaching full time in their most recent spring semester of teaching, those who taught general elementary classes were responsible for an average of 33 children. About 12 percent of these new full-time general elementary teachers believed their workloads were more difficult than those of other teachers in their schools. Full-time general elementary teachers who had left teaching by April 1997 were not, on average, responsible for more students in their most recent semester of teaching than those who were still teaching. Moreover, as compared with their colleagues who were still teaching in April 1997, those who left were no more likely to report that their workloads

were more difficult than those of other teachers in their schools.

Among 1992–93 bachelor’s degree recipients, those who taught single subjects full time in their most recent semester of teaching taught an average of six periods per day in a total of two subject areas. Those who worked in secondary schools were responsible for an average of 116 students, whereas those who taught in elementary schools were responsible for an average of 91 students. Those who left teaching were responsible for no more students than those who remained in the classroom.

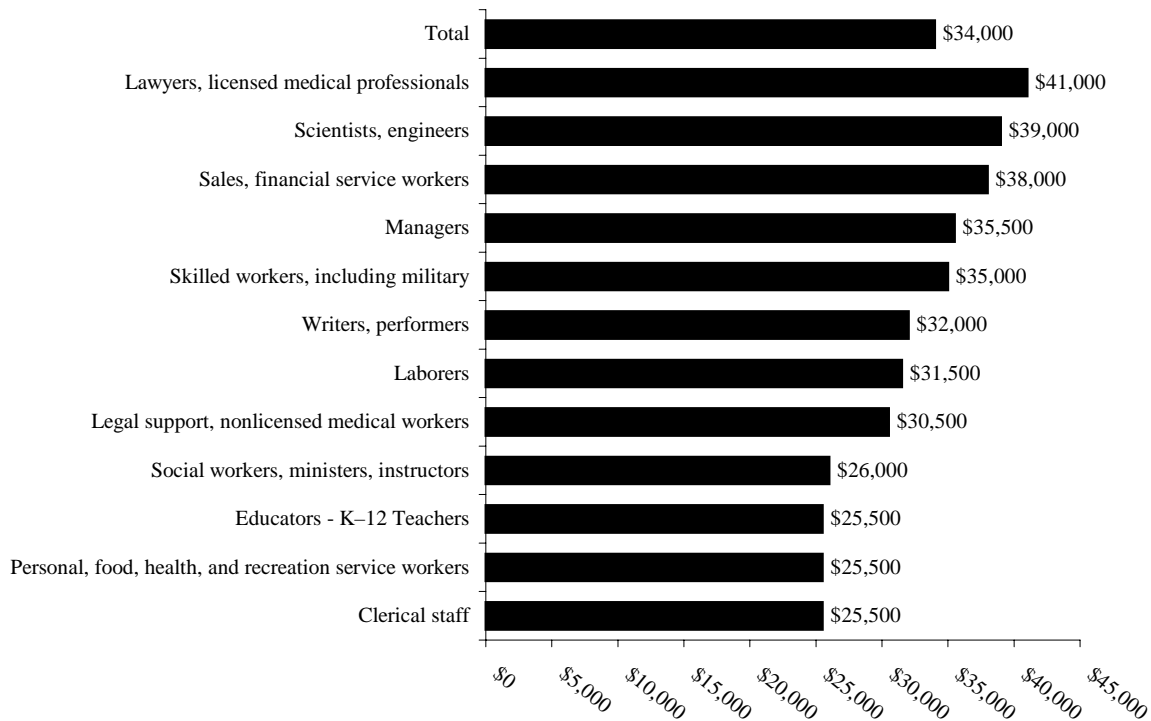
In general, single-subject teachers (for example, secondary English, mathematics, or music teachers) were more likely than general elementary teachers to report that their workloads were more difficult than those of other teachers in their school. However, single-subject teachers who left teaching were no more likely than single-subject teachers who were still teaching in April 1997 to report that they had more difficult workloads.

Graduates who taught earned among the lowest annual salaries of their college cohort.<sup>2</sup> Average annual salaries ranged from about \$25,500 for teachers, clerical workers, and service workers to about \$41,000 for lawyers and licensed medical professionals (figure C). Graduates in all job categories but clerical staff, personal and service workers, and social work areas had higher average annual salaries than did those who worked as K–12 teachers.

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<sup>2</sup>Salaries are reported on an annual basis and do not account for the number of weeks or months worked in a year. Teachers often work on 9- or 10-month contracts, and therefore their annual salaries may be lower due to fewer weeks worked as well as lower rates of pay.

**Figure C—Average annual salary\* of 1992–93 bachelor’s degree recipients who were employed full time in April 1997, by occupation**



\*Salary data do not take into account number of weeks or months worked per year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Nearly three-quarters of teachers among 1992–93 bachelor’s degree recipients would choose to teach if they could go back to their college days and start over again. Undergraduate academic achievement was somewhat associated with graduates’ willingness to teach again. Whereas about three-quarters of teachers who had scored in the bottom three quartiles of the CEE score distribution would choose teaching again, about two-fifths of their colleagues in the top quartile would do so. However, graduates’ GPAs, both overall

and in their majors, were not associated with their willingness to teach again.

The degree to which teachers had received training in pedagogy was associated with their willingness to teach again. For example, whereas 45 percent of those who had no record of completing a student-teaching assignment and were not certified reported that they would choose teaching again, 80 percent of those certified to teach reported that they would teach again.



## Leaving or Stopping Out

One in five 1992–93 bachelor’s degree recipients who started teaching after college had left teaching as of April 1997.<sup>3</sup> Future analyses will determine whether these teachers were stopping out and will return to the classroom later in their working lives. Neither gender nor race/ethnicity was associated with whether new teachers had left teaching without returning. However, graduates with CEE scores in the top quartile were twice as likely as those with scores in the bottom quartile to have left without returning (32 percent versus 16 percent) (figure D).

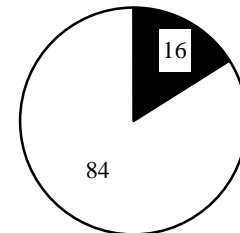
In general, in contrast to new teachers who had less training in pedagogy, those with more training were less likely to have left by April 1997. For example, 15 percent of those who had student taught had left as of April 1997, compared with 29 percent of those who had not student taught. Similarly, whereas 14 percent of certified teachers had left as of April 1997, 49 percent of those without certification had done so.

## Plans Regarding Teaching in the Future

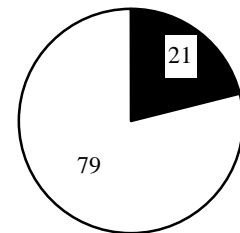
In 1997, all graduates were asked whether they planned to be working full time in 3 years and if so, what they expected to be doing. Graduates were also asked what work they expected they

<sup>3</sup>In this analysis, “leaving” meant not teaching for more than 3 months. This section of the report discusses leaving teaching without returning, defined as leaving no later than January 1997 and not returning by April 1997. This definition was developed to exclude from “leavers” two categories of teachers: 1) those who left at some point but returned to the classroom by April 1997, and 2) those who left within 3 months of the beginning of the 1997 data collection and whose potential return within the allotted 3 months would not have been measured.

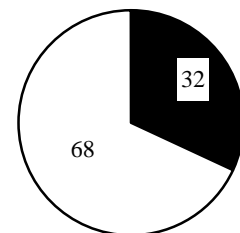
**Figure D—Of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree, percentage distribution according to teaching status in April 1997, by college entrance examination (CEE) score quartile**



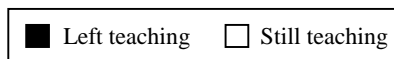
Bottom quartile



Middle half



Top quartile



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

would do in the longer term. Overall, about 8 percent of graduates expected to be teaching full time in 3 years, and 7 percent expected to be teaching in the longer term. Gender and race/ethnicity were related to graduates’ plans for teaching in the fu-

ture. Whereas 10 percent of women expected to teach full time in 3 years and to teach in the longer term, about 4 percent of men did so. Asian/Pacific Islander graduates were less likely than Hispanic and white, non-Hispanic graduates to expect to teach full time in 3 years or in the longer term. In addition, black, non-Hispanic graduates were about one-half as likely as white, non-Hispanic graduates to expect to teach in the longer term.

As with their entrance into teaching, graduates with higher CEE scores were less likely than graduates with lower scores to expect to teach in the future. For example, whereas 4 percent of top-quartile graduates expected to teach full time in 3 years, 10 percent of those in the bottom quartile did so. Graduates with the lowest GPAs (less than 2.74) were less likely than graduates with GPAs of 2.75 or higher to expect to teach in the future.

Preparation to teach was associated with differences in graduates' expectations for teaching in the future. Fifty-six percent of certified teachers expected to be teaching full time in 3 years, and 44 percent expected to be teaching in the longer term.

## **Summary**

Although 13 percent of 1992–93 college graduates had taught by 1997, 8 percent expected to teach full time in 3 years and 7 percent expected to teach in the longer term. Thus, it appears that many graduates who teach soon after college do not expect to spend much time teaching, let alone make it a career. Whether this is also true in other white-collar professions has not yet been studied empirically, however, and remains an important question for future research. If indeed new college graduates often change careers regardless of the occupations in which they begin their post-

baccalaureate working lives, educators and policymakers who want to improve teacher retention rates may need to address undergraduate career development more generally in addition to teachers' professional preparation, working conditions, and support.

White, non-Hispanic graduates continue to be more inclined than minority graduates to teach. Asian/Pacific Islander graduates were generally less inclined than graduates of other racial/ethnic backgrounds to teach. Black, non-Hispanic graduates were less inclined than Hispanic or white, non-Hispanic graduates to expect to teach in the longer term. Thus, this cohort's plans for the future do not suggest that the proportion of minority teachers will more closely resemble the proportion of minority students in the future.

Graduates' commitment to teach, whether measured in terms of pedagogical training and certification or expectations for teaching in the future, was associated with their CEE scores and with their undergraduate GPAs, although in opposite directions. Graduates with higher scores were less inclined to teach, while graduates with higher GPAs were more inclined to teach. As has traditionally been true, however, men were less inclined than women to teach, and although men were more likely than women to score in the top quartile of college entrance examination scores, they were less likely to have cumulative GPAs of 3.5 or higher (McCormick, Horn, and Knepper 1996). Therefore, gender differences in teaching may at least partly explain the divergent CEE and GPA findings.

Consistent with such an hypothesis, secondary-level teachers, who are more likely than elementary-level teachers to be men, were also more likely than elementary-level teachers to have

scored in the top quartile of the CEE score distribution, and were as likely as all graduates to have scored in the top quartile. Secondary teachers were less likely than elementary teachers to have top GPAs, overall and in their majors.

Thus, patterns in teaching behavior among 1992–93 college graduates have continued from their first year out of college through their fourth. Whether these patterns will continue as states and localities both meet the needs of a growing school-aged population and attempt to improve the quality of their teaching forces are questions for future research as the B&B:93 study continues into the next century.

## Foreword

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The 1993 Baccalaureate and Beyond Longitudinal Study (B&B:93) follows men and women who completed a bachelor's degree in the 1992–93 academic year. Students who graduated that year were first sampled as part of the 1992–93 National Postsecondary Student Aid Study (NPSAS:93) and were interviewed a second time in 1994, 1 year after completing the bachelor's degree. This first follow-up interview (B&B:93/94) was designed to provide data comparable to the cross-sectional Survey of Recent College Graduates (RCG) conducted from the 1970s to the early 1990s. In 1997, NCES conducted a second follow-up interview (B&B:93/97) to collect additional data their on their postbaccalaureate education, work, civic participation, family formation, and other topics.

This report is the second in a series of reports that examines entry into elementary and secondary school teaching among this cohort of college graduates. The first, *Out of the Lecture Hall and into the Classroom*, presented data on the proportion of college graduates who had taught, prepared to teach, or were considering teaching 1 year after completing the bachelor's degree. This report continues that analysis, examining the proportion of graduates who had taken various steps toward teaching and comparing these graduates with those who were not considering teaching in 1997. It looks ahead to future B&B:93 follow-up interviews by presenting data on graduates' expectations for teaching in the future.

## Acknowledgments

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Reviewers from within and without the Department of Education also made very helpful comments throughout the process and greatly improved the quality of the report. Paula Knepper, the project officer at NCES, informed the analysis from the beginning and provided invaluable intellectual and moral support. Stephen Broughman, C. Dennis Carroll, Andrew Malizio, and Edith McArthur of NCES reviewed various drafts and contributed useful insights. Mary Dilworth and Said Yasin of the American Association of Colleges of Teacher Education and Rolf Blank of the Council of Chief State School Officers provided valuable perspectives, enriching the report.

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## Introduction

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Rising school enrollments, impending teacher retirements, an increasing number of minority children, and a focus on teacher quality among education reformers have brought the need for qualified teachers to the attention of the general public as well as education policymakers and administrators. In the mid-1980s, education scholars warned that shortages of elementary and secondary school teachers were imminent as baby-boomer teachers would begin retiring in large numbers at the same time that school enrollments would begin to rise (Darling-Hammond 1984). Although there was little evidence of teacher shortages in the late 1980s or early 1990s (Henke, Choy, Geis, and Broughman 1996a), at the end of the 20th century, elementary enrollments are growing, larger proportions of teachers are retiring, and some school districts are experiencing difficulty finding qualified teachers (Colvin 1998; Mundy 1999; Schultze and Zahn 1998a). Moreover, enrollments are expected to continue to rise through 2009 (Gerald and Hussar 1999), and minority children are expected to become a larger proportion of the school-aged population in the future (Riley 1998).

First-time teachers are a large source of newly hired teachers for both public and private schools, accounting for 53 percent of new hires in public schools and 42 percent in private schools in 1990–91. In particular, one-third of new hires in public schools and one-fifth of new hires in private schools entered teaching straight out of college. Another 20 percent of both public and private school new hires were college graduates who had been doing other work between graduating from college and becoming teachers (Rollefson and Broughman 1995). Thus, new graduates are an important source of the teacher supply, and the rate at which they become teachers is important to those who staff U.S. classrooms.

Which new college graduates become teachers, however? Although minority representation among students in schools, colleges, and departments of education has increased in the last decade (American Association of Colleges of Teacher Education [AACTE 1999]), teachers continue to be considerably less likely than students to be of racial/ethnic minority backgrounds. Currently, there is limited empirical evidence to indicate that student achievement would improve if teacher demographics more closely resembled student demographics. However, some researchers have identified teachers who are particularly effective with African-American children, and found that they tend “ ... to contextualize teaching, helping students build bridges linking their



everyday experiences to new knowledge” (Darling-Hammond, Dilworth, and Bullmaster 1997). Another noted characteristic of these teachers is their tendency to use teaching practices that are consistent with African-American cultural norms (Ladson-Billings 1994, cited in Darling-Hammond, Dilworth, and Bullmaster 1997). Researchers and policymakers argue that increasing the proportion of teachers who have direct knowledge of minority group cultural norms will enhance the achievement of minority children both through their teaching or by informing nonminority teachers’ practice (Darling-Hammond, Dilworth, and Bullmaster 1997; Riley 1998).

In addition, these shortages are occurring at a time when teacher preparation and qualifications have reached the forefront of education reform agendas. Education researchers and policymakers have drawn attention to the academic skills of those who prepare to become teachers and who remain in the profession, the training they receive in both pedagogy and their academic fields, hiring policies and practices, and teacher retention. In the 1980s and 1990s, research indicated that the most academically talented college graduates were less likely than lower achieving graduates to teach, and that higher achieving graduates who did teach were more likely than their lower achieving counterparts to leave teaching (Schlechy and Vance 1983; Murnane, Singer, Willett, Kemple, and Olsen 1991). Research into this issue has continued, with somewhat mixed results (Bruschi and Coley 1999; Gitomer, Latham, and Ziomek 1999).

Teacher professional development and preservice teacher training are viewed as inadequate by many scholars and policymakers, and initiatives to improve both abound (American Council on Education [ACE] 1999; National Commission on Teaching and America’s Future [NCTAF] 1996, 1997; National Council for Accreditation of Teacher Education [NCATE] 1998, 1999; Ryni 1996). The Interstate New Teacher Assessment and Support Consortium (INTASC) has begun developing standards for new teachers’ performance in core academic subjects (INTASC no date). Similarly, teachers who specialize in teaching particular subjects have developed or are developing standards for the teaching of their subjects (e.g., National Council of Teachers of Mathematics 1991). The National Board for Professional Teaching Standards (NBPTS) has established 15 sets of standards for teachers of various subject areas and grade levels and has developed criteria for assessing whether teachers meet those standards. The President’s 1997 State of the Union address included a call to ensure that every classroom was taught by a talented and dedicated teacher and proposed that the federal government provide funds for 100,000 teachers to earn NBPTS certification in the coming decade.

In former periods of teacher shortage, some districts have resorted to hiring less qualified teachers in order to staff their classrooms, and some education researchers and policymakers have warned against doing so in the face of current and anticipated shortages (NCTAF 1996,

1997). For example, schools and school districts, sometimes in partnerships with universities or nonprofit groups, have piloted a number of projects designed to increase the size, racial/ethnic diversity, and academic achievement of the pool of prospective teachers (Darling-Hammond, Dilworth, and Bullmaster 1997). High schools and colleges have implemented programs to provide students who are interested in teaching with experiences that help them determine whether to pursue teaching as a career (Coles 1998; U.S. Department of Education 1998). In addition, school districts increasingly offer internships as pathways into teaching for prospective teachers who did not train to teach as college students and who cannot afford to stop working to earn a teaching certificate in a traditional teacher training program (Schultze and Zahn 1998b; U.S. Department of Education 1998).

Recruiting highly skilled college graduates as teachers is one means of coping with shortages, and enhancing the quality of the teacher work force through retaining highly qualified teachers is another. Teaching has long been recognized as a profession that “cannibaliz[es] its young” by requiring that novice teachers fulfill the same responsibilities as highly experienced teachers without extra support (Archer 1999). In response, some states and districts are designing support programs for new teachers to help them meet the stresses of their jobs more successfully and thereby reduce attrition (Archer 1999; Fideler and Haselkorn 1999).

Given projections of teacher shortages, ambitions for education reform, and the implementation of programs designed to meet these challenges, education researchers, policymakers, and administrators need current and accurate information regarding college graduates’ interest in and pursuit of teaching careers. Crucial issues to be examined include the proportion of college graduates who consider teaching or become teachers at various points in their postbaccalaureate careers, the undergraduate and graduate education of teachers compared with the experiences of their classmates who are considering teaching and those who are not, and college graduates’ experiences as beginning teachers.

Beyond teachers’ paths into teaching and early experiences as teachers, it is important to examine how long they remain in the classroom and the career paths of those who leave it. Relevant questions include, for example: How many teachers leave the classroom for careers outside education or other careers in education? Of those who leave the classroom, how many plan to return later?

The 1993 Baccalaureate and Beyond Longitudinal Study (B&B:93) has provided, and will continue to provide, valuable information regarding these questions about new teachers from the class of 1992–93 and their careers. A previous report, *Out of the Lecture Hall and Into the Classroom: 1992–93 College Graduates and Elementary/Secondary School Teaching* (Henke et al.

1996b), presented data regarding the 1992–93 graduates who, as of 1994, had begun teaching or indicated that they were considering teaching in the future. Continuing that analysis, this report follows that cohort using data collected in 1997. As in *Out of the Lecture Hall*, the analysis focuses on graduates’ academic characteristics and the relationships between those characteristics and movement into and out of teaching. It also discusses their experiences as teachers and the relationships between those experiences and whether they were teaching in April 1997.

### **Analytic Framework: The Teacher Pipeline**

Although teacher preparation and certification have received considerable scrutiny in recent years, teaching remains a profession that is relatively easy to enter. Teaching in private schools is not regulated by state or local governments; in these schools, teachers are hired at the discretion of the principal or governing board. In public schools, states set standards for teacher certification. However, public school districts, particularly in large urban areas, often hire college graduates with little or no teacher training who have emergency or temporary teaching certificates in order to staff their classrooms.

Nevertheless, although getting a teaching job can be easy when teachers are in high demand, in some states and local education agencies (LEAs) becoming a certified teacher in a public school can be complicated. In some states, no formal education beyond an undergraduate degree in education is necessary to meet state requirements for full certification. In others, graduate-level education, such as an additional year of study beyond the bachelor’s degree or a master’s degree, is required for full certification. Some states confer permanent certificates to those who complete a preparation program certified by the state, and others require a probationary period of 1 or more years before conferring a permanent certificate. Some states require candidates to pass competency examinations, while others do not. Most, if not all, states offer alternatives for those who decide to become teachers after completing an undergraduate degree without undertaking any teacher preparation while pursuing that degree, although the nature of those alternative programs varies widely (AACTE 1996; Feistritzer and Chester 1995). In addition, local bureaucracies, particularly in large urban school districts, can add layers of red tape that make it difficult for even a certified teacher to be hired for a full-time regular teaching position (NCTAF 1996).

In order to synthesize some of the various paths toward teaching, this analysis, like that conducted for *Out of the Lecture Hall*, is based on a conceptual “teacher pipeline” in which college graduates are classified according to the steps they had taken toward teaching. The minimum step is reporting that they were considering teaching in the 1994 or 1997 interviews. Subsequent

steps in the pipeline are filled by graduates who have completed a student-teaching assignment, received a teaching certificate at the probationary level or higher (that is, not an emergency or temporary certificate), applied for at least one teaching job, or taught in any of grades K–12.

Once they have begun teaching, teachers move among schools, grade levels, and subject areas as their needs or the staffing needs of their schools require. Teachers often leave the classroom for a time (for example, to rear their own children) and return to teaching later. Others leave the profession to pursue other careers.

This series of reports, which began with *Out of the Lecture Hall* and will continue with future follow-up studies, examines the progress of this cohort of college graduates through the teacher pipeline at various points in their postbaccalaureate careers. The current report focuses on the following research questions related to 1992–93 graduates and their progress through the teacher pipeline as of 1997:

*Entrance into teaching*

- What kinds of graduates entered the teacher pipeline within 4 years of receiving their bachelor's degrees? Who among them taught?
- Among graduates who had prepared to teach, who did not apply to teach or accept a teaching job when they had been offered one?
- Among those who prepared to teach but had not applied, why did they not apply?

*Teaching experiences*

- Among those who taught, when did they begin teaching relative to completing the 1992–93 degree?
- In what kinds of schools did they teach? At what grade levels?
- How long had they taught?
- How did teaching experiences vary among graduates with different undergraduate academic characteristics and levels of teacher preparation?

*Stopping teaching*

- How many, and which, graduates had stopped teaching by April 1997?
- How long did they teach before leaving?
- Why did they stop?

*Teaching in the future*

- What are graduates' plans for teaching in the short- and long-term future?
- What are graduates' plans for moving into nonteaching jobs in education?

The text is organized according to these research questions. It is followed by a compendium of tables with additional data and a technical appendix that describes the data and the methodology in more detail.

## **Data Source**

The 1993 Baccalaureate and Beyond Longitudinal Study (B&B:93) was designed to examine the postbaccalaureate experiences of 1992–93 bachelor's degree recipients. Following a sample of approximately 11,200 men and women who received bachelor's degrees between July 1992 and June 1993, the available data on this cohort include interviews conducted as part of the 1993 National Postsecondary Student Aid Study (NPSAS:93) when the students were seniors in college, the Baccalaureate and Beyond First Follow-up conducted in 1994 (B&B:93/94), and the Second Follow-up in 1997 (B&B:93/97).<sup>1</sup> Transcript data from the NPSAS institution are also available for most of the cohort. Therefore, the data allow researchers to study the connections between college graduates' careers as undergraduates and their postbaccalaureate experiences as students and employees.

With respect to studying teachers, the B&B:93 data allow researchers to examine teachers' entry into and exit from teaching over time and to compare their careers with those of their nonteaching contemporaries. First, the longitudinal design of B&B:93 permits study of when teachers leave during the course of their careers and of their undergraduate and work experiences before leaving. Second, whereas other national data sets, such as the Schools and Staffing Survey (SASS) and Teacher Follow-up Survey (TFS), allow detailed analyses of teachers' work lives, B&B:93 allows comparisons of teachers' work experiences, e.g., salaries, with those of similar college graduates in other occupations.

This report relies on data from both the 1994 and 1997 follow-up interviews, and therefore includes data only from sample members who participated in both interviews. First and second follow-up interviews began in April of their respective years and continued until November 1994 and December 1997, respectively. For purposes of this analysis, graduates' status in the teacher pipeline was determined as of April 1997 in order to give all respondents an equal chance of be-

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<sup>1</sup>For further details on these data sources, see the following methodology reports: Green et al. 1996; Green, Myers, Veldman, and Pedlow 1999; Malizio 1995.

ing classified as teachers and to compute graduates' years of teaching experience on an equal footing. Graduates whose interviews were conducted after April 1997 and who reported that they had first taught after April 1997 were not identified as teachers for the purposes of this analysis. They will be so identified when data from the next follow-up study are analyzed.

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## Entering the Teacher Pipeline

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The population chosen for this analysis is potential new entrants into the teacher pipeline among 1992–93 college graduates—that is, those who had neither taught at the elementary or secondary level nor prepared to do so before receiving the 1992–93 degree. Three percent of the cohort had taught at the elementary or secondary level before completing the 1992–93 degree or had been certified to teach any of grades K–12 for at least 1 year before receiving this degree (figure 1).<sup>2</sup> These graduates were excluded from the remainder of the analyses presented in this report, which focuses on the 97 percent of 1992–93 bachelor’s degree recipients who were eligible to enter the teacher pipeline. This population is referred to as “graduates” or “bachelor’s degree recipients” throughout the report.

One year after receiving their bachelor’s degrees, in 1994, 26 percent of 1992–93 graduates had entered the teacher pipeline by having taught, becoming certified to teach, completing a student-teaching assignment as an undergraduate, or reporting that they were considering teaching at the time of the 1994 interview. Three years later, in 1997, 36 percent of graduates had entered the teacher pipeline. Of the 1,073,000 graduates who were eligible to enter the teacher pipeline, 390,000 had entered by 1997.<sup>3</sup>

The distribution of graduates among various steps within the pipeline, however, changed little between 1994 and 1997. In 1997, relatively more (35 percent) pipeline entrants had taught, relatively fewer (12 percent) had prepared but not yet taught, and the same proportion (53 percent) were considering teaching.<sup>4</sup> Based on these percentages, 136,000 graduates had taught by 1997, 48,000 had prepared to teach but not yet taught, and another 206,000 were considering teaching.<sup>5</sup>

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<sup>2</sup>College graduates from some groups were more likely than others to be excluded from the sample used in this analysis because they had already taught or been trained to teach. In particular, female graduates were more likely than male graduates, graduates whose baccalaureate degree major was in education were more likely than those majoring in other fields, and graduates who were 25 years old or older when they received the degree were more likely than younger graduates to have taught or been trained to teach before receiving the 1992–93 degree.

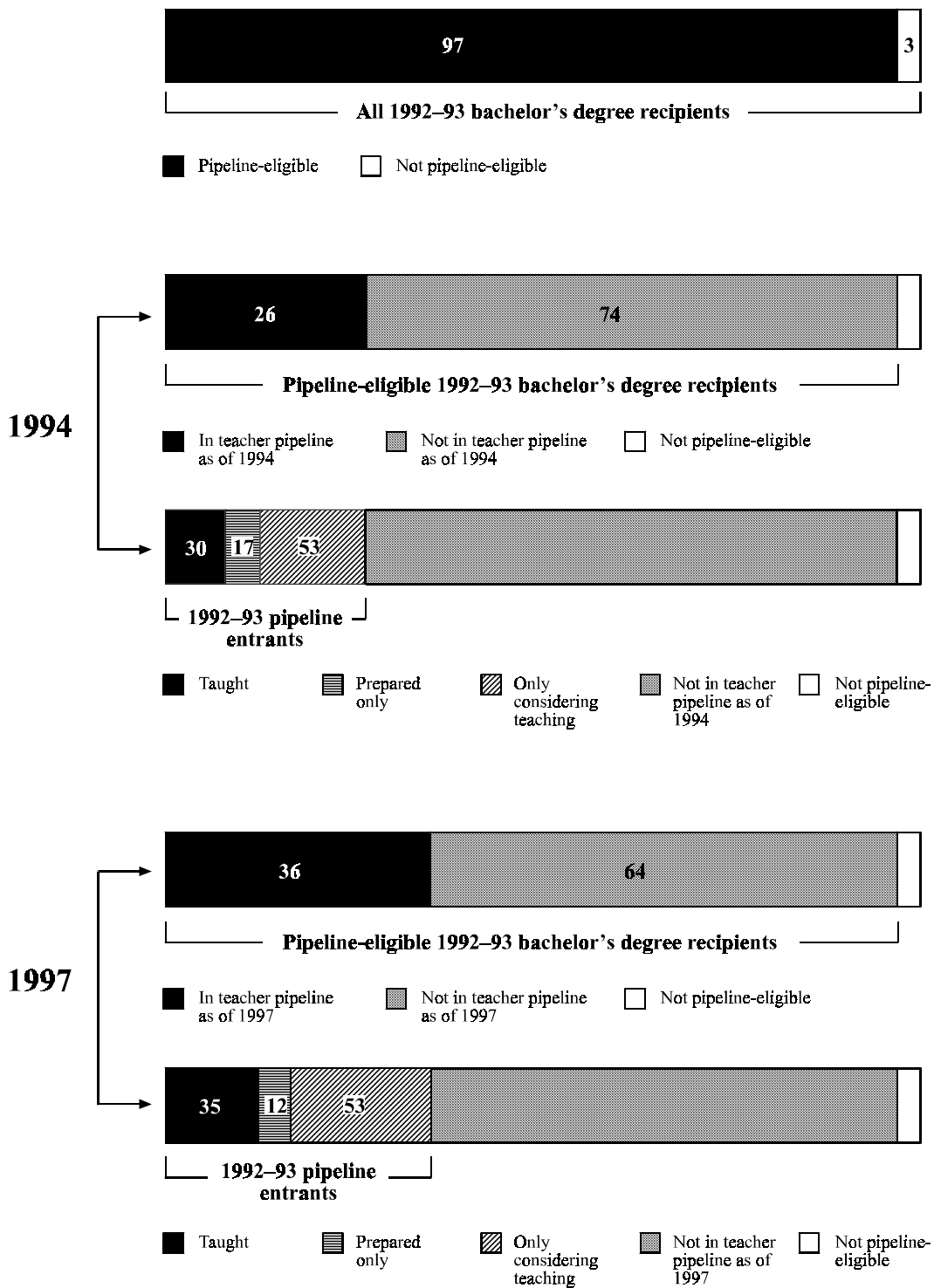
<sup>3</sup>Not shown in figure. These estimates can be obtained from the 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

<sup>4</sup>For the purposes of this report, graduates are defined as having prepared to teach if their undergraduate transcripts indicated that they had completed a student teaching assignment or if they reported having earned a teaching certificate at the probationary level or higher. This definition does not include majoring in education, nor does it indicate any relationship between the graduate’s field of undergraduate or graduate study and the fields in which they taught.

<sup>5</sup>See note 3 above.



**Figure 1—Percentage distributions of 1992–93 bachelor’s degree recipients according to whether they were pipeline eligible, whether they were in the teacher pipeline, and their status in the teacher pipeline: 1994 and 1997**



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

## **Pipeline Status in 1997**

In addition to the issue of whether we will have enough teachers as the demand for them increases over the next decade, questions of who becomes a teacher are also important. Although whites have made up about 90 percent of the teaching force for nearly 30 years, the proportion of children who are of minority backgrounds has increased and is projected to continue increasing (Riley 1998; U.S. Department of Education, National Center for Education Statistics 1998). Such persistent discrepancies between the demographics of the teacher and student populations—with teachers being considerably less likely than students to be of racial/ethnic minority backgrounds—concern some parents, educators, and policymakers.

To address these concerns, as well as those raised earlier regarding the academic qualifications of the teacher work force, this section discusses pipeline entry and location in the pipeline among graduates with different racial/ethnic backgrounds and various undergraduate academic characteristics. Although it is not perceived as an urgent policy issue, the dominance of women in teaching has also persisted over time, and therefore the relationship of gender to teaching is also discussed.

### ***Demographic Characteristics***

Consistent with the historical trend that women are more likely than men to teach in elementary and secondary schools (Murnane et al. 1991), female college graduates were more likely than their male counterparts to enter the teacher pipeline. Within 4 years of college graduation, 43 percent of female graduates had entered the teacher pipeline, compared with 29 percent of male graduates (table 1). Furthermore, female graduates were more likely than male graduates to have prepared to teach without teaching (6 percent versus 3 percent) and to have prepared and taught (14 percent versus 5 percent).

In terms of race/ethnicity, only one consistent difference was observed: Asian/Pacific Islander graduates were less inclined toward teaching than those from other racial/ethnic groups. In 1997, 18 percent of Asian/Pacific Islander graduates had entered the pipeline, compared with 45 percent of black, non-Hispanic; 42 percent of Hispanic; 36 percent of white, non-Hispanic; and 48 percent of American Indian/Alaska Native graduates. Asian/Pacific Islander graduates were less likely than white and black, non-Hispanic; Hispanic; and American Indian/Alaska Native graduates to have considered teaching. Furthermore, Asian/Pacific Islander graduates were less likely than Hispanic and white and black, non-Hispanic graduates to have prepared and taught.

**Table 1—Percentage of 1992–93 bachelor’s degree recipients who entered the teacher pipeline and percentage who took various steps toward teaching, by selected characteristics: 1997**

	Entered pipeline	1997 pipeline status			
		Considered teaching or applied to teach	Taught but had not prepared	Prepared but had not taught	Prepared and had taught
Total	36.3	19.2	2.5	4.5	10.1
Gender					
Male	29.1	18.3	2.2	3.3	5.3
Female	42.6	19.9	2.8	5.6	14.3
Race/ethnicity					
Black, non-Hispanic	44.7	32.1	3.2	1.2	8.1
Hispanic	41.6	22.8	4.3	2.6	11.8
White, non-Hispanic	36.3	18.4	2.4	4.9	10.7
Other, non-Hispanic	23.0	14.6	1.7	3.5	3.2
American Indian/Alaska Native	48.0	35.9	1.3	2.6	8.3
Asian/Pacific Islander	17.7	10.1	1.5	4.0	2.1
Other	43.0	31.5	4.0	0	7.6
College entrance exam (CEE) scores					
Available	36.2	18.7	2.6	4.6	10.3
Bottom quartile	41.0	20.8	2.3	5.7	12.2
Middle half	35.8	17.5	2.2	4.7	11.5
Top quartile	32.3	19.3	3.8	3.2	6.0
Unavailable	36.8	21.0	2.2	4.2	9.4
Baccalaureate degree major					
Business/management	21.4	17.4	1.0	1.7	1.3
Education	84.2	9.2	2.3	17.1	55.7
Humanities	46.4	26.9	5.2	3.9	10.4
Math/computer/natural sciences	30.9	20.2	3.0	2.1	5.6
Social sciences	35.5	23.7	3.3	3.8	4.8
Other	27.1	19.3	2.3	3.8	1.8
Cumulative undergraduate GPA					
Less than 2.75	31.8	21.1	2.5	3.0	5.2
2.75–3.24	36.4	17.6	2.3	5.0	11.5
3.25–3.74	38.7	19.1	2.8	4.9	11.9
3.75 or higher	39.5	17.9	2.2	5.5	13.9
Undergraduate GPA in major					
Less than 2.75	32.4	23.5	2.1	2.0	4.7
2.75–3.24	33.4	18.6	2.2	3.9	8.8
3.25–3.74	38.6	19.1	2.9	5.1	11.5
3.75 or higher	40.0	18.2	2.6	5.6	13.6

NOTE: Includes only those eligible to enter the teacher pipeline. Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

With the exception of Asian/Pacific Islander graduates, however, graduates from other racial/ethnic groups entered the pipeline and taught, with or without preparation, at similar rates.

### ***Academic Characteristics***

Many believe that both teachers' academic knowledge and their pedagogical skills affect the quality of their work with students (NCTAF 1996, 1997). With respect to academic achievement, this section presents data regarding pipeline entry by the fields in which graduates majored for their undergraduate degrees, their college entrance examination (CEE) scores, and their undergraduate grade-point averages (GPAs) in their majors and overall.

Although CEE scores do not take into account what graduates learned as undergraduates, this report uses them as measures of academic achievement for two reasons. First, they offer the only standardized measures that are available for most graduates. Undergraduate grades are not standardized across institutions or across majors within institutions, and thus are of limited utility in comparing academic achievement among groups of graduates. Graduate school entrance examination scores are standardized and take into account undergraduate achievement, but are not available for many graduates: three-fifths of 1992–93 graduates had not taken a graduate school entrance examination by 1997 (McCormick, Nuñez, Shan, Choy, and Knepper 1999). Second, CEE scores have been used in previous studies on the academic achievement of those who become teachers (e.g., Gitomer, Latham, and Ziomek 1999; Schlecty and Vance 1983).

This report presents analyses of two variables related to graduates' CEE scores. "CEE quartile" indicates the quartile of each graduate's score within the distribution of B&B:93 sample graduates who had scores. CEE quartiles were constructed from SAT scores where available, and if no SAT score was available, the ACT quartile was used. Although SAT scores were not available for all graduates, the report presents the average ETS-reported SAT scores, as recentered in 1995, for those for whom they are available. These scores allow comparisons with other studies that have analyzed teachers' average SAT scores. The glossary (appendix A) provides further details on these variables.

### ***Undergraduate Major***

Many teachers, particularly elementary school teachers, major in education as undergraduates in order to prepare for a teaching career (Henke, Choy, Chen, Geis, Alt, and Broughman 1997). However, those who do major in education may be preparing for such other pursuits as graduate study in education, teaching at the postsecondary or preschool levels, or

elementary/secondary school counseling or administration. Majoring in education was not included among the criteria for entering the pipeline or teacher preparation precisely because it may not lead to a K–12 teaching career.

Nevertheless, college graduates who had majored in education were far more likely than graduates in other fields to enter the teacher pipeline. By 1997, 84 percent of education majors had entered the pipeline, compared with 21 to 46 percent of graduates in other fields. Humanities majors were next most likely to enter the pipeline: nearly one-half (46 percent) of humanities majors entered the pipeline, compared with 36 percent or less of graduates in other majors.

Majoring in education as undergraduates did not guarantee that graduates would teach in the first 4 years after completing their studies, however. Although many education majors (58 percent) had taught, a substantial proportion (42 percent) had not.

### *CEE Scores*

Previous research has generally indicated that those who become teachers are less likely than other college graduates to have top scores on achievement tests, although recent studies present a mixed picture. Analyses of data from the 1992 National Adult Literacy Survey (NALS) indicate that teachers were as skilled as other professionals in prose literacy, document literacy, and quantitative literacy (Bruschi and Coley 1999). In addition, compared with all college-bound high school seniors, students who passed the Praxis I exam, which is used as an entrance examination by some schools of education, had higher verbal CEE scores and comparable CEE scores in mathematics (Gitomer, Latham, and Ziomek 1999). However, those who passed the Praxis II examination, which is part of the certification process in many states and is taken near the end of undergraduate study or after completing an undergraduate degree, had lower CEE scores than all college graduates.

The B&B:93/97 data indicate that, in terms of CEE scores, academically stronger graduates were somewhat less inclined to teach than were their academically weaker counterparts. As CEE scores increased from the bottom quartile to the top quartile, the proportion of 1992–93 college graduates who had entered the teacher pipeline by 1997 decreased from 41 percent to 32 percent.<sup>6</sup> In particular, whereas 3 percent of graduates in the top quartile had prepared to teach but not taught, 6 percent of graduates in the bottom quartile had done so. Similarly, 6 percent of graduates in the top quartile had prepared and taught, compared with 12 percent in the bottom

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<sup>6</sup>This variable was recomputed for this report since new data had become available, and therefore it differs from the variable used in *Out of the Lecture Hall*. See the glossary (appendix A) for further detail.

quartile.<sup>7</sup> Graduates in the top quartile were about twice as likely as those in the bottom quartile to teach without having prepared, however.

From another perspective, graduates who had prepared to teach and taught had lower SAT mathematics and total scores than their peers who had not entered the pipeline, were considering teaching or had applied for a teaching job but not taught, and had taught but not prepared to teach (table 2).<sup>8</sup> Similarly, graduates who had prepared to teach and taught had lower average verbal SAT scores than those who had not entered the pipeline or had considered teaching or applied but not taught. Graduates who had prepared to teach and taught had an average total SAT score of 1,035. In contrast, their peers who had not entered the pipeline had an average score of 1,100; those who considered teaching or applied but did not teach had an average score of 1,078; and those who taught without preparation had an average score of 1,120.

**Table 2—Of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree, percentage with available SAT scores, and average scores of those with scores, by selected characteristics: 1997**

	Scores available*	Of those with available scores, average		
		Verbal score	Math score	Composite score
Total	44.7	545	544	1,089
Status in teacher pipeline, 1997				
Pipeline-eligible but did not enter pipeline	46.4	549	551	1,100
Considered teaching or applied to teach	44.3	541	538	1,078
Taught but not prepared	55.9	566	554	1,120
Prepared but had not taught	37.6	534	526	1,061
Prepared and had taught	37.9	522	513	1,035

\*Includes only ETS-reported SAT scores, recentered in 1995.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

However, average SAT scores cannot fully describe the academic achievement of beginning teachers, at least in part because SAT scores were not available for many graduates. This may occur because many graduates do not take the SAT if they are applying to attend postsecon-

<sup>7</sup>For the purposes of this report, graduates were defined as having prepared to teach if their undergraduate transcripts indicated they had completed a student teaching assignment or if they reported having earned a teaching certificate at the probationary level or higher. This definition does not include majoring in education, nor does it indicate any relationship between the graduate’s field of undergraduate or graduate study and the fields in which s/he taught.

<sup>8</sup>These SAT scores were provided by ETS. In contrast, the ACT/SAT quartile data, which are discussed in the previous paragraph, were computed from ETS, NPSAS institution records, or students’ self-reports when neither ETS nor institution data were available. See the glossary for details on variable construction.

dary institutions in the Midwest, whereas many applying to institutions in the West or Northeast have taken the exam. With respect to teaching, graduates who had prepared to teach and taught were less likely to have SAT scores available, compared with their peers who had not entered the pipeline or who had taught without preparation. Whereas 38 percent of those who had prepared to teach and taught had scores, 46 percent of those who had not entered the pipeline had scores as did 56 percent of those who had taught but not prepared to teach. In addition, graduates who had prepared to teach but not taught were less likely than those who had taught without preparation to have SAT scores available.

### *Undergraduate GPAs*

In contrast to the relationships between CEE scores and teaching in this cohort, pipeline entry was positively related to graduates' GPAs, both cumulative and in their undergraduate majors (table 1). Whereas 40 percent of graduates with GPAs of 3.75 or higher overall and in their majors entered the pipeline, about 32 percent of graduates with GPAs lower than 2.75 did so. Furthermore, graduates with top GPAs, both overall and in their undergraduate major, were more likely than graduates with GPAs of less than 2.75 to have prepared to teach but not taught and to have prepared and actually taught. This is at least partly a function of differences in GPAs among graduates who had majored in different fields. Education majors, who were more inclined to prepare to teach and actually teach, also had higher undergraduate GPAs overall and in their majors than those who had majored in business and management; mathematics, computer science, or the natural sciences; and the social sciences (Henke, Geis, Giambattista, and Knepper 1996b).

Thus, between 1994 and 1997, 1992–93 bachelor's degree recipients continued patterns of progress through the teacher pipeline that were first observed in 1994. Overall the proportion of graduates in the pipeline increased from about one-quarter to slightly more than one-third. Women continued to enter the pipeline and to teach at higher rates than men. Asian/Pacific Islander graduates continued to enter the pipeline and teach at lower rates than other graduates.

Education majors continued to enter the pipeline and teach relatively more often than their classmates in other academic fields. Graduates with higher CEE scores were less likely to enter the pipeline, prepare to teach without actually teaching, or prepare and teach. On the other hand, undergraduate academic achievement measured in terms of undergraduate GPAs overall and within the major field of study was positively associated with pipeline entry, teacher preparation, and teaching with preparation. Having examined pipeline entry, the next section examines in greater detail how graduates obtained a teaching position.

## **Obtaining a Teaching Position**

Differential rates of teaching among various types of graduates are almost certainly related to graduates' career choices, but they may also be related to the hiring decisions made by district personnel and school principals. Graduates decide whether to apply for teaching positions and whether to accept offers to teach if they receive them. Education administrators decide whether to offer positions to prospective teachers. This section examines the rates at which graduates who were in the teacher pipeline in 1994 applied for teaching positions, received offers for such positions, and accepted those offers by 1997.

Among 1992–93 bachelor's degree recipients who were in the teacher pipeline but had not taught as of 1994, 25 percent applied for a teaching position between 1994 and 1997 (table 3). Of these applicants, 76 percent received at least one teaching job offer, and 90 percent of those who received offers accepted one. Between 1994 and 1997, 16 percent of those who had not been considering teaching as of the 1994 interview applied for a teaching position. In addition, one-fifth of those who were considering teaching but had neither prepared nor taught as of the 1994 interview applied, and two-thirds of those who had prepared but had not yet taught also applied.

Among those who had prepared to teach but not taught as of April 1997, 42 percent had applied since 1994; 39 percent of the applicants had received an offer; and 73 percent of those with an offer had accepted one.<sup>9</sup> Thus, graduates who had prepared to teach but did not do so may have decided not to teach at this point in their lives: only 42 percent of those who had prepared to teach had applied for a job between 1994 and 1997. In addition, some of those who had prepared to teach but had not taught as of April 1997 may have applied to teach for the upcoming semester but not yet received or accepted offers: approximately 12 percent of graduates who had prepared to teach but had not taught reported that they had accepted offers of teaching positions.<sup>10</sup>

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<sup>9</sup>The latter result occurs for two reasons. First, not all the "teaching jobs" to which graduates referred in the question on job applications were necessarily K–12 classroom teaching jobs, but rather included teachers' aide and substitute teaching jobs. Second, because interviewing for the Second Follow-up began in April 1997, the pipeline variable included only teaching that began no later than April 1997.

<sup>10</sup>The 12 percent rate is the product of the following estimates in table 3: of those who prepared to teach but had not taught, 42 percent had applied; of those who had applied 39.4 percent had received offers; and of those, 73.4 percent had accepted offers:  $42.2 * .394 * .734 = 12.2$ .



**Table 3—Of 1992–93 bachelor’s degree recipients who were in the pipeline but had not taught as of 1994, percentage who had applied for a teaching position; of applicants, percentage who were offered a teaching position; and of those who received offers, percentage who accepted a teaching position since 1994, by selected characteristics: 1997**

	Percent who had applied for a teaching position since 1994	Of those who applied, percent who were offered a teaching position	Of those offered, percent who accepted a teaching position
Total	25.2	76.2	90.3
Gender			
Male	19.2	80.1	87.4
Female	29.2	74.5	91.6
Race/ethnicity			
Black, non-Hispanic	25.3	72.8	79.5
Hispanic	24.5	75.1	85.9
White, non-Hispanic	25.7	76.4	91.9
Other, non-Hispanic*	16.5	—	—
College entrance exam (CEE) scores			
Available	25.8	76.0	90.3
Bottom quartile	25.5	69.5	82.8
Middle half	28.0	77.4	94.1
Top quartile	21.4	80.8	88.7
Unavailable	22.8	77.1	90.0
Baccalaureate degree major			
Business/management	12.1	70.2	91.0
Education	55.1	69.3	93.1
Humanities	30.4	88.1	85.1
Math/computer/natural sciences	20.5	76.3	90.4
Social sciences	25.5	81.4	92.1
Other	12.8	77.0	86.3
Cumulative undergraduate GPA			
Less than 2.75	20.4	70.7	95.7
2.75–3.24	27.2	78.4	89.7
3.25–3.74	28.7	77.9	87.5
3.75 or higher	22.3	86.1	91.0
Undergraduate GPA in major			
Less than 2.75	19.4	71.4	87.9
2.75–3.24	23.5	75.7	94.0
3.25–3.74	28.5	77.8	90.2
3.75 or higher	26.1	77.6	87.6
Status in teacher pipeline, 1994			
Not considering teaching	15.5	79.2	91.6
Didn’t prepare or teach	21.2	78.1	86.6
Prepared but had not taught	65.1	72.3	93.2
Status in teacher pipeline, 1997			
Applied to teach	68.6	67.5	77.9
Taught but had not prepared	70.4	98.0	100.0
Prepared but had not taught	42.2	39.4	73.4
Prepared and had taught	89.6	97.0	98.3

—Sample size too small for a reliable estimate.

\*Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

### ***Demographic Characteristics***

Although female graduates who were in the pipeline by 1994 but had not taught were more likely than their male counterparts to apply for a teaching position by 1997 (29 percent versus 19 percent), the rates of receiving teaching job offers and of accepting them did not vary with gender. In addition, there were no racial/ethnic differences in the proportion of 1994 pipeline graduates who applied for teaching positions or the proportion of those who received teaching job offers. Although black, non-Hispanic applicants who received teaching job offers appeared to be less likely than their white, non-Hispanic peers to accept these offers (80 percent versus 92 percent), the difference was not statistically significant.

### ***Academic Characteristics***

Graduates who had majored in education but had not taught as of 1994 were more likely than those who had majored in other fields to apply for a teaching position by 1997—55 percent of education majors applied, in contrast with 12 to 30 percent of graduates in other fields. However, with one exception, the rate at which applicants received offers and the rate at which those who received offers accepted them did not vary with undergraduate major. The exception was that applicants who had majored in education were less likely than those who had majored in the humanities to be offered a teaching position (69 percent versus 88 percent).

With respect to academic achievement, the findings were mixed. Pipeline graduates' CEE scores were not associated with whether they had applied for a teaching position since 1994. However, graduates whose GPA in their undergraduate major was 3.75 or higher were more likely than graduates whose GPA in their major was less than 2.75 to apply for a teaching position.

Those who hire teachers appear to have valued academic achievement in making decisions about whom to hire. Applicants who received top scores on their college entrance exams were more likely than bottom-quartile applicants to receive an offer (81 percent versus 70 percent). Similarly, whereas 86 percent of applicants with a cumulative GPA of 3.75 or higher (regardless of major) received job offers, 71 percent of applicants with less than a 2.75 cumulative GPA did so.

### **Deciding Not to Teach**

Policymakers often predict teacher shortages on the grounds that the general public, and particularly potential teachers and their families, perceive teaching as offering college graduates

less in financial benefits, social status, and quality of work life in comparison with other careers. Nevertheless, relatively few pipeline entrants who had not applied for a teaching position reported, either in 1994 or in 1997, that they had not done so because teaching offered low pay (7 percent), they had received more lucrative offers in other occupations (10 percent); or they could gain more prestige in another occupation (2 percent) (figure 2).<sup>11</sup> Reasons more commonly cited in either 1994 or 1997 included no longer being interested in teaching (46 percent), not having taken or passed a necessary test<sup>12</sup> (30 percent), or needing more education (25 percent).

Other pipeline entrants were offered teaching positions, but decided not to take them. One-fifth of graduates who declined offers reported in either 1994 or 1997 that they did so because the pay for teaching was too low or they had received a better offer in another occupation (figure 3). In addition, 18 percent reported that they had found another job that was more interesting than teaching. Four percent reported that they did not accept an offer because the school in which they would teach was too difficult or dangerous and 4 percent because they would be teaching a field for which they were not qualified.

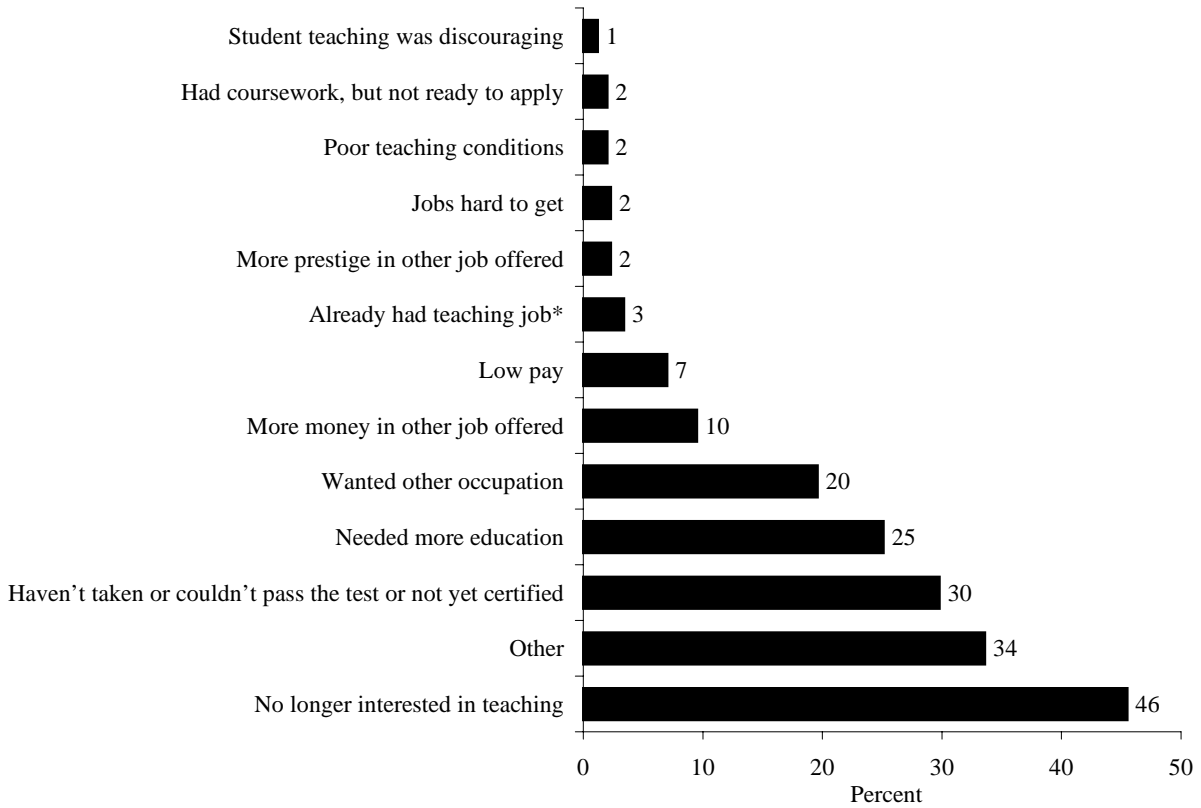
Many pipeline entrants who did not apply or who received job offers but did not accept them indicated that they had some other reason for not pursuing teaching (34 percent and 46 percent, respectively) (figures 2 and 3). These findings indicate that more research into graduates' perceptions of teaching and their goals for the future is necessary to determine what would make teaching more attractive to college graduates.

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<sup>11</sup>In both 1994 and 1997, graduates who had prepared to teach or who were considering teaching but had not applied to teach were asked why they had not applied. This analysis includes all graduates in the pipeline who had not applied by 1997 and who had reported why they had not applied in either 1994 or in 1997.

<sup>12</sup>This includes entrants who reported they had not taken or could not pass a necessary test or were not yet certified to teach.

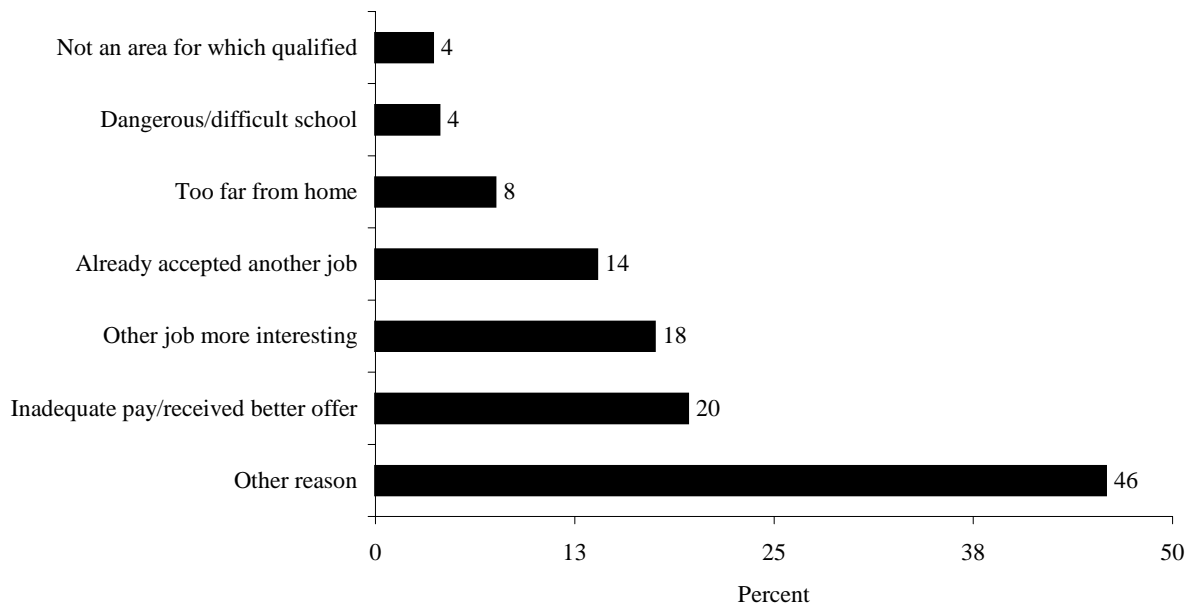
**Figure 2—Of 1992–93 bachelor’s degree recipients who were in the teacher pipeline and had not applied for a teaching position by 1997, percentage who gave various reasons in 1994 or 1997 for not applying**



\*Graduates may have obtained teaching positions through personal contacts or prior experience in the school system (perhaps as a result of student teaching, substitute teaching, working as a teacher’s aide, or other contact) without submitting a formal application.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Figure 3—Of 1992–93 bachelor’s degree recipients who were in the teacher pipeline but had not taught as of 1997 and who had received but not accepted a teaching job offer, percentage who gave various reasons (in 1994 or 1997) for not accepting the offer**



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SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

## **Becoming a Teacher: Preparing for and Working in Classrooms**

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Motivating graduates, particularly those with strong academic backgrounds as well as professional training, to teach is one component of an overall strategy to prevent shortages of teachers and enhance the quality of the teacher work force. Another is to retain those who enter teaching. Between the 1993–94 and 1994–95 school years, 9 percent of public school teachers with less than 4 years of experience and 21 percent of their private school counterparts left teaching (Henke et al. 1997). Teachers believe that they learn the most about their work through experience in classrooms. However, if new teachers leave the profession at high rates, relying on newly hired teachers to staff classrooms is not likely to improve the overall quality of the teaching force over time.

Although many reasons for leaving teaching in the first few years are discussed, two such reasons figure prominently. First, policymakers assert that too many new teachers are ill prepared for the challenges inherent in teaching, and therefore they become discouraged and leave the profession (NCTAF 1996, 1997). Such policymakers argue that providing better preservice education and early-career support is one way of improving teacher retention rates as well as the quality of teachers' work. Second, it is widely believed that new teachers receive difficult teaching assignments more frequently than their more experienced colleagues (e.g., NCTAF 1996, 1997), making the first years of teaching even more difficult and thereby discouraging new teachers. Therefore, it is important to determine whether new teachers teach in schools with more disadvantaged students or are assigned classes that are more difficult than those of other teachers in their schools.

This section examines several aspects of teacher preparation to determine how much preservice and inservice support new teachers received in the mid-1990s. It also examines these new teachers' work assignments—in particular, the characteristics of their schools and classes. Before addressing these issues, however, it reviews the characteristics of graduates from the college class of 1992–93 who first taught between receiving their bachelor's degrees and the 1997 follow-up interview.

## Who Began Teaching and When Did They Begin?

Overall, about 13 percent of 1992–93 bachelor’s degree recipients had taught by 1997 (table 4). As discussed above, which graduates taught varied with several undergraduate academic characteristics, including major field of study, CEE scores, and college GPAs. For instance, 1992–93 college graduates who had already demonstrated an interest in the profession by majoring in education in college were more likely than other groups of students to have taught school

**Table 4—Of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree, percentage who had taught by April 1997 and percentage distribution according to year first taught, by selected characteristics**

	Ever taught	Percentage distribution according to year first taught				
		Before July 1993	July 1993–June 1994	July 1994–June 1995	July 1995–June 1996	July 1996–April 1997
Total	12.7	16.9	39.1	23.1	11.3	9.5
College entrance exam (CEE) scores						
Available	12.9	15.8	16.8	39.8	22.5	11.1
Bottom quartile	14.5	22.5	41.3	21.2	6.0	9.0
Middle half	13.7	15.3	38.0	23.4	12.3	11.1
Top quartile	9.8	14.0	43.3	21.6	14.3	6.8
Unavailable	11.6	16.5	17.4	35.5	26.2	12.6
Baccalaureate degree major						
Business/management	2.3	—	—	—	—	—
Education	58.0	20.0	41.8	22.5	10.7	5.1
Humanities	15.6	14.2	36.8	23.3	9.8	15.9
Math/computer/natural sciences	8.6	15.3	38.0	17.9	12.0	16.8
Social sciences	8.1	9.6	21.6	39.0	18.7	11.1
Other	3.1	16.7	35.6	19.1	6.3	22.3
Cumulative undergraduate GPA						
Less than 2.75	7.7	17.3	36.7	18.8	12.8	14.4
2.75–3.24	13.9	18.9	38.7	22.7	11.4	8.4
3.25–3.74	14.7	16.6	38.3	23.9	12.7	8.5
3.75 or higher	16.1	14.0	39.1	28.5	8.5	10.0
Undergraduate GPA in major						
Less than 2.75	6.8	10.4	30.5	41.5	5.5	12.3
2.75–3.24	11.0	19.2	38.7	19.4	10.6	12.0
3.25–3.74	14.4	16.1	38.3	22.9	15.2	7.5
3.75 or higher	16.2	15.8	39.8	26.8	8.8	8.8

—Sample size too small for a reliable estimate.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

by 1997 (58 percent versus 2 to 16 percent of other majors). Among students who had not majored in education, a higher proportion of humanities majors than majors in other fields entered teaching by 1997 (16 percent versus 2 to 9 percent).

CEE scores were negatively associated with teaching after graduating. Whereas 15 percent of graduates in the bottom quartile on the SAT or ACT had taught for the first time by 1997, 10 percent of their classmates in the top quartile had done so. On the other hand, college grades were positively associated with teaching after graduation. Those 1992–93 bachelor's degree recipients who had higher college GPAs were more likely to have taught school by 1997 than those with lower grades.

Graduates who had first taught by 1997 were most likely to begin teaching the first year after receiving their bachelor's degree. Less than one-fifth (17 percent) of new teachers in the undergraduate class of 1992–93 began teaching before July 1993, two-fifths between July 1993 and June 1994, nearly one-quarter between July 1994 and June 1995, and fewer in each of the years following June 1995.<sup>13</sup> In some states, teaching certificate requirements include a year or more of graduate study, which may explain in part why 45 percent of those who began teaching did so between July 1994 and April 1997.

## **Student Teaching, Certification, and Support of New Teachers**

This section examines three experiences that are common among new teachers: completing a student-teaching assignment as an undergraduate, becoming certified to teach, and participating in an induction program. Completion of a student-teaching assignment was identified through graduates' undergraduate transcripts, which were collected from the institutions that conferred their bachelor's degrees. Not all graduates who completed student-teaching assignments were identified. The transcripts of graduates who accumulated credits toward the bachelor's degree from multiple institutions, such as those who transferred from a community college or another 4-year institution to the institution from which they graduated, did not always specify the courses taken at previous institutions. However, student-teaching assignments are most often completed in the last year of study, and therefore although the estimates provided here may underestimate the proportion of graduates who had completed a student-teaching assignment, they probably do not do so by much.

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<sup>13</sup>The sample includes those who graduated anytime from July 1992 through June 1993. Of those who taught before July 1993, 66 percent had graduated between July and December 1992 (not shown in table).



Certification requirements vary significantly from state to state. Most states require that prospective teachers complete a student-teaching assignment as well as a bachelor's degree, earning a minimum GPA. States also often require that teachers take a specific number of courses in each of a number of academic and professional fields, either as part of completing a bachelor's degree or in addition to the degree requirements. In some states, an additional year or more of graduate study is required beyond completing the bachelor's degree. States also differ in the types of certificates that teachers with various levels of experience may receive. In some states, teachers with the required training but no classroom experience (aside from student teaching) receive a probationary certificate until they successfully complete 1 or more years of regular classroom teaching. Only then are they eligible to receive a regular or standard teaching certificate. In other states, teachers with the required training but no classroom experience beyond student teaching are eligible for regular or standard certificates immediately.

It is not uncommon, however, for college graduates to work as elementary or secondary school teachers without state certification. Private schools are not required by law to have certified teachers. Moreover, in times of teacher shortage, public schools and school districts often hire college graduates as teachers and issue "emergency" certificates or waivers that allow these graduates to teach for a few years while they work toward meeting the requirements for state certification.

Many 1992–93 graduates who first taught after receiving their bachelor's degrees had completed a student-teaching assignment or earned a teaching certificate by 1997. About three-fifths of graduates who taught had a record of completing a student-teaching assignment on their undergraduate transcripts, and about three-quarters were certified to teach at the probationary level or higher (table 5). These findings are consistent with Schools and Staffing Survey (SASS) data, which indicate that 76.3 percent of public school teachers and 39.3 percent of private school teachers with fewer than 4 years of experience were certified in their main assignment field at the probationary level or higher in 1993–94 (Henke et al. 1997).

In general, women who graduated from college in 1992–93 and taught by 1997 were better prepared for teaching than were their male counterparts. Women were more likely than men to have student taught as undergraduates (64 percent versus 43 percent) and to have been certified to teach (80 percent versus 68 percent).

Teacher preparation was also related to the types of schools in which new teachers in this cohort taught. Those who taught in public schools, whether exclusively or in combination with private schools, were more likely than those who taught only in private schools to have become

**Table 5—Of 1992–93 bachelor’s degree recipients who had first taught between receiving the bachelor’s degree and 1997, percentage who had completed student teaching, were certified, and had participated in teaching induction program, by selected characteristics**

	Had student teaching	Were certified <sup>1</sup>	Participated in teacher induction program
Total	58.1	77.0	45.8
Gender			
Male	43.4	67.8	44.0
Female	63.7	80.4	46.5
Race/ethnicity			
Black, non-Hispanic	29.3	68.2	42.1
Hispanic	50.6	71.4	44.4
White, non-Hispanic	60.4	78.3	46.1
Other, non-Hispanic <sup>2</sup>	—	59.0	—
Sector of schools at which taught by 1997			
Public always	63.4	87.5	49.3
Private always	50.9	54.0	45.7
Both	74.2	91.6	31.8
Level of schools at which taught by 1997 <sup>3</sup>			
Elementary only	68.5	86.6	53.6
Secondary only	53.1	78.8	43.6
Combined only	53.4	59.7	33.5
Multiple	68.6	97.8	37.1
Locale of school, most recent job as of 1997			
Central city	57.2	78.5	51.0
Urban fringe/large town	67.0	89.6	52.0
Small town, rural	66.9	85.6	41.5
Percent minority enrollment, most recent job as of 1997			
0–4	72.7	87.1	48.1
5–19	71.2	92.3	45.7
20–49	61.4	88.6	49.2
50 or more	53.8	83.3	49.3
Percent free/reduced-price lunch recipients, most recent job as of 1997			
0–4	70.1	86.9	52.8
5–19	66.7	93.0	50.6
20–49	70.7	88.7	49.5
50 or more	60.1	84.9	51.5

—Sample size too small for a reliable estimate.

<sup>1</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>2</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>3</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

certified (88 and 92 percent, respectively, versus 54 percent).<sup>14</sup> In addition, new teachers who had taught only in elementary schools by 1997 were more likely than those who had taught only in secondary schools to have student taught.

Education researchers have noted that teachers in schools that serve large concentrations of minority and poor children tend not to be as qualified as teachers in other schools (Ingersoll and Gruber 1996; NCTAF 1996, 1997). Among the college class of 1992–93, teachers who taught in schools with larger concentrations of minority students were less likely than their counterparts in schools with lower minority concentrations to have completed a student-teaching assignment (table 5). However, completing a student-teaching assignment was not associated with the school’s concentration of poor students, that is, students who received free or reduced-price lunch. Moreover, certification was not associated with the concentration of either minority or poor students.<sup>15</sup>

In addition to preservice teacher preparation—training that is intended to be completed before working as a classroom teacher—policymakers have instituted programs to support new teachers during their first years in the classroom. At least partly in response to research describing the difficulties new teachers face in their first years on the job (e.g., Veenman 1984), in the 1980s, public schools began implementing formal programs, often called “teacher induction programs,” to provide support for new teachers (Fideler and Haselkorn 1999; Little 1990). These programs usually involve assigning an experienced teacher to serve as a mentor—that is, to help a new teacher adjust to classroom teaching by offering advice on lesson planning, discipline, assessment, parent communication, and other challenges of teaching.

Among 1992–93 bachelor’s degree recipients in the teacher pipeline, 46 percent had participated in formal teacher induction programs during their first year of teaching. Again, these findings are consistent with SASS data, which indicate that about one-half of public school teachers and nearly one-third of private school teachers with fewer than 4 years of experience had participated in formal teacher induction programs during their first year of teaching (Henke et al. 1996a).

School characteristics were sometimes associated with teachers’ participation in a formal induction program. Although sector of school was not related to participating in an induction program, level was. Those who taught only in elementary schools were more likely than others

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<sup>14</sup>Although it appears that those who taught in public schools were also more likely than those who taught only in private schools to have completed a student teaching assignment, these differences are not statistically significant.

<sup>15</sup>Data on minority enrollment, and especially free/reduced-price lunch recipients, were not available for many of the schools in which these graduates taught. Therefore, the sample sizes for these analyses were low and made differences more difficult to detect.

(that is, those who taught only in secondary or combined schools or in schools at multiple levels) to have participated in a formal teacher induction program. In addition, whereas about one-half of those who taught in larger communities had participated in a formal induction program, about two-fifths of teachers who taught in small town or rural schools had done so. However, neither the concentration of minority students nor the concentration of low-income students was associated with participating in an induction program.

## **Employment Status and Compensation**

Policymakers and the general public believe that teachers' lower salaries, relative to those of other college graduates, discourage highly skilled graduates from becoming teachers (Haselkorn and Harris 1998; National Commission on Education and the Economy 1983). B&B:93/97 data provide an opportunity to examine how different teachers' salaries are from those of other college graduates of similar age and experience.

Overall, 92 percent of all 1992–93 bachelor's degree recipients employed in April 1997 were working full time (table 6). The vast majority (96 percent) of those who were teaching in April 1997 had full-time jobs.

Among graduates who were working full time in April 1997, the average annual salary at that job was about \$34,000.<sup>16</sup> Comparing graduates by undergraduate major, those who were working full time in April 1997 and had majored in education earned an average of about \$26,000 per year. Compared with education majors, all other graduates who were working full time earned higher annual salaries, ranging from an average of about \$29,000 for humanities majors to about \$38,000 for mathematics, computer science, and natural science majors. Among graduates who were employed full time, education majors were less likely than those who had majored in other fields to earn between \$35,000 and \$44,999 and to earn \$45,000 or more.

Comparing salaries by occupation, average annual salaries ranged from about \$26,000 for teachers, clerical staff, and service workers to about \$41,000 for lawyers and licensed medical professionals. Graduates in all job categories but clerical staff, personal and service workers, and social work areas had higher average annual salaries than did those who worked as K–12 teachers.

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<sup>16</sup>Salaries are reported on an annual basis and do not account for the number of weeks or months worked in a year. Teachers often work on 9- or 10-month contracts, and therefore their annual salaries may be lower due to fewer weeks worked as well as lower rates of pay.

**Table 6—Percentage of 1992–93 bachelor’s degree recipients who were employed full time, average annual salary for full-time employees, and percentage distribution of full-time employees according to annual salary, by baccalaureate degree major and occupation: April 1997**

	Percent employed full time	Average annual salary*	Percentage distribution according to annual salary				
			Less than \$15,000	\$15,000–24,999	\$25,000–34,999	\$35,000–44,999	\$45,000 or more
Total	91.7	\$34,199	5.2	22.5	32.8	20.6	18.9
Baccalaureate degree major							
Business/management	96.0	37,075	3.0	18.0	30.1	25.8	23.0
Education	89.4	26,294	7.5	40.6	41.6	5.9	4.4
Humanities	86.2	28,878	8.6	29.8	38.8	14.1	8.7
Math/computer/natural sciences	92.3	37,733	4.4	14.9	25.7	27.0	28.1
Social sciences	90.3	32,533	7.5	24.8	35.1	18.7	13.9
Other	90.7	35,063	4.3	20.1	34.1	20.3	21.2
April 1997 occupation							
Educators - K–12 teachers	95.9	25,600	2.4	38.7	55.3	3.5	0.2
Clerical staff	83.5	25,462	10.8	44.4	29.6	9.6	5.6
Personal, food, health, and recreation service workers	74.6	25,639	18.7	44.8	22.4	4.9	9.3
Skilled workers, including military	95.7	35,096	4.4	26.4	29.2	18.4	21.6
Laborers	89.7	31,454	5.2	36.2	31.3	14.5	12.8
Sales, financial service workers	95.2	38,075	2.9	16.4	30.2	26.3	24.1
Lawyers, licensed medical professionals	89.1	40,685	2.5	8.5	29.4	28.4	31.2
Legal support, nonlicensed medical workers	84.6	30,446	7.2	27.5	35.5	20.4	9.4
Social workers, ministers, instructors	81.2	25,988	13.0	38.5	32.6	8.0	8.0
Scientists, engineers	95.1	39,090	4.2	10.2	24.0	31.4	30.2
Writers, performers	88.2	31,703	8.2	20.1	41.3	16.8	13.6
Managers	96.8	35,608	4.2	17.8	33.3	23.8	20.9

\*Average salaries do not take into account the number of weeks worked in a year.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

## Schools and Teaching Assignments

The 1992–93 bachelor’s degree recipients who started teaching by 1997 worked in public and private schools and taught a wide range of subjects and all grade levels. These new teachers reported various levels of satisfaction with their jobs. The following section of the report discusses the proportion of new teachers working in the public and private sectors, the levels and subjects they taught, the numbers of students and classes they taught, and their satisfaction with their teaching jobs.

### ***School Sector***

By 1997, 1992–93 college graduates who first taught within 4 years of receiving their bachelor’s degree could have taught in several schools, and they were asked about as many as six different schools. In 1993–94, public schools made up three-quarters of all schools serving K–12 students, and the remaining quarter were privately owned and operated (Henke et al. 1996a). Therefore, it is not surprising that the majority of 1992–93 graduates who had taught by 1997 had worked only in public schools: 83 percent taught only in public schools, whereas 13 percent taught only in private schools and 4 percent taught in both sectors (table 7). The proportion of graduates who taught in the private sector varied with a few demographic and academic characteristics.

Although gender was not related to the sector in which teachers taught, race/ethnicity was. White, non-Hispanic graduates were more likely to teach in private schools than black, non-Hispanic graduates (14 percent versus 2 percent).

Those with higher CEE scores were more likely to teach only in the private sector. One-fourth of 1992–93 bachelor’s degree recipients with CEE scores in the top quartile who entered teaching taught only in private schools, whereas 10 percent of those with test scores in the bottom quartile did so.<sup>17</sup> However, teaching in private schools only was not associated with graduates’ GPAs, either overall or in their majors.

### ***School Level***

Within each sector, schools and instruction are organized by the grade levels of the children they serve. Elementary schools serve younger children, and in this report are defined as those schools with children enrolled in at least one grade below the 7th and no grade above the 8th. For the most part, these schools organize students into classes by age, and children spend all or most of the day together in the same classroom with one teacher. Some classrooms combine children of two and often three grade levels in the same class, but these grade levels are nearly always contiguous, e.g., a second-/third-grade class or a third-/fourth-grade class. Therefore, their teachers must be knowledgeable about the developmental characteristics of children at the age of their students, the content in the many subject areas that children in their grade level(s) are expected to learn, and the pedagogical strategies that work best when teaching that content.

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<sup>17</sup>This is consistent with another relationship between test scores and the sector of teaching: those whose most recent teaching jobs were in private schools had higher verbal, mathematics, and total SAT scores than their colleagues who had most recently taught in public schools (table C27).

**Table 7—Of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree, percentage distributions according to the sector and level of the schools in which they taught by 1997, by selected characteristics**

	Sector of school			Level of school <sup>1</sup>			
	Public only	Private only	Both	Elementary only	Secondary only	Combined only	Multiple levels
Total	83.2	13.1	3.8	52.3	30.7	4.5	12.4
Gender							
Male	84.9	12.6	2.5	28.7	49.6	3.2	18.5
Female	82.5	13.3	4.3	61.5	23.4	5.1	10.0
Race/ethnicity							
Black, non-Hispanic	94.7	2.4	3.0	60.3	38.3	0	1.5
Hispanic	84.8	13.9	1.3	62.8	29.1	1.6	6.6
White, non-Hispanic	82.2	13.9	3.9	51.2	30.5	5.2	13.1
Other, non-Hispanic <sup>2</sup>	—	—	—	—	—	—	—
College entrance exam (CEE) scores							
Available	81.5	14.4	4.0	51.2	31.4	4.9	12.5
Bottom quartile	84.6	10.4	4.9	57.9	28.2	3.8	10.2
Middle half	84.0	12.5	3.4	51.5	29.0	5.5	14.0
Top quartile	69.4	25.9	4.7	40.3	44.0	4.6	11.1
Unavailable	90.3	7.1	2.6	57.6	27.8	2.9	11.7
Baccalaureate degree major							
Business/management	—	—	—	—	—	—	—
Education	84.7	10.9	4.5	64.1	19.7	3.7	12.4
Humanities	79.5	18.4	2.2	43.3	39.4	6.5	10.8
Math/computer/natural sciences	78.8	17.8	3.4	31.9	51.7	5.5	11.0
Social sciences	73.8	24.7	1.6	31.3	52.5	7.9	8.4
Other	91.4	6.9	2.6	42.6	37.0	2.8	17.7
Cumulative undergraduate GPA							
Less than 2.75	87.9	9.4	2.7	45.6	41.5	4.7	8.2
2.75–3.24	82.2	13.5	4.3	55.2	27.6	3.7	13.5
3.25–3.74	86.2	9.6	4.2	53.1	29.5	4.5	12.8
3.75 or higher	79.9	16.8	3.4	52.8	28.4	5.6	13.2
Undergraduate GPA in major							
Less than 2.75	81.2	8.6	10.2	50.7	37.1	4.9	7.3
2.75–3.24	86.1	11.6	2.3	48.1	36.2	3.9	11.9
3.25–3.74	87.4	8.5	4.1	53.7	30.8	4.1	11.4
3.75 or higher	79.7	16.1	4.2	55.6	23.6	5.2	15.6

—Sample size too small for a reliable estimate.

<sup>1</sup>Elementary schools have at least one grade lower than 7th and no grade higher than 8th. Secondary schools have no grade lower than 7th and some students in any of grades 7–12. Combined schools have grades below 7th and above 8th. See glossary for further details.

<sup>2</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Secondary schools serve older children, and in this report are defined as those that serve no grade below the 7th and no grade higher than the 12th. These schools are often organized into subject-based departments. The day is divided into class periods, and students move from classroom to classroom to learn from teachers who specialize in one or two subjects. Teachers in these schools are responsible for fewer subjects, but are expected to know each in greater depth than elementary school teachers.

Combined schools include both children in the lower (K–6) grades and schools in the upper (9–12) grades. They are more common in the private sector than in the public sector: in 1993–94, 31 percent of private schools combined elementary and secondary grades, in contrast with 4 percent of public schools (McLaughlin and Broughman 1997). The nature of teachers' work in combined schools is probably dictated more by the grade level of their particular students than by the grades included in the entire school, with upper grade teachers specializing in a few subjects and lower grade teachers covering the spectrum of subjects.

In 1993–94, 64 percent of U.S. school children attended elementary schools, 31 percent attended secondary schools, and 5 percent attended combined schools (Henke et al. 1996a). Among 1992–93 bachelor's degree recipients, 52 percent of new teachers had taught only in elementary schools, 31 percent had taught only in secondary schools, and 5 percent only in schools that combined elementary and secondary grades. About 12 percent had taught in schools at more than one level.

The level of the schools at which new teachers in this cohort had taught varied considerably by gender. One-half of new male teachers had taught only in secondary schools by 1997, compared with nearly one-quarter of new female teachers. Conversely, twice the proportion of new female teachers as of male teachers had taught only in elementary schools (62 versus 29 percent).

Academic characteristics were associated with the level of the schools at which new teachers in the 1992–93 college class had taught. Graduates who had majored in education, in which they are likely to have studied teaching methods for multiple content areas, were more likely than those who had majored in other fields to teach only at the elementary level where they would be responsible for teaching multiple subjects. Graduates who had majored in mathematics, computer science, the natural sciences, or the social sciences were more likely than education, humanities, or other majors to teach only at the secondary level, where they would be likely to specialize in no more than a few subjects.

Previous research indicates that graduates with higher CEE scores were more likely to have taught only at the secondary level (Gitomer, Latham, and Ziomek 1999), and B&B:93/97 data are



consistent with those findings. As compared with graduates in the bottom quartile of CEE scores, those in the top quartile were more likely to have taught only at the secondary level and less likely to have taught only at the elementary level. However, grades in college, both overall and within graduates' major fields of study, were not associated with the level at which graduates taught.

### ***School Minority and Free/Reduced-Price Lunch Enrollment***

Some policy analysts have found that new teachers are more likely to teach in schools that serve large proportions of poor and minority students (NCTAF 1996, 1997). The B&B:93/97 data are to some degree consistent with these findings. This section presents data regarding minority enrollment in the schools in which new teachers among 1992–93 college graduates had taught most recently as of April 1997. For teachers who had most recently taught in public schools, it also discusses the concentration of poor students in the schools where new teachers had most recently taught. Although it appears that first-time teachers among 1992–93 college graduates were more likely than teachers overall to teach in high-minority enrollment schools, it is not clear whether they were more likely to teach in high-poverty schools.

As of 1993–94, one-fifth of the nation's teachers were working in high-minority enrollment schools—that is, schools where at least one-half of the enrolled students were of minority backgrounds (Henke et al. 1997). In contrast, the B&B:93/97 data indicate that between 1992 and 1997, about one-third of new teachers worked in high-minority enrollment schools during their most recent semester of teaching (table 8). Among 1992–93 college graduates, nearly one-fifth of teachers taught in schools with less than 5 percent minority enrollment during their most recent semester.

Although neither gender nor academic achievement was associated with the likelihood of teaching in a school where a majority of students were of minority background, race/ethnicity was. Whereas 67 percent of black, non-Hispanic teachers and 79 percent of Hispanic teachers taught in high-minority enrollment schools, 27 percent of white, non-Hispanic teachers taught in these schools.

Among elementary and secondary schools, student poverty is often measured by the proportion of students who receive free or reduced-price lunch through the National School Lunch Program. Very few private schools participate in this program, and therefore the indicator is typically used only for public schools. In 1993–94, about 39 percent of public schools served high-poverty populations—that is, populations in which more than 40 percent of the students received

**Table 8—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage distributions according to minority enrollment and percentage of students who received free or reduced-price lunch in the school where they taught during the most recent spring semester, by selected characteristics**

	Percent minority enrollment				Percent free or reduced-price lunch recipients <sup>1</sup>			
	0–4	5–19	20–49	50 or more	0–4	5–19	20–49	50 or more
Total	18.4	26.9	22.3	32.4	5.2	32.2	36.6	26.0
Gender								
Male	24.2	29.4	19.6	26.9	6.8	41.2	33.8	18.2
Female	16.0	25.9	23.4	34.7	4.6	29.0	37.6	28.7
Race/ethnicity								
Black, non-Hispanic	1.7	6.3	24.6	67.4	2.5	25.6	21.6	50.3
Hispanic	1.7	10.7	8.5	79.2	2.0	8.3	26.8	62.8
White, non-Hispanic	21.0	29.5	22.7	26.8	5.8	34.6	38.3	21.3
Other, non-Hispanic <sup>2</sup>	—	—	—	—	—	—	—	—
College entrance exam (CEE) scores								
Available	18.8	24.8	24.3	32.1	5.7	34.2	36.1	24.1
Bottom quartile	17.5	21.2	27.5	33.8	2.0	36.0	30.8	31.3
Middle half	18.9	25.1	22.2	33.9	6.5	32.2	37.6	23.7
Top quartile	20.7	29.6	27.2	22.5	10.2	38.9	40.5	10.4
Unavailable	16.8	35.4	14.1	33.7	3.1	24.6	38.8	33.6
Cumulative undergraduate GPA								
Less than 2.75	20.8	14.0	21.8	43.4	2.1	25.4	37.5	35.0
2.75–3.24	15.1	31.5	20.5	33.0	6.4	33.8	32.2	27.6
3.25–3.74	19.5	25.9	24.8	29.8	5.2	34.5	38.3	22.1
3.75 or higher	19.4	33.2	22.1	25.3	6.1	28.6	42.5	22.8
Undergraduate GPA in major								
Less than 2.75	—	—	—	—	—	—	—	—
2.75–3.24	14.2	28.2	22.8	34.8	6.1	33.8	33.7	26.4
3.25–3.74	20.6	24.8	25.4	29.2	3.8	35.2	37.4	23.7
3.75 or higher	23.3	29.5	19.8	27.4	6.5	29.3	41.5	22.8

—Sample size too small for a reliable estimate.

<sup>1</sup>Computed for public schools only.

<sup>2</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

free or reduced-price lunch (Henke et al. 1997). About 8 percent of public schools served low-poverty populations, defined as populations in which less than 6 percent of the students received free or reduced-price lunch.

B&B:93/97 data indicate that about 5 percent of 1992–93 college graduates who had taught in public schools taught in schools where less than 5 percent of the students received free or reduced-price lunch. One-quarter of 1992–93 graduates taught in schools where at least one-half of the students were poor. As with teaching in high-minority schools, black, non-Hispanic and Hispanic graduates were more likely than white, non-Hispanic graduates to have taught in a high-poverty school during the last semester they taught.

The relationship between teaching in a high-poverty school and academic achievement was less clear, however. Graduates scoring in the top quartile of CEE scores were about one-third as likely as those in the bottom quartile to teach in a school where more than one-half the students were poor. On the other hand, neither graduates' GPA overall nor in their undergraduate major was associated with their teaching in a high-poverty school.

New teachers among 1992–93 college graduates were more likely than teachers overall to teach in high-minority enrollment schools. It is not possible to determine whether new teachers were also more likely to teach in high-poverty schools because comparable estimates concerning the distribution of all teachers by the poverty level of their schools are not available. However, given the available published estimates, it appears unlikely that new teachers were more likely than more experienced teachers to have taught in high-poverty schools.

### ***Main Teaching Field***

Although many teachers teach multiple fields, most have a main field, that is, a field that they teach more than any other single field. This section discusses graduates' main teaching fields during the semester they had most recently taught as of the 1997 interview and focuses on the relationship between graduates' main fields and the fields they studied as undergraduates.

During the most recent spring semester they had taught, about one-third of new teachers taught general elementary classes, in which they taught multiple subjects to a single group of children throughout the day (table 9). The remainder taught single-subject classes, in which they taught different subjects to different groups of students throughout the day. Twenty-four percent taught mainly science or mathematics classes, 11 percent English, and 5 percent one or more of the social sciences.

The level of the schools in which they taught was associated with graduates' CEE scores, and therefore it is not surprising that graduates in the top quartile were about one-third as likely as graduates in the bottom quartile to teach mainly general elementary classes. Compared with

**Table 9—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage distribution according to the main field taught in current or most recent teaching job, by selected characteristics**

	Main field taught in most recent job as of 1997								
	General elementary	Business and vocational	Science and mathematics	Foreign languages	Special education	English	Social sciences	Fine arts	Other
Total	34.2	4.5	23.6	3.6	8.0	10.8	5.2	3.8	6.4
College entrance exam (CEE) scores									
Available	32.4	3.6	23.9	3.9	8.6	11.8	5.7	3.7	6.5
Bottom quartile	44.3	3.2	15.6	4.5	9.1	6.0	5.7	3.1	8.5
Middle half	32.2	4.1	26.0	3.1	8.6	10.8	5.4	4.1	5.8
Top quartile	15.0	2.8	29.3	5.7	7.8	23.9	6.9	3.1	5.5
Unavailable	43.0	8.8	22.3	2.2	5.2	5.8	2.3	4.4	6.0
Baccalaureate degree major									
Business/management	—	—	—	—	—	—	—	—	—
Education	42.7	4.0	17.8	2.5	9.3	10.2	3.3	3.3	6.9
Humanities	25.6	1.4	9.5	12.6	1.7	19.1	9.9	15.4	4.9
Math/computer/natural sciences	15.4	8.2	67.8	0.1	2.0	3.1	0.7	0	2.8
Social sciences	23.5	3.3	15.0	2.1	10.6	18.8	19.4	0.2	7.1
Other	26.6	4.9	16.0	0	19.8	6.2	7.4	0	19.2

—Sample size too small for a reliable estimate.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

bottom-quartile graduates, those in the top quartile were nearly twice as likely to teach science or mathematics and about four times as likely to teach English, however.

As teacher preparation has become an important policy issue, teachers' academic background in the fields they teach has received increasing scrutiny (Ingersoll and Gruber 1996; NCTAF 1996, 1997). Table 9 also illustrates the relationship between graduates' undergraduate majors and the main fields they taught in their most recent teaching jobs. About two-fifths of education majors taught general elementary classes, and almost one-fifth taught science or mathematics. About one-tenth taught English, and another one-tenth taught special education classes. The remainder were divided among vocational education, foreign language, social science, art, and other classes.

Two-thirds of teachers who had majored in mathematics, computer science, or natural science taught mathematics or science more than any other single subject. Another 15 percent taught general elementary classes more than other fields, and 8 percent taught business or other vocational education classes more than others. Although 68 percent of mathematics/computer/natural science majors taught mathematics or science classes more than any other subject, only 19 percent of social science majors taught social science classes more than classes in any other subject.

From another perspective, many 1992–93 graduates who taught had majored in education as undergraduates. Nearly three-quarters of general elementary teachers had majored in education, and about two-thirds of special education teachers had done so as well (table 10). Nearly two-fifths of science and mathematics teachers had majored in mathematics, computer science, or the natural sciences, and about two-fifths had majored in education. Similarly, about two-fifths of foreign language teachers had majored in one of the humanities, and two-fifths in education. About one-half of English teachers had majored in education, and one-fifth in the humanities. One-third of social science teachers had majored in the social sciences, and nearly two-fifths in education.

In addition, noteworthy proportions of teachers in some fields had majored outside the fields they taught. Twenty-three percent of social science teachers had majored in the humanities as undergraduates, 15 percent of English teachers had majored in the social sciences, and 14 percent of foreign language teachers had completed business/management majors.

**Table 10—Percentage distribution of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree according to baccalaureate degree major, by main field taught in most recent job as of 1997**

	Business/ management	Education	Humanities	Mathematics/ computer/ natural sciences	Social sciences	Other
Total*	25.2	11.7	9.8	19.6	15.2	18.4
Main field taught in most recent job as of 1997						
General elementary	4.3	72.0	9.0	6.0	6.0	2.7
Business and vocational	10.3	51.8	3.6	24.0	6.4	3.8
Science and mathematics	5.4	43.6	4.8	38.2	5.6	2.4
Foreign languages	13.7	39.3	41.7	0.3	5.0	0
Special education	5.1	68.2	2.6	3.3	11.9	8.9
English	2.8	54.6	21.4	3.9	15.3	2.0
Social sciences	0	37.4	22.9	1.7	33.0	5.0
Fine arts	0	59.0	24.3	3.7	6.3	6.7

\*Includes graduates who did not teach.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

## **Workload**

Teaching out of field may frustrate teachers and contribute to their attrition because it adds significantly to their workloads. Preparing lessons in subjects in which one has less expertise requires more time and energy than doing so in a discipline in which one is well grounded. Other aspects of teachers’ assignments affect their workloads in other ways. Education agencies at the local, state, and federal levels are working to reduce class sizes, particularly at the elementary level, in order to allow teachers the time to work with students more intensively. Secondary teachers’ workload is also affected by the number of different subjects and class periods they teach in the average day or week. Having more subjects or classes for which to prepare increases teachers’ workload.

Among 1992–93 bachelor’s degree recipients who were teaching full time in their most recent spring semester of teaching, general elementary classroom teachers had an average of 33 children in their classes (table 11).<sup>18</sup> Full-time general elementary teachers who had left teaching

<sup>18</sup>The SASS data indicate that the average public school teacher who taught a general elementary class had 24 students in the class, and the average private school general elementary teacher had 21 students (Henke et al. 1997). However, the SASS estimates do not include teachers who team taught, taught in pull-out programs, or taught elementary enrichment classes. Teachers in each of these categories are included in the B&B:93/97 estimates.

**Table 11—For 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997 and who were teaching general elementary classes full time during the most recent semester they taught: average number of students taught, and percentage distribution according to perceived difficulty of workload, by selected teaching-related characteristics**

	Average number of students taught in the most recent spring term	Percentage distribution of teachers by whether they reported that their workload was more difficult than those of other teachers at their school		
		Yes	No	Not sure
Total	33.0	12.4	84.9	2.8
Sector of school, most recent job as of 1997				
Public	30.7	12.4	85.1	2.5
Private	26.7	7.8	83.5	8.7
Teaching status at end of study period				
Still teaching spring 1997	32.8	12.3	85.1	2.6
Not teaching spring 1997	29.9	12.4	85.0	2.7

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

by April 1997 were not, on average, responsible for more students in their most recent semester of teaching than those who were still teaching.

The number of students for whom general elementary teachers were responsible is an objective measure of workload. However, not all classrooms of 33 children are alike: some groups of children are more demanding than others. Therefore, it is important to consider teachers’ perceptions as well as more objective statistics. Twelve percent of full-time general elementary teachers believed their workloads were more difficult than those of other teachers in their schools. It appears that teachers’ perceptions of the relative difficulty of their workloads varied with the sector of the school in which they had most recently taught, but this apparent difference is not statistically significant. Full-time general elementary teachers who had left teaching by April 1997 were no more likely than their classmates who were still teaching in 1997 to report that their workloads were more difficult than those of other teachers in their schools.<sup>19</sup>

<sup>19</sup>See table 8 and the accompanying text for information regarding the types of schools in which new teachers among 1992–93 college graduates taught.

Among 1992–93 bachelor’s degree recipients who were teaching full time in their most recent spring semester of teaching, teachers of single subjects, that is, not general elementary classes, taught an average of six periods per day (table 12). In addition, they taught an average of two fields. These estimates and the secondary school teacher estimates—also six periods and two fields—are fairly consistent with SASS estimates from public and private secondary school teachers who taught departmentalized classes. According to SASS estimates, secondary school teachers who taught departmentalized classes taught an average of five periods per day and two subject areas (Henke et al. 1997).

**Table 12—Various workload characteristics for 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997 and were teaching single-subject classes full time during the most recent semester they taught since receiving the bachelor’s degree, by selected teaching-related characteristics**

	Average number of subject areas taught in the most recent spring term	Average number of periods taught in the most recent spring term	Average number of students taught in the most recent spring term	Percentage distribution of teachers by whether they reported that their workload was more difficult than those of other teachers at their school		
				Yes	No	Not sure
Total	1.7	5.6	99.5	24.2	72.8	2.9
Level of school, most recent job as of 1997 <sup>1</sup>						
Elementary	1.9	5.9	90.9	28.0	71.3	0.8
Secondary	1.5	5.6	115.8	22.6	73.5	3.9
Combined	1.7	4.6	76.1	23.8	74.0	2.2
Teaching status at end of study period						
Still teaching	1.7	5.6	97.6	23.3	73.4	3.4
Not teaching	1.6	5.9	113.2	29.0	69.7	1.3

<sup>1</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

In total, 1992–93 bachelor’s degree recipients who taught single-subject classes full time were responsible for an average of 100 students during the last semester they taught. Those working in elementary schools taught an average of 91 students, whereas those in secondary schools taught 116 students. Again, the SASS data present a similar view of secondary school teachers’ workloads: SASS public secondary school teachers in departments taught an average of 124 students, and SASS private secondary school teachers taught an average of 99 students



(Henke et al. 1997). Although it appears that full-time single-subject teachers who had left teaching were responsible for more students than were those who remained in the classroom, this apparent difference was not statistically significant.

In general, compared with general elementary teachers, single-subject teachers (who work at all levels) were about twice as likely to report that their workloads were more difficult than those of other teachers in their schools (tables 11 and 12). Whereas 24 percent of single-subject teachers felt they had a more difficult workload than colleagues in their schools, 12 percent of general elementary teachers felt so. However, single-subject teachers who left teaching were no more likely than those who remained to perceive that their workloads were more difficult than those of colleagues (table 12).

## **Satisfaction**

### ***Satisfaction with Aspects of Teaching***

Among 1992–93 bachelor’s degree recipients, teachers were asked how satisfied they were with six aspects of teaching during their most recent semester in the classroom: student motivation to learn, the school learning environment, student discipline and behavior, class size, parent support, and society’s esteem for the teaching profession. Teachers responded on a three-point scale: very satisfied, somewhat satisfied, or dissatisfied. These data offer an opportunity to examine relationships between school and teacher characteristics on the one hand and teachers’ satisfaction on the other.

Teachers were considerably more satisfied with some aspects of their work than with others. For example, whereas 47 percent of teachers were very satisfied with their class size, only 15 percent were very satisfied with society’s esteem for the profession (table 13).

In addition, teachers’ satisfaction varied considerably with several characteristics of their schools. No matter which of the six aspects one examines, public school teachers were less likely than private school teachers to report that they were very satisfied. Compared with elementary or combined school teachers, secondary school teachers were less likely to be very satisfied with students’ motivation to learn, the school environment, and student behavior and discipline. Teachers who worked in schools with higher concentrations of minority students were less likely than those in schools with relatively fewer minority students to be very satisfied with the school environment, student behavior and discipline, and parent support.

**Table 13—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage who were very satisfied with various aspects of teaching and quite satisfied overall in the most recent semester they taught, by selected teaching-related characteristics**

	Percent who reported that they were very satisfied with						Percent quite satisfied overall
	Student motivation to learn	School learning environment	Student discipline and behavior	Class size	Support from parents	Esteem of society for teaching profession	
Total	26.5	44.9	32.7	46.7	31.0	14.6	27.4
Sector of school, most recent job as of 1997							
Public	22.9	42.0	29.1	41.8	26.3	11.6	23.1
Private	36.2	54.7	42.4	68.2	51.5	23.2	42.4
Level of school, most recent job as of 1997*							
Elementary	31.0	50.1	34.1	45.0	31.7	11.6	28.5
Secondary	10.6	30.5	23.3	41.0	23.9	15.4	18.1
Combined	38.0	48.8	39.4	65.5	37.9	18.9	40.9
Percent minority enrollment, most recent job as of 1997							
0–4	30.4	51.8	35.6	49.0	33.1	15.6	32.3
5–19	21.7	54.6	40.2	44.6	38.2	15.1	33.8
20–49	20.6	37.8	23.3	43.8	25.4	6.2	18.2
50 or more	21.3	30.5	21.1	34.4	13.4	10.2	14.5
Teaching status at end of study period							
Still teaching	26.4	47.0	33.5	46.3	32.7	14.1	29.0
Not teaching	24.7	31.3	28.5	47.6	22.1	19.9	18.4

\*Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Finally, satisfaction with some aspects of teaching was associated with continuing to teach in April 1997. Teachers who were not teaching in the spring of 1997 were less likely than those who continued to teach to be very satisfied with the school learning environment and parent support.

### ***Choose Teaching Again?***

Another indicator of teachers' satisfaction is whether they would choose to teach again if they had the opportunity to start over. According to this measure, most teachers were relatively satisfied with their choice: 73 percent of teachers among 1992–93 bachelor's degree recipients would choose to teach if they could go back to their college days and start over again (table 14).

Undergraduate academic achievement was somewhat associated with graduates' willingness to teach again. Whereas 75 percent of teachers who had scored in the bottom three quartiles of the CEE score distribution would choose teaching again, 63 percent of their colleagues in the top quartile would do so. However, graduates' GPAs, both overall and in their majors, were not associated with their willingness to teach again.

The degree to which teachers had undergone training in pedagogy was associated with their willingness to teach again. For example, whereas 45 percent of those who had no record of completing a student-teaching assignment and were also not certified reported that they would choose teaching again, 80 percent of those certified to teach reported that they would teach again.

Teachers who had worked only in private schools were less likely than those who had worked only in public schools or in both sectors to report that they would choose teaching again. Teachers who had taught at multiple levels were more likely than those who had taught at only one of the three levels to report that they would return to teaching. Otherwise, those who had taught only at one level did not differ from each other.

Not surprisingly, teachers who were not teaching in the spring of 1997 were less enthusiastic than those who continued to teach. Whereas 84 percent of those who were teaching in 1997 would teach again if they had the chance, 49 percent of those who left would do so.

### **Years of Experience**

How long had these new teachers taught? The amount of time graduates had spent in the classroom depends on both how soon they began teaching after receiving the bachelor's degree and on whether, and for how long, they had stopped teaching at any time before the 1997 interviews began in April 1997. Bachelor's degree recipients who had taught for the first time after receiving the 1992–93 bachelor's degree had spent an average of nearly 3 years in the classroom by the spring of 1997 (table 15). Women had taught slightly longer than men.

**Table 14—Of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree, percentage distribution according to whether they would still choose teaching, by selected characteristics: 1997**

	Would respondent choose teaching again?		
	Yes	No	Not sure
Total	72.6	20.0	7.4
College entrance exam (CEE) scores			
Available	72.1	20.0	7.9
Bottom quartile	74.9	20.6	4.5
Middle half	73.7	17.4	8.8
Top quartile	62.7	27.4	9.9
Unavailable	75.0	19.6	5.4
Cumulative undergraduate GPA			
Less than 2.75	65.8	29.2	5.0
2.75–3.24	74.9	18.9	6.2
3.25–3.74	73.6	18.1	8.3
3.75 or higher	76.4	17.4	6.2
Undergraduate GPA in major			
Less than 2.75	59.4	33.6	7.0
2.75–3.24	72.9	21.0	6.1
3.25–3.74	74.6	17.8	7.7
3.75 or higher	75.3	17.9	6.9
Status in teacher pipeline, 1997			
No training	45.1	43.2	11.7
Student teaching, not certified	55.7	24.7	19.6
Certified	80.3	13.9	5.9
Taught, training unknown	—	—	—
Sector of schools at which taught by 1997			
Public	77.3	16.4	6.4
Private	60.0	24.6	65.4
Both	83.5	12.3	4.2
Level of schools at which taught by 1997*			
Elementary	75.1	19.2	5.7
Secondary	70.9	19.4	9.7
Combined	72.7	21.7	5.6
Multiple	89.6	3.7	6.7
Teaching status at end of study period			
Current teachers	83.6	10.5	5.9
Former teachers	49.4	39.6	11.0

—Sample size too small for a reliable estimate.

\*Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table 15—Average years of teaching experience and percentage distribution of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree according to teaching status at the end of the study period, by selected characteristics: 1997**

	Average years of teaching experience	Teaching status at end of study period	
		Left teaching	Still teaching
Total	2.8	20.7	79.4
Gender			
Male	2.6	23.5	76.5
Female	2.9	19.5	80.5
Race/ethnicity			
Black, non-Hispanic	2.6	24.6	75.4
Hispanic	2.9	27.4	72.6
White, non-Hispanic	2.8	19.8	80.2
Other, non-Hispanic <sup>1</sup>	—	—	—
College entrance exam (CEE) scores			
Available	2.8	21.6	78.4
Bottom quartile	3.1	16.1	83.9
Middle half	2.8	20.6	79.4
Top quartile	2.5	32.1	67.9
Unavailable	2.9	15.9	84.1
Baccalaureate degree major			
Business/management	—	30.6	69.4
Education	3.2	15.2	84.8
Humanities	2.5	27.1	72.9
Math/computer/natural sciences	2.6	20.8	79.2
Social sciences	2.1	29.3	70.8
Other	2.0	41.4	58.6
Cumulative undergraduate GPA			
Less than 2.75	2.6	27.6	72.4
2.75–3.24	2.9	19.1	80.9
3.25–3.74	2.8	20.3	79.7
3.75 or higher	3.0	14.5	85.5
Undergraduate GPA in major			
Less than 2.75	2.6	20.4	79.6
2.75–3.24	2.8	23.6	76.4
3.25–3.74	2.8	19.2	80.8
3.75 or higher	3.0	16.6	83.4
Has student teaching credit			
Yes	3.2	15.3	84.7
No	2.3	29.3	70.7
Certified to teach <sup>2</sup>			
Certified	3.0	14.2	85.8
Not certified	2.0	49.1	50.9

**Table 15—Average years of teaching experience and percentage distribution of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree according to teaching status at the end of the study period, by selected characteristics: 1997—Continued**

	Average years of teaching experience	Teaching status at end of study period	
		Left teaching	Still teaching
Sector of school at which taught by 1997			
Public	2.9	15.9	84.1
Private	2.5	40.8	59.2
Both	3.2	19.7	80.3
Level of schools at which taught by 1997 <sup>3</sup>			
Elementary	3.0	16.1	84.0
Secondary	2.5	24.8	75.2
Combined	2.5	38.4	61.7
Multiple	3.1	10.6	89.4
Participated in teacher induction program			
Participated	3.0	15.4	84.6
Did not participate	2.7	25.7	74.3

—Sample size too small for a reliable estimate.

<sup>1</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>2</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>3</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

The relationship between undergraduate academic achievement and the amount of time graduates had spent teaching by 1997 varied with the indicator of academic achievement. Among graduates who taught, those whose CEE scores fell in the bottom quartile of the ACT/SAT scores distribution among the B&B:93 sample had taught an average of 3 years, whereas those whose scores fell in the top quartile of the distribution had taught an average of 2.5 years. In contrast, graduates with cumulative GPAs under 2.75 had taught slightly less time, on average, than those with higher cumulative GPAs. However, there was no relationship between graduates’ GPAs in the undergraduate major and the amount of time teachers had taught.

Graduates who had trained to teach—whether by completing a student teaching assignment or becoming certified to teach—and those who had participated in an induction program for new teachers had amassed more teaching experience, on average, than their colleagues without the

respective type of training. Given these findings, it is perhaps not surprising that education majors had also taught longer, an average of slightly over 3 years, than graduates in other majors, who had taught between 2 and 2.6 years, on average.

Teachers who had worked only in elementary schools or at multiple levels had taught an average of about 3 years. In comparison, those who had taught in secondary or combined schools had taught about 2.5 years. Women are more likely than men to teach in elementary schools. Therefore, the finding that women had taught for 2.9 years, as compared with 2.6 years for men, may reflect covariation between gender and school level. In addition, secondary level teachers are more likely, in the aggregate (Henke et al. 1997) and among 1992–93 graduates in particular, to have earned a graduate degree. Therefore, graduate study may delay their entry into teaching and reduce the amount of time they had taught by April 1997.

Thus, the B&B:93/97 data indicate that teachers with different characteristics taught for different lengths of time between July 1992 and April 1997. The next section examines whether teachers' propensity to leave teaching and the reasons they left were also associated with various characteristics of themselves and their schools.

## Leaving Teaching

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By 1997, some of the new teachers who began teaching after completing bachelor's degrees in 1992–93 had already left teaching. Some left for some period of time and returned to the classroom by 1997, and others had not. At this early stage of their postbaccalaureate careers it will be a while before it becomes clear how many will not teach in a K–12 classroom again. However, estimating the proportion who taught and left the classroom without returning by 1997 provides baseline data for examining rates of leaving and returning in the future. This section examines whether graduates who differed in their demographic, academic, and teaching characteristics varied in the rates at which they had left teaching without returning by 1997.

One in five 1992–93 bachelor's degree recipients who started teaching after college had left the profession without returning by 1997 (table 15).<sup>20</sup> Neither gender nor race/ethnicity was associated with whether new teachers had left without returning.

There was some evidence that academic performance was associated with leaving teaching by 1997. Graduates with CEE scores in the top quartile were twice as likely as those with scores in the bottom quartile to leave without returning (32 percent versus 16 percent). In contrast, graduates' GPAs were not associated with whether they had left teaching by 1997.

In comparison with new teachers who had less training in pedagogy, those with more training were less likely to have left teaching without returning by 1997. Fifteen percent of those who had student taught had left the profession and not returned by 1997, compared with 29 percent of those who had not student taught. Whereas 14 percent of certified teachers had left by 1997, 49 percent of those without certification had done so. Similarly, 15 percent of those who had participated in an induction program had left teaching by 1997, compared with 26 percent of those who had not participated in such a program. Despite the apparent difference between education majors and those who had majored in other fields, however, education majors who taught were no less likely than those who had majored in business/management; the humanities;

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<sup>20</sup>In this analysis, "leaving" meant not teaching for more than 3 months. This section of the report discusses leaving teaching without returning, defined as leaving no later than January 1997 and not returning by April 1997. This definition was developed to exclude from "leavers" two categories of teachers: (1) those who left at some point but returned to the classroom by April 1997, and (2) those who left within 3 months of the beginning of the 1997 data collection and whose potential return within the allotted 3 months would not have been measured.



mathematics, computer science, or the natural sciences; or the social sciences to have left teaching.

The types of schools in which graduates taught were also associated with their rates of leaving without returning in this period. Whereas 16 percent of those who taught only in public schools and 20 percent of those who taught in both public and private schools had left without returning, 41 percent of those who taught only in private schools had done so. Private schools are far more likely than public schools to combine elementary and secondary grades in combined schools (McLaughlin and Broughman 1997). Therefore, it is not surprising that those who taught either only in elementary schools or in schools at multiple levels were less likely than those who taught only in combined schools to have left teaching by 1997. In addition, those who taught at multiple levels or only in elementary schools were less likely than those who taught only in secondary schools to have left teaching by 1997.

Why did these new graduates leave teaching? Overall, one-quarter of teachers who left did so to pursue a career outside education (table 16). Others left because they were not interested in teaching (19 percent) or because they disliked it or were dissatisfied with it (5 percent). Ten percent were dissatisfied with the salary and benefits available in teaching. Another quarter left for reasons not included among the response categories in the survey, and the remainder left for the various reasons enumerated in table 16. Because there were relatively few cases available for this analysis, these estimates are less reliable than others, and differences among groups in the reasons for leaving teaching are difficult to detect. Nevertheless, the reasons that leavers gave for not pursuing teaching varied somewhat according to their demographic, academic, and teaching characteristics.

Education majors and certified teachers were more likely than those who had majored in other fields and those without certification, respectively, to leave teaching in order to have or rear their own children. Not surprisingly, women were more likely than men to leave teaching to have or rear children: 10 percent of women left for this reason, in contrast with 0.5 percent of men. The former finding is at least partly connected to the latter because women are generally more inclined to teach than men. In particular, education majors are more likely to be women (McCormick, Horn, and Knepper 1996), and women are more likely than men to become certified to teach (table 1).

Whereas women cited family formation as the reason for leaving more often than men, financial compensation appears to have been more important to men than to women. Men were more likely than women to leave because they were dissatisfied with the salary and benefits (table 16).

**Table 16—Of 1992–93 bachelor’s degree recipients who first taught and left teaching between receiving the bachelor’s degree and 1997, percentage distribution according to primary reason they chose, in 1994 or 1997, not to pursue teaching, by selected characteristics**

	Reason not teaching next fall												
	Moved/ moving for family/ personal reasons	Preg- nancy/ child rearing	Health reasons/ disability	To pursue career outside of education	Dissatis- faction with salary and benefits	To take courses for education career	To take courses for career outside of education	School staffing action	Not interested in teaching	Disliked/ dissatis- fied with teaching	Not willing to pursue training to teach	To move into school adminis- tration	Other reason for leaving teaching job
Total	1.9	6.2	0.4	24.9	10.0	2.4	1.1	0.4	18.9	5.4	2.7	1.1	24.6
Gender													
Male	1.4	0.5	0	28.7	13.4	3.5	0.6	0.1	20.9	3.4	3.2	0.5	23.8
Female	2.1	9.9	0.7	22.5	7.9	1.7	1.4	0.5	17.6	6.7	2.4	1.4	25.1
Baccalaureate degree major													
Business/management	2.0	5.8	0	18.5	9.8	2.5	0	0	25.1	5.9	6.6	0	24.0
Education	4.8	17.1	1.1	17.2	8.9	2.3	0	0.9	13.0	7.1	2.2	1.7	23.8
Humanities	0.8	5.1	0.6	25.9	15.2	3.5	2.8	0.2	11.1	7.5	2.1	2.1	23.2
Math/computer/natural sciences	1.7	2.5	0.7	28.8	11.2	1.2	1.0	0.7	21.1	4.8	3.5	2.4	20.6
Social sciences	0.8	2.4	0	30.6	7.0	4.0	2.1	0	16.3	5.2	2.0	0	29.6
Other	0.4	2.1	0	29.2	8.3	1.0	1.0	0.3	27.9	2.9	0.9	0.4	25.7
Certified to teach*													
Certified	4.1	19.9	1.6	19.7	10.3	1.5	0.6	0.4	7.3	5.7	0.5	3.0	25.5
Not certified	1.2	2.5	0.1	26.4	10.0	2.7	1.2	0.3	22.0	5.4	3.3	0.6	24.4

\*Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

In general, teachers who were more committed to careers in education, as indicated by majoring in education or becoming certified to teach, were less likely than others to leave because they were dissatisfied with aspects of the job or wanted to do something else. Education majors were less likely than social science majors to leave in order to pursue a career in another field. In addition, although 7 percent of certified teachers who left did so because they were not interested in teaching, 22 percent of uncertified teachers left for similar reasons.

## Plans Regarding Teaching in the Future

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Looking ahead to future follow-up interviews, in the 1997 interview, graduates were asked what they expected to be doing in the short term (3 years from 1997) and longer term future. Overall, about 8 percent of pipeline-eligible college graduates expected to be teaching full time in 3 years, and 7 percent expected to be teaching in the longer term (table 17).

As with steps toward teaching, gender and race/ethnicity were related to plans for teaching in the future. Women were more likely than men to expect to teach full time in 3 years and to teach in the longer term, and they were also more likely to expect not to be working full time in 3 years. Asian/Pacific Islander graduates were less likely than Hispanic and white, non-Hispanic graduates to expect to teach full time in 3 years or in the longer term. In addition, black, non-Hispanic graduates were less likely than white, non-Hispanic graduates to expect to teach in the longer term.

Academic characteristics were also associated with graduates' plans to teach in the future. Not surprisingly, education majors were more likely than those who had majored in other fields to expect to be teaching full time in 3 years and in the longer term. In addition, business/management majors were less likely than humanities and social science majors to expect to be teaching full time in 3 years, and less likely than humanities majors to expect to be teaching in the longer term.

As with their entrance into teaching, graduates with higher CEE scores were less likely to expect to teach full time in 3 years and in the longer term. On the other hand, graduates with GPAs of 2.75 and higher, both in their majors and overall, were more likely to expect to be teaching full time in 3 years, and not to be working full time in 3 years. In the longer term, graduates with GPAs of 2.75 and higher were again more likely than those with the lowest GPAs to expect to be teaching.

Commitment to teaching, as indicated by 1997 pipeline status, was associated with differences in graduates' expectations for teaching in the future. Fifty-six percent of certified teachers expected to be teaching full time in 3 years, and 44 percent expected to be teaching in the longer term. Certified teachers were more likely than all pipeline groups but one—those who student

**Table 17—Percentage distributions of 1992–93 bachelor’s degree recipients according to their employment expectations in 3 years and whether they expected to be teaching in the longer term; and percentage distribution of pipeline entrants according to whether they planned to move into an education-related job, by selected characteristics: 1997**

	1992–93 bachelor’s degree recipients who had not taught before receiving the degree					Of those in pipeline, whether planned to move into education-related, nonteaching job <sup>1</sup>	
	Employment expectations in 3 years			Expects to be teaching longer term			
	Teaching full time	Other full-time work	Not working full time				
				Yes	No	Yes	No
Total	7.6	83.7	8.8	7.1	92.9	31.6	68.4
Gender							
Male	4.3	92.1	3.5	3.7	96.3	29.1	71.0
Female	10.4	76.3	13.3	10.1	90.0	32.9	67.1
Race/ethnicity							
Black, non-Hispanic	6.4	88.5	5.2	4.1	95.9	49.4	50.6
Hispanic	10.0	82.8	7.2	8.1	91.9	43.2	56.8
White, non-Hispanic	7.8	83.0	9.2	7.5	92.5	29.3	70.7
Other, non-Hispanic	5.1	84.1	10.8	1.8	98.2	—	—
American Indian/Alaska Native	8.5	84.2	7.3	7.1	92.9	—	—
Asian/Pacific Islander	2.1	91.2	6.7	2.0	98.0	30.8	69.2
Other	5.1	84.1	10.8	1.8	98.2	—	—
Baccalaureate degree major							
Business/management	2.1	92.3	5.6	3.2	96.9	30.3	69.8
Education	35.9	54.6	9.5	29.9	70.1	33.2	66.8
Humanities	8.3	78.4	13.2	7.0	93.1	27.1	72.9
Math/computer/natural sciences	4.5	88.7	6.8	4.2	95.9	28.8	71.2
Social sciences	5.5	85.2	9.3	5.5	94.5	37.6	62.4
Other	2.0	86.2	11.8	2.5	97.5	28.9	71.1
College entrance exam (CEE) scores							
Available	7.6	84.2	8.3	7.0	93.0	30.8	69.2
Bottom quartile	10.1	83.0	7.0	8.0	92.0	38.0	62.0
Middle half	7.9	83.8	8.3	7.5	92.5	29.8	70.3
Top quartile	4.4	86.1	9.5	4.9	95.1	23.4	76.6
Unavailable	7.7	81.6	10.7	7.4	92.6	35.1	64.9
Cumulative undergraduate GPA							
Less than 2.75	4.6	89.3	6.1	4.8	95.2	37.4	62.7
2.75–3.24	9.3	81.8	9.0	8.1	91.9	34.7	65.3
3.25–3.74	8.9	82.1	9.0	8.4	91.6	28.0	72.0
3.75 or higher	7.9	78.3	13.8	7.5	92.5	22.6	77.4
Undergraduate GPA in major							
Less than 2.75	3.6	90.5	5.9	5.0	95.1	43.0	57.0
2.75–3.24	6.9	85.5	7.6	5.7	94.3	35.4	64.6
3.25–3.74	8.9	82.0	9.1	8.7	91.3	30.6	69.4
3.75 or higher	8.8	80.2	11.0	8.4	91.6	26.8	73.3

**Table 17—Percentage distributions of 1992–93 bachelor’s degree recipients according to their employment expectations in 3 years and whether they expected to be teaching in the longer term; and percentage distribution of pipeline entrants according to whether they planned to move into an education-related job, by selected characteristics: 1997—Continued**

	1992–93 bachelor’s degree recipients who had not taught before receiving the degree						Of those in pipeline, whether planned to move into education-related, nonteaching job <sup>1</sup>	
	Employment expectations in 3 years			Expects to be teaching longer term		Yes	No	
	Teaching full time	Other full-time work	Not working full time					Yes
				Yes	No			
Status in teacher pipeline, 1997								
Considered only	4.1	85.3	10.7	6.2	93.8	28.2	71.8	
Applied	7.8	77.6	14.6	10.2	89.8	31.5	68.5	
Taught, no training	13.9	70.7	15.4	11.0	89.0	33.9	66.1	
Student taught only	7.2	83.6	9.3	7.2	92.9	25.1	74.9	
Student taught, taught, not certified	36.0	58.3	5.6	29.8	70.2	28.3	71.7	
Certified, no teach	20.8	64.4	14.9	23.5	76.6	26.8	73.2	
Certified, taught	55.5	37.2	7.4	44.4	55.7	37.9	62.1	
Taught, training unknown	—	—	—	—	—	—	—	
Trained, teaching unknown	—	—	—	—	—	—	—	
Sector of schools at which taught by 1997								
Public	55.7	38.9	5.5	43.9	56.1	38.3	61.7	
Private	24.5	55.7	19.9	25.8	74.2	35.4	64.6	
Both	55.9	43.5	0.7	45.3	54.7	33.4	66.6	
Level of schools at which taught by 1997 <sup>2</sup>								
Elementary	52.0	40.9	7.1	42.4	57.7	37.2	62.8	
Secondary	53.3	41.3	5.4	43.8	56.2	33.1	66.9	
Combined	28.8	62.4	8.9	28.7	71.3	31.8	68.2	
Multiple	60.7	34.0	5.3	42.1	57.9	51.7	48.4	
Teaching status at end of study period								
Still teaching spring 1997	58.2	36.4	5.4	45.6	54.4	37.3	62.8	
Not teaching spring 1997	16.2	67.4	16.5	14.5	85.6	36.6	63.4	

—Sample size too small for a reliable estimate.

<sup>1</sup>Defined as nonteaching jobs such as school administration or counseling.

<sup>2</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

taught and taught without a certificate—to report that they expected to teach full time in 3 years and in the longer term. Those who were certified but had not taught were more likely than three other groups—those who had student taught but neither earned a certificate nor taught, those who had applied but not taught by April 1997, and those who were considering teaching but had taken no other steps toward teaching—to expect to teach full time in 3 years and in the longer term.

Teachers who had always taught in public schools were more likely than those who had always taught in private schools to expect to teach full time in 3 years (56 percent versus 25 percent) and to be teaching in the longer term (44 percent versus 26 percent).

Among educators and policymakers concerned with staffing the nation's schools, some research and policy discussions focus on those college graduates among the general public who could be drawn into teaching with the right incentives. Former teachers constitute a large portion of this group. The B&B:93/97 data indicate that some graduates who had left teaching intended to return to the classroom: 16 percent of first-time teachers who had left the classroom by 1997 expected to be teaching full time in 3 years, and 15 percent expected to be teaching in the longer term.

Given their inclinations toward teaching, graduates in the teacher pipeline may consider other occupations in education, such as counseling or jobs in administration, as well as teaching. When those in the teacher pipeline were asked whether they planned to move into another education-related job in the future, 32 percent indicated that they did. Men and women were equally likely to indicate they would move into a nonteaching job in education. About one-half of black, non-Hispanic graduates indicated that they planned to work in a nonteaching education job in the future, compared with about 30 percent of white, non-Hispanic graduates.

With respect to academic characteristics, pipeline graduates' major field of study was not associated with their expectations of moving into an education-related but nonteaching job. However, whether measured with test scores or undergraduate GPAs, pipeline graduates with higher academic achievement were less likely to expect to move into a nonteaching but education-related job. Whereas 23 percent of pipeline graduates in the top quartile of the CEE score distribution planned to move into an education-related job, 38 percent of those in the bottom quartile did so. Similarly, pipeline graduates with higher undergraduate GPAs, both cumulative and in their majors, were less likely to report that they planned to move into an education-related job in the future.

Few teaching characteristics, however, were associated with pipeline graduates' expectations regarding nonteaching education jobs in the future. Their status in the pipeline and the sec-

tor and level of the schools in which they had taught were not associated with their expectations for moving into a nonteaching education job in the future. Likewise, no such association was found for graduates' teaching status at the end of the study period: 37 percent of both those who were still teaching and those who had left the classroom planned to move into an education-related job.



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## Summary and Conclusion

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Although about one-quarter of graduates had entered the teacher pipeline by 1994, more than one-third had done so by 1997. By 1997, 13 percent of all pipeline-eligible graduates had taught in public or private K–12 schools. The proportion of graduates who entered the pipeline, who taught, who left, and who intended to teach in the future varied consistently with a number of demographic and academic characteristics.

### Entering and Exiting Teaching

#### *Gender*

Women were consistently more inclined toward teaching than men. Women were more likely to enter the pipeline, to have prepared to teach, to apply for teaching positions, and to teach. Moreover, they taught longer, on average, than men did, although they were no less likely to have left without returning by April 1997.

Women's teaching experiences differed somewhat from men's as well. Women were twice as likely as men to have taught only in elementary schools, and also more likely to have taught general elementary classes and in schools with a majority of children from minority backgrounds.

#### *Race/Ethnicity*

Asian/Pacific Islander graduates were generally less inclined to teach than were those from other racial/ethnic groups. They were less likely than others to consider teaching or to prepare to teach and teach. They were also less likely than Hispanics and white, non-Hispanics to expect to teach in the future.

In addition, teaching experiences varied with racial/ethnic background among graduates who taught. Black, non-Hispanics were half as likely as white, non-Hispanics to have student taught, and also less likely to have taught in private schools. Black, non-Hispanic and Hispanic graduates were more likely than white, non-Hispanic graduates to have taught in high-minority or high-poverty schools.

### ***Undergraduate Major***

Not surprisingly, in comparison with graduates who had majored in other fields, education majors were more likely to enter the teacher pipeline, to apply for teaching positions, to teach, and to expect to teach in the future. In addition, humanities majors were more likely than graduates in all other fields but education to enter the pipeline and to teach.

Although the rate at which graduates left teaching without returning by April 1997 did not vary with major, the reasons for leaving did. Graduates who had majored in education were more likely than those with other majors to leave in order to have or rear their own children. Education majors who taught were more likely than those who had majored in other fields to teach only in elementary schools. They were less likely than science, mathematics, computer science, or social science majors to teach only at the secondary level.

### ***CEE Scores***

Graduates with the highest CEE scores were consistently less inclined than their peers with lower scores to teach. One-third of graduates in the top quartile of CEE scores entered the pipeline, compared with two-fifths of graduates in the bottom quartile. Graduates in the top quartile were half as likely as those in the bottom quartile to prepare to teach (9 percent versus 18 percent).

Compared with graduates in the bottom quartile, those in the top quartile were more likely to teach only in private schools, to teach only in secondary schools, and to teach fields that they had not studied at the postsecondary level. Top-quartile graduates were less likely than bottom-quartile graduates to teach only in elementary schools or to teach in high-poverty schools.

Whereas 63 percent of graduates in the top quartile would choose to teach again, 75 percent of graduates in the bottom quartile would do so. Graduates in the top quartile were twice as likely as those in the bottom quartile to leave without returning by April 1997 and were less likely to expect to teach in the future.

### ***Undergraduate GPAs***

In contrast to CEE scores, undergraduate GPAs were positively associated with teaching. Graduates with higher GPAs in their majors or overall were more likely to enter the pipeline, prepare to teach, to teach, and to expect to teach in the future. Graduates with high GPAs who applied to teach were also more likely than others to receive offers for teaching positions. How-

ever, school characteristics (sector, level, and concentration of minority or poor students) were not associated with the GPAs of graduates who taught.

## **Teaching Experiences**

Four-fifths of graduates who taught worked only in public schools, and one-half only in elementary schools. Nearly one-third worked only in secondary schools, and the remainder in combined schools or schools at multiple levels. In their most recent semester of teaching, about one-third taught general elementary classes more than any other single subject, one-quarter taught science or mathematics more than any other single subject, 11 percent English more than any other single subject, 5 percent social sciences, and the remainder taught other subjects.

Among first-time teachers in this college cohort, workloads—measured in terms of the number of students for whom they were responsible and the number of subjects they taught as well as their subjective assessments—were comparable to those of the general population of teachers in 1993–94. Their satisfaction with their work varied, depending on which aspect of work they were asked about. Although nearly one-half were very satisfied with their class size, only 15 percent were satisfied with the esteem society held for teaching as a profession.

Graduates who first taught felt that society does not give teaching the respect it deserves, and this sentiment may reflect, at least partly, the salary data. Compared with their classmates who were working full time in most other occupations, graduates who taught full time earned the lowest salaries (along with clerical staff, service workers, and social workers or ministers). However, the salary data were not adjusted to account for the amount of time worked per year, and differences in the amount of time worked may at least partly account for salary differences among graduates in different occupations.

The B&B:93/97 data indicate that patterns in teaching behavior among 1992–93 college graduates have continued from their first year out of college through their fourth. Women and whites continue to enter teaching more frequently than do men and minority graduates. Compared with high-scoring graduates, those with lower test scores are more attracted to teaching in the short run, make greater investments in teaching as a career, and intend to persist in it longer. However, the multivariate techniques necessary to identify the unique effects of gender and the two measures of achievement were not undertaken in this report and await future researchers' attention. Future research will also examine whether the patterns observed in 1997 will continue as states and localities both meet the needs of a growing school-aged population and attempt to improve the quality of their teaching forces into the next century.

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## Appendix A—Glossary

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This glossary describes the variables used in this report. The variables were taken directly from the B&B:97 Data Analysis System (DAS), an NCES software application that generates tables from the B&B:97 data. A description of the DAS software can be found in appendix B. The labels are in bold capital letters and correspond to the names of the variables in the DAS.

In the index below, the variables in each section are listed in the order they appear in the compendium tables; the glossary is in alphabetical order by variable name (displayed in the right-hand column).

### GLOSSARY INDEX

#### ACADEMIC CHARACTERISTICS

College entrance exam (CEE) scores..... SACTACTQ2  
 Baccalaureate degree major..... MAJORS3  
 Undergraduate GPA in major..... GPAMAJ  
 Cumulative undergraduate GPA..... NORMGPA  
 Degree-granting institution  
 (undergraduate)..... SECTOR\_B  
 Highest degree received..... B2HDGPRG  
 Highest degree expected in 1997..... B2HIEXP  
 Average SAT math score..... SATMR10  
 Average composite SAT score..... SATR10  
 Average SAT verbal score..... SATVR10  
 Type of postsecondary institution first  
 attended..... FSCTYPE

#### DEMOGRAPHIC CHARACTERISTICS

Gender..... B2RSEX  
 Respondent race/ethnicity..... B2RACETH  
 Age as of 12/31/96..... AGE

#### TEACHING-RELATED CHARACTERISTICS

##### *Teaching Preparation*

Eligible for teaching pipeline..... TEACHUNV  
 Status in teacher pipeline..... B2PIPLIN  
 Has student teaching credit..... TEACHTRN  
 Participated in teacher induction  
 program..... B2COMIND

##### *Entering Teaching*

Applied for a teaching position..... B2TJAPPL  
 Received teaching job offers..... B2TJOFFR  
 Accepted teaching job offers..... B2TJACCP

##### *Reasons For Not Applying For Teaching Job*

Already had teaching job..... B2NOAP01

Not interested in teaching..... B2NOAP02  
 Needed more education..... B2NOAP03  
 Had coursework but not ready to  
 apply for teaching jobs..... B2NOAP04  
 Jobs hard to get..... B2NOAP05  
 Student teaching was discouraging..... B2NOAP06  
 More money on other job offered..... B2NOAP07  
 More prestige in other job offered..... B2NOAP08  
 Wanted other occupation..... B2NOAP09  
 Low pay..... B2NOAP10  
 Poor teaching conditions..... B2NOAP11  
 No test or not yet certified..... B2NOAP12  
 Other reason for not applying for  
 teaching jobs..... B2NOAP13

##### *Reasons For Not Accepting Teaching Job Offer*

Already accepted other job..... B2NTAC01  
 Inadequate pay/other offer..... B2NTAC02  
 Too far from home..... B2NTAC03  
 Dangerous/difficult school..... B2NTAC04  
 Not in area which qualified..... B2NTAC05  
 Other job more interesting..... B2NTAC06  
 Other reason for not accepting offer..... B2NTAC07  
 Whether employed in education..... B2AJOBIN

##### *Teaching Variables*

Year first began teaching after  
 receiving BA..... B2SPSTRT  
 Entered teaching during 1992–93..... B2SPSTY1  
 Entered teaching during 1993–94..... B2SPSTY2  
 Entered teaching during 1994–95..... B2SPSTY3  
 Entered teaching during 1995–96..... B2SPSTY4  
 Entered teaching during 1996–97..... B2SPSTY5  
 Sector of schools at which taught  
 by 1997..... B2SECTOR

Level of schools at which taught ..... B2SLEVEL  
 Locale of school, most recent job  
 as of 1997..... B2MRSLOC  
 Percent minority enrollment, most recent  
 job as of 1997 ..... B2MRSMP  
 Percent free or reduced-price lunch recipients, most  
 recent job as of 1997..... B2MRSFLE  
 Sector of most recent job as of 1997..... B2MRSECT  
 Level of school, most recent  
 job as of 1997 ..... B2MRSLEV  
 Total teaching experience in years..... B2SPEXPY  
 Expects to be teaching in long term..... B2TLNG  
 Main field taught in most recent job  
 as of 1997..... B2FIELD  
 Resource or pullout teacher ..... B2PULLOU  
 Teaching status at end of study period..... B2SPEND  
 Teacher workload, most recent job  
 as of 1997..... B2ASSIGN  
 Average number of fields taught,  
 most recent job as of 1997 ..... B2NUMFLD  
 Average number of periods taught,  
 most recent job as of 1997 ..... B2NUMPD  
 Number of students taught, most  
 recent job as of 1997 ..... B2SIZECL

Employed full-time ..... B2FPJOB  
 April 1997 occupation ..... B2AJOB  
 Annual salary for 1997 job ..... B2SALARY  
 Academic year salary for  
 primary teaching job ..... B2SALTEA  
 Reason not teaching next fall..... B2LEFTEA  
 Would respondent choose teaching  
 again?..... B2CARCHN  
 Employment/enrollment status ..... B2NM9704  
 Employment expectations in 3 years ..... B2T3YR  
 Plans to move into education-related  
 job ..... B2JOBCHN

*Job Satisfaction Variables*

Student learning ..... B2TSAT01  
 School environment ..... B2TSAT02  
 Discipline ..... B2TSAT03  
 Class size ..... B2TSAT04  
 Support from parents ..... B2TSAT05  
 Societal views of teaching ..... B2TSAT06  
 Percent quite satisfied ..... B2TSAT

***Age as of 12/31/96*****AGE**

Indicates the respondent's age when he or she received a bachelor's degree.

26 or younger  
27–28  
29 or older

***Whether employed in education*****B2AJOBIN**

Indicates respondent's type of business or industry for main job held in April 1997. If main job was a teaching job, this question was not asked and code for education industry was filled in. For this analysis, the categories were aggregated as follows:

In education  
Outside education

***April 1997 occupation*****B2AJOB0C**

Indicates the occupation code of respondent's main job held in April 1997. If main job was a teaching job, question was not asked and appropriate code for K–12 teacher was filled in. For this analysis, the categories were aggregated as follows:

Educators—K–12 teachers  
Clerical staff  
Personal, food, health, and recreation services workers  
Skilled workers, including military  
Laborers  
Sales, financial service workers  
Lawyers, licensed medical professionals  
Legal support, nonlicensed medical workers  
Social workers, ministers, instructors  
Scientists, engineers  
Writers, performers  
Managers

***Teacher workload, most recent job as of 1997*****B2ASSIGN**

Graduate's response to the question "In the current spring term/the most recent spring term that you taught, is/was the workload given to you by your school the students or classes you teach/taught more difficult than those of other teachers at your school?"

Yes  
No  
Not sure

***Would respondent choose teaching again?***

**B2CARCHN**

Graduate's response to the question "If you could go back to your college days and start over again, would you become a teacher or not?" This question was asked not only of regular elementary and secondary school teachers, but also those who held only substitute, teacher's aide, itinerant, or support teaching positions.

Yes  
No  
Not sure

***Participated in teacher induction program***

**B2COMIND**

Indicates whether or not respondent had participated in a teacher induction program by the 1997 interview.

Participated  
Did not participate

***Main field taught, most recent job as of 1997***

**B2FIELD**

Identifies a teacher's main teaching field, in teaching job most recently held as of April 1997.

General elementary  
Business and vocational  
Science and mathematics  
Foreign languages  
Special education  
English  
Social sciences  
Fine arts  
Other

***Employed full time***

**B2FPJOB**

Full-time/part-time status of main job held in April 1997. Full time is defined as 30 or more hours per week, except for those who were teaching in April 1997 in which case "full time" was defined by the respondent.

***Highest degree received***

**B2HDGPRG**

Identifies degree type for the highest degree a graduate received after bachelor's degree from NPSAS:93 sample school as of 1997 interview date.

Bachelor's degree  
Master's/professional/doctoral degree

***Highest degree expected*****B2HIEXP**

Indicates highest level of education respondent expects to complete when asked in 1997 interview. Degrees were classified as follows:

- Bachelor's degree
- Master's degree
- First-professional degree
- Doctoral degree

***Plans to move into education-related job*****B2JOBCHN**

Graduate's response to the question, "Do you have any plans to move into or continue an education-related but non-teaching job in the future, such as administration or counseling?" This question was asked if the respondent had ever had a teaching job, had ever been certified, or had ever taken courses toward certification. Also asked if respondent had applied for teaching jobs.

- Yes
- No

***Reason not teaching next fall*****B2LEFTEA**

Graduate's response to the question, "What is the primary reason you decided not to pursue teaching?" This question was asked if respondent had taught, but was not planning to teach in fall 1997.

- Moved/moving for family/personal reasons
- Pregnancy/child rearing
- Health reasons/disability
- To pursue career outside of education
- Dissatisfaction with salary and benefits
- To take courses for education career
- To take courses for career outside of education
- School staffing action
- Not interested in teaching
- Disliked/dissatisfied with teaching
- Not willing to pursue training to teach
- To move into school administration
- Other reason for leaving teaching job

***Sector of most recent teaching job as of 1997*****B2MRSECT**

Sector of school in which respondent taught during primary teaching job in the most recent spring term that the respondent taught as of 1997.

- Public
- Private

***Percent free or reduced-price lunch recipients, most recent job as of 1997***

**B2MRSFLE**

Percentage of students who received free or reduced-price lunch at school in which respondent taught during primary teaching job in the most recent spring term that the respondent taught as of 1997. The categories for this analysis are as follows:

- 0–4
- 5–19
- 20–49
- More than 50

***Locale of school, most recent job as of 1997***

**B2MRSLOC**

Locale code of school in which respondent taught during primary teaching job in the most recent spring term that the respondent taught as of 1997.

- Central city
- Urban fringe/large town
- Small town, rural

***Level of school, most recent job as of 1997***

**B2MRSLEV**

Level of school in which respondent taught during primary teaching job in the most recent spring term that the respondent taught.

- Elementary
- Secondary
- Combined

***Percent minority enrollment, most recent job as of 1997***

**B2MRSMPC**

Percentage of students who were of minority racial/ethnic backgrounds in school in which respondent taught during primary teaching job in the most recent term that the respondent taught as of 1997. The categories for this analysis are as follows:

- 0–4
- 5–19
- 20–49
- More than 50

***Employment/enrollment status***

**B2NM9704**

Indicates the employment/enrollment status as of April 1997. The categories for this analysis are as follows:

- Employed only
- Employed and enrolled
- Enrolled only
- Neither enrolled nor employed

***Already had teaching job*****B2NOAP01**

In both 1994 and 1997 respondents who had at some time considered teaching were asked if they had ever applied. If not, they were asked whether they had not applied or any of several reasons. This variable combines 1994 and 1997 responses, and indicates “respondent did not apply for teaching jobs because already had teaching job.” Respondents who indicated that this was a reason for not applying for teaching jobs are included in this analysis.

Yes  
No

***Not interested in teaching*****B2NOAP02**

Indicates whether respondent did not apply for teaching jobs because he/she was no longer interested in teaching. For more detailed explanation see NOAP01.

Yes  
No

***Needed more education*****B2NOAP03**

Indicates whether respondent did not apply for teaching jobs because he/she needed more education. For more detailed explanation see NOAP01.

Yes  
No

***Had course work but not ready to apply for teaching jobs*****B2NOAP04**

Indicates whether respondent did not apply for teaching jobs because he/she had the coursework but was not ready to apply. For more detailed explanation see NOAP01.

Yes  
No

***Jobs hard to get*****B2NOAP05**

Indicates whether respondent did not apply for teaching jobs because he/she felt teaching jobs were hard to get. For more detailed explanation see NOAP01.

Yes  
No

***Student teaching was discouraging*****B2NOAP06**

Indicates whether respondent did not apply for teaching jobs because he/she was discouraged by student teaching. For more detailed explanation see NOAP01.

Yes  
No



***More money in other job offered***

**B2NOAP07**

Indicates whether respondent did not apply for teaching jobs because he/she was offered more money for a non-teaching job offer. For more detailed explanation see NOAP01.

Yes  
No

***More prestige in other job offered***

**B2NOAP08**

Indicates whether respondent did not apply for teaching jobs because he/she was offered another job that had more prestige. For more detailed explanation see NOAP01.

Yes  
No

***Wanted other occupation***

**B2NOAP09**

Indicates whether respondent did not apply for teaching jobs because he/she wanted other occupation. For more detailed explanation see NOAP01.

Yes  
No

***Low pay***

**B2NOAP10**

Indicates whether respondent did not apply for teaching jobs because of low pay. For more detailed explanation see NOAP01.

Yes  
No

***Poor teaching conditions***

**B2NOAP11**

Indicates whether respondent did not apply for teaching jobs because of poor teaching conditions. For more detailed explanation see NOAP01.

Yes  
No

***No test or not yet certified***

**B2NOAP12**

Indicates whether respondent did not apply for teaching jobs because he/she hadn't taken or couldn't pass the required test or was not yet certified. For more detailed explanation see NOAP01.

Yes  
No

***Other reason for not applying for teaching jobs*****B2NOAP13**

Indicates whether respondent did not apply for teaching jobs because of reason other than the ones listed in NOAP02–B2NOAP12. For more detailed explanation see NOAP01.

Yes  
No

***Already accepted other job*****B2NTAC01**

In 1994 and 1997, respondents who had been offered teaching jobs were asked if they had accepted them. If not, they were asked why not. This variable combines 1994 and 1997 responses, and indicates “that respondent did not accept because received offer after another job was accepted.”

Yes  
No

***Inadequate pay/other offer*****B2NTAC02**

Indicates whether respondent did not accept teaching job offer because pay was not adequate or received better offer. For more detailed explanation see B2NTAC01.

Yes  
No

***Too far from home*****B2NTAC03**

Indicates whether respondent did not accept teaching job offer because job offer was too far away from home. For more detailed explanation see B2NTAC01.

Yes  
No

***Dangerous/difficult school*****B2NTAC04**

Indicates whether respondent did not accept teaching job offers because job offer was in a dangerous or difficult school. For more detailed explanation see B2NTAC01.

Yes  
No

***Not in area which qualified*****B2NTAC05**

Indicates whether respondent did not accept teaching job offers because job offer was not in area for which qualified. For more detailed explanation see B2NTAC01.

Yes  
No

***Other job more interesting***

**B2NTAC06**

Indicates whether respondent did not accept teaching job offers because another job offered more interesting and challenging work. For more detailed explanation see B2NTAC01.

Yes  
No

***Other reason for not accepting offer***

**B2NTAC07**

Indicates whether respondent did not accept teaching job offers because of reason other than the ones listed in B2NTAC01–B2NTAC06. For more detailed explanation see B2NTAC01.

Yes  
No

***Average number of fields taught, most recent job as of 1997***

**B2NUMFLD**

Indicates the number of fields taught at primary teaching job in most recent spring term working as a teacher. This analysis looks at the average number of fields taught.

***Average number of periods taught, most recent job as of 1997***

**B2NUMPD**

Indicates the number of periods taught in various fields at primary teaching job in most recent spring term working as a teacher. This analysis looks at the average number of periods taught.

***Status in teacher pipeline***

**B2PIPLIN**

This variable measures extent of involvement with teaching, using variables from 1994 and 1997 interviews and composites. Respondents who taught were classified as having taught with certification, with student teaching, without training, or with training unknown. Those who did not teach were classified as certified, having student taught, applied for teaching jobs, considered teaching, or having no interest or action in teaching. An additional category of cases who had become certified but whose teaching status was unknown was identified. All of these categories were combined in various ways throughout the report, depending on the context of the particular analysis.

***Resource or pullout teacher***

**B2PULLOU**

Graduate response to the question, “During the spring term of 92–93/93–94/94–95/95–96/96–97, are/were you a resource teacher, that is, are you teaching/did you teach students who were pulled out of regular classes?” Asked about primary job during most recent spring term taught.

No  
Yes

**Respondent race/ethnicity****B2RACETH**

Indicates race/ethnicity of respondent.

Black, non-Hispanic	A person having origins in any of the black racial groups of Africa, not of Hispanic origin
Hispanic	A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
White, non-Hispanic	A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin).
Other	
American Indian/Alaska Native	A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition.
Asian/Pacific Islander	A person having origins in any of the peoples of the Far East, Southeast Asia, the Indian subcontinent, or Pacific Islands. This includes people from China, Japan, Korea, the Philippine Islands, Samoa, India, and Vietnam.
Other, non-Hispanic	A person not in any of the above categories and not of Hispanic origin.

**Gender****B2RSEX**

Respondent's gender.

Male  
Female

**Annual salary for 1997 job****B2SALARY**

Relies on April salary data for nonteachers, but substitutes academic-year salary for teachers. The categories used in this analysis are as follows:

Less than \$15,000  
\$25,000–34,999  
\$35,000–44,999  
\$45,000 or more

***Academic year salary for primary teaching job***

**B2SALTEA**

Academic year salary of primary teaching job in the most recent spring term that respondent taught. The categories for this analysis are as follows:

Less than \$15,000  
\$25,000–34,999  
\$35,000–44,999  
\$45,000 or more

***Sector of schools at which taught by 1997***

**B2SECTOR**

Categorizes respondents according to sector of schools they had taught in by 1997.

Public only  
Private only  
Both

***Number of students taught, most recent job as of 1997***

**B2SIZECL**

Graduate's response to the question "What is/was the total number of students you are teaching/taught in the spring term of 92–93/93–94/94–95/95–96/96–97?" Asked about primary job during most recent spring term taught. This analysis looks at the average number of students taught.

***Level of schools at which taught***

**B2SLEVEL**

Categorizes respondents according to level of schools they had taught in by 1997.

Elementary only  
Secondary only  
Combined only  
Multiple

***Teaching status at end of study period***

**B2SPEND**

Teaching status in February 1997. For teaching spell definitions, see B2SPSTRT.

Left teaching by spring 1997  
  One spell, left teaching  
  Multiple spells, left teaching  
Still teaching by spring 1997  
  One spell, still teaching  
  Multiple spells, still teaching

***Total teaching experience in years*****B2SPEXPY**

Counts number of years of teaching since earned B&B degree. See also B2SPSTRT.

- 1 or less years
- 2 years
- 3 years
- More than 3 years

***Year first began teaching after receiving BA*****B2SPSTRT**

Start date of first teaching spell after college graduation. Teaching spells are defined as periods of employment as a teacher lasting at least one month. A spell ends if the respondent is not teaching for longer than a three-month period. All data on teaching spells counts employment only between B&B college graduation and April 1997. Those who taught before college are missing on all spells variables. The categories for this analysis are:

- Before July 1993
- July 1993–June 1994
- July 1994–June 1995
- July 1995–June 1996
- July 1996–April 1997

***Entered teaching during 1992–93*****B2SPSTY1**

Indicates whether or not respondent entered teaching in 1992–93.

- No
- Yes

***Entered teaching during 1993–94*****B2SPSTY2**

Indicates whether or not respondent entered teaching in 1993–94.

- No
- Yes

***Entered teaching during 1994–95*****B2SPSTY3**

Indicates whether or not respondent entered teaching in 1994–95.

- No
- Yes

***Entered teaching during 1995–96*****B2SPSTY4**

Indicates whether or not respondent entered teaching in 1995–96

- No
- Yes

***Entered teaching during 1996–97***

**B2SPSTY5**

Indicates whether or not respondent entered teaching in 1996–97.

No  
Yes

***Employment expectations in 3 years***

**B2T3YR**

Identifies those who, in 1997, expected to be working full time in 3 years and those who expected to be teaching full time in 3 years.

Teaching full time  
Other full-time work  
Not working full time

***Expects to be teaching in longer term***

**B2TLNG**

Indicates whether respondent intends, as of 1997 interview date, to be teaching in the long term.

Yes  
No

***Accepted teaching job offers***

**B2TJACCP**

For respondents who received teaching job offer(s), indicates whether they accepted the offer(s).

Yes  
No

***Applied for a teaching position***

**B2TJAPPL**

Indicates whether respondent applied for a teaching position since 1994, based on 1997 interview.

Yes  
No

***Received teaching job offers***

**B2TJOFFR**

For respondents who submitted applications, indicates the number of teaching positions offered. Only the respondents who received offers are included in this analysis.

***Percent quite satisfied***

**B2TSAT**

Composite variable measuring the satisfaction of those who taught with six aspects of their most recent teaching jobs.

The six aspects are as follows:

- Student learning
- School environment
- Discipline
- Class size
- Parent support
- Societal views of teaching

Possible responses are as follows:

- Dissatisfied
- Somewhat satisfied
- Very satisfied

Values on the satisfaction index ranged from 6 (dissatisfied with all six aspects) to 18 (very satisfied with all six aspects). In this analysis, respondents whose satisfaction index score was 15 or higher were defined as “quite satisfied overall.”

***Student learning***

**B2TSAT01**

Indicates respondent’s satisfaction with students’ motivation to learn. For more detailed explanation see B2TSAT.

- Dissatisfied
- Somewhat satisfied
- Very satisfied

***School environment***

**B2TSAT02**

Indicates respondent’s satisfaction with school’s learning environment. For more detailed explanation see B2TSAT.

- Dissatisfied
- Somewhat satisfied
- Very satisfied

***Discipline***

**B2TSAT03**

Indicates respondent’s satisfaction with school learning environment. For more detailed explanation see B2TSAT.

- Dissatisfied
- Somewhat satisfied
- Very satisfied

***Class size***

**B2TSAT04**

Indicates respondent’s satisfaction with class size. For more detailed explanation see B2TSAT.

- Dissatisfied
- Somewhat satisfied
- Very satisfied



***Parent support***

**B2TSAT05**

Indicates respondent's satisfaction with parental support. For more detailed explanation see B2TSAT.

Dissatisfied  
Somewhat satisfied  
Very satisfied

***Societal views of teaching***

**B2TSAT06**

Indicates respondent's satisfaction with the esteem of society for the teaching profession. For more detailed explanation see B2TSAT.

Dissatisfied  
Somewhat satisfied  
Very satisfied

***Type of postsecondary institution first attended***

**FSCTYPE**

Indicates the type of school the student first attended. It was created by looking for the earliest enrollment date from the sample school and any other school attended before receiving the bachelor's degree at the sample school.

4-year  
2-year  
Less-than-2-year

***Undergraduate GPA in major***

**GPAMAJ**

Indicates student-reported grade point average in undergraduate major.

Less than 2.75  
2.75–3.24  
3.25–3.74  
3.75 or higher

***Baccalaureate degree major***

**MAJORS3**

Student's major at sample school during 1992–93.

Business/management  
Education  
Humanities  
Math/computer/natural sciences  
Social sciences  
Other

***Cumulative undergraduate GPA*****NORMGPA**

Respondent's normalized calculated undergraduate GPA, based on recorded grades at NPSAS:93 sample school (4.0 scale). GPA was categorized as follows:

- Less than 2.75
- 2.75–3.24
- 3.25–3.74
- 3.75 or higher

***College entrance exam (CEE) scores*****SATACTQ2**

Indicates whether SAT or ACT score(s) are available. For those who have scores, this variable categorizes the scores into quartiles as listed below. SAT/ACT scores were available from a number of sources. If an ETS-supplied SAT score was available, it was used to compute a quartile ranking based upon the distribution of ETS-supplied SAT scores of graduates in the B&B sample who had scores. If an ETS-supplied score was not available, the quartile ranking of institution- or self-reported SAT scores were used. If no SAT score was available, the quartile ranking of an institution or self-reported ACT score was used. If none of these scores was available, the respondent was coded as missing on SATACTQ2.

- Bottom quartile
- Middle quartile
- Top quartile

***Average SAT math score*****SATMR10**

This variable was added to the DAS in April 1999. In April 1995, the College Board recentered the score scales for all tests in the SAT Program to reflect the contemporary test-taking population. Recentering reestablished the average score for a study group of 1990 seniors at about 500—the midpoint of the 200-to-800 scale—allowing students, schools, and colleges to more easily interpret their scores in relation to those of a similar group of college-bound seniors. For additional information on the SAT, see the College Board web site at <http://collegeboard.org>. These data were supplied by ETS.

***Average composite SAT score*****SATR10**

Indicates the composite SAT verbal and math score. One of a series of variables based on SAT scores recentered by the College Board. For more detailed description see SATMR10.

***Average SAT verbal score*****SATVR10**

Indicates the average SAT verbal score. One of a series of variables based on SAT scores recentered by the College Board. For more detailed description see SATMR10.

***Degree-granting institution (undergraduate)***

**SECTOR\_B**

Institution type by level and control, combined of NPSAS:93, degree-granting institution. Institution level concerns the institution's highest offering (length of program and type of certificate, degree or award), and control concerns the source of revenue and control of operations.

- Public
  - Nondoctorate-granting
  - Doctorate granting
- Private, not-for-profit
  - Nondoctorate-granting
  - Doctorate granting

***Has student teaching credit***

**TEACHTRN**

Indicates whether respondent's transcript indicates that she/he has completed a student-teaching assignment.

- No
- Yes

***Eligible for teacher pipeline***

**TEACHUNV**

Identifies respondents who reported that they had neither taught school before, nor been certified to teach one year or more before obtaining the B&B bachelor's degree.

- Taught or certified before BA/BS
- Neither taught nor certified before BA/BS

## Appendix B—Technical Notes and Methodology

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### The Baccalaureate and Beyond Longitudinal Study<sup>19</sup>

The data analyzed in this report came from the First and Second Follow-ups of the Baccalaureate and Beyond Longitudinal Study (B&B:93/94 and B&B:93/97), a study that tracks the experiences of a cohort of college graduates who received baccalaureate degrees during the 1992–93 academic year and were first interviewed as part of the National Postsecondary Student Aid Study (NPSAS:93). This group’s experiences in the areas of academic enrollments, degree completions, employment, public service, and other adult decisions will be followed for about twelve years. The series of data collections will provide critical information about college graduates’ postsecondary education outcomes, including graduate and professional program access, labor market experience, and rates of return on investment in education.

The B&B:93/94 survey was the first follow-up interview of NPSAS:93 participants who received their bachelor’s degrees between July 1992 and June 1993. Of 12,500 NPSAS:93 respondents who were identified as potentially eligible for the first follow-up survey, about 1,500 were determined to be ineligible. A total of 10,080 eligible individuals completed the 1994 interview.

The B&B:93/97 survey is the second follow-up interview of the B&B cohort. The first followup interview (B&B:93/94) collected information from respondents 1 year after they received the bachelor’s degree; the second follow-up (B&B:93/97) collected data 4 years after they received the bachelor’s degree. Data collection for B&B:93/97 took place between April and December 1997. A total of 11,192 individuals in the B&B cohort were determined eligible for follow-up in 1997. For the second followup, the number of interviews completed was 10,093, yielding a response rate of 90 percent. A total of 9,274 individuals (83 percent of the sample) responded to all three rounds of the B&B study. Referred to as “the B&B panel sample,” these respondents became the base sample of the analyses presented in this report.

The NPSAS:93 sample, while representative and statistically accurate, was not a simple random sample. Instead, the survey sample was selected using a more complex three-step proce-

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<sup>19</sup>The text in this section is based on excerpts from the *Baccalaureate and Beyond Longitudinal Study: 1993/97 Methodology Report*, (NCES 1999–159) (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1999).

cedure with stratified samples and differential probabilities of selection at each level. Postsecondary institutions were initially selected within geographic strata. Once institutions were organized by zip code and state, they were further stratified by control (i.e., public; private, not-for-profit; or private, for-profit) and degree offering (less-than-2-year, 2- to 3-year, 4-year nondoctorate-granting, and 4-year doctorate-granting).<sup>20</sup>

For more information about the NPSAS:93 survey, refer to the *Methodology Report for the National Postsecondary Student Aid Study, 1992–93* (NCES 95–211, Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1995). For more information on procedures for the Baccalaureate and Beyond First Follow-up Study (B&B:93/94), consult the *Baccalaureate and Beyond Longitudinal Study: 1993/94 Methodology Report* (NCES 96–149, Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1996). For more information on procedures for the Baccalaureate and Beyond Second Follow-up Study (B&B:93/97), consult the *Baccalaureate and Beyond Longitudinal Study: 1993/97 Methodology Report* (NCES 1999–159, Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1999).

*Sample weights.* B&B:93/97 final weights were calculated by making a nonresponse adjustment to the baseline B&B weight calculated for B&B:93/94. This baseline B&B weight is an adjustment of the baseline NPSAS:93 weight. All analyses in this report are weighted to compensate for unequal probability of selection into the B&B sample and to adjust for nonresponse. The B&B panel weight, based on respondents who participated in all three surveys, is used in both the report and compendium analyses. A complete description of the weighting methodology is available in the methodology reports cited above.

## Transcript Data

The B&B:93/94 data collection included a student transcript study in addition to the graduate interview. Transcripts were sought for all B&B:93 sample members from the NPSAS sample institution from which they received their bachelor's degrees. Transcripts were requested from the NPSAS institution only. Credits that students received at other institutions were included in the B&B data only when supplied by the NPSAS institution. Ninety-nine percent of eligible NPSAS institutions responded, resulting in a student-level collection rate of 98 percent.

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<sup>20</sup>The NPSAS universe excludes institutions offering only correspondence courses, institutions enrolling only their own employees, and U.S. service academies. For this B&B cohort, institutions were further stratified by the number of degrees in education they had awarded in the past.

Institutions were also asked to provide course catalogs and information regarding their credit and grading systems. This information was used to categorize several parts of course records on the transcripts. Course catalogs allowed coders to classify courses within the College Course Map, a course classification system designed by the U.S. Department of Education.<sup>21</sup> Information on credit and grading systems allowed the normalization of credits and grades across institutions.

### **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 occur because observations are made only on samples of students, not on entire populations. Surveys of population universes are not subject to sampling errors. Estimates based on a sample will differ somewhat from those that would have been obtained by a complete census of the relevant population using the same survey instruments, instructions, and procedures. The standard error of a statistic is a measure of the variation due to sampling; it indicates the precision of the statistic obtained in a particular sample. In addition, the standard errors for two sample statistics can be used to estimate the precision of the difference between the two statistics and to help determine whether the difference based on the sample is large enough so that it represents the population difference.

Nonsampling errors occur not only in sample surveys but also in complete 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 or institutions refused to participate, or students participated but answered only certain items); ambiguous definitions; differences in interpreting questions; inability or unwillingness to give correct information; mistakes in recording or coding data; and other errors of collecting, processing, sampling, and imputing missing data. Although nonsampling errors due to questionnaire and item nonresponse can be reduced somewhat by the adjustment of sample weights and imputation procedures, correcting nonsampling errors or gauging the effects of these errors is usually difficult.

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<sup>21</sup>U.S. Department of Education, Office of Educational Research and Improvement, *The New College Course Map and Transcript Files: Changes in Course-Taking and Achievement, 1972–1993* (Washington, DC: U.S. Government Printing Office), 1995.

## Data Analysis System

The estimates presented in this report were produced using the B&B:93/97 Data Analysis System (DAS). The DAS software makes it possible for users to specify and generate their own tables from the B&B:93/97 data. With the DAS, users can replicate or expand upon the tables presented in this report. In addition to the table estimates, the DAS calculates proper standard errors<sup>22</sup> and weighted sample sizes for these estimates. For example, table B1 contains estimated standard errors that correspond to the estimates presented in table C1 in the compendium of this report, and was generated by the B&B:93/97 DAS. If the number of valid cases is too small to produce a reliable estimate (fewer than 30 cases), the DAS prints the message “low N” instead of the estimate. Tables B2 and B3 provide standard errors for tables C2 and C18.

In addition to tables, the DAS will also produce a correlation matrix of selected variables to be used for linear regression models. Included in the output with the correlation matrix are the design effects (DEFTs) for each variable in the matrix. Since statistical procedures generally compute standard errors based on an assumption of simple random sampling, the standard errors must be adjusted with the design effects to take into account B&B’s complex sample design. (See discussion under “Statistical Procedures” below for the adjustment procedure.)

For more information about the B&B:93/97 and other Data Analysis Systems, consult the NCES DAS website ([www.nces.ed.gov/das](http://www.nces.ed.gov/das)) or its West Coast mirror site ([www.pedar-das.org](http://www.pedar-das.org)), or contact:

Aurora D’Amico  
Postsecondary Studies Division  
National Center for Education Statistics  
555 New Jersey Avenue, NW  
Washington, DC 20208-5652  
(202) 219-1365  
Internet address: [Aurora\\_D’Amico@ed.gov](mailto:Aurora_D’Amico@ed.gov)

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<sup>22</sup>The B&B sample is not a simple random sample, and 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 B1—Standard errors for table C1: Percentage of 1992–93 bachelor’s degree recipients who were eligible to enter the teacher pipeline; of those eligible to enter, percentage who entered and percentage who took various steps toward teaching, by selected characteristics: 1994 and 1997**

	Of pipeline eligible										
	1994						1997 <sup>1</sup>				
	Pipeline <sup>2</sup> eligible	Pipeline status					Pipeline status				
		Total entered pipeline	Considered teaching but did nothing	Taught but had not prepared	Prepared but had not taught	Prepared and had taught	Total entered pipeline	Considered teaching or applied to teach	Taught but had not prepared	Prepared but had not taught	Prepared and had taught
Total	0.23	0.67	0.52	0.17	0.31	0.34	0.72	0.59	0.19	0.31	0.44
Gender											
Male	0.26	0.86	0.72	0.25	0.32	0.38	0.96	0.80	0.28	0.38	0.48
Female	0.35	0.91	0.69	0.22	0.47	0.52	0.97	0.80	0.25	0.46	0.67
Race/ethnicity											
Black, non-Hispanic	0.90	2.93	2.79	0.51	0.47	1.08	3.20	2.84	0.67	0.42	1.72
Hispanic	1.54	2.71	2.25	1.06	0.75	1.50	3.04	2.59	1.17	0.84	1.78
White, non-Hispanic	0.25	0.71	0.54	0.19	0.34	0.37	0.76	0.62	0.21	0.33	0.49
Other, non-Hispanic	0.45	2.05	1.60	0.26	0.91	0.77	2.65	2.19	0.55	1.21	0.91
American Indian/Alaska Native	2.96	7.90	7.55	0	1.72	2.77	7.85	7.87	1.32	1.92	3.31
Asian/Pacific Islander	0.43	1.95	1.26	0.32	1.09	0.82	2.65	1.96	0.60	1.48	0.94
Other	0	8.31	7.82	0	1.66	3.03	9.40	8.95	2.53	0	3.83
Age as of 12/31/96											
26 or younger	0.19	0.74	0.58	0.20	0.29	0.36	0.78	0.64	0.23	0.31	0.47
27–28	1.17	2.86	2.22	0.80	1.11	1.29	3.36	2.72	0.87	1.16	1.51
29 or older	0.89	1.52	1.20	0.34	0.93	0.68	1.66	1.40	0.35	0.81	1.06
College entrance exam (CEE) scores											
Available	0.20	0.79	0.60	0.20	0.32	0.42	0.81	0.63	0.22	0.33	0.52
Bottom quartile	0.52	1.43	1.15	0.27	0.70	0.80	1.26	0.32	0.89	1.00	13.06
Middle half	0.24	1.12	0.84	0.27	0.41	0.59	0.87	0.27	0.40	0.72	10.75
Top quartile	0.40	1.26	1.09	0.50	0.54	0.53	1.15	0.62	0.62	0.72	6.47
Unavailable	1.04	1.96	1.49	0.61	0.91	0.90	2.21	1.76	0.62	1.00	1.11



**Table B1—Standard errors for table C1: Percentage of 1992–93 bachelor’s degree recipients who were eligible to enter the teacher pipeline; of those eligible to enter, percentage who entered and percentage who took various steps toward teaching, by selected characteristics: 1994 and 1997—Continued**

	Of pipeline eligible										
	Pipeline <sup>2</sup> eligible	1994					1997 <sup>1</sup>				
		Pipeline status					Pipeline status				
		Total entered pipeline	Considered teaching but did nothing	Taught but had not prepared	Prepared but had not taught	Prepared and had taught	Total entered pipeline	Considered teaching or applied to teach	Taught but had not prepared	Prepared but had not taught	Prepared and had taught
<b>Baccalaureate degree major</b>											
Business/management	0.29	1.17	1.11	0.27	0.21	0.21	1.38	1.28	0.29	0.39	0.34
Education	1.12	1.73	1.15	0.54	1.71	1.95	1.55	1.08	0.47	1.57	2.09
Humanities	0.92	2.00	1.79	0.52	0.75	0.86	2.15	2.08	0.69	0.72	1.22
Math/computer/natural sciences	0.37	1.26	1.07	0.35	0.43	0.51	1.42	1.14	0.47	0.34	0.79
Social sciences	0.49	1.34	1.16	0.50	0.52	0.29	1.55	1.33	0.58	0.59	0.62
Other	0.45	1.25	1.01	0.46	0.49	0.18	1.49	1.24	0.49	0.71	0.32
<b>Cumulative undergraduate GPA</b>											
Less than 2.75	0.28	1.09	0.94	0.34	0.36	0.36	1.24	1.08	0.37	0.41	0.55
2.75–3.24	0.40	1.14	0.81	0.25	0.49	0.60	1.24	0.88	0.31	0.52	0.83
3.25–3.74	0.36	1.22	0.95	0.30	0.62	0.65	1.28	1.08	0.35	0.51	0.78
3.75 or higher	1.16	1.97	1.39	0.60	1.27	1.11	2.19	1.80	0.58	1.20	1.37
<b>Undergraduate GPA in major</b>											
Less than 2.75	0.54	2.12	2.06	0.51	0.39	0.51	2.32	2.20	0.59	0.54	1.12
2.75–3.24	0.33	0.97	0.80	0.21	0.34	0.42	1.11	0.90	0.27	0.43	0.61
3.25–3.74	0.39	1.19	0.91	0.32	0.59	0.63	1.25	1.01	0.37	0.55	0.85
3.75 or higher	0.63	1.38	0.94	0.44	0.83	0.77	1.48	1.19	0.47	0.73	0.92
<b>Degree-granting institution (undergraduate)</b>											
<b>Public</b>											
Nondoctorate-granting	0.50	1.36	1.07	0.28	0.84	0.73	1.45	1.14	0.30	0.73	1.03
Doctorate-granting	0.28	1.04	0.70	0.24	0.39	0.58	1.06	0.85	0.27	0.42	0.71
<b>Private, not-for-profit</b>											
Nondoctorate-granting	0.75	1.38	1.26	0.51	0.58	0.55	1.59	1.32	0.53	0.68	0.75
Doctorate-granting	0.56	1.86	1.54	0.52	0.78	0.63	1.90	1.67	0.62	0.82	0.93
Other	0.30	7.86	7.94	0.61	0	0.37	11.53	11.61	0.68	0	0.40

**Table B1—Standard errors for table C1: Percentage of 1992–93 bachelor’s degree recipients who were eligible to enter the teacher pipeline; of those eligible to enter, percentage who entered and percentage who took various steps toward teaching, by selected characteristics: 1994 and 1997—Continued**

	Of pipeline eligible										
	1994						1997 <sup>1</sup>				
	Pipeline <sup>2</sup> eligible	Pipeline status					Pipeline status				
		Total entered pipeline	Considered				Total entered pipeline	Considered			
teaching but did nothing			Taught but had not prepared	Prepared but had not taught	Prepared and had taught	teaching or applied to teach		Taught but had not prepared	Prepared but had not taught	Prepared and had taught	
Highest degree attained											
Bachelor’s degree	0.25	0.70	0.54	0.17	0.32	0.35	0.76	0.64	0.19	0.31	0.46
Master’s degree or higher	0.59	1.63	1.26	0.73	0.77	0.71	1.73	1.26	0.78	0.90	1.14
Highest degree expected in 1997											
Bachelor’s degree	0.32	1.03	0.89	0.18	0.50	0.33	1.10	0.96	0.20	0.52	0.43
Master’s degree	0.32	0.93	0.68	0.27	0.44	0.50	1.01	0.83	0.29	0.43	0.64
First-professional degree	1.29	2.12	2.09	0.47	0.34	0.47	2.45	2.11	0.69	0.85	1.44
Doctoral degree	0.68	1.73	1.40	0.58	0.67	0.85	1.88	1.58	0.77	0.74	1.16

<sup>1</sup>Includes responses from both 1994 and 1997 interviews.

<sup>2</sup>Pipeline-eligible graduates had neither taught at the elementary/secondary level before receiving the 1992–93 bachelor’s degree nor had prepared to teach a year or more before receiving that degree.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table B2—Standard errors for table C2: Of 1992–93 bachelor’s degree recipients in the teacher pipeline, percentage distribution by pipeline status in 1997, by selected characteristics**

	Considered teaching or applied to teach only	Taught but had not prepared	Prepared but had not taught	Prepared and had taught
Total	1.24	0.51	0.81	1.07
Gender				
Male	1.89	0.93	1.22	1.51
Female	1.52	0.58	1.04	1.34
Race/ethnicity				
Black, non-Hispanic	3.56	1.45	0.90	3.64
Hispanic	4.38	2.66	2.00	3.96
White, non-Hispanic	1.34	0.57	0.87	1.18
Other, non-Hispanic	5.76	2.33	4.90	3.72
American Indian/Alaska Native	—	—	—	—
Asian/Pacific Islander	7.78	3.26	7.30	4.99
Other	—	—	—	—
Age as of 12/31/96				
26 or younger	1.35	0.62	0.84	1.13
27–28	4.61	2.31	3.01	4.08
29 or older	2.93	0.89	2.00	2.49
College entrance exam (CEE) scores				
Available	1.41	0.62	0.90	1.23
Bottom quartile	2.56	0.82	2.10	2.25
Middle half	1.89	0.74	1.07	1.70
Top quartile	2.75	1.85	1.86	2.11
Unavailable	3.50	1.67	2.62	2.84
Baccalaureate degree major				
Business/management	2.51	1.30	1.77	1.58
Education	1.30	0.56	1.82	2.11
Humanities	3.09	1.51	1.57	2.47
Math/computer/natural sciences	2.62	1.44	1.08	2.27
Social sciences	2.43	1.58	1.59	1.65
Other	2.85	1.76	2.38	1.17
Cumulative undergraduate GPA				
Less than 2.75	2.06	1.16	1.26	1.60
2.75–3.24	1.94	0.82	1.35	1.91
3.25–3.74	2.07	0.90	1.27	1.80
3.75 or higher	3.60	1.47	2.84	3.21
Undergraduate GPA in major				
Less than 2.75	3.87	1.83	1.65	3.28
2.75–3.24	1.83	0.79	1.23	1.63
3.25–3.74	2.02	0.95	1.36	1.93
3.75 or higher	2.38	1.16	1.72	2.05

**Table B2—Standard errors for table C2: Of 1992–93 bachelor’s degree recipients in the teacher pipeline, percentage distribution by pipeline status in 1997, by selected characteristics—Continued**

	Had considered teaching or applied to teach only	Had taught but were not prepared	Prepared but had not taught	Prepared and had taught
Degree-granting institution (undergraduate)				
Public				
Nondoctorate-granting	2.25	0.72	1.68	2.07
Doctorate-granting	2.05	0.83	1.27	1.84
Private, not-for-profit				
Nondoctorate-granting	2.48	1.30	1.59	1.84
Doctorate-granting	3.40	1.72	2.25	2.33
Other	—	—	—	—
Highest degree attained				
Bachelor’s degree	1.34	0.52	0.83	1.14
Master’s degree or higher	2.62	1.88	2.14	2.54
Highest degree expected in 1997				
Bachelor’s degree	2.61	0.87	2.06	1.78
Master’s degree	1.55	0.70	1.00	1.38
First-professional degree	5.92	2.83	3.30	5.39
Doctoral degree	2.35	1.51	1.44	2.19
Status in teacher pipeline, 1994				
Considered teaching	1.24	0.65	0.46	1.04
Taught but had not prepared	0	3.41	0	3.41
Prepared but had not taught	0	0	3.20	3.20
Prepared and had taught	0	0	0	0

—Sample size too small for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&amp;B:93/97), Data Analysis System.

**Table B3—Standard errors for table C17: Of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree, percentage distributions according to teaching status in spring 1997 and number of teaching spells completed by spring 1997, <sup>1</sup> by selected characteristics: 1997**

	Left teaching by spring 1997	Of those who left teaching		Still teaching spring 1997	Of those still teaching	
		One spell	Multiple spells		One spell	Multiple spells
Total	1.43	1.38	0.38	1.43	1.62	0.86
Gender						
Male	3.22	3.06	1.06	3.22	3.60	2.09
Female	1.56	1.51	0.34	1.56	1.76	0.90
Race/ethnicity						
Black, non-Hispanic	6.92	6.77	1.72	6.92	7.15	1.58
Hispanic	7.58	7.23	2.25	7.58	7.76	3.98
White, non-Hispanic	1.51	1.47	0.39	1.51	1.73	0.95
Other, non-Hispanic <sup>2</sup>	—	—	—	—	—	—
Age as of 12/31/96						
26 or younger	1.61	1.56	0.45	1.61	1.85	1.03
27–28	8.81	8.81	0	8.81	9.27	4.68
29 or older	2.64	2.53	0.83	2.64	2.92	1.40
College entrance exam (CEE) scores						
Available	1.75	1.69	0.45	1.75	2.03	1.11
Bottom quartile	3.03	2.89	1.18	3.03	3.47	1.62
Middle half	2.37	2.31	0.43	2.37	2.73	1.71
Top quartile	4.57	4.40	1.02	4.57	4.85	2.36
Unavailable	4.69	4.35	1.95	4.69	5.66	3.22
Baccalaureate degree major						
Business/management	9.44	9.44	0	9.44	10.44	6.44
Education	1.67	1.66	0.28	1.67	2.00	1.12
Humanities	4.19	3.56	2.20	4.19	4.34	1.63
Math/computer/natural sciences	4.28	4.28	0	4.28	5.03	3.23
Social sciences	6.05	5.78	1.80	6.05	6.31	1.94
Other	7.43	7.43	2.23	7.43	7.42	3.33
Cumulative undergraduate GPA						
Less than 2.75	3.84	3.81	0.86	3.84	4.01	1.38
2.75–3.24	2.32	2.26	0.67	2.32	2.76	1.83
3.25–3.74	2.36	2.29	0.75	2.36	2.58	1.24
3.75 or higher	3.87	3.87	0	3.87	3.98	1.10
Undergraduate GPA in major						
Less than 2.75	7.42	6.99	2.44	7.42	7.71	1.92
2.75–3.24	2.60	2.57	0.65	2.60	2.86	1.59
3.25–3.74	2.44	2.37	0.74	2.44	2.65	1.47
3.75 or higher	2.57	2.50	0.51	2.57	3.03	1.89

**Table B3—Standard errors for table C17: Of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree, percentage distributions according to teaching status in spring 1997 and number of teaching spells completed by spring 1997, <sup>1</sup> by selected characteristics: 1997**  
—Continued

	Left teaching by spring 1997	Of those who left teaching		Still teaching spring 1997	Of those still teaching	
		One spell	Multiple spells		One spell	Multiple spells
Degree-granting institution (undergraduate)						
Public						
Nondoctorate-granting	1.96	1.85	0.61	1.96	2.08	1.01
Doctorate-granting	2.46	2.44	0.48	2.46	2.94	1.55
Private, not-for-profit						
Nondoctorate-granting	3.34	3.28	0.58	3.34	3.35	1.38
Doctorate-granting	5.12	4.77	2.15	5.12	5.78	4.12
Other	—	—	—	—	—	—
Highest degree attained						
Bachelor’s degree	1.56	1.51	0.38	1.56	1.78	0.91
Master’s degree or higher	3.29	3.13	1.38	3.29	3.57	1.87
Highest degree expected in 1997						
Bachelor’s degree	5.29	5.29	0	5.29	5.28	1.66
Master’s degree	1.55	1.50	0.41	1.55	1.86	1.04
First-professional degree	—	—	—	—	—	—
Doctoral degree	3.32	3.26	1.17	3.32	3.78	2.26
Had student teaching credit						
Yes	1.58	1.51	0.47	1.58	1.86	1.09
No	2.59	2.51	0.64	2.59	2.85	1.49
Certified to teach <sup>3</sup>						
Certified	1.27	1.22	0.40	1.27	1.59	1.03
Not certified	4.66	4.65	1.08	4.66	4.61	1.16
Participated in teacher induction program						
Participated	1.92	1.88	0.37	1.92	2.09	1.02
Did not participate	2.03	1.98	0.65	2.03	2.26	1.32
Years of teaching experience						
1 or less	8.71	8.75	3.80	8.71	8.71	0
2	4.24	4.20	1.15	4.24	4.31	1.27
3	3.85	3.74	1.32	3.85	4.44	3.29
More than 3	0.97	0.96	0.21	0.97	1.36	1.04
Expects to be teaching in long term						
Yes	1.50	1.50	0	1.50	1.85	1.03
No	2.11	2.02	0.63	2.11	2.30	1.22

**Table B3—Standard errors for table C17: Of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree, percentage distributions according to teaching status in spring 1997 and number of teaching spells completed by spring 1997, <sup>1</sup> by selected characteristics: 1997—Continued**

	Left teaching by spring 1997	Of those who left teaching		Still teaching spring 1997	Of those still teaching	
		One spell	Multiple spells		One spell	Multiple spells
Level of schools at which taught by 1997 <sup>4</sup>						
Elementary	2.24	2.24	0.26	2.24	2.34	0.74
Secondary	3.53	3.53	0.54	3.53	3.54	0.64
Combined	8.02	7.92	3.04	8.02	8.02	0
Year first began teaching after receiving BA						
July 92–June 93	3.62	3.47	1.43	3.62	4.43	3.09
July 93–June 94	2.67	2.61	0.67	2.67	2.86	1.61
July 94–June 95	2.66	2.61	0.62	2.66	2.91	1.50
July 95–June 96	3.90	3.84	0.83	3.90	4.17	1.59
July 96–April 97	1.64	1.64	0	1.64	1.64	0
Employment expectations in 3 years, as of 1997						
Teaching full time	1.22	1.18	0.28	1.22	1.87	1.46
Other full-time work	2.74	2.62	0.78	2.74	2.79	1.06
Not working full time	6.64	6.59	1.28	6.64	6.61	3.24

—Sample size too small for a reliable estimate.

<sup>1</sup>Teaching spells are periods of continuous teaching with no break longer than 3 months.

<sup>2</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>3</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>4</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

## Statistical Procedures

Two types of statistical procedures were used in this report: testing differences between means (or proportions) and testing for linear trends. Each procedure is described below.

### *Differences Between Means or Proportions*

The estimates in this report are based on a sample, and therefore observed differences between two estimates can reflect either of two possibilities: differences that exist in the population at large and are reflected in the sample, or differences due solely to the composition of the sample that do not reflect underlying population differences. To minimize the risk of erroneously interpreting differences due to sampling alone as signifying population differences (a Type I error), the statistical significance of differences between estimates was tested using Student's  $t$  statistic. Statistical significance was determined by calculating  $t$  values for differences between pairs of means or proportions and comparing these with published values of  $t$  for two-tailed hypothesis testing, using a 5 percent probability of a Type I error (a significance level of .05).<sup>23</sup>

Student's  $t$  values may be computed to test the difference between estimates with the following formula:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2}} \quad (1)$$

where  $E_1$  and  $E_2$  are the estimates to be compared and  $se_1$  and  $se_2$  are their corresponding standard errors. Note that this formula is valid only for independent estimates. When the estimates are not independent (for example, when comparing a total percentage with that for a subgroup that is included in the total), a covariance term must be added to the denominator of the  $t$ -test formula. When comparing the estimate for a total with that of a subgroup, the following formula was used:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2 - 2p se_{sub}^2}} \quad (2)$$

where  $p$  is the proportion of the total contained in the subgroup.

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<sup>23</sup>A Type I error occurs when one erroneously concludes that a difference observed in a sample reflects a true difference in the population from which the sample was drawn.



There are hazards in reporting statistical tests for each comparison. First, comparisons based on large  $t$  statistics may 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 occurs when making multiple comparisons between categories of an independent variable. For example, when making paired comparisons between different levels of income, the probability of a Type I error for these comparisons taken as a group is larger than the probability for a single comparison. When more than one difference between groups of related characteristics or “families” are tested for statistical significance, one must apply a standard that assures a level of significance for all of those comparisons taken together.

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 for  $k$  comparisons within a family of possible comparisons, the significance level for all the comparisons would sum to  $p \leq .05$ .<sup>24</sup>

For example, when comparing males and females, only one comparison is possible. In this family,  $k=1$ , and there is no need to adjust the significance level. When students are divided into five racial/ethnic groups and all possible comparisons are made, then  $k=10$  and the significance level for each test within this family of comparisons must be  $p \leq .05/10$ , or  $p \leq .005$ . The formula for calculating family size ( $k$ ) is as follows:

$$k = \frac{j(j-1)}{2} \quad (3)$$

where  $j$  is the number of categories for the variable being tested. For example, in the case of a variable with five categories such as race/ethnicity, one substitutes 5 for  $j$  in equation 3:

$$k = \frac{5(5-1)}{2} = 10$$

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<sup>24</sup>The standard that  $p \leq .05/k$  for each comparison is more stringent than the criterion 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 (1961): 52–64.

Different schools of thought exist on the application of the Bonferroni adjustment: while some would use an experiment-wise calculation of  $k$ , where all the dependent variables were considered simultaneously in selecting a critical value, here the calculation of  $k$  and the accompanying critical value were restricted to a single dependent variable at a time, because the Bonferroni adjustment is already a conservative strategy.

### ***Linear Trends***

While most descriptive comparisons in this report were tested using Student's  $t$  statistic, some comparisons across categories of an ordered variable with three or more levels involved a test for a linear trend across all categories, rather than a series of tests between pairs of categories. In this report, when averages of a continuous variable were examined relative to a variable with ordered categories, Analysis of Variance (ANOVA) was used to test for a linear relationship between the two variables. To do this, ANOVA models included orthogonal linear contrasts corresponding to successive levels of the independent variable. The squares of the Taylorized standard errors (that is, standard errors that were calculated by the Taylor series method), the variance between the means, and the unweighted sample sizes were used to partition total sum of squares into within- and between-group sums of squares. These were used to create mean squares for the within- and between-group variance components and their corresponding  $F$  statistics, which were then compared with published values of  $F$  for a significance level of .05.<sup>25</sup> Significant values of both the overall  $F$  and the  $F$  associated with the linear contrast term were required as evidence of a linear relationship between the two variables. Means and Taylorized standard errors were calculated by the DAS. Unweighted sample sizes are not available from the DAS and were provided by NCES.

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<sup>25</sup>More information about ANOVA and significance testing using the  $F$  statistic can be found in any standard textbook on statistical methods in the social and behavioral sciences.

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## **Appendix C—Compendium Tables**

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**Table C1—Percentage of 1992–93 bachelor’s degree recipients who were eligible to enter the teacher pipeline; of those eligible to enter, percentage who entered and percentage who took various steps toward teaching, by selected characteristics: 1994 and 1997**

	Of pipeline eligible										
	Pipeline <sup>2</sup> eligible	1994					1997 <sup>1</sup>				
		Total entered pipeline	Pipeline status				Total entered pipeline	Pipeline status			
			Considered teaching	Taught but had not prepared	Prepared but had not taught	Prepared and had taught		Considered teaching or applied to teach	Taught but had not prepared	Prepared but had not taught	Prepared and had taught
Total	96.8	26.3	13.9	1.8	4.5	6.1	36.3	19.2	2.5	4.5	10.1
Gender											
Male	98.1	19.7	12.5	1.6	2.6	3.0	29.1	18.3	2.2	3.3	5.3
Female	95.7	32.1	15.0	2.0	6.2	8.9	42.6	19.9	2.8	5.6	14.3
Race/ethnicity											
Black, non-Hispanic	96.1	31.7	24.3	1.8	1.6	3.9	44.7	32.1	3.2	1.2	8.1
Hispanic	94.8	28.6	15.4	3.1	2.3	7.8	41.6	22.8	4.3	2.6	11.8
White, non-Hispanic	96.8	26.7	13.3	1.8	5.0	6.5	36.3	18.4	2.4	4.9	10.7
Other, non-Hispanic	98.7	14.5	9.9	0.5	2.1	2.0	23.0	14.6	1.7	3.5	3.2
American Indian/Alaska Native	94.2	35.4	27.8	0	1.7	5.8	48.0	35.9	1.3	2.6	8.3
Asian/Pacific Islander	99.1	10.2	6.1	0.6	2.2	1.3	17.7	10.1	1.5	4.0	2.1
Other	100.0	31.4	25.5	0	1.7	4.3	43.0	31.5	4.0	0	7.6
Age as of 12/31/96											
26 or younger	97.7	26.1	13.9	1.9	4.1	6.2	35.9	18.7	2.8	4.3	10.1
27–28	96.2	24.3	11.7	1.6	4.0	7.0	34.8	18.5	2.2	4.5	9.7
29 or older	93.0	28.0	14.4	1.3	6.5	5.8	38.5	21.3	1.6	5.3	10.5
College entrance exam (CEE) scores											
Available	97.5	26.4	13.9	1.9	4.4	6.3	36.2	18.7	2.6	4.6	10.3
Bottom quartile	96.8	30.0	15.4	1.5	5.1	7.9	41.0	20.8	2.3	5.7	12.2
Middle half	97.7	26.9	13.5	1.7	4.9	6.7	35.8	17.5	2.2	4.7	11.5
Top quartile	97.8	21.9	13.2	2.5	2.4	3.8	32.3	19.3	3.8	3.2	6.0
Unavailable	94.1	26.0	13.8	1.6	5.2	5.4	36.8	21.0	2.2	4.2	9.4

**Table C1—Percentage of 1992–93 bachelor’s degree recipients who were eligible to enter the teacher pipeline; of those eligible to enter, percentage who entered and percentage who took various steps toward teaching, by selected characteristics: 1994 and 1997—Continued**

	Of pipeline eligible										
	Pipeline <sup>2</sup> eligible	1994					1997 <sup>1</sup>				
		Total entered pipeline	Pipeline status				Total entered pipeline	Pipeline status			
			Considered teaching	Taught but had not prepared	Prepared but had not taught	Prepared and had taught		Considered teaching or applied to teach	Taught but had not prepared	Prepared but had not taught	Prepared and had taught
<b>Baccalaureate degree major</b>											
Business/management	99.1	13.5	11.9	0.8	0.4	0.3	21.4	17.4	1.0	1.7	1.3
Education	88.9	77.3	9.9	2.8	25.2	39.4	84.2	9.2	2.3	17.1	55.7
Humanities	94.4	34.0	22.0	3.0	4.2	4.8	46.4	26.9	5.2	3.9	10.4
Math/computer/natural sciences	98.0	20.5	13.8	1.8	2.0	3.0	30.9	20.2	3.0	2.1	5.6
Social sciences	97.9	23.5	17.3	2.1	2.6	1.5	35.5	23.7	3.3	3.8	4.8
Other	98.4	16.4	12.2	1.7	1.7	0.7	27.1	19.3	2.3	3.8	1.8
<b>Cumulative undergraduate GPA</b>											
Less than 2.75	98.2	23.1	16.0	1.7	2.6	2.8	31.8	21.1	2.5	3.0	5.2
2.75–3.24	96.6	27.0	13.4	1.7	4.8	7.2	36.4	17.6	2.3	5.0	11.5
3.25–3.74	96.7	28.8	13.7	1.9	5.8	7.4	38.7	19.1	2.8	4.9	11.9
3.75 or higher	94.0	29.2	11.6	2.3	6.2	9.2	39.5	17.9	2.2	5.5	13.9
<b>Undergraduate GPA in major</b>											
Less than 2.75	98.2	24.1	19.2	1.4	1.4	2.2	32.4	23.5	2.1	2.0	4.7
2.75–3.24	97.8	24.0	14.2	1.4	3.2	5.1	33.4	18.6	2.2	3.9	8.8
3.25–3.74	96.8	28.2	13.9	2.0	5.5	6.7	38.6	19.1	2.9	5.1	11.5
3.75 or higher	95.2	29.7	11.9	2.0	6.8	9.0	40.0	18.2	2.6	5.6	13.6
<b>Degree-granting institution (undergraduate)</b>											
<b>Public</b>											
Nondoctorate-granting	96.2	32.1	14.9	1.3	7.4	8.5	41.9	18.9	1.8	6.1	15.0
Doctorate-granting	97.3	23.3	12.0	1.7	3.4	6.2	32.4	16.8	2.4	3.7	9.4
<b>Private, not-for-profit</b>											
Nondoctorate-granting	96.0	28.0	16.2	2.4	4.2	5.2	39.0	22.8	3.1	4.7	8.5
Doctorate-granting	97.1	24.2	14.5	2.5	3.9	3.3	35.7	21.4	3.6	4.1	6.6
Other	99.7	17.3	16.3	0.6	0	0.4	29.1	28.1	0.7	0	0.4

**Table C1—Percentage of 1992–93 bachelor’s degree recipients who were eligible to enter the teacher pipeline; of those eligible to enter, percentage who entered and percentage who took various steps toward teaching, by selected characteristics: 1994 and 1997—Continued**

	Of pipeline eligible										
	Pipeline <sup>2</sup> eligible	1994					1997 <sup>1</sup>				
		Pipeline status					Pipeline status				
		Total entered pipeline	Considered teaching	Taught but had not prepared	Prepared but had not taught	Prepared and had taught	Total entered pipeline	Considered teaching or applied to teach	Taught but had not prepared	Prepared but had not taught	Prepared and had taught
Highest degree attained											
Bachelor’s degree	96.8	26.1	13.7	1.7	4.5	6.2	35.8	19.3	2.4	4.3	9.8
Master’s degree or higher	96.9	28.1	15.1	2.7	4.5	5.8	40.0	18.0	3.8	5.6	12.5
Highest degree expected in 1997											
Bachelor’s degree	98.0	18.2	11.2	0.8	3.5	2.6	23.2	14.2	1.1	4.1	3.8
Master’s degree	96.4	29.7	13.9	2.0	5.6	8.3	40.9	20.0	2.7	5.0	13.2
First-professional degree	97.5	15.4	12.0	1.3	0.8	1.3	24.8	16.5	2.4	2.3	3.6
Doctoral degree	95.7	34.0	19.2	3.4	4.4	7.0	49.5	26.4	5.3	4.2	13.6

<sup>1</sup>Includes responses from both 1994 and 1997 interviews.

<sup>2</sup>Pipeline-eligible graduates had neither taught at the elementary/secondary level before receiving the 1992–93 bachelor’s degree nor had prepared to teach a year or more before receiving that degree.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C2—Of 1992–93 bachelor’s degree recipients in the teacher pipeline, percentage distribution by pipeline status in 1997, by selected characteristics**

	Considered teaching or applied to teach only	Taught but had not prepared	Prepared but had not taught	Prepared and had taught
Total	52.8	7.0	12.4	27.9
Gender				
Male	63.1	7.6	11.2	18.2
Female	46.7	6.6	13.1	33.7
Race/ethnicity				
Black, non-Hispanic	71.9	7.2	2.8	18.1
Hispanic	54.8	10.4	6.4	28.4
White, non-Hispanic	50.6	6.7	13.4	29.3
Other, non-Hispanic	63.5	7.6	15.0	13.9
American Indian/Alaska Native	—	—	—	—
Asian/Pacific Islander	57.1	8.7	22.4	11.8
Other	—	—	—	—
Age as of 12/31/96				
26 or younger	52.2	7.7	12.0	28.1
27–28	53.2	6.2	12.9	27.7
29 or older	55.2	4.1	13.6	27.1
College entrance exam (CEE) scores				
Available	51.7	7.2	12.6	28.5
Bottom quartile	50.8	5.6	14.0	29.7
Middle half	48.8	6.2	13.0	32.0
Top quartile	59.8	11.8	9.8	18.7
Unavailable	57.1	6.1	11.4	25.5
Baccalaureate degree major				
Business/management	81.5	4.7	7.8	6.0
Education	10.9	2.7	20.3	66.2
Humanities	58.1	11.1	8.4	22.4
Math/computer/natural sciences	65.5	9.9	6.7	18.0
Social sciences	66.7	9.4	10.6	13.4
Other	71.0	8.4	13.9	6.7
Cumulative undergraduate GPA				
Less than 2.75	66.3	7.8	9.5	16.4
2.75–3.24	48.3	6.4	13.6	31.7
3.25–3.74	49.2	7.3	12.7	30.7
3.75 or higher	45.3	5.6	13.8	35.3
Undergraduate GPA in major				
Less than 2.75	72.5	6.6	6.3	14.6
2.75–3.24	55.6	6.5	11.5	26.4
3.25–3.74	49.6	7.4	13.2	29.8
3.75 or higher	45.6	6.5	14.0	33.9



**Table C2—Of 1992–93 bachelor’s degree recipients in the teacher pipeline, percentage distribution by pipeline status in 1997, by selected characteristics—Continued**

	Considered teaching or applied to teach only	Taught but had not prepared	Prepared but had not taught	Prepared and had taught
Degree-granting institution (undergraduate)				
Public				
Nondoctorate-granting	45.2	4.4	14.6	35.9
Doctorate-granting	51.9	7.5	11.6	29.0
Private, not-for-profit				
Nondoctorate-granting	58.4	7.9	11.9	21.8
Doctorate-granting	60.0	10.2	11.5	18.4
Other	—	—	—	—
Highest degree attained				
Bachelor’s degree	54.0	6.6	12.1	27.4
Master’s degree or higher	45.1	9.6	14.0	31.4
Highest degree expected in 1997				
Bachelor’s degree	61.1	4.8	17.7	16.4
Master’s degree	48.9	6.7	12.2	32.2
First-professional degree	66.7	9.5	9.1	14.7
Doctoral degree	53.3	10.6	8.5	27.5
Status in teacher pipeline, 1994				
Considered teaching	86.5	4.1	1.9	7.5
Taught but had not prepared	0	79.7	0	20.3
Prepared but had not taught	0	0	55.1	44.9
Prepared and had taught	0	0	0	100.0

—Sample size too small for a reliable estimate.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C3—Of 1992–93 bachelor’s degree recipients who were in the pipeline but had not taught as of 1994, percentage who had applied for a teaching position; of applicants, percentage who were offered a teaching position; and of those who received offers, percentage who accepted a teaching position since 1994, by selected characteristics: 1997**

	Percent who had applied for a teaching position since 1994	Of those who applied, percent who were offered a teaching position	Of those offered, percent who accepted a teaching position
Total	25.2	76.2	90.3
Gender			
Male	19.2	80.1	87.4
Female	29.2	74.5	91.6
Race/ethnicity			
Black, non-Hispanic	25.3	72.8	79.5
Hispanic	24.5	75.1	85.9
White, non-Hispanic	25.7	76.4	91.9
Other, non-Hispanic*	16.5	—	—
Age as of 12/31/96			
26 or younger	25.6	77.4	90.5
27–28	18.7	—	—
29 or older	24.8	72.5	92.2
College entrance exam (CEE) scores			
Available	25.8	76.0	90.3
Bottom quartile	25.5	69.5	82.8
Middle half	28.0	77.4	94.1
Top quartile	21.4	80.8	88.7
Unavailable	22.8	77.1	90.0
Baccalaureate degree major			
Business/management	12.1	70.2	91.0
Education	55.1	69.3	93.1
Humanities	30.4	88.1	85.1
Math/computer/natural sciences	20.5	76.3	90.4
Social sciences	25.5	81.4	92.1
Other	12.8	77.0	86.3
Cumulative undergraduate GPA			
Less than 2.75	20.4	70.7	95.7
2.75–3.24	27.2	78.4	89.7
3.25–3.74	28.7	77.9	87.5
3.75 or higher	22.3	86.1	91.0
Undergraduate GPA in major			
Less than 2.75	19.4	71.4	87.9
2.75–3.24	23.5	75.7	94.0
3.25–3.74	28.5	77.8	90.2
3.75 or higher	26.1	77.6	87.6

**Table C3—Of 1992–93 bachelor’s degree recipients who were in the pipeline but had not taught as of 1994, percentage who had applied for a teaching position; of applicants, percentage who were offered a teaching position; and of those who received offers, percentage who accepted a teaching position since 1994, by selected characteristics: 1997—Continued**

	Percent who had applied for a teaching position since 1994	Of those who applied, percent who were offered a teaching position	Of those offered, percent who accepted a teaching position
Degree-granting institution (undergraduate)			
Public			
Nondoctorate-granting	31.8	74.8	91.9
Doctorate-granting	24.2	76.7	91.4
Private, not-for-profit			
Nondoctorate-granting	22.4	74.7	86.0
Doctorate-granting	21.3	80.4	88.5
Other	—	—	—
Highest degree attained			
Bachelor’s degree	23.2	75.6	88.8
Master’s degree or higher	37.9	78.4	95.7
Highest degree expected in 1997			
Bachelor’s degree	16.0	58.2	90.0
Master’s degree	27.7	75.5	90.2
First-professional degree	17.4	—	—
Doctoral degree	31.0	86.1	90.9
Status in teacher pipeline, 1994			
Not considering teaching	15.5	79.2	91.6
Didn’t prepare or teach	21.2	78.1	86.6
Prepared, didn’t teach	65.1	72.3	93.2
Status in teacher pipeline, 1997			
Applied to teach	68.6	67.5	77.9
Taught but had not prepared	70.4	98.0	100.0
Prepared but had not taught	42.2	39.4	73.4
Prepared and had taught	89.6	97.0	98.3

—Sample size too small for a reliable estimate.

\*Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C4a—Of pipeline entrants who had not applied for a teaching position by 1997, percentage who gave various reasons for not applying in 1994 or 1997, by selected characteristics**

	Already had teaching job	Not interested in teaching	Needed more education	Had course-work but not ready to apply	Jobs hard to get	Student teaching was discouraging
Total	3.4	45.4	25.1	2.0	2.3	1.2
Gender						
Male	2.2	48.5	21.0	2.7	0.8	1.7
Female	4.3	43.1	28.1	1.5	3.4	0.9
Race/ethnicity						
Black, non-Hispanic	0.6	49.7	27.9	0.8	1.6	0
Hispanic	9.5	42.9	26.5	0	3.6	1.5
White, non-Hispanic	3.5	44.7	25.4	2.3	2.0	1.2
Other, non-Hispanic	0	52.4	12.2	1.5	6.9	3.1
American Indian/Alaska Native	—	—	—	—	—	—
Asian/Pacific Islander	0	49.0	8.8	2.4	11.1	1.9
Other	—	—	—	—	—	—
Age as of 12/31/96						
26 or younger	3.0	46.8	25.2	1.8	2.3	1.5
27–28	2.9	45.4	22.1	1.3	0	0
29 or older	5.1	39.8	25.0	3.0	2.6	0.6
College entrance exam (CEE) scores						
Available	3.0	47.5	24.4	1.6	2.2	1.3
Bottom quartile	5.1	42.9	27.8	1.0	3.1	0.6
Middle half	1.9	47.8	22.9	1.5	2.4	1.7
Top quartile	2.9	52.4	23.9	2.7	0.7	1.1
Unavailable	5.0	37.3	27.5	3.5	2.6	1.1
Baccalaureate degree major						
Business/management	1.8	46.2	28.7	1.1	3.7	0
Education	11.0	27.6	24.0	1.8	6.1	3.4
Humanities	2.4	52.9	23.3	2.1	1.6	0.2
Math/computer/natural sciences	2.7	43.3	23.0	3.2	1.2	0.6
Social sciences	2.8	45.7	33.2	2.9	2.2	3.0
Other	2.9	51.4	17.6	1.4	0.4	1.2
Cumulative undergraduate GPA						
Less than 2.75	1.9	43.1	26.4	1.3	1.1	1.2
2.75–3.24	3.8	46.5	24.4	2.5	1.1	1.7
3.25–3.74	2.3	47.5	25.1	2.7	4.5	0.5
3.75 or higher	8.5	40.4	22.2	1.9	3.7	1.8

**Table C4a—Of pipeline entrants who had not applied for a teaching position by 1997, percentage who gave various reasons for not applying in 1994 or 1997, by selected characteristics—Continued**

	Already had teaching job	Not interested in teaching	Needed more education	Had course- work but not ready to apply	Jobs hard to get	Student teaching was discouraging
Undergraduate GPA in major						
Less than 2.75	0.6	52.1	25.0	0.6	0	1.1
2.75–3.24	3.2	42.3	28.0	2.5	1.6	0.8
3.25–3.74	3.8	43.5	22.6	2.7	2.9	0.9
3.75 or higher	4.0	48.6	23.2	1.4	3.6	1.3
Degree-granting institution (undergraduate)						
Public						
Nondoctorate-granting	6.0	48.8	25.7	1.9	1.9	0.8
Doctorate-granting	2.7	45.3	24.6	1.5	2.4	1.5
Private, not-for-profit						
Nondoctorate-granting	2.9	36.1	27.2	2.4	3.7	0.5
Doctorate-granting	0.9	50.3	20.6	3.2	0.9	2.5
Other	—	—	—	—	—	—
Highest degree attained						
Bachelor's degree	3.2	45.3	24.9	2.0	2.0	1.1
Master's degree or higher	4.8	45.9	26.5	2.4	4.8	2.2
Highest degree expected in 1997						
Bachelor's degree	1.4	50.6	26.3	1.4	3.6	1.8
Master's degree	3.0	43.3	26.8	1.9	1.2	0.6
First-professional degree	2.5	52.3	13.7	2.3	1.2	3.6
Doctoral degree	6.5	43.1	21.1	3.3	2.9	1.9

—Sample size too small for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C4b—Of pipeline entrants who had not applied for a teaching position by 1997, percentage who gave various reasons for not applying in 1994 or 1997, by selected characteristics**

	More money in other job offered	More prestige in other job offered	Wanted other occupation	Low pay	Poor teaching conditions	Haven't taken or couldn't pass the test or not yet certified	Other
Total	9.5	2.3	19.6	7.0	2.0	29.8	33.6
Gender							
Male	11.8	2.4	19.2	8.1	2.2	27.1	35.5
Female	7.7	2.2	19.9	6.3	1.9	31.8	32.2
Race/ethnicity							
Black, non-Hispanic	10.9	0	16.0	8.0	0.7	24.0	29.1
Hispanic	7.7	0.5	14.4	7.9	3.6	29.4	37.6
White, non-Hispanic	9.3	2.6	20.0	6.9	2.2	30.4	33.7
Other, non-Hispanic	11.6	3.3	24.9	6.5	0	29.9	36.0
American Indian/Alaska Native	—	—	—	—	—	—	—
Asian/Pacific Islander	13.3	3.9	30.7	2.5	0	32.5	38.9
Other	—	—	—	—	—	—	—
Age as of 12/31/96							
26 or younger	9.6	2.7	19.9	7.5	1.5	30.5	33.2
27–28	7.3	1.3	22.6	4.0	3.4	22.4	37.7
29 or older	9.3	1.0	18.0	5.9	3.7	28.5	34.3
College entrance exam (CEE) scores							
Available	9.6	2.2	20.2	7.7	2.2	28.4	32.9
Bottom quartile	10.5	3.0	19.5	3.9	0.9	28.2	30.4
Middle half	10.8	1.8	20.2	10.0	1.6	30.8	33.0
Top quartile	5.8	2.2	21.1	6.9	4.9	23.3	35.6
Unavailable	9.0	2.7	17.4	4.6	1.4	35.1	36.3
Baccalaureate degree major							
Business/management	14.6	0.8	18.0	8.7	1.9	40.6	26.5
Education	7.3	4.4	25.8	4.3	2.3	29.1	45.3
Humanities	1.7	0.5	14.8	6.4	1.7	31.6	35.8
Math/computer/natural sciences	9.2	3.2	21.1	9.3	3.6	26.2	36.5
Social sciences	9.4	2.0	20.7	6.2	1.4	24.2	29.9
Other	10.5	3.5	17.6	5.4	1.4	26.7	35.4
Cumulative undergraduate GPA							
Less than 2.75	8.0	1.9	19.6	7.0	1.9	34.8	32.0
2.75–3.24	9.9	3.6	16.5	6.7	3.0	28.7	35.9
3.25–3.74	11.2	2.0	24.3	7.4	1.0	28.1	35.7
3.75 or higher	6.2	0.8	20.2	8.9	2.1	24.2	30.9

**Table C4b—Of pipeline entrants who had not applied for a teaching position by 1997, percentage who gave various reasons for not applying in 1994 or 1997, by selected characteristics—Continued**

	More money in other job offered	More prestige in other job offered	Wanted other occupation	Low pay	Poor teaching conditions	Haven't taken or couldn't pass the test or not yet certified	Other
<b>Undergraduate GPA in major</b>							
Less than 2.75	9.2	2.4	13.9	5.2	1.2	35.9	31.7
2.75–3.24	9.1	1.9	21.0	7.8	2.2	29.8	33.5
3.25–3.74	13.0	3.2	20.5	6.2	0.9	31.1	33.8
3.75 or higher	7.6	1.3	19.9	8.5	2.4	26.2	33.0
<b>Degree-granting institution (undergraduate)</b>							
<b>Public</b>							
Nondoctorate-granting	7.1	4.5	14.7	4.7	1.0	38.7	33.9
Doctorate-granting	10.9	1.9	20.6	9.2	2.4	26.0	33.9
<b>Private, not-for-profit</b>							
Nondoctorate-granting	12.0	1.3	19.9	7.3	2.7	32.1	31.0
Doctorate-granting	5.7	1.1	25.8	5.6	2.0	22.7	38.5
Other	—	—	—	—	—	—	—
<b>Highest degree attained</b>							
Bachelor's degree	9.7	2.3	19.0	6.6	2.1	31.1	33.9
Master's degree or higher	8.1	1.9	24.8	10.5	1.7	20.1	31.5
<b>Highest degree expected in 1997</b>							
Bachelor's degree	10.3	1.7	19.2	8.9	1.0	31.5	31.6
Master's degree	9.4	1.7	19.8	5.9	2.1	31.6	35.1
First-professional degree	3.6	2.6	25.9	8.7	3.9	15.3	37.4
Doctoral degree	8.7	3.5	19.2	8.5	2.5	31.3	29.9

—Sample size too small for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C5—Of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree, percentage who had taught by April 1997 and percentage distribution according to year first taught, by selected characteristics**

	Ever taught	Percentage distribution according to year first taught				
		Before July 1993	July 1993– June 1994	July 1994– June 1995	July 1995– June 1996	July 1996– April 1997
Total	12.7	16.9	39.1	23.1	11.3	9.5
Gender						
Male	7.5	15.8	39.6	21.3	12.2	11.1
Female	17.2	17.3	38.9	23.8	11.0	9.0
Race/ethnicity						
Black, non-Hispanic	11.3	5.6	37.6	38.9	10.6	7.3
Hispanic	16.1	26.1	35.4	26.9	4.6	7.0
White, non-Hispanic	13.1	17.2	39.3	21.8	11.7	10.1
Other, non-Hispanic <sup>1</sup>	5.0	—	—	—	—	—
Age as of 12/31/96						
26 or younger	12.9	17.6	39.6	22.2	10.7	9.9
27–28	11.8	14.7	42.8	28.4	9.4	4.7
29 or older	12.0	14.2	35.7	26.3	14.8	9.0
College entrance exam (CEE) scores						
Available	12.9	15.8	16.8	39.8	22.5	11.1
Bottom quartile	14.5	22.5	41.3	21.2	6.0	9.0
Middle half	13.7	15.3	38.0	23.4	12.3	11.1
Top quartile	9.8	14.0	43.3	21.6	14.3	6.8
Unavailable	11.6	16.5	17.4	35.5	26.2	12.6
Baccalaureate degree major						
Business/management	2.3	—	—	—	—	—
Education	58.0	20.0	41.8	22.5	10.7	5.1
Humanities	15.6	14.2	36.8	23.3	9.8	15.9
Math/computer/natural sciences	8.6	15.3	38.0	17.9	12.0	16.8
Social sciences	8.1	9.6	21.6	39.0	18.7	11.1
Other	3.1	16.7	35.6	19.1	6.3	22.3
Cumulative undergraduate GPA						
Less than 2.75	7.7	17.3	36.7	18.8	12.8	14.4
2.75–3.24	13.9	18.9	38.7	22.7	11.4	8.4
3.25–3.74	14.7	16.6	38.3	23.9	12.7	8.5
3.75 or higher	16.1	14.0	39.1	28.5	8.5	10.0
Undergraduate GPA in major						
Less than 2.75	6.8	10.4	30.5	41.5	5.5	12.3
2.75–3.24	11.0	19.2	38.7	19.4	10.6	12.0
3.25–3.74	14.4	16.1	38.3	22.9	15.2	7.5
3.75 or higher	16.2	15.8	39.8	26.8	8.8	8.8



**Table C5—Of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree, percentage who had taught by April 1997 and percentage distribution according to year first taught, by selected characteristics—Continued**

	Ever taught	Percentage distribution according to year first taught				
		Before July 1993	July 1993– June 1994	July 1994– June 1995	July 1995– June 1996	July 1996– April 1997
Degree-granting institution (undergraduate)						
Public						
Nondoctorate-granting	16.9	13.9	34.8	28.6	11.8	10.9
Doctorate-granting	11.9	21.2	41.3	18.8	7.8	10.8
Private, not-for-profit						
Nondoctorate-granting	11.6	14.5	39.3	26.3	13.1	6.9
Doctorate-granting	10.2	14.1	43.2	17.8	20.3	4.6
Other	1.1	—	—	—	—	—
Highest degree attained						
Bachelor’s degree	12.1	17.7	40.9	23.2	9.2	9.0
Master’s degree or higher	16.4	12.9	28.5	21.4	24.2	13.0
Highest degree expected in 1997						
Bachelor’s degree	4.9	21.2	40.9	18.7	11.3	8.0
Master’s degree	15.9	17.6	39.7	23.0	10.3	9.5
First-professional degree	6.0	—	—	—	—	—
Doctoral degree	18.9	14.6	35.7	24.4	12.6	12.7
Certified to teach <sup>2</sup>						
Certified	80.4	17.4	38.5	23.6	12.0	8.5
Not certified	3.3	15.4	41.9	19.3	8.4	15.0

—Sample size too small for a reliable estimate.

<sup>1</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>2</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C6—Of pipeline-eligible 1992–93 graduates who had not already begun teaching, percentage who began teaching each year following degree receipt through April 1997, by selected characteristics**

	Of those who had not taught before July 1992, percent who began before July 1993	Of those who had not taught before July 1993, percent who began before July 1994	Of those who had not taught before July 1994, percent who began before July 1995	Of those who had not taught before July 1995, percent who began before July 1996	Of those who had not taught before July 1996, percent who began before April 1997
Total	1.9	4.4	2.7	1.4	1.2
Gender					
Male	1.0	2.5	1.4	0.8	0.8
Female	2.6	6.0	3.9	1.9	1.5
Race/ethnicity					
Black, non-Hispanic	0.6	3.7	4.0	1.1	0.8
Hispanic	3.4	4.7	3.8	0.7	1.0
White, non-Hispanic	2.0	4.6	2.7	1.5	1.3
Other, non-Hispanic	0.3	1.6	1.2	0.7	0
American Indian/Alaska Native	0	6.5	0	1.9	0
Asian/Pacific Islander	0.2	0.8	1.3	0.3	0
Other	2.0	4.2	1.5	3.3	0
Age as of 12/31/96					
26 or younger	2.0	4.5	2.7	1.3	1.2
27–28	1.4	4.1	2.8	1.0	0.5
29 or older	1.4	3.6	2.8	1.6	1.0
College entrance exam (CEE) scores					
Available	1.9	4.6	2.8	1.4	1.3
Bottom quartile	2.8	5.2	2.8	0.8	1.2
Middle half	1.9	4.8	3.1	1.7	1.5
Top quartile	1.2	3.9	2.0	1.4	0.7
Unavailable	1.6	3.2	2.5	1.2	0.8
Baccalaureate degree major					
Business/management	0.1	1.0	0.4	0.2	0.2
Education	10.6	24.7	17.7	10.3	5.4
Humanities	1.9	5.1	3.4	1.5	2.4
Math/computer/natural sciences	1.1	2.9	1.4	0.9	1.3
Social sciences	0.6	1.5	2.7	1.3	0.8
Other	0.5	1.1	0.6	0.2	0.7
Cumulative undergraduate GPA					
Less than 2.75	1.1	2.3	1.2	0.8	0.9
2.75–3.24	2.3	4.8	3.0	1.5	1.2
3.25–3.74	2.2	5.2	3.4	1.9	1.3
3.75 or higher	2.0	5.6	4.3	1.3	1.6

**Table C6—Of pipeline-eligible 1992–93 graduates who had not already begun teaching, percentage who began teaching each year following degree receipt through April 1997, by selected characteristics  
—Continued**

	Of those who had not taught before July 1992, percent who began before July 1993	Of those who had not taught before July 1993, percent who began before July 1994	Of those who had not taught before July 1994, percent who began before July 1995	Of those who had not taught before July 1995, percent who began before July 1996	Of those who had not taught before July 1996, percent who began before April 1997
Undergraduate GPA in major					
Less than 2.75	0.6	1.7	2.4	0.3	0.7
2.75–3.24	1.8	3.7	1.9	1.1	1.2
3.25–3.74	2.1	5.1	3.2	2.2	1.1
3.75 or higher	2.2	5.6	4.0	1.4	1.4
Degree-granting institution (undergraduate)					
Public					
Nondoctorate-granting	2.1	5.3	4.6	2.0	1.9
Doctorate-granting	2.2	4.3	2.1	0.9	1.2
Private, not-for-profit					
Nondoctorate-granting	1.4	3.7	2.6	1.3	0.7
Doctorate-granting	1.3	3.9	1.7	1.9	0.5
Other	0	1.0	0	0	0
Highest degree attained					
Bachelor's degree	1.9	4.4	2.6	1.1	1.1
Master's degree or higher	1.8	3.9	3.1	3.6	2.0
Highest degree expected in 1997					
Bachelor's degree	0.8	1.6	0.7	0.5	0.3
Master's degree	2.5	5.7	3.5	1.6	1.5
First-professional degree	0.3	1.4	2.0	0.6	0.2
Doctoral degree	2.4	6.1	4.4	2.4	2.5
Certified to teach*					
Certified	16.3	42.9	46.2	43.7	55.0
Not certified	11.5	35.3	25.1	14.6	30.4

\*Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C7—Of 1992–93 bachelor’s degree recipients who had first taught between receiving the bachelor’s degree and 1997, percentage who had completed student teaching, were certified, and had participated in teaching induction program, by selected characteristics**

	Had student teaching	Were certified <sup>1</sup>	Participated in teacher induction program
Total	58.1	77.0	45.8
Gender			
Male	43.4	67.8	44.0
Female	63.7	80.4	46.5
Race/ethnicity			
Black, non-Hispanic	29.3	68.2	42.1
Hispanic	50.6	71.4	44.4
White, non-Hispanic	60.4	78.3	46.1
Other, non-Hispanic <sup>2</sup>	—	59.0	—
Age as of 12/31/96			
26 or younger	56.2	75.5	45.3
27–28	64.1	81.7	35.0
29 or older	65.7	83.2	50.5
College entrance exam (CEE) scores			
Available	57.1	77.1	46.1
Bottom quartile	63.8	80.8	42.7
Middle half	59.7	81.1	47.7
Top quartile	39.8	59.5	45.9
Unavailable	62.4	76.2	44.5
Baccalaureate degree major			
Business/management	3.9	55.8	36.9
Education	84.6	91.9	46.7
Humanities	34.1	64.9	45.1
Math/computer/natural sciences	34.9	63.7	49.8
Social sciences	21.6	55.5	43.6
Other	14.9	43.7	39.7
Cumulative undergraduate GPA			
Less than 2.75	40.4	66.3	44.6
2.75–3.24	60.8	79.7	47.3
3.25–3.74	62.0	79.1	44.9
3.75 or higher	64.7	81.7	46.4
Undergraduate GPA in major			
Less than 2.75	30.5	64.7	42.8
2.75–3.24	53.2	77.4	45.5
3.25–3.74	59.3	77.5	44.2
3.75 or higher	68.8	80.9	47.8
Degree-granting institution (undergraduate)			
Public			
Nondoctorate-granting	66.6	85.4	47.9
Doctorate-granting	55.6	76.7	46.6
Private, not-for-profit			
Nondoctorate-granting	55.8	71.6	42.1
Doctorate-granting	45.4	60.6	42.2
Other	—	—	—

**Table C7—Of 1992–93 bachelor’s degree recipients who had first taught between receiving the bachelor’s degree and 1997, percentage who had completed student teaching, were certified, and had participated in teaching induction program, by selected characteristics—Continued**

	Had student teaching	Were certified <sup>1</sup>	Participated in teacher induction program
Highest degree attained			
Bachelor’s degree	61.2	77.3	45.6
Master’s degree or higher	41.2	75.4	47.0
Highest degree expected in 1997			
Bachelor’s degree	66.7	70.2	35.3
Master’s degree	62.3	80.8	49.0
First-professional degree	17.7	57.8	54.9
Doctoral degree	43.8	69.1	42.0
Sector of schools at which taught by 1997			
Public always	63.4	87.5	49.3
Private always	50.9	54.0	45.7
Both	74.2	91.6	31.8
Level of schools at which taught by 1997 <sup>3</sup>			
Elementary only	68.5	86.6	53.6
Secondary only	53.1	78.8	43.6
Combined only	53.4	59.7	33.5
Multiple	68.6	97.8	37.1
Locale of school, most recent job as of 1997			
Central city	57.2	78.5	51.0
Urban fringe/large town	67.0	89.6	52.0
Small town, rural	66.9	85.6	41.5
Percent minority enrollment, most recent job as of 1997			
0–4	72.7	87.1	48.1
5–19	71.2	92.3	45.7
20–49	61.4	88.6	49.2
50 or more	53.8	83.3	49.3
Percent free/reduced-price lunch recipients, most recent job as of 1997			
0–4	70.1	86.9	52.8
5–19	66.7	93.0	50.6
20–49	70.7	88.7	49.5
50 or more	60.1	84.9	51.5

—Sample size too small for a reliable estimate.

<sup>1</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>2</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>3</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C8—Of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree, percentage distributions according to the sector and level of the schools in which they taught by 1997, by selected characteristics**

	Sector of school			Level of school <sup>1</sup>			
	Public only	Private only	Both	Elementary only	Secondary only	Combined only	Multiple levels
Total	83.2	13.1	3.8	52.3	30.7	4.5	12.4
Gender							
Male	84.9	12.6	2.5	28.7	49.6	3.2	18.5
Female	82.5	13.3	4.3	61.5	23.4	5.1	10.0
Race/ethnicity							
Black, non-Hispanic	94.7	2.4	3.0	60.3	38.3	0	1.5
Hispanic	84.8	13.9	1.3	62.8	29.1	1.6	6.6
White, non-Hispanic	82.2	13.9	3.9	51.2	30.5	5.2	13.1
Other, non-Hispanic <sup>2</sup>	—	—	—	—	—	—	—
Age as of 12/31/96							
26 or younger	80.9	14.9	4.2	50.2	32.2	5.0	12.7
27–28	92.2	5.6	2.2	57.1	22.8	2.6	17.5
29 or older	91.7	6.1	2.2	61.2	26.0	2.9	10.0
College entrance exam (CEE) scores							
Available	81.5	14.4	4.0	51.2	31.4	4.9	12.5
Bottom quartile	84.6	10.4	4.9	57.9	28.2	3.8	10.2
Middle half	84.0	12.5	3.4	51.5	29.0	5.5	14.0
Top quartile	69.4	25.9	4.7	40.3	44.0	4.6	11.1
Unavailable	90.3	7.1	2.6	57.6	27.8	2.9	11.7
Baccalaureate degree major							
Business/management	—	—	—	—	—	—	—
Education	84.7	10.9	4.5	64.1	19.7	3.7	12.4
Humanities	79.5	18.4	2.2	43.3	39.4	6.5	10.8
Math/computer/natural sciences	78.8	17.8	3.4	31.9	51.7	5.5	11.0
Social sciences	73.8	24.7	1.6	31.3	52.5	7.9	8.4
Other	91.4	6.9	2.6	42.6	37.0	2.8	17.7
Cumulative undergraduate GPA							
Less than 2.75	87.9	9.4	2.7	45.6	41.5	4.7	8.2
2.75–3.24	82.2	13.5	4.3	55.2	27.6	3.7	13.5
3.25–3.74	86.2	9.6	4.2	53.1	29.5	4.5	12.8
3.75 or higher	79.9	16.8	3.4	52.8	28.4	5.6	13.2
Undergraduate GPA in major							
Less than 2.75	81.2	8.6	10.2	50.7	37.1	4.9	7.3
2.75–3.24	86.1	11.6	2.3	48.1	36.2	3.9	11.9
3.25–3.74	87.4	8.5	4.1	53.7	30.8	4.1	11.4
3.75 or higher	79.7	16.1	4.2	55.6	23.6	5.2	15.6
Degree-granting institution (undergraduate)							
Public							
Nondoctorate-granting	89.8	6.9	3.3	56.8	28.7	4.1	10.3
Doctorate-granting	85.8	11.7	2.5	50.1	34.3	1.9	13.7
Private, not-for-profit							
Nondoctorate-granting	74.5	20.8	4.7	53.9	27.4	9.5	9.2
Doctorate-granting	62.5	27.9	9.6	43.3	27.5	9.1	20.1
Other	—	—	—	—	—	—	—

**Table C8—Of 1992–93 bachelor’s degree recipients who had taught since receiving the bachelor’s degree, percentage distributions according to the sector and level of the schools in which they taught by 1997, by selected characteristics—Continued**

	Sector of school			Level of school <sup>1</sup>			
	Public only	Private only	Both	Elementary only	Secondary only	Combined only	Multiple levels
Highest degree attained							
Bachelor’s degree	83.6	13.3	3.1	54.0	28.7	4.8	12.6
Master’s degree or higher	81.3	10.7	8.0	43.0	43.2	2.3	11.5
Highest degree expected in 1997							
Bachelor’s degree	83.7	12.9	3.4	59.8	27.1	8.4	4.7
Master’s degree	84.7	11.5	3.9	53.6	29.1	4.1	13.2
First-professional degree	—	—	—	—	—	—	—
Doctoral degree	80.2	16.5	3.3	41.9	38.2	3.7	16.2
Had student teaching credit							
Yes	84.9	10.6	4.6	56.7	26.1	3.8	13.4
No	80.6	16.8	2.6	44.5	39.3	5.7	10.5
Certified to teach <sup>3</sup>							
Certified	88.5	8.0	3.5	53.8	28.7	3.2	14.4
Not certified	61.6	36.5	1.9	44.8	41.8	11.6	1.8
Participated in teacher induction program							
Participated	85.3	12.2	2.5	58.9	28.3	3.1	9.8
Did not participate	81.5	13.5	5.0	46.2	33.2	5.5	15.1
Years of teaching experience							
1 or less	84.7	14.4	1.0	44.2	47.7	4.6	3.6
2	71.1	23.9	5.0	43.7	35.3	9.3	11.6
3	84.6	10.3	5.1	52.8	24.6	2.6	20.0
More than 3	86.3	9.3	4.4	57.9	24.4	3.4	14.3
Expects to be teaching in long term							
Yes	87.8	8.3	4.0	51.9	32.5	3.1	12.5
No	79.7	16.9	3.4	51.5	30.4	5.5	12.6

—Sample size too small for a reliable estimate.

<sup>1</sup>Elementary schools have at least one grade lower than 7th and no grade higher than 8th. Secondary schools have no grade lower than 7th and some students in any of grades 7–12. Combined schools have grades below 7th and above 8th. See glossary for further details.

<sup>2</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>3</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C9—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage distributions according to minority enrollment and percentage of students who received free or reduced-price lunch in the school where they taught during the most recent spring semester, by selected characteristics**

	Percent minority enrollment				Percent free or reduced-price lunch recipients <sup>1</sup>			
	0–4	5–19	20–49	50 or more	0–4	5–19	20–49	50 or more
Total	18.4	26.9	22.3	32.4	5.2	32.2	36.6	26.0
Gender								
Male	24.2	29.4	19.6	26.9	6.8	41.2	33.8	18.2
Female	16.0	25.9	23.4	34.7	4.6	29.0	37.6	28.7
Race/ethnicity								
Black, non-Hispanic	1.7	6.3	24.6	67.4	2.5	25.6	21.6	50.3
Hispanic	1.7	10.7	8.5	79.2	2.0	8.3	26.8	62.8
White, non-Hispanic	21.0	29.5	22.7	26.8	5.8	34.6	38.3	21.3
Other, non-Hispanic <sup>2</sup>	—	—	—	—	—	—	—	—
Age as of 12/31/96								
26 or younger	20.3	27.6	21.9	30.2	5.7	35.8	35.6	22.9
27–28	19.9	18.6	19.6	42.0	—	—	—	—
29 or older	10.3	25.5	24.2	40.0	3.0	18.9	41.4	36.7
College entrance exam (CEE) scores								
Available	18.8	24.8	24.3	32.1	5.7	34.2	36.1	24.1
Bottom quartile	17.5	21.2	27.5	33.8	2.0	36.0	30.8	31.3
Middle half	18.9	25.1	22.2	33.9	6.5	32.2	37.6	23.7
Top quartile	20.7	29.6	27.2	22.5	10.2	38.9	40.5	10.4
Unavailable	16.8	35.4	14.1	33.7	3.1	24.6	38.8	33.6
Baccalaureate degree major								
Business/management	—	—	—	—	—	—	—	—
Education	21.1	29.4	21.7	27.9	4.8	31.0	38.3	25.9
Humanities	8.5	25.9	24.8	40.8	8.5	31.8	24.8	35.0
Math/computer/natural sciences	19.3	22.9	23.5	34.3	0.6	41.9	34.2	23.4
Social sciences	14.4	35.0	10.7	39.9	9.5	34.2	27.9	28.5
Other	26.6	17.0	33.1	23.3	—	—	—	—
Cumulative undergraduate GPA								
Less than 2.75	20.8	14.0	21.8	43.4	2.1	25.4	37.5	35.0
2.75–3.24	15.1	31.5	20.5	33.0	6.4	33.8	32.2	27.6
3.25–3.74	19.5	25.9	24.8	29.8	5.2	34.5	38.3	22.1
3.75 or higher	19.4	33.2	22.1	25.3	6.1	28.6	42.5	22.8
Undergraduate GPA in major								
Less than 2.75	—	—	—	—	—	—	—	—
2.75–3.24	14.2	28.2	22.8	34.8	6.1	33.8	33.7	26.4
3.25–3.74	20.6	24.8	25.4	29.2	3.8	35.2	37.4	23.7
3.75 or higher	23.3	29.5	19.8	27.4	6.5	29.3	41.5	22.8



**Table C9—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage distributions according to minority enrollment and percentage of students who received free or reduced-price lunch in the school where they taught during the most recent spring semester, by selected characteristics—Continued**

	Percent minority enrollment				Percent free or reduced-price lunch recipients <sup>1</sup>			
	0–4	5–19	20–49	50 or more	0–4	5–19	20–49	50 or more
Degree-granting institution (undergraduate)								
Public								
Nondoctorate-granting	17.1	26.4	19.3	37.2	3.3	29.2	36.6	30.9
Doctorate-granting	14.3	27.1	27.7	31.0	6.6	35.2	33.5	24.7
Private, not-for-profit								
Nondoctorate-granting	32.4	30.7	13.5	23.4	5.5	30.9	43.5	20.1
Doctorate-granting	20.4	22.2	21.4	36.0	5.9	32.6	41.4	20.1
Other	—	—	—	—	—	—	—	—
Highest degree attained								
Bachelor’s degree	17.4	27.0	22.2	33.5	4.9	32.7	35.8	26.6
Master’s degree or higher	24.3	26.0	23.4	26.3	6.5	29.4	44.0	20.1
Highest degree expected in 1997								
Bachelor’s degree	17.0	31.6	23.7	27.8	6.3	32.6	33.2	27.9
Master’s degree	19.5	25.0	22.4	33.0	4.8	32.7	37.4	25.1
First-professional degree	—	—	—	—	—	—	—	—
Doctoral degree	16.8	29.4	24.2	29.6	6.5	32.4	37.5	23.7
Had student teaching credit								
Yes	20.8	30.1	21.6	27.6	5.5	32.2	38.8	23.5
No	13.7	21.2	23.7	41.4	4.7	32.0	32.1	31.2
Certified to teach <sup>3</sup>								
Certified	18.3	28.4	22.5	30.8	5.1	33.7	36.5	24.8
Not certified	19.1	16.8	20.4	43.7	6.2	20.5	37.6	35.7
Participated in teacher induction program								
Participated	18.4	25.9	22.9	32.9	5.4	32.5	36.1	26.0
Did not participate	18.4	28.5	21.8	31.3	4.9	32.3	37.7	25.1
Years of teaching experience								
1 or less	15.3	31.0	18.8	34.9	5.8	42.0	30.0	22.3
2	15.5	32.5	24.5	27.5	7.9	28.2	31.0	32.9
3	18.7	23.3	14.9	43.1	3.1	32.5	34.3	30.1
More than 3	20.1	25.3	26.0	28.6	4.0	33.9	38.7	23.4
Expects to be teaching in long term								
Yes	20.8	29.9	19.5	29.9	5.2	36.0	33.5	25.2
No	16.9	24.7	24.0	34.4	5.1	29.4	39.3	26.3
Sector of schools at which taught by 1997								
Public always	17.3	28.3	21.6	32.7	4.9	32.5	35.3	27.2
Private always	—	—	—	—	—	—	—	—
Both	—	—	—	—	—	—	—	—

**Table C9—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage distributions according to minority enrollment and percentage of students who received free or reduced-price lunch in the school where they taught during the most recent spring semester, by selected characteristics—Continued**

	Percent minority enrollment				Percent free or reduced-price lunch recipients <sup>1</sup>			
	0–4	5–19	20–49	50 or more	0–4	5–19	20–49	50 or more
Level of schools at which taught by 1997 <sup>4</sup>								
Elementary only	16.3	23.5	23.3	36.9	4.3	23.0	35.8	37.0
Secondary only	14.8	34.9	21.2	29.1	7.2	51.5	30.6	10.7
Combined only	—	—	—	—	—	—	—	—
Multiple	20.8	35.2	16.8	27.2	1.6	35.6	41.4	21.4
Locale of school, most recent job as of 1997								
Central city	5.0	14.6	19.9	60.5	1.4	20.7	28.9	49.0
Urban fringe/large town	8.8	42.5	23.7	25.0	10.1	46.6	31.5	11.8
Small town, rural	36.0	25.7	23.1	15.2	4.3	30.7	46.8	18.2
Percent minority enrollment, most recent job as of 1997								
0–4	100.0	0	0	0	11.0	54.8	33.2	1.0
5–19	0	100.0	0	0	10.7	52.2	35.6	1.5
20–49	0	0	100.0	0	2.6	27.2	52.8	17.4
50 or more	0	0	0	100.0	0	11.1	26.0	62.9
Percent free/reduced-price lunch recipients, most recent job as of 1997								
0–4	—	—	—	—	100.0	0	0	0
5–19	24.8	42.2	20.2	12.9	0	100.0	0	0
20–49	13.3	25.5	34.7	26.6	0	0	100.0	0
50 or more	0.5	1.4	14.7	83.4	0	0	0	100.0
Year first began teaching after receiving BA								
Began teaching 7/92–6/93	17.6	25.0	26.4	31.0	6.3	32.5	37.7	23.6
Began teaching 7/93–6/94	22.3	22.1	24.7	31.0	3.3	35.7	35.4	25.5
Began teaching 7/94–6/95	15.1	25.9	15.8	43.2	3.6	27.7	35.2	33.5
Began teaching 7/95–6/96	15.4	41.4	24.0	19.2	7.8	38.5	34.3	19.4
Began teaching 7/96–4/97	16.0	28.0	20.3	35.8	6.0	38.4	30.9	24.8

—Sample size too small for a reliable estimate.

<sup>1</sup>Computed for public schools only.

<sup>2</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>3</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>4</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C10—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage distribution according to community type of the school where they taught during the most recent spring semester, by selected characteristics**

	Central city	Urban fringe/large town	Small town/rural
Total	33.3	28.4	38.3
Gender			
Male	25.1	25.1	49.9
Female	36.5	29.7	33.8
Race/ethnicity			
Black, non-Hispanic	57.5	21.0	21.5
Hispanic	61.2	24.8	14.0
White, non-Hispanic	30.2	28.7	41.1
Other, non-Hispanic <sup>1</sup>	—	—	—
Age as of 12/31/96			
26 or younger	32.8	30.2	37.0
27–28	26.2	28.5	45.4
29 or older	36.8	19.9	43.3
College entrance exam (CEE) scores			
Available	32.6	28.7	38.7
Bottom quartile	34.0	24.9	41.1
Middle half	30.5	31.1	38.4
Top quartile	37.3	26.6	36.1
Unavailable	36.6	26.7	36.7
Baccalaureate degree major			
Business/management	—	—	—
Education	30.0	30.2	39.8
Humanities	46.8	31.9	21.3
Math/computer/natural sciences	34.9	20.4	44.7
Social sciences	29.1	24.7	46.2
Other	41.6	25.4	33.1
Cumulative undergraduate GPA			
Less than 2.75	44.7	19.3	36.0
2.75–3.24	32.5	31.7	35.8
3.25–3.74	31.7	29.6	38.8
3.75 or higher	27.1	26.6	46.3
Undergraduate GPA in major			
Less than 2.75	53.5	13.3	33.3
2.75–3.24	34.0	29.9	36.1
3.25–3.74	27.8	32.3	39.9
3.75 or higher	35.6	24.3	40.2

**Table C10—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage distribution according to community type of the school where they taught during the most recent spring semester, by selected characteristics—Continued**

	Central city	Urban fringe/large town	Small town/rural
Degree-granting institution (undergraduate)			
Public			
Nondoctorate-granting	32.9	19.1	48.1
Doctorate-granting	32.4	36.4	31.2
Private, not-for-profit			
Nondoctorate-granting	28.5	30.2	41.4
Doctorate-granting	48.2	23.8	28.0
Other	—	—	—
Highest degree attained			
Bachelor’s degree	32.7	28.5	38.8
Master’s degree or higher	36.3	27.5	36.2
Highest degree expected in 1997			
Bachelor’s degree	26.4	29.4	44.1
Master’s degree	34.2	27.6	38.2
First-professional degree	—	—	—
Doctoral degree	31.6	33.5	34.9
Had student teaching credit			
Yes	29.9	29.9	40.3
No	39.3	25.8	34.9
Certified to teach <sup>2</sup>			
Certified	30.8	30.2	39.0
Not certified	46.2	18.9	34.9
Participated in teacher induction program			
Participated	35.4	31.2	33.5
Did not participate	30.9	26.2	42.9
Years of teaching experience			
1 or less	35.3	24.1	40.7
2	33.2	32.5	34.3
3	39.2	29.5	31.3
More than 3	28.7	30.3	41.0
Expects to be teaching in long term			
Yes	28.6	33.7	37.7
No	36.4	24.7	39.0
Sector of schools at which taught by 1997			
Public always	31.2	27.6	41.2
Private always	51.1	28.3	20.7
Both	35.2	38.9	26.0

**Table C10—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage distribution according to community type of the school where they taught during the most recent spring semester, by selected characteristics—Continued**

	Central city	Urban fringe/large town	Small town/rural
Level of schools at which taught by 1997 <sup>3</sup>			
Elementary only	37.9	29.5	32.6
Secondary only	28.0	27.9	44.2
Combined only	37.2	19.0	43.8
Multiple	26.8	28.2	45.1
Percent minority enrollment, most recent job as of 1997			
0–4	8.7	13.6	77.8
5–19	17.2	44.8	38.0
20–49	28.5	30.3	41.3
50 or more	59.4	21.9	18.7
Percent free/reduced-price lunch recipients, most recent job as of 1997			
0–4	9.0	54.8	36.2
5–19	20.9	39.0	40.1
20–49	25.0	22.6	52.4
50 or more	59.4	11.9	28.6
Year first began teaching after receiving BA			
Began teaching 7/92–6/93	34.0	24.8	41.2
Began teaching 7/93–6/94	29.1	31.6	39.3
Began teaching 7/94–6/95	41.8	27.8	30.4
Began teaching 7/95–6/96	24.6	35.5	39.9
Began teaching 7/96–4/97	41.2	23.8	35.0

—Sample size too small for a reliable estimate.

<sup>1</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>2</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>3</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C11—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage distribution according to the main field taught in current or most recent teaching job, by selected characteristics**

	Main field taught in most recent job as of 1997								
	General elemen- tary	Business and vocational	Science and mathe- matics	Foreign languages	Special education	English	Social sciences	Fine arts	Other
Total	34.2	4.5	23.6	3.6	8.0	10.8	5.2	3.8	6.4
Gender									
Male	11.4	7.3	35.8	3.0	4.1	11.4	9.3	4.7	13.0
Female	42.7	3.5	19.1	3.9	9.4	10.6	3.6	3.4	3.9
Race/ethnicity									
Black, non-Hispanic	35.3	4.7	12.5	12.6	14.1	7.5	2.9	2.9	7.4
Hispanic	40.9	2.0	24.2	4.6	8.5	12.1	4.5	0.8	2.3
White, non-Hispanic	33.2	4.7	24.3	3.1	7.7	10.9	5.3	4.1	6.7
Other, non-Hispanic <sup>1</sup>	—	—	—	—	—	—	—	—	—
Age as of 12/31/96									
26 or younger	32.6	3.3	24.8	4.1	8.3	11.6	5.7	4.0	5.7
27–28	35.2	2.7	31.9	0	1.7	11.3	3.6	0	13.7
29 or older	41.3	10.5	16.7	2.2	8.1	6.9	2.8	3.4	8.1
College entrance exam (CEE) scores									
Available	32.4	3.6	23.9	3.9	8.6	11.8	5.7	3.7	6.5
Bottom quartile	44.3	3.2	15.6	4.5	9.1	6.0	5.7	3.1	8.5
Middle half	32.2	4.1	26.0	3.1	8.6	10.8	5.4	4.1	5.8
Top quartile	15.0	2.8	29.3	5.7	7.8	23.9	6.9	3.1	5.5
Unavailable	43.0	8.8	22.3	2.2	5.2	5.8	2.3	4.4	6.0
Baccalaureate degree major									
Business/management	—	—	—	—	—	—	—	—	—
Education	42.7	4.0	17.8	2.5	9.3	10.2	3.3	3.3	6.9
Humanities	25.6	1.4	9.5	12.6	1.7	19.1	9.9	15.4	4.9
Math/computer/natural sciences	15.4	8.2	67.8	0.1	2.0	3.1	0.7	0	2.8
Social sciences	23.5	3.3	15.0	2.1	10.6	18.8	19.4	0.2	7.1
Other	26.6	4.9	16.0	0	19.8	6.2	7.4	0	19.2
Cumulative undergraduate GPA									
Less than 2.75	34.6	5.9	24.4	0.9	8.1	10.3	3.7	3.9	8.1
2.75–3.24	35.1	2.2	26.7	2.1	7.9	12.5	4.2	1.8	7.6
3.25–3.74	32.1	5.9	24.0	6.5	7.0	9.0	6.1	4.8	4.7
3.75 or higher	38.2	6.2	12.1	3.0	11.6	9.2	6.9	7.2	5.8
Undergraduate GPA in major									
Less than 2.75	52.3	5.4	25.1	3.8	4.8	2.3	3.7	0	2.5
2.75–3.24	29.4	4.8	30.8	1.2	7.9	12.2	3.5	2.8	7.4
3.25–3.74	34.9	3.4	18.9	5.3	7.5	12.1	6.2	5.0	6.9
3.75 or higher	34.7	5.6	20.2	4.4	10.1	9.1	6.1	4.5	5.4

**Table C11—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage distribution according to the main field taught in current or most recent teaching job, by selected characteristics—Continued**

	Main field taught in most recent job as of 1997								
	General elementary	Business and vocational	Science and mathematics	Foreign languages	Special education	English	Social sciences	Fine arts	Other
Degree-granting institution (undergraduate)									
Public									
Nondoctorate-granting	39.5	5.6	24.8	1.5	6.7	7.0	4.7	4.5	5.6
Doctorate-granting	30.0	4.3	21.7	5.2	12.2	11.8	5.7	2.3	6.8
Private, not-for-profit									
Nondoctorate-granting	37.2	2.6	20.9	3.9	4.6	14.5	5.7	3.9	6.7
Doctorate-granting	28.1	3.6	30.5	4.6	1.3	14.4	4.0	6.7	6.7
Other	—	—	—	—	—	—	—	—	—
Highest degree attained									
Bachelor’s degree	35.8	4.6	23.6	3.3	7.4	10.7	4.3	3.9	6.6
Master’s degree or higher	24.9	3.7	24.2	5.6	12.1	11.1	10.5	3.2	4.9
Highest degree expected in 1997									
Bachelor’s degree	48.7	6.3	13.2	0.8	4.1	8.7	0.4	5.3	12.5
Master’s degree	35.2	4.0	23.7	4.0	8.9	9.9	4.9	3.6	5.9
First-professional degree	—	—	—	—	—	—	—	—	—
Doctoral degree	24.4	6.4	28.7	2.9	6.7	15.4	6.0	3.7	6.0
Had student teaching credit									
Yes	38.2	4.6	21.2	2.4	8.3	9.6	4.5	4.7	6.5
No	27.5	4.6	27.6	5.6	7.6	12.1	6.4	2.3	6.3
Certified to teach <sup>2</sup>									
Certified	36.6	4.5	22.1	3.6	8.2	9.8	5.3	3.8	6.1
Not certified	19.5	4.5	32.8	3.9	6.5	16.7	4.3	3.6	8.3
Participated in teacher induction program									
Participated	37.6	4.2	22.7	2.3	8.4	10.5	5.1	2.9	6.4
Did not participate	29.9	4.7	25.0	5.1	7.7	11.1	5.3	4.8	6.4
Years of teaching experience									
1 or less	29.8	5.0	22.2	5.5	6.5	10.7	10.0	4.4	6.0
2	25.3	5.7	24.1	3.7	7.3	15.0	5.8	4.8	8.4
3	39.1	1.6	24.0	3.2	6.9	11.3	3.4	5.5	5.1
More than 3	36.4	6.7	24.1	3.8	8.2	8.9	4.3	2.0	5.5
Expects to be teaching in long term									
Yes	38.2	3.7	24.4	4.2	7.2	8.1	6.2	3.7	4.4
No	31.2	5.2	22.8	3.1	8.4	12.9	4.7	3.7	8.0
Sector of schools at which taught by 1997									
Public always	34.9	5.2	24.0	4.0	7.4	9.5	5.8	3.7	5.5
Private always	28.6	4.1	32.9	1.2	7.0	10.0	3.5	3.8	8.8
Both	31.3	0	27.9	2.9	9.0	3.9	2.4	13.9	8.8

**Table C11—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage distribution according to the main field taught in current or most recent teaching job, by selected characteristics—Continued**

	Main field taught in most recent job as of 1997								
	General elementary	Business and vocational	Science and mathematics	Foreign languages	Special education	English	Social sciences	Fine arts	Other
Level of schools at which taught by 1997 <sup>3</sup>									
Elementary only	59.1	0.8	15.3	1.1	7.5	6.5	2.5	3.4	3.8
Secondary only	1.7	9.5	37.9	6.4	6.0	14.1	12.3	3.2	9.0
Combined only	28.5	3.2	20.3	4.0	8.7	18.5	1.6	6.0	9.3
Multiple	13.9	9.6	33.4	7.5	9.3	6.2	3.5	8.4	8.4
Locale of school, most recent job as of 1997									
Central city	42.9	4.3	20.1	2.5	8.4	10.0	4.7	3.1	4.3
Urban fringe/large town	34.3	3.0	21.2	6.4	6.9	11.2	5.3	5.4	6.4
Small town, rural	28.3	5.8	29.4	2.5	7.4	8.9	5.6	4.5	7.6
Percent minority enrollment, most recent job as of 1997									
0–4	30.9	3.7	32.8	1.6	6.9	7.0	3.1	10.0	4.0
5–19	27.4	10.6	21.8	4.9	4.5	9.9	9.3	3.9	7.7
20–49	28.8	1.7	25.0	4.1	10.1	15.4	4.2	3.5	7.3
50 or more	48.5	2.8	16.2	4.2	7.7	9.0	5.5	2.5	3.8
Percent free/reduced-price lunch recipients, most recent job as of 1997									
0–4	—	—	—	—	—	—	—	—	—
5–19	21.8	6.8	29.2	7.8	7.7	9.1	6.0	5.1	6.5
20–49	38.2	6.7	21.6	3.7	7.6	10.4	3.3	1.2	7.4
50 or more	60.0	0.9	13.5	0.6	9.1	4.2	3.4	2.7	5.6
Year first began teaching after BA									
Began teaching 7/92–6/93	40.3	3.1	20.3	3.6	11.8	10.3	2.5	0.8	7.4
Began teaching 7/93–6/94	32.1	6.5	26.6	4.0	7.5	9.1	4.3	4.5	5.5
Began teaching 7/94–6/95	38.5	2.4	21.0	2.0	8.1	13.0	3.8	4.8	6.5
Began teaching 7/95–6/96	22.2	4.9	22.0	5.4	7.3	14.2	11.5	4.4	8.2
Began teaching 7/96–4/97	33.6	5.1	26.9	4.7	5.0	8.7	8.3	3.4	4.5

—Sample size too small for a reliable estimate.

<sup>1</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>2</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>3</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.



**Table C12—For 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997 and who were teaching general elementary classes full time during the most recent semester they taught: average number of students taught, percentage who taught resource or pull-out classes, and percentage distribution according to perceived difficulty of workload, by selected characteristics**

	Average number of students taught in the most recent spring term	Percentage distribution of teachers by whether they reported that their workload was more difficult than those of other teachers at their school		
		Yes	No	Not sure
Total	33.0	12.4	84.9	2.8
College entrance exam (CEE) scores				
Available	33.1	14.5	82.6	3.0
Bottom quartile	38.2	11.9	84.8	3.4
Middle half	27.5	15.1	81.8	3.1
Top quartile	—	—	—	—
Unavailable	33.0	4.9	93.1	2.0
Cumulative undergraduate GPA				
Less than 2.75	24.8	5.7	85.5	8.8
2.75–3.24	35.6	11.5	87.1	1.4
3.25–3.74	31.4	14.1	83.2	2.8
3.75 or higher	31.6	15.3	84.7	0
Undergraduate GPA in major				
Less than 2.75	—	—	—	—
2.75–3.24	29.8	7.3	89.6	3.2
3.25–3.74	36.5	16.3	82.8	0.9
3.75 or higher	32.4	15.8	82.7	1.6
Degree-granting institution				
Public				
Nondoctorate-granting	37.4	12.8	85.6	1.6
Doctorate-granting	28.6	14.5	80.7	4.8
Private, not-for-profit				
Nondoctorate-granting	34.9	8.2	89.4	2.4
Doctorate-granting	—	—	—	—
Other	—	—	—	—
Highest degree attained				
Bachelor’s degree	33.8	12.5	85.6	1.8
Master’s degree or higher	27.2	11.2	78.6	10.3
Highest degree expected in 1997				
Bachelor’s degree	32.6	14.5	80.9	4.6
Master’s degree	33.0	12.9	84.3	2.8
First-professional degree	—	—	—	—
Doctoral degree	35.0	9.7	88.7	1.7

**Table C12—For 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997 and who were teaching general elementary classes full time during the most recent semester they taught: average number of students taught, percentage who taught resource or pull-out classes, and percentage distribution according to perceived difficulty of workload, by selected characteristics—Continued**

	Average number of students taught in the most recent spring term	Percentage distribution of teachers by whether they reported that their workload was more difficult than those of other teachers at their school		
		Yes	No	Not sure
<b>Years of teaching experience</b>				
1 or less	31.8	6.4	84.3	9.4
2	31.4	6.6	93.4	0
3	29.4	15.2	81.6	3.3
More than 3	35.5	13.8	85.4	0.8
<b>Sector of school, most recent job as of 1997</b>				
Public	30.7	12.4	85.1	2.5
Private	26.7	7.8	83.5	8.7
<b>Percent minority enrollment, most recent job as of 1997</b>				
0–4	31.0	17.0	83.1	0
5–19	39.0	9.0	87.4	3.6
20–49	25.9	6.9	90.6	2.4
50 or more	27.3	14.8	81.8	3.4
<b>Percent free/reduced-price lunch recipients, most recent job as of 1997</b>				
0–4	—	—	—	—
5–19	38.2	21.6	78.5	0
20–49	27.9	7.1	88.8	4.1
50 or more	25.8	17.7	80.5	1.8
<b>Teaching status at end of study period</b>				
Still teaching spring 1997	32.8	12.3	85.1	2.6
Not teaching spring 1997	29.9	12.4	85.0	2.7

—Sample size too small for a reliable estimate.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C13—Various workload characteristics for 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997 and were teaching single-subject classes full time during the most recent semester they taught since receiving the bachelor’s degree, by selected characteristics**

	Average number of subject areas taught in the most recent spring term	Average number of periods taught in the most recent spring term	Average number of students taught in the most recent spring term	Percentage distribution of teachers by whether they reported that their workload was more difficult than those of other teachers at their school		
				Yes	No	Not sure
Total	1.7	5.6	99.5	24.2	72.8	2.9
Gender						
Male	1.5	5.3	113.8	20.9	75.9	3.2
Female	1.8	5.8	91.0	26.2	71.0	2.8
Race/ethnicity						
Black, non-Hispanic	1.5	4.7	96.8	16.1	82.0	1.9
Hispanic	1.5	4.6	96.4	36.1	64.0	0
White, non-Hispanic	1.7	5.8	99.8	23.9	73.3	2.8
Other, non-Hispanic <sup>1</sup>	—	—	—	—	—	—
Age as of 12/31/96						
26 or younger	1.6	5.5	102.4	23.6	73.8	2.6
27–28	—	—	—	—	—	—
29 or older	1.9	6.7	84.8	27.7	67.9	4.4
College entrance exam (CEE) scores						
Available	1.7	5.6	100.9	24.3	73.0	2.8
Bottom quartile	1.6	5.3	96.0	28.8	68.6	2.6
Middle half	1.7	5.8	102.3	25.0	72.5	2.5
Top quartile	1.7	5.3	102.1	17.8	78.6	3.6
Unavailable	1.7	5.8	91.5	23.9	72.1	4.0
Baccalaureate degree major						
Business/management	—	—	—	—	—	—
Education	1.8	6.0	94.5	23.2	74.0	2.7
Humanities	1.4	5.2	111.8	21.7	76.6	1.7
Math/computer/natural sciences	1.6	5.0	110.9	31.2	63.4	5.5
Social sciences	1.6	5.0	93.3	20.0	78.7	1.3
Other	—	—	—	—	—	—
Cumulative undergraduate GPA						
Less than 2.75	1.7	4.9	91.4	27.6	68.1	4.3
2.75–3.24	1.7	5.5	104.8	26.9	71.2	1.9
3.25–3.74	1.7	6.1	103.4	19.6	77.3	3.2
3.75 or higher	1.4	5.3	88.6	27.4	68.4	4.3

**Table C13—Various workload characteristics for 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997 and were teaching single-subject classes full time during the most recent semester they taught since receiving the bachelor’s degree, by selected characteristics—Continued**

	Average number of subject areas taught in the most recent spring term	Average number of periods taught in the most recent spring term	Average number of students taught in the most recent spring term	Percentage distribution of teachers by whether they reported that their workload was more difficult than those of other teachers at their school		
				Yes	No	Not sure
Undergraduate GPA in major						
Less than 2.75	—	—	—	—	—	—
2.75–3.24	1.6	5.2	101.2	23.8	73.3	2.9
3.25–3.74	1.7	6.2	101.7	22.0	75.3	2.7
3.75 or higher	1.8	5.8	94.8	26.3	71.1	2.7
Degree-granting institution						
Public						
Nondoctorate-granting	1.7	5.6	97.0	21.7	76.4	1.9
Doctorate-granting	1.6	5.9	96.4	26.9	70.5	2.5
Private, not-for-profit						
Nondoctorate-granting	1.6	5.6	103.7	29.2	66.9	3.9
Doctorate-granting	1.6	4.8	113.6	15.0	79.8	5.1
Other	—	—	—	—	—	—
Highest degree attained						
Bachelor’s degree	1.7	5.6	100.3	23.1	74.7	2.2
Master’s degree or higher	1.6	5.6	93.9	29.8	63.4	6.9
Highest degree expected in 1997						
Bachelor’s degree	2.0	7.5	106.5	15.1	82.8	2.1
Master’s degree	1.7	5.5	97.9	22.7	74.5	2.8
First-professional degree	—	—	—	—	—	—
Doctoral degree	1.6	5.6	103.2	33.0	62.7	4.3
Years of teaching experience						
1 or less	1.8	5.4	97.1	20.2	76.7	3.1
2	1.7	5.2	101.4	27.3	69.9	2.7
3	1.6	5.8	106.0	25.3	70.9	3.8
More than 3	1.6	5.9	95.8	23.3	73.9	2.8
Sector of school, most recent job as of 1997						
Public	1.7	5.8	101.6	25.6	71.6	2.8
Private	1.7	5.0	103.8	20.7	78.7	0.6
Level of school, most recent job as of 1997 <sup>2</sup>						
Elementary	1.9	5.9	90.9	28.0	71.3	0.8
Secondary	1.5	5.6	115.8	22.6	73.5	3.9
Combined	1.7	4.6	76.1	23.8	74.0	2.2

**Table C13—Various workload characteristics for 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997 and were teaching single-subject classes full time during the most recent semester they taught since receiving the bachelor’s degree, by selected characteristics—Continued**

	Average number of subject areas taught in the most recent spring term	Average number of periods taught in the most recent spring term	Average number of students taught in the most recent spring term	Percentage distribution of teachers by whether they reported that their workload was more difficult than those of other teachers at their school		
				Yes	No	Not sure
Percent minority enrollment, most recent job as of 1997						
0–4	1.9	6.3	106.7	32.4	65.3	2.4
5–19	1.5	5.2	109.2	15.6	83.7	0.8
20–49	1.8	6.0	91.8	27.7	65.3	7.0
50 or more	1.6	5.9	99.3	28.1	70.4	1.5
Percent free/reduced-price lunch recipients, most recent job as of 1997						
0–4	—	—	—	—	—	—
5–19	1.4	5.7	113.0	25.7	72.9	1.4
20–49	1.8	5.7	99.9	20.9	74.1	5.1
50 or more	1.7	5.7	71.5	47.5	52.5	0
Main field taught, most recent job as of 1997						
Business and vocational	1.7	5.1	100.0	19.5	78.3	2.2
Science and mathematics	1.9	5.1	100.3	20.3	75.7	3.9
Foreign languages	1.5	5.4	119.0	26.1	73.9	0
Special education	1.9	8.0	27.1	45.8	49.9	4.3
English	1.7	5.4	90.0	21.9	76.6	1.6
Social sciences	1.3	5.0	118.7	16.5	81.0	2.5
Fine arts	1.2	6.2	159.3	30.8	66.8	2.4
Other	1.1	5.5	154.8	20.1	77.6	2.3
Teaching status at end of study period						
Still teaching	1.7	5.6	97.6	23.3	73.4	3.4
Not teaching	1.6	5.9	113.2	29.0	69.7	1.3

—Sample size too small for a reliable estimate.

<sup>1</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>2</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C14—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage who were very satisfied with various aspects of teaching and quite satisfied overall in the most recent semester they taught, by selected characteristics**

	Percent who reported that they were very satisfied with						Percent quite satisfied overall
	Student motivation to learn	School learning environment	Student discipline and behavior	Class size	Support from parents	Esteem of society for teaching profession	
Total	26.5	44.9	32.7	46.7	31.0	14.6	27.4
Gender							
Male	20.1	34.5	35.0	51.2	28.1	17.0	24.8
Female	28.9	48.7	31.9	45.0	32.0	13.8	28.4
Race/ethnicity							
Black, non-Hispanic	24.2	39.6	24.6	29.7	21.5	9.6	15.2
Hispanic	34.3	41.9	43.5	48.4	29.6	6.9	26.6
White, non-Hispanic	25.7	45.2	31.9	48.2	31.0	15.4	28.2
Other, non-Hispanic <sup>1</sup>	—	—	—	—	—	—	—
Age as of 12/31/96							
26 or younger	26.7	45.5	33.1	47.5	33.4	15.5	28.6
27–28	23.4	32.2	27.8	50.0	12.7	10.3	16.6
29 or older	25.9	44.4	32.1	42.2	23.4	11.4	24.2
College entrance exam (CEE) scores							
Available	26.7	45.3	32.7	47.9	31.6	15.7	27.8
Bottom quartile	32.6	44.4	26.9	40.9	33.5	20.8	28.1
Middle half	25.8	45.6	32.6	47.3	30.0	14.0	27.2
Top quartile	21.3	45.3	41.7	60.6	34.3	13.6	29.0
Unavailable	25.2	42.9	33.0	40.7	27.7	9.5	25.7
Baccalaureate degree major							
Business/management	—	—	—	—	—	—	—
Education	27.5	49.8	31.9	47.7	32.6	14.9	28.5
Humanities	26.4	42.6	34.6	40.5	27.7	11.4	26.5
Math/computer/natural sciences	25.4	42.6	37.5	42.4	30.5	12.4	25.9
Social sciences	24.2	33.2	35.9	60.2	38.1	22.5	31.6
Other	30.0	24.9	19.5	27.5	18.0	8.7	8.7
Cumulative undergraduate GPA							
Less than 2.75	31.3	51.2	30.3	41.6	30.2	17.1	28.4
2.75–3.24	29.3	45.8	31.8	46.1	34.0	15.7	30.6
3.25–3.74	19.3	41.7	31.7	48.7	27.9	13.2	22.4
3.75 or higher	28.0	45.3	37.5	47.1	29.6	9.5	29.1
Undergraduate GPA in major							
Less than 2.75	44.9	54.5	27.2	43.4	27.8	13.6	24.8
2.75–3.24	27.3	46.1	33.2	45.9	33.5	15.9	28.0
3.25–3.74	25.6	42.4	32.6	50.0	30.7	15.3	30.1
3.75 or higher	24.6	42.9	32.0	45.6	28.6	13.4	24.7

**Table C14—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage who were very satisfied with various aspects of teaching and quite satisfied overall in the most recent semester they taught, by selected characteristics—Continued**

	Percent who reported that they were very satisfied with						Percent quite satisfied overall
	Student motivation to learn	School learning environment	Student discipline and behavior	Class size	Support from parents	Esteem of society for teaching profession	
Degree-granting institution							
Public							
Nondoctorate-granting	26.2	45.2	30.4	46.6	26.1	13.3	25.2
Doctorate-granting	25.7	44.5	32.6	43.5	32.2	14.4	26.5
Private, not-for-profit							
Nondoctorate-granting	30.9	47.7	37.2	53.1	37.8	17.3	35.5
Doctorate-granting	24.1	40.7	34.5	49.9	32.8	16.0	26.4
Other	—	—	—	—	—	—	—
Highest degree attained							
Bachelor’s degree	27.1	44.4	33.3	47.0	30.4	14.3	27.5
Master’s degree or higher	23.2	47.6	30.0	45.5	34.9	16.9	27.3
Highest degree expected in 1997							
Bachelor’s degree	23.8	45.1	26.8	38.9	28.3	14.2	29.2
Master’s degree	25.4	44.4	31.9	48.6	30.4	14.4	27.4
First-professional degree	—	—	—	—	—	—	—
Doctoral degree	30.3	43.9	36.8	43.7	33.4	16.5	24.7
Years of teaching experience							
1 or less	28.4	43.4	32.9	47.5	31.2	24.0	31.6
2	23.1	32.9	29.8	49.0	31.0	15.3	23.9
3	29.7	49.9	37.9	43.9	30.8	14.1	26.6
More than 3	23.8	47.0	30.0	46.8	31.1	11.8	27.5
Sector of school, most recent job as of 1997							
Public	22.9	42.0	29.1	41.8	26.3	11.6	23.1
Private	36.2	54.7	42.4	68.2	51.5	23.2	42.4
Level of school, most recent job as of 1997 <sup>2</sup>							
Elementary	31.0	50.1	34.1	45.0	31.7	11.6	28.5
Secondary	10.6	30.5	23.3	41.0	23.9	15.4	18.1
Combined	38.0	48.8	39.4	65.5	37.9	18.9	40.9
Percent minority enrollment, most recent job as of 1997							
0–4	30.4	51.8	35.6	49.0	33.1	15.6	32.3
5–19	21.7	54.6	40.2	44.6	38.2	15.1	33.8
20–49	20.6	37.8	23.3	43.8	25.4	6.2	18.2
50 or more	21.3	30.5	21.1	34.4	13.4	10.2	14.5
Percent free/reduced-price lunch recipients, most recent job as of 1997							
0–4	—	—	—	—	—	—	—
5–19	17.7	40.8	27.9	38.3	29.4	11.5	25.3
20–49	21.2	45.1	30.8	45.6	24.9	9.3	23.8
50 or more	30.1	34.9	25.5	34.7	14.7	12.0	15.8

**Table C14—Of 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, percentage who were very satisfied with various aspects of teaching and quite satisfied overall in the most recent semester they taught, by selected characteristics—Continued**

	Percent who reported that they were very satisfied with						Percent quite satisfied overall
	Student motivation to learn	School learning environment	Student discipline and behavior	Class size	Support from parents	Esteem of society for teaching profession	
Main field taught, most recent job as of 1997							
General elementary	40.2	54.2	35.4	42.4	35.5	15.2	32.8
Business and vocational	11.0	39.9	32.0	51.1	25.8	17.0	25.3
Science and mathematics	19.9	40.8	33.6	50.3	28.6	14.1	26.8
Foreign languages	12.9	33.9	21.8	26.5	24.7	3.2	16.5
Special education	14.2	42.6	26.9	38.9	18.5	12.3	17.4
English	19.7	40.4	33.1	61.6	31.6	16.0	28.8
Social sciences	12.9	33.8	31.9	49.5	32.2	12.4	23.7
Fine arts	28.5	43.5	31.2	47.9	37.8	16.1	32.4
Other	32.7	38.1	31.5	47.2	33.8	20.6	20.3
Teaching status at end of study period							
Still teaching	26.4	47.0	33.5	46.3	32.7	14.1	29.0
Not teaching	24.7	31.3	28.5	47.6	22.1	19.9	18.4

—Sample size too small for a reliable estimate.

<sup>1</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>2</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.



**Table C15—Percentage of 1992–93 bachelor’s degree recipients who were employed full time, average annual salary for full-time employees, and percentage distribution of full-time employees according to annual salary, by baccalaureate degree major and occupation: April 1997**

	Percentage employed full time	Average annual salary*	Percentage distribution according to annual salary				
			Less than \$15,000	\$15,000–24,999	\$25,000–34,999	\$35,000–44,999	\$45,000 or more
Total	91.7	\$34,199	5.2	22.5	32.8	20.6	18.9
Baccalaureate degree major							
Business/management	96.0	37,075	3.0	18.0	30.1	25.8	23.0
Education	89.4	26,294	7.5	40.6	41.6	5.9	4.4
Humanities	86.2	28,878	8.6	29.8	38.8	14.1	8.7
Math/computer/natural sciences	92.3	37,733	4.4	14.9	25.7	27.0	28.1
Social sciences	90.3	32,533	7.5	24.8	35.1	18.7	13.9
Other	90.7	35,063	4.3	20.1	34.1	20.3	21.2
April 1997 occupation							
Educators - K–12 teachers	95.9	25,600	2.4	38.7	55.3	3.5	0.2
Clerical staff	83.5	25,462	10.8	44.4	29.6	9.6	5.6
Personal, food, health, and recreation service workers	74.6	25,639	18.7	44.8	22.4	4.9	9.3
Skilled workers, including military	95.7	35,096	4.4	26.4	29.2	18.4	21.6
Laborers	89.7	31,454	5.2	36.2	31.3	14.5	12.8
Sales, financial service workers	95.2	38,075	2.9	16.4	30.2	26.3	24.1
Lawyers, licensed medical professionals	89.1	40,685	2.5	8.5	29.4	28.4	31.2
Legal support, nonlicensed medical workers	84.6	30,446	7.2	27.5	35.5	20.4	9.4
Social workers, ministers, instructors	81.2	25,988	13.0	38.5	32.6	8.0	8.0
Scientists, engineers	95.1	39,090	4.2	10.2	24.0	31.4	30.2
Writers, performers	88.2	31,703	8.2	20.1	41.3	16.8	13.6
Managers	96.8	35,608	4.2	17.8	33.3	23.8	20.9

\*Average salaries do not take into account the number of weeks worked in a year.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C16—For 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, average academic year salary for primary full-time teaching job during most recent semester taught and percentage distribution according to academic year salary, by selected individual and teaching-related characteristics**

	Average academic year salary	Percentage distribution according to academic year salary				
		\$20,000 or lower	\$20,001–25,000	\$25,001–30,000	\$30,001–35,000	Above \$35,000
Total	\$25,612	11.4	35.0	38.7	12.0	2.9
Gender						
Male	26,466	6.9	34.3	44.5	9.3	5.1
Female	25,306	13.0	35.3	36.6	13.0	2.2
Race/ethnicity						
Black, non-Hispanic	28,538	7.1	14.5	41.3	25.0	12.2
Hispanic	27,428	6.9	22.0	51.3	17.1	2.6
White, non-Hispanic	25,283	12.0	37.4	37.3	10.8	2.5
Other, non-Hispanic <sup>1</sup>	—	—	—	—	—	—
Highest degree attained						
Bachelor’s degree	25,183	12.7	37.3	37.4	10.6	2.1
Master’s degree or higher	28,056	3.9	22.1	45.8	20.4	7.8
Certified to teach <sup>2</sup>						
Certified	25,625	10.7	36.2	38.0	12.4	2.7
Not certified	25,371	17.6	25.9	43.0	8.2	5.2
Years of teaching experience						
1 or less	25,818	12.2	21.5	53.2	12.0	1.1
2	24,639	14.4	38.4	36.8	8.7	1.7
3	26,253	10.4	34.9	34.1	15.3	5.4
More than 3	25,324	11.6	38.5	37.0	11.1	1.8
Sector of school, most recent job as of 1997						
Public	26,319	5.9	35.0	42.6	13.2	3.3
Private	21,327	37.9	45.3	13.6	2.3	1.0
Level of school, most recent job as of 1997 <sup>3</sup>						
Elementary	25,930	8.8	37.6	37.4	13.7	2.7
Secondary	25,842	8.8	31.8	45.0	10.4	4.1
Combined	24,047	18.3	47.3	30.6	1.8	2.0

**Table C16—For 1992–93 bachelor’s degree recipients who first taught between receiving the bachelor’s degree and 1997, average academic year salary for primary full-time teaching job during most recent semester taught and percentage distribution according to academic year salary, by selected individual and teaching-related characteristics—Continued**

	Average academic year salary	Percentage distribution according to academic year salary				
		\$20,000 or lower	\$20,001– 25,000	\$25,001– 30,000	\$30,001– 35,000	Above \$35,000
Main field taught, most recent teaching job as of 1997						
General elementary	\$25,644	13.0	34.7	35.7	15.0	1.6
Business and vocational	—	—	—	—	—	—
Science and mathematics	24,754	14.0	35.7	42.5	6.5	1.3
Foreign languages	—	—	—	—	—	—
Special education	27,275	1.0	29.5	55.7	8.2	5.5
English	25,697	8.5	41.4	30.1	18.7	1.4
Social sciences	25,986	9.1	33.5	40.1	14.9	2.4
Fine arts	—	—	—	—	—	—
Other	25,833	17.1	27.0	36.2	15.6	4.1

—Sample size too small for a reliable estimate.

<sup>1</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>2</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>3</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C17—Of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree, percentage distributions according to teaching status in spring 1997 and number of teaching spells completed by spring 1997,<sup>1</sup> by selected characteristics: 1997**

	Left teaching by spring 1997	Of those who left teaching		Still teaching spring 1997	Of those still teaching	
		One spell	Multiple spells		One spell	Multiple spells
Total	20.7	19.2	1.5	79.4	74.3	5.0
Gender						
Male	23.5	20.7	2.9	76.5	70.2	6.3
Female	19.5	18.6	0.9	80.5	75.9	4.5
Race/ethnicity						
Black, non-Hispanic	24.6	22.8	1.7	75.4	73.4	2.0
Hispanic	27.4	24.1	3.3	72.6	64.5	8.1
White, non-Hispanic	19.8	18.5	1.3	80.2	75.2	5.0
Other, non-Hispanic <sup>2</sup>	—	—	—	—	—	—
Age as of 12/31/96						
26 or younger	22.7	21.2	1.6	77.3	72.1	5.2
27–28	12.2	12.2	0	87.8	80.4	7.3
29 or older	12.2	10.7	1.4	87.9	84.4	3.5
College entrance exam (CEE) scores						
Available	21.6	20.1	1.5	78.4	73.6	4.8
Bottom quartile	16.1	14.1	2.0	83.9	79.5	4.4
Middle half	20.6	19.4	1.2	79.4	74.0	5.5
Top quartile	32.1	30.3	1.8	67.9	64.6	3.3
Unavailable	15.9	14.5	1.4	84.1	78.0	6.1
Baccalaureate degree major						
Business/management	30.6	30.6	0	69.4	62.7	6.7
Education	15.2	14.7	0.6	84.8	79.6	5.2
Humanities	27.1	21.2	5.9	72.9	68.8	4.1
Math/computer/natural sciences	20.8	20.8	0	79.2	74.6	4.6
Social sciences	29.3	26.1	3.2	70.8	66.9	3.9
Other	41.4	38.3	3.2	58.6	53.8	4.8
Cumulative undergraduate GPA						
Less than 2.75	27.6	26.4	1.2	72.4	69.3	3.1
2.75–3.24	19.1	17.2	1.9	80.9	73.6	7.3
3.25–3.74	20.3	18.7	1.6	79.7	75.2	4.5
3.75 or higher	14.5	14.5	0	85.5	83.2	2.4
Undergraduate GPA in major						
Less than 2.75	20.4	18.0	2.4	79.6	77.7	1.9
2.75–3.24	23.6	21.9	1.7	76.4	71.7	4.8
3.25–3.74	19.2	17.8	1.4	80.8	75.3	5.5
3.75 or higher	16.6	15.9	0.7	83.4	78.0	5.5

**Table C17—Of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree, percentage distributions according to teaching status in spring 1997 and number of teaching spells completed by spring 1997,<sup>1</sup> by selected characteristics: 1997—Continued**

	Left teaching by spring 1997	Of those who left teaching		Still teaching spring 1997	Of those still teaching	
		One spell	Multiple spells		One spell	Multiple spells
Degree-granting institution (undergraduate)						
Public						
Nondoctorate-granting	14.7	13.2	1.5	85.3	81.2	4.1
Doctorate-granting	20.7	19.8	1.0	79.3	73.9	5.4
Private, not-for-profit						
Nondoctorate-granting	26.4	25.6	0.9	73.6	69.3	4.3
Doctorate-granting	30.9	26.7	4.1	69.1	61.4	7.7
Other	—	—	—	—	—	—
Highest degree attained						
Bachelor’s degree	21.0	19.6	1.4	79.0	73.9	5.2
Master’s degree or higher	19.1	17.2	1.9	80.9	76.5	4.3
Highest degree expected in 1997						
Bachelor’s degree	34.8	34.8	0	65.2	62.3	2.9
Master’s degree	15.7	14.7	1.0	84.3	79.0	5.2
First-professional degree	—	—	—	—	—	—
Doctoral degree	25.6	22.7	2.9	74.4	68.1	6.3
Had student teaching credit						
Yes	15.3	14.0	1.3	84.7	79.4	5.4
No	29.3	27.6	1.7	70.7	66.3	4.5
Certified to teach <sup>3</sup>						
Certified	14.2	13.0	1.3	85.8	80.2	5.6
Not certified	49.1	46.6	2.4	50.9	48.3	2.6
Participated in teacher induction program						
Participated	15.4	14.6	0.7	84.6	80.9	3.7
Did not participate	25.7	23.5	2.2	74.3	68.0	6.4
Years of teaching experience						
1 or less	43.0	40.2	2.8	57.0	56.0	1.0
2	43.5	39.3	4.1	56.6	49.2	7.4
3	13.0	13.0	0	87.0	79.2	7.8
More than 3	2.9	2.4	0.5	97.1	93.2	4.0
Expects to be teaching in long term						
Yes	7.4	7.4	0	92.6	88.4	4.2
No	28.4	26.0	2.4	71.7	65.8	5.8

**Table C17—Of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree, percentage distributions according to teaching status in spring 1997 and number of teaching spells completed by spring 1997,<sup>1</sup> by selected characteristics: 1997—Continued**

	Left teaching by spring 1997	Of those who left teaching		Still teaching spring 1997	Of those still teaching	
		One spell	Multiple spells		One spell	Multiple spells
Sector of schools at which taught by 1997						
Public	15.9	15.2	0.8	84.1	79.4	4.7
Private	40.8	39.8	1.0	59.2	58.4	0.8
Both	19.7	11.1	8.6	80.3	70.9	9.4
Level of schools at which taught by 1997 <sup>4</sup>						
Elementary	16.1	15.8	0.3	84.0	81.5	2.4
Secondary	24.8	24.0	0.8	75.2	74.0	1.3
Combined	38.4	35.3	3.1	61.7	61.7	0
Multiple	10.6	6.8	3.8	89.4	68.6	20.8
Year first began teaching after receiving BA						
July 92–June 93	25.8	22.0	3.8	74.2	64.8	9.4
July 93–June 94	28.1	26.7	1.4	71.9	65.9	6.0
July 94–June 95	15.4	14.4	1.0	84.6	80.9	3.7
July 95–June 96	18.3	17.5	0.8	81.7	78.1	3.6
July 96–April 97	3.1	3.1	0	96.9	96.9	0
Employment expectations in 3 years, as of 1997						
Teaching full time	6.6	6.2	0.4	93.4	87.7	5.7
Other full-time work	31.9	29.3	2.6	68.1	64.0	4.1
Not working full time	43.6	42.3	1.3	56.4	49.7	6.7

—Sample size too small for a reliable estimate.

<sup>1</sup>Teaching spells are periods of continuous teaching with no break longer than 3 months.

<sup>2</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>3</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>4</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C18—Average years of teaching experience and percentage distribution of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree according to years of teaching experience, by selected characteristics: 1997**

	Average years of teaching experience	Years of teaching experience			
		1 or less	2	3	More than 3
Total	2.8	19.2	18.7	26.1	36.0
Gender					
Male	2.6	25.8	19.3	22.7	32.2
Female	2.9	16.7	18.5	27.3	37.4
Race/ethnicity					
Black, non-Hispanic	2.6	21.4	14.6	48.1	15.9
Hispanic	2.9	17.3	17.0	26.6	39.1
White, non-Hispanic	2.8	19.3	19.2	24.3	37.2
Other, non-Hispanic <sup>1</sup>	—	—	—	—	—
Age as of 12/31/96					
26 or younger	2.8	20.2	19.6	25.3	35.0
27–28	3.2	9.8	14.7	31.4	44.1
29 or older	3.0	16.3	15.6	28.8	39.3
College entrance exam (CEE) scores					
Available	2.8	19.8	19.1	25.1	36.1
Bottom quartile	3.1	16.6	11.2	25.5	46.6
Middle half	2.8	19.4	20.5	26.0	34.1
Top quartile	2.5	25.3	25.5	21.4	27.9
Unavailable	2.9	16.2	17.1	31.2	35.5
Baccalaureate degree major					
Business/management	—	—	—	—	—
Education	3.2	9.9	17.5	27.4	45.2
Humanities	2.5	30.6	17.3	25.0	27.2
Math/computer/natural sciences	2.6	25.8	21.7	21.0	31.5
Social sciences	2.1	36.8	24.0	27.6	11.6
Other	2.0	51.6	13.9	16.3	18.2
Cumulative undergraduate GPA					
Less than 2.75	2.6	29.6	17.8	21.4	31.2
2.75–3.24	2.9	17.3	18.8	25.4	38.5
3.25–3.74	2.8	16.9	21.0	28.1	34.1
3.75 or higher	3.0	19.8	10.4	28.4	41.4
Undergraduate GPA in major					
Less than 2.75	2.6	23.7	12.5	46.8	17.0
2.75–3.24	2.8	20.8	21.3	20.4	37.6
3.25–3.74	2.8	18.6	19.9	28.0	33.6
3.75 or higher	3.0	16.8	13.9	30.4	39.0
Degree-granting institution (undergraduate)					
Public					
Nondoctorate-granting	2.8	20.4	14.5	29.7	35.4
Doctorate-granting	2.9	20.1	15.5	24.0	40.4
Private, not-for-profit					
Nondoctorate-granting	2.8	16.4	22.9	28.0	32.7
Doctorate-granting	2.6	16.6	37.6	19.5	26.4
Other	—	—	—	—	—

**Table C18—Average years of teaching experience and percentage distribution of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree according to years of teaching experience, by selected characteristics: 1997—Continued**

	Average years of teaching experience	Years of teaching experience			
		1 or less	2	3	More than 3
Highest degree attained					
Bachelor’s degree	2.9	17.7	17.2	27.8	37.4
Master’s degree or higher	2.4	28.8	28.0	15.7	27.6
Highest degree expected in 1997					
Bachelor’s degree	2.6	23.6	23.9	24.0	28.5
Master’s degree	3.0	16.9	15.0	27.1	41.1
First-professional degree	—	—	—	—	—
Doctoral degree	2.5	23.6	25.7	23.0	27.6
Has student teaching credit					
Yes	3.2	10.2	15.7	27.4	46.8
No	2.3	33.7	24.0	23.6	18.8
Certified to teach <sup>2</sup>					
Certified	3.0	14.0	16.9	28.2	40.9
Not certified	2.0	42.6	27.0	16.3	14.1
Participated in teacher induction program					
Participated	3.0	16.1	17.4	26.5	40.0
Did not participate	2.7	22.2	20.4	26.1	31.4
Sector of schools at which taught by 1997					
Public	2.9	20.5	15.3	26.9	37.3
Private	2.5	21.8	32.3	20.6	25.3
Both	3.2	4.8	22.5	33.2	39.4
Level of schools at which taught by 1997 <sup>3</sup>					
Elementary	3.0	17.1	15.4	27.2	40.3
Secondary	2.5	30.5	20.6	20.9	28.0
Combined	2.5	20.1	37.5	15.2	27.2
Multiple	3.1	5.4	15.9	40.0	38.7
Teaching status at end of study period					
Still teaching	3.1	13.8	13.4	28.6	44.2
Not teaching	1.8	39.7	39.1	16.2	4.9

—Sample size too small for a reliable estimate.

<sup>1</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>2</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>3</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.



**Table C19—Of 1992–93 bachelor’s degree recipients who first taught and left teaching between receiving the bachelor’s degree and 1997, percentage distribution according to primary reason they chose, in 1994 or 1997, not to pursue teaching, by selected characteristics**

	Reason not teaching next fall												
	Moved/ moving for family/ personal reasons	Preg- nancy/ child rearing	Health reasons/ disability	To pursue career outside of education	Dissatis- faction with salary and benefits	To take courses for education career	To take courses for career outside of education	School staffing action	Not interested in teaching	Disliked/ dissatis- fied with teaching	Not willing to pursue training to teach	To move into school adminis- tration	Other reason for leaving teaching job
Total	1.9	6.2	0.4	24.9	10.0	2.4	1.1	0.4	18.9	5.4	2.7	1.1	24.6
Gender													
Male	1.4	0.5	0	28.7	13.4	3.5	0.6	0.1	20.9	3.4	3.2	0.5	23.8
Female	2.1	9.9	0.7	22.5	7.9	1.7	1.4	0.5	17.6	6.7	2.4	1.4	25.1
Race/ethnicity													
Black, non-Hispanic	0	0	0	33.7	8.1	4.6	1.8	0	24.9	3.7	2.5	2.2	18.5
Hispanic	0	8.6	0.9	20.2	11.4	3.7	0	3.8	12.9	0.9	6.4	0.9	30.3
White, non-Hispanic	2.3	6.8	0.4	23.6	10.1	2.2	1.1	0.1	18.9	5.9	2.3	1.0	25.2
Other, non-Hispanic <sup>1</sup>	0	2.3	0	43.5	10.5	0	0	0.6	16.4	6.4	6.4	0	14.0
Age as of 12/31/96													
26 or younger	1.9	6.6	0.2	25.0	10.6	2.9	1.3	0.1	20.0	5.8	3.1	0.9	21.7
27–28	0	11.4	0	23.7	23.2	0	0	1.5	5.5	3.3	2.2	0	29.2
29 or older	2.2	3.3	1.7	24.9	4.6	0.7	0.6	1.3	16.9	4.0	1.1	1.9	36.9
College entrance exam (CEE) scores													
Available	1.8	6.7	0.2	26.4	10.5	2.4	1.2	0.1	19.5	5.3	2.8	0.8	22.2
Bottom quartile	1.7	7.3	0.5	26.4	12.3	3.1	1.0	0.2	18.7	4.7	2.4	0.7	21.0
Middle half	1.9	7.5	0.2	24.8	11.1	1.6	1.2	0.2	19.4	6.1	3.0	1.1	22.0
Top quartile	1.7	4.1	0	30.8	6.8	3.5	1.4	0	20.6	4.3	2.6	0.4	23.9
Unavailable	1.9	4.1	1.3	18.7	8.1	2.6	0.5	1.3	16.5	5.8	2.4	2.0	34.8
Baccalaureate degree major													
Business/management	2.0	5.8	0	18.4	9.8	2.5	0	0	25.1	5.9	6.6	0	23.9
Education	4.8	17.1	1.1	17.2	8.9	2.3	0	0.9	12.9	7.1	2.2	1.7	23.8
Humanities	0.8	5.0	0.6	25.9	15.2	3.5	2.8	0.1	11.1	7.5	2.1	2.1	23.2
Math/computer/natural sciences	1.7	2.5	0.7	28.8	11.2	1.1	1.0	0.7	21.1	4.8	3.5	2.4	20.6
Social sciences	0.8	2.4	0	30.6	7.0	4.0	2.1	0	16.3	5.2	2.0	0	29.6
Other	0.4	2.1	0	29.1	8.3	1.0	1.0	0.3	27.9	2.9	0.9	0.4	25.7

**Table C19—Of 1992–93 bachelor’s degree recipients who first taught and left teaching between receiving the bachelor’s degree and 1997, percentage distribution according to primary reason they chose, in 1994 or 1997, not to pursue teaching, by selected characteristics—Continued**

	Reason not teaching next fall												
	Moved/ moving for family/ personal reasons	Preg- nancy/ child rearing	Health reasons/ disability	To pursue career outside of education	Dissatis- faction with salary and benefits	To take courses for education career	To take courses for career outside of education	School staffing action	Not interested in teaching	Disliked/ dissatis- fied with teaching	Not willing to pursue training to teach	To move into school adminis- tration	Other reason for leaving teaching job
Cumulative undergraduate GPA													
Less than 2.75	1.6	3.2	0.3	25.8	13.5	2.3	1.2	0.3	20.7	5.6	2.5	1.1	22.0
2.75–3.24	2.7	7.8	0.5	25.1	9.2	2.8	1.2	0.8	16.3	6.2	3.4	0.2	23.7
3.25–3.74	2.2	6.5	0.3	25.9	7.5	1.3	1.4	0	19.4	5.7	2.5	2.5	24.8
3.75 or higher	0	9.4	1.2	19.3	11.9	1.0	0	0.2	20.3	2.7	2.1	0	32.0
Undergraduate GPA in major													
Less than 2.75	1.9	6.0	0	31.7	10.9	1.7	1.9	1.5	18.4	4.0	0.7	0	21.2
2.75–3.24	2.9	3.9	0.4	24.4	11.7	3.3	1.3	0	17.6	5.9	3.5	1.2	23.9
3.25–3.74	1.2	7.0	0	24.6	8.8	2.6	1.7	0	17.1	5.2	3.5	0.9	27.3
3.75 or higher	0.9	9.3	0.9	23.7	9.6	1.5	0	0.1	21.3	4.8	1.6	1.8	24.5
Degree-granting institution (undergraduate)													
Public													
Nondoctorate-granting	1.5	5.6	0.6	24.7	9.8	2.6	1.6	0.2	14.2	7.5	2.6	1.7	27.5
Doctorate-granting	2.1	6.6	0.7	24.8	10.7	2.5	0.6	0	19.3	4.4	2.6	1.0	24.6
Private, not-for-profit													
Nondoctorate-granting	2.1	7.2	0	24.9	10.9	3.1	1.4	1.4	17.7	5.1	0.7	0.3	25.1
Doctorate-granting	1.4	5.4	0	25.8	8.0	1.0	1.1	0.1	24.1	5.4	6.0	1.3	20.3
Other	—	—	—	—	—	—	—	—	—	—	—	—	—
Highest degree attained													
Bachelor’s degree	2.1	6.7	0.5	24.6	10.5	2.5	1.1	0.4	19.2	5.2	2.4	0.9	24.1
Master’s degree or higher	0.5	2.9	0	27.4	7.0	2.0	1.0	0.2	17.0	7.0	5.2	1.9	28.0
Highest degree expected in 1997													
Bachelor’s degree	2.0	8.0	1.5	17.5	10.6	0.2	0	0.2	24.3	6.7	2.7	0.3	26.0
Master’s degree	2.4	7.7	0.2	26.0	11.0	3.3	1.2	0.6	15.6	4.6	3.1	1.3	23.1
First-professional degree	0	1.6	0	44.3	11.5	0	0	0	27.6	5.1	0	0	10.0
Doctoral degree	0.5	1.6	0	22.0	7.8	4.1	1.6	0.1	19.4	4.7	3.2	2.1	32.9



**Table C19—Of 1992–93 bachelor’s degree recipients who first taught and left teaching between receiving the bachelor’s degree and 1997, percentage distribution according to primary reason they chose, in 1994 or 1997, not to pursue teaching, by selected characteristics—Continued**

	Reason not teaching next fall												
	Moved/ moving for family/ personal reasons	Preg- nancy/ child rearing	Health reasons/ disability	To pursue career outside of education	Dissatis- faction with salary and benefits	To take courses for education career	To take courses for career outside of education	School staffing action	Not interested in teaching	Disliked/ dissatis- fied with teaching	Not willing to pursue training to teach	To move into school adminis- tration	Other reason for leaving teaching job
Year first began teaching after receiving BA													
July 92–June 93	3.3	29.2	2.6	16.1	10.5	0	0	0	13.1	5.9	0	0	19.3
July 93–June 94	7.3	19.5	1.9	16.1	1.2	6.3	1.2	0	5.1	11.6	0	1.0	28.8
July 94–June 95	5.6	20.8	0	23.7	6.4	10.9	2.5	0	2.7	12.0	0	2.8	12.7
July 95–June 96	—	—	—	—	—	—	—	—	—	—	—	—	—
July 96–April 97	—	—	—	—	—	—	—	—	—	—	—	—	—
Employment expectations in 3 years, as of 1997													
Teaching full time	7.0	15.2	2.8	4.8	2.2	15.1	0	0	4.5	0	1.4	7.4	39.6
Other full-time work	0.9	1.6	0.1	26.5	11.7	1.8	1.3	0.5	21.3	5.8	2.6	0.8	25.2
Not working full time	4.6	28.3	1.5	22.5	4.9	1.0	0.7	0	11.4	4.4	3.8	0	17.0

—Sample size too small for a reliable estimate.

<sup>1</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>2</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>3</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C20—Of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree, percentage distribution according to whether they would still choose teaching, by selected characteristics: 1997**

	Would respondent choose teaching again?		
	Yes	No	Not sure
Total	72.6	20.0	7.4
Gender			
Male	64.9	28.3	6.8
Female	75.5	16.8	7.7
Race/ethnicity			
Black, non-Hispanic	62.0	34.1	3.9
Hispanic	70.7	22.0	7.4
White, non-Hispanic	73.1	19.2	7.7
Other, non-Hispanic <sup>1</sup>	83.9	9.5	6.6
Age as of 12/31/96			
26 or younger	73.5	19.0	7.6
27–28	73.1	15.2	11.7
29 or older	68.5	25.6	5.9
College entrance exam (CEE) scores			
Available	72.1	20.0	7.9
Bottom quartile	74.9	20.6	4.5
Middle half	73.7	17.4	8.8
Top quartile	62.7	27.4	9.9
Unavailable	75.0	19.6	5.4
Baccalaureate degree major			
Education	77.8	15.1	7.0
Humanities	70.9	22.9	6.2
Math/computer/natural sciences	65.1	28.9	6.0
Social sciences	64.8	20.6	14.7
Other	52.7	37.7	9.6
Cumulative undergraduate GPA			
Less than 2.75	65.8	29.2	5.0
2.75–3.24	74.9	18.9	6.2
3.25–3.74	73.6	18.1	8.3
3.75 or higher	76.4	17.4	6.2
Undergraduate GPA in major			
Less than 2.75	59.4	33.6	7.0
2.75–3.24	72.9	21.0	6.1
3.25–3.74	74.6	17.8	7.7
3.75 or higher	75.3	17.9	6.9
Degree-granting institution (undergraduate)			
Public			
Nondoctorate-granting	78.1	17.5	4.4
Doctorate-granting	68.2	21.0	10.9
Private, not-for-profit			
Nondoctorate-granting	75.3	20.1	4.6
Doctorate-granting	68.0	23.8	8.2
Other	—	—	—

**Table C20—Of 1992–93 bachelor’s degree recipients who first taught after receiving the bachelor’s degree, percentage distribution according to whether they would still choose teaching, by selected characteristics: 1997—Continued**

	Would respondent choose teaching again?		
	Yes	No	Not sure
<b>Highest degree attained</b>			
Bachelor’s degree	73.4	19.1	7.5
Master’s degree or higher	68.7	24.3	7.0
<b>Highest degree expected in 1997</b>			
Bachelor’s degree	62.2	28.9	9.0
Master’s degree	76.3	16.3	7.4
First-professional degree	29.3	69.0	1.7
Doctoral degree	71.2	22.3	6.5
<b>Status in teacher pipeline, 1997</b>			
No training	45.1	43.2	11.7
Student teaching, not certified	55.7	24.7	19.6
Certified	80.3	13.9	5.9
Taught, training unknown	—	—	—
<b>Years of teaching experience</b>			
1 or less	63.8	27.5	8.7
2	72.0	20.4	7.7
3	82.0	12.3	5.7
More than 3	82.2	11.4	6.4
<b>Sector of schools at which taught by 1997</b>			
Public	77.3	16.4	6.4
Private	60.0	24.6	65.4
Both	83.5	12.3	4.2
<b>Level of schools at which taught by 1997<sup>2</sup></b>			
Elementary	75.1	19.2	5.7
Secondary	70.9	19.4	9.7
Combined	72.7	21.7	5.6
Multiple	89.6	3.7	6.7
<b>Teaching status at end of study period</b>			
Current teachers	83.6	10.5	5.9
Former teachers	49.4	39.6	11.0

—Sample size too small for a reliable estimate.

<sup>1</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>2</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C21—Of 1992–93 bachelor’s degree recipients who first taught and left teaching since receiving the bachelor’s degree, percentage distribution according to employment/enrollment status in April 1997, by selected characteristics**

	Employed only	Employed and enrolled	Of those employed, percent employed		Enrolled only	Neither employed nor enrolled
			In education	Outside education		
Total	66.1	24.9	80.0	20.0	2.9	6.1
Gender						
Male	64.7	25.5	71.4	28.6	5.2	4.6
Female	66.6	24.6	83.2	16.8	2.0	6.7
Race/ethnicity						
Black, non-Hispanic	75.0	18.9	84.7	15.3	4.3	1.7
Hispanic	60.9	26.0	81.0	19.0	6.3	6.9
White, non-Hispanic	66.4	25.0	79.6	20.4	2.5	6.1
Other, non-Hispanic <sup>1</sup>	—	—	—	—	—	—
Age as of 12/31/96						
26 or younger	66.6	24.0	78.3	21.8	3.1	6.3
27–28	51.7	39.6	78.6	21.4	2.1	6.5
29 or older	66.8	26.0	88.7	11.3	2.0	5.3
College entrance exam (CEE) scores						
Available	65.8	25.1	79.1	20.9	3.0	6.1
Bottom quartile	63.7	27.2	85.4	14.7	0.7	8.5
Middle half	65.7	26.7	79.7	20.3	2.6	5.0
Top quartile	69.3	17.2	68.7	31.3	7.8	5.8
Unavailable	67.4	23.8	83.9	16.1	2.4	6.5
Baccalaureate degree major						
Business/management	71.1	22.8	62.8	37.2	1.6	4.4
Education	67.1	26.8	87.7	12.4	1.0	5.1
Humanities	65.7	25.5	72.2	27.8	2.4	6.4
Math/computer/natural sciences	65.3	22.7	78.1	21.9	6.0	5.9
Social sciences	60.7	24.3	70.8	29.3	8.5	6.5
Other	64.3	14.5	54.3	45.7	6.5	14.8
Cumulative undergraduate GPA						
Less than 2.75	65.5	24.2	69.6	30.4	0.9	9.3
2.75–3.24	66.9	25.0	84.2	15.8	2.8	5.3
3.25–3.74	67.1	24.4	81.4	18.6	2.6	5.9
3.75 or higher	62.1	27.7	81.7	18.3	5.3	4.9
Undergraduate GPA in major						
Less than 2.75	70.8	22.7	64.2	35.8	0	6.5
2.75–3.24	67.7	22.6	78.5	21.5	4.0	5.7
3.25–3.74	68.7	24.8	83.0	17.0	2.1	4.4
3.75 or higher	61.6	26.9	81.8	18.2	3.6	7.9

**Table C21—Of 1992–93 bachelor’s degree recipients who first taught and left teaching since receiving the bachelor’s degree, percentage distribution according to employment/enrollment status in April 1997, by selected characteristics—Continued**

	Employed only	Employed and enrolled	Of those employed, percent employed		Enrolled only	Neither employed nor enrolled
			In education	Outside education		
Degree-granting institution (undergraduate)						
Public						
Nondoctorate-granting	70.0	26.6	85.4	14.6	1.0	2.4
Doctorate-granting	66.4	23.1	79.2	20.8	3.3	7.2
Private, not-for-profit						
Nondoctorate-granting	61.4	26.1	75.1	24.9	2.6	10.0
Doctorate-granting	60.3	24.2	73.0	27.0	7.4	8.1
Other	—	—	—	—	—	—
Highest degree attained						
Bachelor’s degree	65.3	25.9	80.0	20.0	3.0	5.8
Master’s degree or higher	71.1	18.4	79.5	20.5	2.4	8.2
Highest degree expected in 1997						
Bachelor’s degree	77.1	12.4	58.7	41.3	0	10.6
Master’s degree	67.9	24.3	84.2	15.8	1.7	6.1
First-professional or doctoral degree	54.6	33.6	78.1	21.9	7.2	4.5
Status in teacher pipeline, 1997						
Taught, no training	63.5	20.5	44.8	55.2	7.7	8.3
Student taught, taught, not certified	76.0	20.7	54.7	45.3	3.3	0
Certified, taught	66.7	26.1	90.2	9.9	1.6	5.6
Taught, training unknown	—	—	—	—	—	—
Sector of schools at which taught by 1997						
Public	65.0	27.1	88.3	11.7	1.7	6.2
Private	68.7	15.1	67.4	32.6	8.9	7.3
Both	78.3	16.8	89.2	10.8	3.4	1.5
Level of schools at which taught by 1997 <sup>2</sup>						
Elementary	64.9	25.9	89.7	10.3	2.5	6.7
Secondary	70.1	21.8	78.9	21.1	3.1	5.1
Combined	68.7	24.4	62.2	37.8	5.9	1.1
Multiple	61.9	34.2	94.1	5.9	2.2	1.7
Satisfaction with student learning						
Dissatisfied	65.3	27.6	90.4	9.7	2.7	4.4
Somewhat or very satisfied	67.2	24.8	91.0	9.0	2.4	5.6
Satisfaction with school environment						
Dissatisfied	61.9	28.7	89.1	10.9	3.7	5.7
Somewhat or very satisfied	70.5	24.7	92.2	7.8	1.3	3.5



**Table C21—Of 1992–93 bachelor’s degree recipients who first taught and left teaching since receiving the bachelor’s degree, percentage distribution according to employment/enrollment status in April 1997, by selected characteristics—Continued**

	Employed only	Employed and enrolled	Of those employed, percent employed		Enrolled only	Neither employed nor enrolled
			In education	Outside education		
Satisfaction with discipline						
Dissatisfied	65.9	27.2	90.2	9.8	2.2	4.7
Somewhat or very satisfied	65.9	26.2	91.2	8.8	3.4	4.5
Satisfaction with class size						
Dissatisfied	63.6	29.9	92.3	7.7	2.0	4.5
Somewhat or very satisfied	68.3	23.6	88.5	11.5	3.3	4.9
Satisfaction with parent support						
Dissatisfied	64.4	28.4	89.0	11.0	3.2	4.1
Somewhat or very satisfied	68.8	23.7	93.9	6.1	1.3	6.2
Satisfaction with societal views of teaching						
Dissatisfied	66.5	26.7	91.3	8.7	2.3	4.4
Somewhat or very satisfied	61.5	28.0	86.0	14.0	4.2	6.3

—Sample size too small for a reliable estimate.

<sup>1</sup>Includes American Indian/Alaska Natives, Asian/Pacific Islanders, and others.

<sup>2</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C22—Percentage distributions of 1992–93 bachelor’s degree recipients according to their employment expectations in 3 years and whether they expected to be teaching in the longer term; and percentage distribution of pipeline entrants according to whether they planned to move into an education-related job, by selected characteristics: 1997**

	1992–93 bachelor’s degree recipients who had not taught before receiving the degree					Of those in pipeline, whether planned to move into education-related, nonteaching job <sup>1</sup>	
	Employment expectations in 3 years			Expects to be teaching longer term		Yes	No
	Teaching full time	Other full-time work	Not working full time	Yes	No		
Total	7.6	83.7	8.8	7.1	92.9	31.6	68.4
Gender							
Male	4.3	92.1	3.5	3.7	96.3	29.1	71.0
Female	10.4	76.3	13.3	10.1	90.0	32.9	67.1
Race/ethnicity							
Black, non-Hispanic	6.4	88.5	5.2	4.1	95.9	49.4	50.6
Hispanic	10.0	82.8	7.2	8.1	91.9	43.2	56.8
White, non-Hispanic	7.8	83.0	9.2	7.5	92.5	29.3	70.7
Other, non-Hispanic	5.1	84.1	10.8	1.8	98.2	—	—
American Indian/Alaska Native	8.5	84.2	7.3	7.1	92.9	—	—
Asian/Pacific Islander	2.1	91.2	6.7	2.0	98.0	30.8	69.2
Other	5.1	84.1	10.8	1.8	98.2	—	—
Age as of 12/31/96							
26 or younger	7.5	84.3	8.2	6.9	93.1	32.2	67.8
27–28	8.6	81.2	10.3	8.5	91.5	26.5	73.6
29 or older	7.6	81.4	11.0	7.4	92.6	30.4	69.6
College entrance exam (CEE) scores							
Available	7.6	84.2	8.3	7.0	93.0	30.8	69.2
Bottom quartile	10.1	83.0	7.0	8.0	92.0	38.0	62.0
Middle half	7.9	83.8	8.3	7.5	92.5	29.8	70.3
Top quartile	4.4	86.1	9.5	4.9	95.1	23.4	76.6
Unavailable	7.7	81.6	10.7	7.4	92.6	35.1	64.9
Baccalaureate degree major							
Business/management	2.1	92.3	5.6	3.2	96.9	30.3	69.8
Education	35.9	54.6	9.5	29.9	70.1	33.2	66.8
Humanities	8.3	78.4	13.2	7.0	93.1	27.1	72.9
Math/computer/natural sciences	4.5	88.7	6.8	4.2	95.9	28.8	71.2
Social sciences	5.5	85.2	9.3	5.5	94.5	37.6	62.4
Other	2.0	86.2	11.8	2.5	97.5	28.9	71.1
Cumulative undergraduate GPA							
Less than 2.75	4.6	89.3	6.1	4.8	95.2	37.4	62.7
2.75–3.24	9.3	81.8	9.0	8.1	91.9	34.7	65.3
3.25–3.74	8.9	82.1	9.0	8.4	91.6	28.0	72.0
3.75 or higher	7.9	78.3	13.8	7.5	92.5	22.6	77.4

**Table C22—Percentage distributions of 1992–93 bachelor’s degree recipients according to their employment expectations in 3 years and whether they expected to be teaching in the longer term; and percentage distribution of pipeline entrants according to whether they planned to move into an education-related job, by selected characteristics: 1997—Continued**

	1992–93 bachelor’s degree recipients who had not taught before receiving the degree					Of those in pipeline, whether planned to move into education-related, nonteaching job <sup>1</sup>	
	Employment expectations in 3 years			Expects to be teaching longer term		Yes	No
	Teaching full time	Other full-time work	Not working full time	Yes	No		
Undergraduate GPA in major							
Less than 2.75	3.6	90.5	5.9	5.0	95.1	43.0	57.0
2.75–3.24	6.9	85.5	7.6	5.7	94.3	35.4	64.6
3.25–3.74	8.9	82.0	9.1	8.7	91.3	30.6	69.4
3.75 or higher	8.8	80.2	11.0	8.4	91.6	26.8	73.3
Degree-granting institution (undergraduate)							
Public							
Nondoctorate-granting	11.7	80.4	8.0	9.9	90.1	33.8	66.2
Doctorate-granting	7.1	84.9	8.0	6.4	93.6	31.2	68.8
Private, not-for-profit							
Nondoctorate-granting	6.4	84.7	8.9	6.7	93.3	31.9	68.1
Doctorate-granting	3.8	83.8	12.3	5.2	94.8	26.5	73.6
Other	0	90.5	9.5	1.0	99.0	—	—
Highest degree attained							
Bachelor’s degree	7.4	83.5	9.1	6.9	93.1	31.2	68.8
Master’s degree or higher	9.3	84.9	5.8	8.1	92.0	34.1	65.9
Highest degree expected in 1997							
Bachelor’s degree	2.6	86.4	11.0	3.9	96.1	11.2	88.8
Master’s degree	10.5	82.6	7.0	9.7	90.3	32.5	67.6
First-professional degree	0.7	89.9	9.4	0.2	99.8	21.7	78.3
Doctoral degree	9.2	79.6	11.2	5.7	94.3	49.1	50.9
Status in teacher pipeline, 1997							
Pipeline-eligible but did not enter pipeline	0.4	91.9	7.8	0.7	99.3	22.3	77.7
Considered only	4.1	85.3	10.7	6.2	93.8	28.2	71.8
Applied	7.8	77.6	14.6	10.2	89.8	31.5	68.5
Taught, no training	13.9	70.7	15.4	11.0	89.0	33.9	66.1
Student taught only	7.2	83.6	9.3	7.2	92.9	25.1	74.9
Student taught, taught, not certified	36.0	58.3	5.6	29.8	70.2	28.3	71.7
Certified, had not taught	20.8	64.4	14.9	23.5	76.6	26.8	73.2
Certified, taught	55.5	37.2	7.4	44.4	55.7	37.9	62.1
Taught, training unknown	—	—	—	—	—	—	—
Trained, teaching unknown	—	—	—	—	—	—	—
Years of teaching experience							
1 or less	43.2	51.1	5.7	37.7	62.3	33.8	66.2
2	36.6	51.5	11.9	26.6	73.4	43.3	56.7
3	53.2	37.8	9.0	41.9	58.1	36.4	63.6
More than 3	57.2	37.3	5.5	45.0	55.0	36.4	63.6

**Table C22—Percentage distributions of 1992–93 bachelor’s degree recipients according to their employment expectations in 3 years and whether they expected to be teaching in the longer term; and percentage distribution of pipeline entrants according to whether they planned to move into an education-related job, by selected characteristics: 1997—Continued**

	1992–93 bachelor’s degree recipients who had not taught before receiving the degree					Of those in pipeline, whether planned to move into education-related, nonteaching job <sup>1</sup>	
	Employment expectations in 3 years			Expects to be teaching longer term		Yes	No
	Teaching full time	Other full-time work	Not working full time	Yes	No		
Sector of schools at which taught by 1997							
Public	55.7	38.9	5.5	43.9	56.1	38.3	61.7
Private	24.5	55.7	19.9	25.8	74.2	35.4	64.6
Both	55.9	43.5	0.7	45.3	54.7	33.4	66.6
Level of schools at which taught by 1997 <sup>2</sup>							
Elementary	52.0	40.9	7.1	42.4	57.7	37.2	62.8
Secondary	53.3	41.3	5.4	43.8	56.2	33.1	66.9
Combined	28.8	62.4	8.9	28.7	71.3	31.8	68.2
Multiple	60.7	34.0	5.3	42.1	57.9	51.7	48.4
Teacher workload more difficult, most recent job as of 1997							
Yes	54.9	39.6	5.5	40.9	59.1	40.8	59.2
No	52.2	40.1	7.7	42.3	57.8	36.8	63.2
Not sure	59.7	32.3	8.0	55.6	44.4	18.0	82.0
Teaching status at end of study period							
Still teaching	58.2	36.4	5.4	45.6	54.4	37.3	62.8
Not teaching	16.2	67.4	16.5	14.5	85.6	36.6	63.4
Satisfaction with student learning							
Dissatisfied	56.0	36.8	7.2	41.4	58.7	38.6	61.4
Somewhat or very satisfied	52.1	40.6	7.3	42.7	57.3	36.6	63.4
Satisfaction with school environment							
Dissatisfied	47.8	40.8	11.4	32.5	67.5	47.5	52.5
Somewhat or very satisfied	53.5	39.7	6.8	43.6	56.4	35.7	64.3
Satisfaction with discipline							
Dissatisfied	49.7	42.6	7.8	37.0	63.0	43.7	56.3
Somewhat or very satisfied	53.8	39.0	7.1	43.9	56.1	35.0	65.0
Satisfaction with class size							
Dissatisfied	55.2	33.8	11.0	43.2	56.8	43.7	56.4
Somewhat or very satisfied	52.3	41.4	6.3	42.2	57.9	35.3	64.7
Satisfaction with parent support							
Dissatisfied	52.5	42.8	4.7	40.4	59.6	42.1	57.9
Somewhat or very satisfied	53.0	38.9	8.1	43.0	57.0	35.4	64.6

**Table C22—Percentage distributions of 1992–93 bachelor’s degree recipients according to their employment expectations in 3 years and whether they expected to be teaching in the longer term; and percentage distribution of pipeline entrants according to whether they planned to move into an education-related job, by selected characteristics: 1997—Continued**

	1992–93 bachelor’s degree recipients who had not taught before receiving the degree					Of those in pipeline, whether planned to move into education-related, nonteaching job <sup>1</sup>	
	Employment expectations in 3 years			Expects to be teaching longer term		Yes	No
	Teaching full time	Other full-time work	Not working full time				
		Yes	No	Yes	No		
Satisfaction with societal views of teaching							
Dissatisfied	50.9	42.2	6.9	39.7	60.3	40.9	59.1
Somewhat or very satisfied	54.1	38.5	7.5	44.0	56.1	34.8	65.2

—Sample size too small for a reliable estimate.

<sup>1</sup>Defined as nonteaching jobs such as school administration or counseling.

<sup>2</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C23—Percentage distributions of 1992–93 bachelor’s degree recipients according to gender and race/ethnicity, by selected characteristics: 1997**

	Gender		Race/ethnicity					
			American Indian/ Alaska Native	Asian/ Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other, non- Hispanic
	Male	Female						
Total	46.5	53.5	0.6	4.7	5.8	4.8	83.5	0.6
Baccalaureate degree major								
Business/management	52.7	47.3	0.4	4.1	6.6	4.4	83.8	0.7
Education	24.3	75.7	0.4	1.9	3.4	3.9	90.2	0.2
Humanities	37.5	62.5	1.1	4.9	4.9	4.9	83.4	0.8
Math/computer/natural sciences	65.3	34.7	0.3	8.3	5.6	4.8	80.7	0.4
Social sciences	43.3	56.8	0.8	3.1	6.7	5.2	83.5	0.7
Other	39.1	60.9	0.7	4.7	6.3	5.6	82.1	0.6
Status in teacher pipeline, 1997								
Pipeline-eligible but did not enter pipeline	51.7	48.3	0.5	6.0	5.0	4.4	83.7	0.5
Considered teaching or applied to teach	44.4	55.6	1.1	2.4	9.6	5.7	80.3	0.9
Taught but had not prepared	40.4	59.7	0.3	2.8	7.3	8.2	80.6	0.8
Prepared but had not taught	33.6	66.4	0.3	4.1	1.6	2.8	91.2	0
Prepared and had taught	24.2	75.8	0.5	1.0	4.6	5.6	88.0	0.4
Has student teaching credit								
No	49.1	51.0	0.6	4.9	6.2	4.9	82.9	0.5
Yes	25.3	74.7	0.4	2.4	2.3	4.4	90.2	0.4
Certified to teach <sup>1</sup>								
Certified	24.8	75.2	0.5	1.0	3.8	5.0	89.5	0.3
Everyone else	49.4	50.6	0.6	5.2	6.1	4.8	82.7	0.6
Participated in teacher induction program								
Participated	26.7	73.3	0.5	1.2	4.7	5.9	87.2	0.6
Did not participate	28.7	71.3	0.3	1.3	5.5	6.2	86.2	0.6
Years of teaching experience								
1 or less	36.8	63.2	0	0.6	5.8	5.3	87.5	0.8
2	28.2	71.8	0.9	0	4.1	5.3	89.2	0.5
3	23.9	76.1	0.3	2.6	9.6	6.0	81.0	0.4
More than 3	24.6	75.4	0.4	0.9	2.3	6.4	89.8	0.3
Expects to be teaching in long term								
Yes	24.1	75.9	0.6	1.3	3.3	5.4	89.3	0.1
No	48.2	51.8	0.6	4.8	6.0	4.7	83.5	0.5
Sector of schools at which taught by 1997								
Public always	29.1	71.0	0.1	1.0	6.2	6.7	85.5	0.5
Private always	27.5	72.5	0	0	1.0	7.0	92.1	0
Both	19.2	80.8	0	0	4.3	2.3	90.1	3.4

**Table C23—Percentage distributions of 1992–93 bachelor’s degree recipients according to gender and race/ethnicity, by selected characteristics: 1997—Continued**

	Gender		Race/ethnicity					
			American Indian/ Alaska Native	Asian/ Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other, non- Hispanic
	Male	Female						
Level of schools at which taught by 1997 <sup>2</sup>								
Elementary only	15.4	84.6	0	0.2	6.5	8.1	84.3	0.9
Secondary only	45.3	54.8	0.3	1.0	7.0	6.4	85.3	0
Combined only	19.8	80.2	0	0	0	2.4	97.6	0
Multiple	41.8	58.2	0	4.5	0.7	3.6	91.3	0
Teaching status at end of study period								
Current teachers	26.6	73.4	0.4	1.2	4.9	5.4	87.9	0.2
Former teachers	31.5	68.5	0.4	1.0	6.1	7.9	83.4	1.3

<sup>1</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>2</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C24—Percentage distribution of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree according to age as of December 31, 1996, by selected characteristics: 1997**

	26 years old or younger	27–28 years old	29 years old or older
Total	52.5	19.6	28.0
Baccalaureate degree major			
Business/management	48.5	18.1	33.4
Education	54.1	19.3	26.6
Humanities	55.4	21.3	23.4
Math/computer/natural sciences	55.2	21.6	23.3
Social sciences	59.9	16.1	24.0
Other	46.4	21.6	32.0
Status in teacher pipeline, 1997			
Pipeline-eligible but did not enter pipeline	52.6	19.9	27.5
Considered teaching or applied to teach	50.0	20.6	29.3
Had taught but not prepared	61.7	14.3	24.1
Prepared but had not taught	57.6	13.0	29.4
Prepared and had taught	51.9	20.1	28.0
Has student teaching credit			
Yes	51.1	18.8	30.1
No	52.7	19.7	27.6
Certified to teach <sup>1</sup>			
Certified	52.6	19.0	28.4
Not certified	52.5	19.6	27.9
Participated in teacher induction program			
Participated	54.8	17.1	28.1
Did not participate	53.8	20.3	25.9
Years of teaching experience			
1 or less	63.5	16.2	20.4
2	67.9	12.2	19.9
3	54.2	17.6	28.2
More than 3	48.1	23.7	28.2
Expects to be teaching in long term			
Yes	51.7	19.5	28.8
No	52.6	19.5	27.9
Sector of schools at which taught by 1997			
Public always	50.5	18.6	30.8
Private always	75.9	11.3	12.7
Both	59.2	23.2	17.6



**Table C24—Percentage distribution of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree according to age as of December 31, 1996, by selected characteristics: 1997—Continued**

	26 years old or younger	27–28 years old	29 years old or older
Level of schools at which taught by 1997 <sup>2</sup>			
Elementary only	53.5	16.9	29.6
Secondary only	52.1	19.8	28.2
Combined only	64.7	14.6	20.7
Multiple	60.7	17.5	21.9
Teaching status at end of study period			
Current teachers	54.1	18.7	27.1
Former teachers	66.4	17.0	16.7

<sup>1</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>2</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C25—Percentage distributions of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree according to whether college entrance examination scores were available and entrance examination score quartile, by selected characteristics: 1997**

	Of all graduates, percent with <sup>1</sup>		Of those with scores available		
	Scores unavailable	Scores available	Bottom quartile	Middle half	Top quartile
Total	11.5	88.5	23.3	51.7	25.0
Baccalaureate degree major					
Business/management	15.3	84.7	26.7	54.3	19.1
Education	9.2	90.8	29.6	54.8	15.6
Humanities	10.4	89.6	18.1	50.2	31.8
Math/computer/natural sciences	7.9	92.1	13.6	48.7	37.7
Social sciences	10.3	89.7	21.9	52.1	25.9
Other	13.4	86.6	30.6	50.9	18.5
Status in teacher pipeline, 1997					
Pipeline-eligible but did not enter pipeline	11.3	88.7	21.5	52.2	26.3
Considered teaching or applied to teach	12.5	87.5	22.8	52.3	25.0
Had taught but not prepared	10.6	89.4	16.1	45.3	38.7
Prepared but had not taught	12.2	87.8	31.7	49.5	18.8
Prepared and had taught	9.1	90.9	29.2	55.0	15.8
Has student teaching credit					
Yes	10.2	89.8	29.4	54.5	16.1
No	11.5	88.5	22.1	51.9	26.0
Certified to teach <sup>2</sup>					
Certified	9.5	90.5	30.0	54.5	15.5
Not certified	11.7	88.3	22.4	51.3	26.3
Participated in teacher induction program					
Participated	9.0	91.0	25.6	53.9	20.5
Did not participate	9.0	91.0	27.6	50.5	21.9
Years of teaching experience					
1 or less	13.8	86.2	21.1	55.7	23.3
2	14.9	85.2	14.8	60.9	24.4
3	19.6	80.5	25.6	58.8	15.6
More than 3	16.1	83.9	32.4	53.5	14.1
Expects to be teaching in long term					
Yes	12.8	87.2	27.7	55.0	17.3
No	11.2	88.8	23.0	51.3	25.8
Sector of schools at which taught by 1997					
Public always	9.2	90.8	27.4	54.5	18.2
Private always	5.0	95.0	13.0	49.4	37.7
Both	—	—	—	—	—

**Table C25—Percentage distributions of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree according to whether college entrance examination scores were available and entrance examination score quartile, by selected characteristics: 1997—Continued**

	Of all graduates, percent with <sup>1</sup>		Of those with scores available		
	Scores unavailable	Scores available	Bottom quartile	Middle half	Top quartile
Level of schools at which taught by 1997 <sup>3</sup>					
Elementary only	10.5	89.6	28.3	54.8	16.9
Secondary only	7.5	92.5	22.0	51.4	26.7
Combined only	7.2	92.8	18.5	59.6	21.8
Multiple	6.2	93.8	28.1	50.1	21.8
Teaching status at end of study period					
Current teachers	8.7	91.3	28.2	53.7	18.0
Former teachers	6.3	93.7	22.7	49.3	28.0

<sup>1</sup>Includes ETS SAT scores, institution-, or self-reported SAT scores. See glossary for details.

<sup>2</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>3</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C26—Of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree, percentage with available SAT scores, and average scores of those with scores, by selected characteristics: 1997**

	Scores available <sup>1</sup>	Of those with available scores, average		
		Verbal score	Math score	Composite score
Total	44.7	545	544	1,089
Baccalaureate degree major				
Business/management	40.5	520	534	1,054
Education	38.6	527	517	1,044
Humanities	52.2	581	549	1,130
Math/computer/natural sciences	49.6	567	588	1,155
Social sciences	52.7	553	540	1,093
Other	38.7	527	517	1,045
Status in teacher pipeline, 1997				
Pipeline-eligible but did not enter pipeline	46.4	549	551	1,100
Considered teaching or applied to teach	44.3	541	538	1,078
Taught but not prepared	55.9	566	554	1,120
Prepared but had not taught	37.6	534	526	1,061
Prepared and had taught	37.9	522	513	1,035
Has student teaching credit				
Yes	2.2	524	517	1,042
No	1.3	547	547	1,094
Certified to teach <sup>2</sup>				
Certified	36.6	547	547	1,094
Not certified	45.8	524	517	1,042
Participated in teacher induction program				
Participated	40.8	539	534	1,073
Did not participate	42.6	533	523	1,056
Years of teaching experience				
1 or less	56.3	546	536	1,082
2	45.9	565	547	1,113
3	39.8	533	532	1,065
More than 3	37.0	518	514	1,033
Expects to be teaching in long term				
Yes	34.6	524	517	1,042
No	46.2	547	547	1,094
Sector of schools at which taught by 1997				
Public always	38.2	520	516	1,036
Private always	50.6	578	558	1,136
Both	45.8	—	—	—

**Table C26—Of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree, percentage with available SAT scores, and average scores of those with scores, by selected characteristics: 1997—Continued**

	Scores available <sup>1</sup>	Of those with available scores, average		
		Verbal score	Math score	Composite score
Level of schools at which taught by 1997 <sup>3</sup>				
Elementary	38.1	517	513	1,030
Secondary	44.0	540	532	1,072
Combined	50.2	—	—	—
Multiple	36.5	540	536	1,076
Teaching status at end of study period				
Current teachers	40.9	529	525	1,054
Former teachers	52.3	563	549	1,112

—Sample size too small for a reliable estimate.

<sup>1</sup>Includes only ETS-reported SAT scores, recentered in 1995.

<sup>2</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>3</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C27—Percentage distribution of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree according to baccalaureate degree major, by selected characteristics: 1997**

	Business/ management	Education	Humanities	Mathematics/ computer/ natural sciences	Social sciences	Other
Total	25.2	11.7	9.8	19.6	15.2	18.4
Status in teacher pipeline, 1997						
Pipeline-eligible but did not enter pipeline	31.2	3.0	8.3	21.2	15.3	21.0
Considered teaching or applied to teach	22.9	5.7	13.8	20.6	18.7	18.4
Had taught but not prepared	10.1	10.5	20.0	23.4	19.8	16.3
Prepared but had not taught	9.3	45.3	8.5	8.9	12.6	15.3
Prepared and had taught	3.2	65.6	10.1	10.7	7.1	3.3
Has student teaching credit						
Yes	3.2	68.6	7.5	8.6	6.3	5.9
No	27.9	5.0	10.2	20.9	16.2	19.8
Certified to teach <sup>1</sup>						
Certified	3.8	63.9	9.6	10.0	8.2	4.5
Not certified	28.1	4.7	9.9	20.9	16.1	20.3
Whether participated in induction program						
Participated	3.7	56.6	11.5	14.3	9.0	4.9
Did not participate	5.4	54.5	11.8	12.1	9.8	6.3
Years of teaching experience						
1 or less	3.4	28.9	20.4	18.6	16.2	12.5
2	5.7	52.4	11.7	16.0	10.8	3.4
3	5.5	59.2	12.3	11.2	8.9	2.9
More than 3	2.6	70.6	9.6	12.1	2.7	2.4
Expects to be teaching in long term						
Yes	11.2	49.5	9.5	11.5	11.7	6.6
No	26.4	8.9	9.7	20.3	15.4	19.3
Sector of schools at which taught by 1997						
Public always	5.9	56.8	11.1	13.2	7.3	5.8
Private always	1.0	46.0	16.3	18.8	15.4	2.5
Both	8.3	65.6	6.6	12.6	3.4	3.5
Level of schools at which taught by 1997 <sup>2</sup>						
Elementary	3.6	69.0	9.7	8.5	4.8	4.6
Secondary	6.8	36.1	15.0	23.3	13.6	5.3
Combined	0	46.4	16.8	16.7	13.9	6.2
Multiple	11.6	57.3	10.3	12.5	5.5	2.9

**Table C27—Percentage distribution of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree according to baccalaureate degree major, by selected characteristics: 1997—Continued**

	Business/ management	Education	Humanities	Mathematics/ computer/ natural sciences	Social sciences	Other
Main field taught in most recent job as of 1997						
General elementary	4.3	72.0	9.0	6.0	6.0	2.7
Business and vocational	10.3	51.8	3.6	24.0	6.4	3.8
Science and mathematics	5.4	43.6	4.8	38.2	5.6	2.4
Foreign languages	13.7	39.3	41.7	0.3	5.0	0
Special education	5.1	68.2	2.6	3.3	11.9	8.9
English	2.8	54.6	21.4	3.9	15.3	2.0
Social sciences	0	37.4	22.9	1.7	33.0	5.0
Fine arts	0	59.0	24.3	3.7	6.3	6.7
Teaching status at end of study period						
Current teachers	3.8	59.6	11.9	13.8	7.6	3.4
Former teachers	6.4	41.2	17.0	14.0	12.1	9.3

<sup>1</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>2</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C28—Percentage distributions of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree according to cumulative undergraduate grade-point average (GPA) and undergraduate GPA in major, by selected characteristics: 1997**

	Cumulative undergraduate GPA				Undergraduate GPA in major			
	Less than 2.75	2.75–3.24	3.25–3.74	3.75 or higher	Less than 2.75	2.75–3.24	3.25–3.74	3.75 or higher
	Total	16.0	40.6	30.9	12.5	8.4	40.0	28.6
Baccalaureate degree major								
Business/management	17.0	40.1	30.6	12.4	10.0	42.1	27.6	20.4
Education	11.5	38.9	33.8	15.9	4.2	33.0	31.4	31.4
Humanities	13.2	35.8	36.0	15.1	6.9	31.3	30.9	30.8
Math/computer/natural sciences	19.6	40.7	29.7	10.0	11.1	43.6	26.5	18.8
Social sciences	17.2	39.1	30.8	12.9	7.7	38.2	29.3	24.8
Other	13.9	46.2	28.5	11.4	7.3	43.9	28.6	20.2
Status in teacher pipeline, 1997								
Pipeline-eligible but did not enter pipeline	16.9	41.6	29.5	12.0	9.0	41.7	27.6	21.8
Considered teaching or applied to teach	19.0	37.7	31.9	11.4	10.4	38.8	28.7	22.1
Had taught but not prepared	14.2	35.1	35.6	15.2	7.3	35.3	33.1	24.4
Prepared but had not taught	7.9	41.7	34.3	16.1	3.9	34.6	32.6	29.0
Prepared and had taught	9.1	40.7	34.4	15.8	3.9	34.1	31.8	30.3
Has student teaching credit								
Yes	7.2	40.5	35.7	16.6	2.7	32.7	32.4	32.1
No	17.1	40.7	30.3	12.0	9.2	40.7	28.2	21.9
Certified to teach <sup>1</sup>								
Certified	9.2	39.6	35.6	15.7	3.8	33.3	32.1	30.8
Not certified	16.9	40.7	30.3	12.1	9.0	41.0	28.1	21.9
Participated in teacher induction program								
Participated	9.7	38.1	34.8	17.4	4.1	34.0	31.2	30.7
Did not participate	10.4	39.9	35.3	14.4	4.6	34.2	33.1	28.1
Years of teaching experience								
1 or less	23.9	32.8	30.2	13.1	5.2	37.4	32.4	25.0
2	15.2	37.8	39.7	7.3	2.8	39.8	35.9	21.4
3	12.8	35.8	37.4	14.0	7.2	26.0	34.6	32.1
More than 3	13.5	39.1	32.7	14.7	2.0	35.9	31.2	30.9
Expects to be teaching in long term								
Yes	12.1	39.6	34.2	14.2	5.9	32.3	34.9	27.0
No	16.4	40.6	30.6	12.4	8.7	40.7	28.0	22.6
Sector of schools at which taught by 1997								
Public always	10.2	39.0	35.5	15.3	4.3	34.7	33.2	27.9
Private always	8.4	41.4	30.0	20.3	3.2	33.4	23.2	40.3
Both	12.0	36.5	32.5	18.9	12.0	20.7	34.5	32.9



**Table C28—Percentage distributions of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree according to cumulative undergraduate grade-point average (GPA) and undergraduate GPA in major, by selected characteristics: 1997—Continued**

	Cumulative undergraduate GPA				Undergraduate GPA in major			
	Less than 2.75	2.75–3.24	3.25–3.74	3.75 or higher	Less than 2.75	2.75–3.24	3.25–3.74	3.75 or higher
Level of schools at which taught by 1997 <sup>2</sup>								
Elementary only	8.4	39.1	36.0	16.5	4.6	31.5	33.2	30.8
Secondary only	13.2	40.5	34.6	11.7	5.6	40.0	32.2	22.1
Combined only	8.9	38.7	31.1	21.2	5.3	30.1	30.2	34.4
Multiple	11.1	36.7	32.5	19.8	2.7	32.2	29.2	35.9
Teaching status at end of study period								
Current teachers	9.1	39.6	35.5	15.8	4.1	32.9	33.3	29.7
Former teachers	12.3	41.8	34.3	11.6	4.2	40.6	31.6	23.6

<sup>1</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>2</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C29—Percentage distributions of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree according to type of postsecondary institution first attended and degree-granting institution type, by selected characteristics: 1997**

	Type of post-secondary institution first attended			Degree-granting institution type				
	4-year	2-year	Less-than-2-year	Public		Private, not-for-profit		Other
				Non-doctorate-granting	octorate-granting	Non-doctorate-granting	octorate-granting	
Total	82.4	17.5	0.1	24.7	42.6	17.9	13.5	1.5
Baccalaureate degree major								
Business/management	80.2	19.7	0.1	25.3	37.6	23.8	11.9	1.4
Education	80.3	19.6	0.1	32.2	40.3	16.8	10.5	0.3
Humanities	83.5	16.4	0.1	23.3	36.3	19.9	16.7	3.8
Math/computer/natural sciences	85.6	14.3	0.2	22.8	48.4	12.7	15.2	0.9
Social sciences	85.6	14.4	0	23.1	43.4	18.2	15.4	0
Other	80.0	19.8	0.2	23.1	47.6	14.3	12.2	2.8
Status in teacher pipeline, 1997								
Pipeline-eligible but did not enter pipeline	83.1	16.9	0.1	22.6	45.3	17.0	13.7	1.5
Considered teaching or applied to teach	82.2	17.7	0.1	24.5	37.4	21.0	15.2	2.0
Had taught but not prepared	81.9	17.8	0.3	17.8	41.0	21.5	19.4	0.4
Prepared but had not taught	85.6	14.4	0	33.7	35.6	18.3	12.4	0
Prepared and had taught	77.6	22.4	0	36.7	39.6	14.9	8.8	0.1
Has student teaching credit								
Yes	79.0	21.0	0	36.6	36.9	16.9	9.6	0.1
No	82.8	17.1	0.1	23.4	43.3	17.7	14.1	1.5
Certified to teach <sup>1</sup>								
Certified	78.5	21.5	0	36.8	39.1	15.3	8.8	0.1
Not certified	82.9	17.0	0.1	23.0	43.0	18.2	14.1	1.7
Participated in teacher induction program								
Participated	78.6	21.4	0	34.4	40.3	15.1	10.0	0.2
Did not participate	77.7	22.2	0.1	31.7	39.0	17.6	11.7	0.1
Years of teaching experience								
1 or less	78.0	22.0	0	36.6	40.6	13.3	9.5	0
2	83.1	16.9	0	26.7	32.1	19.1	22.1	0
3	77.0	23.0	0	39.3	35.6	16.8	8.2	0
More than 3	77.1	22.7	0.2	33.9	43.5	14.2	8.1	0.4
Expects to be teaching in long term								
Yes	80.2	19.8	0	34.4	38.6	16.9	9.9	0.2
No	82.8	17.1	0.1	23.8	43.0	18.0	13.8	1.4

**Table C29—Percentage distributions of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree according to type of postsecondary institution first attended and degree-granting institution type, by selected characteristics: 1997—Continued**

	Type of post-secondary institution first attended			Degree-granting institution type				
				Public		Private, not-for-profit		Other
	4-year	2-year	Less-than-2-year	Non-doctorate-granting	octorate-granting	Non-doctorate-granting	octorate-granting	
<b>Sector of schools at which taught by 1997</b>								
Public always	77.3	22.7	0	36.6	41.8	14.4	7.1	0.1
Private always	82.2	17.8	0	18.0	36.3	25.5	20.1	0
Both	85.0	15.0	0	29.5	26.6	20.0	24.0	0
<b>Level of schools at which taught by 1997<sup>2</sup></b>								
Elementary only	75.8	24.2	0	37.3	39.0	16.2	7.6	0
Secondary only	79.4	20.6	0	32.1	45.4	14.0	8.2	0.3
Combined only	77.1	22.9	0	31.4	17.3	33.0	18.3	0
Multiple	86.9	13.1	0	28.7	44.8	11.7	14.8	0
<b>Teaching status at end of study period</b>								
Current teachers	77.9	22.0	0.1	36.8	38.9	14.5	9.6	0.2
Former teachers	80.2	19.8	0	24.5	39.1	19.9	16.5	0

<sup>1</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>2</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

**Table C30—Percentage distributions of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree according to highest degree attained by 1997 interview and highest degree expected as of 1997 interview, by selected characteristics: 1997**

	Highest degree attained		Highest degree expected			
	Bachelor’s degree	Master’s or higher	Bachelor’s degree	Master’s degree	First-professional degree	Doctoral degree
Total	88.4	11.6	27.2	54.8	5.6	12.3
Baccalaureate degree major						
Business/management	92.6	7.4	34.2	57.6	2.8	5.5
Education	87.9	12.1	19.5	64.5	1.9	14.1
Humanities	87.7	12.3	27.5	51.7	6.0	14.9
Math/computer/natural sciences	85.2	14.8	23.7	49.8	8.9	17.5
Social sciences	84.6	15.5	20.2	52.6	9.5	17.6
Other	90.1	9.9	31.8	54.5	4.9	8.9
Status in teacher pipeline, 1997						
Pipeline-eligible but did not enter pipeline	89.0	11.0	32.7	50.9	6.6	9.8
Considered teaching or applied to teach	89.0	11.0	20.2	57.7	4.9	17.2
Had taught but not prepared	82.3	17.7	11.7	57.9	5.1	25.3
Prepared but had not taught	85.5	14.5	24.7	60.8	2.8	11.6
Prepared and had taught	85.5	14.5	10.2	71.1	2.0	16.7
Has student teaching credit						
Yes	88.3	11.7	16.6	68.5	1.7	13.2
No	88.4	11.6	28.4	53.1	6.2	12.3
Certified to teach <sup>1</sup>						
Certified	85.5	14.5	12.6	70.6	1.7	15.1
Not certified	88.8	11.2	29.2	52.7	6.2	12.0
Participated in teacher induction program						
Participated	84.6	15.4	8.0	72.1	3.2	16.8
Did not participate	85.3	14.7	12.7	64.9	2.2	20.1
Years of teaching experience						
1 or less	78.4	21.6	11.6	60.4	4.6	23.5
2	78.5	21.5	12.4	56.7	4.0	26.9
3	91.3	8.7	8.7	71.0	3.6	16.8
More than 3	88.9	11.1	7.4	78.0	0	14.5
Expects to be teaching in long term						
Yes	86.5	13.5	14.8	74.9	0.2	10.2
No	88.3	11.8	28.1	52.9	6.2	12.9
Sector of schools at which taught by 1997						
Public always	85.5	14.5	10.5	70.7	2.7	16.2
Private always	87.8	12.2	10.5	62.3	5.6	21.7
Both	68.8	31.2	10.0	74.8	0	15.3

**Table C30—Percentage distributions of 1992–93 bachelor’s degree recipients who had not taught before receiving the bachelor’s degree according to highest degree attained by 1997 interview and highest degree expected as of 1997 interview, by selected characteristics: 1997—Continued**

	Highest degree attained		Highest degree expected			
	Bachelor’s degree	Master’s or higher	Bachelor’s degree	Master’s degree	First-professional degree	Doctoral degree
Level of schools at which taught by 1997 <sup>2</sup>						
Elementary only	88.7	11.3	12.3	71.2	3.3	13.2
Secondary only	80.6	19.4	9.6	66.6	3.1	20.7
Combined only	92.8	7.2	19.7	62.1	4.8	13.4
Multiple	87.2	12.8	4.0	73.4	1.3	21.4
Teaching status at end of study period						
Current teachers	84.9	15.1	7.7	72.9	1.7	17.7
Former teachers	86.3	13.7	16.2	53.7	6.1	24.0

<sup>1</sup>Those who were certified at the probationary, regular, or advanced level in any U.S. state were classified as certified. Those who had no state certification or who were certified at no level higher than the temporary, emergency, or other levels were classified as not certified.

<sup>2</sup>Elementary schools provide instruction in some grade lower than 7th and no grade higher than 8th. Secondary schools provide instruction in no grade lower than 7th. Combined schools provide instruction in some grade lower than 7th and some grade higher than 8th.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.