

U.S. Department of Education NCES 2007–163

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Teaching Experience and Preparation Among 1992–93 Bachelor's Degree Recipients 10 Years After College

Statistical Analysis Report



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Teaching Experience and Preparation Among 1992–93 Bachelor's Degree Recipients 10 Years After College

Statistical Analysis Report

July 2007

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Executive Summary

Efforts to increase student achievement have focused in recent years on improving teaching in the United States. Programs implementing higher standards for curricula, student performance, and, especially, teachers' preparation and inservice training have been cornerstones of recent reforms (Hirsch, Koppich, and Knapp 2001; Potts, Blank, and Williams 2002). To ensure a highly qualified teacher for every child, the No Child Left Behind Act and related state policies now require that teachers hold a bachelor's degree and full certification in their field. Two common goals are attracting more skilled people to the profession and retaining teachers at higher rates, particularly new teachers.

Interest in the teaching workforce often focuses on the characteristics of college graduates who choose teaching and who later decide to stay in the profession, and how teachers compare to their counterparts in other professions (Hanushek, Kain, and Rivkin 2004; Henke and Zahn 2001). This report profiles 1992-93 bachelor's degree recipients' experience with K-12 teaching in the subsequent 10 years, and their preparation for teaching. The analysis compares current and former teachers among this cohort on many measures, and contrasts these groups with graduates who never taught (where appropriate). It uses data from the 2003 Baccalaureate and Beyond Longitudinal Study (B&B:93/03), the final follow-up survey of students who received their bachelor's degrees in 1992–93 (B&B:93).

The B&B:93 sample was drawn primarily from eligible respondents in the 1993 National Postsecondary Student Aid Study (NPSAS:93), a nationally representative sample of all students in postsecondary education institutions in the 50 states, the District of Columbia, and Puerto Rico.

The analysis uses standard t-tests to determine statistical significance of differences between estimates, and one-way Analysis of Variance (ANOVA) to detect linear relationships between one ordered and one other variable. All differences reported in the text are statistically significant at the p < .05 level.

Teaching Status of 1992–93 Graduates in 2003

In this study, teachers are defined as bachelor's degree recipients who had worked as teachers of any grade K–12. This definition excludes those who worked only as long- or short-term substitutes or teacher's aides, and those who taught only preschool grades.

Through spring 2003, one-fifth (20 percent) of 1992–93 bachelor's degree recipients had taught in an elementary or secondary school (figure A and text table 1). Approximately 11 percent of these graduates were teaching when interviewed in 2003, and another 9 percent had taught at some point but were not teaching at the time of the interview.

Percent 30 25 12 20 ☐ Former teachers 15 9 ■ Current teachers 10 6 15 11 5 6 0 All Male Female

Figure A. Percentage of 1992–93 bachelor's degree recipients who were current or former teachers, by gender: 2003

NOTE: Estimates include graduates from the 50 states, DC, and Puerto Rico. SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/03 Baccalaureate and Beyond Longitudinal Study (B&B:93/03).

Demographic Characteristics

Consistent with historical precedent (Grant and Murray 1999), in 2003 women were more likely than men to report that they were currently teaching (15 percent vs. 6 percent) or had taught previously (12 percent vs. 6 percent) (figure A and text table 1). Overall, 26 percent of the female graduates had taught at some point, compared with 12 percent of the males (text table 1). Asian/Pacific Islander graduates in this cohort were less inclined than others toward a teaching career; 93 percent of Asian graduates had never taught by 2003, compared with 75 to 80 percent of graduates of other racial/ethnic backgrounds. Graduates who were age 30 or older when they completed their 1992–93 bachelor's degrees were also in general more

likely than younger graduates to be teaching when they were interviewed in 2003.

Academic Characteristics

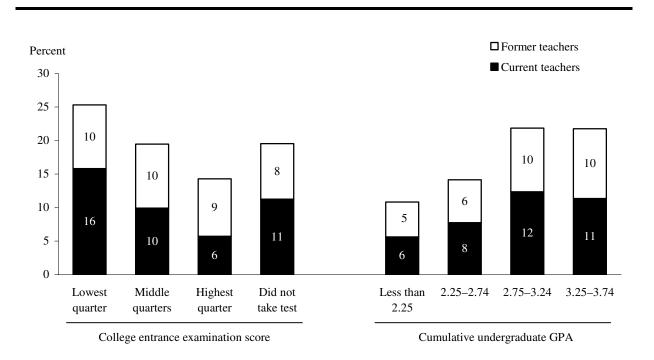
Graduates of public nondoctoral institutions were more likely than others to be teaching in 2003 (text table 2). While 17 percent of public nondoctoral institution graduates reported teaching in 2003, among graduates from other institution types, 11 percent or fewer were teaching in 2003 (figure 2 and text table 2).

Approximately 71 percent of education majors among 1992–93 graduates had taught by 2003: 43 percent were teaching at the time of the interview, and 29 percent had taught but were not currently teaching (figure 3 and text table 2). Education majors were more likely than those

who majored in any other discipline to be teaching in 2003 and to have prior teaching experience. However, 57 percent of all education majors were not teaching in 2003—29 percent who had never taught plus 29 percent who were former teachers. The data also indicate lower attrition rates from teaching among education majors than among majors in other fields.

Graduates' scores on college entrance examinations (i.e., the SAT or ACT) were inversely related to their subsequent likelihood of teaching in 2003. For example, 16 percent of graduates with college entrance examination (CEE) scores in the lowest 25 percent of the distribution were teaching in 2003, compared with 10 percent of those in the middle half of the score distribution and 6 percent of those with the highest scores (figure B and text table 2).

Figure B. Percentage of 1992–93 bachelor's degree recipients who were current or former teachers, by college entrance examination score and normalized undergraduate GPA: 2003



NOTE: Estimates include graduates from the 50 states, DC, and Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/03 Baccalaureate and Beyond Longitudinal Study (B&B:93/03).

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¹ Although the two estimates each round to 29 and thus their sum would appear to be 58, summing the unrounded estimates produces 57.4.

On the other hand, as college grade point average (GPA) increased, graduates were more likely to have past teaching experience and in general were more likely to be teaching in 2003 (figure B).

About 34 percent of 1992–93 graduates whose highest earned degree was a master's—and 47 percent of those who attained a post-baccalaureate certificate—had taught at some point by 2003 (figure 5 and text table 2). In contrast, 16 percent of graduates whose highest degree was a bachelor's and 10 percent of those who earned a credential higher than a master's degree had taught by 2003.

Teachers' Job Characteristics and Opinions About Teaching

Characteristics of Teaching Job

Among graduates who were teaching in 2003, 91 percent were teaching in a public school and 64 percent in an elementary school (figure 6 and text table 3). Graduates who were teaching in 2003 were more likely than graduates who had taught only previously to work at a public school. General elementary was the main assignment field reported by 35 percent of these graduates, and 18 percent taught science or mathematics (figure 7).

Job Satisfaction and Plans for Continuing to Teach

Nearly all graduates (93 percent) who were teaching in 2003 expressed overall satisfaction with that job (figure C). Teachers were more likely to be satisfied with the learning environment at their 2003 school (77 percent)

than with such aspects as pay, parent support, and students' motivation to learn (48 percent of teachers were satisfied with each of these aspects).

On other measures reflecting job satisfaction, 90 percent of 2003 teachers reported that they would choose teaching again, and 2 in 3 (67 percent) said they would remain a teacher for the rest of their working life (text table 4). Male and female teachers did not differ measurably in how long they planned to remain in the profession. However, more male than female teachers (94 vs. 88 percent) said they would choose teaching if they had a chance to make the decision again (figure 9). White teachers were more likely than Black teachers to plan to teach until retirement (70 vs. 37 percent; figure D).

Reasons for Not Teaching in 2003

About 11 percent of the 1992–93 cohort were teaching in 2003, and 9 percent had taught but were not currently teaching (text table 2). Roughly as many graduates had thus left teaching as had stayed in the field by 2003, whether leaving was on a temporary or permanent basis.

One-fifth of teachers who left teaching by 2003 cited raising children or other family demands as their main reason for leaving (text table 5). Other common reasons for leaving teaching were to take jobs outside of education (18 percent) or nonteaching jobs in education (15 percent), because of low pay (13 percent), and "other"—an unspecified reason (22 percent). Male teachers were more likely than females to leave for a job outside of education, while females were more likely to leave for family-related reasons.

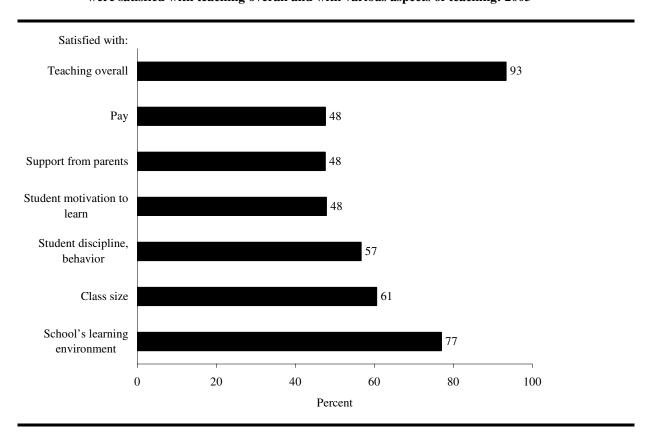


Figure C. Among 1992–93 bachelor's degree recipients who were teaching in 2003, percentages who were satisfied with teaching overall and with various aspects of teaching: 2003

NOTE: School and job characteristics apply to respondents' current teaching job. Estimates include graduates from the 50 states, DC, and Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/03 Baccalaureate and Beyond Longitudinal Study (B&B:93/03).

Preparation for Teaching

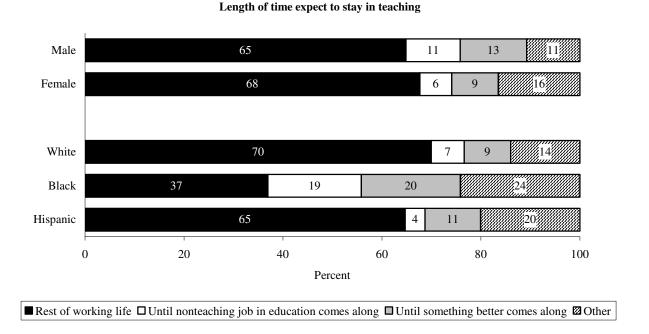
Progress Through the Teacher Pipeline

Nearly one-half (46 percent) of all 1992–93 bachelor's degree recipients had either not considered teaching or not taken any steps to prepare for the profession (figure 12 and text table 6). Another 30 percent had either considered teaching or applied for a teaching job at some point in the previous decade. While 16 percent had both prepared to teach and taught,

roughly 4 percent each had taught with no training or prepared but had not taught. Males and Asians/Pacific Islanders in the cohort were less likely than females and those from other racial/ethnic groups to have considered teaching or taken steps toward a teaching career (text table 6).

Being prepared to teach is defined in this report as having earned a teaching certificate or having completed a student teaching assignment (which usually occurs toward the end of a

Figure D. Among 1992–93 bachelor's degree recipients who were teaching in 2003, percentage distribution by length of time they expected to stay in teaching, by gender and race/ethnicity: 2003



NOTE: Black includes African American and Hispanic includes Latino. Race categories exclude Hispanic origin. Detail may not sum to totals because of rounding. Estimates include graduates from the 50 states, DC, and Puerto Rico. SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/03 Baccalaureate and Beyond Longitudinal Study (B&B:93/03).

teacher preparation program).² Characteristics associated with preparing for and becoming a teacher included having earned a different bachelor's degree before the 1992–93 degree, earning the latter degree from a public non-doctorate-granting institution, and having majored in education as an undergraduate. Graduates who had higher college grades were also more likely to have gained teaching experience and to have completed preparation to

teach by 2003. On the other hand, as CEE scores increased, graduates were less likely to have prepared and to have taught by 2003. Having either taught or trained to teach before completing the 1992–93 degree were other predictors of preparing and teaching by 2003.

Student Teaching and Certification

Overall, 4 in 5 of 1992–93 bachelor's degree recipients had not prepared to teach by 2003 (text table 7), while 17 percent earned teaching certificates. Another 3 percent had completed student teaching but not all requirements for certification. Graduates who were relatively

² Most states' certification requirements for public school teachers include a period of student teaching—either directly or indirectly (e.g., states may require teachers' education programs to include student teaching and require all prospective teachers to complete such a program).

likely to earn teaching certification included females (figure E and text table 7), Whites and Blacks (vs. Asians/Pacific Islanders), those who graduated from public non-doctorate-granting postsecondary institutions, and those who majored in education.

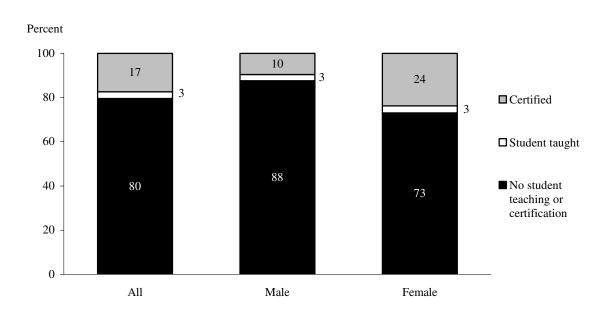
Reasons for Deciding Not to Teach

Among the 1992–93 graduates who had considered teaching but had not entered the profession, 36 percent cited lack of interest in teaching, 30 percent reported having another job already, and 25 percent sought higher pay (text table 8). Males were more likely than females to

have sought higher pay, gotten another job, and received a better offer than teaching (figure 14).

Graduates whose attainment before the 1992–93 bachelor's degree was less than a bachelor's were also more likely than those with higher prior attainment to report seeking higher pay as their reason for not teaching (25 percent vs. 14 percent). As their CEE scores increased, 1992–93 graduates were more likely to select the following reasons for not entering teaching: poor working conditions, low pay, and having another job already. Graduates with relatively high college grades were less likely than those with lower grades to say that lack of teacher certification played a role in the decision.

Figure E. Percentage distribution of 1992–93 bachelor's degree recipients by preparation to teach, by gender: 2003



NOTE: Detail may not sum to totals because of rounding. Estimates include graduates from the 50 states, DC, and Puerto Rico. SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/03 Baccalaureate and Beyond Longitudinal Study (B&B:93/03).

Foreword

This report profiles the K–12 teaching experience and preparation of 1992–93 bachelor's degree recipients in the 10 years following their college graduation. The data upon which the report is based were collected as part of the final follow-up of the first long-term study of bachelor's degree recipients conducted by the National Center for Education Statistics (NCES) in the U.S. Department of Education. The sample was obtained by identifying eligible respondents from the 1993 National Postsecondary Student Aid Study (NPSAS:93), a nationally representative cross-section of all students in postsecondary education institutions in the 50 states, the District of Columbia, and Puerto Rico. As part of NPSAS:93, information was obtained from postsecondary institutions and through telephone interviews with students. Those members of the NPSAS:93 sample who completed a bachelor's degree between July 1, 1992, and June 30, 1993, were identified and contacted for a 1-year follow-up interview in 1994, the Baccalaureate and Beyond Longitudinal Study (B&B:93/94). These graduates were interviewed a second time in 1997, and in a third and final follow-up interview approximately 10 years after they had received their bachelor's degrees (B&B:93/03).

The estimates presented in the report were produced using the NCES Data Analysis System Online (DAS), a web-based table-generating application that provides the public with direct, free access to the B&B:93/03 data as well as other postsecondary data collected by NCES. The DAS produces the design-adjusted standard errors necessary for testing the statistical significance of differences between estimates. For more information about the DAS, readers should consult appendix B of this report.

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