

Data Sources: Master's Degree Persistence and Attainment-1993 to 2003

Each year, more than 1.8 million master's degree candidates are enrolled at American colleges and universities (NCES, 2006a). While information on the demographic characteristics of these students is widely available, their persistence and degree attainment rates are often one of the biggest concerns among graduate deans and other program administrators.

Attempts to collect, analyze, and report accurate national data on this issue have been difficult due to the large proportion of part-time master's students, vast differences in program fields of study, and wide variations in students' degree objectives. These and other impediments have prevented a comprehensive study of master's degree persistence and attainment from emerging. However, data recently released by the National Center for Education Statistics (NCES)

provide some clues to the degree attainment rates for students who entered master's programs in 1993. The NCES data give a valuable first-hand look at master's degree attainment and time-to-degree rates for master's candidates by race/ethnicity, gender, and other important demographic parameters.

The NCES data were released recently in the report *The Path through Graduate School: A Longitudinal Examination 10 Years After Bachelor's Degree* (NCES, 2006b and 2007). The full report, which is available on the NCES Web site at <http://nces.ed.gov/pubs2007/2007162.pdf>, examines the graduate and professional school attendance and degree attainment status of approximately 12,500 students who received bachelor's degrees during the 1992-1993 academic year (July 1, 1992 to June 30, 1993). The surveyed baccalaureates represent the roughly 1.2 million students who graduated from four-year public, private non-profit, and private for-profit (proprietary) colleges and universities during the year. Through NCES's *Baccalaureate and Beyond* longitudinal survey, the students were interviewed in 1994, 1997, and 2003 and asked to report on their employment and graduate school attendance activities (NCES, 2006b and 2007). The survey includes students who entered and obtained master's, doctoral, and professional (law, dental, medical, veterinary, and theology) degrees by 2003. However, the examination focuses almost exclusively on students who entered master's degree programs.

Among the 1992-1993 bachelor's degree recipients, about 30% had enrolled in a master's degree program within ten years of college graduation. In comparison, only about 5% enrolled in doctoral and professional programs. Table 1 provides a

distribution of the rates of enrollment of 1992-1993 baccalaureate recipients who entered graduate/professional schools by type of degree program, race/ethnicity, gender, and age. Overall, women had a slightly higher percentage of enrollment in master's programs than men (34% versus 27%). As might be expected, much of this difference is accounted for by the relatively high rate of enrollment of women in the field of education; women were more than three times as likely as men to be seeking these master's of education (MEd.)¹ degrees, while men were more likely to be seeking master's of business administration (MBA) awards. Within the racial/ethnic groups,

African Americans had a slightly higher overall rate of enrollment in master's programs than Hispanics and White non-Hispanics, but somewhat higher shares of Hispanics were seeking both MBA and MEd. degrees than the other groups. One important predictor of master's degree attendance is the student's age at the time of receipt of a baccalaureate. More than 34% of persons who were 22-years old or younger at time of college graduation entered master's programs, compared with

less than 26% of those between the ages of 23 and 29.

While a higher share of under-represented racial/ethnic minority bachelor's degree recipients entered master's degree programs, these students' levels of degree persistence and attainment appear to be lower than the rates for majority students. As Table 2 shows, roughly 61% of the White, non-Hispanic and 62% Asian/Pacific Islander American master's candidates received their degrees sometime within the ten-year time frame of the NCES survey. Just 54% of African American and 52% of Hispanics finished their degrees in this time period. A number of factors may account for the lower level of degree attainment among minority students; unfortunately, these factors were not examined in the NCES report and deserve further research to determine what actions graduate programs might take to reduce the achievement gaps. It should be noted that roughly 20% of minority candidates remained enrolled in master's programs after 2003; so it is possible that completion rates among these students will rise in later years (the *Baccalaureate and Beyond* survey was stopped after 2003, so it will not be possible to examine degree completion rates for these students in later years).

Table 2 also shows that there was virtually no difference in completion rates between male and female degree candidates, but 65% of students who began their degrees at or before age 22 were able to complete their programs, compared with just 52% of those who began between the ages of 25 and 29 and 56% of those over the age of 30. Several factors -- such as work and family responsibilities -- among older students may account for this difference. Once again, further

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Table 1. Percentage of 1992-1993 Bachelor's Degree Recipients Who Enrolled in Graduate/Professional School Programs by 2003, by Age Level, Gender, and Race/Ethnicity

	Enrolled in Any Master's Degree Program	MBA	MEd	Other Master's	Doctoral	First Professional	Not Enrolled in Any Grad/Prof Program
Total (All Bachelor's Recipients)*	30.90%	7.10%	9.10%	14.70%	4.50%	4.90%	59.60%
Gender of student							
Male	27.10%	8.84	4.14	14.12	5.66	6.12	61.11
Female	34.10%	5.73	13.24	15.14	3.52	3.94	58.43
Race/ethnicity							
White, non-Hispanic	30.80%	6.89	9.46	14.45	4.37	4.49	60.35
Black, non-Hispanic	35.40%	8.11	7.91	19.42	5.39	5.03	54.14
Hispanic	32.80%	8.74	9.83	14.27	5.82	4.56	56.78
Asian or Pacific Islander	25.30%	7.96	4.26	13.12	3.21	13.32	58.13
Age when received bachelor's							
22 and Younger	34.40%	7.71	9.74	17	6.57	7.62	51.37
23 to 24	25.70%	5.87	8.36	11.45	3.66	3.53	67.13
25 to 29	25.40%	6.58	6.61	12.19	1.94	1.81	70.87
30 and Older	32.60%	7.63	10.01	14.96	1.78	1.86	63.77

*All data include students who were U.S. citizens and permanent residents only.

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study is needed to account for these factors more completely. Overall, of the students who entered master's degree programs between 1993 and 2003, 60% successfully earned a degree by 2003, 13% were still enrolled in master's programs, and 26% left higher education without completing a degree.

Table 2. Master's Degree Attainment Rates Among 1992-1993 Bachelor's Degree Recipients Who Enrolled in Master's Degree Programs* by 2003, by Gender, Race/Ethnicity, and Age Level

	2003 Enrollment and attainment status		
	Pct. Attained Master's	Pct. Currently Enrolled	No Degree, Not Enrolled
Total (All Master's Candidates)	60.6%	13.0%	26.4%
Gender of student			
Male	61.1	13.8	25.1
Female	60.3	12.5	27.2
Race/ethnicity			
White, non-Hispanic	61.4	12.0	26.7
Black, non-Hispanic	54.2	20.5	25.3
Hispanic	52.7	20.5	26.9
Asian or Pacific Islander	62.0	11.8	26.2
Age when received bachelor's			
22 and Younger	65.3	11.1	23.6
23 to 24	56.0	16.1	27.9
25 to 29	52.5	15.5	32.0
30 and Older	56.2	13.4	30.4

*All data include students who were U.S. citizens and permanent residents only.

Source: National Center for Education Statistics, 2006b.

Due to low sample sizes, it is not possible to show the distribution of degrees conferred by field of study and demographic characteristics. Overall, the plurality of master's degrees (28%) were awarded in education, followed by science, mathematics, engineering, and technology fields (14%) and social/behavioral sciences (11%). Only 4% of the master's degrees were awarded to students who majored in arts and humanities fields. Oftentimes, students who seek degrees in the arts and humanities fields enroll in doctoral instead of master's programs.

One additional important factor in degree completion is time to degree, defined in the NCES report as the number of years between the first graduate school enrollment and degree completion (NCES, 2007). On average, master's degree candidates who finished their programs took about 2.7 years to complete. Men and women finished in roughly the same amount of time, but there were some differences in time to completion by race/ethnicity. Asian/Pacific Islander Americans finished in roughly 2.3 years, compared with 3.4 years for Hispanics and 2.8 years for African Americans. (Table 3) There were also broad differences in the percentages of students who completed their programs in three or fewer years. More than 87% of Asian American students completed master's programs within three years; this compares with only 51% of Hispanics and 75% of African Americans. (Table 3) Slightly higher shares of men finished in three years or fewer than women, and students who entered master's programs before age 23 were more likely to finish in fewer than three years than older students.

It is very likely that differences in field of study by race/ethnicity and other characteristics account for time-to-degree differences. Unfortunately, limitations in the survey sample sizes do not permit a complete examination of students by race/ethnicity, gender, age, and degree field. Nonetheless, these possible field-of-study differences should be kept in mind while evaluating the variations in the results by gender, race, and other categories.

It generally appears that a majority of students who entered master's program were able to complete their degrees within a relatively short time frame. However, the NCES data point to some disturbing gaps in degree completion and time-to-degree rates. Under-represented minorities and older students appear to complete at lower rates than White and Asian Americans. Majority students also appear to complete their degrees in fewer years than minorities and older students. More research is needed to discover reasons these gaps have appeared and propose appropriate solutions to close them. While the NCES data do not answer all the questions surrounding master's degree persistence and attainment, they provide a valuable starting point for future research attempts.

¹Enrollment in master's of education programs include students who were seeking post-baccalaureate certificates in education.

by Kenneth E. Redd, CGS Director of Research and Policy Analysis

References

National Center for Education Statistics. 2007. *The Path through Graduate School: A Longitudinal Examination 10 Years after Bachelor's Degree*. NCES Report Number 2007-162. Washington, DC: Author.

National Center for Education Statistics. 2006a. 2003 National Postsecondary Student Aid Study. Dataset.

National Center for Education Statistics. 2006b. 1993/2003 Baccalaureate and Beyond Longitudinal Study. Dataset.

Table 3. Average Number of Years to Completion of Master's Degrees Among 1992-1993 Bachelor's Degree Candidates Who Entered Master's Degree Programs*, by Gender, Age Level, and Race/Ethnicity

	Average Number of Years	Pct. Who Completed in Three Years or Fewer
Total (All Master's Candidates)	2.7	69.9%
Gender of student		
Male	2.7	72.1
Female	2.8	68.3
Race/ethnicity		
White, non-Hispanic	2.7	69.8
Black, non-Hispanic	2.8	75.4
Hispanic	3.4	51.3
Asian or Pacific Islander	2.3	87.4
Age when received bachelor's		
22 and Younger	2.7	72.6
23 to 24	2.6	76.0
25 to 29	3.4	54.0
30 and Older	3.0	59.5

*All data include students who were U.S. citizens and permanent residents only.

Source: National Center for Education Statistics, 2007.