

College Persistence, Graduation, and Remediation

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I. PERSISTENCE AND EDUCATIONAL ATTAINMENT

Understanding the Data

Data on college persistence and graduation often appear inconsistent and overly complex because different groups of students are often defined in different reports, and a variety of metrics are used to evaluate these outcomes. For example, colleges generally define graduation rates in terms of first-time freshmen who complete a bachelor's degree at that institution within a specific period of time. When students leave an institution, they may either be leaving postsecondary education permanently or transferring to another institution. From that institution's perspective, all students who leave prior to degree completion are considered dropouts. However, students who transfer to another institution and graduate are not considered dropouts within the broader higher education system from any perspective (DOE, NCES, 2003). Therefore, it is helpful to distinguish between institutional completion rates (bachelor's degree attainment of students at the first institution they attended) and student completion rates (bachelor's degree attainment anywhere).

College completion rates not only differ by institutional or student perspectives, but also by subcategory of students being considered. The completion rates can be quite different among first-time college students (students who first enter college at any time), high school graduates or "traditional students" who enter college as full-time students immediately after high school with no delay, and several categories of nontraditional students (these include students who delay entry into college by a couple of years, to those who enter college decades after high school). In addition, part-time and full-time students are yet another distinction made in describing college completion.

Enrollment in Postsecondary Education by Institutional Type: Students Who Entered Higher Education in 1995-96

Public two-year institutions or community colleges	46%
Public four-year institutions	26%
Private four-year institutions	15%
Private for-profit institutions or vocational programs of less than four years	10%
Other institutions	3%

Bachelor's Degree Attainment

Traditional college students (high school graduates who enroll in college full-time immediately after high school) comprised 83 percent of freshmen at four-year institutions in 1995-96. Sixty-four percent of these students attained a bachelor's degree in six years or less from a four-year institution versus 55 percent of all freshmen (DOE, NCES, 2003).

Persistence Track

When student persistence is tracked by following students who transfer from one institution to another institution, degree completion improves from 55 percent to 63 percent for the same students, as shown in Table 1. An additional 5 percent received an associate degree or certificate, 12 percent were still enrolled, 2 percent were enrolled at a two-year institution, and 18 percent left postsecondary education. Among all students who began postsecondary education (two- or four-year institutions) in 1995-96, 32 percent transferred to another postsecondary institution. Transfer rates were higher at two-year public institutions than four-year institutions, 42 percent versus 25 percent.

What happens to students who enter college as freshmen and don't graduate? Institutional graduation rates are lower than student graduation

**TABLE I
PERCENT OF STUDENTS BEGINNING FOUR-YEAR COLLEGES WHO COMPLETED A BACHELOR'S DEGREE AT ANY INSTITUTION IN SIX YEARS BY SUBCATEGORIES**

		Institutional completion rate at first four-year institution	Student completion rate at any four-year institution
1	All beginners at four-year institutions	100	50.7
Subcategories			
2	Enrolled full-time (first year)	90.4	54.1
3	Had a B.A. goal	90.3	55.3
4	Had a B.A. goal and enrolled FT	82.9	58
5	Recent HS graduate (no delay)	83.2	55.1
6	Recent HS graduate, with B.A. goal	76.5	59.2
7	Recent HS graduate, with B.A. goal and enrolled FT (first year)	73	60.6

Reprinted from DOE, NCES, 2003-151, pg.V, table A.

rates. From an institutional perspective, 86 percent of students who entered four-year postsecondary institutions in 1995-96 with a B.A. goal were still enrolled at that institution after one year, while 10 percent transferred and 3 percent left higher education. After two years, 73 percent persisted at the same institution, while 18 percent transferred and 6 percent left postsecondary education. After three years, 65 percent persisted at the same institution, 22 percent transferred, 9 percent left postsecondary education, 2 percent had a B.A., and 2 percent had attained an associate degree or certificate. At the end of six years, 55 percent had a B.A., 2 percent an associate degree or certificate, 7 percent were still enrolled, 23 percent had transferred, and 13 percent had left postsecondary education.

First-Generation Students

First-generation students are less likely to enroll in a four-year college than students with at least one parent who has a bachelor’s degree (60 versus 70 percent); and if they do enroll, they are less likely to persist toward a degree three years later (13 versus 33 percent) (DOE, NCES, 2002).

Academic Preparation and College Completion

Rigorous academic courses in high school greatly improve college-going rates, but as importantly, dramatically increase students’ success in college.¹ Three years after entering college, 87 percent of students who had taken rigorous course work in high school remained on track for a bachelor’s degree compared to 62 percent of students who had not completed even a core curriculum.

The gap between first-generation and other students decreases for students who take more rigorous curriculum in high school. For example, among students completing a core curriculum, 55 percent of first-generation students persist beyond three years compared to 69 percent of students with a parent who has a four-year college degree. This 14-percent gap decreases to 10 percent when students take more than a core curriculum. However, among students who completed a rigorous curriculum, 81 percent of first-generation students are persisting at three years, as well as 89 percent of students with parents who have a four-year degree. Among these students the gap in college persistence is reduced to only 7 percent.

1. Core curriculum includes four years of English, two years of math, science, and social studies. Rigorous curriculum includes at least four years of English and mathematics (including precalculus), three years of science (including biology, chemistry and physics) and social studies, three years of foreign language, and at least one honors course or AP® Examination score.

TABLE 2
AP EXAMS AND DEGREE ATTAINMENT

	At first four-year institution			At any four-year institution		
	4 years or less	More than 4 years	6 years	4 years or less	More than 4 years	6 years
None	26.9	22.1	49.0	28.9	27.4	56.3
One	42.5	22.3	64.8	44.9	27.2	72.1
Two or more	57.3	17.5	74.8	60.9	21.4	82.3

“Students who entered college with good academic preparation—those who received mostly A’s in high school, took two or more AP® tests and had high SAT® scores (1030+)—also had higher completion rates than others. About 80 percent completed a bachelor’s degree within six years, and more than one-half (55–61 percent) graduated within four years.” (DOE, NCES, 2003-151, p.vii). In fact AP Exams are a strong indicator of bachelor’s degree attainment, as shown in Table 2.

Risks to College Completion

There are a number of risk factors that reduce college completion rates. As noted earlier, first-generation students have lower completion rates, but these are mitigated by rigorous course work in high school. Students who complete less than rigorous courses have lower completion rates than students who complete a core curriculum, and students who complete less than a core curriculum are at greatest risk for not receiving a degree. Transferring colleges, attending part-time, and non-continuous enrollments are associated with lower persistence and graduation rates. Parental income was much less of an influence on degree attainment than these student behaviors. For example, 22 percent of students from families with incomes below \$25,000 received a degree in more than four years compared to 30.8 percent of students from families with incomes above \$70,000.

Ethnicity/Race

There remain significant differences in educational attainment by ethnicity and race, although gaps have decreased significantly in the past 30 years. Table 3 illustrates the percent of 25- to 29-year-olds at different levels of educational attainment between 1971 and 2001 (DOE, NCES *Condition of Education, 2002*).

There are substantial differences among males and females within these groups. In 1971, females consistently had lower levels of educational achievement among all groups, except for blacks where a slightly higher proportion of females completed high school and some college. Today, females had higher levels of all categories of educational attainment and among all of these groups. The gender gap favoring males appeared to change and advantage females in terms of high school graduation in 1981-83, in terms of some college in 1985-86, and in terms of college graduation in 1990-93. The largest gender gap for high school graduation is among Hispanic students (59 percent male versus 67 percent females) and is more consistent across all groups in terms of college attendance and completion. Today 54.4 percent of males attend some college and 26.2 percent have attained a B.A. or higher, compared to 62.5 percent and 31.1 percent of females, respectively.

TABLE 3
EDUCATIONAL ATTAINMENT

	All		White		Black		Hispanic	
	1971	2001	1971	2001	1971	2001	1971	2001
HS completion	77.7	87.7	81.7	93.3	58.8	87	48.3	63.2
Some college	33.9	58.4	36.7	64.8	18.2	50.5	14.8	32.2
B.A. or higher	17.1	28.7	18.9	33.0	6.7	17.9	5.1	11.1

II. REMEDIATION

Student Rates

A report by the Southern Regional Education Board (SREB, 2000) notes that remedial education is now needed by about one-third of students who enter higher education where college placement tests are used. The report goes further to state that there is no typical remedial student; often students with high grades and college-preparatory courses are in need of remediation in college.

A 1995 survey of colleges reported 29 percent of all first-time freshmen enrolled in at least one remedial course and about 75 percent of these students eventually pass or complete those courses successfully (DOE, NCES, 1996). Fifty-six percent of those in remediation were freshmen, and 24 percent were sophomores, with juniors and seniors comprising an additional 18 percent. In one of the only national studies of students who received remediation, a cohort of students who graduated from high school in 1982 were followed until they were 29–30 years of age. The data were clear—students assigned to remedial reading in college are much more likely to take additional remediation courses and have a substantially lower rate of graduation.

Students who take remedial courses in math or reading, especially remedial reading, have a substantially smaller probability of graduation from college. Sixty-three percent of students attending a two-year college took one or more remedial course compared to 40 percent of students attending a four-year college. Math remediation rates were nearly twice the rate of reading remediation courses.

Tennessee and Oklahoma report that remediation rates are higher among less-traditional students who graduated more than one year prior to enrolling as freshmen in higher education. Academic rigor is also related to remediation. In Georgia, 80 percent of students who did not complete a core curriculum took at least one remedial course while only 20 percent of students who did complete such a curriculum required remediation. Similar results have been reported in Maryland where students not taking a core curriculum were 50 percent more likely to be placed in remedial writing, math, and reading courses (SREB, 2000).

Remedial Courses

A 1995 survey of remediation in colleges (DOE, NCES, 1996) indicated that 78 percent of institutions offered a least one remedial course, with 100 percent of two-year colleges offering remedial courses. The average number of remedial courses at an institution was: 2.1 reading, 2.0 writing, and 2.5 math. About 47 percent of institutions surveyed indicated students enrolled in remedial courses has remained the same over the past five years, while 39 percent and 14 percent, respectively, said remediation rates increased or decreased. Placement testing was the most common method for selecting students for remediation (60 percent) and 1.3 of institutions offering remediation reported there were state policies or laws affecting offerings at their institutions (DOE, NCES, 1996).

Among first-time freshmen in 1995 across all institutions:

- 17 percent were in remedial writing courses—up 1 percent from 1989.
- 13 percent were in remedial reading courses—the same as in 1989.
- 24 percent were in remedial math courses—up from 21 percent in 1989.

At four-year institutions in 1995:

- 12 percent of students at public institutions and 8 percent at private institutions were in remedial writing courses.
- 8 percent of students at public institutions and 7 percent at private institutions were in remedial reading courses.
- 18 percent of students in public institutions and 9 percent at private intuitions were in remedial math courses.

Figure 1 shows the percent of students receiving an associate or bachelor's degree from 1980 to 1993 by extent and type of remedial courses in college.

The Institute for Higher Education Policy (1998) estimated that remediation costs \$2 billion annually in public higher education. Costs vary greatly by state and institutional type. Firm estimates of the extent and cost of remediation may often be understated for a variety of reasons, ranging from different definitions on what constitutes a remedial course and a student enrolled in remedial courses, to how direct and indirect costs associated with remediation are classified and the

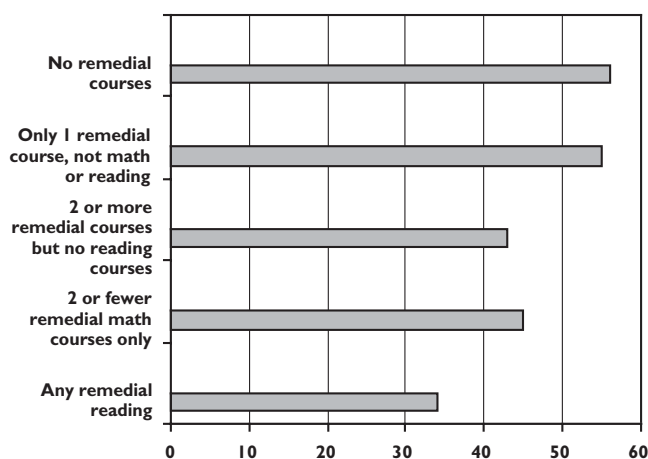


Figure 1. Percent of students receiving an associate or bachelor's degree 1980-93 by extent and type of remedial courses in college. Reprinted from *The Condition of Education, 2001*, pg. 40, Indicator 29, DOE, NCES, 2001.

extent they can be separated from other institutional costs. Finally, the stigmatizing factor for the student and the negative incentives for institutions may also result in underreporting of remediation rates (The Institute for Higher Education Policy, 1998).

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