



VOLUME 10 • NUMBER 1 • JANUARY 2004

Update

Rethinking Graduation Rates as Accountability Measures

INTRODUCTION

Higher education is facing increasing pressure to bolster its accountability to state and federal government agencies. In part, this trend may signal a growing belief among legislators that the public investment in colleges and universities provides insufficient payoff for many students. It also links the goal held by some to make colleges and universities more businesslike on the one hand, with a stronger commitment toward improving education for low-income and minority students on the other. While both are reasonable goals, the congressional initiative to use graduation rates as an accountability measure is not the best way to achieve them.

Some measure of institutional graduation rates is usually included in the list of accountability criteria at the state level and is being considered for inclusion in federal legislation that would associate graduation rates with the award of student aid. In most cases, these measures follow a cohort of students that starts college full-time and tracks it through 150 percent of expected graduation time (three years for community colleges and six years for baccalaureate institutions). The proportion of students from the original cohort that has received a degree at the end of that period determines the institutional graduation rate. A review of the evidence suggests that, by itself, this measure is incomplete and can be misleading.

REVIEW OF GRADUATION RATES

The graduation rate model assumes that a student has a clear degree goal and follows a straight-line trajectory toward that goal. In many instances, that is not how students make their way through their educa-

tion. This is most evident at community colleges. Figure 1 shows the percentage of students who received a degree or certificate of any type as well as the percentage still enrolled after six years, classified by the type of institution at which they first started. The total is the sum of those who received a degree

or certificate and those who are still enrolled somewhere.

Figure 1 makes three points:

- First, a larger share of students in public colleges continues enrollment after six years than do students in private colleges;
- Second, public four-year colleges have higher completion rates than public two-year institutions and private four-year colleges have higher completion rates than private colleges with less than four-year programs;¹ and
- Third, private colleges have higher completion rates than public colleges.

Community colleges pose a particular problem for those who want to use a single graduation rate to measure institutional effectiveness. The community college mission attracts students with a variety of educational goals and from a variety of backgrounds. About half of community college students start with a goal of obtaining an associate's degree, one-fourth want to

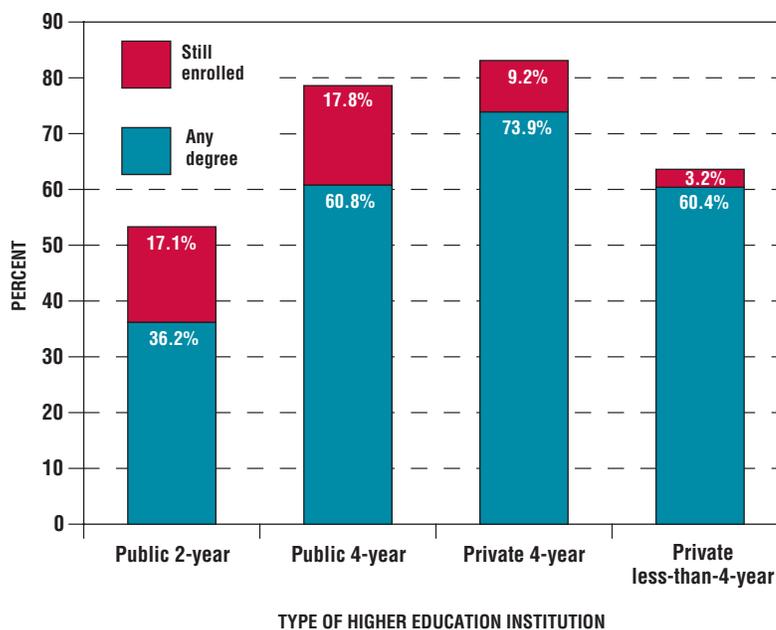
complete a bachelor's degree, and the rest want a certificate below the associate of arts degree.

The problem is complicated by the fact that it is possible for a student to transfer from a community college to a four-year institution without having received an AA degree. Based on individual reports of educational goals at time of enrollment, of those students who said they wanted either an AA or BA, 23 percent received an AA and 13 percent received a BA (5 percent received both).² The majority of community college students who received a BA did not also obtain an AA, so unless the community college was able to track transfers to other institutions or students finished all the general education requirements before transferring, they would be reported as dropouts.

Students starting in community colleges pose more retention problems than do those in four-year colleges and universities. Because of their backgrounds, a larger percentage of students enrolled in community colleges qualify as non-traditional and these students tend to be less well prepared for college than their counterparts at four-year colleges. Successful community college transfer students tend to be younger, traditional students.³

Figure 1

Graduation within six years by type of institution first attended



SOURCE: *Beginning Postsecondary Students Longitudinal Study, 1996–2001 Data Analysis System (BPS: 96/01)*. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2002.

STUDENT CHARACTERISTICS

Student characteristics are typically more important in predicting college graduation than are institutional characteristics. This basic fact is the central argument against using institutional graduation rates as an accountability measure. The links between institutional characteristics and student graduation are weaker than those between student characteristics and college completion.

Traditional college students are more likely to graduate than

their non-traditional counterparts. The traditional college student group includes those who have participated in a rigorous high school curriculum and have high admission test scores. They enroll in a four-year college immediately after high school and attend full-time.⁴ Colleges and universities that enroll such students will generally have higher graduation rates than those whose mission is to provide access to a broader range of educational opportunities and a broader range of students. An institution's graduation

rate can often be predicted simply by observing the selectivity of its admissions standards.

Older students, for example, face greater demands from family, employment, and community activities that tend to compete with college and extend the time to graduation or reduce the chances of graduating. Today, at least 57 percent of undergraduates are 21 or older.⁵ It is, however, unlikely that age *per se* accounts for the higher dropout rate. Rather, there are several factors associated with age that increase the likelihood of not completing college. They include:

- Part-time enrollment;
- Not having a regular high school diploma;
- Having children;
- Being a single parent;
- Being financially independent of parents; and
- Working full-time while enrolled.⁶

The effect of these risk factors is cumulative. The more risk characteristics a student has, the greater the chance that he or she will not complete college. Institutions that enroll a high proportion of these high-risk students will tend to have a lower graduation rate than institutions that enroll younger, more traditional students.

INCOME

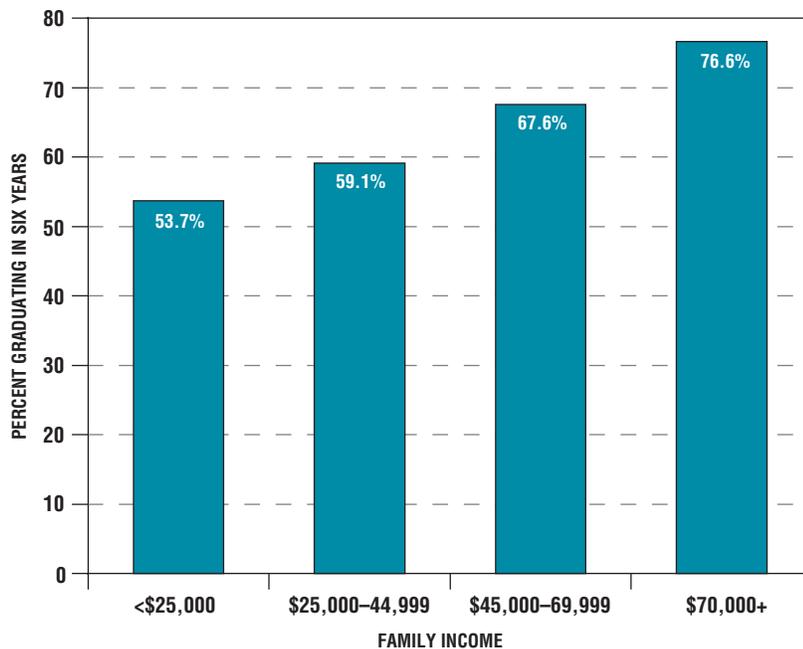
Figure 2 shows that, for beginning full-time students seeking a bachelor's degree, family income bears a positive relationship to the likelihood of graduating within six years. As a result, colleges and universities enrolling large numbers of low-income students may exhibit lower graduation rates than otherwise comparable institutions.⁷ This tends to stack the deck against such schools when graduation rates are used to measure accountability.

RACE AND ETHNICITY

Figure 3 displays the six-year graduation rates by race and ethnicity for students who initially enrolled full time in a four-year college or university. These data show that Hispanic and Black students are less likely to graduate than are Asian and White students. However, because race and ethnicity are highly correlated with family income and other background characteristics, it is difficult to determine the independent effects of these variables on college

Figure 2

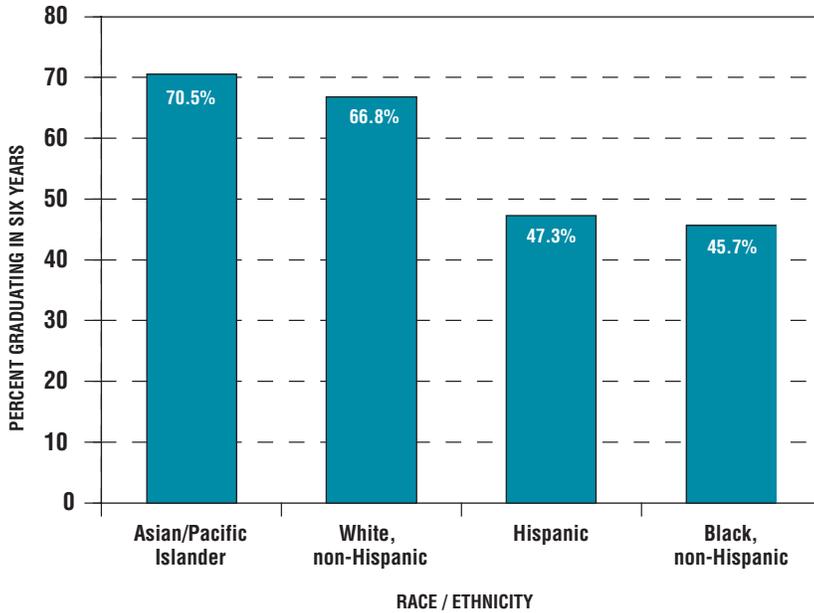
Six-year graduation rates by family income for BA-seeking students starting at a four-year institution



SOURCE: *Beginning Postsecondary Students Longitudinal Study, 1996-2001 Data Analysis System (BPS: 96/01)*. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2002.

Figure 3

Six-year graduation rate by race/ethnicity for BA-seeking students starting at a four-year institution



SOURCE: *Beginning Postsecondary Students Longitudinal Study, 1996–2001 Data Analysis System (BPS: 96/01)*. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2002.

completion. Moreover, the individual-level relationship between race/ethnicity and graduation rates, while suggestive, does not necessarily translate into an aggregate-level relationship between the racial/ethnic composition of higher education institutions and their graduation rates. As with the case of income, other factors also play a role in determining the proportion of students who complete a degree. These issues further complicate the interpretation and use of institutional graduation rates as accountability measures.

INSTITUTIONAL VS. SYSTEM GRADUATION RATES

Figure 4 shows the differences in graduation rates by selected student characteristics assessed at the beginning of their college experience. It also shows the difference between the institutional graduation rate and the system graduation rate. The *institutional* graduation rate—that is, the proportion of students who graduate from the college or university at which they started—underestimates the true rate of degree attainment. The *system* graduation

rate is the combination of those who graduate from their first school plus those who graduated from any subsequent college or university. For example, about 51 percent of the 1995–96 freshman cohort that started at a four-year college or university graduated from the institution at which they started, but another 8 percent graduated from somewhere else within six years for a total of about 59 percent.

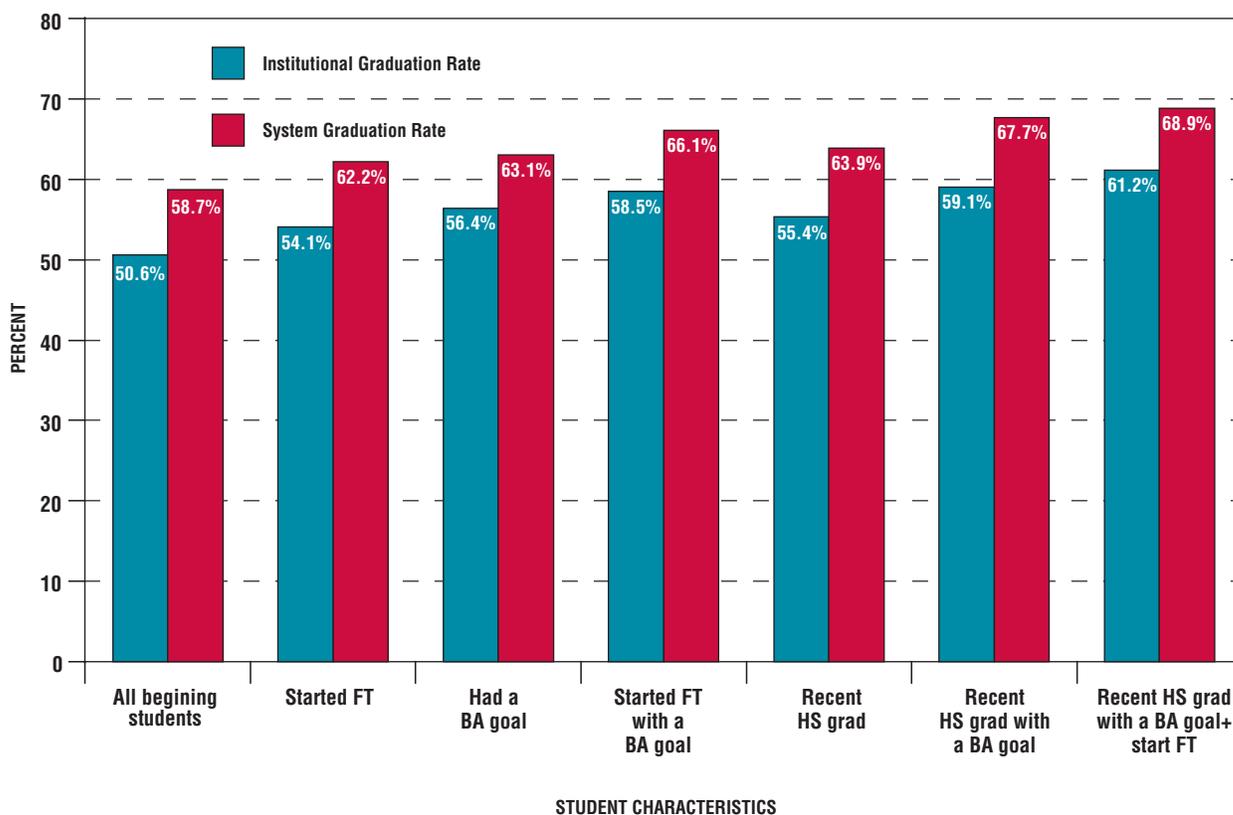
As shown in Figure 4, there are several student characteristics that relate to graduation rates. These include starting as a full-time student, having the goal of receiving a bachelor’s degree, and being a recent high-school graduate. These factors each contribute independently to student graduation rates. Students with all of these characteristics have a graduation rate that is about 10 percentage points higher than that for all beginning students.⁸ These results show that reporting a simple institutional graduation rate distorts the success that many students have in completing college, especially those traditional students who enroll immediately upon graduating from high school.

CONCLUSION

Stressing institutional graduation rates has the potential to reduce the willingness of colleges to enroll non-traditional,

Figure 4

Percent of cohort graduating from the first institution and from any institution, for students starting in a four-year institution



SOURCE: *Beginning Postsecondary Students Longitudinal Study, 1996–2001 Data Analysis System (BPS: 96/01)*. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2002.

high-risk students, including those with below-standard academic preparation, lower family incomes, parents without college experience, and those living in communities with limited public resources. If accountability is measured by graduation rates without considering these potential vulnerabilities, students with specific ethnic, social, and economic backgrounds may

ultimately be underserved by higher education.

To build a better society, we must address the educational needs of these students. We must continue to be sensitive to the goal of providing college opportunities to all who can benefit while ensuring that each student has a real chance to succeed. Imposing simple graduation rates as the sole

standard of institutional accountability will not achieve that goal. In fact, it runs the risk of forcing colleges to limit enrollment of the most vulnerable students who want to give college a try.

Even worse, the proposed use of incentive funding based on improving graduation rates may act to undermine educational quality as colleges and



universities dilute course or grading requirements in a bid to help marginal students graduate. In the long run, politically defined outcomes run the risk of simplifying and distorting the educational process.

Graduation rates miss key questions about the quality of education, such as the academic gains students make as a result of their college experience. These outcomes are conceptually difficult to define, and so are usually not measured or are included only as minimum standards. The basic skills tests for teacher candidates provide one such example.

This issue reflects the delicate balancing act between the value of allowing colleges and universities to set their own curricula and standards against the reasonable question from politicians

about what the public is getting for its money. Higher education representatives must be prepared to provide a meaningful answer

to that question if they are to move beyond the current focus on graduation rates as an accountability measure.

NOTES

¹Many students graduating from institutions of this type undertake short-term programs of study leading to a specific job-training certificate.

²*Beginning Postsecondary Students Longitudinal Study, 1996–2001 Data Analysis System (BPS: 96/01)*. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2002.

³*Descriptive Summary of 1995-96 Beginning Postsecondary Students: Six Years Later, NCES 2003-151*, by L. Berkner, S. He, and E. Fox-Cataldi; P. Knepper, Project Officer. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2002.

⁴*Tool-Box*, by C. Adelman. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1999.

⁵"New Low for College Graduation Rate, But Dropout Picture Brighter," *ACT*, April 1, 1998.

⁶*Beginning Postsecondary Students: Six Years Later, NCES 2003-151, Descriptive Summary of 1995-96*, by L. Berkner, S. He, and E. Fox-Cataldi; P. Knepper, Project Officer. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2002.

⁷Other factors—such as the level of financial aid or the adequacy of student support services—also influence graduation rates. The presence of a large concentration of low-income students is not, in itself, a sure predictor of low graduation rates.

⁸Various programs, such as the federal Student Right to Know and the NCAA, use graduation rates based on differing beginning characteristics.



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