The availability of institutional graduation rate data poses both risks and opportunities. With the recent passage of the Higher Education Opportunity Act, this is an excellent time to take stock of where we are with respect to graduation rate reporting and where we should go from here. Guiding our efforts should be the essential principle that no institution should be penalized for serving low-income, non-traditional, or other “at-risk” students.

**Context**

Since the passage of the federal Student Right-to-Know Act of 1990 (SRTK), graduation rates have been a subject of much debate and controversy. Given the paucity of comparable, widely accepted outcome measures for postsecondary education, state and federal policymakers have latched on to student persistence and graduation measures as key accountability indicators. Typically, they treat high graduation rates as indicators of institutional success and low graduation rates as institutional failure. And despite the many limitations of these measures, graduation rates have gained attention and influence in the media, in college ranking systems and among consumers.

At the same time, critics have denounced graduation rates as inadequate and misleading metrics. They argue that simple graduation rates do not measure institutional effectiveness, but rather reflect the characteristics of entering students. Disclosure of such rates—and public policy based on them—unfairly condemns institutions whose access missions lead them to accept “at-risk” students.

Why all the fuss? The simple truth is that graduation from college does matter, and it matters more than ever. From the societal perspective, the United States is falling behind other nations in the production of college graduates, and we need many more workers with postsecondary credentials to remain competitive in the global economy.
marketplace. Further, federal and state investment in higher education has never been higher, and poor completion rates may be viewed as a waste of public resources. From the individual perspective, attaining a postsecondary credential is increasingly a requirement for a middle class lifestyle. Moreover, the consequences of not graduating become even more dire as students invest greater personal resources and increasingly take on debt to finance college attendance. A final issue is that of equity—the fact that there is a substantial gap in graduation rates between whites and students of color, between high- and low-income students. Thus, the need to improve the nation’s college graduation rates is evident.

Just as evident is the role data must play in this effort. In order to improve institutional accountability, consumer information and institutional performance, data on student progress—properly conceived and presented—can and should be used. But it must be done correctly.

With the recent passage of the Higher Education Opportunity Act (HEOA), this is an excellent time to take stock of where we are with respect to graduation rate reporting and where we should go from here. This paper will explore the federal role in shaping where we are today, problems with current definitions, and progress that has been made on several fronts.

Observations

Federal law and U.S. Department of Education regulations and practices have largely determined how graduation rate is defined and reported, and established conventions are not likely to disappear in the near future.

The federal Student Right-to-Know Act of 1990 (SRTK) established in law the requirement that all institutions participating in Title IV programs must annually report their graduation rate for first-time, full-time degree- or certificate-seeking students at 150 percent of normal time. Institutions were required to begin collecting data for the entering cohort of 1996-97, and reporting of graduation rates for four-year institutions began in 2003, after six years had elapsed.

To carry out this requirement, the National Center for Education Statistics (NCES) developed the Graduation Rate Survey (GRS) as part of its Integrated Postsecondary Education Data System (IPEDS). This marked new ground for IPEDS, which had previously collected only data pertaining to a single term or academic year. GRS was different because it required the tracking of individual students over a period of time, a requirement that challenged the capacity of many existing data systems.

The 1998 Higher Education Act Amendments (HEA) went further, charging NCES with making specific consumer information, including graduation rates, available online. This led to the development of the College Opportunities On-Line (COOL) Web site, which was later redesigned and re-launched as the College Navigator Web site in 2007. NCES’ release of the first GRS data was significant in the sense that institutional graduation rates for the entire nation had not previously existed. The release was eye-opening for many, as the nation learned that institutional graduation rates varied tremendously—from less than 10 percent to almost 100 percent, according to analysis by the Education Trust.

With HEA reauthorization again imminent in the early 2000s—and anticipating expanded interest on the part of Congress in more accurate institutional data on student retention and completion, net price and other items—NCES conducted a study to determine if it would be technically feasible to develop a federal unit record data system. Such a system could replace the student-related IPEDS surveys and produce better data. The report concluded that it would be “technically feasible” to create such a data system, while protecting student privacy, and that such a system would be less burdensome than the alternative—what Congress might otherwise require institutions to report through expanded IPEDS collections. The report left to policymakers the question of whether such a system “should” be created.
AASCU was among the strong advocates for the creation of a federal student unit record database, arguing that the proposed system would not be limited by specific IPEDS data collections, but rather would allow for “drilling down” to investigate a variety of public policy questions. Private colleges, however, strongly objected on the grounds of risk to student privacy and the additional reporting burden. Further, the proposal elicited immediate opposition from many in Congress.

The passage of the Higher Education Opportunity Act (HEOA) in 2008 contains several sections related to graduation rates. First, section 134 prohibits the development of a federal database of personally identifiable information, “including a student unit record system, an education bar code system, or any other system that tracks individual students over time.” It does not, however, prohibit individual states, or a consortium of states, from developing such databases. Second, among the new consumer information that must be made available on the College Navigator Web site (section 132), there is a requirement for a graduation rate for first-time, full-time students who graduate within 200 percent of normal time, an expansion of the existing GRS time frame of 150 percent. Finally, Title IV (section 488) requires institutions to annually disclose a graduation rate that is disaggregated by financial aid category, broken down into three categories: recipients of federal Pell Grants, recipients of federal subsidized loans who do not receive Pell Grants, and students who do not receive either a Pell Grant or a federal subsidized loan. Significantly, this requirement recognizes that student socio-economic status affects the likelihood of college graduation, and that it is beneficial to compare graduation rates for similar groups of students. However, the requirement for disclosure only, rather than reporting to NCES and posting on College Navigator, somewhat lessens the potential impact of this provision.

There is general agreement that current definitions of graduation rate are imperfect, but awareness of these limitations is creating opportunities for improvement. A common criticism of our current graduation rate metric is that it is based on an outmoded model of student behavior that assumes linear and timely progression through a single institution. This model fails to recognize the increasingly common “swirling” behavior that involves alternating full- and part-time attendance, enrollment in multiple institutions, transfer, and stopping out. Specifically, the GRS cohort (the “denominator”) excludes part-time students, adults with prior college coursework, students who began elsewhere but transferred into a particular institution, and students who began in any term other than fall. The GRS definition of “success” (the “numerator”) excludes students who transfer and graduate elsewhere and students who take longer that the allotted time to graduate. By not taking into account students’ actual enrollment behavior, and by failing to encompass much of what institutions do, current graduation rate data lead to misleading conclusions about institutional performance.

A second common criticism is that the current graduation rate metric fails to take into account variation in institutional mission and in the characteristics of entering students. This effectively blames institutions whose missions are more student-access oriented, and which have less selective admissions criteria. Research has repeatedly shown that students with certain “risk factors” are less likely than others to graduate in a defined period of time. To the extent that institutions disproportionately serve “at-risk” students, they demonstrate, on average, lower graduation rates. For example, NCES reports that the average six-year graduation rate for institutions with 20 percent or less low-income students was 70 percent, compared to a graduation rate of 42 percent for institutions with more than 40 percent low-income students (2006).

1For example, NCES’ Beginning Postsecondary Students longitudinal study identified seven characteristics associated with leaving postsecondary education without a degree: delayed enrollment, enrolling part time, working more than 35 hours per week, financial independence, having children, being a single parent, and not having a high school diploma.
Though some critics would go so far as to recommend eliminating the graduation rate because they perceive it as misleading and causing harm, AASCU believes that the identification of underlying flaws can lead to steps that add value to this metric. The following sections describe some promising actions to date.

There has been tremendous progress in the development of data systems that facilitate improved graduation rate measures, but the nation is not yet where it needs to be.

Statewide and system-wide higher education boards have been collecting, reporting and utilizing institutional data for decades. By 1990, more than 20 state unit record databases were in place, allowing the tracking of individual students over time. The passage of the Student Right-to-Know Act stimulated this development, and since that time, state unit record databases have grown in number, in types of data collected, in the number of institutions included, and in cross-agency linkages.

According to a 2007 Lumina Foundation study, 40 states now have student unit record databases in place covering at least the public institutions in their states, for a total of 47 such databases. Seven of these states have more than one such database, corresponding to different postsecondary systems, but in most cases they can share data across databases. Seventeen states have at least some information from independent institutions, and six have at least some information from proprietary institutions.

The Lumina study indicates that the most common use of these databases is the calculation of graduation rates. All use a methodology consistent with GRS, but some states have additional capabilities, such as tracking students for longer periods of time, following part-time cohorts, and measuring transfer to other institutions in the state. These features are extremely valuable in terms of expanding the meaningfulness of graduation rates. In terms of the ability of states to produce graduation rates disaggregated by financial aid status, most state unit record databases have at least some financial aid data, but there is much variability in level of detail. At the current time, there is some equivalency across states, but no universally-accepted definitions.

As attention has shifted away from the possibility of a federal unit record database, there is increasing interest in the question of whether a “national” (not federal) system can be developed based on existing state databases. The 2007 Lumina study focused on this question and determined that it is feasible to harness state databases into a national system. By analyzing 33 key data elements, the researchers found that the nation is close to having a consistent “common core” of data elements. The report recommends the creation of “a national capacity to link unit record data quickly and securely,” noting that it would be most effective if managed by a third-party, non-governmental organization.

Supported by the Lumina Foundation, the National Center for Higher Education Management Systems (NCHEMS) conducted a study in 2003-04 to test the feasibility of linking data across states. NCHEMS worked with only two states—Ohio and Kentucky—but did find value in the effort. An expanded project unfolded in 2004-07 that involved data exchange among four states: Kentucky, Ohio, Tennessee and West Virginia. Researchers concluded that “it is feasible to exchange records from multiple state SUR [student unit record] systems to create more accurate estimates of cohort retention and completion” but that “political issues trump data issues and will slow the effort down.” It remains to be seen whether states will have much interest in inter-state data exchange efforts in the future.

Finally, the National Student Clearinghouse, founded in 1993 to document student enrollment for lenders, represents a different kind of data system with a potential not yet fully realized. This system is based on voluntary participation by institutions, but now covers over 90 percent of college students. Through it, records are matched across institutions, and institutions can learn what happens to their students who do not re-enroll—if they enroll and/or graduate elsewhere. Though not founded for this purpose, the
Clearinghouse has also provided limited information for researchers pertaining to inter-state student transfer.

There have been a number of promising initiatives attempting to expand or improve upon existing graduation rate measures, promoting more meaningful usage of this metric, but not replacing conventional definitions.

The Voluntary System of Accountability (VSA), a joint product of AASCU and the Association of Public and Land-Grant Universities (A•P•L•U), goes well beyond GRS definitions in the information on student success and progress rates provided on its College Portrait Web site. First, College Portrait contains data on two different cohorts: the GRS-defined first-time, full-time cohort, and an additional transfer cohort. Second, it allows for multiple measures of student progress: graduation from that institution, graduation from another institution, still enrolled at that institution, and still enrolled at another institution. These various outcomes are presented separately, as well as cumulatively, for a more complete picture of the multiple kinds of student advancement. Data for these additional measures are derived from the National Student Clearinghouse.

The Education Trust has developed the College Results Online web-based tool for making more sophisticated and meaningful comparisons of institutional graduation rates. Based on research using GRS data, it identified 11 institutional and student factors that are statistically related to graduation rates and used these factors to identify “similar” peer institutions. The interactive tool enables actual-to-peer comparison, as well as comparison of graduation rates by race/ethnicity and gender, and rates over time. Each of these options provides more useful results than does a simple “apples-to-oranges” comparison.

Many states are tracking students more broadly than required under SRTK, and with particular policy purposes in mind, states can be innovative in how they utilize their data. For example, The University System of Ohio is now redesigning its performance-based funding system, and instead of basing it mostly on enrollment as the current system does, the new system will be based more on outcomes. To do this fairly, however, it is considering a way to recognize the impact of student characteristics on educational outcomes, such as using weights for “at-risk” undergraduates and comparing actual-to-predicted graduation rates. Though too early to draw any conclusions, this is an example to watch in terms of more innovative use of graduation rate in a state accountability system.

These and other examples offer promise, but do not replace the predominant way of thinking defined at the federal level by SRTK and GRS. The new requirement in HEOA to report and publish a graduation rate at 200 percent of normal time does represent a noteworthy expansion of the current federal graduation rate definition.

Research is emerging that has the potential to improve institutional graduation rates. This is a very real payoff of investments made in advanced data systems and innovative uses of graduation rate measures.

Research by the U.S. Department of Education provides a firm foundation for understanding graduation rates, both in terms of student behavior and institutional characteristics. The former is based on analysis of student-level data from multiple NCES longitudinal studies. Among the well-known findings of this research is the fact that high school academic preparation and socioeconomic status are highly predictive of degree attainment. The latter is based on analysis of institutional-level data from GRS, never before available until just a few years ago. The findings include the fact that graduation rates are lower for less selective colleges and for institutions that serve greater numbers of low-income students, and that even within the same selectivity level, graduation rates are lower when the size of the low-income population increases.

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2 These measures build on recommendations of the Joint Commission on Accountability Reporting (JCAR), co-sponsored by AASCU in the 1990s, which sought to improve definitions emerging from SRTK.
Other organizations and researchers are now taking this research further as they make use of some of the advances described above. Because these efforts are data-based and focused on specific institutional issues, they have enhanced potential for bringing about change.

Co-sponsored by AASCU, the Education Trust, and the National Association of System Heads (NASH), the Graduation Rate Outcomes Study put to use the College Results Online database to compare similar institutions, identify and study a dozen campuses that were particularly successful at retaining and graduating students, and develop recommendations for presidents. The study found that there is no "magic bullet," but that there are ways in which campus culture and sound presidential leadership make a significant difference. AASCU and the Education Trust followed this with the Hispanic Student Success Study, a similar study focused on retention and graduation of Hispanic students. Again, no single factor was identified, but distinctive features related to mission and culture, student-success programming, and organizational leadership were identified.

Other research initiatives have made similar efforts to explain why some institutions are more successful than others and to offer recommendations for change. The Pell Institute undertook a study to account for differences in graduation rates among large public colleges and universities that serve large numbers of low-income students. The Education Sector identified nearly 100 institutions where the gap between white and black students was minimal, and studied how these institutions achieved these results.

Finally, research by HigherEd.org, Inc. made use of the NCHEMS inter-state data exchange described above to explore issues related to non-traditional students. This work is especially significant since GRS data are ill-suited to examining policy questions related to these students. This work built on the four-state database already established, and added two additional databases (Virginia and the State University of New York) for a six-state analysis. The study was able to identify factors that are linked to improved student outcomes for non-traditional students. The author concluded that the research not only demonstrated "a working prototype" of the utility of unit record data, but also provided "meaningful calculations of data that may be used in a variety of ways to improve institutional effectiveness."

**Conclusion**

It is safe to conclude that established conventions pertaining to graduation rate reporting are not likely to disappear in the foreseeable future, and that this will remain a contentious issue for some time to come. The challenge is to find ways to maximize the utility of the graduation rate metric while minimizing the potentially detrimental or unforeseen consequences. To do this, continued improvements in state data systems should be supported. In the absence of a federal student unit record system, work should continue toward the development of common core data elements and the sharing of data across states. Work must also continue on the development and effective utilization of disaggregated graduation rates and multiple measures that offer more meaningful comparisons.

A primary guiding principle is that no institution should be penalized for serving low-income, non-traditional, or other “at-risk” students; they should not be pressured into increasing selectivity to produce better graduation rates. Federal and state policymakers who use the graduation rate as a measure of institutional performance must find a way to take into account fundamental institutional differences. They must recognize the essential role played by institutions that serve “at-risk” students and support and reward them for providing access and for serving their students effectively.

On their part, institutional leaders must not make excuses for low graduation rates, nor believe that failure is inevitable. There is now compelling evidence that student success is possible at every type of institution and that graduation rates can
be improved regardless of who is being served. Institutional leaders must make the commitment and use all the tools at their disposal to promote student persistence and completion. Part of this effort should include developing and using disaggregated graduation rate data to inform their decisions.

Resources


American Association of State Colleges and Universities (AASCU) and the Association of Public and Land-Grant Universities (A•P•L•U). College Portrait of Undergraduate Education Web site, a product of the Voluntary System of Accountability. collegeportraits.org/


Education Trust. A Matter of Degrees: Improving Graduation Rates in Four-Year Colleges and Universities (2004), Choosing to Improve: Voices from Colleges and Universities with Better Graduation Rates (2005), One Step from the Finish Line: Higher College-Graduation Rates Are Within our Reach (2005), and the College Results Online Web site. www2.edtrust.org/edtrust


Lumina Foundation for Education. Following the Mobile Student: Can We Develop the Capacity for a Comprehensive Database to Assess Student Progression? (2003) and Critical Connections: Linking States’ Unit Record Systems to Track Student Progress (2007). www.luminafoundation.org/


