

Incomplete Completers: Analysis of a Comprehensive Graduation Rate

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Introduction

Since President Obama stated that “by 2020, America will once again have the highest proportion of college graduates in the world,”¹ postsecondary education graduation rates have become increasingly important. In an environment of increased attention to evidence of institutional success, it’s easy to understand the appeal of graduation rates: They appear to be a simple, commonsense indicator. However, the reality is that calculating and interpreting graduation rates is far more complex and analytically challenging than one might think. As a result, graduation rates may, despite their apparent simplicity, provide a misleading picture of how well an institution is doing. This is the case with the most frequently cited source for postsecondary graduation rate information, the Integrated

Postsecondary Education Data System (IPEDS)². While graduation rates reported from IPEDS are by far the most trusted source of publicly available data of this type, IPEDS data are in fact inadequate and misleading for several reasons. Most importantly, the IPEDS rate excludes students who:

- Transfer from four-year institutions;
- Begin programs part-time; or
- Enter an academic program at any time other than the fall term.

In other words, the current federal calculation counts only first-time students who enroll in an institution full time in the fall term

and receive a degree from that same institution. Over the last decade, this definition has become increasingly irrelevant as the student population has changed. Indeed, at present, less than half of all college students are counted in federal graduation rates. At some community colleges, the graduation rate is based on less than 10 percent of the student body.

Tracking modern, “post-traditional” students, particularly transfer and part-time students, is more complicated than one might think. The central challenge to tracking students who transfer from one school to another is knowing who they are. While an institution always knows whether a student withdraws, it typically has no way of knowing whether that student eventually enrolls at another school. It does not make sense, of course, to count students who complete a program at another school as graduates of the institution where they began. But neither does it make sense to count such students as dropouts when calculating the institutional graduation rate³.

An additional challenge regarding “post-traditional” students is defining them by their enrollment pattern. For example, are part-time students those who enroll part time during their first semester of postsecondary education (regardless of their enrollment status beyond the first semester)? Are they students who enroll part time for at least one term during their postsecondary education? Or are

¹ President Barack Obama, “Address to Joint Session of Congress,” February 24, 2009, http://www.whitehouse.gov/the_press_office/Remarks-of-President-Barack-Obama-Address-to-Joint-Session-of-Congress.

² IPEDS is a system of interrelated surveys that collects information on all colleges and universities that receive Title IV funding. The surveys are conducted annually by the U.S. Department of Education’s National Center for Education Statistics (NCES).

³ Students who are part of an IPEDS Graduation Rate Survey cohort and enrolled at a four-year postsecondary institution are treated as dropouts if they transfer to another postsecondary institution.

they students who are enrolled part time for the majority of their enrollment? Obviously, the way part-time students are defined has significant implications for measuring both their persistence and graduation rates.

While the appropriate definition of a part-time (or full time) student is open for debate, the only way to accurately track students who transfer would be through a national unit record database that follows students from one school to another. Given privacy concerns, the U.S. Department of Education is prohibited by law from establishing such a database. Unit record databases exist at the state level, but they are only able to provide a snapshot of institutions in their states and have limited participation from private institutions.

To date, there is only one source of data tracking students rather than institutions. The National Student Clearinghouse (NSC) is a private nonprofit organization created in 1993 by colleges, universities, and financial institutions to monitor the utilization of federal student aid. Since federal loan programs have both annual and cumulative limits on the amount of money students may borrow from the federal government, NSC collects information from institutions to help them track student borrowing over time. Unlike IPEDS, which primarily follows a cohort of students at a single campus, NSC is able to track individual students who migrate from one campus to another. NSC data also include students who enroll part time and start any time during the year. Individual students can be tracked through graduation as well, meaning that NSC is not limited to a six-year graduation rate. Given NSC's capability to track all students across multiple institutions, it is able to provide a more comprehensive picture of postsecondary persistence and graduation rates than the federal government. As such, the American Council on Education (ACE) solicited NSC to generate a data report that could provide a more complete and detailed accounting of what happens to students who pursue a postsecondary education.

While the NSC data offer a more complete

database for exploring student persistence and graduation rates, the data are not without limitations. There are three notable shortcomings of the NSC data as they relate to calculating national graduation rates. First, not all institutions are included in the NSC data. NSC has data from approximately 3,300 postsecondary institutions—less than half of the colleges and universities that participate in federal student aid programs. (It should be noted that the approximately 3,300 NSC-participating institutions account for roughly 93 percent of all enrolled students.) Second, the NSC degree completion data only recently began collecting information on certificates, which are the fastest-growing credential awarded by colleges and universities. Finally, because the data are owned by participating institutions, NSC cannot make institution-level data publicly available without their consent. They can only provide graduation rate data at the aggregate level. Despite these limitations, NSC data are still the best source of persistence and completion rates for all students who enroll in postsecondary education.

The purpose of this issue brief is twofold. First, it will compare a more inclusive national graduation rate with the frequently used federal graduation rate from IPEDS. Second, it will examine the persistence and graduation rates of two groups of students currently excluded from IPEDS—part-time and transfer-in students.

NSC and IPEDS

Table 1 provides a comparison of graduation rates calculated from IPEDS and graduation and persistence rates calculated with NSC data. The rates for both IPEDS and NSC are based on a cohort of students who enrolled in college in the fall of the 2006–07 academic year.

When using an IPEDS-defined cohort of first-time, full-time students (i.e., students who have not transferred from another institution), graduation rates are higher for colleges and universities (with the exception of community colleges) when calculated using the NSC data. When students who have not

yet earned a degree but are still enrolled after six years are included, a very different picture of student persistence and success emerges across all institution types. For example, the six-year graduation rate for first-time, full-time students at all public four-year institutions is 54 percent. However, when first-time, full-time students who transfer (“graduation from anywhere”) are included, the graduation rate increases to 63 percent. When first-time, full-time students who graduated or are still enrolled are included (“graduation from anywhere or still enrolled”), we can account for 78 percent of the first-time, full-time students. In other words, while the federal government’s data show that slightly more than half of students have graduated within six years, the NSC data show that nearly 80 percent of all

students have either completed their education or are still pursuing it. While it is unclear what share of students who were still enrolled after six years earned a degree, it is important to note that the students had not dropped out and were still working toward earning a credential. A common misperception of graduation rates reported from IPEDS is that the students who did not earn a degree had dropped out. Again, using the public four-year data in **Table 1** as an example, a 54 percent graduation rate does not mean that 46 percent of students had dropped out. In fact, as the NSC data show, just 22 percent were no longer enrolled after six years.

Table 1 also provides a snapshot of data not available through IPEDS—graduation rates that include part-time and transfer students.

Table 1. Six-Year Graduation and Persistence Rates

	IPEDS ⁴	NSC (Graduation from anywhere)	NSC (Graduation from anywhere or still enrolled)
First-time, full-time students ⁵ at two-year public institutions	22%	14% ⁶	63% ⁷
All students at two-year public institutions	N/A	15%	66%
First-time, full-time students at four-year public institutions	54%	63%	77%
All students at four-year public institutions	N/A	60%	75%
First-time, full-time students at four-year private not-for-profit institutions	63%	73%	82%
All students at four-year private not-for-profit institutions	N/A	69%	78%
First-time, full-time students at four-year for-profit institutions	39%	35%	46%
All students at four-year for-profit institutions	N/A	35%	49%

⁴ National Center for Education Statistics Integrated Postsecondary Education Data System 2011 Graduation Rate Survey, preliminary release data.

⁵ For public two-year institutions, the numbers shown are the three-year graduation and persistence rates.

⁶ As the NSC does not yet have certificate information for many of its participating schools, it did not include in these graduation rate calculations students who earned a certificate. Additionally, for the purposes of this report NSC used a proxy measure to determine students’ degree-seeking status, and those measures tend to overestimate the number of degree seeking students when compared to IPEDS. As a result, the NSC-calculated graduation rate for community colleges is lower than the graduation rate calculated from IPEDS.

⁷ For public two-year institutions, this represents the number who successfully transferred to another postsecondary institution. It is unclear from our analysis how many were still enrolled in the transfer institution.

As mentioned previously, IPEDS is based on a cohort that represents only first-time, full-time students who enroll in the fall. For the IPEDS cohort that entered college in 2006, first-time, full-time students who enrolled in the fall represented just 50 percent of the class. As such, the NSC “all student” percentages in **Table 1** provide a more comprehensive picture of student completion and persistence.

Not surprisingly, the graduation and persistence rates for all students are lower than the rates for just first-time, full-time students (at least at the four-year level). This is to be expected, as students who enroll part-time are likely to take longer than normal to graduate, and students who transfer may have to take additional courses to complete a degree, thus delaying their time to graduation. What is important to note is that while including part-time and transfer students dropped the graduation rates below the first-time, full-time rate in the NSC data, the more comprehensive NSC graduation rate was still higher than the graduation rate produced from IPEDS. A possible explanation is the high rate of completion among students who transfer into four-year institutions. This will be discussed in more detail later.

Part-time and Transfer-in Students

Part-time Students

As previously mentioned, part-time students are not formally tracked in the IPEDS graduation rate data. This however, does not mean they have no impact on the six-year graduation rate for first-time, full-time students. IPEDS establishes its graduation rate cohort based on first-time students who are enrolled full time in their first semester. Students included in the IPEDS graduation rate cohort are not dropped from the cohort if their enrollment status changes after their first semester. In other words, first-time students who enroll full time in their first semester but enroll part time for subsequent semesters continue to be part of the IPEDS graduation rate cohort. Ac-

ording to U.S. Department of Education data, 33 percent of first-time students who enroll full time in their first semester enroll part time at some point⁸. This suggests that one out of every three students in the IPEDS graduation rate cohort enrolls part time for at least one semester within six years. Despite the presence of part-time students in the IPEDS graduation rate calculation, they are not formally tracked, thus no annual data exist on the rate of degree completion or persistence for part-time students.

As mentioned previously in this brief, one of the major challenges in calculating graduation rates for part-time students is defining who is in fact a part-time student. For example, is a part-time student one who enrolls exclusively part time? U.S. Department of Education data show that less than 40 percent of students who begin part time are exclusively part time. Conversely, if a part-time student is defined as someone who has ever enrolled part time, is there a minimum threshold? That is, is the student who enrolls part time for just one semester in five years included in the same part-time graduation rate as the student who only enrolled full time for two semesters over five years? Obviously, how part-time students are defined can significantly impact the resulting completion and persistence rate. A forthcoming report by NSC will provide more detail on the graduation rates of different types of part-time students.

For the purposes of this issue brief, part-time students are defined as students who began the fall 2006 term enrolled part time but who may have enrolled full time in subsequent semesters. ACE chose this definition for two reasons. First, it most closely resembles the definition of part-time students proposed by the National Center for Education Statistics to be used in future collections of IPEDS graduation rates. Second, it aligns with the current IPEDS graduation cohort definition of “first-time, full-time.” Below is an overview of the NSC data on part-time students.

⁸ 2003–04 Beginning Postsecondary Students Longitudinal Study.

Four-Year Institutions

At public four-year institutions, first-time, part-time students made up 11 percent of the 2006 entering cohort. Among these students, 32 percent had earned a degree (at institution of origin or transfer institution) within six years and another 22 percent were still working toward their degree (see **Table 2**). While the completion and persistence rate for part-time students at public four-year institutions is, not surprisingly, much lower than what the NSC data revealed for first-time, full-time, public four-year students, more than half of part-time students at public four-year institutions had either earned a degree or were still on track to earn a degree.

Part-time students made up 7 percent of the NSC 2006 entering cohort at private four-year colleges and universities. Although part-time students made up just 7 percent of the entering class of first-time students at private institutions, more than 40 percent of these students earned a degree, and another 17 percent were still enrolled after six years. Similar to students attending public four-year institutions, part-time students did not persist or complete at the same rates as their first-time, full-time peers; however, well more than half were able to complete or continue working toward their postsecondary credential.

According to NSC data, 9 percent of the

2006 entering cohort at four-year, private for-profit institutions was enrolled part time. Among these students, 19 percent had earned a degree or credential after six years and 17 percent were still enrolled, meaning that a little more than one in three part-time students had earned a degree or were still enrolled after six years.

Public Two-Year Institutions

According to NSC data, 22 percent of the 2006 entering cohort at public two-year institutions was enrolled part time. After three years, just 8 percent of these students had earned a degree. However, 70 percent were either still enrolled or had transferred to another college or university. After six years, 30 percent of students who began part time had earned a degree and 33 percent were still on track to graduate from their original institution or had transferred to another institution.

Summary

While part-time students (as defined in this report) do not make up a large share of the entering cohort of students, they are an important segment of the undergraduate population. As the number of working adults and other non-traditional students who return to higher education grows, we are likely to see an increase in the number of part-time students enrolling in postsecondary education. It will

Table 2. Six-Year Graduation and Persistence Rate, Part-time Students

	Graduation from anywhere within three years	Graduation from anywhere or still enrolled within three years	Graduation from anywhere within six years	Graduation from anywhere or still enrolled within six years
Four-year public institutions	N/A	N/A	32%	54%
Four-year private not-for-profit institutions	N/A	N/A	43%	60%
Four-year for-profit institutions	N/A	N/A	20%	36%
Two-year public institutions	8%	70%	30%	63% ⁹

⁹ For public two-year institutions, this represents the number who successfully transferred to another postsecondary institution. It is unclear from our analysis how many were still enrolled in the transfer institution.

be important to efforts to increase educational attainment to track how these students are faring in their educational pursuits. That is currently not possible on an annual basis with federal data¹⁰. However, NSC data are able to provide a snapshot of outcomes for part-time students that reveal completion and persistence rates greater than 50 percent for every four-year sector (with the exception of for-profits), as well as for two-year institutions. While there is work to be done to improve these rates, the first step is having readily available data that capture the educational achievements of this group of students.

Transfer-in Students

Unlike part-time students, the definition of transfer-in students is more straightforward. For the purposes of this publication, these are students who in the fall of 2006–07 enrolled full time in a postsecondary institution that was different than the institution in which they were previously enrolled. Additionally, whereas part-time enrollments are an inadvertent part of the IPEDS graduation rate cohort, transfer-in¹¹ students are almost nonexistent in the IPEDS data. Below is an overview of the NSC data on transfer-in students.

Four-Year Institutions

At public four-year institutions, transfer students made up nearly one-third (31 percent) of the entering 2006 cohort. Within six years, 71 percent had earned a degree (at their institution of origin or at the transfer institution) and 10 percent were still working toward their degree (see **Table 3**).

Transfer-in students made up 29 percent of the NSC 2006 entering cohort at private four-year colleges and universities. Similar to public four-year institutions, an overwhelming share of these students completed a degree within six years. NSC data show that 73 percent of transfer-in students earned a degree from a private not-for-profit four-year institution (see **Table 3**). An additional 8 percent were still enrolled in a postsecondary institution.

In the NSC data, 43 percent of the 2006 entering cohort at four-year private for-profit institutions had transferred in from another institution. Of these students, 42 percent had earned a degree or credential after six years and 14 percent were still pursuing a degree (see **Table 3**).

Table 3. Six-Year Graduation and Persistence Rate, Transfer-in Students

	Graduation from anywhere within three years	Graduation from anywhere or still enrolled within three years	Graduation from anywhere within six years	Graduation from anywhere or still enrolled within six years
Four-year public institution	N/A	N/A	71%	81%
Four-year private not-for-profit institution	N/A	N/A	73%	81%
Four-year for-profit institution	N/A	N/A	42%	56%
Two-year public institution	19%	68%	36%	71%

¹⁰ NCES does collect data on part-time students as part of its sample surveys (e.g., the Beginning Postsecondary Students Longitudinal Study and the National Postsecondary Student Aid Study), but these data are collected approximately every five years and are not available at the institution level.

¹¹ While transfer-in students are not captured in IPEDS, transfer-out students are reported in IPEDS by institutions that, as part of their mission, prepare students for transfer to a four-year institution.

Public Two-Year Institutions

Seventeen percent of the 2006 entering cohort at public two-year institutions were students who had transferred from another institution. Within three years, 19 percent of these students had earned a degree while 48 percent were either still enrolled or had transferred to another college or university. After six years, 37 percent of students who began part time had earned a degree, and 34 percent were still on track to graduate from their original institution or from a subsequent institution.

Summary

According to NSC data, transfer students made up a fairly significant share of the 2006 entering cohort of students at four-year institutions. This is not surprising given the increasing mobility of college students. Similar to part-time students, this is a population that is currently not accounted for in the federal graduation rate, but given the share they represent in the entering cohort, transfer-in students are not an insignificant part of the undergraduate population. Additionally, transfer-in students, according to NSC data, appear to have a higher completion and persistence rate than first-time, full-time students (with the exception of those enrolled at for-profit institutions).

Conclusion

With the increasingly important role that graduation rates are playing in both federal and state policy discussions of postsecondary accountability and productivity, it is critical that a graduation rate metric exists that is comprehensive in its accounting of student success. As detailed earlier, the current federal graduation rate reported through IPEDS excludes part-time and transfer-in students (as well as students who enroll after the first semester), who account for more than 50 percent of the undergraduate population. To measure an institution's success based on a graduation rate that potentially excludes up to 90 percent of its enrolled students provides both an incomplete and inaccurate picture of student success and institutional productivity.

While this issue brief makes an argument for more comprehensive data on student completions, it is important to underscore that improved metrics are just one piece of the educational attainment puzzle. Access to data such as those provided by NSC does not change the need for colleges and universities to produce more graduates, which is essential to increasing educational attainment in the United States.