

Transfer and Completion

By David Radwin and Laura Horn

Six-year completion rates provide a realistic time frame for students who enroll part time, who are not enrolled continuously, or who require developmental education.

The national imperative to increase the college attainment of American adults requires colleges to increase the number of students who complete postsecondary certificates and degrees. Community colleges are vital to this effort because the projected growth in employers' demand for individuals with associate degrees exceeds even the growth in demand for individuals with bachelor's and postgraduate degrees (Lacey & Wright, 2009, table 3).

The Completion Arch[™] portrays measures of completion in numerous ways, all of which contribute to a broader, more realistic accounting of students' success in community colleges. For example, in addition to the most widely reported completion measure—Integrated Postsecondary Education Data System (IPEDS) graduation rates—*The Completion Arch*[™] reports longitudinal completion rates, the average time it takes

to earn a certificate or degree, the number of certificates and degrees awarded, the number of credits that students earn toward their degree or transfer, and six-year persistence rates.

New to *The Completion Arch*[™] are IPEDS graduation trends including new IPEDS graduation rates, which measure graduation rates over a longer time frame (e.g., four-year graduation rates for associate degrees, representing degrees earned within 200 percent of normal time, in addition to three-year graduation rates). Also, the report now includes indicators accounting for the number of credits transferred by community college students who transfer to four-year colleges. Taken together, these indicators account for students who attend part time, stop out, or otherwise do not attend on a full-time or continuous basis.

Completion Measures Beyond Graduation Rates

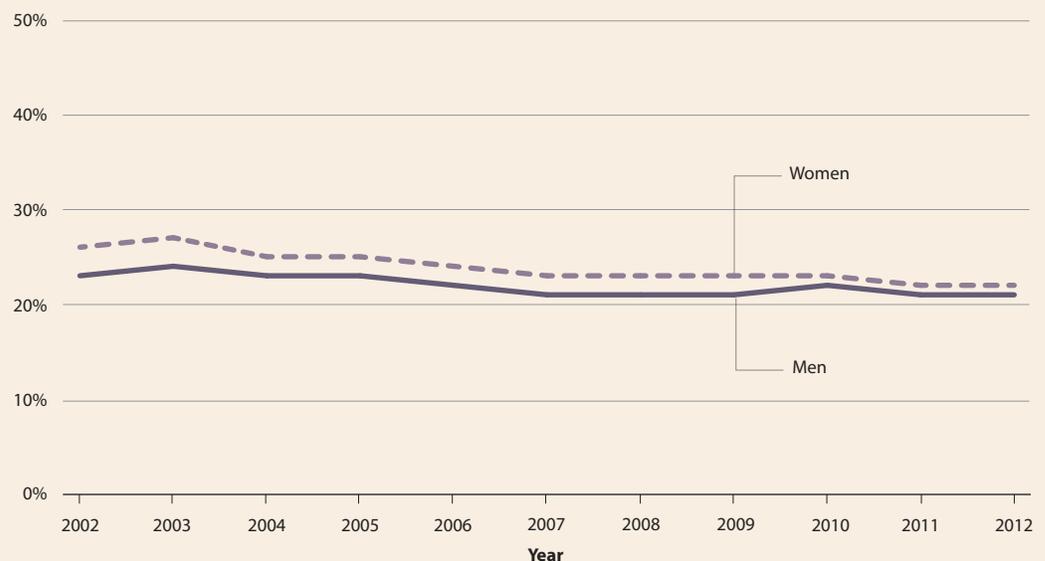
The institutional graduation rate reported in IPEDS is the most well-known indicator of community college completion (figure 1). The IPEDS graduation rate is reported annually according to a standard formula and can be compared over time and across states and individual institutions. The IPEDS graduation rate has become a key component of college rankings and state accountability systems for public colleges.

However, the IPEDS graduation rate has several notable limitations. Most prominently, it includes only first-time, full-time students who begin in the fall, thus excluding the majority of community college students who initially enroll part time or in other terms (Offenstein & Shullock, 2009). To address this shortcoming, one of the recommendations of the federal Committee on Measures of Student Success is to expand IPEDS to include separate graduation rates for part-time community college students (Bailey, 2012; Committee on Measures of Student Success, 2011), which will be implemented in 2015–16 (Voight, Long, Huelsman, & Engle,

2014). Even then, a third of students who are included in the IPEDS graduation rate will likely enroll part time for at least one term over the three years they are tracked (Bailey, Crosta, & Jenkins, 2006; Offenstein & Shullock, 2009). In addition, until recently, IPEDS estimates reported graduation rates within, at most, 150 percent of normative time or three years for an associate degree. Since 2008, community colleges and other postsecondary institutions have also reported graduation rates within 100 percent and 200 percent of normal time, tracking associate degree-seeking students up to four years, though they are not disaggregated by race/ethnicity or gender.

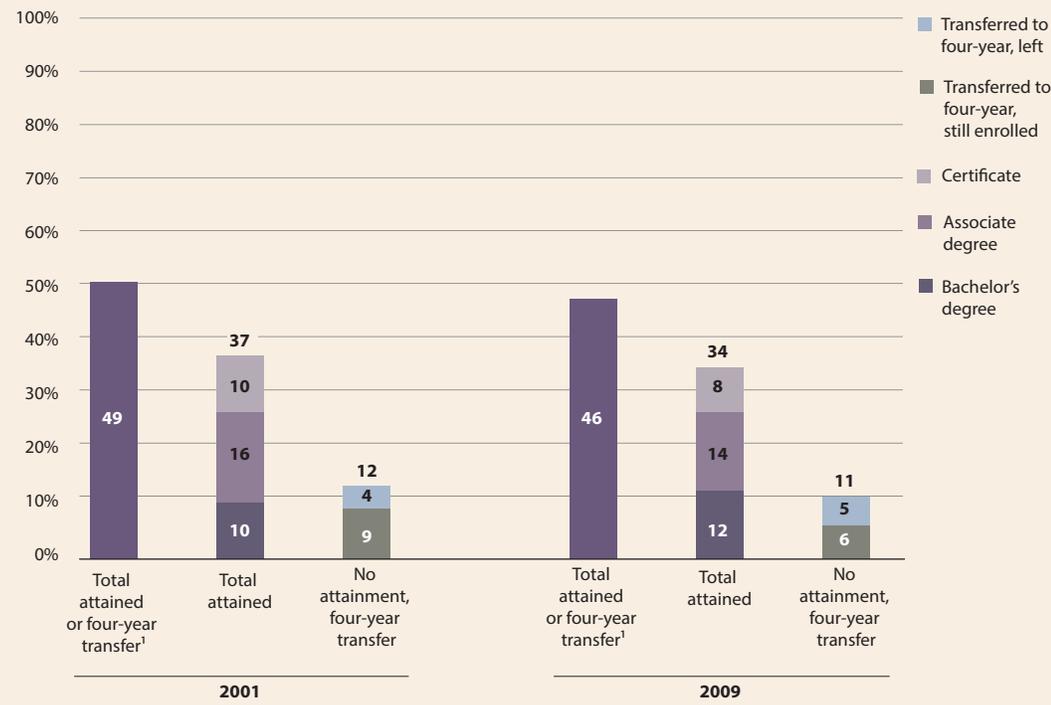
Six-year completion rates provide a more realistic time frame for students who enroll part time, who are not enrolled continuously, or who require developmental education to complete community college course work in order to transfer or earn a degree or certificate. Several states have begun reporting six-year completion rates, and national initiatives such as Achieving the Dream have contributed toward promot-

Figure 1 Institutional graduation rates at 150 percent of normal time by gender, United States, 2002 to 2012



SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Institutional Characteristics Survey and Graduation Rates Survey.

Figure 2 Percentage distribution of beginning community college students who attained or transferred within six years: 2001 and 2009



¹ Transfers include those who are still enrolled and those who left without a degree.

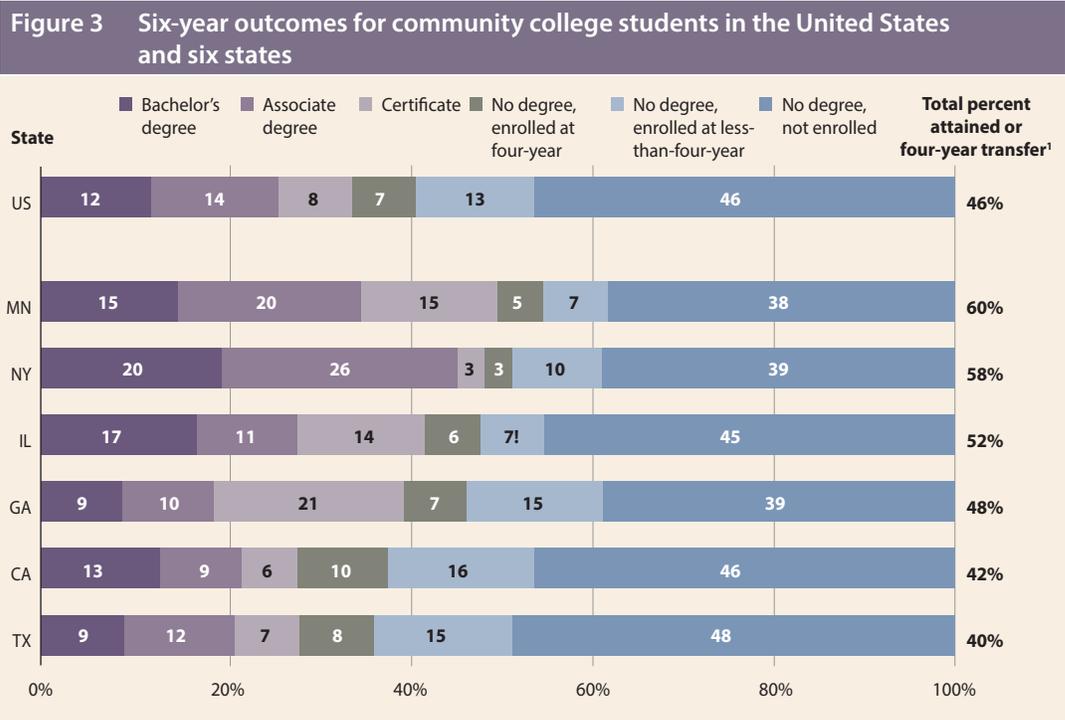
NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1996/01 Beginning Postsecondary Students Longitudinal Study (BPS:96/01) and 2004/09 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:04/09).

ing this measure across a number of states and institutions. Figure 2 shows six-year completion rates for the 1996/01 and 2004/09 cohorts of the national Beginning Postsecondary Students (BPS) Longitudinal Study sample. Notably, the 34 percent of students who started community college in 2003–04 who attained some award within six years is higher than the institutional graduation rate in any year in figure 2, not only because of the longer time period but also because BPS tracks students across institutions and IPEDS does not. That is, students who graduate from a different institution than the one where they started are counted as graduates in BPS but not in IPEDS. The figure also shows the percentage of students who either complete or transfer to a four-year institution, which is sometimes called the “success rate” for community colleges. There is little change in the completion or success rates across the two cohorts, however. The apparent drops in the overall completion rate (from 37 percent to 34

percent) and success rate (from 49 percent to 46 percent) are not statistically significant.

Because the BPS data allow researchers to follow students across institutions, they can identify the percentage of beginning community college students who transfer and earn a bachelor’s degree at a four-year institution. Most beginning community college students initially planned to earn a bachelor’s degree or higher—81 percent overall and 90 percent of those who started at age 18 or younger (Horn & Skomsvold, 2011, table 1-A). Figure 3 shows outcomes for the United States and for six states with samples representative of their states’ postsecondary enrollments. Nationally, 12 percent of community college students earned a bachelor’s degree within six years, but the proportion ranges from 9 percent in Georgia and Texas to 20 percent in New York. The success rate of students who attained any credential or transferred ranges from 40 percent in Texas to 60 percent in Minnesota.



¹ Interpret data with caution. Estimate is unstable because the standard error represents more than 30 percent of the estimate.

¹ Includes degree and certificate completers, those still enrolled in a four-year institution without a degree and those who transferred to a four-year institution but left without a degree. The last appear in the no degree, not enrolled category in the bar graph.

NOTES: Detail may not sum to totals because of rounding. The six states are Minnesota, New York, Illinois, Georgia, California, and Texas.

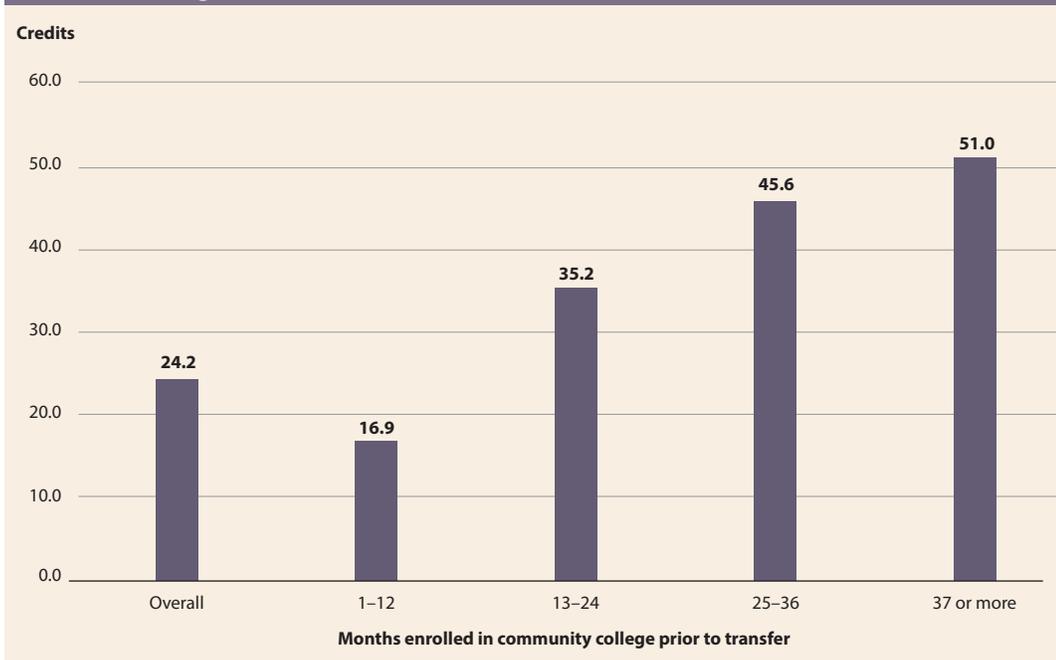
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1996/01 Beginning Postsecondary Students Longitudinal Study (BPS:96/01) and 2004/09 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:04/09).

Another indicator new to *The Completion Arch*TM this year is the number of credits that students transfer to a four-year institution. This indicator takes advantage of recently released transcript data collected from all institutions attended by students in the BPS:04/09 sample. The number of credits represents the contribution of the community college toward attaining a bachelor's degree. Because bachelor's degrees typically require at least 120 semester credits to complete, representing four academic years of full-time enrollment, students need to transfer at least 60 credits to have junior-level or upper-division standing (Moore, Shulock, & Jensen, 2009). In reality, relatively few students meet this threshold. Figure 4 shows the distribution of credits transferred by community college students who transferred to a four-year institution within six years. Overall, students transferred an average of 24 credits, less than half of the 60

credits required for junior-level standing. Not surprisingly, the number of credits transferred strongly correlates with the number of months enrolled in community college, but even students who enrolled 37 or more months in community college before transferring transferred an average of 51 credits, still short of the 60 credit benchmark. Many community college students did not transfer any credits at all, including 19 percent who transferred to four-year public colleges and 21 percent who transferred to four-year private nonprofit colleges (Simone, 2014, table 8), although some researchers would not consider these individuals as transfer students unless they earned more than 12 or 15 credits at a community college before starting at a four-year college (see "What Is a Transfer Student?" research brief).

To be sure, these credit transfer statistics do not reflect the totality of the students' academic ac-

Figure 4 Average number of credits transferred by months enrolled in community college, 2009



NOTE: Results are shown for first-time students who began at a community college in the 2003–04 academic year and transferred to a four-year college as their first transfer. Credits are normalized to semester credit hours.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003/04 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:04/09) Postsecondary Education Transcript Study (PETS:09).

accomplishments in community college. Students may have completed noncredit courses such as developmental courses that prepared them for credit-bearing work, and they may have earned credits that for some reason were not accepted by the four-year institution. Indeed, community

college students' inability to transfer credits to four-year colleges, also known as credit loss, is a key obstacle to their earning bachelor's degrees at a similar rate to students who started at four-year colleges (Monaghan & Attewell, 2014).

From Transfer to Bachelor's Degree: Recent Research

As noted above, most beginning community college students intend to earn a bachelor's degree. There are many reasons why bachelor's degree-seeking students might start at a community college rather than a four-year college, and chief among them is cost savings. An estimate based on the published tuition or "sticker price" is that the 200,000 students who started in a community college in 2003–04 and subsequently transferred to a public four-year college collec-

tively saved \$943 million in current dollars, and the projected savings for students entering in 2011–12 would have been \$1.9 billion (Mullin, 2012). These figures do not include any savings for students who transfer to private four-year institutions nor any possible savings to taxpayers because students attended less expensive community colleges. Other reasons for attending community college include their geographic accessibility, which can ease the burden of housing

and transportation for some students, especially for those with family obligations; their open admissions policies, which emphasize access; and their mission to serve all incoming students regardless of ability or prior academic preparation, including students lacking high school diplomas and with severe skill deficits.

States vary in whether and how they regulate and encourage transfer from community colleges to public four-year colleges. As of 2010, 36 states had a statewide articulation policy setting specific rules about transfer, and others had additional policies to incentivize transfer, such as guaranteed admission to four-year colleges for qualified transfer students (Smith, 2010). The research, however, suggests that state articulation policies are not effective in promoting transfer. Transfer rates in states with formal articulation policies are no higher than in states without such policies, and transfer rates may differ more across institutions within a state than between states (Roksa, 2009; Roksa & Keith, 2008). One explanation for this situation is that even with statewide articulation policies and other supports, the transfer process can still be complex and transfer requirements can vary across public four-year institutions (not to mention private four-year institutions) (Moore et al., 2009). For this and other reasons, some college administrators consider state policies less important than bilateral agreements between community colleges and four-year colleges (Kienzl et al., 2012).

But transferring from community colleges is only an equivalent path to the bachelor's degree to the extent that transfer students are actually able to complete bachelor's degrees at the same rate as their counterparts who start at four-year colleges, also called "native" four-year students. One avenue of research attempts to answer whether and to what degree there is a transfer "gap" or "penalty," representing the difference in bachelor's degree completion rates for students starting in community colleges as compared with native four-year students. The key issue for researchers is that students who start in commu-

nity colleges differ from students who start in four-year colleges in multiple dimensions known to be relevant to success in college. Some of these pre-college differences, such as level of prior education, academic preparation, disabilities, and socioeconomic status, are observable characteristics that can be measured by standardized tests, high school transcripts, registration and enrollment records, and surveys. Others, such as noncognitive skills (motivation, persistence, self-discipline, organization, time management, study skills, etc.), degree goals, and familiarity with the culture of college, are more difficult to measure accurately. Credible estimates of the transfer penalty must control for observable differences even if they cannot necessarily control for unobservable ones.

In one study of bachelor's degree completion rates, researchers compared transfer students who had completed at least one full-time semester at a community college and native four-year students (Kienzl, Wesaw, & Kumar, 2012; also see Handel & Williams, 2012). After statistically controlling for differences in the background characteristics, the researchers compared transfer students with native four-year students who had reached the junior level of college. Across a range of different specifications, each analysis showed a substantial transfer penalty, implying that community college transfer students were 19 percent to 35 percent less likely to earn a bachelor's degree than otherwise similar native four-year students. Limiting the analyses to community college students who earned an associate degree first, which in some states guarantees junior-level standing at public four-year institutions (Florida Department of Education, 2009), the penalty shrinks to as low as 9 percent but still persists. These findings are consistent with other estimates of a moderately large penalty in bachelor's degree completion for community college transfer students (Doyle, 2009; Long & Kurlaender, 2009; Melguizo, Kienzl, & Alfonso, 2011) and of a somewhat larger penalty for students who begin at community colleges versus those who begin at four-year

colleges (for a review, see Pascarella & Terenzini, 2005, ch. 8).

Still, even with a transfer penalty, attending community college may still be the best path for some subsets of students seeking a bachelor's degree. The possibility that attending community college might simultaneously hinder and promote bachelor's degree completion, first considered by Rouse (1995), was extended by Brand et al. (2012) to estimate the effects of community college enrollment separately for different groups of students. The study used the academic and demographic characteristics of students to group them by their estimated propensity to initially attend community college, initially attend a four-year college, or not initially attend college at all, regardless of their actual enrollment. Among students who appeared most likely to initially attend a four-year college, a transfer penalty was detected in line with the studies mentioned above, but among the students who appeared most likely not to attend college at all, attending community college was associated with a slightly higher rate of bachelor's degree completion. In other words,

while there may be an overall transfer penalty, students at highest risk of not attending college at all were more likely to earn a bachelor's degree if they started at a community college than if they started at a four-year college. Similarly, as Monaghan and Attewell (2014) describe, community college students who transferred at least 48 credits were just as likely to earn a bachelor's degree as a matched group of native four-year students at minimally selective and nonselective four-year colleges who had earned at least the same number of credits. A primary source of transfer penalty, in their analysis, is that many community college students fail to transfer most or all of their credits, which makes it more difficult for them to accumulate the 120 credits typically needed to complete a bachelor's degree. The existence and size of the transfer penalty for any given community college student depends on a counterfactual outcome—what the student would have done instead of starting at a community college—that calls into question whether a single estimate can meaningfully describe as diverse a group of individuals as community college students.

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