IS STUDENT SUCCESS
LABELED INSTITUTIONAL
FAILURE?

STUDENT GOALS AND
GRADUATION RATES IN THE
ACCOUNTABILITY DEBATE AT
COMMUNITY COLLEGES

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TABLE OF CONTENTS

ABSTRACT

Community colleges are open-door institutions serving many students with academic, economic, and personal characteristics that can make college completion a challenge. Their graduation rates are low, but community college students do not always have earning a degree as their goal. While individual students may feel that their experience at a community college is a success, unless it culminates in a credential or transfer to a four-year institution the enrollment is counted as a failure for the college. This report explores different views on whether graduation rates are a fair and valid measure of community college effectiveness. It indicates how these rates can be useful as a relative measure and as a guide for institutional improvement, and suggests other ways of measuring student and institutional success.

Is Student Success Labeled Institutional Failure?

Student Goals and Graduation Rates in the

Accountability Debate at Community Colleges

Introduction

I continue to be discouraged that these articles do not ever account for the students who come to the community colleges with different goals. While I agree that the students we get whose goal is, or should be, a degree and transfer need more focused attention from us, I am always discouraged that community colleges are made to look like failures when the number of students who come to the community colleges to gain particular job skills or some similar goal are not separated out when the percentages are run. Or for comparison include perhaps a statistic that compares the number of poor and minority students who start at four-year institutions and their completion rates; or a comparison of completion rates by funding per student. I think this continues to be one of our challenges: to remind university researchers of the multiple missions of the community colleges and define success by the students who meet their personal goals. Then we would be in a better position to talk about how much more community colleges need to do.

— Community college president in response to an article
criticizing community colleges for low graduation rates

This quote will have a familiar ring to anyone involved in the discussion of community college outcomes and accountability. It reflects a conviction that community colleges are unfairly criticized for low graduation rates by outsiders (university researchers and others) who fail to understand that community colleges enroll a wide variety of students, many of whom, according to this view, are not seeking degrees and may face formidable social, economic, and academic barriers to getting an education. If this is true, then many community college "non-completers" are actually achieving their goals or are failing to finish due to problems that are beyond the control of the colleges. From this perspective, undue focus on low graduation rates is

1

misplaced and counterproductive. It creates a negative image of community colleges which are, to the extent possible given the many problems that their students face, actually meeting their students' goals.

At first glance, community college graduation rates appear to be very low. According to the Beginning Postsecondary Students Longitudinal Study of 1996-2001 (BPS:96/01, U.S. Department of Education, 2003a),[1] six years after initial enrollment at a community college, only 36 percent of all students had earned a certificate or an associate or bachelor's degree. Another 9 percent had transferred to a four-year college and were still enrolled. Yet 47 percent were no longer enrolled and had not earned any degree or certificate, although 4 percent of those transferred before ending their enrollment (see Figure 1).

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[1] BPS:96/01 is based on a sample collected by the National Center for Education Statistics of 12,085 students who began their initial postsecondary education in the 1995-96 school year. The sample used in this report includes 9,132 students for whom we have six years of longitudinal data, 1,094 of whom started their postsecondary education in a community college. The first-time students included here can be of any age.

Figure 1.

Highest Outcome in All Postsecondary Education Within Six Years
for First-Time Community College Students
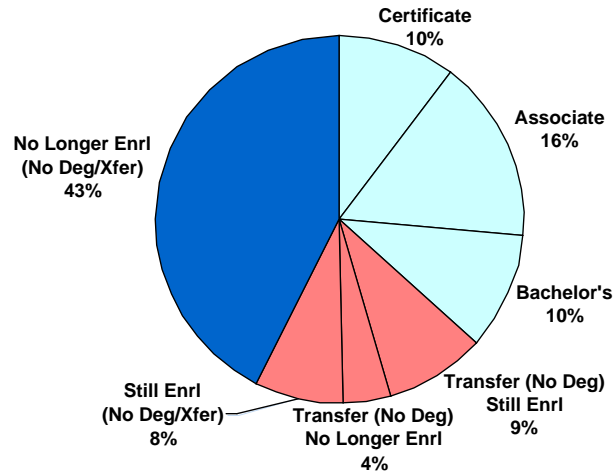
Source: Authors' calculations using data from BPS:96/01 (n=1,080).
Note: This chart displays the *highest* outcome for each student. If a student earns
both an associate and a bachelor's degree, the student is counted as earning a
bachelor's. If a student earns an associate and transfers without subsequently
earning a bachelor's, s/he is counted as earning an associate and is not included in
the transfer totals.

What should we make of these numbers? Are these outcomes low? Do they reflect
ineffective community college policies, programs, and practices that colleges could change or
improve? Or do they reflect the varied goals, interests, and characteristics of community college
students? This report explores these questions, presenting two sides to the argument about
whether graduation rates are an appropriate and fair measure of community college performance.
We first discuss the background of the use of graduation rates in the accountability debate. We
examine the major reasons why community college faculty, administrators, and supporters argue
that graduation rates are misleading measures of institutional performance and student success.

We end with conclusions, suggestions for how better to assess community college graduation

rates, and recommendations for further research.

Institutional Accountability and Graduation Rates

The Trend Toward Greater Accountability

The focus on the graduation rates of community college students must be understood in the context of broader trends in education. Over the last two decades, state and federal policymakers and accreditors have increasingly come to demand performance accountability and assessment of institutional quality based on student outcomes rather than measurements using more traditional process indicators (Burke, 2005; Dougherty & Hong, forthcoming). This movement toward accountability has recently gained momentum, particularly in elementary and secondary schools, where the No Child Left Behind Act has brought this issue to the center of the public debate about educational policy. At the postsecondary level, accreditation traditionally had been determined by an examination of the characteristics of a program or institution, such as faculty qualifications and characteristics or adequacy of facilities, rather than by measures of student success. Recently, though, many states have introduced various types of accountability measures based on student outcomes, and, in some cases, have tied at least some amount of funding to performance on outcome measures (Burke, 2005).

In early 2005, at the beginning of the second Bush Administration, the new Secretary of Education, Margaret Spellings, emphasized the need for performance measures for colleges, arguing that the accountability approach embedded in No Child Left Behind needed to be applied to colleges as well. At a speech at the American Council on Education, Spellings stated that:

One of our biggest challenges is a lack of compatible and comprehensive measurements—the kind of information parents have come to expect from grade schools….Colleges and states should use "common languages and metrics" to measure their performance….That way, both traditional and nontraditional education consumers can make smart choices, based on information, not anecdote. (Brush, 2005)

The higher education accountability movement has been further spurred by an increasingly difficult state funding environment in which other demands on state resources, such as health care and corrections, have squeezed community college funding in many states (Kane, Orszag, & Gunter, 2003). Tuition and fee increases have been one response to reduced public funds, and they encourage students, parents, and state policymakers to focus on the returns to their private or public investments in education.

Given this political environment, it is not surprising that community college staff may experience anxiety as the public and policymakers increasingly push for outcome-based accountability measures. Since 1997, by congressional mandate, all colleges have been required to report their graduation rates for fall semester cohorts of first-time, full-time students in degree programs. The name chosen to label these graduation rate measures, "Student Right-to-Know" (SRK), betrays an underlying skepticism about the willingness of colleges to divulge outcome information, implying that students must assert rights in order to get access to this information. But, as the quote at the beginning of this report implies, community college faculty and administrators do not necessarily object to outcome measures as a basis for accountability, but rather to an exclusive focus on credential completion and transfer rates.

Concerns about Graduation Rate Data

      Community college advocates criticize graduation rate-based outcome measures for three broad reasons, two of which are articulated in the beginning quote. First, they observe that many of the economic, social, and academic problems that confront community college students and thwart their retention and graduation are beyond the control of the colleges. Community colleges are expected to provide open access, and in many states students seeking to enroll include even those who have not graduated from high school. By definition, these students come to college with many characteristics that might make completing a credential a challenge. Advocates ask why community colleges should be criticized for enrolling the very students they are expected to accept, regardless of their prospects for graduation.

      Second, advocates argue that many students at community colleges are not seeking degrees or transfer to a four-year college, but may wish only to learn specific skills that can be picked up in a small number of classes. As the quote at the beginning argues, this approach to higher education is consistent with the multiple missions of the community colleges and suggests that community colleges should not be penalized in cases where students do not complete degrees but do meet their personal goals.

      A third criticism applies to institutional graduation rates, and especially the SRK measures. The SRK data for community colleges consist of two rates: student degree and certificate completion and student transfer. The completion rate is calculated by dividing all students in the cohort who earn a degree or certificate at the college within 150 percent of the expected completion time for the program in which they enrolled (three years for most associate degree programs) by the total number of students in the cohort. The transfer rate is the number of

cohort students who transfer within three years to another postsecondary institution (including other community colleges) divided by the cohort total.

There are several potential problems with these indicators. First, institutional rates measure only the graduation rate of students who earn a credential at, or transfer from, the college where they began their postsecondary education. However, increasingly students are attending more than one college during their undergraduate careers. Second, the SRK graduation rate uses a cohort of first-time full-time students, which focuses attention on atypical community college students since the majority of these students attend part-time (Burd, 2004; Delow & Romano, 2002). Third, critics argue that the three-year period used by the National Center for Education Statistics to compute graduation rates is unrealistically short for students who attend part time for at least some of their enrollment and have multiple demands on their time. Many community college students who complete programs require more than three years to do so. For these reasons, the SRK graduation rates may give a misleading picture of community college student outcomes.

In the following sections, we address each of these objections in detail. Our discussion of student characteristics is based on data from the National Education Longitudinal Study (NELS) of 1988 (U.S. Department of Education, 2003b), and our analysis of student goals and the problems with the SRK graduation rates is based on evidence from BPS:96/01 (U.S. Department of Education, 2003a).

Assessing the Validity of Graduation Rates as an Accountability Measure

The Effects of Student Characteristics on College Completion

The college president quoted at the beginning of this article asked that, when examining

completion rates, attention be paid to the many poor and minority students enrolled in

community colleges and to the lower level of resources available to community colleges

compared to baccalaureate institutions. Community colleges are expected to accommodate a

wide variety of students, and many of them face financial, academic, and personal challenges

that may be beyond the control of the colleges and that can thwart students' retention and

successful completion of programs. As open access institutions, community colleges cannot

increase their graduation rates by being more selective in admissions. Several states have even

mandated that any student judged to be in need of remediation must enroll in a community

college rather than a public four-year institution,[2] thus increasing the burden on community

colleges of dealing with academically unprepared—students sometimes without the additional

resources needed to serve such students effectively.

Figures 2 through 4 present information on the background and enrollment characteristics

of students in certificate and associate degree programs at community colleges compared with

students in bachelor's degree programs at baccalaureate institutions. Observe that community

college students are much more likely to come from households in the lower SES quartiles

(Figure 2), to have generally lower test scores in high school (Figure 3), and to delay enrollment

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[2] Based on our calculations, over 60 percent of all first-time students at community colleges in the NELS:88 survey took at least one remedial course.

in college after high school, attend part-time, or to interrupt their college studies (Figure 4).[3] All

of these factors have been shown in many studies to be related to lower retention and graduation

(Alfonso, Bailey, & Scott, 2005; Bailey, Alfonso, Scott, & Leinbach, in press; Berkner, Cuccaro-

Alamin, & McCormick, 1996). The data for these charts are from NELS:88 and, unlike the data

from BPS:96/01, include primarily traditional-age college students.[4] We use these data here

because they have good information on students' socioeconomic status and students' high school

academic record. But the sample does not include many older community college students, who

face additional challenges to success in college. Older students are more likely to work full time

and may have a family to support, characteristics that have been found to be significant barriers

to their education (Gooden & Matus-Grossman, 2002).

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[3] The part-time and interrupted measures on Figure 4 are for a student's whole period of enrollment until earning a certificate or degree, transferring, or dropping out. Therefore, the period of measurement for bachelor's program students is, on average, much longer than that for associate and certificate program students. The rates of part-time and interrupted enrollment for bachelor's students would be even lower if a fixed period, such as three years, were used for all students.

[4] Students in the NELS:88 sample were all in eighth grade in 1988 and would have been in the high school class of 1992. The analyses in this report used the sample of 8,283 NELS:88 students for whom there are complete postsecondary transcript data through the year 2000. First PSE enrollment could have taken place at any time up to 2000, but no student would have been older than 26 at any time during the period.
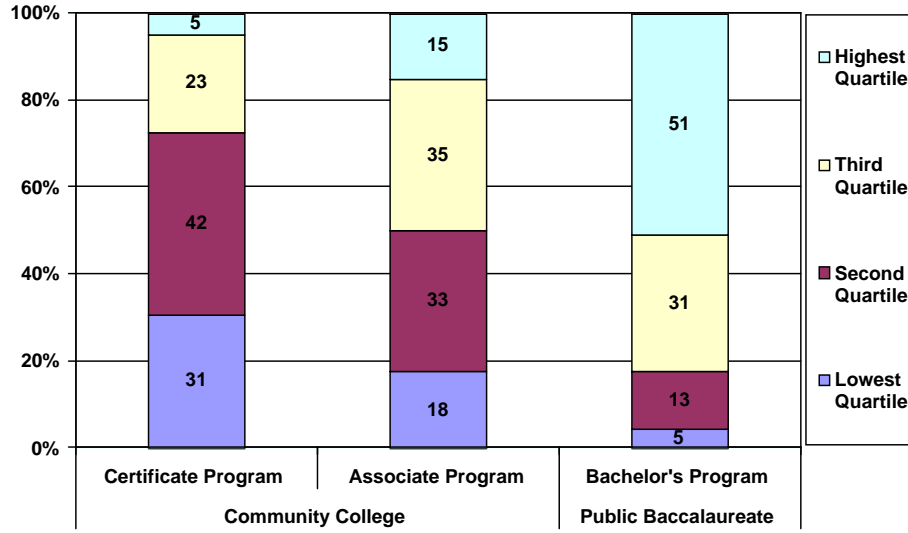
Figure 2.

Degree Program of First Postsecondary Enrollment for High School Class of 1992,
by Household SES Quartile
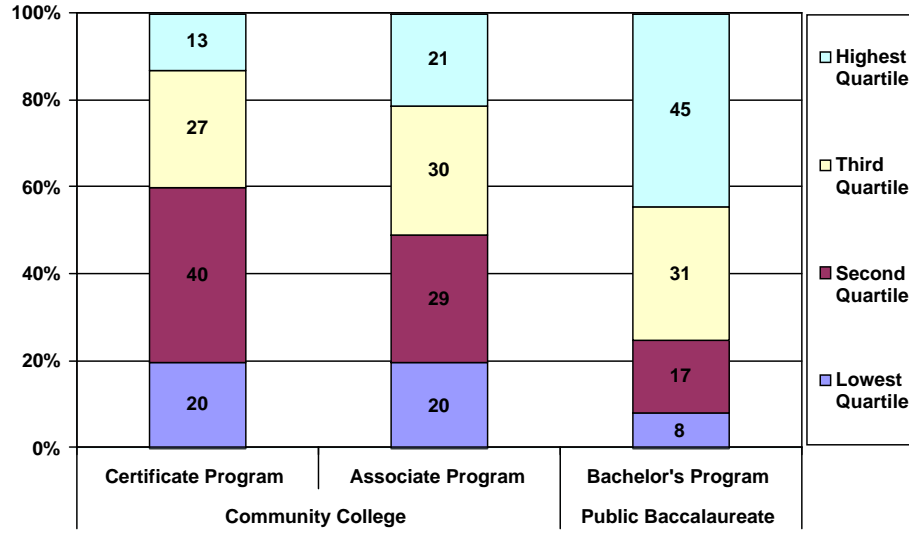
Source: Authors' calculations using data from NELS:88.
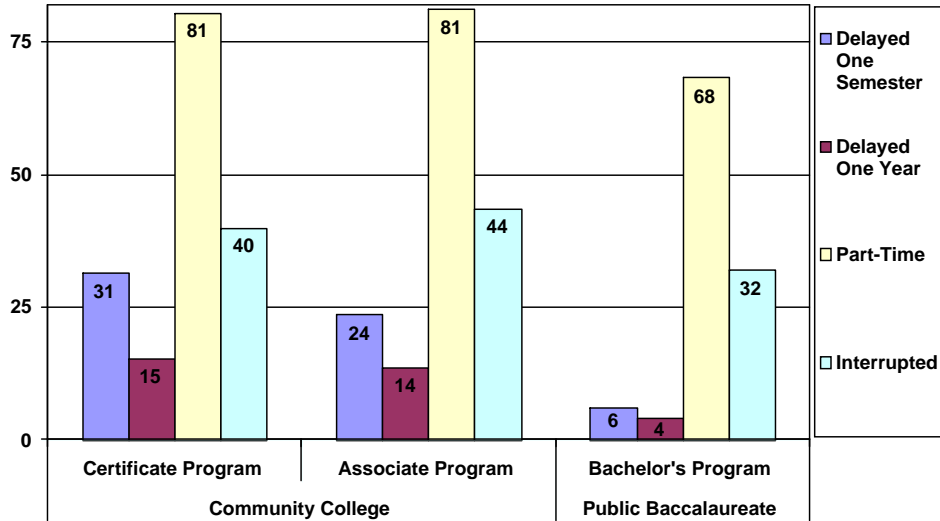
Figure 3.

Degree Program of First Postsecondary Enrollment for High School Class of 1992, by Grade 10 Composite Test Score Quartile

Source: Authors' calculations using data from NELS:88.

Figure 4.

Degree Program of First Postsecondary Enrollment for High School Class of 1992,
by Student Enrollment Patterns

Finally, community colleges have fewer resources to devote to the education of each of their students. Expenditures per full-time equivalent (FTE) student at community colleges averaged $8,623 in 2000-01, or about 45 percent of the $19,124 spent per FTE at four-year public colleges.[5] For just instructional expenditures per FTE, community colleges spend on average only 56 percent of the amount spent at four-year public colleges.[6] Moreover, it is not clear that FTE student count is the most appropriate number to use for comparison. As Figure 4 demonstrates, the majority of community college students are part time and one could argue that part-time students may require proportionately more educational services than full-time students.

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[5] Authors' calculations using the NCES *Digest of Education Statistics* (2003). Calculations for four-year colleges excludes universities.

[6] Expenditures include costs for non-credit enrollments, yet the FTE calculations exclude non-credit students. Therefore, expenditures per FTE may be inflated. Consequently, since community colleges generally have higher rates of non-credit enrollment than do four-year colleges, the gap in expenditures between college types would be even greater.

In other words, colleges may need more money to effectively educate two half-time students than they do for one full-time student.

Certainly community colleges face many challenges with the students they enroll. Their students arrive with many barriers to overcome, and the colleges have fewer resources than baccalaureate institutions to help students overcome those barriers. We will discuss the implications of this situation in the conclusion.

The Effects of Student Goals and Expectations on College Completion

What are community college students' goals for postsecondary education, and are the students achieving them? Certainly many students arrive at a community college intending to complete a certificate, associate, or bachelor's degree. However, for many of them, this intention may not be very concrete—at least not at their initial institution of enrollment. Students may in effect be "sampling" college. Since community colleges are often closer to students' homes and cost less than four-year institutions, they lend themselves to such experimentation. Furthermore, some students may have very specific goals that can be met by taking a small number of courses. Such students are those whom community college advocates have in mind when they say that failure to complete a degree does not necessarily mean that a student failed to achieve a personal goal. The BPS:96/01 survey contains a number of questions that cast light on students' intentions, and they reflect the varied objectives of community college students. In order to understand the effect on outcomes of different objectives, we can look at the graduation rates for students with different reasons for enrolling.

Primary Reason for Enrolling. Figure 5 displays the distribution of responses to the following question asked by the BPS:96/01 survey: "What is your primary reason for enrolling in this school?" Respondents were given the following options: obtain job skills, obtain a degree or certificate, transfer, or personal enrichment. Fifty-seven percent said that they wanted a degree or certificate or that they wanted to transfer to a baccalaureate institution. Forty percent stated that they wanted job skills or personal enrichment, although they may also seek degrees as a means of meeting those primary goals.

Figure 5.

First-Time Community College Students by Primary Reason for Enrolling
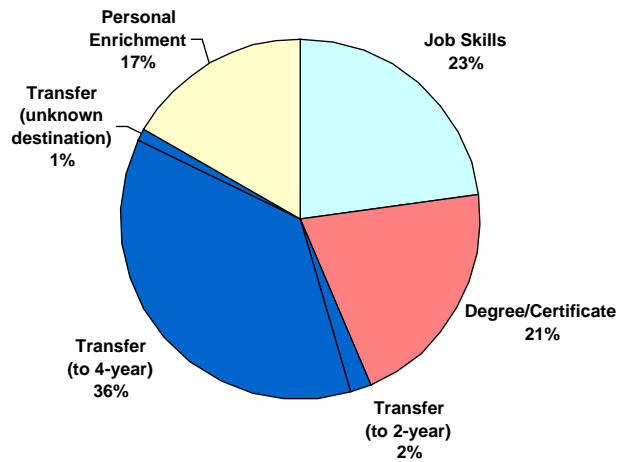
Source: Authors' calculations using data from BPS:96/01.

Figure 6 displays the educational outcomes, six years after initial enrollment, by the different goals. The bottom three sections of each bar indicate the share of students that complete a certificate, associate degree, or bachelor's degree. The middle sections show the proportion of students who transfer to a four-year college (without earning any credential in six years). The top

section shows the share who are no longer enrolled—either having completed a degree nor having transferred.

Figure 6.

Highest Outcome in Postsecondary Education Within Six Years for First-Time Community College Students by Primary Reason for Enrolling

(Percents)
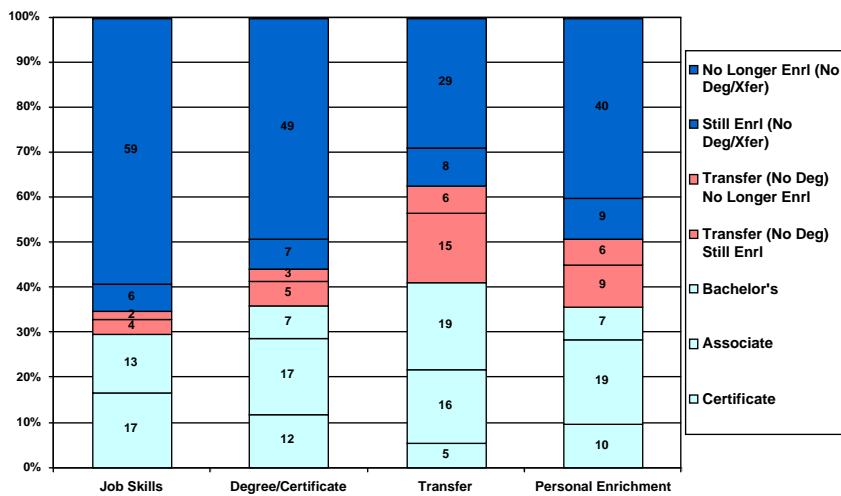
Source: Authors' calculations using data from BPS:96/01.

Figure 6 indicates that the completion rate (the percentage of all students starting in a community college who earn a certificate or an associate or bachelor's degree within six years) for students who sought "job skills" was lower than the average—30 percent instead of 36 percent (see Figure 1). None of the students in this sample with the job-skills goal completed a bachelor's degree. Perhaps consistent with their non-degree goals, after six years three-fifths of them were no longer enrolled and had not completed any degree.

In contrast, the students who stated that their primary reason was transfer were much more likely to complete a degree or persist. Forty percent had completed some degree and almost

16

half of those earned a bachelor's.[7] In addition, 21 percent (compared with 13 percent for all community college students) had transferred and 22 percent of students with transfer goals were still enrolled. Since six years is a relatively short time for completing a bachelor's degree for students who start in a community college, some of the students who were still enrolled could be expected to finish in subsequent years. Students whose primary goal was a "degree or certificate" were less likely to graduate or transfer. Their experience closely paralleled that of the typical student—after six years, about half were no longer enrolled and had earned no degree.

Another way to distinguish students by goals is to eliminate students who complete less than one semester's worth of coursework. Presumably, students who are interested in taking a small number of courses or students who are experimenting with college and quickly decide that they would be better off doing something else would not accumulate more than one semester of courses (about 15 credits).[8] Eliminating these students reduces the BPS:96/01 community college sample by 11 percent. It also would tend to portray community colleges in a more favorable light, since it assumes that very early departures are not the colleges' responsibility. But it is possible that students leave college quickly because of poor teaching, inadequate services, failure to find courses that they want or need, or other problems that the colleges might in fact be able to remedy. Completion rates *must* rise under this assumption, but by how much? We found that 39 percent of students who started in a community college and completed at least one semester of

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[7] Among students with the primary goal of transfer specifically to a four-year institution, the degree completion rates are even higher.

[8] Students may have accumulated their one full-time equivalent (FTE) semester of enrollment with a single full-time semester or several part-time semesters of enrollment. BPS:96/01 provides enrollment intensity (full time, part time, mixed, not enrolled) for each month. We assigned percentages of 1, .375, .75, and 0, respectively, to each level of enrollment intensity. These monthly values were accumulated for the student's whole enrollment at an institution. Four FTE months of enrollment constitute one FTE semester. In his analysis of NELS:88, which includes student transcripts (unlike BPS:96/01), Clifford Adelman (2005b) used 10 credits (about two-thirds of a semester) as a minimum indication that a student had engaged enough in an institution to be considered for analysis at that institution.

coursework earned a certificate, or an associate or bachelor's degree within six years. Another 15 percent transferred, but did not earn a bachelor's degree. These rates are only slightly higher than the respective rates of 36 percent and 13 percent for all first-time community college students. Given the ambiguous interpretation of the reasons for departure—students left because they got what they wanted or they left because the college was not able to accommodate them—the slight change in graduation rates does not suggest a significantly different conclusion from that based on the graduation rate for all community college students. That is, even with the exclusion of students who are apparently less committed to degree completion, or less committed to a completion at their first institution, the completion rate fails to rise significantly.

Figure 6 presents simple comparisons among students with different reasons for enrolling. Do the differences in outcomes reflect differences in goals or differences in underlying characteristics, such as family income or age, which are correlated with stated objectives? We conducted a multivariate analysis (logistic regression) of the probability of completing a degree or certificate within six years. In addition to the educational objective variables, we included gender, race, and ethnicity, parental education, family income, age, and marital status as control variables. According to these results, a student who stated that his or her primary reason for enrolling was to transfer was about 20 percent more likely to earn a certificate, degree, or transfer than a student with job skills as a stated goal. However, there is no statistically significant difference in the probability of degree or certificate completion among groups who stated that they were seeking job skills, a degree or certificate, or personal enrichment.[9] Thus a student's immediate reason for enrolling, particularly for those whose primary reason was to transfer, had an impact on the six-year educational outcome of the student. But there is much less

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[9] Results are not shown here. They are available from the authors upon request.

difference in the graduation rates between those who said that they were seeking job skills and those who wished to earn a degree or certificate.

The findings here provide some validity to the claim that many community college students are seeking neither a credential nor to transfer, suggesting that even many non-completers may meet their educational goals, as indicated by their stated reason for enrolling. Yet, despite the primary purpose for their immediate enrollment, students also hold long-term educational expectations that, more often than not, include the expectation of earning some degree.

Long-Term Educational Expectations. In addition to the question on primary reason for enrolling, BPS:96/01 asked students during their first year of postsecondary enrollment: "What is the highest level of education you ever expect to complete?" The answer to this question would combine students' aspirations and their judgments about what they expect to be able to achieve. The results suggest that over the long run, students are very ambitious. For example, Figure 7 shows that 70 percent of students starting their postsecondary education at a community college expected to earn a bachelor's degree or more while 80 percent expected to earn at least an associate degree. Even among students enrolled in certificate programs, 60 percent expected to earn at least an associate degree at some point (results not shown). When comparing the relationship of students' stated primary reason for enrolling with long-term expectations, we found a similar relationship of high expectations even if the immediate goals were modest. Nearly 80 percent of students in community colleges whose primary reason for enrolling in their initial postsecondary enrollment was to gain job skills or for personal enrichment still expected

to earn some credential in the long term. The vast majority of these credentials are associates or higher degrees.

Figure 7.

First-Time Community College Students by Highest Level of Education Expected
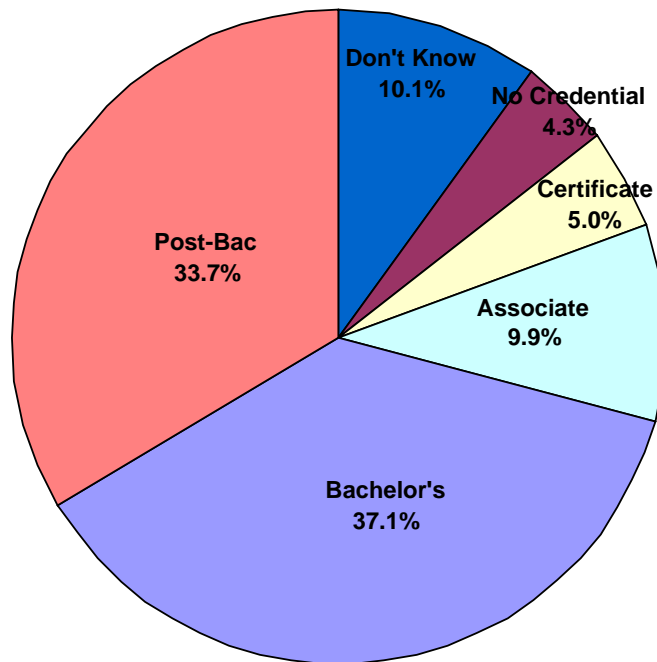
Source: Authors' calculations using data from BPS:96/01.

Students' long-term educational expectations are also correlated with their educational attainment (see Adelman, 2005). Figure 8 displays educational outcomes for students with different long-term expectations. Clearly more ambitious students earn higher degrees, and students with expectations for a bachelor's degree or higher are more likely to transfer. However, the overall six-year graduation rate hovers near 40 percent for all students except for the small

number of students who explicitly expected to earn no credential or those with unknown degree or certificate expectations. Students who have no degree goals are not likely to complete degrees.

Figure 8.

Highest Outcome in Postsecondary Education Within Six Years for
First-Time Community College Students by Highest Level of Education Expected
(Percents)
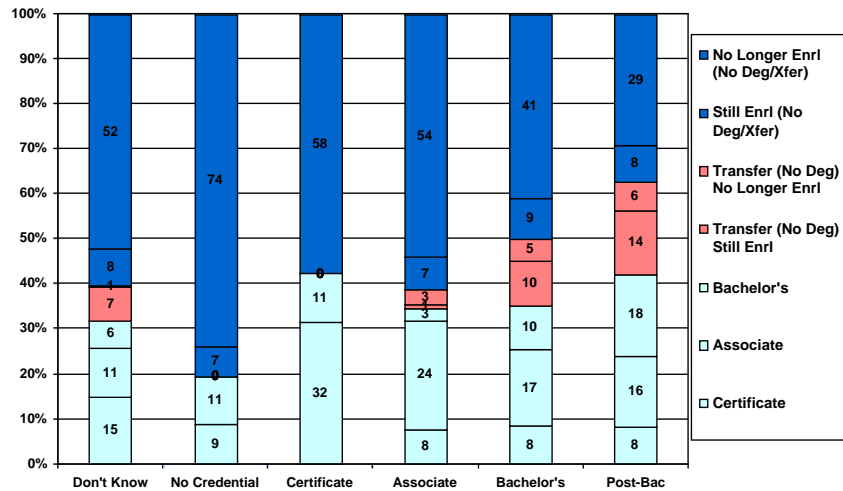
Source: Authors' calculations using data from BPS:96/01.

Students with modest goals tend to accumulate less education, to persist less, to earn fewer degrees, and, when they do complete degrees, to complete lower-level degrees. Yet this does not mean that even students with lower expectations are necessarily meeting their goals. As shown on Figure 6, more than one-half of students whose primary reason for enrolling was to earn a certificate or degree did not complete any credential within six years of entering a community college. Among students whose long-term expectation was to complete an associate degree, only 27 percent completed an associate or bachelor's degree within six years and over 60 percent were no longer enrolled, having completed no degree or certificate (Figure 8). Among

21

those expecting to receive a bachelor's, 27 percent earned that degree or an associate degree after six years while another 19 percent of that group were still enrolled, either in a community college or a baccalaureate institution. These data clearly indicate that many community college students are not getting what they want, or at least what they state that they want.

Student Background and the Construction of Educational Expectations. How should we look at students' educational expectations? From one perspective, they could be considered unrealistic "socially constructed" goals. This would be the case when students say they want a bachelor's degree because that is what they believe that they are expected to say. But from the point of view of college educators, it is certainly problematic to discount students' stated goals on the basis of the argument that those educators know, despite what the students say, that students have modest goals. Moreover, if goals are socially constructed, and if low-income and minority students have lower educational expectations than other students, then educators may question whether they should consider the student outcome a success, even when the goals are met. In any case, research has shown that there are clear economic benefits to credentials, and in particular to a bachelor's degree, so high educational expectations should be seen as a rational economic goal for students (Bailey, Kienzl, & Marcotte, in press; Grubb, 2002).

Figure 9 displays data on student expectations for community college students by race and for those from the lowest and the highest family income quartiles. Although whites and blacks had little difference in degree expectations, Hispanics exhibited much higher expectations for earning bachelor's and graduate degrees. Most significantly, only 60 percent of low-income students expected to earn a bachelor's or higher degree, while over 80 percent of high-income students had such expectations. The low-income students were also significantly more likely to

22

have unknown expectations or have a certificate as their highest expected credential. A similar

distribution for students' responses to the question asking their "primary reason for enrolling"

reflect these expectations (not shown here): low-income students were more than twice as likely

to state that they wanted job skills, while high-income students were far more likely to be

pursuing transfer. It should be noted here that over 75 percent of high school graduates from the

highest income quartile initially go to four-year colleges, while the majority (55 percent) of

graduates from the lowest quartile start at community colleges.[10]

Figure 9.

Highest Degree Ever Expected by First-Time Community College Students
by Race/Ethnicity and Household Income Quartile
(Percents)
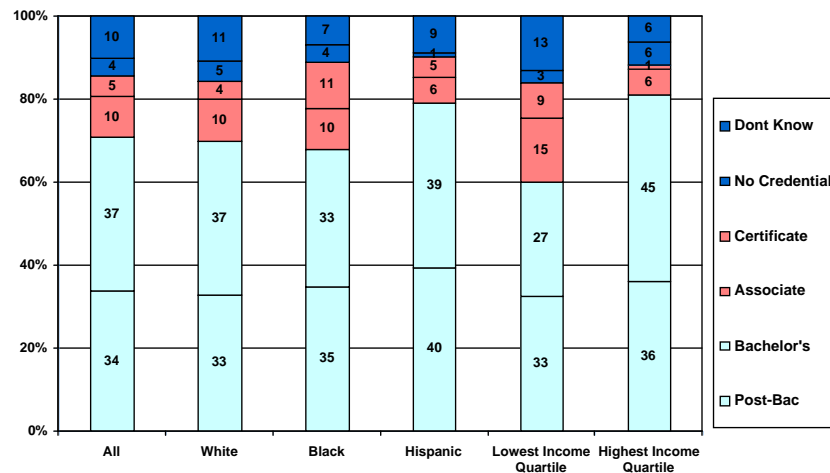
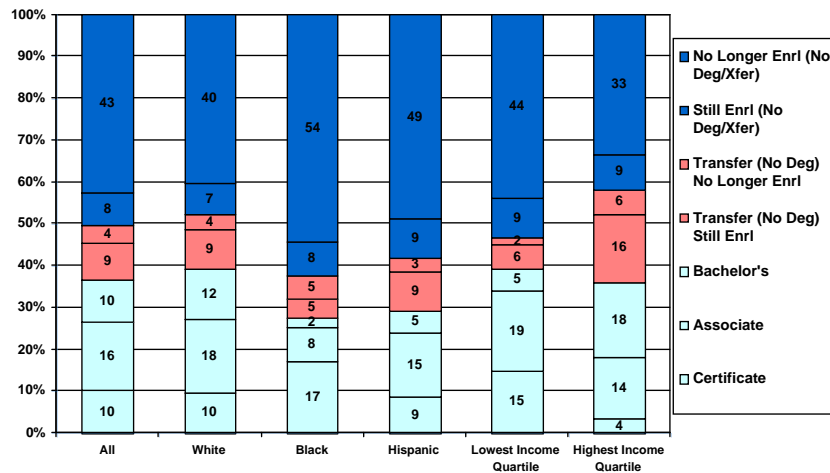Source: Authors' calculations using data from BPS:96/01.

Significant differences in educational outcomes, particularly by household income, raise

questions about whether colleges should accept student goals and expectations as reasonable

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[10] Authors' calculations using data from NELS:88.

benchmarks for success. Educational outcomes by race and income are displayed on Figure 10. When compared with blacks and Hispanics, whites were more likely to earn a credential, earn higher level credentials and transfer; they were much less likely to have left college after six years without having earned a certificate or degree. The comparison between low- and high-income students is more complicated. After six years, the low-income students were more likely to have earned some credential, but that is much more likely to be a certificate, while high-income students were more likely to have earned a bachelor's degree. Moreover, high-income students are also more likely to still be enrolled, presumably working towards a degree.

Figure 10.

Highest Outcome in Postsecondary Education Within Six Years for First-Time Community College Students by Race/Ethnicity and Household Income Quartile (Percents)

Source: Authors' calculations using data from BPS:96/01.

Even after controlling for high school test scores, other personal characteristics, and stated degree goals, socioeconomic status continues to be strongly related to the probability of

completion (Bailey, Alfonso, et al., in press). If this fact represents systematic difficulties faced by lower income and minority students, then colleges should try to do something about those difficulties. Alternatively, if it represents systematic differences in expectations, even after controlling for high school academic record, then we should ask why such students have lower expectations. For these reasons, it might be argued that, even when students themselves do not seek degrees, community colleges should strive to raise those students' expectations, including helping them recognize the opportunities for advancement in education and subsequently in employment with further education (Jenkins, 2003).

Shifting Student Expectations. The idea that students who enroll in college without strong direction or goals end up strengthening their attachment to education and raising their expectations is consistent with the community college mission of promoting higher education access and success. BPS:96/01 provides some possibilities for exploring whether students' expectations change as a result of their educational experience by asking students about their ultimate degree expectations in the 1995-96 school year and then again in 2001.

Figure 11 compares the educational expectations of first-time beginning students in 1995-96 with the expectations of those same students in 2001. Each bar shows the percent of students who had a particular level of expectation in 1995-96 at the start of their postsecondary enrollment and in 2001, six years later. For example, at the start, 10.1 percent of the respondents stated that they did not know their long-term educational expectation. Six years later, after many had either earned a credential, dropped out, or were still enrolled, that proportion dropped to 3.7 percent, as would be expected at this point. Similarly, the proportion of students indicating that they did not expect to earn any credential increased from 4.3 to 10.7 percent, presumably

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because many of them did not believe they would return. Otherwise, there is remarkably little

change in the distributions across students who expected to earn a certificate or degree, although

we would expect some shifting of student expectations among these categories. After six years,

the expectations of community college students remained high.[11] We noted earlier that in 1995-

96 more than 70 percent of community college students expected to earn either a bachelor's or a

graduate degree at some point. And, even after six years this percent barely dipped, as it

remained close to 70 percent when students were asked again in 2001.

Figure 11.

First-Time Community College Students by Highest Level of Education Expected,
1995-96 and 2001
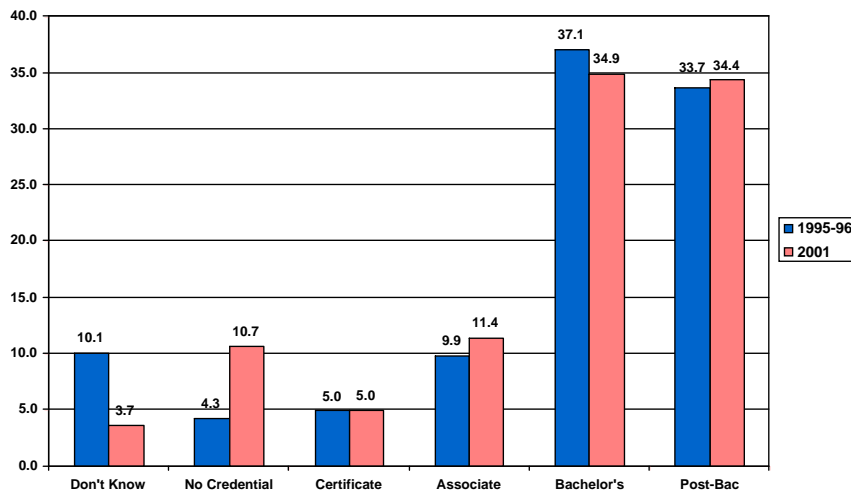
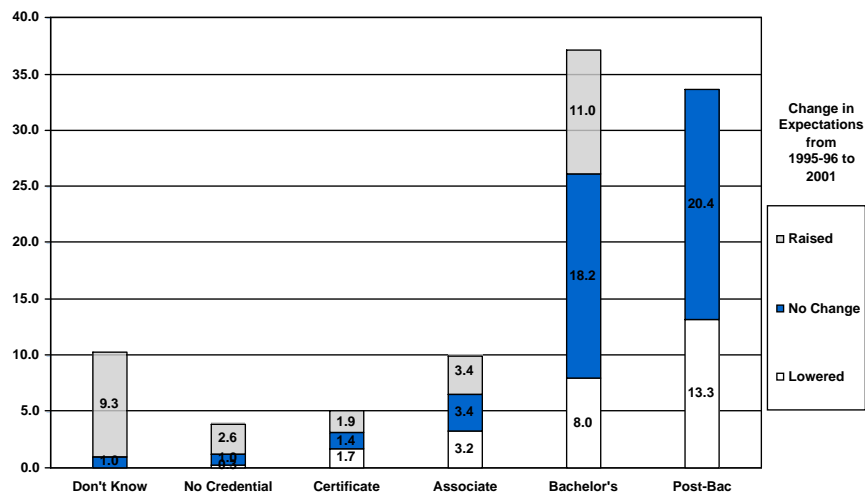Source: Authors' calculations using data from BPS:96/01.

Of greater interest is the direction of shifts in student expectations from the beginning of

a student's enrollment to six years later. These shifts are displayed on Figure 12. Notice from the

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[11] Adelman (2005) found similar results after two years among first-time community college students in the
NELS:88 sample.

first column (Don't Know) that most of the more than 10 percent of students who did not have an
expected outcome had raised their expectations by 2001.[12] In fact, more than half of them ended
up expecting to earn at least a bachelor's degree (data not shown).

Figure 12.

First-Time Community College Students by Highest Level of Education Expected in 1995-96
with Change in Expectations by 2001[13]

Source: Authors' calculations using data from BPS:96/01.

While Figure 11 shows that the total proportion with each type of credential expectation
remained fairly stable between 1995-96 and 2001, Figure 12 shows that the proportion of
students who actually had no change in expectations was not particularly large in any category.
For example, among those students who expected to earn either a certificate or an associate
degree, roughly one-third raised their expectations, one-third lowered them, and the remaining

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[12] Raised expectations includes a shift from not knowing to expecting to earn "no credential."
[13] The height of each bar represents the percent of all students with each level of expectation in 1995-96 and is the
same as those labeled 1995-96 on Figure 11.

third were unchanged. And, nearly one-third of the students who entered community college

expecting to earn a bachelor's degree or higher had lowered their expectations six years later, but

a nearly identical proportion of students raised their expectations into these categories (since

Figure 11 showed little overall change). Thus students arrive at community colleges with high

expectations and, for some, their experience in college raises those expectations. For others,

those expectations are lowered, with the possible exception of the shift upward from "don't

know."[14] Under what circumstances do these shifted expectations occur?

Figure 13 helps answer this question by separating expectations between students who

had no outcome and were no longer enrolled (first column in each cluster, labeled "No") and

students who had either earned a credential, transferred to a baccalaureate institution, or were

still enrolled (second column in each cluster, labeled "Yes"). Students who had no outcome and

were no longer enrolled by 2001 were less ambitious even in 1995-96, and their expectations had

declined markedly by 2001. Although these students were nearly as likely to expect to earn a

bachelor's degree, they were significantly less likely to expect a postgraduate degree than were

those students who attained an outcome by 2001. Students with no outcome were also three

times as likely to state that they had no credential expectation. But does this mean that students

are achieving their personal goals? First, even among those with no outcome, 60 percent initially

expected to complete at least a bachelor's degree. Moreover, students with no outcome were

much more likely to have lowered their expectations: 45 percent of those initially expecting a

bachelor's degree or more, 50 percent of those expecting an associate degree, and almost 60

percent of those expecting a certificate had lowered their long-term expectations by 2001.

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[14] It is difficult to interpret the "don't know" response since some students could give this answer if they could not decide between a master's and a bachelor's degree, for example.

Among this "no outcome" group the share who stated that they did not expect to earn any

credential had increased from 7 percent in 1995-96 to 21 percent by 2001 (not shown).

Figure 13.

First-Time Community College Students with Change in Expectations by 2001 by Highest Level
of Education Expected in 1995-96 and by Outcome Within Six Years
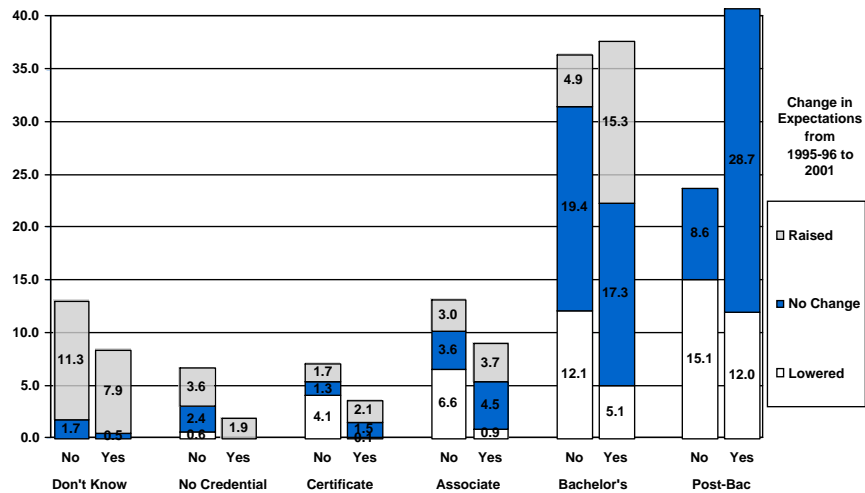
Source: Authors' calculations using data from BPS:96/01.

These data suggest several conclusions. First, initially, community college students are

ambitious, with most expecting to complete at least a bachelor's degree. Moreover, in general,

the experience at community colleges does not tend to raise students' educational expectations.

Students with lower expectations are less likely to complete, as we have already seen, but even

students with lower expectations may not be reaching their personal goals. If they were, then

why would their educational expectations drop? We should add that the relationship between

changing expectations and educational achievement is complicated, and causality could run in

both directions. Students' educational expectations might change for reasons beyond the control

of colleges—their personal circumstances might mitigate against their persisting in college, and their lowered expectations might simply recognize that reality. Nevertheless, if students were arriving with modest personal goals, achieving those goals, and leaving satisfied, then there is no reason to think that their expectations would drop. And, community colleges cannot rely on a student's stated primary reason for enrolling in a college as a reasonable approximation of the student's goals. As we found, the reason may mask more ambitious expectations for credentials, which colleges must be prepared to support even if the student does not expect to earn those credentials at his or her initial institution. Thus, these data suggest that rather than using student goals as benchmarks of success, colleges need to understand student expectations, how they are related to student experiences, and what they can do to raise those expectations and make them more concrete.

The Accuracy of Student Right-to-Know Data

The Student Right-to-Know (SRK) graduation rate for community colleges is defined as the proportion of a cohort of first-time, full-time students in certificate, degree, or transfer-preparatory[15] programs entering that college who have completed their program at that college within 150 percent of normal completion time.[16] The great advantage of this rate is that it is available from almost every community college in the country. Consistent measures of outcomes for all colleges are a potentially powerful research tool and can allow comparisons and

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[15] IPEDS defines a transfer-preparatory program as one "designed specifically to provide a student with the basic knowledge needed to transfer into a higher level program," such as the first two years of a baccalaureate program in which no credential is offered (U.S. Department of Education, n.d.).

[16] For most associate degree programs, 150 percent of the normal time to completion is three years. For certificates the time varies by program. The equivalent period for a bachelor's degree is six years.

benchmarking of colleges. But the use of such a measure could also be misleading or counterproductive if it is distorted or does not reflect reality. There are three common criticisms of the graduation rate measure: (1) students who transfer and earn credentials at other than their initial institution are counted as non-completers; (2) because the rate is based on first-time, full-time degree-program students, it does not capture the experience of the vast population of community college students who attend part-time; and (3) the three-year time frame is too short to fairly measure community college student outcomes. The validity of the SRK rates overall and each of these criticisms are addressed in turn.

Multiple Institutional Attendance and Student Transfer. Increasingly, students are attending more than one college during their undergraduate education, and very often they are transferring prior to completing their program at their initial institution. For example, one out of five students in the National Education Longitudinal Study of 1988 (U.S. Department of Education, 2003b) who earned a bachelor's degree received it from a four-year college other than the college where they initially enrolled (Adelman, 2003). Moreover, findings from BPS:96/01 indicate that up to 40 percent of first-time community college students attended more than one institution during the six-year period in which they were tracked.[17] Adelman has pointed out that students change colleges for many legitimate reasons that do not necessarily reflect on the quality of the college. In a recent article in *The Chronicle of Higher Education*, he stated, "Why should institutions be judged for choices, made by students, that are beyond their control? College students are legal adults, after all" (Burd, 2004, p. A1). Even if a student goes on to graduate at the new college, certainly a positive outcome for the student, that student is counted as a non-completer in

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[17] Authors' calculations.

institutional graduation rates such as the SRK measure. This implies that students experience less educational success as a result of attending a community college than they actually do.

Given this student mobility, the argument follows that SRK institutional graduation rates, measured at a single institution, may under-report actual rates of student completion. To determine how serious the distortion of the SRK graduation rate is, we compared it to the graduation rate based on BPS:96/01, a longitudinal database that tracks individual students across multiple institutions.

Overall, according to the SRK data, for the cohort starting in Fall 1999, 22.3 percent of first-time, full-time community college students in degree programs attained a postsecondary credential in their starting institutions after three years.[18] By reconstructing an SRK-like variable using BPS, we found that a nearly identical 22.9 percentage of all first-time, full-time degree-program community college students in the BPS:96/01 sample earned a credential (certificate or associate degree) from their institutions of first enrollment within three years.[19] Further, 25.5 percent of the BPS:96/01 cohort earned a certificate or associate degree at *any* institution within three years. The comparison indicates that the difference between institutional and individual graduation rates is not large for a three-year period. This suggests that the three-year SRK graduation rate for full-time students is probably a reasonable approximation of the actual individual student graduation rate, refuting the argument put forth above.

Still, the SRK graduation rate measure can produce an unduly negative picture of individual college performance since it fails to give credit to community colleges for the successful transfer to other institutions of their students. Recognizing this potential problem

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[18] All SRK rates are authors' calculations from IPEDS Graduation Rate Survey 2002-03 (U.S. Department of Education, 2003c).

[19] Note that BPS:96/01 is for an earlier cohort (1995) than the SRK cohort (1999). Still, it is noteworthy that the rates are extremely close.

caused by transfer, NCES has community colleges report the number of students in an entering cohort (the same as used for the graduation rate) who transferred to another institution prior to completing a program at their initial institution. Colleges were asked to report only transfer-out students for whom they actually had evidence of a subsequent enrollment at another eligible institution (of any level).[20] There are potentially serious problems with the transfer measure. Many colleges do not know what happens to their students once they leave, so the reported transfer rate reflects both actual transfer and college data-information-gathering capacities. If the colleges follow the NCES directions, this transfer rate must be an underestimate. Yet, should students who transfer to other two-year institutions or to less than two-year institutions be included in a institutional measure of success? Using BPS as a benchmark we investigated the extent of this transfer-rate distortion.

We compared the SRK graduation rate to an equivalent rate calculated from BPS:96/01. According to the SRK data, 15.9 percent of the first-time full-time SRK cohort transferred within three years of initial enrollment without earning a certificate or degree. Of the same BPS:96/01 cohort used in our calculation of an SRK-like graduation rate, 30.7 percent of the students transferred within three years without earning a degree. If we limit the calculation to transfers to two- and four-year institutions, then the rate drops to 28.8 percent. Just 19.5 percent of the cohort transferred to a four-year institution within three years. Thus the actual three-year transfer rate for full-time students who did not earn an associate degree is about twice the rate reported in the SRK data. This wide discrepancy undoubtedly results from the inability of many colleges to track and document their transfers. Consequently, the SRK transfer rate appears to grossly

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[20] Transfer-out students include only those who did not complete a program or graduate at the initial institution. Eligible institutions are those offering at least one-year degree programs and eligible for Title IV aid.

undercount total transfers and is therefore too inaccurate to provide any meaningful measure of student transfer, an important function of many community colleges.

Discounting of Part-Time Students. A second weakness in the SRK rates is that they are based on the assumption of full-time student enrollment. Since the majority of community college students attend part time for at least some of their enrollment, the underlying basis of the rate does not reflect the experience of the typical community college student. This is a reasonable criticism since, according to BPS:96/01, only 58 percent of the students starting in community colleges in Fall 1995 met the SRK criteria (full time and in degree programs).[21] Including part-time students would distort a measure based on a reasonably short period of time, however, and would clearly lower the measured rates. An analysis using part-time students would either have to use a much longer graduation period, or focus on retention data—semester to semester or year to year—rather than on completion.

The categorization of students using full-time status in the SRK rates introduces another distortion. Students are included in the cohort as long as they *start* as full-timers.[22] Some of these students will change to part time, but they will be retained in the sample. Indeed, according to BPS:96/01, about 30 percent of students who start out as full-timers enroll part time for at least one semester within three years.[23] Consequently, the SRK graduation rate is an underestimate of

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[21] Since this figure is for first semester enrollment for first-time students it suggests higher rates of full-time enrollment than is normal for community college students. A more accurate figure comes from the National Postsecondary Student Aid Study 1999-2000, which is a cross-sectional survey of all students in postsecondary education enrolled during the academic year. Calculations from this survey show that only 22 percent of all students enrolled in for-credit courses in a community college during the 1999-2000 school year enrolled full time and for the full academic year (exclusive of summer).

[22] Students are counted as full time if they are enrolled full time at the time the college takes its enrollment census – usually on October 15. Even if they subsequently become part time, they continue to be counted in the cohort.

[23] Authors' calculations.

the completion rate for those students who maintain full-time status throughout their period of enrollment.

Three-year Measurement Period. A final criticism of the SRK rates is that three years is too short a period to judge the graduation rates of community colleges, even for full-time students. As we indicated, almost one-third of those who start as full-time students switch to part-time status. In addition, the large number of community college students who enroll in remediation may spend a significant amount of time in college before they start accumulating credits towards their degree. According to our calculations using the BPS:96/01 data, the institutional graduation rate (graduation from the institution of initial enrollment) would rise only five percentage points if a six-year graduation rate were used. The problem with increasing the time period, though, is that it would increase the difference between the institutional graduation rate and the individual graduation rate (graduation from any institution). We found from BPS:96/01 that the three-year institutional rate is 22.9 percent and the individual graduation rate is 25.5 percent. But the six-year institutional graduation rate is 28.3 percent while the six-year individual graduation rate is a significantly higher 45.7 percent.

Therefore, while using a three-year graduation rate certainly gives a more negative picture of graduation from community college (since many students go on to graduate in subsequent years), it does minimize the distortion created by attendance at more than one institution. Thus the use of institutional graduation rates and the short time period do tend to make community college graduation rates look lower then they are. But lengthening the time period would increase the extent to which the institutional rate underestimates the individual rates, making the institutional rates that much less reflective of actual student outcomes.

Alternative Methods of Measurement. Simply looking at the absolute graduation rate of any individual college is probably going to be misleading. Unless such a number is accompanied by an explanation of the many factors and influences that thwart retention at a given institution, it would be difficult for the public to understand the meaning of these rates. National or state-level longitudinal data such as those in BPS or NELS provide a much more accurate picture of students' completion in community colleges. But these data cannot be used to understand or measure particular institutions. Despite the distortions in the SRK data, they still may be useful for analyzing differences in performance among institutions. Even if we assume that the rates are too low, if they are all too low by a similar proportion, then searching for explanations of the differences among institutions could still yield important insights. Comparative analysis must take into account the different proportions of part-time, low-income, and minority students and different educational missions of different institutions (an orientation toward transfer as opposed to an emphasis on occupational certificates, for example). Each characteristic may make the distortion of SRK graduation rates different across different institutions, making benchmark comparison a complex procedure.

In other research (Bailey, Calcagno, Jenkins, Kienzl, & Leinbach, in press) we developed a method for comparing community college graduation rates that takes into account individual college characteristics that can impact student outcomes. Using a multinomial regression, we produced estimated graduation rates using information on each college's student characteristics, institutional resources, size, and other factors. These estimated rates can be compared to colleges' actual rates to see if particular colleges are graduating students at a higher or lower rate than would be expected given their mix of students, resources, and other factors that bear on

graduation. We discuss other suggestions about improvement of the SRK data and their potential

usefulness in the conclusion.

Conclusion

We have reviewed here the objections about why a focus on graduation and transfer rates could understate the educational effectiveness of community colleges.

There is no question that many factors hinder community colleges in their ability to increase graduation and transfer rates. They are expected to open their doors to students with many difficult economic, social, and academic challenges, and, among other postsecondary institutions, they are given the least amount of resources per student to provide their services. There are many steps that policymakers and the public outside of community colleges can take that would lead to higher graduation rates. They include implementing policies concerning increased financial aid, affordable day care, flexible work schedules, funding for non-credit and remediation, job search assistance, and flexible regulations regarding work and schooling for welfare recipients. Certainly, improved K-12 systems would permit students to arrive at community colleges prepared for college level work. While it is important to work for broader policy change and to recognize that there are limits to what colleges can do, we nevertheless recognize that some colleges have higher graduation rates than others and perform better on a variety of student outcome measures.

In trying to answer the question in the title of this paper, the judgment that we make about the success or failure of community colleges depends, to some extent, on our assessment of the meaning of student goals. Community college students have varied educational goals, and those goals surely influence their outcomes. Students who state that their primary reason for enrolling is to transfer to a four-year college are more likely to complete a degree or certificate or to transfer, although many of them still do not achieve their transfer goal. Community college

students' long-term educational expectations are more ambitious. The large majority of those who are seeking "job skills" as their primary reason for enrolling still state that they expect to earn at least an associate degree. Overall, almost three-fourths of all first-time college students starting at a community college state that they want to earn a bachelor's degree. Yet, research shows that low-income students have lower educational aspirations (Alfonso, 2004). Do colleges have a responsibility to encourage those students to be more ambitious? The answer to this question will undoubtedly vary depending on the type of students and the concreteness of their goals. It is one thing for adult full-time workers who return to college to learn some specific skills for job advancement to say that they are in college to learn "job skills." We should be less willing to accept limited stated goals of low-income students of any age who have had little success in school and lack confidence about their abilities or knowledge about what they need to do to progress.

The particularly low graduation rates for minority and low-income students is an additional reason why we should question the contention that students who do not complete community college programs are nonetheless achieving their goals. We saw that students tend to state ambitious long-term goals, yet often fail to progress very far towards them. What responsibility do colleges have to work with students to help them understand the implications of their long-term goals, to make the goals more concrete, and to help their students achieve them more systematically? As long as there are big differences in expectations and in the achievement of expectations among income and racial and ethnic groups, colleges should do what they can to reduce those gaps. Of course the colleges cannot do that alone. There need to be supportive social and financial aid policies as well.

The final objection we discussed was about the universally available Student Right-to-Know (SRK) institutional graduation rates, criticisms of which are certainly valid. These rates demonstrably understate the share of students who graduate after starting at a particular institution, although it should be noted that the BPS:96/01 and NELS:88 data that track individual students across institutions also indicate low graduation rates. The distortion caused by the institutional, as opposed to the individual, graduation rates is very small for the three-year time period used by the SRK measurements. Yet, this short time period has its own problems. Thus, the SRK graduation rates may offer more insights into the explanation for the large differences among institutions than into the debate on the low rates at all institutions. The potential lessons from the variation in rates would remain even if we accept that all of the rates are too low in the same proportion, and as long as any cross-institutional rate comparison controls for the different institutional characteristics that may independently impact graduation rates. Since these graduation rates provide an outcome measure on a national sample of community colleges, they are a potentially powerful research tool for understanding the determinants of college performance. As mentioned, it is possible to account for differences among colleges in their mix of students, resources, and other factors by using regressions to produce an estimated graduation rate for each college. Nevertheless, at this point, SRK graduation rates need to be used with caution. Their usefulness can be further explored by comparing them to more complete measures of student success that could be derived in states with comprehensive state-wide student unit record tracking systems.

Semester-to-semester or perhaps year-to-year retention rates would be an additional useful measure of institutional performance. These rates are correlated with graduation rates, and they would reduce, although not eliminate, the distortions of institutional rates caused by

successful transfer. Of course, a better solution would involve improved inter-institutional tracking. Some states already do this, at least for public institutions. NCES proposed in 2004 to develop a national student unit record database that could track individual students as they move among institutions, but the current House bill extending the Higher Education Act includes an amendment specifically forbidding its creation. Still, as multiple institutional attendance becomes more common, this type of information would be useful for any accurate assessment of institutional performance.

Finally, policymakers should not condemn colleges merely on the basis of an apparently low graduation rate, especially if such criticism does not take into account the nature of community colleges or is based on potentially distorted understatements of the performance of individual colleges such as the SRK graduation and transfer rates. Neither, though, should colleges be complacent about their completion rates, either because they believe that students are getting what they want (many are not and in any case many ought to have higher aspirations) or because they believe that they can do no better, given all of the difficult problems they face in successfully educating their students.

In any case, we doubt that many community college educators actually believe that they have optimal graduation rates, even as they ask the public and policymakers to understand their difficulties. At the dozens of colleges that we have visited over the last few years, every institution had initiatives and programs designed to increase student retention and completion, and this is as it should be. Some of course have much more success than others. It is the job of policymakers, researchers, and the colleges themselves to understand what differentiates the more successful institutions and to improve completion rates at all colleges.

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