

En Route to the Baccalaureate: Community College Student Outcomes

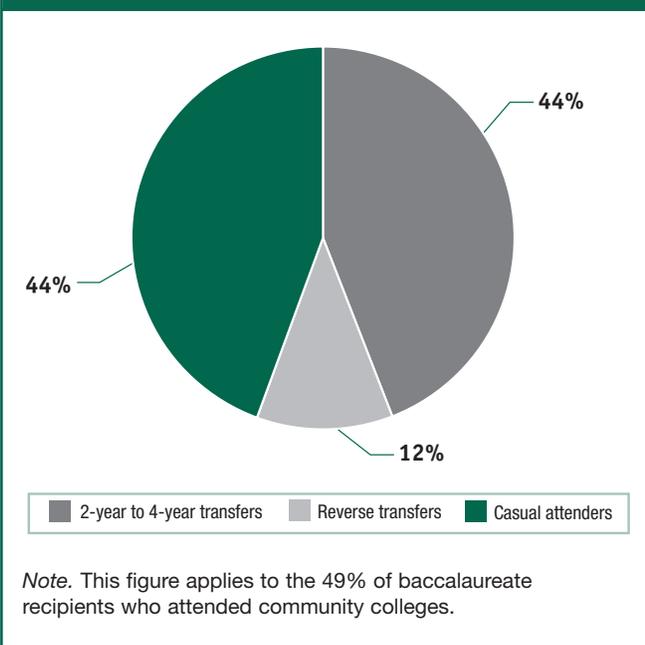
BY SARA MCPHEE

EXECUTIVE SUMMARY

Half of the 1999–2000 baccalaureate recipients in the United States attended a community college prior to obtaining the baccalaureate. Using data from the National Center for Education Statistics (NCES) Baccalaureate and Beyond (B&B) Longitudinal Study: 2000–2001 (NCES, 2003), the American Association

of Community Colleges (AACC) examined how baccalaureate recipients incorporated community college attendance or courses into their undergraduate studies and how the outcomes of community college attenders differed from those who did not attend community college on their route to the baccalaureate.

FIGURE 1 Type of Community College Attendance Among Baccalaureate Recipients



- Community college attenders were more likely to be minority, female, and older than non-community college attenders. The most pronounced difference was age: Community college attenders were generally older than non-community college attenders when they began college and when they graduated.
- Community college attenders were more likely than non-community college attenders to be working during their undergraduate years and to see themselves primarily as employees.
- Community college attenders were more likely to receive a Pell grant and to borrow less than non-community college attenders.
- After graduation, both community college attenders and non-community college attenders reported similar plans to work and to pursue graduate studies.

INTRODUCTION

Community colleges play a major role in postsecondary education in the United States. Almost half of undergraduate students attend a community college (Phillippe & Sullivan, 2005). In 1999–2000, 49% of the students who received a baccalaureate had attended a community college at some point during their undergraduate career.

The B&B study captured information on students who were about to complete or had recently received a baccalaureate. Survey results included information regarding students who incorporated community college into their studies at any point (community college attenders) and those who attended only 4-year institutions (non-community college attenders).

BACKGROUND AND METHODOLOGY

The National Center for Education Statistics (NCES) conducts surveys of postsecondary students to inform policymakers and the general public on a variety of issues facing higher education in the United States. An AACC researcher prepared this brief using data from NCES's Baccalaureate and Beyond Longitudinal Study: 2000–2001 (B&B study), a nationally representative sample of students who completed their baccalaureate during the 1999–2000 academic year. NCES interviewed the graduates twice, once during the 1999–2000 school year and again in 2001, after they had received their degree. NCES did not collect transcript or course details, but it captured information in the following areas: demographics; career, work, and family aspirations; and borrowing and debt. An AACC researcher examined the NCES data by dividing the students into categories based on their community college attendance. AACC sought to reveal potential differences among students who attended community college at any time during their undergraduate career and those who did not.

BACCALAUREATE RECIPIENTS' ATTENDANCE AT COMMUNITY COLLEGE

Using the NCES data, AACC divided the baccalaureate recipients who were community college attenders into three categories: (1) students who started their postsecondary education at a community college (2- to 4-year transfer students); (2) students who did not start their postsecondary education at a community college but did receive an associate degree or certificate before obtaining the baccalaureate (reverse transfer students); and (3) students who did not start their postsecondary education at a community college but took courses at one en route to obtaining the baccalaureate (casual attenders). In addition, AACC considered students who did not attend a community college at all, in two categories: (1) students who attended only one institution en route to the baccalaureate and (2) students who attended multiple institutions but did not attend a community college.

Figure 1 shows the percentage of different groups of community college attenders. Forty-four percent of the baccalaureate recipients who attended community college were traditional 2- to 4-year transfer students who began their undergraduate studies at a community college and then transferred to a 4-year institution to complete the baccalaureate. Of this group, approximately half obtained an associate degree or certificate before transferring to the 4-year institution.

Twelve percent of the baccalaureate recipients were reverse transfer students who started their postsecondary studies at a 4-year institution but attended a community college and received an associate degree or certificate before obtaining a baccalaureate. The remaining group of community college students, casual attenders (44%), did not start their postsecondary studies at the community college and did not obtain a degree or a certificate from the community college. These students may have attended only a few courses to graduate faster or to fill a deficiency in the schedule at their baccalaureate institution. Among the non-community college attenders, 68%

attended only the institution from which they received the baccalaureate, and 32% attended more than one 4-year institution en route to the baccalaureate.

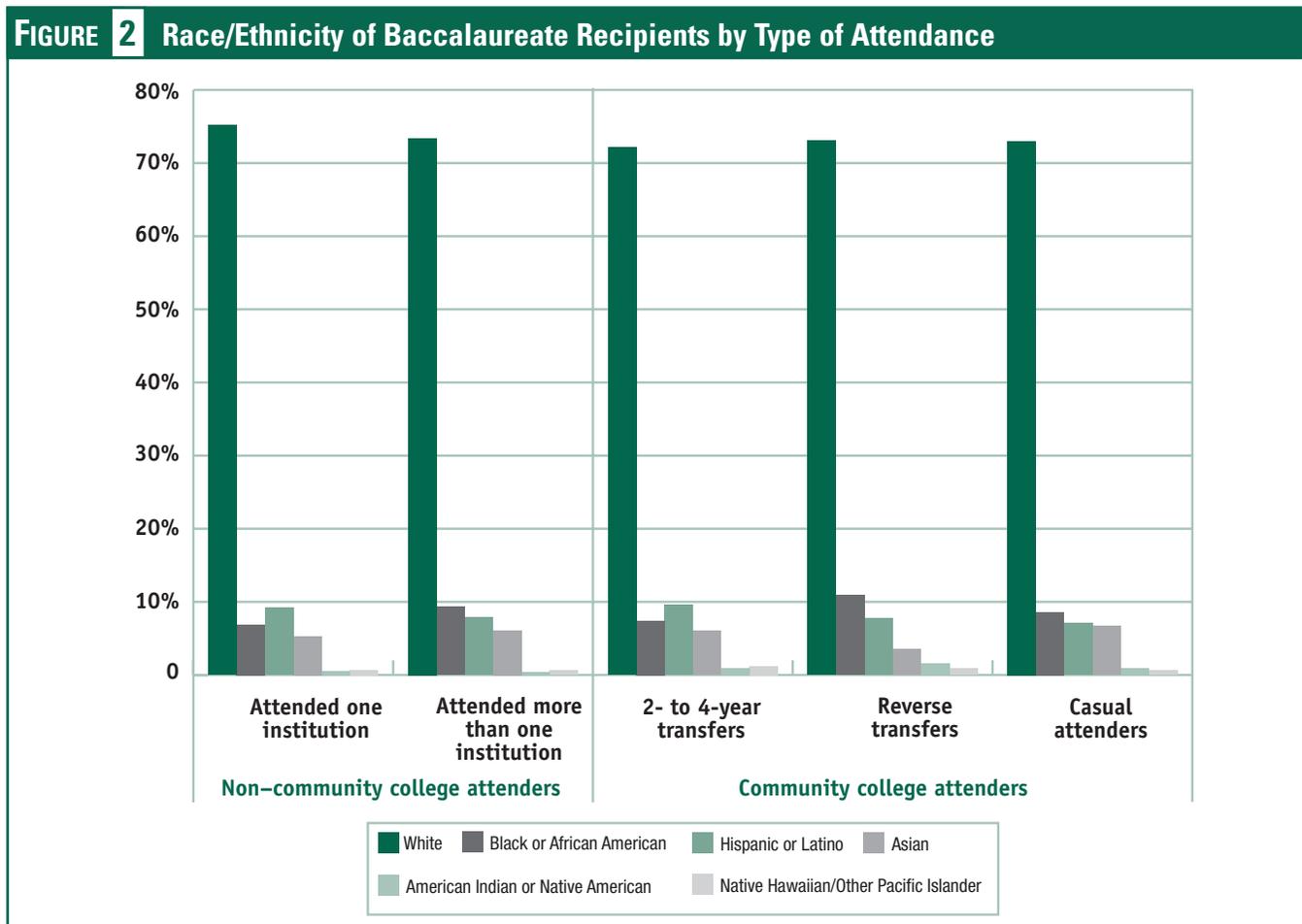
Characteristics at Graduation

Research demonstrates that community college students in general are more likely to be in a lower-income group and to be female, minority, and older than their counterparts at 4-year institutions (Phillippe & Sullivan, 2005). Overall, these trends continued among baccalaureate recipients in the B&B study who attended a community college; however, some differences appeared among the community college attenders.

The 2- to 4-year transfer students who began their undergraduate studies at a community college and received an associate degree or certificate tended to look like the general community college population in that they were more likely to be female and minority than were

non-community college attenders. The 2- to 4-year transfer students who did not obtain an associate degree or certificate were similar to other community college attenders in the B&B study with regard to race, but they were more likely to be male than were other community college attenders or non-community college attenders.

The most striking difference was the age at which the various groups began postsecondary education and earned the baccalaureate. On average, 2- to 4-year transfer students started their postsecondary education at an older age than did non-community college attenders and also finished at an older age (average 30 years versus 24 years). Two- to 4-year transfer students who earned a degree at the community college before transferring to the 4-year institution tended to finish the baccalaureate at a later age (average 31 years) than did 2- to 4-year transfer students who did not earn an associate degree or certificate before transferring.



Reverse transfer students were similar to other community college attenders in race and gender, but they were the oldest group to receive the baccalaureate. They started their postsecondary studies at an average age of 22 and graduated at an average age of 32. Casual attenders were similar in age to non–community college attenders, both of whose average age for starting postsecondary education was 19. Age at graduation was 26 for casual attenders and 24 for non–community college attenders. Casual attenders were more likely to be female and minority than were the non–community college attenders.

Differences in the race, ethnicity, and gender of these groups were small compared with the difference in age of community college attenders versus non–community college attenders. Seventy-three percent of community college attenders and 76% of non–community college attenders were White. Figure 2 shows percentages of baccalaureate recipients by race and ethnicity.

Given the differences in age among the various groups, other factors usually related to age show differences among the groups that were not surprising. For exam-

ple, dependency status also varied among students who did and did not attend community college. Seventy-two percent of non–community college attenders were still dependents in their final year of study, compared with only 40% of community college attenders. Dependency status also varied among the groups of community college attenders (see Figure 3). Casual attenders were similar to the non–community college attenders: 59% of casual attenders were still dependents in their final year of study. In the reverse transfer group, the oldest group of graduates, only 17% of students were dependents in their final year.

Community college attenders also were more likely to be married at the time of graduation. Thirty-seven percent of the community college attenders were married, compared with 23% of the non–community college attenders. Among the community college groups, the reverse transfer students were the most likely to be married.

Community college attenders were more likely to have been working before they began attending their baccalaureate institution and were more likely than

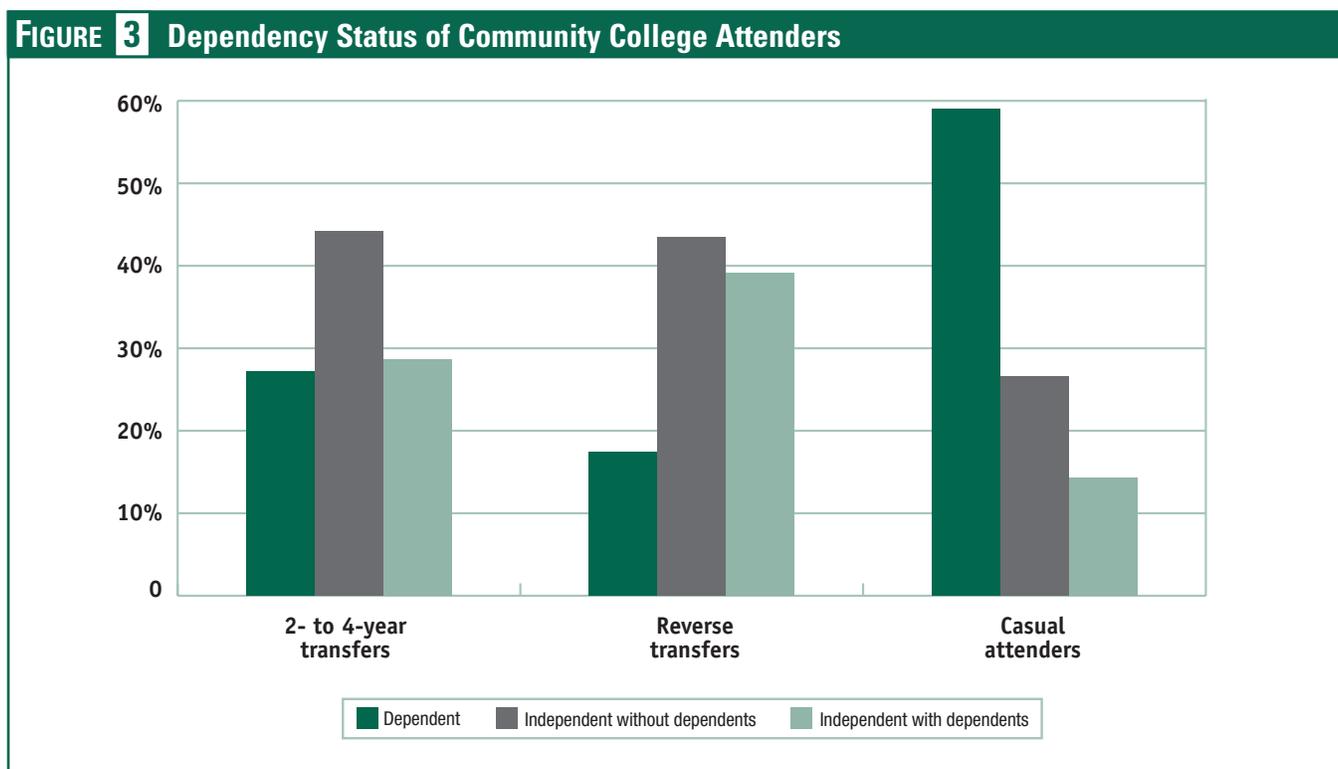
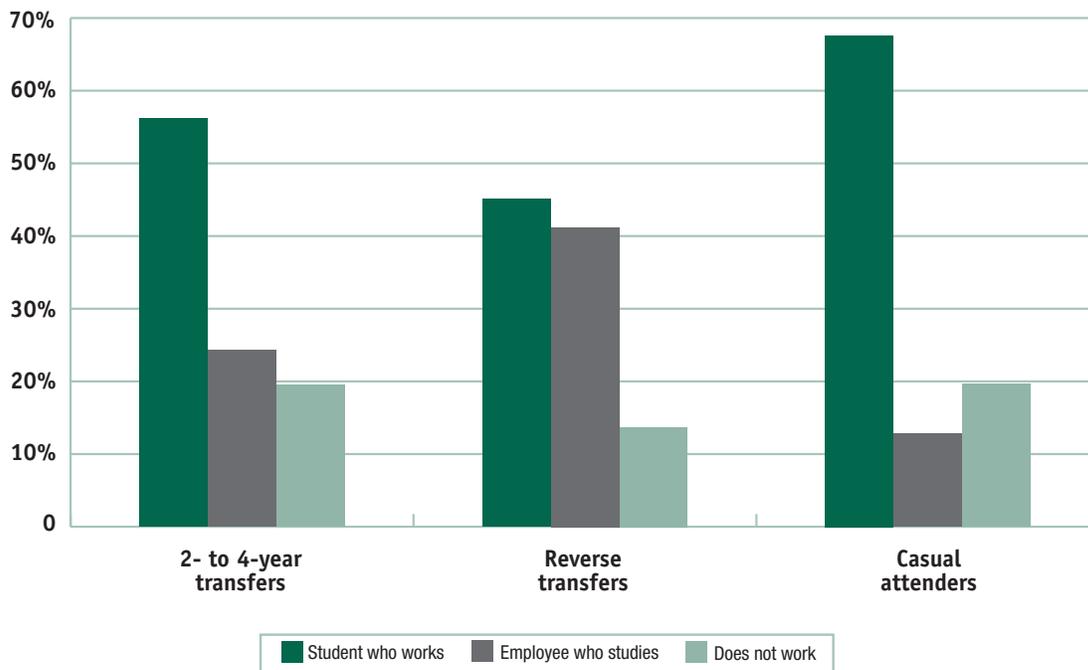


FIGURE 4 Primary Role of Community College Attenders: Student or Employee



non-community college attenders to view themselves as employees first rather than as students. Of the non-community college attenders, 15% reported that they held the same job during their final year of study as they had before enrolling in the baccalaureate institution. Twenty-two percent of casual attenders indicated that they held the same job in their last year as they had before attending the baccalaureate institution. Fifty-four percent of reverse transfer students indicated that they held the same job as they had before enrolling at the baccalaureate institution.

The 2- to 4-year transfer students provided differing responses depending on whether or not they had completed an associate degree or certificate before their transfer. Of those who did not obtain an associate degree or certificate before transfer, 34% reported they held the same job that they had before attending the baccalaureate institution. Among those who did obtain an associate degree or certificate, 51% reported having the same job.

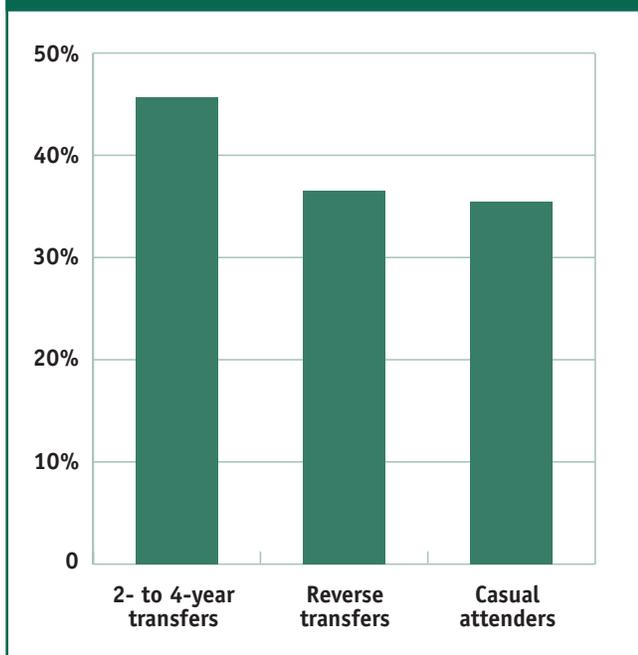
These data suggest that students who received a credential before attending their baccalaureate institution were

more likely to have been employed at the same job during their final year of study as they had before attending the baccalaureate institution. This pattern continued in whether or not students viewed themselves primarily as an employee or as a student. The non-community college attenders were much more likely than the community college attenders to view themselves primarily as a student (see Figure 4).

STUDENT AID

Increasing numbers of students are making use of financial assistance to help pay for or delay the costs of education. The most common sources of financial aid are federal programs in the form of the Pell grants and Stafford loans (King, 2003). The Pell grant is available only to low-income students; 37% of the 1999–2000 graduating class had received a Pell grant during their undergraduate education. In addition, 61% of the students reported borrowing (from federal or non-federal aid sources) to help finance their studies.

FIGURE 5 Community College Attenders Who Received Pell Grants



Although a multitude of factors exist that could influence students' decisions concerning financial aid, the B&B data set does not provide data for all of them. However, it is possible to determine the amount of Pell grant funds received and the cumulative amounts borrowed by community college attenders and non-community college attenders as they completed their baccalaureate studies.

Pell Grants

Community college students in general tend to be in a lower-income group than do non-community college students (Phillippe & Sullivan, 2005). In this study, a higher percentage of community college attenders than non-community college attenders reported receiving a Pell grant during their undergraduate studies (see Figure 5). Forty percent of community college attenders received a Pell grant, whereas 33% of non-community college attenders received a Pell grant. Among the community college attenders, the 2- to 4-year transfer students, regardless of whether they obtained an associate degree or certificate, were the most likely to have received a Pell .

Although these students do not stand out from the other community college attenders in their demographic charac-

teristics, these students had the lowest median expected family contribution of any of the groups, based on the information submitted on financial aid applications.

With expected family contribution as a proxy for income, it appears that students who started their undergraduate studies at a community college were the neediest and therefore the most likely to receive a Pell grant. The 2- to 4-year transfer students who filed a financial aid application had a median expected family contribution of \$1,848, compared with the median for all community college attenders of \$2,676 and the median for non-community college attenders of \$4,105.

For all baccalaureate recipients who received a Pell grant, the median cumulative Pell amount was approximately \$3,500; however, across the groups, differences emerged. The 2- to 4-year transfer students had the highest median Pell amounts. Those who did not obtain an associate degree or certificate received a median of \$3,582, and those who did obtain an associate degree or certificate received a median of \$3,935. Among the non-community college attenders, those who attended only one institution also had a relatively high median cumulative Pell amount of \$3,775.

Student Loans

Community college attenders were more likely than non-community college attenders to have borrowed money to finance their education. The 2- to 4-year transfer students had the largest percentage of borrowers (66%). The reverse transfer students were the least likely to borrow (58%). Although community college attenders were more likely to have borrowed, the median cumulative loan amounts for those who borrowed was lower for community college attenders than for non-community college attenders. Overall, community college attenders who borrowed reported a median cumulative debt of \$15,000; non-community college attenders who borrowed reported a median cumulative debt of \$17,000. Reverse transfer students had the lowest median cumulative debt, at \$12,000. Those who attended multiple institutions but not a community college had the highest median cumulative debt, at \$18,000.

Some of the explanation for the differing cumulative debt amounts may be related to the tuition rates at the baccalaureate institutions. The median tuition for the non–community college attenders (full-time and part-time students) was \$3,910, compared with \$2,399 for community college attenders. During the 1999–2000 academic year, more community college attenders than non–community college attenders enrolled part time; however, the pattern of lower tuition costs remained the same between the full-time students (\$4,707 median tuition for non–community college attenders versus \$3,224 for community college attenders) and part-time students (\$1,975 median tuition for non–community college attenders versus \$1,814 for community college attenders). Loan amounts tend to increase with the tuition costs at a baccalaureate institution, so one explanation for lower cumulative loan amounts may be that community college attenders reduced their loan amounts by choosing lower-cost 4-year institutions.

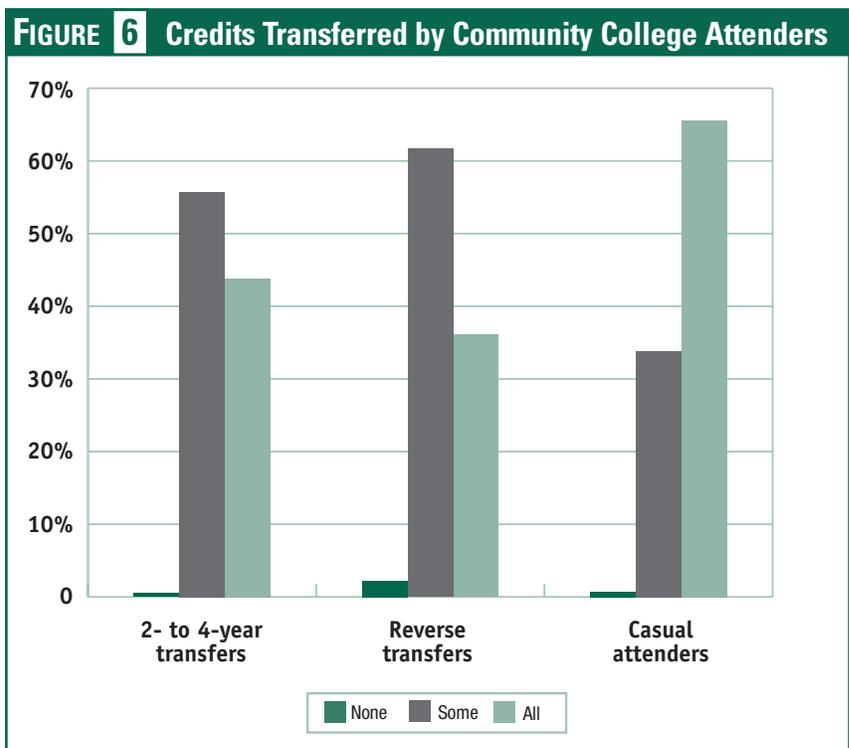
Tuition rates are not the only factor in borrowing amounts. Research indicates that the age of a student also affects the amount of debt incurred (Harrast, 2004). Community college attenders, particularly reverse transfer students, were older than the non–community college attenders and had lower debt levels. Although it may appear from their debt levels (compared with tuition rates) that community college attenders did not save much money by using the community college en route to the baccalaureate, it is difficult to know how much debt these students would have accrued if they had not spent time at a community college.

Transfer of Credit

An important measure of the role played by community colleges in students’ baccalaureate aspirations is the ability to transfer credits from the community college to the baccalaureate-awarding insti-

tuition. The data set did not indicate how many credits students transferred and for what courses; however, it is possible to analyze whether or not a student attempted to transfer credits and whether the student was successful in transferring none, some, or all of the credits. Almost all of the community college attenders attempted to transfer credits to their baccalaureate institution. In addition, of those who attempted to transfer credits, more than 98% reported being able to transfer at least some of the credits. These data show that students were able to attend multiple institutions to advance their academic careers; however, only a little over half of the community college attenders were able to transfer all of their credits.

Community college groups varied in their ability to transfer credits (see Figure 6). The casual attenders were the most efficient in their use of the community college in that they were the most likely to report that they were able to transfer all of their credits. This information supports the theory that the casual attenders were likely to be students taking a few discrete courses at the community college, possibly during the summer terms, that they knew would count toward their baccalaureate program.



Both the 2- to 4-year transfer students and the reverse transfer students were much less likely to be able to transfer all of their credits. The majority of the students in both the 2- to 4-year transfer and the reverse transfer groups had completed an associate degree or certificate at the community college. The data indicate that articulation policies with 4-year institutions did not enable community college graduates to receive credit for all of their work at the community college level. In addition, only slightly more than half of the students who attended multiple institutions but not a community college were able to transfer all of their credits. These findings suggest that baccalaureate-granting institutions may offer a less-than-seamless process for transferring credits, not only from community colleges but also from other 4-year institutions.

LIFE AFTER COLLEGE

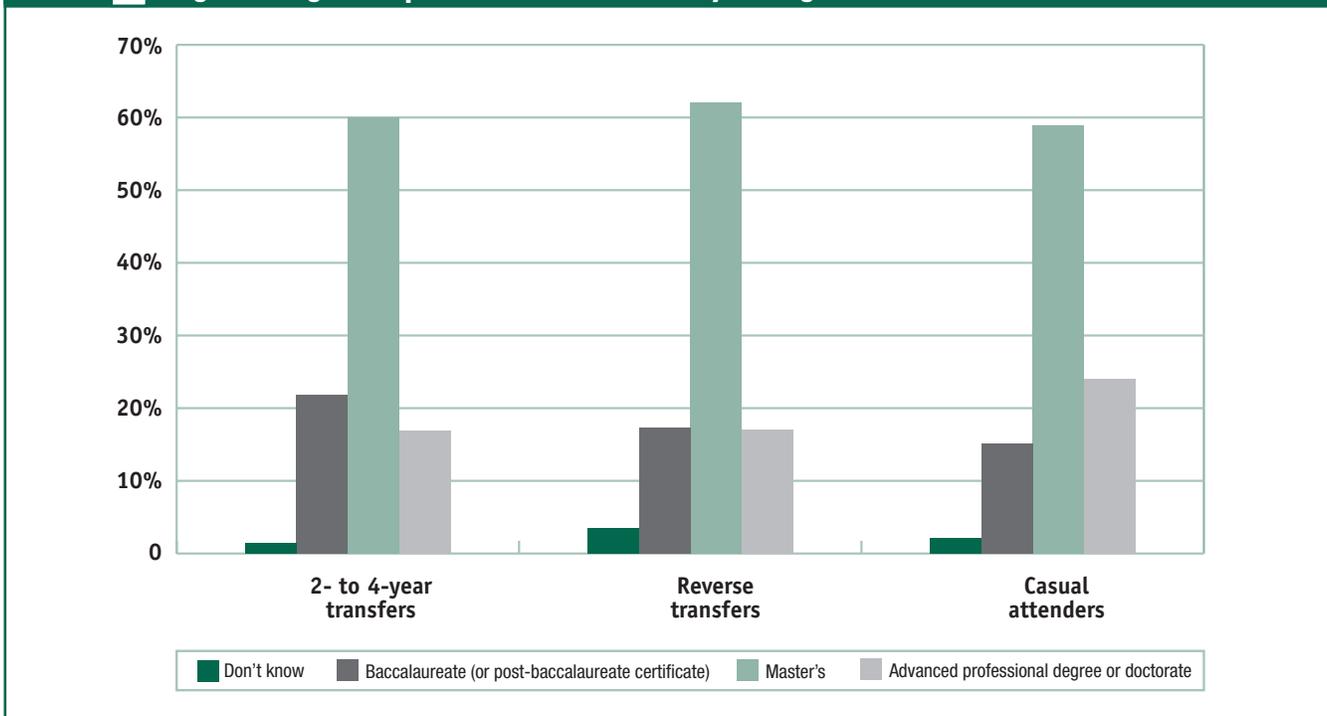
It is evident that demographic differences exist between students who attended community college and those who did not. Given these differences, it would be logical to expect that community college attenders would differ from the non-community college attenders in their

future aspirations. For example, the community college attenders are older and more likely to be married or to have dependents. The age and family responsibilities of the community college attenders may affect the further educational aspirations and work activities immediately after receipt of the baccalaureate. To test hypotheses such as this, NCES asked students a variety of questions about their aspirations both during the last year of their baccalaureate studies and again 1 year later.

Education Plans

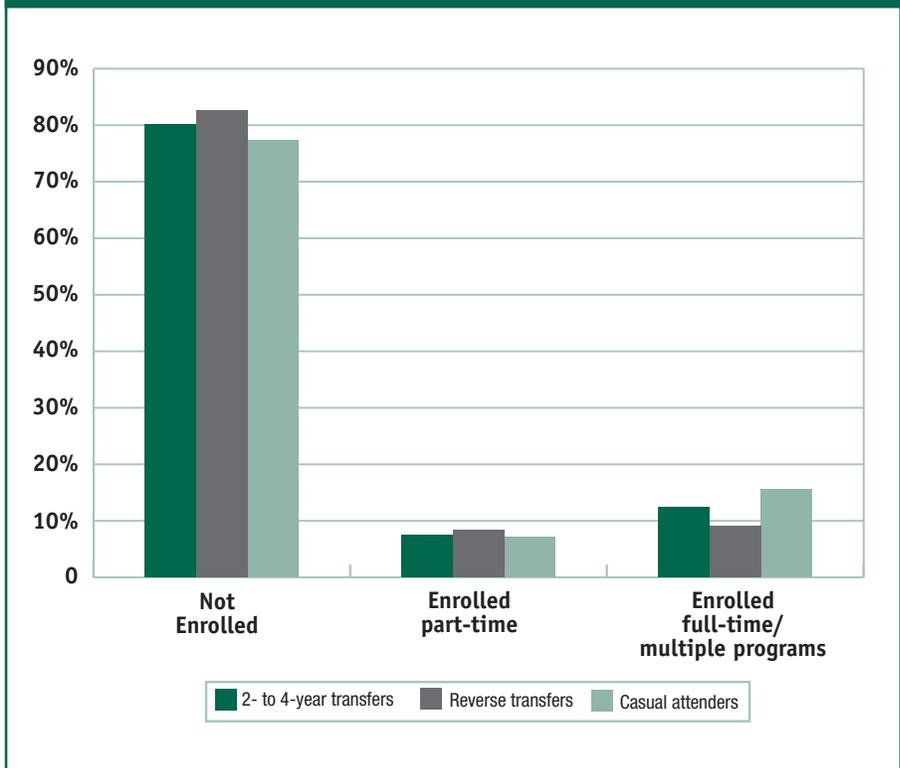
During the final year of baccalaureate studies, all students had similar goals for their future education. Eighty-four percent of non-community college attenders and 80% of community college attenders indicated that they planned to attend graduate school. The majority of students across all groups, approximately 60%, had plans to obtain a master's degree. For the remaining 40%, some variations occurred. The non-community college attenders were more likely to report planning to obtain a doctorate or a professional degree, and the community college attenders were more likely to report stopping with the baccalaureate (see Figure 7).

FIGURE 7 Highest Degree Expectations of Community College Attenders



Of the community college attenders, the 2- to 4-year transfer students were the most likely to report stopping with the baccalaureate. Across all of the groups, approximately 70% of students who reported wanting to pursue a graduate degree also indicated that they did not intend to enroll in the next year. In addition, 1 year later, the baccalaureate recipients across all groups still planned to attend graduate school. In fact, there was an increase in the percentage of students anticipating that they would attend graduate school in the future. The community college attenders were slightly less likely to be planning to attend graduate school, but across all the groups, approximately 20% of baccalaureate recipients had started attending graduate school part time or full time (see Figure 8).

FIGURE 8 Graduate School Attendance by Community College Attenders One Year After Receipt of Baccalaureate



Work Plans

The majority of students reported that they planned to be employed following graduation. Although the variation among groups was not large, the non-community college attenders were the most likely to report that they would not be working in the next year. In addition, at the follow-up 1 year later, the community college attenders were more likely than the non-community college attenders to be employed.

Seventy-one percent of students who were working 1 year after completing the baccalaureate considered their current job to be the start of their career. This response is not surprising for the younger graduates and those who had not previously been working; however, 67% of reverse transfer students, who were the oldest and least likely to be dependents upon graduation, also reported that their current job was the start of their career. Although the percentage was the lowest among the groups, it contrasts with the finding that 54% of reverse transfer students viewed them-

selves primarily as employees who study rather than as students who work. It appears that earning the baccalaureate is a way for students to make a transition into a new career field. For the 29% of students who indicated that their current job was not the start of their career, the primary reason was that they were continuing in their current job or continuing in their current career field.

Financial Situation

At the time of graduation, almost all the students who had reported borrowing also reported that they still owed money; however, only a small percentage had started repayment (repayment for student loans is not required until 6 months after graduation). Approximately 20% of students indicated that they had begun repaying, and almost 30% of the reverse transfer students already were repaying their student loans. When asked the same question 1 year later, more than 60% of borrowers were in repayment. The reverse transfer students were the most likely to indicate that they were in repayment (67%), but across all groups the variation was quite small (5%).

The amount of repayment relative to income or the debt burden was an important point of analysis: Are students borrowing an appropriate amount of money to finance their education, and are they comfortably able to repay their loans after they graduate? The median repayment amount for the community college attenders was \$170 per month and was less than that for the non-community college attenders, who had a median repayment of \$193 per month.

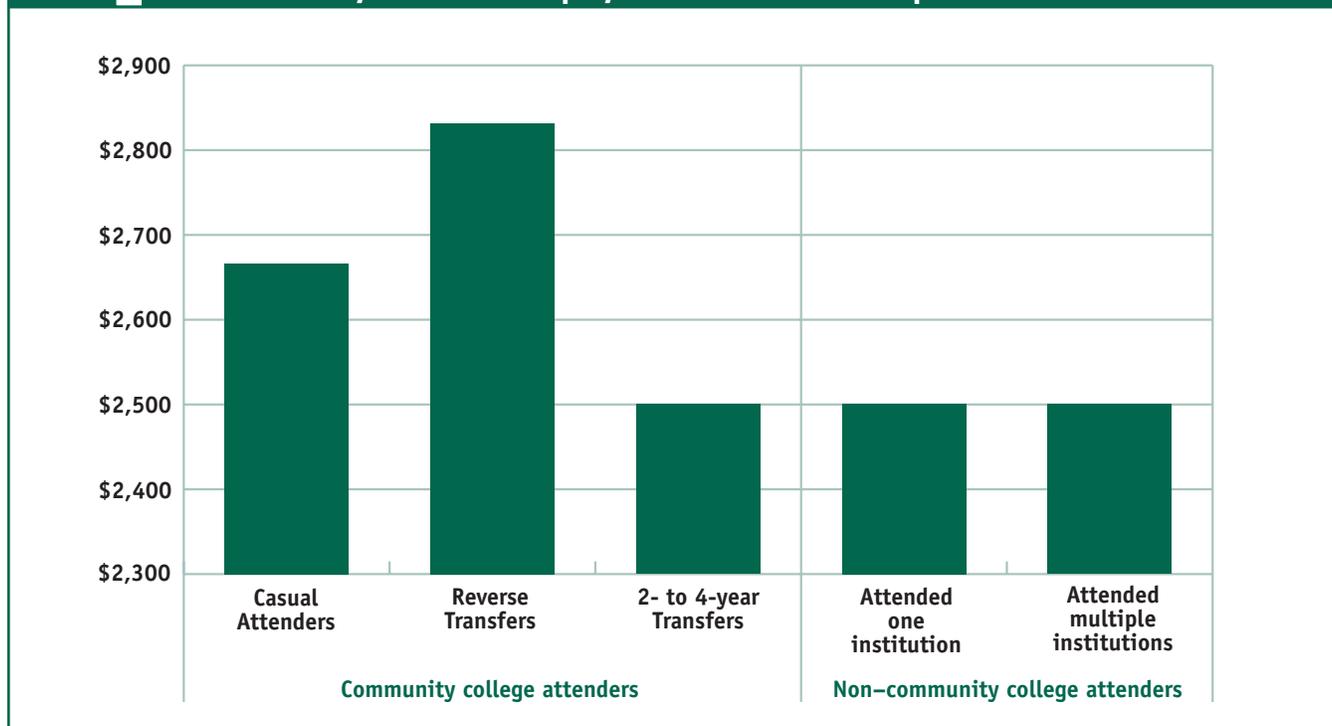
These differences correspond with the amounts borrowed, which also were lower for the community college attenders than for the non-community college attenders. Among the community college groups, the 2- to 4-year transfer students had the smallest median repayment amounts at \$167 per month for those who did not obtain an associate degree or certificate before transferring to the baccalaureate institution and \$150 for those who did obtain a degree or certificate before transferring. Although the reverse transfer students borrowed the least, their median monthly repayment amount of \$175 was not the lowest.

On the surface, these debt levels appear to be manageable, but whether a debt is manageable is based largely on the income of the student after he or she graduates. According to research by the College Board, a debt burden of 8% or less of monthly income is the most common benchmark for what is considered a manageable student loan debt for most graduates (Baum & Schwartz, 2006).

Across the various groups for the students who were employed, the median monthly income varied from a high of \$2,833 for the reverse transfer students and a low of \$2,500 for the non-community college attenders (see Figure 9). Based on median monthly income and the median monthly repayment amounts, all the groups were paying at or below 8% of their monthly income. The non-community college attenders were paying about 8% of their monthly income, and the community college attenders were paying about 6% of their monthly income.

The data suggest that the majority of the borrowers had a manageable amount of student loan debt. There were baccalaureate recipients with debts in excess of 8% of their monthly income, but no group of students stood out as

FIGURE 9 Median Monthly Income for Employed Baccalaureate Recipients



having a greater proportion of students struggling with high debt levels. The percentage of students with debt levels of above 12% of their monthly income was 5% for both the community college attenders and the non-community college attenders.

Manageable debt levels are not based solely on student loan debts. College graduates also may pay rent or a mortgage, a car payment, and credit card debts. The majority of students reported having to pay rent or a mortgage each month. Community college attenders were slightly more likely than non-community college attenders to indicate that they paid rent or a mortgage (80% versus 77%).

Median rent or mortgage amounts varied. Community college attenders generally paid more than the non-community college attenders (\$615 versus \$590 per month). Reverse transfer students had the highest median rent or mortgage amount (\$700 per month). The community college attenders also were more likely to have a car payment than were the non-community college attenders, and the median car payments were higher for the community college attenders. With higher median incomes, it seems logical that community college attenders were more likely to have rent or mortgage payments or car payments, or both, and to have higher median payments than non-community college attenders.

Almost half of the 1999–2000 baccalaureate recipients reported carrying a credit card balance 1 year after graduation. Community college attenders were more likely than non-community college attenders to report carrying a credit card balance (52% versus 45%). The median balance was \$3,000 for both the community college attenders and the non-community college attenders. Among the community college groups, the reverse transfer students had the highest median balance of \$4,000.

Overall, the financial picture for the baccalaureate recipients was similar across groups. The community college attenders had slightly higher income and debts (other than student loans), but they had lower student loan pay-

ments, so in terms of debt versus income, in the aggregate the community college attenders and the non-community college attenders were virtually the same.

CONCLUSION

Students who attended community college en route to the baccalaureate differed demographically from students who did not attend community college. In particular, they were older, were more likely to finish the baccalaureate as an independent student, were more likely to be married (and have dependents), and were more likely to view themselves as employees rather than as students.

Community college attenders incurred lower debt levels in their pursuit of a baccalaureate; however, the amount of total borrowing of community college attenders and the non-community college attenders was similar. The similar borrowing amounts may result because community college attenders have lower incomes and therefore must borrow more, and because community college attenders, particularly those who obtained an associate degree or certificate at the community college, were not able to transfer all their credits to the baccalaureate institution.

In spite of the demographic differences between community college attenders and non-community college attenders, after receiving the baccalaureate the student groups appeared similar in their work, educational aspirations, and financial situations. With little variation across groups, the students reported wanting to continue their education and considered the baccalaureate a means to start their career.

In the case of the non-community college attenders, the career was likely to be their first; for the community college attenders, the baccalaureate was more likely to be a means of changing to a new career. Most of the students were employed or in school and appeared to make an adequate salary to cover their debts.

REFERENCES

- Baum, S., & Schwartz, S. (2006). *How much debt is too much? Defining benchmarks for manageable student debt*. Washington, DC: The College Board.
- Harrast, S. (2004). Undergraduate borrowing: A study of debtor students and their ability to retire undergraduate loans. *Journal of Student Financial Aid*, 34(1).
- King, J. (2003). *2003 Status report on the federal education loan programs*. Washington, DC: American Council on Education.
- National Center for Education Statistics. (2003). *Baccalaureate and beyond longitudinal study: 2000–2001* [Data file]. Washington, DC: U.S. Department of Education.
- Phillippe, K. A., & Sullivan, L. G. (2005). *National profile of community colleges: Trends and statistics* (4th ed.). Washington, DC: Community College Press.

**FOR MORE INFORMATION ON THIS RESEARCH
PROJECT, CONTACT:**

Sara McPhee
American Association of Community Colleges
One Dupont Circle, NW, Suite 410
Washington, DC 20036-1176
Phone: (202) 728-0200, ext. 258
Fax: (202) 833-2467
E-mail: smcpee@aacc.nche.edu
www.aacc.nche.edu

