

## What Is a Cohort?

A *cohort* is a group of people studied over time. The individuals in the group have at least one statistical factor — such as when they started college — in common.

The Achieving the Dream 2002 student cohort is the group of credential-seeking students that attended Achieving the Dream institutions for the first time in fall 2002. This cohort will be tracked until 2008.

Tracking a cohort over time makes it possible to compare the progress and outcomes of different groups of students (e.g., groups defined by race, age or other demographic characteristics) and to determine if there are gaps in achievement among groups of interest.

## Credits, Persistence and Attainment

One goal of Achieving the Dream is to increase the persistence and completion rates of community college students. According to the U.S. Department of Education, fewer than half of community college students who aspire to earn certificates, earn degrees or transfer to four-year institutions achieve their goals.<sup>1</sup>

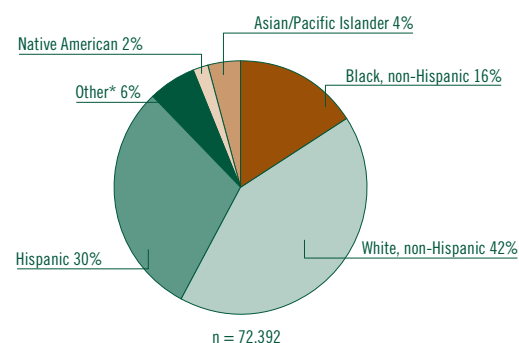
We know that more than half of community college students work full time,<sup>2</sup> and two-thirds attend college part time.<sup>3</sup> In addition, research has shown that part-time students are more likely to drop out than their full-time counterparts. Research also has shown that taking more credits in the first year, receiving higher grades in the first year, and having fewer course withdrawals or repeats are predictors of students' chances of continuing their education.<sup>4</sup> Finally, current research indicates that students who complete fewer than 20 credits by the end of their first year are less likely to persist than are students with 20 or more credits under their belts.<sup>5</sup>

Using data collected from the 35 participating Achieving the Dream colleges, we examined the relationships between course attempts and completions on one hand and persistence and

“We examined the relationships between course attempts and completions on one hand and persistence and attainment on the other — and found results that countered our expectations.”

attainment on the other — and found results that countered our expectations. The following analysis examines the number of credits attempted and completed for the 2002 student

Figure 1. Distribution of students in the 2002 Achieving the Dream cohort by race/ethnicity



\*“Other” includes nonresident aliens, others and students with missing race/ethnicity codes.

cohort’s first academic year as it relates to their persistence and credential completion through the third academic year. During this period, many of the 35 colleges had not yet begun any new practices related to Achieving the Dream.

## What Does the Cohort Look Like?

Colleges in selected states with large portions of Pell Grant recipients and students of color were asked to apply to participate in the initiative. Figure 1 displays the distribution of the 2002 cohort by race/ethnicity. Colleges in Florida, New Mexico and Texas represent a significant portion of the cohort; the Connecticut, North Carolina, Ohio and Virginia colleges represent fewer students in the population. This geographic distribution helps explain the fact that Hispanic students are the largest group of students of color (30 percent), while black students constitute 16 percent, and Native American students constitute 2 percent.

(continued on next page)

<sup>1</sup>U.S. Department of Education, NCES (2001). *Beginning Postsecondary Students Longitudinal Study 1996–2001 (BPS:96/01)*. Analysis by Community College Research Center.

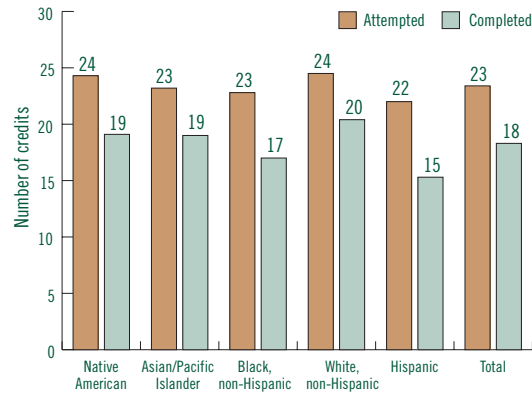
<sup>2</sup>Wilson, Cynthia D. (July 2004). “Coming Through the Open Door: A Student Profile,” *Keeping America’s Promise*, p. 27. Education Commission of the States and the League for Innovation in the Community College.

<sup>3</sup>U.S. Department of Education, NCES (2004). *National Postsecondary Student Aid Study (NPSAS)*. Analysis by Community College Research Center.

<sup>4</sup>Chen, X. (2005). *First-Generation Students in Postsecondary Education: A Look at Their College Transcripts* (NCES 2005-171). U.S. Department of Education, National Center for Education Statistics, Washington, D.C. Available: <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2005171>.

<sup>5</sup>Adelman, C. (2006). *The Toolbox Revisited: Paths to Degree Completion from High School through College*. U.S. Department of Education, Washington, D.C. Available: <http://www.ed.gov/rschstat/research/pubs/toolboxrevisit/index.html>.

**Figure 2.** Number of credits attempted and completed by students in the 2002 Achieving the Dream cohort



## The First Year

Examination of the number of credits attempted and completed by students during the first year reveals that students in the 2002 cohort,<sup>6</sup> on average, attempted one credit short of full-time attendance, or 23 credits, during the academic year (see Figure 2). (This assumes that 12 credits per term is a full-time load.) On average, white and Native American students in the 2002 cohort attempted full-time loads for the academic year, with an average of 24 credits. However, Hispanic and black students attempted slightly less than full-time loads.

Completions, however, tell a different story. The 2002 cohort students completed, on average, 18 of the 23 attempted credits during the first academic year — six credits less than a full-time load. On average, students failed to complete five of the credits they attempted during the academic year. Credits attempted that were not completed could have been withdrawals or classes for which the student did not achieve a satisfactory grade. White and Native American students completed an average of 20 and 19 credits, respectively, while black students completed 17 credits and Hispanic students completed 15 credits.

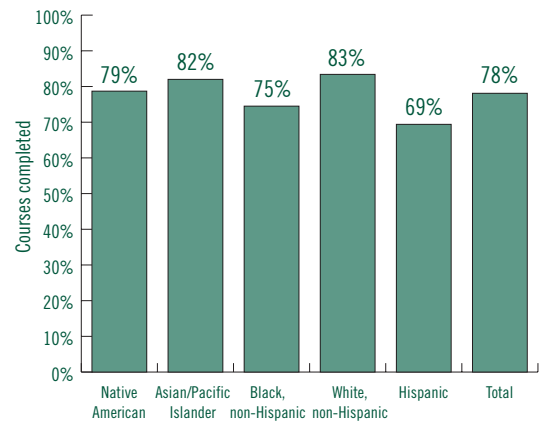
The 2002 cohort students, on average, completed 78 percent of the credits they attempted in the first year. It is noteworthy that the completions ratio differs by racial/ethnic group: Completion rates for white and Native American students were 83 and 79 percent, respectively; Hispanic students completed 69 percent of the credits attempted, and black students 75 percent (see Figure 3).

Figure 4 displays the percentage of students in the 2002 cohort who completed 20 or more credits during their first academic year. Overall, 43 per-

cent of the cohort completed 20 or more credits during the first academic year. Fifty-two percent of white students and 50 percent of Native American students versus 38 percent of black students and 31 percent of Hispanic students finished 20 or more credits in their first year.

Previous research suggests that completing more credits with fewer withdrawals is related to persistence. If this is true, the ratio of credits completed to those attempted may be an important early predictor of dropping out — and given our findings, this research would predict that Hispanic and black students would be less likely to persist or complete their credential programs than Native American and white students. The early Achieving the Dream findings, however, do not fully support this hypothesis.

**Figure 3.** Completions ratio (percentage of courses attempted that are completed) for students in the 2002 Achieving the Dream cohort



## Unexpected Findings in the Third Year

Overall, 29 percent of the 2002 cohort completed the credential program or was still enrolled in the third year (see Figure 5).<sup>7</sup> Figures 4 and 5 together show that, contrary to what we would predict from past research, the percentage of Native American students (who had high course completion measures during the first year compared with other groups) persisting or attaining credentials by the third year was lower than most other groups — 26 percent. Equally contrary, Hispanic students were lower on course completion measures than other groups, yet the percentage of Hispanic students who persisted or attained credentials was higher than average — 30 percent.

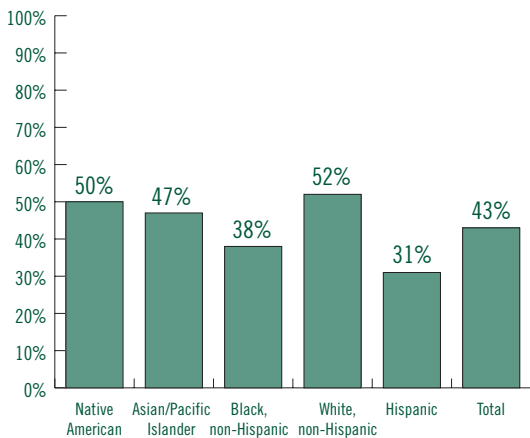
The relationship between course completions and persistence and attainment was in the predicted direction for white and black students.

*(continued on next page)*

<sup>6</sup>For students enrolled for the complete first year, 65 percent of the cohort.

<sup>7</sup>These are students who have been in college continuously from the first term of the first year through the first term of the third year. These data do not include students who stopped out and returned.

**Figure 4.** Percentage of students in the 2002 Achieving the Dream cohort who completed 20 or more credits during their first academic year

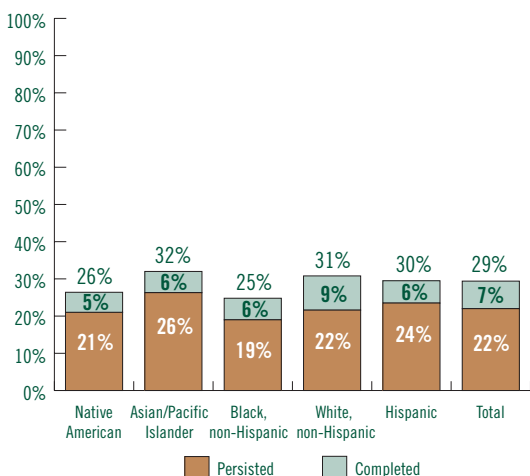


Black students were less likely to complete their classes in their first year and were less likely to persist or graduate than were other groups. Likewise, white students had higher first-year course completion rates and higher persistence and attainment outcomes in the third year.<sup>8</sup>

## What Does This Mean?

First-year students in the 2002 Achieving the Dream cohort, on average, attended less than full time, as the cohort attempted an average of 23 credits over the first academic year. Also,

**Figure 5.** How many students attain credentials — or stay? Percentage of students in the 2002 Achieving the Dream cohort who persisted (remained at the college) or completed their credentials in the third year\*



\*These data include only students who were in college consistently from the first term of the first year through the first term of the third year. They do not include students who stopped out and returned during this period.

43 percent of the students completed at least 20 credits during the first year. A large portion of Achieving the Dream students had first-year enrollment patterns that are associated with reduced chances for success.

On the other hand, the results challenge earlier research. On average, the Native American students — the only group of students of color to attempt enough credits during the first year to qualify as full time — had relatively high course completion rates as well as a high percentage of students completing 20 or more credits. However, by the third year, persistence and program completion rates for Native American students were lower than those of other ethnic/racial groups. The opposite was found for Hispanic students: They attempted and completed fewer courses in their first year than students from other ethnic/racial groups and had a smaller share of students completing at least 20 credits during the first year. Yet Hispanic students' third-year persistence rate was higher than average.

*“These findings are a reminder that colleges should not base decisions on averages. They should tease out subgroups and disaggregate data — and examine preconceived beliefs and conventional wisdom against what the data show.”*

These findings are a reminder that colleges should not base decisions on averages. They should tease out subgroups and disaggregate data — and examine preconceived beliefs and conventional wisdom against what the data show. The findings reported here indicate the need for further investigation and analysis. Also, these findings underline the importance of using detailed analysis and results, rather than general theories, to guide institutional change.

## Achieving the Dream's Access Database

Achieving the Dream colleges can use the Access database created by JBL Associates to replicate the analysis presented here for their own institutions. This analysis might help a college identify areas of the curriculum or groups of students needing special attention. ■

*Data Notes* is a monthly publication that examines data to illuminate the challenges facing Achieving the Dream colleges and to chart their progress over time.

Achieving the Dream: Community Colleges Count is a national initiative to help more community college students, particularly students of color and low-income learners, succeed. The initiative works on multiple fronts — including efforts at community colleges and in research, public engagement and public policy — and emphasizes the use of data to drive change. For more information, visit [www.achievingthedream.org](http://www.achievingthedream.org).

*Data Notes* is written by Sue Clery, senior research associate at JBL Associates, Inc., and designed by KSA-Plus Communications, Inc.

If you have questions regarding this issue, or if there is a topic you would like to see addressed in *Data Notes*, please contact Sue Clery at [sclery@jblassoc.com](mailto:sclery@jblassoc.com).

<sup>8</sup>Persistence and completion rates for all students do not include students who transfer to four-year institutions. The data currently available are not complete and accurate enough to track transfer students in the Achieving the Dream database.