

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.

The Developmental Math Dilemma

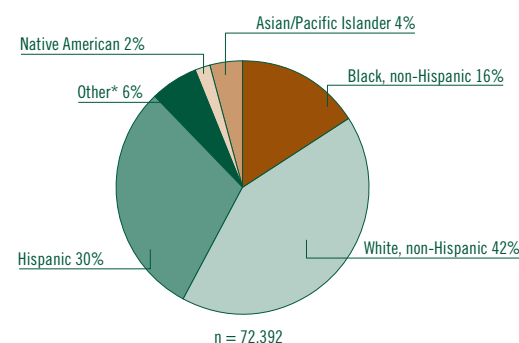
One goal of Achieving the Dream is to increase the percentage of community college students who complete developmental courses and continue on with credit-bearing classes. Developmental math is one of the biggest barriers to student success: It is the developmental class most students are required to take but are least likely to complete.

Data collected from the 35 Achieving the Dream colleges document this problem. The following analysis examines developmental math referrals, attempts and completions from the 2002 student cohort over two academic years, fall 2002 through spring 2004. During this period, the 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 Texas, New Mexico and Florida represent a significant portion of the cohort; the Virginia, North Carolina, Ohio and Connecticut colleges represent fewer students in the population. This

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.

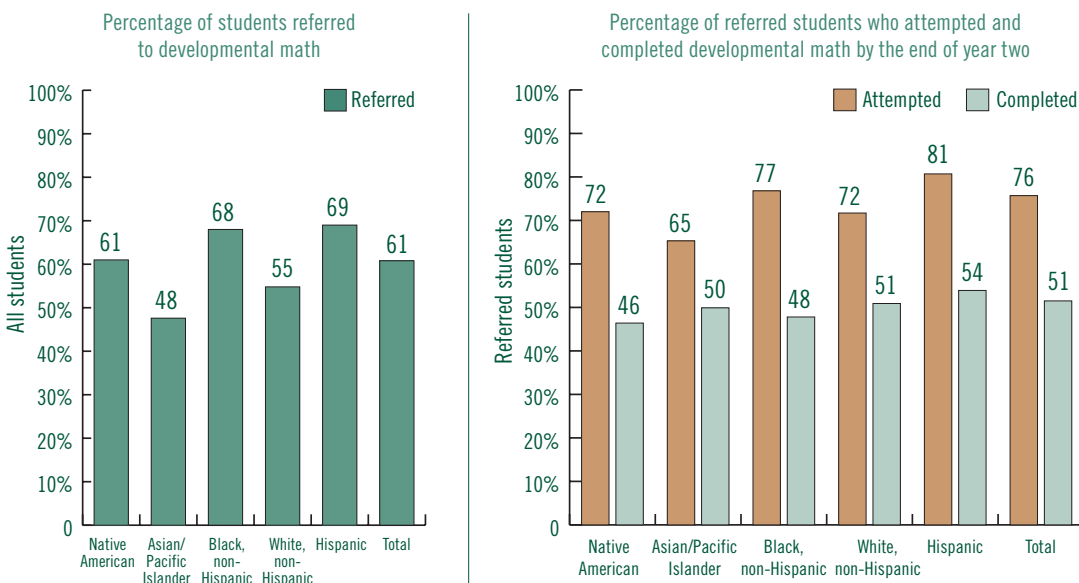
geographic distribution helps explain the fact that Hispanic students are the largest group of students of color (30 percent), while black students constitute 16 percent, followed by Native Americans at 2 percent.

Who Was Referred to Developmental Math?

Figure 2 shows that 61 percent of students in the 2002 cohort were referred to developmental

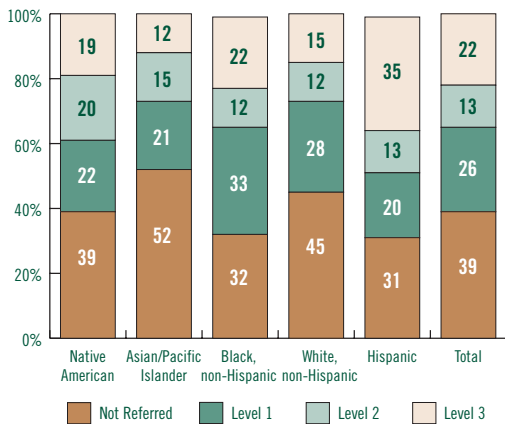
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Figure 2. Percentage of students in the 2002 Achieving the Dream cohort who were referred to, attempted and completed developmental math courses



math.¹ Hispanic and black students were most often referred to developmental math (69 percent and 68 percent, respectively). Sixty-one percent of Native Americans were referred to developmental math — the same as the average for the cohort. The percentage of students referred to developmental math ranged from 27 percent to 89 percent among individual institutions.

Figure 3. Distribution of students in the 2002 Achieving the Dream cohort by developmental math referral level and race/ethnicity*



*for institutions reporting data on math referral levels
 Note: Due to rounding, totals may not equal 100 percent.

Figure 3 displays the percentage of students referred to level 1, 2 or 3 of developmental math (students referred to level 3 developmental math require the most developmental work, while students referred to level 1 require the least). With the exception of Asian/Pacific Islander students, learners of color were more likely to be referred to level 3 than were white students.

Who Attempted Developmental Math Courses?

Among the students referred to developmental math (see Figure 2), Hispanic students were the most likely to enroll in developmental math courses. Eighty-one percent of Hispanic students referred to developmental math attempted at least one developmental math course within two years of enrolling. The average for the cohort was 76 percent.

And What about Successes?

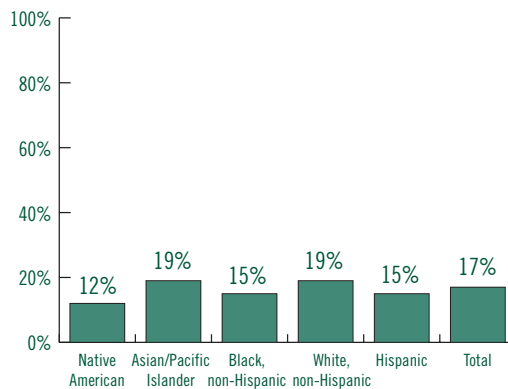
Of the 2002 cohort students that attempted developmental math course(s), 51 percent successfully completed at least one developmental math course within two years. Success rates were lowest for Native American students, 46 percent. Forty-eight percent of black students successfully completed at least one developmental math class, while 54 percent of Hispanic students (higher than the cohort average) completed at least one developmental math course.

What Does This Mean?

Although approximately half of the students who were referred to developmental math completed at least one math class within two years, the fact that they completed a class does not mean that they met all of the requirements for college-level math. Nearly half of the students referred to developmental math had to take two or three classes to qualify for college-level math (see Figure 3).

At the end of two years, only 17 percent of those in the 2002 cohort who had been referred to any developmental math met all of the qualifications to continue on to college-level math. Figure 4 shows the percentage of learners who completed the coursework and met requirements. Nineteen percent of white students, 15 percent of both Hispanic and black students, and 12 percent of Native Americans completed the required developmental math.

Figure 4. Percentage of students in the 2002 Achieving the Dream cohort who completed all developmental math requirements by the end of year two*



*for students with a reported math referral level
 Note: Figures represent the percentages of each race/ethnicity that completed developmental math, not a distribution across races/ethnicities. The totals do not equal 100 percent.

Achieving the Dream's Access Database

Achieving the Dream colleges can use the Access Database created by JBL Associates to compare their institutions with initiativewide statistics on these measures. The initiativewide data can provide rough benchmarks, enabling a college to compare its student performance with student performance at institutions with similar student populations. Such a comparison might help a college identify areas of the curriculum or groups of students needing special attention. ■

¹for colleges reporting data on developmental math referrals; six colleges, or 13 percent of the student cohort, did not report this referral information and were not included in this analysis.

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.

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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.

This report uses the November 10, 2005, version of the Achieving the Dream database.