



## Achieving the Dream

Achieving the Dream: Community Colleges Count is a bold national effort to help more community college students succeed, with a special focus on students of color and low-income students. The initiative proceeds from the premise that success begets success, using a student-centered model of institutional improvement to create a culture of evidence in which data and inquiry drive broad-based institutional efforts to close achievement gaps and improve student outcomes overall.

## Developmental Education: Time to Completion

Achieving the Dream colleges refer, on average, 56 percent of their students to developmental education coursework, with individual institutional referral rates ranging from a low of 9 percent to a high of 97 percent of all entering students. Students who are placed into developmental education coursework are more likely to struggle academically and are at a greater risk of stopping out or dropping out of college. Only 16 percent of Achieving the Dream students completed all of the developmental education coursework to which they were referred during their first academic year, and less than 10 percent successfully completed gateway English or math by the end of their second year.<sup>1</sup>

Previous reports have identified the characteristics of students referred to developmental education and their overall outcomes. Students are at greater risk of leaving college if they struggle academically and have to repeat courses, including developmental education courses. To further the initiative's knowledge on the cumulative effect of developmental referral on overall student outcomes, this report investigates the number of attempts it takes students to complete all developmental education courses to which they are referred. Subsequent gateway course completion and overall persistence are also examined. Three-year outcomes were analyzed and disaggregated by developmental education subject (English and math) and the level of developmental education assignment.<sup>2</sup>

## Developmental Course Completion

Seventy-five percent of all students referred to developmental math, and 70 percent of all students referred to developmental English, attempted at least one developmental education course over three years (Figure 1). Although developmental math is thought to be a barrier for many students, students referred to developmental math were more likely to attempt the class than were students referred to develop-

mental English. However, students referred to developmental math were less likely to complete the coursework to which they were referred than were those referred to developmental English classes, especially as remediation needs increased. Twenty-eight percent of students referred to just one level below college-level

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in math did not attempt their developmental coursework within the first three years, which was a larger proportion than the 23 percent of students referred to two or more levels.

Thirty-six percent of students referred to one level of developmental math completed their developmental coursework in one attempt. Twenty-six percent of the students referred to two levels completed, as did 19 percent referred to three levels. The progression for English was 41 percent, 32 percent and 26 percent.

The relationship between number of referral levels and percentage of students completing coursework in one attempt is inversely related: the more levels of developmental education to which a student is referred, the less likely he or she is to complete all levels in one attempt per level. However, the reverse is true for students attempting one or more levels multiple times: the more levels referred to, the larger the portion of students who completed all levels attempted.

A larger proportion of students who attempted and completed on the first attempt, rather than needing multiple attempts, was successful in passing the class, regardless of subject and number of levels referred. This is especially true for developmental English students, who were two to six times more likely—depending on number of levels to which they were referred—to complete all of their developmental courses on the first attempt than were those needing multiple attempts.<sup>3</sup>

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<sup>1</sup> Lee, J. (November/December 2010). Student outcomes by state. *Data Notes: Keeping Informed about Achieving the Dream Data*, v(5), n(6). Available for download: <http://www.achievingthedream.org/DATARESEARCH/DATANOTESNEWSLETTER/default.tp>

<sup>2</sup> Baseline cohort for Rounds 1 through 4 and Cohort 2009 were included in the analysis (2003 for Rounds 1, 2, and 3; 2004 for Round 4; 2006 for Cohort 2009; 2007 for Cohort 2010; Achieving the Dream database V201101).

<sup>3</sup> Achieving the Dream has defined developmental “success” as completing all levels of developmental education to which students are referred. It may be the case that students take alternative routes through their developmental education coursework, for instance: a student may be referred to and pass two levels below college, skip one level below college, but successfully pass their gateway course. This analysis, however, does not explore these other, potentially “successful” paths.



## What Is a Cohort?

A cohort is a group of people studied during a period of 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, for example, is the group of credential-seeking students that attended Achieving the Dream institutions for the first time in fall 2002.

Tracking a cohort makes it possible to compare 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.

**Figure 1.** Percentage distribution of Achieving the Dream students referred to developmental education by the number of attempts to complete developmental coursework within three years, by subject and level of referral

	ATTEMPTED DEVELOPMENTAL COURSEWORK				Did not attempt
	One attempt		Multiple attempts <sup>1</sup>		
	Completed	Did not complete <sup>2</sup>	Completed	Did not complete <sup>2</sup>	
<b>Math referral level</b>	<b>27</b>	<b>24</b>	<b>13</b>	<b>13</b>	<b>25</b>
1 level below college	36	18	10	9	28
2 levels below college	26	26	12	13	23
3 or more levels below college	19	27	16	15	23
<b>English referral level</b>	<b>37</b>	<b>18</b>	<b>8</b>	<b>6</b>	<b>30</b>
1 level below college	41	16	7	5	31
2 levels below college	32	24	10	8	26
3 or more levels below college	26	19	10	6	38

<sup>1</sup>For students referred to any level, multiple attempts is defined as the student attempting any level referred to more than once.

<sup>2</sup>For students referred to any level, did not complete is defined as the student attempting any level referred to, and not completing; a student may have completed one or more other levels.

Note: The baseline cohorts for Rounds 1 through 4 and Cohort 2009 were included in the analysis (2003 for Rounds 1, 2, and 3; 2004 for Round 4; 2006 for Cohort 2009; 2007 for Cohort 2010).

Source: Achieving the Dream database, V201101.

## Subsequent Gateway Completion

Figure 2 displays the percentage of students completing gateway courses by the attempt and completion status of their developmental education coursework within three years. Not unexpectedly, the number of developmental education course attempts and the student's referral level are both inversely related to successful gateway course completion, regardless of subject. The proportion of students completing gateway courses increases as the developmental education referral level decreases. The proportion of students completing gateway coursework increases as the number of attempts to pass the developmental class decreases.

Some students completed gateway coursework without attempting the developmental course-

“The proportion of students completing gateway coursework increases as the number of attempts to pass the developmental class decreases.”

work to which they were referred; this includes some students who were referred to multiple levels of development coursework. Five to 17 percent of students completing gateway math did so without attempting developmental math, and 15 to 30 percent did the same in English coursework.

About half (48 percent) of first-time developmental math completers who were referred to one level completed gateway math within three

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**Figure 2.** Percentage of Achieving the Dream students referred to developmental education who completed gateway coursework within three years, by number of attempts made in developmental coursework, by subject and level of referral

	ATTEMPTED DEVELOPMENTAL COURSEWORK AND COMPLETED GATEWAY COURSEWORK WITHIN THREE YEARS				Did not attempt but completed gateway coursework within three years
	One attempt		Multiple attempts <sup>1</sup>		
	Completed	Did not complete <sup>2</sup>	Completed	Did not complete <sup>2</sup>	
<b>Math referral level</b>	<b>39</b>	<b>3</b>	<b>22</b>	<b>2</b>	<b>11</b>
1 level below college	48	5	29	3	17
2 levels below college	37	4	23	2	10
3 or more levels below college	25	1	16	1	5
<b>English referral level</b>	<b>54</b>	<b>7</b>	<b>36</b>	<b>5</b>	<b>25</b>
1 level below college	58	8	34	6	30
2 levels below college	47	6	37	3	15
3 or more levels below college	48	5	40	9	17

<sup>1</sup>For students referred to any level, multiple attempts is defined as the student attempting any level referred to more than once.

<sup>2</sup>For students referred to any level, did not complete is defined as the student attempting any level referred to, and not completing; a student may have completed one or more other levels.

Note: The baseline cohorts for Rounds 1 through 4 and Cohort 2009 were included in the analysis (2003 for Rounds 1, 2, and 3; 2004 for Round 4; 2006 for Cohort 2009; 2007 for Cohort 2010).

Source: Achieving the Dream database, V201101.

**Figure 3.** Percentage of Achieving the Dream students referred to developmental education who persisted\* through the third academic year by number of attempts made in developmental coursework, by subject and level of referral

	ATTEMPTED DEVELOPMENTAL COURSEWORK				Did not attempt
	One attempt		Multiple attempts <sup>1</sup>		
	Completed	Did not complete <sup>2</sup>	Completed	Did not complete <sup>2</sup>	
<b>Math referral level</b>	<b>53</b>	<b>19</b>	<b>63</b>	<b>39</b>	<b>29</b>
1 level below college	55	21	63	34	34
2 levels below college	54	21	64	38	29
3 or more levels below college	48	17	62	42	24
<b>English referral level</b>	<b>51</b>	<b>16</b>	<b>58</b>	<b>25</b>	<b>30</b>
1 level below college	51	17	55	23	33
2 levels below college	52	15	59	26	25
3 or more levels below college	51	17	68	33	23

<sup>1</sup> For students referred to any level, multiple attempts is defined as the student attempting any level referred to more than once.

<sup>2</sup> For students referred to any level, did not complete is defined as the student attempting any level referred to, and not completing; a student may have completed one or more other levels.\*Persistence includes those enrolled at some point during year 3, or completed or transferred by the end of year 3.

Note: The baseline cohorts for Rounds 1 through 4 and Cohort 2009 were included in the analysis (2003 for Rounds 1, 2, and 3; 2004 for Round 4; 2006 for Cohort 2009; 2007 for Cohort 2010).

Source: Achieving the Dream database, V201101.

years. This compares with 37 percent of students referred to two levels below college level and 25 percent of students referred to three or more levels below college level who also completed their developmental education coursework in one attempt. The same pattern is evident among students who took multiple attempts to complete their developmental math coursework, with those who were referred to only one level of developmental math successfully completing gateway coursework at a higher rate than did students referred to more levels.

More than half (58 percent) of first-time developmental English completers who were referred to one level of developmental English completed gateway English within three years—10 percentage points higher than first-time completers referred to three or more levels of remediation. Contrary to the developmental math patterns, developmental English students referred to multiple levels and attempting developmental coursework more than one time had higher gateway English completion rates (40 percent and 37 percent) than did those referred to one level of remediation (34 percent).

### Persistence and Completion

Figure 3 displays the percentage of students who were referred to developmental education and persisted (enrolled at some point during year 3, or completed or transferred by the end of year 3) within three years of first enrollment. The data show that persistence rates were positively associated with developmental math coursework completion, but not with the number of developmental coursework attempts—students who attempted developmental coursework multiple times were more likely to persist (62 to 64 percent) than were those attempting once (48 to 55 percent), regardless of the depth of their devel-

opmental needs. Further, students who completed their developmental education coursework were about twice as likely to persist than were students who did not complete the prescribed coursework<sup>4</sup>.

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Among students completing their prescribed developmental coursework, there is no evident pattern as to persistence by level of referral or number of attempts across subject, except that, as expected, those with more attempts were more likely to persist. For example, 51 to 52 percent of students persisted who completed their developmental English coursework on the first attempt, regardless of developmental level; however, being referred to fewer levels was related to an increased chance of persistence for developmental math students. The reverse was true for those attempting multiple times: Persistence rates for developmental math students were relatively steady at 62 to 64 percent, while an *increase* in developmental levels of English was related to increased persistence rates (55 to 68 percent).

### What Does This Mean?

The results point to the conclusion that students with the greatest developmental needs are at the greatest risk of leaving college; however, if the college can keep the developmental student enrolled, his or her chances of success improve.

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<sup>4</sup> Note that students who drop out will have fewer attempts than students that continue their enrollment at the college.

Students with the fewest levels of need had higher completion rates after one attempt per course than did students with greater need. A larger portion of students completed if referred to more levels, for those making multiple attempts on at least one course.

Level of remediation is largely associated with gateway completion rates; students referred to more levels of developmental education coursework were less likely to complete gateway coursework within three years, except for students referred to multiple levels of English remediation who show the opposite trend. Further, some students referred to developmental education, but not attempting any, completed gateway coursework in the same subject in which they had developmental needs.

Students who completed the required developmental coursework were more likely to persist than those who did not, especially those students who completed remediation after multiple attempts. Students who complete developmental education coursework on the first attempt may have more academic or social capital associated with higher persistence rates, while students who took multiple attempts to complete developmental coursework appear to show a perseverance and commitment to their education despite coming to college with weaker academic skills. The data also show that roughly two out of every three students who did not take the prescribed developmental coursework were no longer enrolled after three years, as successfully completing developmental education is a key fac-

tor in predicting gateway course completion and persistence rates.

As colleges think about their developmental education students, especially those requiring multiple attempts to complete an individual course, related outcomes and critical points in a student's education, such as timely gateway enrollment and course completion, should be considered. Some questions to examine include:

- Why is there a substantial number of students who are still enrolled after three years, but have not even attempted to complete their developmental coursework?
- What distinguishes students who make multiple attempts at developmental education from those who do not?
- Why is it that some students who complete their developmental coursework successfully within three years, or even earlier, do not persist, complete, or transfer?
- Do unsuccessful developmental education attempts vary by subject area or referral level at our institution?
- What distinguishes students who experience higher first-time success in developmental education courses to which they were referred from students whose outcomes are not as successful?

Achieving the Dream colleges can download the companion tables to this issue of *Data Notes*, featuring your college's data, at [www.dreamwebsubmission.org](http://www.dreamwebsubmission.org). ■

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

This issue of *Data Notes* was written by Amy Topper of JBL Associates, Inc., subcontractor to Achieving the Dream, and edited by Katie Loois, Achieving the Dream's Director of Strategic Communications & Marketing. Newsletter production by Linda Marcetti, founder of Asterisk & Image, subcontractor to JBL Associates, Inc.

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Note: This issue of *Data Notes* uses the January 2011 version of the Achieving the Dream database. Institutions are grouped by the year they started work with the initiative.