

# What We Know About Accelerated Developmental Education

## Why Accelerate Developmental Education?

Most community colleges require new students to take placement exams to assess their readiness for college-level work, and the majority of tested students are deemed underprepared.<sup>1</sup> Students with very low levels of preparation may be referred to a three- or even four-course developmental education sequence in math or English before they can proceed to college-level, for-credit coursework in that subject area.

The majority of developmental students drop out before completing their assigned sequence—either because they fail a course or because they do not enroll in the next course in the sequence. As a result, only a small proportion of these students ever enroll in college-level math or English.<sup>2</sup> To address high rates of attrition, many community colleges have begun experimenting with an “accelerated” model of developmental education, which is designed to help students complete remediation within a shorter timeframe so they can enroll more quickly in college-level math and English.

This research summary is part of CCRC’s practitioner packet on developmental education. For more information on the effectiveness of community college assessment and placement tests, accelerated approaches to developmental education, and overcoming challenges in the developmental education reform process, please see our complete packet, [Designing Meaningful Developmental Reform](#).

## What Are the Potential Benefits of Acceleration?

Proponents of acceleration believe that it can mitigate two problems that tend to slow students’ progress through developmental education: multiple opportunities for exiting the developmental course sequence and poor alignment with college-level curricula.

### Fewer Opportunities for Exit

Lengthy developmental sequences give students multiple opportunities to drop out. Many students—even those who perform well in their developmental courses—withdraw before they reach college-level courses.<sup>3</sup> Acceleration strategies are designed to minimize exit points and limit the time students spend in developmental education, reducing the likelihood that outside commitments or events will pull students away from college before they complete their developmental sequence.<sup>4</sup>

**Acceleration strategies are designed to minimize exit points in the developmental sequence and limit time spent in developmental education.**

## Better Alignment With College-Level Courses

Developmental education courses sometimes teach skills that are not clearly relevant to the tasks and assignments used in college-level programs of study.<sup>5</sup> Some acceleration strategies tailor the developmental curriculum to the skills required for success in introductory college-level courses, eliminating unnecessary topics and allowing students to move through the course material more quickly. Some may also employ assignments that approximate college-level expectations, along with pedagogies designed to support students' efforts to meet these challenging expectations.

**Some acceleration strategies employ assignments that approximate college-level expectations, along with pedagogies to help students meet these expectations.**

## What Are the Possible Drawbacks of Acceleration?

While acceleration strategies may address the problems discussed above, faculty members and administrators are often concerned that a shortened developmental education sequence will not allow enough time to remediate the academic weaknesses of many students, thus increasing their likelihood of failing college-level courses. They worry that if accelerated students arrive in college-level courses underprepared and consequently fail those courses, the students may lose confidence in their academic abilities, increasing the risk that they will drop out of college.

# What the Research Tells Us

Over the past several years, CCRC has studied four acceleration strategies at four different colleges and college systems across the country. These strategies vary in terms of the number of students they serve, their content area focus, and the skill range of the students they target. All of them eliminate an exit point in the developmental sequence but differ in the extent to which they redesign student supports, pedagogy, and curriculum to help students succeed at college-level work.

Below, we describe these four acceleration strategies and review student outcomes for each strategy.<sup>6</sup> In each analysis, accelerated students are compared to a matched set of students with similar placement exam scores who proceeded through a longer developmental sequence.<sup>7</sup> While the studies control for a rich set of student characteristics, it is possible that unobserved characteristics, such as motivation, could influence the results.

In reviewing student outcomes, we focus on completion of “gatekeeper” courses—the introductory college-level math and English courses that all students must complete to earn a degree—as well as overall college-level credit accrual. To better understand gatekeeper completion, we examine its two subsidiary components: whether students ever enrolled in the gatekeeper course (“gatekeeper enrollment”), and among those who enrolled, the percentage who passed the course (“gatekeeper pass rate”).

The accompanying figures display the percentage point differences in outcomes between students who participated in the accelerated pathway and those who enrolled in the traditional developmental sequence. For example, if 50 percent of students completed gatekeeper English within one year of enrolling in an accelerated developmental course while only 40 percent of matched non-accelerated students did so, the figure would show a 10-percentage-point difference in gatekeeper course completion within one year.

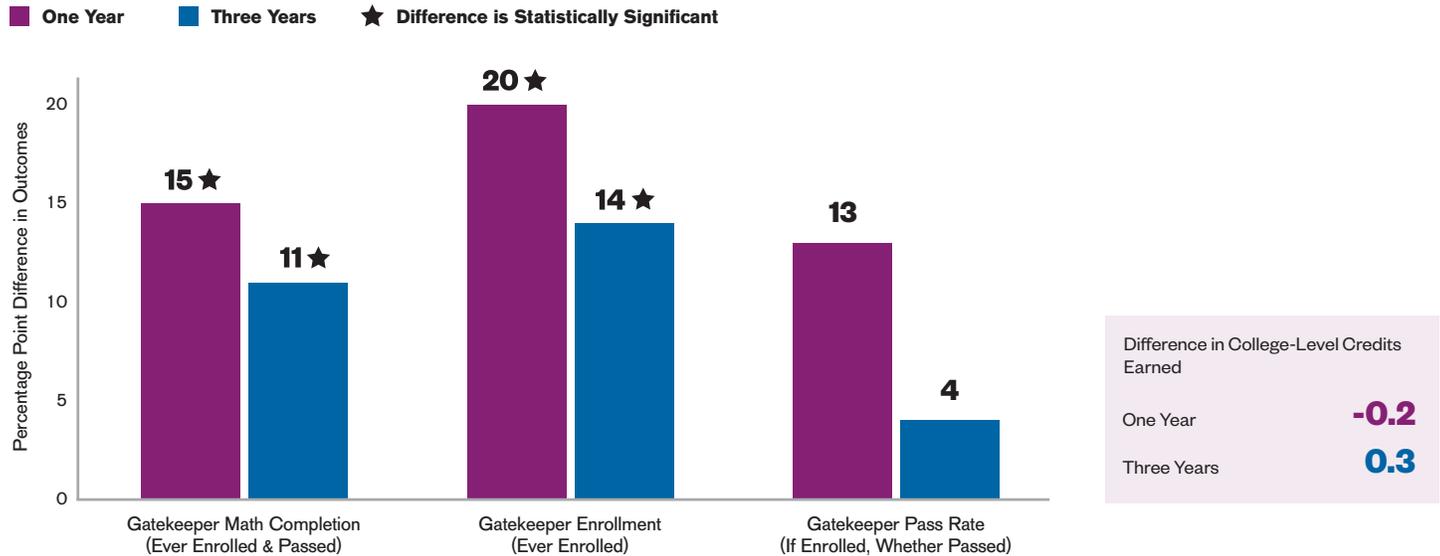
## FastStart at the Community College of Denver

The Community College of Denver's traditional developmental math sequence includes three courses, Math 030, Math 060, and Math 090. FastStart reduces the number of exit points between courses by combining them into two paired courses, Math 030/060 and Math 060/090. Each of the paired courses has the same number of credit hours as two stand-alone courses but can be completed in one semester instead of two.

FastStart also supports students by assigning them to a dedicated case manager and encouraging them to take a student success course during their FastStart semester. Additionally, the program employs long blocks of instructional time that encourage faculty members to implement a wider variety of instructional activities, including collaborative group work.

Because scheduling and registering students for blocked pairs of courses is often challenging, the FastStart program has remained relatively small since its launch in spring 2006.

### Students in Fast Start vs. Non-Accelerated Students<sup>8</sup>



Compared with students in the traditional developmental course sequence, students in the FastStart program were more likely to complete gatekeeper math. This effect was driven primarily by their higher enrollment rates in gatekeeper math; among those who enrolled, there was no statistically significant difference in pass rates between FastStart and traditional students. Accelerated students did not accrue more college-level credits than peers in the longer sequence.

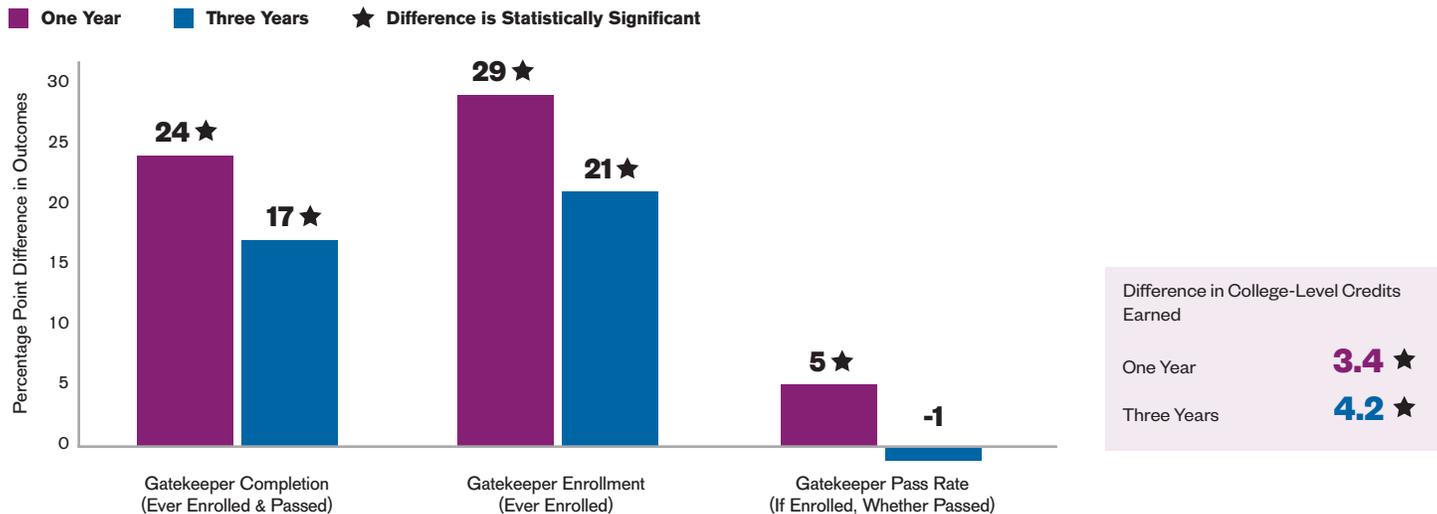
## Accelerated English at Chabot College

Chabot College offers an accelerated developmental English option that enables students to progress to college-level English after a single semester of developmental English rather than two semesters.<sup>9</sup>

Both the two-course sequence and the accelerated alternative are aligned with college-level English requirements. In both cases, developmental students are given the same types of assignments they would receive in college-level English and are provided with scaffolded instruction and detailed feedback on these assignments.

Any developmental English student at Chabot may enroll in the accelerated course, which now serves the majority of Chabot’s developmental English students.

### Students in Chabot’s Accelerated English Program vs. Non-Accelerated Students<sup>10</sup>



Results indicate that Chabot’s accelerated students were more likely to complete gatekeeper English than students who completed the traditional sequence. Again, these results were driven by higher enrollment rates; accelerated students who enrolled in the gatekeeper course passed it at approximately the same rate as their peers who completed the traditional developmental sequence. Accelerated students also accrued more college-level credits.

### Accelerated Learning Program (ALP) at the Community College of Baltimore County

In ALP, students who test into upper level developmental writing may enroll directly in college-level English 101 if they co-enroll in a special ALP section of developmental writing. Only 10 ALP students are allowed to enroll in any given section of English 101;<sup>11</sup> after each class meeting, these 10 students attend a companion ALP class that is taught by the same English 101 instructor.

While the course pairing eliminates an exit point, ALP’s larger purpose is to align the skills taught in developmental writing with the demands of college-level English. The ALP curriculum focuses on assignments and skills that support students’ success in their English 101 assignments.

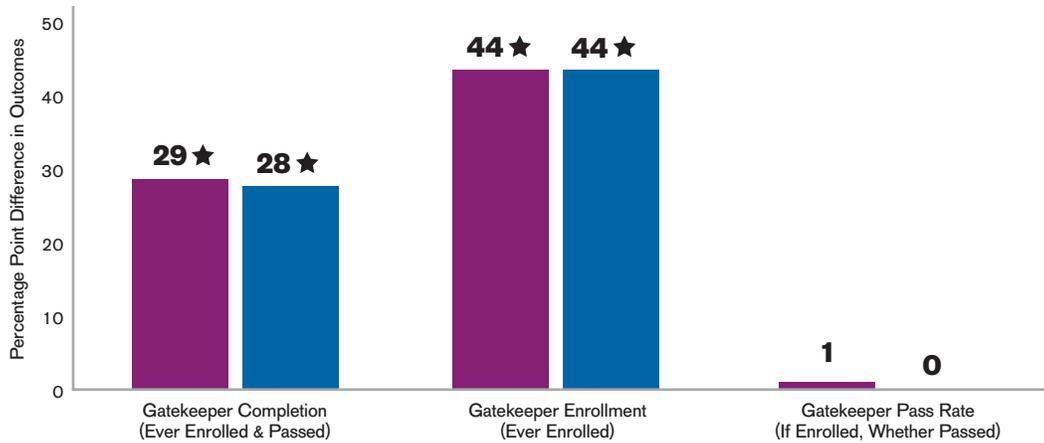
While the logistics of scheduling ALP classes can be challenging, the program now serves a majority of the college’s upper level developmental writing population.

Results show that ALP students received a very large boost in gatekeeper enrollment and completion rates. This is not surprising, given that ALP participants are required to enroll in English 101. ALP students who enrolled in gatekeeper English were equally likely to pass it, compared with peers who took developmental writing as a prerequisite for English 101. ALP students also accrued more college-level credits.

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### Students in ALP vs. Non-Accelerated Students<sup>12</sup>

■ One Year ■ Three Years ★ Difference is Statistically Significant



| Difference in College-Level Credits Earned |      |
|--|------|
| One Year                                   | 1.8★ |
| Three Years                                | 5.7★ |

### Shorter Sequences at the City University of New York’s (CUNY) Community Colleges

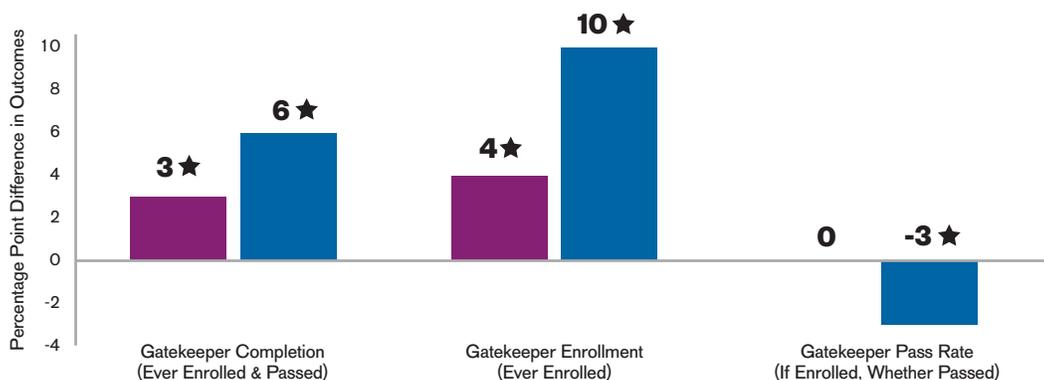
CUNY’s community colleges adhere to a common set of college-level placement exam cutoffs, but each college has the autonomy to design its own developmental sequence. Consequently, developmental sequences at CUNY colleges vary in length.

During the timeframe under study, at some CUNY colleges, a student with a very low score on the writing exam would be required to take two developmental writing courses (8 to 12 credits); at others, the same student would be required to take only one developmental course (6 or 7 credits). For math, most colleges required students who scored very poorly to complete a two-course sequence (8 or 9 credits). At one college, however, similarly low-scoring students were referred to a three-course sequence (11 credits). CUNY colleges with shorter sequences did not view them as “accelerated,” and did not provide students with supports beyond what are offered by colleges with longer sequences.

Developmental students are generally required to participate in their college’s sequence. Accordingly, thousands of students participated in the shorter sequences each year.

### CUNY Students in Shorter Sequence vs. Students in Longer Sequence (Outcomes Within Three Years)<sup>13,14</sup>

■ Math ■ English ★ Difference is Statistically Significant



| Difference in College-Level Credits Earned |      |
|--|------|
| Math                                       | 0.3  |
| English                                    | 2.0★ |

Findings indicate that CUNY students in the shorter sequences were more likely to enroll in and complete gatekeeper courses. In math, students in the shorter sequence were equally likely to pass the gatekeeper course. In writing, however, the improved completion rate came at a cost. Students from the shorter sequence who enrolled in gatekeeper English were less likely to pass than students from the longer sequence. Students in the shorter writing sequence accrued more college-level credits; students in the shorter math sequence did not.

## How Should Colleges Interpret These Results?

Overall, the research suggests that across a variety of approaches, accelerated developmental education is associated with increased enrollment in and completion of gatekeeper math and English. It also suggests that students who take accelerated developmental courses typically perform about as well in gatekeeper courses as their non-accelerated peers. In some cases, acceleration may also provide a boost to students' overall college-level credit accumulation, furthering their progress along the path to a degree. The apparent benefits of acceleration are likely due at least in part to the reduced number of exit points and reduced time to complete remedial requirements.

CUNY's shorter sequences show the smallest effects and the only statistically significant negative estimates in terms of pass rates among students who enrolled in gatekeeper courses. The minor impacts of CUNY's shorter sequences' could be due in part to a superior level of control for unmeasured student characteristics such as motivation, given that CUNY students were not allowed to choose whether they took a shorter or longer pathway. They may also result from the fact that the shorter CUNY sequences only eliminate an exit point without redesigning supports, pedagogy, or curriculum—suggesting that these features play a consequential role in the effectiveness of acceleration strategies.

To ameliorate acceleration's potential negative effects on pass rates within college-level courses, we recommend that colleges implement what could be called "supported acceleration": compressing or shortening the developmental sequence while providing supports that help students succeed in that more rigorous environment.

In particular, developmental curricula should be designed to incorporate college-level activities and content, giving students the opportunity to practice challenging assignments and develop their skills in a relatively safe and supportive environment. As one Chabot faculty member recounted, "Our thinking was, the best way to prepare them for 1A [the English gatekeeper course] was to give them 1A experiences." Additional supports could include required tutoring or co-requisite coursework for at-risk students; early-warning systems to identify struggling students, so that instructors may intervene early in the course; and a support network for instructors, to help them collaboratively develop strategies for working with struggling students. Integrating such supports into college-level courses may also benefit overplaced students, who have been deemed college-ready but nonetheless struggle to succeed.<sup>15</sup>

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**Developmental curricula should incorporate college-level activities and content, giving students the opportunity to develop their skills in a supportive environment.**

## Endnotes

1. Bailey (2009).
2. Bailey, Jeong, & Cho (2010); Hern (2010).
3. Bailey et al. (2010).
4. Edgecombe (2011).
5. Grubb (2012); Jaggars & Hodara (2011).

6. The CUNY results reported here are based on a study by Hodara and Jaggars (2014). The remaining results are based on a study by Jaggars, Hodara, Cho, and Xu (in press), who conducted new analyses of CCRC's larger studies of the Accelerated Learning Program (Cho, Kopko, Jenkins, & Jaggars, 2012), FastStart (Edgecombe, Jaggars, Baker, & Bailey, 2013), and the accelerated English program at Chabot College (Edgecombe, Jaggars, Xu, & Barragan, 2014) in order to focus on a consistent set of outcomes and timeframes, allowing an apples-to-apples comparison across the four studies' results.
7. Results are based on propensity score matching models that control for demographic characteristics (such as gender, ethnicity, and age), financial need, and initial academic behaviors and academic preparation (such as part-time/full-time enrollment and prior credits earned).
8. To give a sense of the baseline outcomes of developmental students in this study, the non-accelerated comparison group had the following outcomes at the three-year follow-up (see Jaggars et al., in press): 18% completed gatekeeper math; 23% enrolled in gatekeeper math; 76% enrolled in and passed gatekeeper math; on average, students accrued 14.1 college-level credits.
9. Hern (2011).
10. To give a sense of the baseline outcomes of developmental students in this study, the non-accelerated comparison group had the following outcomes at the three-year follow-up (see Jaggars et al., in press): 36% completed gatekeeper English; 43% enrolled in gatekeeper English; 83% enrolled in and passed gatekeeper English; on average, students accrued 23.5 college-level credits.
11. During the period under study, there were eight ALP students in each English 101 course; recently, the number has been increased to 10.
12. To give a sense of the baseline outcomes of developmental students in this study, the non-accelerated comparison group had the following outcomes at the three-year follow-up (see Jaggars et al., in press): 45% completed gatekeeper English; 58% enrolled in gatekeeper English; 78% enrolled in and passed gatekeeper English; on average, students accrued 16.0 college-level credits.
13. Hodara & Jaggars (2014).
14. To give a sense of the baseline outcomes of developmental students in this study, the longer sequence comparison group had the following outcomes at the three-year follow-up (see Jaggars & Hodara, 2011): 11% completed gatekeeper math; 23% completed gatekeeper English; 15% enrolled in gatekeeper math; 28% enrolled in gatekeeper English; 73% enrolled in and passed gatekeeper math; 82% enrolled in and passed gatekeeper English.
15. Belfield & Crosta (2012); Scott-Clayton (2012).

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