

# Accelerating Remedial Math Education: How Institutional Innovation and State Policy Interact

by Radha Roy Biswas

## Executive Summary

One of the most pressing challenges facing community colleges is improving outcomes for students who place into developmental math courses. For example, an analysis of the progress of 46,000 students enrolled in the first 27 institutions in Achieving the Dream, a national initiative on community college success, found that students were in greater need of developmental education in math than in English: over 70 percent were referred by faculty to developmental math, compared to 34 percent referred to developmental English. The analysis, conducted by the Community College Research Center at Columbia University, also found that nearly half of those referred to developmental math were referred to courses three levels below college-level math. Of those, fewer than a fifth (18 percent) attempted a college algebra course, and only 14 percent completed that course.

No wonder, then, that success in developmental education has emerged as a top priority for Achieving the Dream institutions and states. As some institutions have dug into this problem, they have been attracted to alternative ways to structure and deliver developmental education content. Students who are assessed as unready for college-level work enter at var-

ious levels of preparedness. Some need minimal remediation, but others need much more. Students who need only limited remediation can get discouraged at having to spend a semester's worth of time and resources in a remedial course. Those who see three levels to climb might get frustrated that they will never advance to college courses.

Some colleges have begun experimenting with alternative delivery and design approaches for remedial math. These typically allow students the option of pacing their own learning or accelerating their progress. However, in doing so, institutions are guided and sometimes limited by systems and state policies—around enrollment, financial aid, funding, data systems, and accountability. These policies often reinforce the traditional design and delivery of developmental education and make flexible delivery difficult.

This policy brief looks at efforts in three community colleges, two of which are Achieving the Dream institutions, to revamp their remedial math programming. It focuses on the ways in which state and system policies interact with institutional reform efforts—and how policies can either support or slow institutional change.



*Accelerating Remedial Math Education* was prepared by JFF for Achieving the Dream: Community Colleges Count, a national initiative to help more community college students succeed (earn degrees, earn certificates, or transfer to other institutions to continue their studies).

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**Housatonic Community College**, an Achieving the Dream college in Connecticut, is piloting a self-paced, modularized, competency-based, developmental math course. The course is offered in a lab setting, with open entry and exit so that students can start and finish their coursework at their own pace. State and institutional leaders are looking for ways to overcome obstacles that HCC has encountered in overcoming financial aid and other policy constraints, even as the college is trying to expand this program model more broadly across the institution.

**Community College of Denver** has developed “Fast Start,” a developmental education design that enables students to take modules of two different courses in the same semester. This accelerates their progress through both a traditional class setting and a self-paced option. State system policies around managing enrollment data have made it easier for CCD to offer this option.

**Mountain Empire Community College**, an Achieving the Dream College in Virginia, has developed short refresher courses for developmental math students. These courses take less time to complete and cost the student less than more traditional developmental courses. Students can move through more than one of the short courses in a single semester. As in Denver, Virginia’s enrollment, financial aid, and student data system policies have not presented any obstacle to Mountain Empire’s innovations.

These three colleges and their efforts to accelerate developmental math provide an important and instructive window on how institutional practice can be shaped by state and system policies—and by shifts in policies. They also demonstrate how important it is for college innovators to work closely with state and system policymakers to protect and promote efforts that show promise to improve student success at the college level.

These efforts highlight the importance of enrollment policies and student data systems to innovation—and to the flexibility that can help some students move faster through developmental requirements. In all three states, policies allow for flexible calendaring and course scheduling by individual institutions. But variations in data systems and certain nuances in enrollment census and reporting policies make the critical difference in capturing the student information needed to run such programs easily and to maximum advantage for students and institutions.