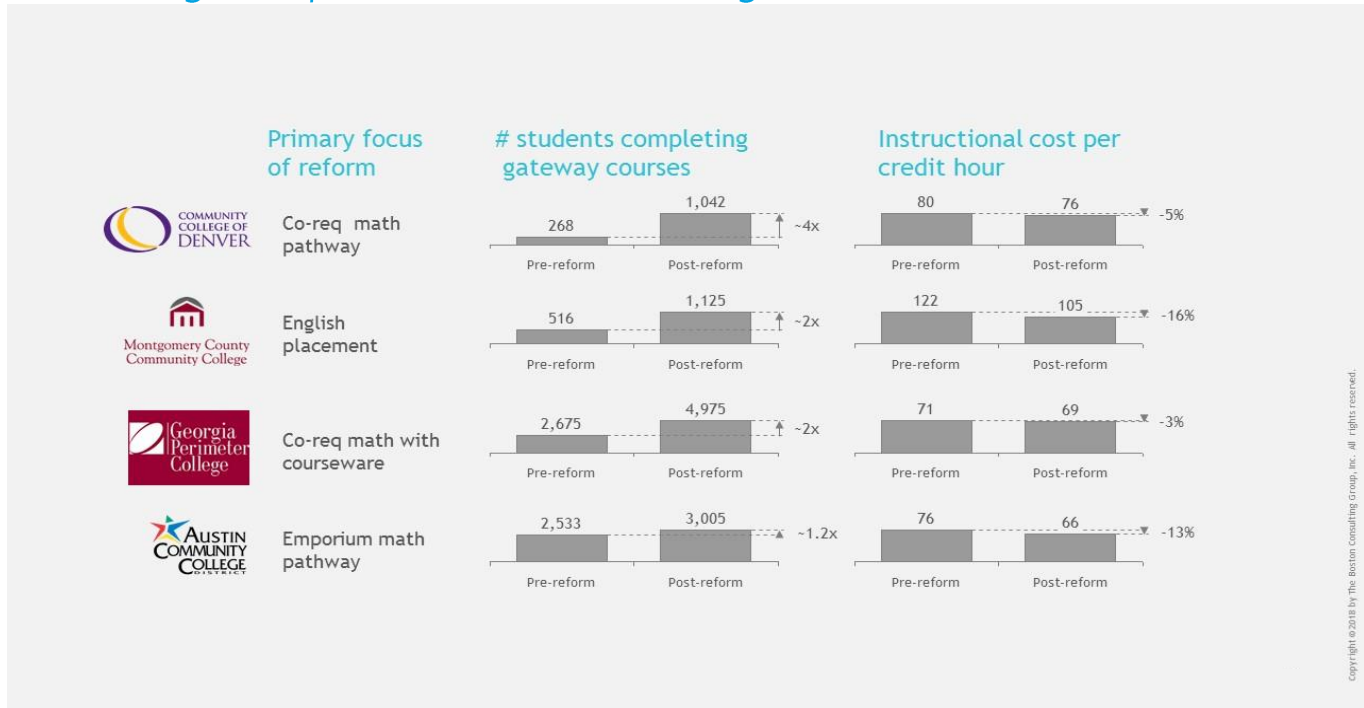


Impactful Reforms

Increasing completions while reducing instructional costs



Notes: Figures are adjusted to norm for changes in volume of credit hours across institution. For MCCC, the data are based on students completing ENG101 gateway course only in Fall semester only. Impact may be an underestimate, since students enrolling in ENG101 during other semesters are excluded; Pre-reform based on AY2008; Post-reform based on AY2016. Georgia Perimeter College consolidated with Georgia State University in January 2016. Source: BCG analysis as presented in "Playbook for Developmental Education Reforms" (forthcoming).

Educational reforms focused on aligning developmental education and guided pathways reforms have shown to increase student success. What has been lesser known is the impact on economics. As illustrated above, in four unique environments educational reforms have been shown to increase success while also being financially viable. The observable increase in students completing gateway courses is primarily a result of starting more students in gateway courses. Shifting more students to larger classroom sizes with supports contributes to the positive economic outcomes.

About the Site-based Reforms Studied

The **Community College of Denver (CCD)** was motivated by national evidence that Dev Ed math outcomes could be substantially improved. Backed by research and implementation support from the Charles A. Dana Center and Complete College America, CCD scaled default placement of students into college-level courses with a co-requisite lab and with STEM and non-STEM pathways. As a result, the frequency of enrollment in pre-requisite Dev Ed math courses has decreased by 55pp (from 86% to 31%); at the same time, gateway course success improved from 59% to 63% ABC grades. After a slight dip in initial outcomes, co-requisite pedagogy was adjusted from an open lab setting to tie content in lab to what is needed for a college-level course later that week (i.e., just-in-time instruction) with a master course model (i.e., centrally designed course). Over the time period of reforms, CCD slightly decreased class sizes for those who need it most (Dev Ed students) and slightly increased the gateway course sizes. This, coupled with the enrollment shift to

gateway courses described above, resulted in the slight decline in average instructional cost per SCH across developmental education and gateway math seen in the figure.

Austin Community College (ACC), in partnership with local government, reinvigorated an Austin neighborhood, created non-STEM pathways and redesigned the STEM path to an adaptive emporium model (ALEKS in ACCelerator lab). Reforms have driven 15pp improvement in developmental education course success rate versus the traditional model (from 60% to 75% receiving ABC grades); given credit requirements (i.e., the number of courses in developmental sequences) have not been changed, these improvements have translated to a minimal increase in gateway completion within 2 years. Additionally, ACC recently piloted a co-requisite college algebra course with just-in-time remediation and saw success rates rise from 55% to 74%; in the future ACC is looking to expand the co-requisite support via ALEKS courseware in the ACCelerator to improve success rates while reducing credit requirements. Although it was a multimillion dollar upfront investment to transform an old department building into the lab, only a portion of this cost would be relevant to other institutions renovating classrooms. As shown in the figure, ongoing costs are 13% lower than traditional model due to shared instructors and slightly larger class sizes in emporium model.

Georgia Perimeter College's (GPC) developmental math reforms had two phases against a backdrop of state and federal policies that reduced developmental education enrollment. The first phase of reforms was based on national research; GPC invested in ALEKS, compressed its sequence into a single semester, and hired development specialists to support students. After an initial dip in course outcomes while faculty learned to effectively instruct with the ALEKS courseware, course-level success rates rebounded and student progression improved (e.g., 70% of students exited Learning Support in 2 semesters vs. 27%). GPC's second reform was driven by a state mandated shift to exclusive co-requisite model by Fall 2018. Since 2016, GPC has gradually transitioned a greater proportion of its developmental population to co-requisite with promising early results (e.g., gateway course success rate consistent at ~60% with a 22pp increase in the proportion of students enrolled in gateway math). GPC was able to offset the upfront costs of reforms through grant funds and a one-time increase to the student technology fee (e.g., to support classroom conversion, purchasing computers). In terms of ongoing costs, concurrent legislative changes over the period of reforms exacerbated enrollment declines and increased pressures to maintain FT faculty course loads; however, if the impacts of these changes are held constant, average instructional cost decreased slightly between AY12-16 (from ~\$71 to ~\$69), and overall efficiency improved.

At **Montgomery County Community College (MCCC)**, two faculty advanced English placement reforms by encouraging their peers to try student placement tests themselves. This revealed that placement test multiple choice questions were overly complex and did not adequately test writing and reading comprehension, which subsequently provoked faculty to implement placement changes (e.g. new typed essay exam to replace multiple-choice test, new option to exempt from developmental education if verbal SAT score is above 500). The placement change doubled the percent of students in gateway courses (from 45% to 91%) while holding gateway course success rates constant at about 73%. More recently, with fewer fall first-time English students in developmental education, MCCC refocused pedagogy on critical reading and writing by transitioning from worksheet-based classroom activities to workshops focused on the writing process; reduced the developmental education sequence to a single semester; and piloted a co-requisite gateway course (worth the same amount of credits as the original sequence to comply with transfer agreements). Ongoing instructional margin improved slightly (18%) primarily due to shifting volume to gateway courses with larger class sizes and slightly more credit hours being taught by part time faculty.

This information was collaboratively developed by the Boston Consulting Group and Strong Start to Finish. For more information, contact either Renee Laverdiere, Boston Consulting Group, at laverdiere.renee@bcg.com or Christopher M. Mullin, Strong Start to Finish, at cmullin@strongstart.org.

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