Transform Remediation: The Co-Requisite Course Model

For far too many students, remedial education is a dead end. About 50 percent of all students entering college require remedial courses prior to enrolling in credit-bearing courses. The problem is exceptionally dramatic at two-year colleges where 70 percent of entering students require remediation. Unfortunately, students taking remedial courses are much less likely to graduate with a postsecondary degree than those not needing remediation. Quite frankly, postsecondary remedial education, as currently conceived, is failing to meet the needs of both students and institutions.

The problem starts with placement exams and their failure to provide the information colleges need to support students’ successful completion of credit-bearing courses.

- Research has shown that placement exams are not predictive of student success in college-level courses. There is evidence that up to 50% of students placed into remediation could be successful in college-level courses.

- Students’ scores on placement exams reveal little about student specific skill deficiencies, nevertheless institutions are using them, as if they are finely tuned instruments, to place students in courses that are three or more levels below college-level.

About one-third of all students assigned to remediation never take a remedial course in the relevant subject area, and as many as 40 percent of students referred to remedial courses in math never enroll. About half of those who do enroll fail to complete their first developmental course, and less than 40 percent complete the entire sequence of recommended developmental courses.

Even more troubling is that very few students who are placed into remedial education ever complete the gateway courses for which the remedial courses were designed. Among those students who successfully enroll in and exit remediation, about half never take the gateway courses for which they were supposedly preparing.

Further, it is not clear that enrolling in and completing the remedial courses puts students on a better path to completing gateway courses or a degree. A Virginia community college study found that among students identified as needing remediation, those who did not take the remedial course to which they were referred
were generally more likely to complete the gateway courses and/or earn a degree than those who did enroll.\textsuperscript{vii}

Students didn’t come to college to end up in a remedial course. New evidence has found that in fact, placement into remedial education is a significant deterrent to students, signaling to students that they may not be “college material”.\textsuperscript{viii} As a result, many do not attend the first class, complete subsequent remedial courses or the gateway class. Only about 1 in 10 students who are placed 3 levels below college-level in math ever complete a gateway course. Students quit at every possible point of attrition.

Clearly the developmental education system is broken. Fortunately, innovative practices are emerging that ensure students gain the academic support they need, when they need it so that they can stay on track to graduation.

**The Co-Requisite Course Model**

Co-requisite developmental education enrolls students in remedial and college-level courses in the same subject at the same time. Students receive targeted support to help boost their understanding and learning of the college-level course material. Remediation is delivered as a co-requisite, rather a prerequisite, providing academic ‘just in time. This strategy can work at both two- and four-year institutions, the latter of which are often prohibited from providing remedial education. The concurrent course design allows four-year colleges and universities to offer the co-requisite developmental instruction as a non-credit, supplement to a credit-bearing college course.\textsuperscript{ix}

Early results are showing that these initiatives are yielding better outcomes for students in less time and with significant savings for students and institutions. What they all have in common is a focus on completion of the entry-level, credit- bearing college courses that put students on a steadier path to completion.

The **Accelerated Learning Program** (ALP) at the Community College of Baltimore County allows students who did not pass the writing placement test to enroll both in English 101 and a companion course that provides extra support. Designated sections of English 101 reserve eight of 20 seats for ALP students, and the course standards are the same as for all sections of English 101. The eight ALP students enroll in the companion course or workshop, which meets immediately following the English 101 course with the same instructor. The design removes some of the stigma of developmental courses and places ALP students in the classroom with stronger students who model better writing, study habits, and class participation. Students pay for six credits and receive three credits for English 101. The ALP students not only complete English 101 at nearly twice the rate of non-ALP students in traditional remedial courses, but they also go on...
to complete English 102 at a higher rate and enroll in more college courses. The program is catching on and has spread to over 90 additional colleges.

Austin Peay State University (APSU) in Tennessee has eliminated its two remedial math courses, Elementary Algebra and Intermediate Algebra, and instead offers enhanced sections of its quantitative literacy and statistics college-level courses. Developmental math students enroll in a core math course and a linked workshop simultaneously. Initial assessments determine each student’s math weaknesses. During the linked workshops, students receive additional instruction on key math concepts on their identified weaknesses. The Linked Workshop facilitators, who are undergraduate students who have excelled in math, attend the core class with the developmental students and then review concepts presented in class during the workshop. Students completing the corequisite workshop and core math courses have succeeded at more than two times the rate of those who previously took the traditional developmental courses. The pass rate for developmental students rose from 23 percent to 54 percent in Elements of Statistics and from 33 percent to 71 percent in Mathematical Thought and Practice. Furthermore, more of these students are returning and enrolling in college courses the following school year.

The University of Maryland at College Park, the state’s flagship, public, four-year university, identifies about 20 percent of its incoming students as deficient in math and enrolls the top 60 percent of them, based on placement test scores, in a combined math course. The class meets five days a week, instead of three, for the entire semester. During the first five weeks, the students receive developmental instruction to help bolster their math knowledge and skills. They are then tested again using the same placement test. If the students score high enough, they are allowed to continue in the class, which is taught as a regular first-year math class for the remaining ten weeks of the semester. Over 80 percent were eligible to continue, and they successfully completed the course at the same rate as those students who had not been identified as needing remediation. The students who successfully complete the course earn three entry-level math credits.

The Carnegie Foundation’s Quantway and Statway models and Charles A. Dana Center’s New Mathways Program have developed a corequisite model for students who need more significant support. These initiatives have created two semester corequisite course models that that result in students passing gateway math courses within one academic year. These courses are particularly effective for students who lack the critical non-academic skills that are essential to college success. Weaving together gateway college content, student success skills and academic support has enabled students, who had traditionally been placed in multiple levels of remediation, to complete gateway courses much sooner. Early results from the Carnegie Foundation found an increase in the percent of students completing college-level statistics in one academic year from 6%
to 51%. In the Quantway model, success in college-level quantitative reasoning classes within one academic year increased from 21% to 56%. 

**Taking Action**
State leaders should take action to stop the cycle of dead-end remedial education in colleges and support adoption of the co-requisite model as a strategy for improving remedial education, and ultimately, improving college completion rates.

**Make co-requisite remedial education the norm for most students.** Placement into gateway courses should be the default for the vast majority of students. Both single semester options and one year models, where students are immediately engaged in gateway course material, are showing much stronger results than traditional models. As a result, the vast majority of students should be placed into corequisite models, eliminating the multiple attrition points in long remedial sequences that undermine student success.

**Incorporate multiple measures to place more students in gateway courses.** Colleges should consider high school GPA, high school transcripts and non-cognitive measures of student readiness for college in order to place more students in gateway courses. Measures like high school GPA are actually more predictive of student success than placement exams. As a result, colleges should compile more comprehensive data, shifting the evidence standard from why students should be in college courses, to why shouldn’t they be.

**Ensure students are only receiving the support they need in the skills essential to their program of study.** Many effective models are aligning academic support to the skills necessary for success in gateway courses. Colleges should not be in the business of remediating what students should have learned in high school and instead be building the skills necessary for students to succeed in their chosen program of study. This is particularly important in math, where many students are expected to master skills that are only relevant for student success in calculus. Models that prepare students for success in programs that require statistics or quantitative reasoning skills are resulting in higher success rates, particularly when they are delivered as a corequisite.

**Remove regulatory barriers.** State leaders should eliminate or change policies that make the co-requisite model difficult or impossible to implement. States like Connecticut, Colorado and Florida have removed barriers that had previously prevented corequisite models. States should remove all language from their policies that prevent access into gateway college-level courses for students who are assessed as not college ready.
Collect and publicly report the CCA metrics, particularly those measuring success in first-year courses. The ultimate measure of college readiness and of productive remedial education is success in first-year, college-level gateway courses. State leaders should track state-, system-, campus-, and student-level data on success in first-year, college-level courses in core subjects, such as math and English. State leaders should also track additional related metrics on remedial education placement and graduation rates disaggregated by remedial status. Publicly reporting these metrics in a consumer-friendly way is critical for informing the public and other key audiences and for ensuring the metrics drive decision-making at the state, system, and campus levels.

The current model of remediation does not promote credit accumulation or college completion. State leaders should act quickly and decisively to make significant changes before more students lose additional time and money to a system that does not promote attainment of a degree. Both state policymakers and postsecondary education leaders should explore these innovative co-requisite course models for improving success in gateway courses, putting these students on a steadier path to college completion. States, institutions, and students may realize significant cost savings, and possibly additional revenues from increased earnings, that can be reinvested in replicating this and other strategies for improving college completion.


iv Davis Jenkins, Shanna Smith Jaggars, and Josipa Roksas, Promoting Gatekeeper Course Success Among Community College Students Needing Remediation: Findings and Recommendations from a Virginia Study (Summary Report), (New York: Community College Research Center, Teachers College Columbia University, 2009), 2-3.

v Thomas Bailey, Dong Wook Jeong, and Sung-Woo Cho, Student Progression Through Developmental Sequences in Community Colleges, CCRC Brief Number 45, (New York: Community College Research Center, Teachers College, Columbia University, September 2010), 3.

vi Ibid.


x Nikki Edgecombe, Accelerating the Academic Achievement of Students Referred to Developmental Education, CCRC Issue Brief Number 55, (New York: Community College Research Center, Teachers College, Columbia University, May 2011).

