

Research Brief \ November 2023

Multiple Measures Assessment and Corequisite Courses: Alternate Ways to Place and Prepare New College Students

Sophie Litschwartz, Dan Cullinan, and Vivianna Plancarte

At community colleges and open-enrollment universities,¹ most first-year students take placement exams in English and mathematics to determine whether they are ready for college-level courses. Students with low scores are placed in developmental, or remedial, courses that may not count toward college credits. Twenty percent of students entering college nationwide, and over a quarter of students entering public community colleges, end up taking at least one developmental course.² Historically, the overwhelming majority of these students have not graduated.³

But large-scale studies have indicated that these test scores misplace substantial numbers of students—in other words, for many students, the test score does not accurately reflect their ability to succeed in college-level courses.⁴ This fact means that many students are taking these courses when they do not need them, using up valuable time and money. Meanwhile, there may be students who need remediation but are not getting it.

To improve placement accuracy, hundreds of colleges across the country have begun implementing a strategy called multiple measures assessment (MMA), a placement approach that uses alternative indicators including high school grade point average instead of or in addition to a single test score to improve placement accuracy.⁵ At the same time, to help students who have been assessed as needing developmental education complete college-level courses sooner, colleges are increasingly offering corequisite remediation, where students enroll directly in college-level courses while receiving related developmental education support at the same time. This support may come in the form of a separate course section with a different instructor or be offered in the same class with the same instructor.

Experiments evaluating the use of MMA instead of a test-based system have shown that it helps more students progress in college. Specifically, students bumped up from prerequisite developmental courses to college-level courses because of an MMA system are more likely to complete college-level courses than similar students assigned to developmental education.⁶ These studies, however, took place in a prerequisite remediation context—that is, in situations where developmental courses were required before students could enroll in college-level courses. Today, more and more colleges are adopting corequisite remediation in place of traditional sequential coursework, and some states are mandating that colleges adopt corequisite models.⁷

Both corequisite remediation and MMA have been shown to get more students into college-level courses quickly and to help more students pass those courses.⁸ Indeed, colleges may already view corequisite remediation as the solution to the developmental placement problem since students receiving it are able to take college-level courses right away. But students who do not need corequisite support courses yet receive them may be spending extra time and money on them needlessly, slowing their progress in college. Meanwhile, those who do need corequisite remediation but do not get it may not have adequate preparation to succeed in their college-level courses. One strategy to better identify which students should go into corequisite courses is to employ MMA, but most of what is known about good MMA implementation was learned when prerequisite remediation was the norm. For that reason, more research on the state of developmental education placement and course offerings is needed, as are updated evidence and implementation guidance. This brief summarizes findings from two surveys that show both corequisite and MMA practices are on the rise nationally, making it even more important to understand how best to implement these two practices together. This brief also introduces a study that will provide rigorous evidence related to that question.

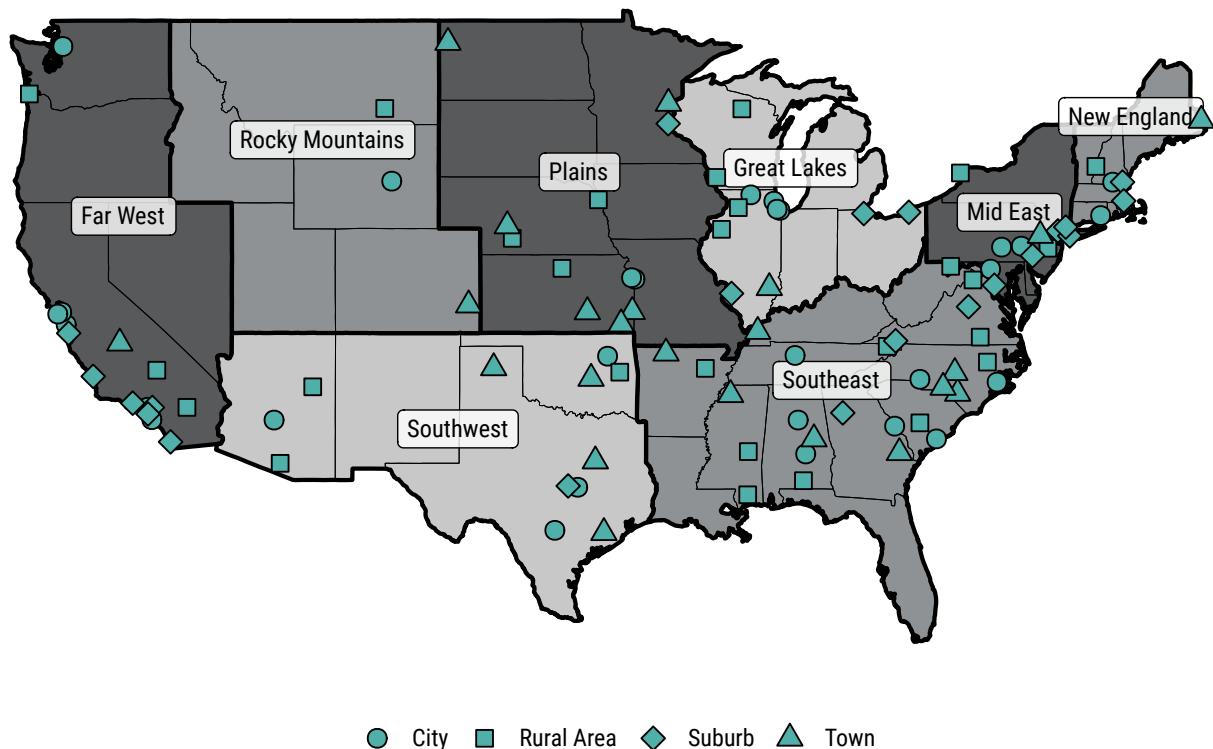
The Surveys: Assessing the Use of Multiple Measures Assessment and Corequisite Remediation

The Center for the Analysis of Postsecondary Readiness (CAPR) is a partnership between MDRC and the Community College Research Center. CAPR was established in 2014 to document progress in developmental education reform across the United States and to conduct rigorous

evaluations of the effects of innovative assessment and instructional practices on student success.

In early 2023, CAPR fielded a short, nationally representative survey to capture specific assessment and developmental course-offering changes systematically. CAPR randomly selected 100 community colleges from a list of all 829 public, two-year, degree-granting community colleges in the United States.⁹ The selected colleges were stratified by region of the country and by urban/rural character (city, suburb, town, rural area) as shown in Figure 1.¹⁰ This brief shows changes in developmental coursework policy by comparing the results from this 2023 survey with a CAPR survey of colleges across the United States fielded in 2016.¹¹

FIGURE 1. 100 Randomly Selected Two-Year Community Colleges by Region and Urban/Rural Character



Increased Use of High School Performance Measures in Placement Systems

In the course of assisting colleges around the country to evaluate and expand MMA efforts, the CAPR team had noted many recent changes in developmental education policies. It appeared that colleges had responded to promising research related to MMA and their own need to adapt during the COVID-19 pandemic by incorporating high school performance into their placement systems. In addition, more colleges seemed to have turned to a corequisite model to try and address the problems with prerequisite remediation.

The 2023 survey confirms these anecdotal observations (Table 1). More colleges are incorporating high school performance measures into their placement systems. In 2016, 37 percent of two-year public colleges used indicators of high school performance in their placement systems in English and 41 percent did so in math. In 2023, those numbers have nearly doubled, with 73 percent of two-year public colleges using indicators of high school performance in their placement systems. (See Figure 2.)

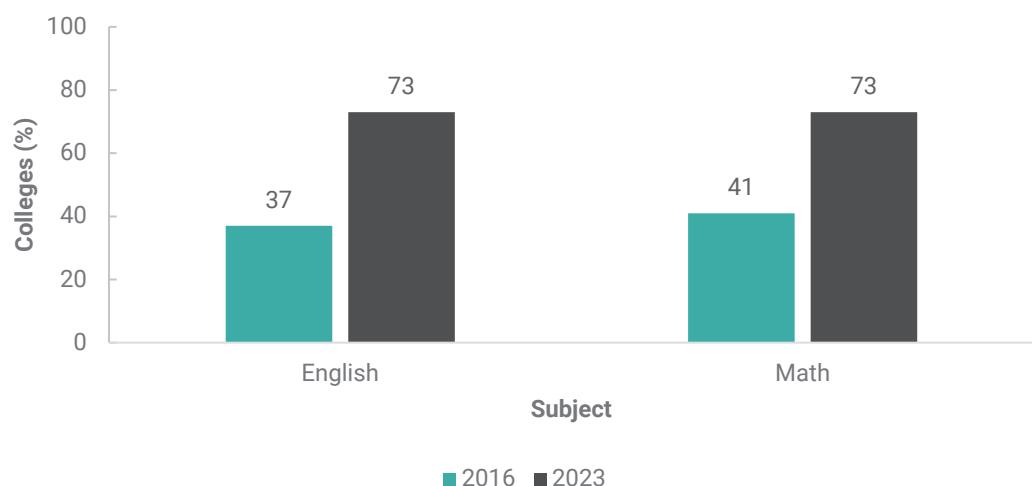
TABLE 1. Developmental Course Policies at U.S. Community Colleges, 2023

Measure	English (%)	Math (%)
Placement system uses indicators of high school performance	73	73
Only prerequisite developmental courses offered	18	21
Only corequisite developmental courses offered	14	12
Both prerequisite and corequisite developmental courses offered	64	65
Neither prerequisite nor corequisite developmental courses offered	4	2
Sample size = 99		

SOURCE: Data from 2023 and 2016 nationally representative surveys of two-year public colleges.

NOTE: While 100 colleges were surveyed, no data were available for one of the colleges. Data were collected and updated from February 2023 through October 2023.

FIGURE 2. Two-Year Public Colleges Using Indicators of High School Performance in Their Placement Systems 2016 to 2023

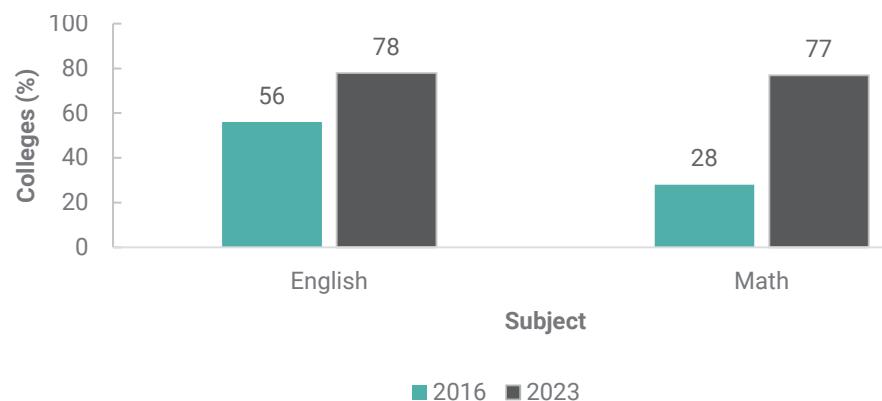


SOURCE: Data from 2023 and 2016 nationally representative surveys of two-year public colleges. Data were collected and updated from February 2023 through October 2023

Increased Use of Corequisite Development Courses

There has also been growth in the number of colleges placing students in corequisite developmental courses, especially in math. In 2016, 56 percent of two-year public colleges offered corequisite developmental courses in English and 28 percent offered those courses in math. In the 2023 survey, 78 percent of two-year public colleges offered corequisite developmental courses in English and 77 percent offered corequisite courses in math (shown in Figure 3). These new figures represent a 22 percentage point increase in the number of colleges offering corequisite remediation in English and a 49 percentage point increase in the number of colleges offering it in math.

FIGURE 3. Two-Year Public Colleges Offering Corequisite Developmental Courses 2016 to 2023



SOURCE: Data from 2023 and 2016 nationally representative surveys of two-year public colleges. Data were collected and updated from February 2023 through October 2023

New MMA Research for the New Policy Context

The growth in both MMA placement systems and corequisite coursework means there is a need for new research on how these two practices interact. When students enter community college there are three main placement options: prerequisite remediation courses, college-level courses with a required corequisite remediation course taken at the same time, or college-level courses by themselves (in other words, without a corequisite requirement). Existing research on MMA was done in contexts where using MMA placement moved some students who would have been required to take prerequisite remediation directly into college-level courses.¹² Similarly, existing research on corequisite remediation was conducted in a context where the alternative was prerequisite remediation. In both these cases, the break from the status quo removed prerequisite courses, which allowed students to progress toward their degrees more quickly. There is not yet experimental research about the trade-offs between directly placing students in college-level coursework alone and requiring corequisite remediation, or

on whether using MMA to place students into corequisite coursework is better than status-quo placement systems.

To help answer these important questions, CAPR is launching a new project in 2023 evaluating multiple measures in the corequisite college context. CAPR will be fielding a randomized controlled trial at multiple colleges that seeks to answer the question: "What are the effects of MMA systems in a corequisite context?"

This study will recruit up to 10 colleges from the colleges sampled for the 2023 survey. Eligible colleges must currently offer corequisite courses and be interested in implementing multiple measures for placement. The study will randomly assign students to either an MMA placement system or the college's current system for placing students in corequisite developmental coursework. Randomization will begin in 2024, affecting students placed leading up to the fall 2024 semester. Results will be published in 2025.

This research study will provide high-quality estimates of the effect MMA has on students' academic outcomes, as well as findings about college-level implementation of MMA, students' experiences, and MMA's costs. Ultimately, this study aims to provide colleges with valuable information to inform both corequisite-remediation and corequisite-placement design, and to answer important questions arising in the field about how to use MMA to place students in the courses that best suit them.

Notes and References

1. Open-enrollment universities (sometimes referred to as open-admissions universities) are universities that have nonselective admissions policies in which all students who have a high school diploma or equivalent are admitted.
2. U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, "Table 311.40. Percentage of First-Year Undergraduate Students Who Reported Taking Remedial Education Courses, by Selected Student and Institution Characteristics: Selected Years, 2003-04 Through 2015-16" (website: https://nces.ed.gov/programs/digest/d18/tables/dt18_311.40.asp, 2018).
3. Complete College America, *Time Is the Enemy* (Washington, DC: Complete College America, 2011)
4. Judith Scott-Clayton, "Do High-Stakes Placement Exams Predict College Success?" CCRC Working Paper No.41 (New York: Community College Research Center, 2012); Clive R. Belfield and Peter M. Crosta, "Predicting Success in College: The Importance of Placement Tests and High School Transcripts," CCRC Working Paper No. 42 (New York: Community College Research Center, 2012).
5. Elizabeth Zachry Rutschow and Alexander K. Mayer, "Early Findings from a National Survey of Developmental Education Practices" (New York: MDRC, 2018).
6. Dan Cullinan and Elizabeth Kopko, "Lessons from Two Experimental Studies of Multiple Measures Assessment" (New York: MDRC, 2022).
7. Education Commission of the States, "Developmental Education Policies: Is Corequisite Support Addressed? If So, Is It Required or Allowed?" (website: <https://reports.ecs.org/comparisons/developmental-education-policies-05>, 2021).
8. Elisabeth A. Barnett, Elizabeth Kopko, Dan Cullinan, and Clive Belfield, *Who Should Take College-Level Courses: Impact Findings from an Evaluation of a Multiple Measures Assessment Strategy* (New York: MDRC, 2020); Susan Bickerstaff, Katie Beal, Julia Raufman, Erika B. Lewy, and Austin Slaughter, *Five Principles for Reforming Developmental Education: A Review of the Evidence* (New York: MDRC, 2022).
9. National Center for Education Statistics, "Integrated Postsecondary Education Data System: Custom Data Files" (website: <https://nces.ed.gov/ipeds/datacenter/CDS.aspx?sid=b1c87a98-bf01-4732-8f29-5ee056d4ca44&rtid=5>, accessed September 25, 2023).
10. Some regions have significantly fewer colleges than others, so that a representative sample is denser where the greatest number of colleges are located.
11. The 2023 minisurvey differs from the 2016 survey in important ways: It is limited to only two questions on developmental course offerings and assessment practices, where the 2016 instrument was much longer and more detailed. The sample size is limited to 100 two-year colleges instead of over 1,000 two- and four-year institutions. It was fielded by MDRC staff members reviewing publicly posted placement policies and course catalogs on college websites, followed by confirmation by phone or e-mail when possible, instead of the traditional and much more costly administration methods used for the 2016 survey. Elizabeth Zachry Rutschow, Maria Scott Cormier, Dominique Dukes, and Diana E. Cruz Zamora, *The Changing Landscape of Developmental Education Practices: Findings from a National Survey and Interviews with Postsecondary Institutions* (New York: MDRC, 2019).
12. The term "placed" does not imply that students will necessarily enroll in the course, only that they are required to do so to advance in that subject. Dan Cullinan and Dorota Biedzio Rizik, *Increasing Gatekeeper Course Completion: Three-Semester Findings from an Experimental Study of Multiple Measures Assessment and Placement* (New York: MDRC, 2021); Elisabeth A. Barnett, Elizabeth Kopko, Dan Cullinan, and Clive Belfield, *Who Should Take College-Level Courses: Impact Findings from an Evaluation of a Multiple Measures Assessment Strategy* (New York: MDRC, 2020).

Acknowledgments

We thank Alex Mayer, Alyssa Ratledge, DeShawn Preston, Elizabeth Kopko, Hollie Daniels, Leigh Parise, and Michael Weiss for reviewing the brief, Joshua Malbin for editing the brief, and Carolyn Thomas for preparing it for publication.

We would also like to thank contributors to the survey collection: Noor Amanullah, Parker Cellura, Melinda Jackson, Ruhi Rao, and Diane Wren.

CAPR is a partnership of research scholars led by the Community College Research Center (CCRC) and MDRC, supported by the Institute of Education Sciences, U.S. Department of Education, through [Grant R305C140007](#) and [Grant R305U200010](#) to Teachers College, Columbia University. Funding for this project was provided by [Ascendium Education Group](#). The opinions expressed herein are those of the authors and do not represent the views of the Institute, the U.S. Department of Education, or Ascendium.

For more information about CAPR, visit postsecondaryreadiness.org.

Copyright © 2023 by CAPR. All rights reserved.