

Jennifer Ballard Schanker, Ed.D. September 2022



Acknowledgements

Thank you to the Kresge Foundation for their generous support of the operations of the Michigan Center for Student Success (MCSS) and the activities that support the technical assistance and professional development services to support the adoption of evidence-based developmental education practices. Thank you to Dawn Coleman, Alison Kadlec, and Erica Orians for their input on this report, and to Carly Buell from Resch Strategies for the report design. Special thanks to the faculty, staff, and administrators at Michigan community colleges who completed the DE SOAA and the MCSS Mentors who participated in the validation calls with MCSS staff.

About the Author

Jennifer Ballard Schanker has been employed at the Michigan Community College Association (MCCA) since 2011 and currently serves as the Director of Research and Institutional Practice at the Michigan Center for Student Success. Prior to her work at MCCA, Schanker was the Chair of Transitional Studies at Lake Michigan College in Benton Harbor, Michigan, where she led a number of student success initiatives and co-chaired the committee for assessment of student learning outcomes. She holds a master's degree from DePaul University and a doctorate in Community College Leadership from National Louis University. She also serves as a scholar with the Higher Learning Commission and as a coach with the Success Center for Ohio Community Colleges.

About the Michigan Center for Student Success

The Michigan Center for Student Success at the Michigan Community College Association provides state-level support to Michigan's community colleges by serving as a hub connecting leadership, administrators, faculty, and staff in their emerging and ongoing efforts to improve equitable student outcomes, emphasizing linkages between practice, research, and policy. Additional information about the center is available at www.mcca.org.

INTRODUCTION

An irrefutable and growing body of national research continues to show that traditional practices aimed at supporting underprepared students, including high stakes placement testing and long sequences of precollege-level courses, are not achieving their intended effects. In fact, research shows definitively, these traditional approaches are dramatically lowering – not increasing – students' chances of success, particularly students from low-income backgrounds and persistently marginalized communities of color. Reforms, including the use of high school GPA for placement and the scaling of corequisite courses aimed at providing additional support in the context of credit-bearing courses, are allowing many more students to access and successfully complete gateway courses. Consensus is growing that these practices dependably increase the numbers of students who complete college-level courses in English and mathematics within one or two semesters of enrollment, boosting the odds that they will complete their programs of study, earn credentials, and transfer or enter the labor market in a timely manner.

In early 2016, the Michigan Center for Student Success (MCSS) conducted its first survey of these emerging developmental education reforms among the 28 public community colleges in Michigan. The responses indicated widespread interest and experimentation, but very little implementation at scale, especially in mathematics. MCSS repeated the survey in January 2019 and found some meaningful growth in the adoption of corequisite delivery for English, but relatively little progress in reforming approaches to developmental mathematics or placement processes.

In April 2020, the Michigan legislature passed Public Act 84, also known as the Michigan Reconnect Grant Act, which guaranteed tuition-free community college to adults 25 and older and tied college eligibility to enroll these students to developmental education reform. Specifically, the legislation required colleges to adopt accelerated models for delivery of pre-college-level English and mathematics instruction to ensure that Reconnectors, or students who participated in the program, would be able to complete gateway courses in these subjects within a semester or two of enrollment.

The DE SOAA measures adoption of evidence-based practices related to accelerating completion of gateway courses in English composition and mathematics pathways. Practices include deployment of corequisite support, the use of multiple measures including high school GPA for placement into supports, and development of a system for GSP. Colleges indicate their implementation on a 5-point scale from "Not Occurring" to "At Scale." To learn more about what was actually happening at each college, followup calls with an MCSS staff member and a member of the MCSS mentoring network took place during spring 2022. Results from the DE SOAA and the follow-up calls are summarized in this brief.

As part of the requirements of the Reconnect legislation, the Michigan Department of Labor and Economic Opportunity (LEO) convened a working group of stakeholders from colleges, state government, business, and philanthropy to provide guidance to colleges complying with the criteria for eligibility outlined in PA 84. This group issued the Michigan Developmental Education and Placement Recommendations (MDEPR) in the summer of 2021. Based on a rigorous review of national research, the MDEPR recommended fully-scaled corequisite delivery of support for gateway courses in English composition and mathematics pathways, the use of a high school GPA of 2.5 or greater to allow students to enroll in gateway courses without support, and a robust system of Guided Self-Placement (GSP) to help students identify the appropriate level of support for their needs. In winter 2022, MCSS adapted its Developmental Education Scale of Adoption Assessment (DE SOAA) to align with the MDEPR and launched a review of developmental education practices at all 28 colleges.

MODELS OF INSTRUCTIONAL SUPPORT

Colleges across the state have adopted and adapted various models to provide developmental education support for gateway English composition and mathematics pathway courses. During the 2022 DE SOAA calls, MCSS identified several broad categories of support models, described below. The selection of support models at each college reflects the local context, including faculty teaching responsibilities, scheduling, and room availability, and the philosophical and pedagogical priorities of the faculty and administration.

- ALP-Style or Dedicated Support Course: In this model, students enroll in a gateway course along with
 a separate corequisite course that typically meets before or after the gateway course. In most but not all
 instances, these dedicated support courses are taught by the same faculty member. English courses are
 often described as ALP-style because the model follows the original format of the Accelerated Learning
 Program at the Community College of Baltimore County. In ALP models, the gateway course comingles
 students who placed directly into the college-level course with students enrolled in the corequisite support
 course. Gateway mathematics courses using the dedicated support course model are more likely to use a
 cohort model where all students in the gateway course section are also enrolled in the support course.
- Embedded Support in Gateway Course: In this model, students who place into or elect corequisite support enroll in a specific section of the gateway course that includes additional credit or contact hours where the support is provided.
- 8/8 Compressed: In this model, students who successfully complete a developmental course in the first
 half of the semester can progress to the gateway course in the second half of the semester. To
 discourage students from stopping out between courses, colleges can require students to enroll in both
 courses at the time of initial registration.
- Standalone or Prerequisite: Standalone or prerequisite developmental education follows the traditional
 model where students are placed into or can elect courses that must be completed before the gateway
 course. In many cases, especially in mathematics, standalone courses have been compressed or
 otherwise accelerated to reduce the number of levels a student must complete before enrolling in the
 gateway course. Some colleges maintain a standalone course at a level below the corequisite/gateway
 course pairing.

Language in the Reconnect legislation specifies accelerated delivery either through corequisite instruction, compression, or modularization (not found in any colleges), while the MDEPR recommend corequisite delivery as the most effective and preferred option. Of the models found among Michigan's community colleges, ALP-style, dedicated support courses, and embedded support in gateway courses are all corequisite models. Compression is an accelerated model, while courses offered as standalone or prerequisite courses may qualify as accelerated if they combine two or more previously separate levels.

CURRENT REFORM LANDSCAPE

Gateway English Composition

English Composition I is the most common gateway English course, with multiple sections offered each semester in every community college. In Michigan, English departments had a head start on adopting corequisite instructional models thanks to an investment at the MCSS from The Kresge Foundation from 2013-2017. The majority of the colleges adopted an ALP-style model and many have been at scale for a number of years. As part of the scaling process, most of the colleges have also adopted an Integrated Reading and Writing (IRW) approach that eliminated standalone reading courses altogether. Others have paired a developmental reading or IRW course with a college-level Student Success course or other courses satisfying general education requirements.

During the 2022 DE SOAA calls, 24 colleges reported being "At Scale" or "In Progress" in implementing corequisite models, including ALP-style or embedded support for delivery of gateway English composition courses. Of those colleges not at scale or scaling up a corequisite model, two are currently using an 8/8 compressed model and one still relies on standalone prerequisite remediation. Three are piloting or planning to pilot corequisite models.

Note that for the data presented here and throughout this report, several colleges reported using more than one model.

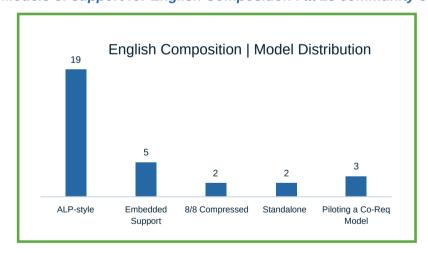


Fig. 1: Models of support for English Composition I at 28 community colleges

Gateway Courses in the MTA Mathematics Pathways

The adoption of Mathematics Pathways, in which students complete gateway math courses that are aligned with their program of study, is another reform that accelerates momentum toward credentials. All 28 colleges offer gateway courses and developmental education support for preparation for calculus, while 25 colleges offer gateway courses and support for statistics and 26 colleges offer quantitative reasoning.

Prior to 2020, very few colleges had adopted any developmental math reforms. The 2022 DE SOAA revealed a broad range of experimentation across the three pathways. The scale of reforms decreases with the increased complexity of the traditional structures for remediation in each pathway (i.e., the more existing levels of prerequisite math, the less likelihood of students being able to complete a gateway course with corequisite support in their first semester of enrollment).

Quantitative Reasoning

The Quantitative Reasoning (QR) pathway typically includes only one course. This course/pathway is also commonly labelled Mathematics for the Liberal Arts and as that label suggests, satisfies the mathematics requirement for programs in liberal arts, humanities, and other non-technical academic areas.

Of the 13 colleges adopting a dedicated support course for QR at this time, seven reported a full-scale adoption of corequisite instruction, either using embedded support or a dedicated support course for students in this pathway. The remaining six were either piloting or beginning to scale up, sometimes alongside a parallel prerequisite model. The three colleges reporting embedded support models are currently planning or piloting their courses.

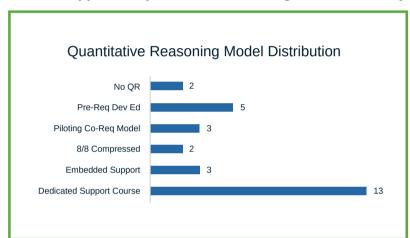


Fig. 2: Models of support for quantitative reasoning at 26 community colleges

Introductory Statistics

The statistics pathway usually includes only one college-level course at the community college, although students in stats-intensive programs may be required to complete additional statistics courses after transfer. Until the <u>establishment of common learning outcomes</u> for the gateway courses in each of the three MTA pathways in 2018, statistics courses at Michigan community colleges typically required a prerequisite of intermediate or college algebra, and this requirement persists at some colleges.

Of the 14 colleges reporting adoption of either a dedicated support course or an embedded support model for statistics, seven reported being at scale right now or by fall 2022. The other seven were piloting or planning to scale, sometimes alongside parallel prerequisite remedial structures.

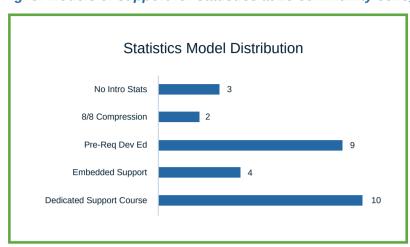


Fig. 3: Models of support for statistics at 25 community colleges

Preparation for Calculus

The pathway to calculus is the most complex of the three MTA mathematics pathways. This algebra-intensive pathway was designed to lead to calculus and beyond for students pursuing STEM majors, but also typically includes College Algebra. Alongside College Composition, College Algebra has long been regarded as a traditional core component of general education. However, as the Mathematical Association of America noted in <u>A Common Vision for Undergraduate Mathematical Sciences in 2025</u>, "[c]urrent college algebra courses serve two distinct student populations: (1) the overwhelming majority for whom it is a terminal course in mathematics, and (2) the relatively small minority for whom it is a gateway to further mathematics. Neither group is well-served by the traditional version of the College Algebra course."

In spring 2022, the majority of colleges were reporting that students in the calculus preparation pathway were very likely to encounter one or two prerequisite courses before enrolling in a gateway mathematics course with or without corequisite support. However, most of these prerequisite sequences have been compressed or otherwise shortened to reflect the requirements of PA 84. Thirteen colleges are currently piloting or beginning to scale up corequisite models.

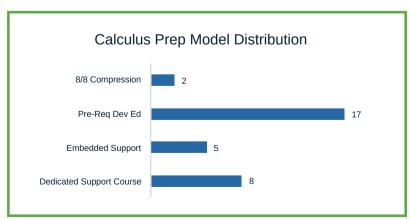


Fig. 4: Models of support for preparation for calculus at 28 community colleges

Placement Practices

The COVID-19 pandemic provided the impetus for changes in college placement policies. While some colleges were experimenting with new approaches prior to spring 2020, the closure of campus testing centers forced a movement to alternative measures, including the use of high school GPA or other grades and advisor-mediated placement. As proctored testing became more available online and campuses began to welcome students back for in-person registration, some colleges returned to relying on tests for placement, but were more likely to combine them with additional measures, providing more flexibility for students to qualify for gateway courses. Based on a body of national research, the MDEPR included a recommendation that colleges use a high school GPA of 2.5 or greater to allow students to enroll in gateway English or mathematics pathway courses without required support, and also recommended that a Guided Self-Placement (GSP) process be used when a student's GPA is below the threshold or the student left high school ten or more years ago. During the 2022 DE SOAA calls, MCSS found that placement models fell into the rough categories below, with colleges frequently employing different models for mathematics, English, and reading placement.

- Primarily Test-Reliant: Test-reliant colleges are continuing to use commercially available placement tools
 including ACCUPLACER and ALEKS to determine students' academic support needs. Despite the research
 indicating significant issues with reliability, ACCUPLACER is still the most common test being used. For
 mathematics, many colleges are using ALEKS, which can also provide tools for independent remediation.
- Primarily GPA-Reliant: A few colleges have moved away from tests and are relying on high school GPA to place most students.
- Multiple Measures: Most colleges are using some version of multiple measures to place students, and of
 these colleges, the majority are employing a "super-scoring" approach, where the student's best score on a
 variety of measures including SAT/ACT, placement testing, and high school GPA determines where they
 are placed.
- Guided Self-Placement (GSP): GSP involves providing students with information about the academic
 expectations of gateway courses and the available support, allowing students to choose for themselves
 whether or not to elect the support. While a number of colleges are investigating or planning to implement a
 GSP approach, very few colleges had systematically implemented GSP at scale in spring 2022. Those who
 have are focused on English.

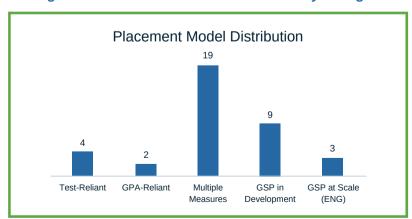


Fig. 5: Placement models at 28 community colleges

THEMES AND OBSERVATIONS

English Leads the Way

In 2013, with funding from The Kresge Foundation, 14 colleges began piloting sections of corequisite English based on Community College of Baltimore County's Accelerated Learning Program (ALP). An additional five colleges joined the network in 2014. By spring 2015, colleges implementing ALP had seen an average increase of over 50 percentage points in pass rates in gateway English for students placed in developmental English. By fall 2017, these efforts were fully scaled or in process at nine colleges, and by the time of the 2019 survey, 19 colleges reported adopting a corequisite model for English. This "head start" led to 24 colleges reporting being "At Scale" or "In Progress" in implementing corequisite models for delivery of gateway English composition courses. English departments are also at the leading edge of adoption of Guided Self-Placement, with three colleges reporting fully scaled GSP models. While there are significant differences in teaching and learning practices for English composition and mathematics, math faculty can look to their English colleagues for tips on structuring successful corequisite courses and designing GSP tools to speed implementation of these reforms.

Structural Flexibility

While most early adopters of corequisite instruction for English use the two course "ALP-style" model popularized by the Community College of Baltimore County, a number of Michigan colleges with corequisite courses in the development or piloting stages are using an embedded support model for both English and mathematics. This model appears to offer some advantages from a logistical perspective, primarily in ensuring that one instructor is responsible for both the gateway and support portions of the pairing. There may also be advantages in programming courses in this format both in space allocation and scheduling in the student information system.

Creative Solutions for Reading

Traditional prerequisite developmental education included pre-college level courses in mathematics, writing, and reading, corresponding to the typical sub scores on standardized tests such as the SAT and ACT. As part of the move to corequisite English instruction, most colleges have eliminated or greatly reduced their standalone offerings in reading, but still find that some students are challenged by college-level reading. Colleges have responded either by integrating reading instruction into the corequisite support for English, or by creating Integrated Reading and Writing (IRW) courses paired with either reading-intensive general education or credit bearing student success seminars. In these cases, students may be required to complete the IRW course prior to enrolling in the corequisite option for gateway English composition. Offering the IRW course as a corequisite with a general education course or with a success seminar maintains some credit momentum for these students while allowing them to hone their reading skills.

Leadership Matters

Making substantive change is never simple for colleges, and in the case of developmental education reform, colleges are working to transform structures that may have been in place for 30 years or more, impacting 20-40% of incoming students. In Michigan's decentralized community colleges, leading this policy change has largely fallen to mid-level managers at the dean or department chair level. These managers work to identify faculty champions who can initiate incremental changes. While commitment from the faculty is essential in any change process, senior institutional leaders play an indispensable role in accelerating transformation. One administrator noted that the ability to mobilize multiple units within the organization (academics, student

services, institutional research, registrar, etc.) was greatly enhanced when the president got involved. Building awareness that the senior leadership team is on board and supportive of the reform efforts also sends a strong message to the faculty, empowering champions and bolstering the efforts of mid-level leaders.

CONCLUSION AND RECOMMENDATIONS

Between 2019 and 2022 Michigan's community colleges have made important progress in implementing developmental education reform. Twenty-four colleges are delivering corequisite support for gateway English composition at scale, with three more colleges piloting or planning corequisite English in upcoming semesters. While adoption of corequisite models in mathematics has been slower, nearly half of colleges have begun implementing corequisite instruction for quantitative reasoning, while more than a third have done so for introductory statistics. Acceleration is also evident in the pathway to calculus, with many colleges using compression to significantly reduce levels of remedial coursework leading to college algebra. The work is impressive, but not complete. To keep the colleges moving forward over the next few years, a variety of supports will be needed.

Collect, analyze and share data on student outcomes and model efficacy.

In 2019, the Community College Research Center (CCRC) published an <u>analysis of key metrics predicting longer term success</u> for community college students. These leading indicators include rates of student completion of gateway college-level English and mathematics courses in the first year of enrollment. The study, including over 500,000 students at 75 community colleges, found that early momentum was associated with higher completion rates across student demographics. Developmental education reforms that accelerate students' progress, including adopting corequisite delivery and revising placement practices, allow more students to enroll in gateway courses in their first or second semester. The MCSS is partnering with Michigan's Center for Educational Performance and Information (CEPI) which has begun collecting and analyzing gateway course completion to provide a statewide baseline for determining the effectiveness of reforms at scale across colleges. At the same time, tools like the DE SOAA can provide detailed, qualitative information on reform models at individual colleges.

Provide professional development resources for faculty and staff implementing reforms.

Adopting new placement models and delivering instruction in new formats will require investments of time and resources from colleges and the state. Thanks to a new investment from the Kresge Foundation, MCSS is partnering with Achieving the Dream, an organization dedicated to increasing success at community colleges by providing colleges with integrated, tailored support for every aspect of their work, including developing customized workshops and multimedia resources for instructors, advisors, and administrators involved in developmental education reform. These efforts will be supported by a peer-to-peer mentoring network pairing practitioners from colleges experienced with various reforms with colleges in earlier stages of adoption.

Communicate to develop and support today's and tomorrow's leaders.

Research across a wide variety of initiatives has demonstrated the importance of support from senior leadership, including the president, cabinet, and even trustees, in encouraging substantive change in institutional policies and practices. Leaders who understand what is at stake for students and their institutions,

along with external support from employers, policymakers, and the general public, will ensure that colleges are well-positioned to mobilize the resources needed to implement and sustain reform efforts over time. MCSS is partnering with <u>Sova</u> and Paul Fain of <u>Work Shift</u> to develop a messaging framework that communicates the potential of developmental education reform to streamline Michigan's talent pipeline and increase equitable opportunity for community college students across all colleges and programs. This campaign will target institutional leaders at all levels, as well as the business community, state government, and philanthropists to raise awareness of the urgency of this work. We will also leverage the MCCA's cohort-based <u>Leadership Academy</u> to build a cohort of emerging leaders who will ensure that progress continues over the next decade.

Involve partners in other education sectors.

While developmental education reform must take place within community colleges, the colleges cannot operate in a vacuum. Connection with K-12 and bachelor's degree-granting institutions will increase the likelihood of realizing the full potential of reform efforts. In partnership with local school districts, colleges can develop high school-to-college transition courses that allow students to gain the skills they need to be successful in gateway courses, with or without corequisite support. Community colleges should also collaborate with public and private universities to ensure that gateway courses in English composition and mathematics pathways transfer with minimal loss of credit, boosting students' likelihood of timely degree completion. MCSS will partner with the Michigan Department of Education, the Office of Sixty by 30, Michigan College Access Network, Michigan Association of State Universities, and Michigan Independent Colleges and Universities to develop strong linkages at both ends of the P-20 education pipeline.

CONNECTING WITH CENTER EFFORTS

The Michigan Center for Student Success received a generous grant from The Kresge Foundation, in part to support the implementation of accelerated developmental education and Guided Self-Placement practices at Michigan community colleges. Stay connected and get engaged with work at the MCSS by reviewing <u>initiatives and resources</u> on our website, registering for <u>events</u>, and following us on <u>LinkedIn</u> and <u>Twitter</u>.



