

High Impact Practices Resource

Scaling the New Mathways Project

Developed by MDRC in collaboration with the Dana Center

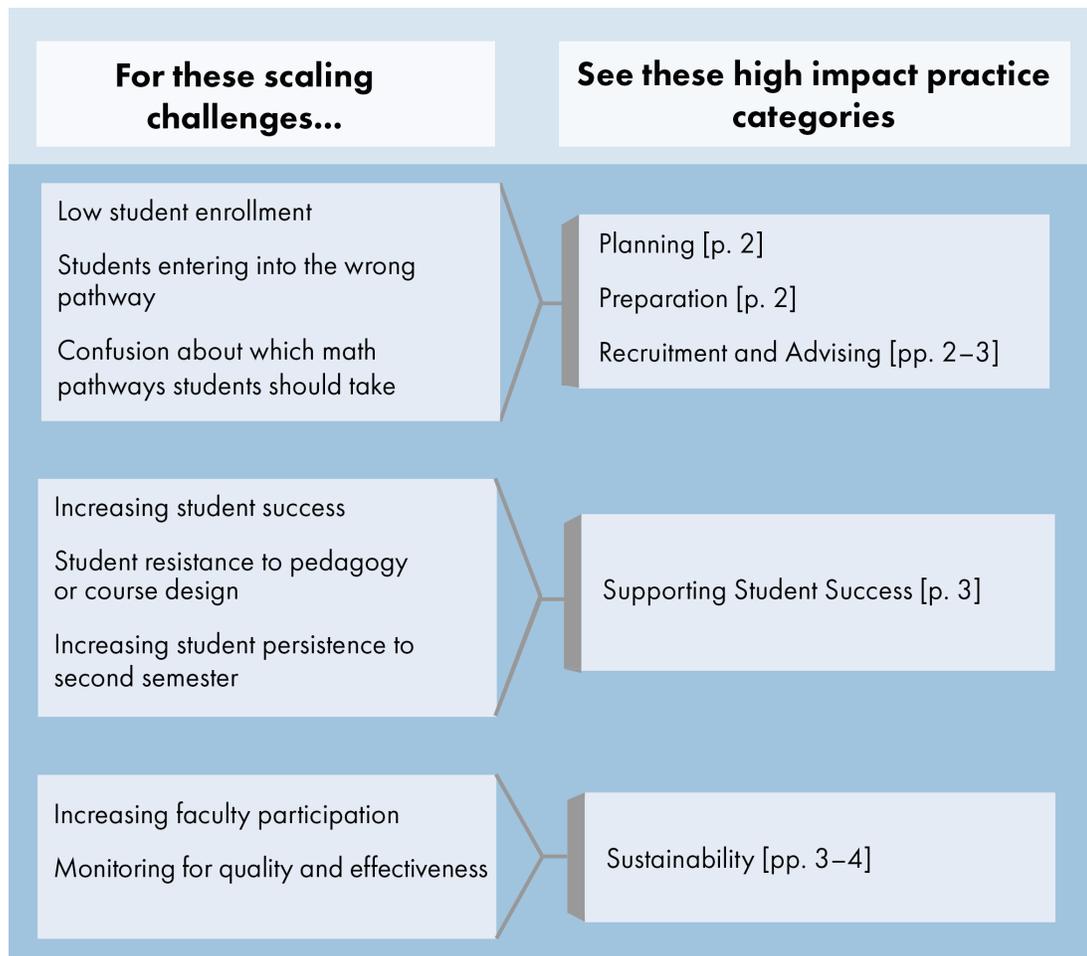
THE
New Mathways
PROJECT

Purpose: Based on implementation experiences of the NMP codevelopment colleges, we created a summary of *high impact practices*—that is, specific practices that show promise for helping colleges make good progress on scaling the NMP program and increasing student success. Our list of high impact practices is not exhaustive, but it does represent some key examples across a range of NMP implementation topics. See the *New Mathways Project Implementation Guide* for more in-depth information: http://www.utdanacenter.org/wp-content/uploads/2014_NMP_Implementation_Guide_March2014.pdf.

It is not possible to work on every practice at the same time. We suggest focusing on a few practices based on priority needs. The high impact practices are organized into five categories based on particular challenges to scaling. These categories are summarized below for quick reference.

The *High Impact Practices Planning Tool* can be used to guide discussion about how to implement the practices.

Users: Administrators, math faculty, advisors



Planning (See pp. 9–17 of the *NMP Implementation Guide*)

Carefully consider your institution's needs in order to implement a sustainable, institution-wide reform.

- Use data to identify and target the pool of students.
 - Review data on the numbers of students in programs, where students transfer, and with what majors. Prioritize high enrollment programs for student recruitment and, if necessary, negotiating changes to math requirements. Focusing on high enrollment majors at your institution and at local transfer institutions will yield greater impact than attempting to change policies for programs in which your students rarely enroll.
- Identify and limit barriers to student eligibility and interest.
 - For example, can students who have already taken a student success course enroll in *Foundations of Mathematical Reasoning* without *Frameworks for Mathematics and Collegiate Learning*? Does financial aid cover all NMP courses offered? Does participation in other programs limit student access to the math pathways courses?

Preparation (See pp. 27–31 of the *NMP Implementation Guide*)

Plan for scalability, and address any concerns and challenges before they become larger implementation issues.

- Make the NMP the default for the target population.
 - For certain programs of study, NMP should be the expected route. Students, advisors, and faculty should begin to regard algebra-intensive developmental classes and college algebra as the exception (preferred only for certain circumstances) rather than the rule for many students.
- Make scheduling decisions based on the needs of the target population.
 - Avoid conflicts with key courses in targeted programs and offer the NMP at a variety of times aligned with student needs.
- Use course and program titles that are student-friendly and that make sense within your institution. For example, the name “New Mathways Project” will not necessarily be meaningful to students.

Recruitment and Advising (See pp. 32–34 of the *NMP Implementation Guide*)

Scaling a math pathway requires a great amount of buy-in and collaboration from advisors, faculty, and students. For recruitment and advising to run smoothly, ensure that communications are clear and informative.

- Help counselors and advisors understand how the NMP helps students.
 - Show advisors and counselors how college-level algebra may not be relevant to many careers or programs of study. Utilize data and published reports to make the case for math pathways.
 - Clarify transferability of the NMP, particularly in the most common majors and with your main transfer institutions. Surface myths and misconceptions.

- Use multiple methods of communication to inform students.
 - College websites, course catalogs, in-class or orientation presentations, and direct emails or phone calls to targeted students can be effective modes of communication.
 - When possible, set specific appointments for advising or registration rather than inviting students to come in whenever they are available.
 - Ensure that all materials advertise the *benefits* of the program to the target population in student-friendly language.
- Normalize the enrollment process for students and advisors.
 - The NMP should not be treated as a “special program” but as a regular and key part of the college’s math offerings. Students should be able to enroll in NMP courses using the same processes as for other courses.

Supporting Student Success (See p. 36-37 of the *NMP Implementation Guide*)

Some of your institution’s existing student support methods may be useful for the NMP; others may need to be revised to help students prepare for their NMP courses and to keep them on track for transfer.

- Present a strong orientation to the math course in the first week of class.
 - A strong, face-to-face orientation during the first week will help students better understand the expectations and culture of the class. Help students understand how the NMP course is different from other math courses and explain the reasons for these differences.
- Align tutoring with courses.
 - Inform and train tutors so that their understanding of math is specific to the NMP courses.
 - Consider any technology and additional resources that can be made available to help students succeed in their NMP courses.
- Encourage students to register for the second semester.
 - *Foundations* faculty should remind their students to register for the second course in the sequence when the registration period is approaching. Conduct outreach to students who have not registered before the end of the first semester.
 - Talk to students throughout *Foundations* and *Frameworks* about the concept of a math pathway. Encourage them to see that completing the college-level math course is the end goal.

Sustainability (See pp. 18–26 of the *NMP Implementation Guide*)

Long-term scale will depend on broad involvement of faculty and staff. Individuals who participated in the work early on should remain informed about progress and continue to contribute. Additional faculty and staff need to become engaged and take meaningful roles. You should plan strategically for how you will continue to share information and build institutional capacity to meet scaling goals.

- Support your faculty and staff.
 - Send faculty and staff to Dana Center training sessions, or establish local training or discussion forums. Foster faculty and staff engagement in continuous improvement.

- Provide local mentors for faculty and advisors.
- Encourage connections with faculty and advisors at other colleges, particularly with those nearby with whom your institution may share transfer partners.
- Share updates and data. Celebrate institutional and individual milestones and achievements.
- Secure ongoing leadership support and oversight.
 - The leadership team should continue to meet regularly as the college moves towards scale.
 - Senior administrators should receive regular updates. They should continue to highlight the NMP work for the rest of the college.