

The Success of Co-requisite Supports

While there are many versions of co-requisite remediation, the broad definition refers to the placing of students who have been designated as underprepared directly into college-level courses and providing necessary additional supports. As the result of co-requisite support strategies that were implemented across the country, institutions and states are seeing double and triple the number of students passing their first college-level mathematics course, and in half the time or less.

How are they gaining these results? Institutions have made structural and cultural changes to their mathematics offerings that address the following issues that have long negatively impacted developmental mathematics students.

A hidden nuance of the co-requisite model is to meet students where they are academically and provide them with the content and strategies they need to succeed in their college-level courses.

- Long developmental sequences were designed to give underprepared students more time to master mathematical concepts and to improve success in the college-level course. However, that well-intentioned goal has not been attained.
- The long sequences increase the time between the learning of content in the developmental course and the application of that content in the college-level course.
- The content in the developmental course may not support the student's college-level course.
- Referral to remedial or developmental courses holds a stigma and contributes to further disenfranchisement of students designated as underprepared.

Many decisions must be made in collaboration among faculty, advisors, administrators, and financial aid staff to design and construct the co-requisite model(s) that will best serve each institution. Some points for discussion are listed below.

Consideration 1: Existing campus supports

- Are there other initiatives on campus, such as guided pathways work, examining content, pedagogy, alignment, enrollment, persistence, etc.? What other on-campus resources can be accessed?

Consideration 2: Co-requisite model (placement, credit hours, financing)

- **Placement:** What information is used to determine the default enrollment for students into their mathematics courses?
 - How will you determine which students are best served by a one-semester co-requisite structure or by a yearlong sequence?
 - Consider giving students information about support options and allowing them to choose.
- **Student structures**
 - **Co-mingling:** Mixing college-ready and underprepared students in the same class. Underprepared students are provided additional supports.
 - **Cohorting:** Designating certain sections of college-level courses exclusively for underprepared students. Additional supports may be embedded or separate.

- **Calendar structures**

- **Just-in-time supports**

- **Support courses:** Separate, structured support courses that run before, after, or on opposite days to the college-level courses; completed within one semester
 - **Embedded supports:** College-level classes with the developmental content embedded
 - **Mandatory tutoring:** Required attendance in a tutoring lab for a specified number of hours per week

- **Prerequisite supports + college-level; one semester**

- **Boot camp:** First 3-5 weeks of the semester are remediation, followed by the college-level content (classes meet for extra hours each week throughout the semester in order to equal the two classes or class + lab)
 - **Compressed courses:** Developmental prerequisite class is compressed into 8 weeks, and then the college-level class is compressed into 8 weeks, so that both classes are completed in one semester (classes meet for extra hours each week throughout the semester in order to equal the two classes).

- **Just-in-time supports; two semesters**

- **Stretch courses:** College-level classes with the developmental content embedded, and stretched over two semesters (e.g., Statway model)

- **Grades:** Whether to give one grade or separate grades for the two portions
- **Staffing:** Determining whether the college-level instructor will also teach the support/developmental portion
 - If separate instructors, what mechanisms will be in place to foster coordination between instructors?
- **Credit hours and financing**
 - How many hours do students attend the college-level portion?
 - How many hours do students attend the support/developmental portion?
 - How many hours do students pay for?
 - How do the hours count in the instructor's teaching load?

Consideration 3: Co-requisite content

- What are the essential foundational concepts that students need to know in order to be successful in the college-level course?

Consideration 4: Cultural shifts

Cultural shifts in both the college-level and the support classrooms can contribute to the narrowing of the gap between instruction and supports.

- **Collaborative work** can contribute to the formation of peer support groups.
- **Early referral** can increase success and decrease withdrawals.
- **Explicit instruction** in goal-setting, self-regulation, and the value of struggle can increase persistence.
- **Ongoing formative assessment** can result in early intervention and increased success.

Implementing such shifts can pay off in students' increased sense of belonging both in the class and on campus, as well as increased feelings of capability and purpose.