COLLEGE STOPS BEFORE IT REALLY BEGINS FOR FAR TOO MANY STUDENTS.
These students enroll in college only to be told that they are not ready for college-level coursework. Historically, colleges and universities have attempted to close this gap by placing these students, who are disproportionately Black, Latinx, or experiencing poverty, in prerequisite remediation. Forced to pass a long series of non-credit-bearing courses before they can even access their gateway college-level math and English courses, these students all too often get stuck and stop out.

As an original member of the Complete College America (CCA) Alliance of States, the University System of Georgia (USG) has taken a different approach, which CCA calls corequisite support. In the corequisite model, students immediately enroll in credit-bearing courses while receiving the extra support they need to complete gateway college-level courses. Since USG implemented the corequisite approach statewide in 2018–19, it has more than tripled the percentage of students who have successfully completed gateway math courses and significantly increased the percentage who have completed gateway English courses.

CCA’s No Room for Doubt report lays out the case for why moving corequisite support from idea to imperative is crucial for states and systems. It shows that the corequisite model not only improves outcomes for all students but also is a strategy to close institutional performance gaps and meet equity goals. In addition, the report provides best practices for how to implement and scale corequisite support effectively.
WHAT IS COREQUISITE SUPPORT?
In traditional prerequisite remediation, students were seen as falling short, and the message that they received was that they were not good enough. To fill perceived shortcomings in their knowledge and skills, institutions required them to pass a long series of non-credit-bearing courses. Students had to complete the series before they could enroll in gateway college-level courses.

In the corequisite model, institutions signal confidence in students’ ability to succeed by immediately enrolling them in credit-bearing, college-level courses while simultaneously providing the additional support they need in corequisite courses. The corequisite courses teach, review, practice, and work through concepts as they come up in the college-level classwork. The most successful models combine teaching content with strategies to engage students, increasing students’ agency and helping them build momentum toward college completion.

To find out more about corequisite support and how states can move from idea to imperative, download a copy of Complete College America’s 2021 No Room for Doubt report at https://completecollege.org/article/coreq-report/.

Even with this guidance, states and institutions will have many decisions to make about the best way to design corequisite support to meet their students’ needs. This brief explores in more detail how USG approached implementation when it scaled corequisite support statewide. It describes the different options the system provided to individual institutions and how the system is evaluating those options to determine which ones provide the most benefit for students, particularly those who are Black or Latinx, are experiencing poverty (defined in this brief as being eligible for federal Pell grants), or are the first in their family to attend college.

CLARIFYING LANGUAGE
In discussing the people most affected by racial inequity in education, CCA aims to choose words that underscore essential ideas, see and acknowledge the people most affected by inequity, and are clear and consistent across our communications. We use the following terms in this report:

HISTORICALLY EXCLUDED/UNDERREPRESENTED/UNDERSERVED. All of these terms refer to groups that have been denied access to resources (e.g., education and health care) as a result of institutional racism. CCA uses historically excluded because it is the most accurate of the three terms.

INSTITUTIONAL PERFORMANCE GAPS. These are gaps among student groups in completion rates and other outcomes. This term puts the focus on the structures and systems that are the root cause of inequities, whereas the term equity gaps implies that students are the cause of (and/or are responsible for changing) the results.
Overall, the results are undeniable: Students at USG are benefiting from corequisite support. Since the system implemented the model statewide in 2018–19, far more of the 26,000 students who have received corequisite support have successfully completed gateway courses than the students who previously received traditional prerequisite remediation. At the same time, institutional performance gaps have narrowed significantly or even been eliminated. All groups of students, including Black and Latinx students, students experiencing poverty, and first-generation college students, are passing gateway courses at the same or similar rates. These and other findings from USG’s research refute some common misperceptions about corequisite support:

**MYTH**
Corequisite support is not important because successfully completing a gateway course in the first year does not mean a student is more likely to graduate.

**FACT**
USG students who successfully complete their gateway math and English courses, defined by the system as earning a grade of C or better in the student’s first academic year, are more than 10 times as likely to graduate with a credential of value as students who do not.

**MYTH**
Corequisite support benefits students who are better prepared, but it does not work for students who are less well prepared.

**FACT**
When evaluating corequisite support, USG looked at several common indicators—ACT math/writing subscores, SAT math/writing subscores, and high school grade point average—to understand the preparation levels of incoming corequisite students. No matter which indicator USG used, the findings were the same: Corequisite support improves results for USG students at all levels of prior preparation.
<table>
<thead>
<tr>
<th><strong>MYTH</strong></th>
<th><strong>FACT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Corequisite support works at only some schools.</td>
<td>The USG system consists of 26 public state institutions, including small, medium, and large schools; open access and highly selective schools; rural, suburban, and urban schools; community colleges; research universities; Historically Black Colleges and Universities; and Hispanic-Serving Institutions. When data on corequisite student success are disaggregated to look at outcomes at individual schools, the findings indicate significant improvement across all types of USG institutions.</td>
</tr>
<tr>
<td>Corequisite support improves success rates for all student groups but does not close gaps separating the groups, so it is not really an equity strategy.</td>
<td>At USG, not only did success rates improve for all students, but corequisite Black, Latinx, and White students; students experiencing poverty; and first-generation students all complete gateway courses at very similar or the same rates. This is equity in action.</td>
</tr>
<tr>
<td>The benefits of corequisite support decline after students pass their gateway courses.</td>
<td>Results for USG show that corequisite students who successfully pass their gateway English course (English 1101) enroll in English 1102 at higher rates than students who received other forms of developmental education before corequisite support was implemented. Moreover, corequisite students go on to pass English 1102 at higher rates.</td>
</tr>
</tbody>
</table>
Corequisite Support Dramatically Increases Completion of Gateway Courses in USG...

...And Shrinks Institutional Performance Gaps Across Student Groups

**Math**
- **2013-14 Prerequisite remediation**: 20%
- **2018-20 Corequisite support**: 66%

**English**
- **2013-14 Prerequisite remediation**: 45%
- **2018-20 Corequisite support**: 69%

**Percentage of students successfully completing gateway courses**

<table>
<thead>
<tr>
<th></th>
<th>Latinx</th>
<th>White</th>
<th>Black</th>
<th>Pell eligible</th>
<th>1st generation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Math</strong> All Students</td>
<td>70%</td>
<td>68%</td>
<td>64%</td>
<td>67%</td>
<td>67%</td>
</tr>
<tr>
<td><strong>English</strong> All Students</td>
<td>76%</td>
<td>74%</td>
<td>66%</td>
<td>68%</td>
<td>67%</td>
</tr>
</tbody>
</table>

Corequisite Works: Student Success Models at the University System of Georgia
DESIGNING SUCCESS: HOW USG DEVELOPED AND EVALUATED ITS COREQUISITE MODEL

Laying the Foundation, but Providing Flexibility

While corequisite support clearly benefits USG students, there are many ways to design it. For example, do the college-level courses include only corequisite students or a mix of corequisite and noncorequisite students? Are the corequisite and college-level courses taught by the same faculty or different faculty? How many contact hours per week does each corequisite support course include?

USG chose to focus on three design principles:

- All students enroll directly into a college-level mathematics or English course that satisfies a general education requirement.
- Corequisite students are required to also attend a corequisite support course that includes one to three contact hours per week and is aligned with, and offered alongside, the appropriate college-level course.
- The corequisite support course is designed specifically to help students master the skills and knowledge required for success in the accompanying college-level course.

With those three principles as the foundation, each institution was able to choose from one of the 12 possible strategy combinations (see p. 7).

Maximizing Benefit

After implementing corequisite support, states and institutions will need to evaluate whether certain strategy combinations benefit their students more than other combinations. This evaluation will help ensure that all students are getting the support they need and that institutional performance gaps are closing.

When evaluating the results of each of its possible strategy combinations, USG controlled for students’ prior level of preparation. That way, it could ensure that the classes seeing the most benefits were not those that simply had the best prepared students. To do this, the system:

- Used student-record and course-scheduling data to identify which strategy combination each corequisite student experienced in English and math in fall 2019 and their prior level of preparation (based on ACT writing/math subscore).
- Calculated average expected success rates for students at each level of prior preparation.
- Determined the level of benefit of each strategy combination by comparing the actual success rate to the expected success rate (based on the level of prior preparation of students that experienced that strategy combination).
SUCCESS IN COREQUISITE COURSES VARIES BASED ON THE MODEL

USG institutions picked from 12 possible corequisite strategy combinations:

- Only Corequisite Students
  - Same instructor, college-level and corequisite classes
  - Different instructor, college-level and corequisite classes
  - Number of corequisite hours: 1, 2, 3

- Combined Students*
  - Same instructor, college-level and corequisite classes
  - Different instructor, college-level and corequisite classes
  - Number of corequisite hours: 1, 2, 3

*Corequisite and noncorequisite students

To determine which combinations worked better for students, USG compared the actual success rate for each combination to the expected success rate. While students in all corequisite models succeeded at higher rates than they did in traditional prerequisite remediation, some combinations benefited students more than others.

Actual success rate – Expected success rate = Benefit for students

ENGLISH

MATH

Note: The institutions did not use every possible combination. If results are not shown, the combination was not selected by any USG school or the number of students experiencing that combination was too small to report. For more information about the study, including levels of statistical significance for the findings, visit completegeorgia.org/success-library.
Results at USG

No matter which strategy combination an institution used, more students completed their gateway courses when they received corequisite support than they did when they received traditional prerequisite remediation.

ENGLISH

Across USG, English corequisite students received the most benefit from having:

- Only corequisite students in the college-level course.
- The same instructor for both the corequisite support and college-level courses.
- At least two contact hours per week for the corequisite course.

They benefited the least from strategy combinations that provided only one hour of corequisite support each week.

These results held true for Black and Latinx students, although Latinx students also benefited from a strategy combination with a mixed class, the same instructor, and three contact hours.

MATH

The results from this analysis are less clear cut in math but show that students, especially Black and Latinx students, benefited more from strategy combinations with:

- The same instructor for both the corequisite support and college-level courses.
- At least two contact hours per week for the corequisite course.

They benefited the least from strategy combinations that provided only one hour of corequisite support each week.
MINDSET: GOING BEYOND STRUCTURE

USG’s progress is remarkable: Implementing corequisite support clearly has benefited USG students. By focusing on the shortcomings of the structures in higher education rather than the perceived shortcomings of students, the corequisite approach has resulted in improved outcomes and helped close institutional performance gaps.

But even with improved success rates, USG is working to increase the number and percentage of students who complete the gateway math and English courses in their first year. To meet this goal, reforms must go beyond structure to engage students in their learning and foster productive academic mindsets.

At USG, a productive academic mindset for students includes traits such as understanding the purpose of coursework; believing that they can learn the material; and persevering, even though they may struggle at times. Fostering this mindset in the classroom starts on day one and continues through the semester. In the textbook *College Algebra with Support*, Andrea Hendricks, senior director of online initiatives at USG’s Perimeter College, outlines a number of strategies to develop a productive academic mindset in online math corequisite courses, including the following:

- Administering a survey about students’ attitudes toward math three times during the semester. The survey asks students to reflect on their feelings about math and their math ability, prior experiences that led them to develop those feelings, and whether and how their attitudes and approaches to solving math challenges have changed over the course of the semester.

- Requiring each student to set specific goals for themselves at the beginning of the course, including three things they can do to meet their goals. They assess their progress toward those goals at the mid-point of the course and determine whether they met their goals at the end.

- After teaching new concepts, asking students to summarize what they have learned and how this information connects to previous concepts.

- Asking students to reflect after each test on what they did to prepare for the test, how effective that preparation was, and what they might do differently for the next test.

Combining corequisite support with strategies such as these—as well as culturally responsive teaching practices (see box on p. 10)—has multiple benefits: It helps institutions not only address the needs of all students but also the specific needs and goals of individual students, especially Black and Latinx students and others who have been historically excluded from higher education.
CULTURALLY RESPONSIVE TEACHING

For many students, corequisite support begins to remove the “othering” that they often experienced in traditional prerequisite remediation. Many systems and institutions across the country are taking this process even further by implementing culturally responsive teaching. This effort is aimed at helping Black and Latinx students feel connected to their institutions and validated as learners, which builds a sense of belonging—another critical trait of fostering a productive academic mindset.

This work includes developing a curriculum that features historical materials and culturally relevant examples with a social justice focus. For example, a lesson on percentages can address the average differences between mortgage rates for Black and Latinx homeowners compared to White and Asian homeowners. Through lessons such as this, students learn not only about math content but also about how it is connected to real-world applications that can inform racial and social injustice.

Without a doubt, corequisite support works at USG. An original member of the CCA Alliance of States, Georgia has long been a leader in working with CCA to reimagine higher education and create scalable, sustainable change by aligning policy, perspective, and practice.

As part of its efforts to build momentum toward college completion and eliminate institutional performance gaps, particularly for historically excluded students and students experiencing poverty, CCA is continuing to work with Georgia and other states and systems across the nation to replicate this success. CCA will support these states, systems, and institutions to assess what is working, identify what needs to improve, and redouble efforts to ensure that every student—not just those deemed “prepared”—succeeds.

If you are looking to get started with corequisite support or go deeper with your implementation, CCA stands ready to help you identify next steps. Reach out to your Strategy Director today at info@completecollege.org.
ACKNOWLEDGMENTS

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