EXECUTIVE SUMMARY/INTRODUCTION
This project seeks to address the need for greater support for academically underprepared students in “gateway” English and math courses at Ohio’s community colleges. This proposal calls for the creation of a resource network and repository devoted to helping connect faculty, staff, and administrators working on corequisite remediation at Ohio’s 23 community colleges. By augmenting the work already done by OACC, the proposed Corequisite Support and Resource Consortium would help connect faculty and staff working through the various stages of corequisite scaling, implementation, and maintenance at schools across the state.

RELEVANT LITERATURE REVIEWED
One of the greatest hurdles for community college students can be completion of so-called “gateway” math and English coursework. Often, these courses function as prerequisites to other courses and programs throughout the college, and students who struggle to finish those courses are often far less likely to continue on to complete a degree or a certificate program at that college. Across higher education, schools have worked to find ways to increase student completion of these gateway courses within the first year (or even semester) of a student’s enrollment.

Traditional pre-requisite models (also known as developmental or remedial coursework) have been largely found to be ineffective in increasing subsequent student success in credit-bearing gateway courses (Complete College American, 2012; Community College Research Center, 2014). Further, traditional placement associated with developmental models often disproportionately disadvantages students of color, thereby reinforcing existing equity gaps (CCRC, 2021).

One strategy embraced by many colleges and universities is to replace or augment existing developmental education programs with some kind of corequisite or bridge program. Corequisite remediation programs are designed to increase the likelihood that students who traditionally would have placed into a non-credit, developmental
course would instead be able to complete their credit-level English or math course while receiving additional support (see the Ohio Department of Higher Education’s Bridges to Success page for an explanation of the corequisite remediation model). Colleges have implemented a variety of systems to try to improve completion rates in these courses, and these models have been found to be largely successful (Ran & Lin, 2019; Childers & Shi, 2021; Petillo & Anuszkiewicz, 2022). However, corequisite remediation can be implemented in a number of different ways. The Ohio Strong Start to Finish Forum’s corequisite English and math implementation reports, for example, outline multiple different models used at various colleges and universities (Ohio Department of Higher Education, 2020). With the variety of available options, then, sometimes it can be difficult to determine which approach might be suitable for a given institution.

DATA EXAMINED
As a part of Ohio’s funding model, all 23 community colleges in the state regularly track and report data on gateway courses. The reliable availability of that data might suggest that it would be easy to determine how programmatic changes to math and English curriculum affect outcomes in those key courses. However, without an understanding of the full institutional context behind the data, it can be difficult to determine the causal relationships of improvements (or declines) in a given area.

For example, at one mid-sized community college, the math program began investigating a shift to corequisite remediation in 2018 as a part of the college’s participation in the Strong Start to Finish program. In AY 2018/19, they began piloting a corequisite pathway for Elementary Statistics wherein students who tested below placement for the course would be enrolled in an additional lab course alongside the Statistics course. Previously, students with the same placement results had been required to pass a developmental-level math course before they could enroll in the credit-level gateway Statistics course).

Given the promise of the corequisite model, the expectation might be that the school would have seen an increase in completion of college math in year 1. However, according to the data collected by the Ohio Department of Higher Education and analyzed by the Community College Research Center, the completion rates for college math in 2018 and 2019 did not show improvement and remained relatively flat:

**Percentage of students who completed college math in year 1 (by fall FTEIC cohort):**

- 2017: 13%
- 2018: 14%
- 2019: 13%
(as reported in the OACC Early Momentum Metrics Tableau created by John Fink et al., for the Ohio Association of Community Colleges, the Community College Research Center, and the Success Center for Ohio Community Colleges)

Why did the shift to the corequisite model for the Statistics course not change the math completion rates for this institution? Without having the full context for the situation at the college, it would be fairly difficult to hypothesize just how this initiative impacted outcomes for students. However, some conversations with faculty and administration at the school quickly helped shine some light on the situation. Those stakeholders reported that corequisite remediation was only implemented for the Statistics course and not for any other math curriculum at this particular college. The overall math completion statistics, then, do not give an accurate picture of the success of the corequisite model as implemented in the Statistics course.

As with any data set, these complications are to be expected, and so it is critical to consider all such metrics within the complex local context of the school. However, those contexts are often not readily available to researchers and practitioners alongside the data being reported to ODHE. This project, then, seeks to augment the data about gateway completion that is already available to Ohio community colleges with a more qualitative and multifaceted set of resources. Making institutional and programmatic contexts a part of the sharing of our data allows all of us to benefit from the work being done at schools statewide. Additionally, making specific space for practitioners to network and share their unique situations allows everyone involved to understand more fully the possibilities and realities of the many strategies being used to address gateway completion for underserved populations.

**PROPOSED CHANGES/REFORMS TO BE ADOPTED**

The ultimate success of a given corequisite remediation model depends on a number of factors: the institution’s resources, student population, community, faculty makeup and buy-in, etc.. Given all these factors, often determining which models might work for a particular school can be a difficult process. The biggest barrier for most schools seems to be simply clear evidence of outcomes: while there is a lot of literature and data out there, the long-term success of these models is hard to gauge. What works well at one school may not work as well at another. Additionally, faculty and administrators charged with developing corequisite models may not have the background or full context to choose a model that works well for their specific situation.

We propose a state-wide Corequisite Support and Resource Consortium. This consortium’s primary function would be to maintain an online site that, among other things, outlines the various corequisite models being used in the 23 Ohio community
colleges. Colleges would be asked to submit information on a biennial basis that includes an overview of the following:

- Corequisite models currently fully scaled in math and English
- Corequisite models currently being piloted
- Corequisite models piloted in the past (but not fully scaled)
- Updated points-of-contact for math and English corequisite leads

The last component is perhaps the simplest but also the most important: often, the individuals charged with implementing corequisite reform have very few subject-matter expert connections outside of their home institution. This consortium builds a network that allows faculty, staff, and administrators to reach out to other schools who have done or are doing similar work to discuss both the benefits and challenges of various corequisite implementation strategies.

In addition to maintaining the above-described resource site, the consortium would also offer annual meetings to make space for discussion and networking. Schools within the Consortium would be invited to speak on the various models in a roundtable-type setting each year. This would be a logical extension of some of the work already begun by the 18 Ohio community colleges that were a part of the Ohio Strong Start to Finish initiative (2018-2021) and also by OACC itself.

**IMPLEMENTATION CHALLENGES**

The first implementation challenge will be determining which entity will take the lead in coordinating the Consortium. This entity would need to be either at the forefront of implementation, or uniquely positioned and able to bring the 23 Ohio Colleges together. If one College were to decide to take on this Consortium, perhaps they would have already found success in their corequisite model. They would then be able to share this information, along with the supporting data, with the other Colleges. If we instead go the route of a uniquely positioned entity, this may lead us to the Ohio Association of Community Colleges. The work that has already been started by the OACC is greatly appreciated and may be a good stepping stone for this Consortium.

The next challenge will be funding. There are a number of ways to fund, however, there are two that stand out. The first would be to collect a fee from any College that would like to participate in the Consortium. The fee would be to cover only the cost of the Consortium, meaning the website and the annual meeting expenses. The second funding possibility would be a grant. There are many opportunities for higher education grants specifically regarding corequisites, however, the entity implementing would drive the specific needs.
We would then need to connect the Colleges through a network of people. We suspect the OACC Cohort fellows may be willing to assist with getting the Consortium in touch with those at their College who would benefit most. Mainly we would be looking to engage deans, chairs and faculty in Math and English. We would want to involve the individuals who would be helping with implementation in order for them to be able to connect with others in the State with their questions. Depending on the structure of each College, it would also potentially be wise to involve the Vice President of Academic Affairs or Provost. This person could help from a high level to get the correct individuals on the team.

Lastly is the challenge of whether or not the Colleges will participate in the Consortium in a meaningful way. Colleges are typically trying to get students a degree that will propel them to a rewarding career as quickly as feasible. This core fundamental goal drives all decisions made at all colleges, which would be the first step towards meaningful participation. The quality of the information gathered and subsequently provided to participants will be a vital piece of participation as well. There would need to be feedback loops in place that are actively and thoughtfully monitored. Finally, the connections made at the networking events would need to be carefully orchestrated. There would need to be individuals with similar roles put into trainings that encourage connection between them. There could also be an email contact group, or groups, that link those involved in the implementation. This would be a lifeline for questions and assistance for those that are in the process of determining any particular step in the implementation process. This networking is critical for the success of the Consortium and should be a focus of the entity that is taking the lead.

CONCLUSION
Gateway course completion is one of the most integral components of student success in Ohio’s community colleges, and studies have shown that the current model of developmental education is largely ineffective and inequitable. Ohio educators are working hard to improve gateway completion outcomes and to close equity gaps for students using a number of corequisite models. As with any complex educational issue, multiple strategies are being developed simultaneously at different institutions, all with the goal of finding solutions to this critical problem. This project proposes that groups like OACC work to create and support a dedicated group for individuals and schools to access information and points of contact at other institutions throughout the state. The development of this Corequisite Support and Resource Consortium would enable community college educators throughout Ohio to leverage the good work happening at other schools while providing personal connections and advice networks to help encourage development and maintenance of corequisite programs in our schools.