Corequisite Research Design Collaborative (CRDC)

2022 Convening Proceedings

Executive Summary

In 2020, the Charles A. Dana Center launched the Corequisite Research Design Collaborative (CRDC), funded by the Bill and Melinda Gates Foundation. The goal of the collaborative was to promote collaboration between researchers, practitioners, policy leaders, and institutions to improve and expand supports for corequisite implementation centered on the student experience, particularly the experiences of Black, Latino, and Indigenous students, and students experiencing poverty.

Institutional implementation within the CRDC focused on developing and testing strategies to inform students about the wraparound and non-academic supports available to them, and on developing processes for embedding holistic student support throughout the corequisite design and implementation process. At the research and policy level, the primary focus was answering the question "Why do some institutions struggle to design and implement corequisite supports even when systemic enabling conditions—such as mandates, state-level initiative support, and policy conditions—exist?" Dr. Sean Pepin's report, *The Challenges of Scaling Gateway Mathematics Corequisites: Recommendations for Policy and Practice* (2022), addressed this question and identified several key enabling conditions and challenges to corequisite implementation.

In summer 2022, the CRDC convened the member researchers, practitioners, and policy leaders for a two-day meeting to explore the findings of Dr. Pepin's report, discuss recent findings and learnings about effective corequisite design and implementation, and identify open questions that should inform the field's future research and focus. The following institutions and organizations were represented at the convening: American Association of Colleges and Universities (AACU), California Acceleration Project (CAP), the Center for the Analysis of Postsecondary Readiness (CAPR), Center for Community College Student Engagement (CCCSE), City University of New York (CUNY), Complete College America (CCA), Houston Community College, Louisiana Board of Regents, Saint Cloud State University, Saint Cloud Technical and Community College, and Strong Start to Finish. (Fond du Lac Tribal and Community College is a member of the CRDC but was unable to send a representative.)

Five stages of corequisite implementation were identified in *The Challenges of Scaling Gateway Mathematics Corequisites*: assessing, exploring, co-creating, implementing, and revising. At each stage, several common challenges and barriers were identified, both procedural and related to the affective domain of the individuals involved in the design and implementation process. These stages formed the context and foundation for the convening, where attendees worked through a series of exercises to surface key learnings from the field and to identify priority actions to address barriers to scaling corequisites. The following key themes emerged from those discussions.

1. It is imperative that current and future reform efforts are designed to achieve equitable outcomes for Black, Latino, and Indigenous students, students experiencing poverty, and other minoritized populations.

2. Corequisites are a necessary component of a comprehensive student success strategy.

3. Effectively engaging key stakeholders in the design, evaluation, and continuous improvement of reforms is critical.

4. The field needs to develop and communicate common definitions of key terms and practices.

5. Effective professional development and capacity building must appeal to both the emotional and intellectual knowledge of faculty and staff.

6. There is an essential relationship between using quantitative and qualitative data to achieve improved and equitable outcomes.

7. Ongoing research and aggressive dissemination of effective practice are crucial for supporting implementation and the achievement of equitable outcomes.

Full Report

Introduction

In 2020, the Charles A. Dana Center launched the Corequisite Research Design Collaborative (CRDC), funded by the Bill and Melinda Gates Foundation. The goal of the collaborative was to promote collaboration between researchers, practitioners, policy leaders, and institutions to improve and expand supports for corequisite implementation centered on the student experience, particularly the experiences of racialized and low-income students.

Four institutions participated in the CRDC: Fond du Lac Tribal and Community College, Houston Community College, Saint Cloud State University, and State Cloud Technical and Community College. While each institution was at a different stage in designing and implementing math corequisites (and English corequisites, in the case of Fond du Lac Tribal and Community College), institutional implementation focused on developing and testing strategies to inform students about the wrap-around and non-academic supports available to them, and on developing processes for embedding holistic student support throughout the corequisite design and implementation process. Houston Community College developed a comprehensive [Corequisite Outreach and Extended Support process](#) that can be used to inform other institutions' development of wraparound holistic student supports for corequisites.

The CRDC also included a national network of advisors who provided information, resources, and support for the work. The advisors were Estela Bensimon, Center for Urban Education; Lynn Brabender, Association of Public and Land-Grant Universities; Tristan Denley, Louisiana Board of Regents; Linda Garcia, Center for Community College Student Engagement; Vanessa Harris, Claflin University; Alison Kadlec, Sova Solutions; Desmond Lewis, Houston Community College; Alexandra (Lexa) Logue, The City University of New York; Tia McNair, American Association of Colleges and Universities; Sean Pepin, Kheper House Consulting; Maxine Roberts, Strong Start to Finish; and Bruce Vandal, Bruce Vandal Consulting.

The primary focus of the collaborative at the research and policy level was answering the question "Why do some institutions struggle to design and implement corequisite supports even when systemic enabling conditions—such as mandates, state-level initiative support, and policy conditions—exist?" Dr. Sean Pepin's report, *[The Challenges of Scaling Gateway Mathematics Corequisites: Recommendations for Policy and Practice](#)* (2022), addressed this question and identified several key enabling conditions and challenges to corequisite implementation.

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In summer 2022, the CRDC convened the member researchers, practitioners, and policy leaders for a two-day meeting to explore the findings of Dr. Pepin's report, discuss recent findings and learnings about effective corequisite design and implementation, and identify open questions that should inform the field's future research and focus. The following institutions and organizations were represented at the convening: American Association of Colleges and Universities (AACU), California Acceleration Project (CAP), Center for the Analysis of Postsecondary Readiness (CAPR), Center for Community College Student Engagement (CCCSE), City University of New York (CUNY), Complete College America (CCA), Houston Community College, Louisiana Board of Regents, Saint Cloud State University, Saint Cloud Technical and Community College, and Strong Start to Finish. (Fond du Lac Tribal and Community College is a member of the CRDC but was unable to send a representative.)

The Stages of Scaling Gateway Mathematics Corequisites

The stages and cross-cutting elements identified in *The Challenges of Scaling Gateway Mathematic Corequisites* provided a framework for discussions during the convening. The report identified five stages of corequisite implementation (assessing, exploring, co-creating, implementing, and revising) and associated recommendations for optimizing each stage. Discussions focused on how best to support institutions at each stage of the work.

Table 1. Pepin's Five Stages of Corequisite Implementation

Five Stages of Development	Descriptions
Assessing Identify and assess your enabling conditions.	By assessing the current landscape, colleges and system offices can use the enabling conditions as a rubric that can help the work move forward and identify potential areas that could pose challenges in the future.
Exploring Provide research, guidance, and data.	When systems and colleges provide clear (local and national) research, guidance, and metrics, stakeholders can better understand what corequisites are, what they intend to solve, and the metrics used to measure success.
Co-Creating Convene and engage cross-functional teams in the design and implementation process.	Convening people fosters stakeholder awareness and knowledge, creates buy-in and new champions of the work, involves different perspectives from across the institution, and helps to share the workload equitably.
Implementing Provide continuous professional development.	Continuously supporting instructors, advisors, and other campus professionals in the form of technical assistance, capacity building, policy and practice guidance, and a thoughtful inclusion of affective domain work will help those directly involved in making this work successful.
Revising Develop sustained and emotionally intelligent dialogues.	During and after initial corequisite implementation, the transformation begins to affect more people; therefore, having open lines of communication can help leaders anticipate long-term barriers, combat burnout, and solidify the shared commitment to continuous improvement.

In addition to the recommendations for each stage, the report outlined various cross-cutting elements to scaling corequisites that apply to all stages of the scaling process.

Equity-Minded

From the outset, it is important to keep equity—specifically around race and ethnicity—central to the work. If programs do not center equity from the very beginning, it is difficult, if not impossible, to retrofit the project with equity afterwards.

Student engagement

At every stage, students are the most important stakeholders to these changes. When implemented with fidelity, corequisite supports can greatly improve students' gateway math completion. It is therefore critical to include students as part of the design and implementation phases.

Data-driven

Data and research can help those who are implementing a new corequisite structure to know whether the structure is working as intended, if it is closing or widening historical equity gaps, and where issues may exist for future iterations and changes.

Capacity building

Leaders must create the professional development to strengthen individual skills and abilities. They must also create the conditions for effective institutional processes and resources to move corequisite supports forward.

Themes

Using the stages and cross-cutting elements as the context, attendees engaged in a series of exercises to surface key learnings from the field and to identify priority actions to address barriers to scaling corequisites. Seven key themes emerged from the discussions.

1. **It is imperative that current and future reform efforts are designed to achieve equitable outcomes for Black, Latino, and Indigenous students, students experiencing poverty, and other minoritized populations.**

The structural reforms that led to the end of prerequisite remediation, adoption of multiple measures for placement, and implementation of corequisite support models have contributed to more equitable outcomes for students. However, simply scaling these reforms are not enough to achieve equity. In order to achieve equity, states, systems, and institutions must be committed to identifying the key barriers for specific minoritized populations and designing customized solutions to remove those barriers. The reforms should be comprehensive, recognizing and considering the broader societal barriers that are the result of systemic racism built into our political, educational, and economic systems. Institutions and systems must build their capacity to understand the existing inequities in their institutions, how those inequities prevent equitable outcomes, and how to address inequities through changes in policy and practice.

> *In order to achieve equity, states, systems, and institutions must be committed to identifying the key barriers for specific minoritized populations and designing customized solutions to remove those barriers.*

All stakeholders should understand their important roles in achieving equity. Institutional and system leaders, faculty, advisors, and other staff who interact directly and indirectly with students should receive professional development in race-conscious and antiracist practices.

Solutions for achieving equity must go beyond reforms to the discreet process of assessing, placing, and instructing students in gateway math and English courses. Future reforms must encompass other elements of a student's experience, including advising, basic needs support, mental health, and other aspects of the postsecondary experience that can alleviate or might exacerbate inequities. Additionally, systemic solutions that support students in corequisites should be extended to all students to address inherent inequities experienced by all minoritized students, including those who do not require corequisite support.

2. **Corequisites are a necessary component of a comprehensive student success strategy.**

Research has shown that poor and inequitable success rates in gateway courses are attributed directly to ineffective placement practices and prerequisite course sequences (Stroup, 2015). It is imperative that evidence-based developmental education reforms be the foundation for a comprehensive student success strategy.

> *Institutions that combine the implementation of corequisites with non-academic supports are more likely to see improved and sustained improvements in student outcomes.*

Without the implementation of developmental education reforms, it is unlikely that other student success reforms on their own will have as large an impact on student outcomes. Institutions that combine the implementation of corequisites with non-academic supports are more likely to see improved and sustained improvements in student outcomes. To integrate corequisite reforms and other student success reforms effectively, institutions should recognize the importance of co-creating reforms with all essential stakeholders. An important first step is for stakeholders to analyze the institution's ecosystem to determine how each department (e.g., student services, advising) intersects with corequisite implementation. Further, the integration of developmental education reforms into larger student success efforts will likely result in innovations that can also support students who are not taking corequisites. Conversely, innovations from other student success strategies could inform continuous improvement of corequisite design and implementation.

Systems and institutions that have implemented and scaled developmental education reforms have the opportunity to be in the vanguard of aligning developmental education reforms with other student success reforms. The lessons learned from their efforts will provide critical insights for all institutions that are embarking on or are in the continuous improvement stages of implementing both developmental education and other student success reforms.

3. **Effectively engaging key stakeholders in the design, evaluation and continuous improvement of reforms is critical.**

The importance of involving key stakeholders in the co-creation of reforms is not a new finding, but it was clearly articulated by the convening participants as a priority to ensure that reforms are designed with equity in mind and to build commitment among stakeholders. Participants discussed key shareholder groups and the need for accountability in reforms.

Identifying key stakeholders

There is little understanding of how to build the appropriate coalition of key stakeholders both within the institution and in the broader community. Emerging examples of coalition building warrant

further study, such as the work of a broad coalition in California (Campaign for College Opportunity, n.d.) that has spearheaded reform efforts. It would be valuable to study coalition building in higher education to gain greater clarity on the actions needed to ensure that all stakeholders (both internal and external) are effectively involved in reforms. Any coalition should include faculty and staff who would be responsible for achieving the goals and objectives of the initiative, representatives who reflect the demographics of the institution, and other key stakeholders whose voices are integral to the process.

Attendees acknowledged that authentic engagement of external stakeholders may be difficult to sustain. There has been little published on how to fully integrate the voices and perspectives of students, families, and other stakeholders into the reform process, although work on integrating student and family voices more broadly is being done by various groups around the country. Nevertheless, many participants felt that the emphasis on equitable outcomes and the prioritization of students' experiences—as students make their way through assessment, placement, and gateway courses—provides a logical starting point for developing an inclusive reform strategy. Participants stressed the need to incorporate student voices by seeking deeper understanding of students' perceptions of developmental education. They also emphasized that an effort should be made to understand students' perspectives on the instruction they receive, the impact of developmental education on student mindsets, and the extent that students believe developmental education results in learning the material.

In addition to including external stakeholders, it is important to involve an often overlooked internal stakeholder group: skeptics who are not fully in favor of reforms. Previous reform efforts prioritized building a coalition of proponents to implement reforms. Pepin's research found that the inclusion of skeptics could be valuable for several reasons. Skeptics can ask challenging questions that reformers must address in order to build an effective approach. Responding to difficult questions during the design process will prepare reformers for

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those same questions when they emerge in broader dialogues. Additionally, skeptics can become advocates for reform if they feel their concerns are considered or addressed. As a result, they may assist with creating buy-in among other skeptics. More research needs to be done on effective practices for engaging those who do not agree with or are not fully persuaded about reforms.

Accountability

A final element of engaging key stakeholders in the development, implementation, and the continuous improvement of reforms is accountability. Stakeholders, including external stakeholders, should be empowered to hold one another accountable for achieving equitable outcomes. Without accountability, it is unlikely that all stakeholders will fulfill their roles for ensuring equitable outcomes.

One approach is to have leaders set a vision and structure for the accountability system and provide resources and tools for implementing the accountability system. Accountability measures must be clear, race-conscious, and effectively communicated. The system must identify measures for each function of the institution, including:

- Orientation

- Placement

- Advising

- Financial aid/tuition

- Classroom pedagogy

- Student supports

- Curriculum

- Protocols for ensuring social belonging of students.

The intention of the accountability system is to generate new insights that drive continuous improvement. Assessments should examine behaviors across the entire student experience with the goal of identifying well-defined behaviors that are assessable and race-conscious. The outcome of the system is to achieve cultural change around inclusion and equity as well as personal and institutional accountability.

4. **The field needs to develop and communicate common definitions of key terms and practices.**

Convening participants discovered that there is a lack of clear definitions of terms and practices in the developmental education reform movement, creating a significant challenge to moving the field and individual institutions toward broad scaled adoption of evidence-based reforms. It is important to offer more precise definitions of key terms and to embed defining the terms and practices into the developmental education reform process within institutions. While common definitions for the field may be difficult, it would be valuable to provide workable definitions that institutions and systems can consider as they engage in reforms.

The lack of clarity and understanding of terms and practices significantly hampers large-scale adoption of reforms.

There are several examples where the lack of clarity and understanding of terms and practices significantly hampers large-scale adoption of reforms. One example was when an institution

claimed it had scaled corequisites but in fact had only about 30% of its students actually enrolled in corequisites.

Another challenge is that definitions of corequisites within state policy and institutional practice are often not aligned with available research on the most effective corequisite approaches. As a result, many institutions simply comply with policies and do not implement the reforms known to maximize student success. Crucially, efforts to address inequities at institutions must begin with a common understanding of what is meant by race-conscious or anti-racist practices. Without well understood definitions of these and other important terms in the developmental education reform movement, it is likely that results, at scale, will continue to be uneven and inequitable.

While more effective communication and modeling of these terms in the field are important, there are definitions and measures of success that are embedded into the cultures of institutions. For example, the deep commitment to course success rates among faculty has made it difficult to generate broad understanding and adoption of throughput as the critical metric of success for developmental and gateway math and English course sequences.[1] While course success is a valuable measure, it is an insufficient measure of student success when compared with throughput. Nevertheless, it has been difficult to change existing mental models toward the more comprehensive approach. The misunderstandings about throughput and the continued reliance on course success have resulted in many faculty's dismissiveness of corequisites because they see their course success rates drop without fully appreciating that many more students are succeeding in gateway courses.

Changing this kind of cultural preference is difficult: Faculty prefer course success rates because they are the singular measure that indicates if faculty have effectively instructed their students. Further, course success rates have a validating impact on faculty mindset and motivation. Course success rates are not an abstract measure for faculty. Success rates represent specific students whom they supported and helped to succeed. College instruction is often seen as an individual pursuit and responsibility of faculty. Consequently, many instructors may not view their efforts as part of a larger educational ecosystem where a community of faculty and staff contribute to or detract from student success. To illustrate this point, one participant quoted an institutional representative who said, "Course success rates are for faculty, and throughput is for students and institutions."

One strategy to shift the culture of measuring instructional success is to leverage both quantitative and qualitative data to communicate the value and impact of throughput as the essential measure of gateway course success. Effectively communicating the value of throughput can build greater buy-in for reforms and catalyze continuous improvement efforts. Stakeholders should be provided disaggregated data on throughput, accompanied by the qualitative perspectives of students and other stakeholders. The data should be shared through presentations that are customized to various audiences and distributed to academic departments, student services, college leaders (including the board), and state and national audiences.

As opportunities for presentations emerge, they should be delivered, as much as possible, by the identified champions for the work. Limiting those who speak to the work publicly creates consistency and allows people to identify with the leaders.

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[1] The Research and Planning (RP) Group, a California-based policy and practice organization, defines throughput rate as "the percentage of a given cohort of students who complete a key gateway course—in this case, a transferable, college-level math course—within a designated time frame."

5.   Effective professional development and capacity building must appeal to both the emotional and intellectual knowledge of faculty and staff.

The growing knowledge base on effective implementation of reforms increases the need for more expansive professional development for faculty, advisors, and other staff. Dimensions of corequisite implementation that should be incorporated into professional development include evidence-based corequisite model specifics, culturally responsive teaching, data analysis and use, and faculty and student mindset.

One strategy for addressing the multiple elements of high-quality professional development is to create communities of practice. With the field changing rapidly, faculty should engage in frequent, meaningful discussions with their colleagues, both within and across institutions, about evidence-based practice. Communities of practice can help ensure that faculty are able to achieve equitable outcomes for students from minoritized communities. When faculty collectively reflect on their data and understand the differentiated impact of reforms on various student populations, they can collaborate to ensure equitable delivery and impact of evidence-based reforms that meet the needs of specific student subpopulations.

A question arose about whether traditional professional development of faculty and staff on evidence-based practices is sufficient to achieve equitable outcomes. One argument asserts that efforts must appeal to both "the heads and hearts"—that is, the emotional and intellectual knowledge—of faculty and staff if equity is to be achieved. There should be a deeper recognition of the systemic nature of inequity generated through racist attitudes and structures. Without recognizing the impact of racism on educational, economic and other outcomes, and confronting personal biases, the inequities will reemerge in other places, much as has been described in Michelle Alexander's *The New Jim Crow* (2019).

A counterpoint, however, is that "changing hearts" is a difficult and unmeasurable endeavor. Professional learning should use data to build the capacity of individuals to track the impact of their instructional practices on student learning, change behaviors that generated inequities, and adopt evidence-based approaches that can meet the needs of students from marginalized populations. Evidence shows that changing actions can ultimately achieve the changing of mindsets (Olson & Stone, 2005).

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In either case, it is essential to confront the mindsets of faculty who do not believe that all students can learn and be successful; otherwise, equity will not be possible.

One approach to changing faculty mindsets is to ensure that faculty are effectively engaged in institutionwide student success reforms. While social belonging of students is an emerging area of reform in institutions, there is little discussion of faculty's sense of belonging within departments, colleges, and systems. By integrating faculty into the broader campus community, it is possible to develop their commitment to the new mental models embedded in developmental education reform. For example, including faculty in broader student success efforts might result in their ownership of throughput as an important measure of gateway success. Professional development could provide the opportunity to describe the larger systemic issues and goals of the reform to faculty. In addition, professional development could leverage student perspectives to prompt faculty to reflect on how their behaviors impact students. The use of data can enable thoughtful dialogue among faculty about their personal practices.

6. **There is an essential relationship between quantitative and qualitative data to achieve improved and equitable outcomes.**

Data use that drives case making, design, implementation, and continuous improvement of developmental education reforms is widely regarded as essential to achieving improved and equitable outcomes. Yet, many in the field have not effectively mastered data use.

Often only a handful of individuals have the knowledge and ability to access and analyze institutional data for use in decision making. This lack of capacity can become a barrier in identifying and addressing inequities. One way to increase capacity is to provide deeper professional development to faculty and staff on data use and how to use results to improve their practice. As discussed in Theme 4, however, simply learning how to view disaggregated data may not be enough. Those analyzing and presenting the data must appreciate the deeper, systemic inequities that are reflected in the data. They must also consider how their own roles and attitudes might contribute to those inequities.

One strategy to promote a deeper and more systemic understanding of data is the use of qualitative data, which reveal the lived experiences of students. This type of data can help unearth the root causes of inequities revealed in quantitative data. Understanding the experiences of students from Black, Latino, and Indigenous communities and from communities impacted by poverty can lead to improvements in practice and help change attitudes among faculty and staff.

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Using qualitative and quantitative data to understand stakeholders' perspectives and experiences of inequity should occur at the outset of any reform process. Therefore, voices of students, faculty, staff, and other key stakeholders who are impacted by developmental education reforms should be included. Having this knowledge from the beginning allows issues of inequity to be addressed proactively during the design, implementation, and continuous improvement of reforms.

One model for presenting both quantitative and qualitative data is to look at the throughput in gateway courses of all students in an entering cohort, including looking at those placed into gateway courses with and without corequisite support, or into remedial courses. The model should be replicated for various subpopulations to measure differential impacts across groups. Additionally, the model should illustrate the experiences of students as they progress into and through gateway courses. At each stage of the process from assessment to placement, and enrollment in a gateway and/or corequisite course, students share their stories about their experiences. This approach enables faculty and staff to explore the root causes that might explain quantitative data, particularly for different subpopulations.

7. **Ongoing research and aggressive dissemination of effective practice are crucial for supporting implementation and the achievement of equitable outcomes.**

The effective implementation of corequisite and other student success reforms is indeed a complicated endeavor. While many evidence-based practices have emerged and resources have been published outlining those practices, there is often a substantial lag time before practitioners begin implementing. There are a variety of reasons for this delay, including practitioners' lack of time and resources to learn and integrate the practices in their unique setting. Additionally, there are many new questions about implementation that require further study. Fortunately, many organizations are already engaged in both research and implementation of best practices in developmental education.

They can provide the appropriate technical assistance to support institutions. However, the number of organizations that are simultaneously conducting research, publishing resources, and providing assistance to institutions can be overwhelming.

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Institutions need a way to both assess their needs and easily access the resources that can support their implementation. One solution is to curate and organize available resources that follow the stages of corequisite implementation. The resources could be part of a series of stage-by-stage publications that guide institutions through each stage of the process. Alternatively, resources could be tied to other frameworks of effective practice in developmental education reform such as the various *Core Principles for Transforming Remedial Education within a Comprehensive Student Success Strategy* (Strong Start to Finish, 2020).

Another solution is to develop and provide professional development and technical assistance to support faculty and staff in using data to create equitable policies and practices. This strategy addresses equity by improving understanding of the experiences of priority populations, and then by having the implementation team craft or refine equity-focused solutions to remove barriers. Strong Start to Finish (SStF) is well suited to support this work through their service providers network. For instance, the organization could develop an assessment to identify the existing capacity of institutions to use disaggregated data to build equitable developmental education policies and practices. States and systems would then ask their institutions to complete the assessment to identify specific technical assistance needs. Once individual needs have been identified, SStF would work with providers to design and deliver targeted technical assistance. The level of support and the types of strategies utilized would depend on the needs of the institution. For example, institutions with greater need might receive coaching support, while others seeking to deepen their existing capacity might only require lighter support or guidance on how to use various data tools.

Beyond the curation of technical assistance and other resources, there is a need for ongoing research to address problems of practice that do not currently have published evidence-based solutions. Participants identified several areas requiring additional and ongoing research. Research ideas include advanced equity work on ensuring access and success in STEM pathways, including an examination of current STEM initiatives to identify whether they warrant continued investment. Another research idea involved the deeper examination of math courses to determine which topics are the most essential to succeed in future coursework and how to ensure that students are able to master those essential topics, particularly those that are traditionally more challenging for students.

Other course-based research could focus on the effective application of evidence-based pedagogy and curriculum in corequisite courses. Another research focus could be to replicate previous studies on the effectiveness of corequisites for courses that have not been deeply studied, particularly college algebra and Calculus 1. Finally, research is needed to examine how changes in revenue streams from a reliance on prerequisite remediation to corequisites impact the financial sustainability of institutions.

In addition to conducting further research, new tools should be developed to assist institutions with the collection, analysis, and use of data. Whether it be more effective data visualization tools or the collection of more fine-grained data with the aim of surfacing root causes of inequity, the field would benefit from more sophisticated tools to allow implementation and continuous improvement to be more efficient and effective.

Conclusion and Next Steps

As the field continues to pursue the implementation and scaling of corequisites, it is necessary for institutional, system, state, and national leaders to continue engaging with one another to develop and implement proven solutions and to find answers to

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ongoing challenges. The CRDC convening revealed an appetite for greater collaboration among the leaders of the corequisite movement. It also highlighted promising opportunities for stakeholders to collaborate, partner, develop project proposals, and generate the funding to pursue further evidence related to best practices and policies related to corequisite implementation.

National organizations like the Dana Center, Strong Start to Finish, and Complete College America have an important role to play in convening leaders to engage in the critical work of achieving equitable improvements in gateway course success and ultimately completion of postsecondary credentials. Many states, systems, and institutions have not begun to implement corequisite reforms. This fact underscores the imperative to remobilize the field toward broader and scaled adoption of developmental education reforms as quickly as possible to ensure that remediation will no longer to be a significant cause of inequity in higher education.

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About the Author

Bruce Vandal is a national expert on college completion and has extensive experience working with states, systems, and institutions to implement evidence-based reforms that have proven to dramatically improve student success on the critical measures that predict college completion. Currently, Bruce works with states, systems, institutions, and higher education policy organizations through Bruce Vandal Consulting, LLC (BVC).

About the Dana Center

The Charles A. Dana Center develops and scales mathematics and science education innovations to support educators, administrators, and policymakers in creating seamless transitions throughout the K–16 system for all students, especially those who have historically been underserved. We focus in particular on strategies for improving student engagement, motivation, persistence, and achievement.

The Center was founded in 1991 at The University of Texas at Austin. Our staff members have expertise in leadership, literacy, research, program evaluation, mathematics and science education, policy and systemic reform, and services to high-need populations.

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