

A State Policy Framework for Developmental Education Reform

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Introduction

Growing evidence of developmental reform effectiveness calls for existing initiatives to be codified in policy to promote scale-up and sustainability.

Evaluation of existing state and system policies allows leaders to determine whether policies are supportive of reform efforts or serving as barriers to implementation.

Some states have used policy language to explicitly elevate their focus on equitable outcomes for marginalized students across developmental education policy areas.

Traditional developmental education practices often serve as [barriers](#) to student attainment, particularly for racially minoritized students, adult learners and students with low incomes overrepresented in developmental education enrollments. Over the [past three decades](#), colleges and universities have sought to [reform](#) existing structures to support more equitable student outcomes.

Growing evidence of reform effectiveness has led state and system leaders to seek to scale reforms beyond individual institutions. [Strong Start to Finish](#) (SStF) was initiated in 2018 with four postsecondary systems dedicated to taking developmental education reforms to scale. By 2020, SStF grew to support 13 postsecondary systems in 12 states in scaling effective [reform efforts](#) systemwide.

As the developmental education reform movement grows, state and system leaders working on scaling effective practices have found it critical to [examine](#) reforms in the context of existing policies. Evaluation of state and system policies allows leaders to determine whether those policies support reform efforts or serve as barriers to implementation. Leaders have found that identified barriers can be addressed most effectively by collectively assessing policy impacts across a core set of reform efforts.

The Strong Start to Finish Equity Philosophy

[Equity](#) informs all parts of Strong Start to Finish's work. SStF believes equity in education is the means to rectify injustices in the distribution of resources, practices and policies.

In higher education, SStF believes equity to be the process of addressing issues of access and success for marginalized individuals negatively impacted by institutional policies and practices. SStF encourages leaders in higher education, including system and institutional leaders, faculty and advisors, to engage in this ongoing corrective process by replacing unjust behaviors and policies with ways of thinking and practices that support students who are ill-served in the system.

As a network of equity-conscious leaders, SStF knows that focusing on the needs of Black, Latinx, Asian American, and Indigenous students, students with low incomes and returning adults does not deprive those who sit outside of these categories. Instead, SStF knows that this focus ensures the creation of a just system where every student can receive what they need to achieve their potential in educational settings.

This Policy Brief presents a holistic framework of state and system policy as it intersects four key reform efforts in developmental education:

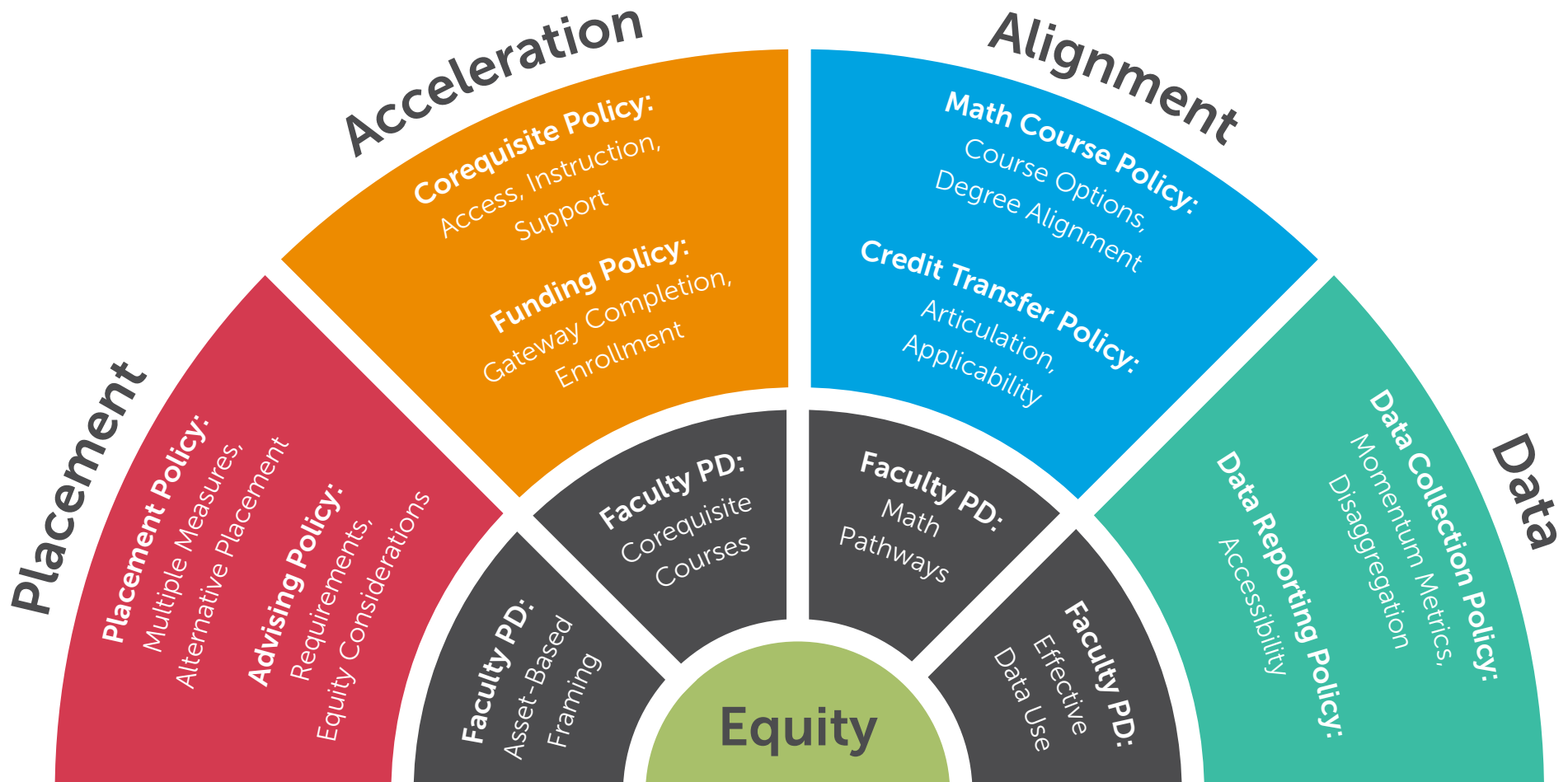
- **Placement:** Rethinking how students are placed in their first credit-bearing college courses in English and mathematics.
- **Acceleration:** Replacing traditional remedial courses with corequisite (accelerated) models.
- **Alignment:** Ensuring first credit-bearing mathematics courses align with degree pathways.
- **Data:** Collecting, reporting and using disaggregated student data to support successful completion of credit-bearing English and mathematics courses within the first year of enrollment.

See the [graphic](#) on Page 3 for an overview of the State Policy Framework for Developmental Education Reform and its main components.

Highlighting key issues, policy levers and examples of state action, this framework is designed to support state and system leaders as they review existing policy structures for alignment with effective practices.

It is important to note that most state-level developmental education reform policies are designed for universal student support rather than with an explicit focus on marginalized students. This brief provides examples of state and system policies that have a universal approach, as well as policies that explicitly address the realities of students who have been historically excluded from higher education opportunity.

State Policy Framework For Developmental Education Reform



Placement

Equitable student access to the first credit-bearing college courses in English and math, also known as [gateway courses](#), begins with effective course placement. [Existing challenges](#) to equitable course placement include overreliance on assessment scores, the absence of defined alternative evidence for demonstrating readiness, limited student input in course selection, and inequitable advising practices. Placement challenges are particularly acute for racially minoritized students, adult learners, and students with low incomes, who are [overrepresented](#) in developmental education enrollments.

Reform efforts to make placement processes more equitable have focused on reducing or removing assessment requirements, defining [multiple alternative measures](#) of readiness, guiding students to direct their placements, and building faculty capacity to effectively serve a diverse student body. These practices have shown [significant positive effects](#) in supporting equitable access to credit-bearing courses in English and mathematics in the first college year.

Areas for Policy Action

State and system leaders can support effective placement practices through the thoughtful construction of placement, advising and faculty professional development policies.

- **Placement Policy:** State and system policies supportive of placement reform replace cut score requirements on specified standardized assessments with multiple measures that better predict success in gateway courses, such as high school transcripts and GPA. Policy can help [place](#) students into [credit-bearing](#) courses by default, with appropriate supports, or direct students toward [guided self-placement](#), which is proven to support student achievement.
- **Advising Policy:** State and system policies are often silent when it comes to advising. Specifying a requirement for [placement advising](#) can help ensure such advising happens consistently across all institutions. Policy can also specify when advising will take place (before placement) and the directionality of advising (toward credit-bearing courses). Additionally, it can require [equitable advising](#) with specificity to marginalized students.
- **Faculty Professional Development Policy:** System or institutional policies addressing the development of faculty contracts can specify [professional development requirements](#) for faculty and advisors responsible for placement. This can include direct training on [culturally sustaining](#) and [equitable advising practices](#), as well as training on [asset-based framing](#) and other [proactive and holistic practices](#) that support more equitable advising of marginalized students.

State Examples

Reform-supportive adjustments to state-level placement policy have included eliminating the use of assessments for placement, requiring the use of at least one measure beyond a single assessment, or requiring the use of multiple measures that may or may not include assessments. The following examples of state placement reform policy were designed for universal student support:



Louisiana: Louisiana Board of Regents policy ([Academic Affairs Policy 2.18](#)) exempts students from mathematics and English corequisite support if they meet one or more criteria, including high school grade-point average, placement assessment scores, prior credit for a college-level general education mathematics course, and/or a faculty-assessed college-level writing sample.



Texas: State administrative code ([19 Tex. Admin. Code § 4.55](#)) allows postsecondary institutions to use the Texas Success Initiative Assessment results, accompanying Diagnostic Profile, and at least one additional factor to determine the appropriate courses and/or interventions for students. Additional factors include high school grade-point average/class ranking; prior academic coursework and/or workplace experiences; non-cognitive factors (e.g., motivation, self-efficacy); and family life issues (e.g., job, childcare, transportation, finances).

Acceleration

Students deemed underprepared for gateway courses in English and mathematics might need additional support to effectively tackle credit-bearing content in their first year. Traditional developmental education course sequences bind these students to pre-credit work that can take from one semester to years to complete. This practice has significant [negative impacts](#) on attainment, particularly for marginalized students. Research has shown that learning support needs can be efficiently and effectively addressed with accelerated support structures delivered through a [corequisite model](#), where students enroll in credit-bearing gateway courses immediately while also enrolling in paired courses for co-curricular support.

With a growing number of postsecondary institutions and systems adopting corequisite models, recent reform efforts have focused on supporting more equitable outcomes across student groups. This work includes [training faculty and advisors](#) on developing and delivering effective corequisite courses, ensuring [alignment of content and instruction](#) between gateway courses and paired co-curricular support courses and shifting from an acceleration optional model to a default implementation of corequisite courses.

Areas for Policy Action

State and system leaders can support effective acceleration practices with policies governing corequisite implementation, institutional financial incentives for gateway course placement and faculty professional development requirements.

- **Corequisite Policy:** To foster equitable access to and success in accelerated content, state and system policies can set corequisite courses as the default model for learning support. Policies can also require content and instructional [alignment](#) between gateway and support courses, specify [evidence-based instructional models](#), and require the establishment of [support structures](#) targeted to marginalized students.
- **Finance Policy:** System and institutional leaders may feel financially constrained from offering corequisite remediation as the default option due to [existing incentive structures](#) such as direct support for traditional developmental education courses and/or enrollment-based funding formulas. To support equitable access to corequisite courses, state and system leaders can examine and address existing financial support mechanisms that may serve as barriers to implementation.
- **Faculty Professional Development:** System and/or institutional policies can specify professional development requirements for faculty developing and delivering corequisite courses. This work can include training in corequisite course design, pedagogy (including [active](#) and culturally sustaining learning experiences) and student supports, as well as [best practices](#) for content and instructional alignment between gateway and support courses.

State Examples

States that have made policy adjustments to support acceleration have allowed and/or encouraged institutions to offer corequisite course options, required institutions to offer at least some corequisite courses, or moved to a corequisite-only model for learning support delivery. The following examples of state acceleration reform policy were designed for universal student support:



Nevada: Nevada System of Higher Education policy ([Board of Regents Handbook, Title 4, Chapter 16, Section 1](#)) requires all degree-seeking students to enroll in a college-level or corequisite gateway English and mathematics course within the first two regular academic semesters following initial enrollment. The students must remain enrolled in the courses until they complete core curriculum English and mathematics requirements.



Tennessee: Tennessee Board of Regents policy ([Academic Policy: Learning Support: 2.03.00.02](#)) requires that students who do not demonstrate college readiness based on established placement assessment cut scores will be placed into the appropriate [corequisite learning support](#) course(s) or interventions for reading, writing and/or mathematics.

Centering Equity Through Policy

The student populations SStF focuses on — racially minoritized students, adult learners and students with low incomes — have historically been both least well served by higher education and disproportionately likely to be placed in developmental coursework. Efforts to reform developmental education practices to better support student attainment are often implicitly assumed to be aimed at increasing equity in outcomes across student groups.

While structural reforms do not guarantee equitable outcomes for marginalized students, some states have used policy language to explicitly elevate their equity focus across developmental education policy areas. In contrast to most reform policies that are designed for universal student support (including, but not directed toward, marginalized students), the following examples from Connecticut and Illinois demonstrate state efforts to address inequities directly and specifically through policy.



Connecticut: Connecticut Board of Regents policy on gateway course completion at its community colleges ([Academic Affairs Policy 1.22](#)) includes an equity statement that specifies that gateway course placement and success policies must be “designed to be anti-racist, eliminate structural inequities, recognize and address implicit bias, and promote equitable course completion.” It further specifies that policies will be rigorously assessed to ensure they promote student success and the elimination of equity gaps across student populations. It also requires that faculty learning include best practices in “recognizing and addressing implicit bias, and for promoting equity in student learning for diverse student groups.”



Illinois: State statute includes an Equity in Higher Education Act ([110 ILCS 235/95-5](#)) that calls out historically disparate opportunities for “Black, Latinx, low-income, and other underrepresented and historically underserved students” and charges the state’s higher education system to proactively remove systemic barriers in access, affordability and quality for such students. State statute on developmental education reform articulates the imperative to address systemic inequities in developmental education placement ([110 ILCS 175/100-5](#)) practices and requires postsecondary institutions to make plans to address inequities in pass rates for Black students, and to report data disaggregated by race, ethnicity and income on remedial placement and success rates ([110 ILCS 175/100-30](#)).

Alignment

While placement and acceleration reforms pertain equally to both English and mathematics gateway courses, alignment is a special problem of mathematics. Historically, the expectation has been that all students entering college complete college algebra as their first credit-bearing mathematics course. Yet [research](#) demonstrates that for marginalized students, the misalignment of college algebra content with student degree aspirations means that it serves more as a gatekeeper than a gateway to attainment.

[Studies](#) have shown that [offering alternate options](#) for a first credit-bearing mathematics course, such as statistics or quantitative reasoning, increases student success in mathematics by allowing them to better align their skill development with their chosen major and degree pathway. Mathematics alignment [reform efforts](#) have focused on developing and delivering college algebra alternates, ensuring appropriate staffing and instructional training for alternate courses, aligning credit-bearing mathematics courses to degree pathways and ensuring credit transfer across institutions.

Areas for Policy Action

State and system leaders can work with math faculty to support effective alignment practices with careful attention to crafting policies that govern available course options, cross-institutional credit transfer and faculty professional development.

- **Mathematics Course Policy:** State and system policy can support mathematics alignment by removing college algebra as the default requirement, replacing it with a more flexible policy of credit-bearing mathematics courses aligned with institutionally defined degree pathways. Policies can also specify [alternate course options](#) and advising requirements to support student course choices. It is critical that such policies are developed in close partnership with mathematics and partner discipline faculty, who have the expertise necessary to align courses with pathways.
- **Mathematics Credit Transfer Policy:** Many states and postsecondary systems have [existing policies](#) for credit transfer across institutions, such as articulation agreements and common course numbering requirements. Leaders can examine these policies to ensure that credit-bearing alternates to college algebra are specifically included in the list of courses with transferrable credits. In addition, policy can specify which degree pathways will accept alternate course credits.

- **Faculty Professional Development:** System and/or institutional policies can set requirements for faculty qualifications specific to the mathematics content of college algebra alternates, which can be met through [content-specific training](#). Policy can also require faculty and advisers to be aware of the full set of available credit-bearing mathematics courses, as well as the alignment of those courses to various degree pathways, so they can appropriately [direct student course choices](#).

State Examples

The development and implementation of mathematics pathways is still in its nascent stages, focusing on action at the institutional and system level to build course options and bring them to scale, rather than on policy. The following are examples of system-level implementation:



University of Georgia System: USG's [five mathematics pathways](#) are based on a student's [program of study or major](#) and defined by their first mathematics courses. The pathways are generally designed around STEM (science, technology, engineering and mathematics) and non-STEM majors. Mathematics pathways are part of the [Complete College Georgia](#) initiative to increase postsecondary attainment and transform developmental education, among other areas.



State University of New York: The SUNY-Carnegie Mathematics Pathways [partnership](#) is designed to strengthen and accelerate student learning in mathematics and increase postsecondary completion rates, especially at community colleges. Starting with two pilot colleges in 2015, the adoption of mathematics pathways has expanded to scale across the SUNY system through the Scale Up of Quantway/Statway [initiative](#). By the end of the 2021-22 academic year, these efforts had resulted in more than 500 faculty trained to teach Quantway and Statway, impacting more than 20,000 students at 28 institutions.

As efforts to implement mathematics pathways mature and begin to be reflected in state and system policy, they will likely first appear in either placement advising policy, requiring students to be counseled on the alignment of their gateway mathematics course with their chosen degree pathway, or in transfer and articulation policy, requiring credit transfer for multiple gateway mathematics courses. An example of the latter can be found in Louisiana Board of Regents policy ([Academic Affairs Policy 2.5](#)), which states that "all transfer pathways must align with statewide mathematics pathways standards."

Data

Collecting, reporting on and utilizing data on the effects of interventions on student outcomes helps leaders effectively support the reform of developmental education practices. While [some states](#) are making real progress in improving the utility of their education data systems, the sector as a whole [has struggled](#) with data availability and use challenges. Specifically, education data systems often collect program inputs rather than learner outcomes and produce aggregate information for state-level accountability rather than localized information to support improvement.

With respect to developmental education, research has identified a variety of specific data deficiencies which, if addressed, could significantly impact reform implementation. These include collecting and reporting [momentum metrics](#) that go beyond point-in-time data and [disaggregated data](#) that allows for examination of effects by student population.

Disaggregated data is most effective in supporting reform aims when paired with appropriate implementation practices crafted to directly address inequities, as highlighted by equity gaps in outcomes experienced by racially minoritized students, adult learners and students with low incomes. Therefore, reform efforts have also elevated the need for reporting that is designed for the end user combined with [building data capacity](#) among faculty and administrators to support continuous improvement.

Areas for Policy Action

State and system leaders can implement effective data practices that support developmental education reform efforts by developing policies that encourage appropriate data collection, reporting and use, as well as building the data capacity of faculty.

- **Data Collection Policy:** State and system policy can require institutions to disaggregate data — by race/ethnicity, socioeconomic status, age, GPA and disability status — and collect momentum metrics — such as pass rates, credit accumulation and persistence. Data disaggregation can be further specified to track the effects of implemented reforms on the outcomes of racially minoritized students, adult learners and students with low incomes [overrepresented](#) in developmental education enrollments. If disaggregated data indicate disparate outcomes between student groups, policy can be examined and adjusted to facilitate equitable outcomes.
- **Data Reporting Policy:** Institutions often have significant existing [data reporting burdens](#) for federal, state and system purposes. Rather than increasing reporting load, state and system leaders can improve the likelihood of data use for improvement by focusing attention on what is

reported, how it is reported and who receives the reports. While it is important to make some data publicly accessible, other data may have the greatest utility in the form of actionable reports for faculty and institutional leaders.

- **Faculty Professional Development:** Though some of the responsibility for data use lies in the creation and provision of user-friendly and accessible reporting, it is also necessary for the end users — faculty and administrators — to be able to correctly interpret and act on the data they receive. System and/or institutional policies can be used to set requirements and provide resources for training that helps faculty and institutional leaders [build their skills](#) in data collection, reporting, analysis and interpretation, as well as in using data to adjust policy and practice to better meet the needs of all students, particularly those marginalized in postsecondary settings.

State Examples

States with reform-supportive data policy require postsecondary institutions to regularly collect and report disaggregated data on student enrollment in developmental education courses specifically, as well as completion, persistence and attainment measures for those students. The following examples of state data reform policy were designed for universal student support:



Colorado: State statute ([Colo. Rev. Stat. Ann. § 23-1-113.3\(3\) and \(4\)](#)) requires the Colorado Department of Higher Education to report annually on students who are identified for and receive supplemental academic instruction or enroll in developmental education courses. The [Pathways to Prosperity](#) report include information on students' developmental education needs by subject and student outcomes (degree enrollment, persistence and completion). Some sections of the report disaggregate data by two- and four-year institutions, race/ethnicity, gender and income status.



Minnesota: State statute ([Minn. Stat. Ann. § 136A.055](#)) requires the Minnesota Office of Higher Education to annually report the number of students placed in developmental education, and the number who complete developmental and gateway courses. Statute requires that the data be disaggregated by race, ethnicity, socioeconomic status and age; aggregated by school district, high school and postsecondary institution; and made public via the state's [Getting Prepared](#) reports.

Final Thoughts

To successfully scale institutional developmental education reform efforts across postsecondary systems and states, leaders can codify certain structures and requirements in system and/or state policy. Leaders can support their efforts by examining policies across developmental education reform areas to ensure they are not working at cross-purposes to each other. Given the vast range of existing experiments in developmental education reform, and the many intricacies of existing state higher education policy, this can be a formidable task.

This Policy Brief presents key state and system policies that intersect with four areas of evidence-based practice in developmental education reform: placement, acceleration, alignment and data. It can serve as a tool for state and system policymakers seeking to holistically examine existing policy in light of current developmental education reform efforts.

Considerations for System Leaders

The questions provided below can support leaders as they interrogate existing policy structures. State and system leaders' responses to these questions can help them identify and dismantle policy barriers and develop equitable, reform-supportive requirements and incentives.

Placement

- Are institutions incentivized to collect and use disaggregated data to assess the impact of placement policies across student groups?
- Are institutions incentivized to place entering postsecondary students into credit-bearing (gateway) courses in English and mathematics within their first year of study?
- Are institutions incentivized to use multiple measures to determine course placement, including at least one metric of student success beyond a standardized test score, such as course grades or high school grade-point average?
- Are institutions incentivized to create and inform students about guided self-placement pathways into gateway and supplemental education courses?
- Are marginalized students encouraged to utilize guided self-placement pathways?

- Are institutions incentivized to advise students on their placement into gateway and supplemental education courses, with specific attention to the equitable placement of marginalized students?
- Are faculty and advisers who work directly with entering students incentivized to engage in training on equitable advising and culturally sustaining practices?

Acceleration

- Are institutions incentivized to collect and use disaggregated data to assess the impact of learning support models (e.g., pre-requisite, corequisite, combination) across student groups?
- Are institutions incentivized to use corequisite support models?
- Are institutions incentivized to build corequisite courses on evidence-based curricular, instructional, pedagogical and student support models?
- Are institutions incentivized to demonstrate curricular, instructional, pedagogical and student support alignment between gateway and supplemental courses?
- In what ways are acceleration policies designed to specifically support marginalized students in successfully completing their first credit-bearing courses in English and mathematics within the first year of enrollment?
- Do state postsecondary financing structures present barriers to the development and scaling of corequisite course delivery?
- Are gateway and corequisite course faculty incentivized to engage in training in designing, developing and delivering courses through the corequisite model, active and culturally sustaining learning practices and content and instructional alignment between gateway and supplemental courses?

Alignment

- Are institutions incentivized to collect and use disaggregated data to assess the impact of their math requirements across student groups?
- Are institutions incentivized to offer students options beyond college algebra as their first credit-bearing (gateway) mathematics course?
- Are institutions incentivized to align gateway mathematics courses with degree pathways?

- Are institutions incentivized to clearly articulate to students, through placement advising, the degree pathway alignments of each gateway path option?
- Do system-wide and state-wide course transfer and articulation agreements include all gateway mathematics options for credit, and do all gateway mathematics options apply to degree pathways?
- Are mathematics faculty assigned to gateway mathematics courses required to be certified to teach the specific mathematics option they are assigned (e.g., algebra vs. statistics vs. quantitative reasoning)?

Data

- Are institutions required to collect and report on momentum metrics, such as pass rates, credit accumulation and persistence, to the system/state for students in developmental education?
- Are institutions required to disaggregate collected data by race, ethnicity, socioeconomic status, age, GPA, disability status and other relevant factors?
- Is disaggregated data regularly assessed to determine whether existing developmental education policies have a disproportionately negative effect on the success of marginalized students in their first credit-bearing courses?
- If disaggregated data indicates equity gaps, are institutions incentivized to make shifts to practice to address those gaps to support equitable success for marginalized students?
- Do data reporting policies consider alleviating institutional data reporting burdens, including ways to repurpose existing data, and whether data needs to be collected and reported publicly or collected and analyzed locally?
- When reporting data to the state or system level, is there a requirement (and associated capacity) to analyze the data specific to developmental education reform and provide user-friendly and accessible reports back to the reporting institution?
- Are financial resources allocated to develop administrator and faculty data capacity across all postsecondary institutions?

About the Author



Dr. Sharmila Mann is an education policy professional with highly developed research, writing, convening, presentation and facilitation skills. Dr. Mann brings more than 20 years of education policy experience to her consulting role, including seven years at Education Commission of the States and 10 years at the State Higher Education Executive Officers Association.

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