Core Principles for Transforming Remediation Within a Comprehensive

STUDENT SUCCESS STRATEGY

A STATEMENT FROM THE FIELD | MARCH 2020

Achieving the Dream™ Community Colleges Count

American Association of Community Colleges

Carnegie Math Pathways WestEd

Charles A. Dana Center The University of Texas at Austin

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Education Commission of the States Your education policy team.

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Ascendium Elevating opportunity

Bill & Melinda Gates foundation

The Kresge Foundation

The 2020 update of the *Core Principles* has been informed by the work and ongoing contributions of the original signatories of the 2012 and 2015 versions. It has also been informed by the input of a wider range of researchers, practitioners, policy experts, advocacy organizations, and philanthropies active in the field. To capture the depth and breadth of the current movement to reform remediation, more than 30 interviews were conducted with the following individuals:

- PETER ADAMS, *Community College of Baltimore County*
- SARAH ANCEL, *Student Ready Strategies*
- MICHAEL COLLINS, *Jobs for the Future*
- TRISTAN DENLEY, *University System Georgia*
- NIKKI EDGECOMBE, *Community College Research Center*
- ANN EDWARDS, *Carnegie/ WestEd Math Pathways*
- MARTHA ELLIS, *Charles A. Dana Center*
- DHANFU ELSTON, *Complete College America*
- CRAIG HAYWARD, *Bakersfield College and RP Group*
- KATIE HERN, *Skyline College and the California Acceleration Project*
- MICHELLE HODARA, *Education Northwest*
- BRANDY JOHNSON, *Executive Office of Governor Gretchen Whitmer*
- MELINDA KARP, *Phase Two Advising*
- RYAN KELSEY, *Achieving the Dream*
- AMY KERWIN, *Ascendium Education Philanthropy*
- KARON KLIPPLE, *Carnegie/ WestEd Math Pathways*
- KAY MCCLENNEY, *American Association of Community Colleges*
- JENNIFER MILLER, *New York State Student Success Center*
- WILLIAM F.L. MOSES, *The Kresge Foundation*
- CHRISTOPHER M. MULLIN, *Strong Start to Finish*
- ERICA ORIANS, *Michigan Center for Student Success*
- RAHIM RAJAN, *Bill and Melinda Gates Foundation*
- LAURA RITTNER, *Success Center at Ohio Association of Community Colleges*
- OLGA RODRIGUEZ, *Public Policy Institute of California*
- CARLOS MARIANI ROSA, *Minnesota House of Representatives (district 65b) & Minnesota Educational Equity Partnership*
- JENNY SCHANKER, *Michigan Center for Student Success*
- BRIAN SPONSLER, *Education Commission of the States*
- KAREN STOUT, *Achieving the Dream*
- URI TREISMAN, *Charles A. Dana Center*
- BRUCE VANDAL, *BV Consulting*
- MARI WATANABE, *The City University of New York (CUNY)*

Seven Core Principles

PRINCIPLE 1 Every student's postsecondary education begins with a well-designed process that empowers them to choose an academic direction and build a plan that starts with passing credit-bearing gateway courses in the first year.

PRINCIPLE 2 Placement of every student is based on multiple measures, using evidence-based criteria, instead of through a single standardized test.

PRINCIPLE 3 Campus communities transform policies and practices to ensure that every student is provided with high-value learning experiences and with the supports needed to remove barriers to success—especially students from historically underrepresented, disenfranchised, and minoritized communities.

PRINCIPLE 4 Program-appropriate college-level math and English courses are offered to every student through evidence-based, integrated support models designed to accelerate gateway course success.

PRINCIPLE 5 Every student is provided access to multiple pathways, such as statistics and data science, that integrate rigorous math appropriate to different disciplines and to the well-paying careers of today and tomorrow.

PRINCIPLE 6 Every student is supported in staying on track to a postsecondary credential through the institution's effective use of early momentum metrics and mechanisms to generate, share, and act on finely disaggregated student progression data.

PRINCIPLE 7 Efforts to improve the student experience, meet the evolving needs of students, and remove barriers to student success are visibly prioritized by the institution through the use of mechanisms that elevate the voices and lived experiences of students—and the entire campus community.

Introduction

Postsecondary institutions and systems across the nation have demonstrated remarkable progress since the first *Core Principles for Transforming Remediation Within a Comprehensive Student Success Strategy* was published in 2015. Building on this progress, we have updated the principles to focus even greater attention on the design, implementation, and scaling of practices that lead to significantly improved and more equitable outcomes for today's students.

The 2015 version introduced the importance of situating developmental education reform within a comprehensive student success strategy, and this remains the anchoring commitment of the current update. Strengthened in this update is explicit attention to the equity imperative of developmental education redesign and the necessity of rigorous attention to the conditions for effective implementation of promising models and practices.

Successfully removing barriers to student achievement for those least well-served historically—first-generation students, students from low-income families, students from minoritized communities of color, and returning adult students—requires a deep understanding of the equity imperative underpinning the commitment to remediation reform at scale. Deeply entrenched, often racialized, implicit bias about students' capabilities makes fundamental mindset shifts as important as structural shifts and pedagogical improvements.

Commitment to equity and to ensuring intentional design that results in the dismantling of barriers and the expansion of opportunities must be clarified and pursued across the entire institution, not just the areas that focus on remediation. Similarly, it is not just the faculty and staff serving students in developmental education who need to be equipped with improved instructional and support strategies—*all* members of the campus community need to develop and refine these skills in order to meet the evolving needs of today's students.

In addition to strengthening and making more explicit the focus on equity across the principles, increased momentum around the state policy drivers of developmental education reform makes it vitally important to be clear about what is currently known and not known about effective institutional practice. For example, while there is much yet to be learned about effective placement strategies, the research base has shown forcefully that there are no circumstances under which a single high-stakes test should be used to place students in developmental education. Likewise, while there is much to be learned about what models work for which students, particularly for students facing the greatest barriers, research definitively shows that students are harmed by even the best-intentioned multi-level prerequisite developmental reading, writing, and math course sequences.

It is imperative to keep in mind that despite the tremendous gains made through remediation reform in recent years, there is still an unacceptably large number of students who are not thriving, even amid the most promising of reforms. Systematic attention to understanding the experiences and needs of these students, and to interrogating the existing policies and practices that have served historically to exclude them from the benefits of higher education, are essential for the movement to achieve its purpose and potential.

Given the driving force that state and system policy now play in the developmental education reform movement, fostering learning among practitioners has never been more important to ensuring that the movement achieves its potential. While the 2015 *Core Principles* document included a sidebar on K-12 connections, we know now that this topic is of such vital importance that it merits its own treatment.

The 2020 update is also intended to reflect the field's growing recognition that the work of remaking structures through new policies and practices rises or falls according to the quality of implementation. Leadership commitment at multiple levels is a requirement for institutions striving to develop and sustain a culture that honors the experiences of its students, and those who work most closely with them, while also cementing an institution-wide, asset-based perspective that says, "We can and must be better."

Adaptive leadership skills are essential because effective implementation of promising reforms implicates every part of an institution and challenges traditional silos between enrollment management, financial aid, student services, academic affairs, tutoring centers, and career counseling. Ongoing professional development, the cultivation of unprecedented levels of cross-silo collaboration and communication, the necessity of amplifying student voice and lived experience, and the effective use of data to inform improvements in practice all receive attention in this update.

While the core principles focus on discrete constructs of practice, together they signal that nothing short of thoroughgoing structural reform, instructional innovation, and integrated student supports that meet both the academic and noncognitive needs of students will result in significantly improved and more equitable student outcomes.

The combinatory effects of the various components of institutional transformation are far greater than the effects of discrete interventions, but this is enormously complicated work that challenges deeply entrenched structures, practices, and mindsets. High-quality integrated support models are costly and labor intensive, and therefore require both long-term commitment to the professional development of practitioners and an understanding of the long-term financial benefits to the institution of retaining and graduating many more students.

The commitment to creating and funding a coordinated research agenda to codify promising evidence-based practices, seek answers to open questions about students not yet being successfully served by these models, and assess the differential effects of interventions across student groups is essential to the long-term success of the developmental education reform movement.

While this document is intended to reflect the latest evidence, it is also intended to foster new conversations and deeper reflection. This joint statement from the field represents the ongoing commitment of researchers, practitioners, and advocates to working with institutions, system leaders, and policymakers to achieve dramatically improved and more equitable outcomes for today's students.

Design Principles Emerging from the Field

PRINCIPLE 1

Every student's postsecondary education begins with a well-designed process that empowers them to choose an academic direction and build a plan that starts with passing credit-bearing gateway courses in the first year.

Students are far more likely to succeed in postsecondary education if they have a purpose in mind. Yet many new students start their postsecondary journey without clear goals and in many cases without an understanding of their options. An effective enrollment process is intentionally designed to accomplish critical objectives for equitable student success. Specifically, a well-designed enrollment process empowers students to choose an initial academic direction, identifies the academic and integrated supports needed to pass the critical gateway courses of math and English, and assists them in developing a full academic plan, all within their first year.

For example, many institutions are helping new students choose from a small set of broad career and academic focus areas (sometimes called "meta majors"), such as social and behavioral sciences, information technology, health careers, business, the arts, and STEM. These focus areas are characterized by a default curriculum which includes appropriate math and English courses and is aligned to a specific program of study. By the end of their first year, students are able to make informed choices about their major from among the more defined options within that general area of study. Such an early determination of academic direction helps students better understand the purpose of the courses they are taking, which leads to increased motivation and persistence.

Effective institutions are not focused on screening students out of credit-bearing work and into remediation. Instead, they are designing innovative, aligned, and effective intake processes that help students clarify their goals, build their academic confidence and college know-how, and position themselves for success in gateway courses. It should also be noted that while onboarding is a critical phase in a student's learning journey, support should continue throughout the journey and not stop after the first year.

PRINCIPLE 2

Placement of every student is based on multiple measures, using evidence-based criteria, instead of through a single standardized test.

In recent years, the inequitable placement of students in developmental education combined with low success rates has led institutions to reform their assessment and placement practices: a growing number of states and postsecondary systems are moving away from single standardized test scores in favor of more accurate "multiple measures" policies. As institutions have begun to couple assessment tests (historically used as a free-standing, high-stakes placement tool) with other measures—including high school coursework completion (e.g., mathematics), high school GPA, and noncognitive factors—many have seen significantly more students placing into and successfully completing gateway math and English. Additionally, the use of multiple measures is showing significant promise with respect to achieving more equitable access to gateway mathematics for African American and Latinx students. As with any reform, quality design and implementation as well as the ongoing use of finely disaggregated data are required for ensuring that a multiple measures approach to placement dismantles rather than replicates existing inequities.

Standardized tests have low predictive validity and should not be used to assess students' academic preparation unless included in a suite of multiple measures. High school GPA and high school coursework completion are the strongest predictors of success and should be the primary measures used to assess students' need for additional corequisite or embedded supports.

Despite encouraging evidence and the growing use of multiple measures, difficulties in obtaining high school transcript data as well as ongoing uncertainty about the right combination of measures to be used remain. Although there is much more to know about the fairest approaches to placement, the latest research indicates that students' self-reporting of high school course grades and GPAs can be reliably used in place of official high school transcripts. Beyond the use of GPAs and individual course grades, institutions are also beginning to experiment with promising placement strategies like guided self-placements to more effectively understand students' needs.

Because there is limited evidence about the most effective measures besides high school GPA and coursework completion, ongoing experimentation and evaluation of different placement approaches is needed. Unknowns aside, the research is clear that the use of single high-stakes tests to place students in developmental education is harmful and inequitable. Institutions committed to achieving better and more equitable outcomes for students use placement practices that more accurately determine students' needs for support and help avoid their placement in prerequisite courses that significantly lower their chances of completing the gateway course.

PRINCIPLE 3

Campus communities transform policies and practices to ensure that every student is provided with high-value learning experiences and with the supports needed to remove barriers to success—especially students from historically underrepresented, disenfranchised, and minoritized communities.

Successful implementation of evidence-based reforms requires ongoing will-building and skill-building—not only on the part of the faculty, staff, and administrators directly involved in the implementation of specific interventions, but also by the wider campus community.

Faculty need to be prepared to support students at all course levels. Students succeed under new teaching paradigms when they are able to understand what was effective in their gateway courses and how they might incorporate and build on those successes in their higher-level courses. Even more student support is needed when institutions increase access to gateway credit-bearing courses. Developmental education reforms are most effective when they include proactive assessment of students' holistic needs. Research shows that significantly better and more equitable outcomes for students can be achieved through a combination of tailored academic and noncognitive supports, high-quality intensive advising, and responsive basic needs support.

Researchers and practitioners are unanimous in the view that no lasting gains can be had in the absence of leadership commitment and the widespread capacity of faculty, staff, and administrators at every level to provide an inclusive, culturally responsive, well-supported learning journey for students. Effective communication, authentic engagement, and ongoing professional development for faculty and staff over time is essential for lowering barriers to success for today's students, particularly students from communities that have been historically marginalized or systematically excluded from the benefits of higher education.

Instructional faculty specifically should be provided with high-quality professional development opportunities that increase their capacity and confidence for creating rich, relevant, and inclusive learning experiences for an increasingly diverse student population. Faculty need to be prepared to provide "just-in-time remediation" that fosters a growth mindset and a sense of academic belonging, as well as active and collaborative learning experiences that empower students to bring their lived experiences to their learning journey.

PRINCIPLE 4

Program-appropriate college-level math and English courses are offered to every student through evidence-based, integrated support models designed to accelerate gateway course success.

Research shows that traditional prerequisite courses hinder students' progress and raise, rather than lower, barriers to gateway course completion. Therefore, increasing numbers of institutions are transitioning from a prerequisite paradigm of remediation to a default approach of placing students directly into credit-bearing courses with enhanced and integrated support.

Research comparing corequisite and prerequisite courses' success in increasing institution-level course completion has found that a corequisite model significantly, sometimes dramatically, improves outcomes for students. Research from several states is also showing that students benefit from a pathway that starts at the college level, and that these patterns hold across race/ethnicity,

gender, Extended Opportunity Programs and Services status, Disabled Student Programs and Services status, English language learner status, and Pell Grant eligibility.

Corequisite courses vary greatly in format, type of instructor, number of credits, content, and pedagogy. While there is a need for more research evaluating the effectiveness of various approaches, there is a growing body of evidence that points to the common characteristics of high-quality models. For example, the most promising models avoid having too many or too few credits attached to them: too many units replicates the very problem corequisite remediation is designed to address by inhibiting students' ability to enroll in other courses, while too few hours (e.g., one hour per week) may provide inadequate time with an instructor. There are also promising approaches that provide an alternative to traditional remedial courses by offering a short, free-of-charge, one semester remedial support course prior to matriculation.

When it comes to instruction in corequisite models, there are many variations, including single instructors, two instructors each connected with the corequisite and gateway course components, embedded tutors, and peer support. Much more research must be conducted to better understand the effectiveness of different models for particular student populations or circumstances, but there is widespread agreement on two key points. First, whether or not the corequisite course is taught by the same instructor as the gateway course, strong professional development for the instructor(s) and intentional coordination between the two courses is crucial. Second, whatever model is adopted, the most effective corequisite courses are those that are designed backwards using the competencies of the main course.

PRINCIPLE 5

Every student is provided access to multiple pathways, such as statistics and data science, that integrate rigorous math appropriate to different disciplines and to the well-paying careers of today and tomorrow.

There is growing consensus among professional associations of mathematicians that intermediate algebra and college algebra should not be the default requirement for programs that do not depend on their content. Students pursuing a program that does not require calculus would be better served by taking a rigorous mathematics course aligned with their intended major. High-quality gateway courses in statistics or mathematical modeling, rather than college algebra, may be more appropriate for the large percentage of students who are not in a STEM program. To determine the appropriate math courses for a given program of study, it is important to consider the competencies needed for successful employment in a field of study as well as to map backwards from the competencies needed to perform well in a major's advanced courses.

Significant focus should also be placed on ensuring that faculty receive the necessary professional development to teach alternative math courses. Currently, most math faculty only receive training in calculus-based pathways; with no prior training in statistics, many are reluctant to teach these courses. Faculty within and across two-year and four-year institutions must also be supported in outlining program-level outcomes and in aligning math courses with broad fields of study or meta majors. Ensuring the integration of pathways with gateway courses is crucial. In addition to the intentional and ongoing support of faculty, advisors also require professional development and training to provide effective, tailored advising that results in students taking the right math coursework for their educational and career goals.

Finally, the most effective institutions know that math pathways must not simply be created and set in stone, lest they become barriers to student success in the future. Care should be taken to ensure that pathways are continually modernized and aligned to provide real access to high-remuneration careers in an evolving world of work.

PRINCIPLE 6

Every student is supported in staying on track to a postsecondary credential through the institution's effective use of early momentum metrics and mechanisms to generate, share, and act on finely disaggregated student progression data.

Effective institutions use disaggregated data effectively to monitor student progress, assess the impact of interventions, and determine the professional development needs of faculty and staff. Early momentum metrics include credit momentum (number of credits completed in the first semester and year), gateway course momentum (completion of college-level math and English in the first year), and persistent momentum (fall to spring persistence in the first year). When institutions focus exclusively on data associated with course success as a short-term progress indicator, rather than on broader momentum data, they may be incentivized to restrict rather than expand equitable access to gateway courses.

The use of early momentum metrics requires institutions to situate developmental education reform efforts in the context of a more comprehensive student success strategy. For effective use in equity-minded decision-making, early momentum data should be disaggregated by race and ethnicity, socioeconomic status, high school GPA bands, age, disability status, and/or other populations related to institutional context and mission. In their strategic plans, institutions and systems should set goals for closing the gaps in early momentum metrics as determined by a broader student success strategy. These metrics must be widely communicated and regularly examined.

Providing the proper infrastructure for data collection and use is a necessary foundation for employing data to improve student support, but it is just the beginning. Institutional researchers must also effectively translate the data for faculty, staff, and administrators, and leaders at multiple levels must create the conditions for widespread engagement with the data in the context of collaborative sense-making and action-planning.

Beyond using data to monitor student progress and gauge the effectiveness of interventions, institutions must also regularly deploy resources to cultivate a culture of continuous improvement anchored in the recognition that student needs will shift over time as student demographics change and the world of work continues to evolve. Institutions must commit themselves to becoming learning organizations capable of refining their strategies and approaches in order to achieve significant, equitable, and lasting improvements over time. Particularly effective institutions are using student progression data in real time to identify and provide academic and non-academic supports to students as they are needed. This requires robust cross-functional relationships between institutional research, instructional leadership, and student services.

PRINCIPLE **7**

Efforts to improve the student experience, meet the evolving needs of students, and remove barriers to student success are visibly prioritized by the institution through the use of mechanisms that elevate the voices and lived experiences of students—and the entire campus community.

Expert practitioners and researchers alike stress that qualitative research is as vital as quantitative research for building a culture of evidence and improvement. Leaders of effective institutions understand that elevating and amplifying the voices and experiences of students are essential means of designing, implementing, and refining models and interventions for maximum impact. Such attention to student experience and voice is also an intrinsic part of the ongoing work of dismantling deeply entrenched and biased structures, processes, and mindsets that have historically raised barriers the highest for students who are low-income, of color, and returning adults.

In addition to elevating student voice and perspective, faculty and staff must be supported to learn together in the service of continuous improvement for students. Without the creative energy and commitment of a critical mass of faculty, staff, and administrators at every level, even the most promising reforms are unlikely to achieve their potential. Frontline faculty and staff must have structured opportunities to reflect on their practices and to engage both qualitative and quantitative data. An authentic culture of continuous improvement is best cultivated over time through the creation of learning communities or communities of practice that bring together faculty and staff to engage data in a spirit of deliberative inquiry for improved action. Communities of practice are vehicles for both strengthening and deepening campus-wide commitment to scaled reform and for implementing and refining evidence-based approaches to providing professional development for faculty, staff, and administrators.

Only with true leadership commitment, operationalized through resource allocation and the dedicated creation of time and space for deep listening and learning, will institutions equip themselves to provide all students with access to programs that promote upward mobility.

Sources

The research supporting the *Core Principles* continues to grow. A sampling of research for each principle is listed below, though it is not an exhaustive list. Additional research can be found in the **Strong Start to Finish Resource Library** and tagged to align with each Core Principle, among other locations.

PRINCIPLE 1: Every student's postsecondary education begins with a well-designed process that empowers them to choose an academic direction and build a plan that starts with passing credit-bearing gateway courses in the first year.

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PRINCIPLE 3: Campus communities transform policies and practices to ensure that every student is provided with high-value learning experiences and with the supports needed to remove barriers to success—especially students from historically underrepresented, disenfranchised, and minoritized communities.

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PRINCIPLE 6: Every student is supported in staying on track to a postsecondary credential through the institution's effective use of early momentum metrics and mechanisms to generate, share, and act on finely disaggregated student progression data.

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PRINCIPLE 7: Efforts to improve the student experience, meet the evolving needs of students, and remove barriers to student success are visibly prioritized by the institution through the use of mechanisms that elevate the voices and lived experiences of students—and the entire campus community.

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This statement from the field captures the depth and breadth of the current movement to reform remediation and was informed by the input of a wider range of researchers, practitioners, policy experts, advocacy organizations, and philanthropies active in the field. The work was informed by interviews with a wide range of researchers, practitioners, policy experts, advocacy organizations, and philanthropies active in the field, prepared by Sova, and supported and published by Strong Start to Finish. The 2020 version of the *Core Principles* reflects the collective knowledge of key national leaders long active in the developmental education reform movement, including:

STRONG START TO FINISH

Strong Start to Finish, an initiative of the Education Commission of the States, is a network of like-minded individuals and organizations from the policy, research, and practice spaces who've come together for one reason—to help all students, not just the select few, find success in postsecondary education. We connect higher education systems and institutions with proven tools, quality technical assistance and financial and human capital resources to give every student the best start on the path toward their degree. We have networked higher education leaders, policy entrepreneurs, institutions and technical assistance providers to drive toward an outcome where all students pass their first credit-bearing English and math courses during the first year of study. To do this, we are identifying and scaling policies and practices to fit institutions large and small, so that all college students start and finish strong. We are developing next-generation technical assistance practices and policies to help more students succeed. And we are supporting and undertaking research and evaluation efforts that advance our collective understanding of what works, for which type of students, under what conditions. Learn more at **www.strongstart.org.**

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STUDENT SUCCESS STRATEGY

A STATEMENT FROM THE FIELD | MARCH 2020

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