

INCOMPLETE

THE UNFINISHED REVOLUTION IN COLLEGE REMEDIAL EDUCATION

BY ANNE KIM

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Independent Analysis, Innovative Ideas

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FutureEd is an independent, solution-oriented think tank at Georgetown University's McCourt School of Public Policy, committed to bringing fresh energy to the causes of excellence, equity, and efficiency in K-12 and higher education. Follow us on Twitter at @FutureEdGU

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TABLE OF CONTENTS

	Foreword
1	Introduction
3	The Impetus for Reform
5	A Playbook for Change
11	A Stalled Revolution
15	Finishing the Job
21	Interviews
22	Endnotes

Foreword

In 2012, a nonprofit called Complete College America issued a blockbuster report revealing that every year more than 1.7 million college freshmen—including more than half of all community college enrollees—were required to take “developmental” courses in reading, writing, and basic math. A shockingly large share of these students would never make it through the remediation, let alone to graduation, saddling students with as much as \$3 billion a year in tuition for remedial courses that didn’t earn them college credit and dealing a devastating blow to social mobility.

In one of the most impressive reform movements in American education in recent decades, state governments, higher education institutions, nonprofits, and philanthropies coalesced around a campaign to tackle the “dev-ed” problem. Successful strategies emerged and many struggling students began to clear remedial-education hurdles.

But the pace of reform has slowed and vast numbers of students, many of them Black, Latino, and low-income, remain stuck in the quagmire of traditional remedial education.

FutureEd Senior Fellow Anne Kim set out to learn what the dev-ed reform movement has achieved, why it stalled, and what needs to be done to get it back on track. The comprehensive analysis draws on a wide range of research and many interviews with researchers, educators, advocates, and dev-ed critics. It is part of FutureEd’s ongoing work to find solutions to the systemic problems that impede the progress of the nation’s most vulnerable students.

Bella DiMarco, Maureen Kelleher, Merry Alderman, and Molly Breen contributed their editorial and design expertise to the project. And we are grateful to Ascendium for funding the work.

Thomas Toch
Director, FutureEd

In 2012, a landmark report by the nonprofit Complete College America sounded a national alarm on the failure of “remedial” education for incoming students deemed unprepared for college. At the time, more than 1.7 million freshmen each year—including more than half of all community college enrollees—were barred from taking college-level, credit-earning English and math courses. Instead, they were routed into “developmental” courses in reading, writing, and basic math. A shockingly large share of these students would never make it through remediation, let alone to graduation.

“Nearly four in 10 remedial students in community colleges never complete their remedial courses... [and] fewer than one in 10 graduate within three years,” the report warned.¹ Among low-income students and students of color, the numbers were bleaker still. More than 85 percent of Black community college students assigned to remediation never finished the courses, nor did 76 percent of Hispanic students or 80 percent of students who were low income.² At the same time, students were spending as much as \$3 billion a year in tuition for remedial courses that didn’t earn them college credit and often burdened them with debt.³ The crisis was dealing a devastating blow to social mobility.

Complete College America’s report helped galvanize a nascent national effort to reform what’s now known as developmental education, or “dev-ed.”⁴ A few years earlier, researchers and educators such as Thomas Bailey of the Community College Research Center and Peter Adams at the Community College of Baltimore County had begun to challenge the effectiveness of traditional remediation. They argued that multi-semester remedial sequences took too long to finish, discouraged students, and encouraged dropout. The material was dull and stigmatizing.⁵ Worse still, many students didn’t need remediation to begin with. Between 2003 and 2009

(the most recent figures available from the National Center on Education Statistics (NCES)), some 68 percent of community college students and 40 percent of four-year college students took at least one developmental class.⁶ Yet according to a series of influential studies published by researcher Judith Scott-Clayton beginning in 2012, the standardized placement tests used by many colleges may have “mis-assigned” as many as one in four students in math and one in three students in English, placing them in remedial courses unnecessarily.⁷

In 2009, the Bill & Melinda Gates Foundation pledged \$110 million to support the nation’s first major developmental education reform initiative, launched by the nonprofit Achieving the Dream.⁸ Other big-name philanthropies followed suit, including the Lumina Foundation, the W.K. Kellogg Foundation, the Ford Foundation, the Kresge Foundation, and Ascendium. Research organizations such as the Carnegie Foundation for the Advancement of Teaching also joined the campaign, while the U.S. Department of Education established the Center for the Analysis of Postsecondary Readiness (CAPR), a research center dedicated to developmental education.⁹ In 2010, President Barack Obama’s White House Summit on Community Colleges focused on

developmental education reform as a strategy for improving college completion.¹⁰

This combination of philanthropic and federal investment led to a burst of innovation and advances throughout the 2010s. Nearly two dozen states adopted policy and legislative reforms, including California, West Virginia, North Carolina, and Texas.¹¹ Reformers challenged faulty placement tests, developed new modes of instruction and created curricula to replace traditional remediation. Among the promising models developed during this period was “corequisite” remediation, through which students enrolled in college-level classes receive intensive, tailored support in a companion course. When the University of Georgia system replaced traditional remediation with corequisites beginning in 2015, pass rates for introductory, or “gateway,” college math more than tripled. While just 20 percent of traditional remedial students ever passed gateway math, the overall pass rate after corequisite implementation leapt to 67 percent.¹²

Despite this emergence of effective remedies and a substantial commitment to reform, the developmental education reform movement has stalled. Traditional remedial education persists in many parts of the country, impeding students’ academic progress and undermining the goal of providing the nation’s increasingly diverse students with the advanced learning they need to compete in the workforce. A 2020 national survey of more than 2,700 faculty and administrators by the education

consultancy Tyton Partners found that about 40 percent of colleges and universities nationwide had implemented no developmental education reforms.¹³ Even among respondents who said their institutions were implementing reforms “at scale,” 24 percent said traditional, multi-semester remedial sequences still comprised more than half of the developmental courses offered.¹⁴ Just as troubling, there’s no reliable, national-level data on the number of students assigned to remediation each year, let alone what form that remediation takes.

Traditional remedial education persists in many parts of the country, impeding students’ academic progress and undermining the goal of providing the nation’s increasingly diverse students with the advanced learning they need to compete in the workforce.

Today, the need to reinvigorate reform across the nation couldn’t be greater. The academic disruption of the pandemic has left untold numbers of high school students without critical foundational skills, worsening an already dire crisis in college preparation and readiness. Average ACT scores hit a record low in 2023 after falling for six straight years, according to the Educational Testing Service.¹⁵ Just 21 percent of seniors who took the ACT in 2023 met all four of the exam’s “college readiness benchmarks” in math, reading, English and science. More than four in 10 met none of these standards, and 70 percent failed the benchmark for math.¹⁶ The story at the other end of the college pipeline is equally troubling. Of first-time community college students who enrolled in 2017, just 43 percent had earned a degree by 2023, according to the National Student Clearinghouse.¹⁷ Among Black community college students, the six-year completion rate was only 32

68%

Share of community college students who took remedial classes between 2003 and 2009

Source: National Center for Education Statistics

percent. While some states have had spectacular success in dev-ed reform, it would be a mistake to conclude from those victories that the movement's work is done.

Drawing on a wide range of research and two dozen interviews with researchers, educators, advocates, and critics, this analysis traces the arc of U.S. developmental education reform over the last two decades, describing the origins of reform and the promising practices that have emerged. It examines the institutional, financial, and historical barriers that have slowed the spread of reform. And it outlines the steps policymakers should take to revitalize the “dev-ed” revolution.

I. The Impetus for Reform

Developmental education was never meant to be the dead end it became for so many students. Rather, its original intent was the opposite—to create an avenue for more Americans to access college-level education.

U.S. remedial education dates to 1636 and the founding of Harvard University, according to scholar Hunter Boylan, the now-retired director of the National Center for Developmental Education at Appalachian State University. As Boylan wrote in a 1987 essay, Harvard was “immediately confronted with a need for remediation among its students” when it opened its doors—because almost all scholarly texts at the time were in Latin.¹⁸ “The learning of an academic language was not a high priority for colonists attempting to carve a homeland out of the wilderness,” as Boylan wrote, so Harvard supplied its students with Latin tutors to get them up to speed.¹⁹

Soon, other American colleges confronted similar problems with students unprepared for the rigors of their coursework.²⁰ In response, the University of Wisconsin opened the nation's first “college preparatory department” in 1849.²¹ By 1889, according to Boylan, more than 80 percent of U.S. colleges and universities had created such

departments. This trend continued until the “junior college” movement of the early 20th century, which established what are now today's community colleges to take on the task of college preparation.²²

At the same time, historically Black colleges, many of them founded after the Civil War, were striving to provide the basic education denied to Black Americans during slavery. HBCUs “established primary departments where reading, writing and mathematics could be taught,” wrote Helen Jones and Helen Richards-Smith in a 1988 companion essay to Boylan's piece. Although these schools also offered college-level work, Jones and Richards-Smith argued that the original mission of HBCUs was primarily developmental: “Since Reconstruction, black colleges have fostered the American idea of universal education dedicated to ensuring freedom, social equality and the assurance of a decent future for the underprepared who come from diverse academic backgrounds.”²³

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Perhaps insulated by its long heritage and egalitarian purpose, developmental education was allowed to stray far from its noble roots. It was only about two decades ago that reformers began to question whether developmental education was still fulfilling its intended mission. Once they began examining remedial education more critically, its flaws became apparent. Most students didn't finish remediation, and vanishingly few went on to graduate. The coursework was dull, stigmatizing, and costly, and its negative impacts fell hardest on low-income and minority students already facing barriers to higher

education. A mechanism intended to promote social mobility was, ironically, working instead to hinder it.

The Failures of Traditional Remediation

Among the first to sound the alarm on the flaws of traditional remediation was pioneering education reformer and English professor Peter Adams, who credits an Apple IIe for helping him realize how badly his developmental students were failing.

The Apple IIe was the first computer purchased by the Community College of Baltimore County (CCBC) for its English department, where Adams directed the writing program and taught for 36 years. He decided to use the computer for a database monitoring his students' progress because "there was no way ... hundreds of students were going to gather around that one very slow little computer," he recalls.

At the time, CCBC had two levels of developmental writing, followed by the college-level gateway courses, English 101 and English 102. Adams gathered data on every student assessed for their writing ability, the classes they took, and the grades they got. "At first glance, it appeared that our basic writing course was doing a good job," he and his colleagues would later write.²⁴ The school's upper-level developmental writing course enjoyed a pass rate of 57 percent, and of the students who enrolled in English 101, the pass rate was an impressive 81 percent.

But Adams uncovered a much more distressing truth when he looked at the data over time: Many of the students who passed his developmental course never went on to English 101. For instance, out of 863 students enrolled in developmental education in 1988, the year Adams first started collecting data, 490 passed remedial ENGL 052. But of those 490, just 355 enrolled in English 101. Of those students, 287 passed. Those 287 students indeed represented 81 percent of the developmental students enrolled in English 101, but they made up only 33 percent of the original cohort of 863.²⁵ Students who began in the lower-level developmental class fared even

worse, with an English 101 completion rate of only about 12 percent.

The phenomenon Adams discovered and what researchers such as Thomas Bailey of the Community College Research Center have also documented is now known as "chained attrition" or "exponential attrition."²⁶ It is perhaps the most significant problem with traditional remediation. As a 2023 manual on developmental education from the University of Georgia System stated: "Basically, the more courses in a sequence, the fewer students will make it through that sequence."²⁷ Or, as Adams puts it, the longer the pipeline, the more likely it is to spring leaks.

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But while the sheer length of remedial sequences seemed its principal failing, researchers found other ways in which remedial education was damaging student success.

First, many students felt stigmatized by remedial education, which undermined their persistence. Sbeydeh Viveros-Walton, for instance, describes her first college remedial class as "basic math"—starting with addition and subtraction. "What that does to a student and their academic confidence is terrible," she says. "It really deters them and sets them up for failure."²⁸ Corley Dennison, Vice Chancellor for Academic Affairs at the West Virginia Higher Education Policy Commission, has spoken to many students who "felt bad" about their placements into remedial courses. "They knew that people called it 'bonehead math,' and they were not happy about that," he says. (West Virginia became an early adopter of developmental education reform.)

Developmental placements can be especially devastating for students who identified as high achievers in high school. In one 2021 study, researcher Sandra Lee Coleman at the College of the Mainland, along with colleagues at Sam Houston State University, conducted in-depth interviews with six students who'd taken dual credit or advanced placement classes in high school but still landed in remedial education.²⁹ Students said they felt “embarrassed,” “frustrated,” “not smart,” and “disheartened.”³⁰ As one student told researchers, “When I was placed in the math class, I was like whoa, this kind of sucks; I should be ahead.”³¹ Three of the six said developmental classes delayed their degree plans; one eventually dropped out.

Both professors and students also found traditional remediation to be stupefying dull. When English professor Dana LeMay began teaching developmental classes at Century College, a two-year institution outside of Minneapolis, she was “horrified” by the curriculum she was given to follow. “It was insulting,” she says. “These students know how to write sentences. It was absurd, and I just felt very complicit.” In Coleman’s 2021 study, one student reported, “[I]t felt like I was learning my addition tables all over again ... the first six weeks of that semester was nothing but rehashing everything I’ve learned since middle school.”³²

In an early critique of remedial pedagogy published by the Community College Research Center, researcher W. Norton Grubb condemned the typical approach in many schools as “skills and drills,” which “violate all the maxims for good teaching in adult education.”³³ After observing traditional remedial classes in 13 California community colleges, Grubb and his team published this damning assessment in 2011:

For observers like the researchers in this study, who can leave at the end of the day, these classes are painful and tedious; for students who have to stick with them in order to make progress in their education, they must be excruciating ... Whatever one’s definition is of ‘higher-order’ or ‘21st-century

or conceptual abilities is, these are missing from remedial classrooms ... These classes are poor preparation for college-level courses or transfer that are the hope of most basic skills students.”³⁴

Worse, the students relegated to the purgatory of remediation were disproportionately Black, Latino, or low-income. Fifty percent of Black community college students and 45 percent of Hispanic community college students have taken a remedial course, compared to 35 percent of white students, according to a New America analysis of 2020 data from the National Postsecondary Student Aid Study.³⁵ The analysis also showed that 45 percent of developmental students received Pell grants.³⁶ Developmental education was holding back the very students it purported to help.

Percentage of Community College Students Taking Developmental-Education Courses, 2020

50% Black

45% Latino

35% White

Source: New America

II. A Playbook for Change

Beginning around the mid-to-late 2000s, the avalanche of criticism leveled at traditional remediation led to a surge of philanthropic and federal interest in developmental education reform. These investments helped produce a remarkably robust body of research and innovation in a relatively short period of time, along with a clear roadmap for fixing remedial education. The work ultimately

coalesced into a three-pronged strategy that has delivered striking gains in institutions embracing reform:

1. **Ending over-reliance on standardized tests for placement.** Instead, reformers have championed “multiple measures”—such as high school GPA and courses taken—to determine what support students need, if any.
2. **Accelerating students into college-level classes.** While some institutions offer compressed remedial sequences, many have adopted direct enrollment into gateway English and math, accompanied by simultaneous corequisite support, typically a companion course providing tailored instruction, tutoring or other additional help.
3. **Eliminating the insistence on algebra for non-STEM students.** A growing number of schools have instead focused on skills more relevant to the demands of specific majors, like quantitative reasoning or statistical analysis (an approach called math pathways).

Multiple measures over standardized testing

After research showed that high-stakes placement tests often resulted in “severe misplacement” and moreover failed to predict college success, many institutions abandoned them. Instead, they turned to multiple measures for assessing students, including high school GPA, years since graduation, and other factors in addition to test scores.^{37, 38}

Studies have since shown that multiple measures can “bump up” many students whom testing alone would direct to remediation, thereby sparing many students unnecessary coursework and increasing their odds of completing college-level math and English.

A 2020 study of community colleges in the State University of New York (SUNY) system, for instance, found that 16 percent of students assessed in this

more holistic way were bumped up into college math, while 23 percent were bumped up in English.³⁹ Thirty-five percent of these bumped-up students would complete college-level math after three semesters, compared to 26 percent of students with comparable test results who wound up in remediation. Forty-eight percent of bumped-up students also finished college-level English, versus 39 percent in remediation.⁴⁰

At California’s Long Beach City College, among the first to experiment with multiple measures, the results were even more spectacular. While just 9 percent of first-time students were placed in college-level math based on test scores alone, that figure jumped to 30 percent once the school considered high school performance. College-level English placement jumped from 13 percent to 60 percent. Meanwhile, pass rates for college-level courses remained relatively unchanged, “suggesting that students who were moved into the courses were as capable of passing them as their peers.”⁴¹

Acceleration to and through college-level classes

Perhaps the most dramatic reform was to eliminate traditional remedial sequences altogether, instead enrolling developmental students directly into college-level courses with additional support. Typically, this support took the form of a companion, or “corequisite,” course designed to provide relevant, “just-in-time” guidance. Colleges instituting corequisites reported significant success, and in a handful of states including Tennessee and Georgia, the model became universal.

Among the first schools to offer corequisites was the Community College of Baltimore County, where Peter Adams piloted a course he called the Accelerated Learning Program (ALP) in 2007.

Under ALP, developmental students could enroll directly into English 101, along with a one-hour companion class that met immediately after each 101 session. “The goal was not to make up their deficits

from high school,” Adams says. “What we were trying to do in ALP was to help figure out what we could do to help them succeed in English 101. It was an entirely different way of thinking about the course.” Instructors helped prepare students for the next meeting of English 101 by reviewing the previous class session, answering questions, brainstorming ideas for upcoming assignments, or editing essay drafts for revision, among other activities. Faculty set aside time to help students with non-academic challenges they faced, such as coping with stress or managing finances. Often, students devised strategies to help each other.

The results were almost immediate. Adams found that the pass rate for students enrolled in English 101 and ALP almost doubled that of developmental students in English 101 prior to ALP. Larger cohorts were also passing the next level class, English 102. In a 2012 evaluation, CCRC found the pass rate for English 101 and 102 to be 75 percent and 38 percent respectively for ALP students, compared to 39 percent and 17 percent for developmental students not in ALP.⁴²

In a 2009 article describing ALP, Adams and his colleagues wrote that one of the most powerful features of the program was putting ALP and non-ALP students in the same classroom: “When students placed into basic writing are allowed to go immediately into first-year composition, their sense that they are excluded from the real college, that they are stigmatized as weak writers, and that they may not be ‘college material’ is greatly reduced.”⁴³

ALP cohorts bonded with each other and with the school, the result of spending so much time together in small classes with a single instructor. Adams observed that “[t]he students begin to look out for each other in a variety of ways—calling to check on students who miss class, offering each other rides to campus, and, most importantly, helping each other to understand difficult concepts they encounter in their academic work.”⁴⁴

Many of these elements also characterize professor Celeste Petersen’s math classes at Clatsop Community College in Astoria, Oregon, where she has taught for eight years. Petersen’s students, she says, are primarily low-income and diverse in age and experience. “Last term, my youngest student was 16, and my oldest student was 78,” she says.

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Half the students in her gateway math class—MTH 105—are also enrolled in a corequisite. Petersen, who began her career in K-12 education, says she tries to promote “active learning” in her corequisite classroom, with hands-on activities, minimal lectures and as much student participation as possible. Last year, her developmental math students passed MTH 105 at a rate of 87 percent—outperforming her non-corequisite “college-ready” students by two percentage points.

Student Jabrielle Jones describes her experience in Petersen’s classroom as “collaborative.” She adds, “We were empowered to ask questions and not feel stupid.” Petersen used real-life examples to illustrate problems, which Jones says led to breakthroughs in her learning. “One of my hobbies is baking—and well, that’s science and math,” she says. “This whole time, I’ve been doing science and math successfully as a hobby, but I just wasn’t cognitively aware. Once [Petersen] started to put those things in place, it was like the synapses were finally firing on all engines.”

Another student, Jennifer Hughes, says the extra time and individual attention in the corequisite helped her keep up despite having been out of school for decades. Hughes returned to school in her 40s after working as the operations manager of a seafood company and raising four children. “It was super helpful,” she says. “I was having trouble with a geometry concept, and Celeste actually got a piece of paper out, ripped it into pieces, and sat there with me rearranging the pieces until it clicked.”

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Though Adams and Petersen are extraordinary teachers, corequisite support for developmental students has also achieved success at scale.

Tennessee’s community colleges, for instance, have offered corequisite learning support in lieu of traditional remediation for math, reading, and English since 2015. According to a 2022 study by CCRC and Strong Start to Finish, a national non-profit in the vanguard of developmental education reform, corequisites have helped narrow completion gaps in gateway English between developmental and “college-ready” students.⁴⁵ For students with the lowest reading placement scores, for instance, the completion gap compared to college-ready students shrank from 35 percentage points to 19.⁴⁶ Pass rates also rose by 17 percentage points for Black students

and 14 points for Hispanic students, although disparities remain in comparison to white students.⁴⁷

Other states reporting success include Louisiana, where freshmen participating in corequisite math in 2020-21 “achieved a passage rate of 55 percent compared to 11 percent for those taking remedial math alone,” according to the Louisiana Board of Regents.⁴⁸ In West Virginia, the Higher Education Policy Commission (HEPC) reported a dramatic rise in gateway math and English completion after introducing corequisites in 2013.⁴⁹ At Fairmont State University, for instance, the share of students passing gateway math leapt from 28 percent to 82 percent, according to a 2017 release from the HEPC, and at West Liberty University, pass rates for gateway English jumped from 46 percent to 91 percent.⁵⁰

In Texas, which passed legislation requiring colleges to implement corequisites, the state’s Higher Education Coordinating Board reported that 30 percent more developmental students were passing college-level math and English with corequisites than with traditional remediation.⁵¹ Moreover, according to a 2021 study by RAND, corequisite students in Texas community colleges “were less likely to perceive coursework as too easy, boring, or repetitive ... less likely to feel embarrassed [and] ... more likely to perceive their instructors as believing in their potential to succeed.”⁵²

Math Pathways

The third strategy reformers embraced was the adoption of new math pathways, typically in tandem with corequisites. These pathways offered students who were not STEM majors useful alternatives to algebra—a well-known stumbling block to college completion. This combination of corequisites plus pathways has helped achieve the dramatic improvements in gateway math completion at many schools that implemented reform.⁵³

While some traditionalists decried the rejection of the standard algebra-to-calculus track, reformers

argued that disciplines like statistics and quantitative analysis can be no less rigorous—but much more useful—to students in non-STEM fields. Rather than forcing everyone into algebra, “pathways are a better way to get students to see themselves as mathematical learners and thinkers,” says Amy Getz, a Senior Program Associate at the nonprofit WestEd who was among the first to help develop math pathways curricula.

The Mathematical Association of America (MAA) in fact challenged math departments to “examine the effectiveness of college algebra” as early as 2004. In its curriculum guidelines that year the MAA concluded, “There is often a serious mismatch between the original rationale for a college algebra requirement and the actual needs of the students who take the course.”⁵⁴ While all students need to be able to think “effectively, quantitatively and logically,” these skills could be taught in non-algebra courses.⁵⁵

In a 2019 episode of his podcast, Freakonomics, University of Chicago economist Steven Levitt argued that colleges’ traditional fixation on algebra is essentially a historical accident.⁵⁶ After the launch of Sputnik in 1957, higher math became a national security priority as America sought to churn out engineers, mathematicians, and scientists who could help beat the Soviets in the space race. The country also needed workers skilled at complex calculations who could support these efforts. “Remember, this predates the age of modern computers,” Levitt told his listeners.

Today, however, fewer than a fifth of college algebra students are in majors that require calculus (the only practical reason to learn algebra).⁵⁷ And only about one in 10 U.S. jobs requires workers to understand the kinds of concepts high school students learn in Algebra II, according to one estimate by Anthony Carnevale of the Georgetown University Center on Education and the Workforce.⁵⁸ Nevertheless, traditional remedial classes remain heavily focused on algebra. Oregon’s Portland Community College, for instance, offers six different developmental math

courses below college-level, including four levels of basic and intermediate algebra, along with “math literacy.”⁵⁹ The result, says WestEd’s Amy Getz, is that algebra can be “a gatekeeper versus a gateway.”

Math pathways, however, solve the problems of completion and relevance by providing students with usable, specific skills necessary for their studies. At Paris Junior College in rural north Texas, for instance, students are directed toward one of three college-level math sequences: quantitative reasoning for those pursuing liberal arts, fine arts, and humanities; statistics for those in social sciences, nursing, and health professions; and algebra to calculus for students studying science and engineering, business and accounting, or aspiring to teach math.⁶⁰

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“We’re not trying to give students an easier path or an easier option,” notes Ed McCraw, who recently retired as Vice President of Academic Studies and is now interim Dean of Math and Sciences at Paris Junior College. “We’re trying to give them relevant math courses that they can actually use in their degree plan and then throughout their lives in their jobs.” McCraw developed the college’s “mathways” approach more than a decade ago, with the help of the Charles A. Dana Center at the University of Texas-Austin. The college replaced its multi-semester remedial courses with corequisites (this was before legislation made them mandatory) and modified its teaching to encourage student skills

such as effective time use and a “growth mindset” for working through challenging material. The college also made mathways available to all students, not just those in developmental education. The college has won several awards for its work, including a 2023 “Exemplar” award from the Texas Association of Community Colleges.⁶¹

The Dana Center was one of two organizations to pioneer the math pathways approach, including by developing model curricula for courses such as Foundations of Mathematical Reasoning, Quantitative Reasoning, and Reasoning with Functions.⁶² Another set of model curricula in quantitative reasoning and statistics—Carnegie Math Pathways—emerged in the early 2010s from the Carnegie Foundation for the Advancement of Teaching. (The two projects are now combined as Dana Center Mathematics Pathways.)⁶³

Carnegie’s Statway and Quantway courses reached 81,794 students at 140 schools in their first 10 years and enjoyed success rates of 61 percent (Statway) and 75 percent (Quantway).⁶⁴ In spring 2024, course materials became freely available as open educational resources.⁶⁵ In 2021, the federal government’s What Works Clearinghouse concluded that the Dana Center Mathematics Pathways are both “likely to increase progression in developmental education” and “likely to increase progression in college.”⁶⁶

Early Successes

Buoyed by encouraging results, generous philanthropic support, and a strong sense of mission, developmental education reformers notched big wins early on, including a tsunami of legislative and policy victories in the first half of the 2010s.

Tennessee was among the first states out of the gate with the Complete College Tennessee Act in 2010, two years ahead of Complete College America’s blockbuster report. The legislation called for a statewide “master plan” to improve educational attainment and banned four-year institutions from offering remedial education altogether.⁶⁷ In 2012,

the Connecticut legislature prohibited community colleges from offering more than one semester of remedial instruction, while Florida passed legislation in 2014 allowing students placed into developmental education to opt out.^{68, 69}

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In 2017, California passed AB 705, a landmark bill that mandated “multiple measures” for placement and required community colleges to “maximize the probability” that students complete gateway math and English classes within their first year (basically establishing a legal right for students to enroll directly into college-level courses).⁷⁰

Community college and university systems in a handful of states adopted policy reforms as well. Early movers included systems in Virginia, North Carolina, Colorado, Ohio, Georgia, and West Virginia, as well as the City University of New York (CUNY). Pioneer Peter Adams crisscrossed the country in the early years of reform, visiting schools in at least 43 states to consult with them on corequisite implementation. “I stopped counting after 250 schools adopted it,” he says.

These sweeping reforms led to equally significant impacts. In California, for instance, 96 percent of first-time students were enrolled in college-level composition in the fall of 2019, while 78 percent were enrolled in college-level math, according to the Public Policy Institute of California (PPIC).⁷¹ By comparison, just 38 percent of students had access to college-level English before reform, and only 21 percent had access to college-level math.

PPIC also found that 57,000 more students passed gateway English in 2019 compared to 2015 (pre-AB 705), and 31,000 more students completed college-level math. Students in corequisites, moreover, were 30 percentage points more likely to pass a gateway class in one year than students in traditional remediation.⁷² “No other educational initiative in California community colleges has produced such dramatic gains,” declared a December 2022 memorandum from California community college system administrators.⁷³

According to a 2022 CAPR analysis, 33 states now have state- or system-wide assessment and placement policies for developmental education, including 26 that allow for multiple measures; 24 states allow or require corequisites; and 26 allow the use of “innovative developmental education instructional methods and interventions” such as boot camps and tutoring.⁷⁴

III. A Stalled Revolution

But the pace of reform has diminished and, in a few places, even reversed, leaving millions of students still struggling in ineffective traditional developmental education programs.

Michigan and Illinois have passed developmental education reform legislation in recent years and California has toughened its reforms.⁷⁵ But a substantial number of states have done little or nothing to address the dev-ed crisis. A 2021 50-state comparison by the Education Commission of the States found more than a dozen states with no identifiable state or system-wide policies on developmental education, including Alaska, the District of Columbia, Hawaii, Maine, Nebraska, New Mexico, and Utah, among others.⁷⁶ A handful of states, including Arizona, Montana, Vermont, and Washington, have policies addressing assessment and placement but not instructional reforms such as corequisites or other acceleration strategies.

The 2020 Tyton Partners survey of higher education institutions’ progress on developmental education reform found that many schools reporting themselves “at scale” in fact still relied on multi-semester prerequisite remediation. “Perceived levels of change and implementation do not always align with on-the-ground reality,” the study concluded.⁷⁷

Challenges related to campus governance, faculty autonomy, the jobs and revenue traditional dev-ed generates, students’ needs, and even simple inertia have conspired to hinder reform, including on campuses that made early advances.

In a 2023 webinar sponsored by Strong Start to Finish, WestEd’s Amy Getz and college completion expert Bruce Vandal identified just five states that were truly “at scale” or close to it, which they defined as all students having the opportunity to enroll directly in gateway math and English courses aligned to their chosen course of study in their first year, with access to appropriate supports (such as corequisites). These states are Texas, Georgia, Louisiana, Tennessee, and California.⁷⁸ Getz and Vandal’s presentation cautioned that “dev-ed reform as the new normal is not inevitable.” They further warned that “reversion to past practices is a real threat,” pointing to “backsliding among early implementers.”^{79, 80}

Barriers to Reform

In some places, a commitment to local autonomy has made scaling reform difficult.

In states like Oregon, for example, community colleges are independently governed, resulting in uneven adoption of reforms from one campus to the next. “We are not a ‘system’ in any way, shape or form,” says Elizabeth Cox Brand, Executive Director of the Oregon Community College Association’s Student Success Center. While Brand has secured grants and technical support to encourage developmental education reform, only 10 of the state’s 17 community colleges have implemented reforms

like corequisites. “We’ve hit this point where we’ve exhausted the coalition of the willing,” she says.

Within individual institutions, faculty frequently have the autonomy to decide their own curriculum. At Oregon’s small, rural Clatsop Community College, for instance, math professor Celeste Petersen was, until very recently, the only one of three math faculty members to teach corequisites; her colleagues continued to teach traditional remedial math.

Even where top-down approaches to reform are customary, reform efforts have created resistance, and even backlash, from faculty who prize their independence.

Even where top-down approaches to reform are customary, reform efforts have created resistance, and even backlash, from faculty who prize their independence. “One thing we’ve heard loud and clear from faculty is, ‘We don’t want the system office telling us what to teach,’” observes Lisa Eads, Associate Vice President of Programs for the North Carolina Community College System.

In some cases, faculty and other stakeholders felt left out of the process when legislative victories in the early years of reform brought rapid, widespread change. “Faculty want control over their classrooms,” acknowledges reform consultant Bruce Vandal. “It’s a bit unusual to have a state legislator decide you can’t teach [remedial] courses anymore after having it be a fundamental part of what community colleges have been doing forever.”

In Connecticut, for instance, faculty felt “excluded from the conversation” before the passage of developmental reform legislation in 2012, according to a 2015 post-mortem by the American Council on Education. This legislation, Public Act 12-40, was unusually prescriptive. It changed assessment and

placement policies; banned remedial education beyond one semester; and mandated a three-tiered system for developmental education that included corequisites, one-semester “intensive” developmental classes, and non-credit, tuition-free “transitional” courses for students with the highest needs.⁸¹

Colleges argued that this three-tiered structure did not allow instructors to innovate, while the ban on tuition for “transitional” courses created financial pressures for schools that had to hire additional staff. In 2021, the Connecticut State Colleges and Universities system adopted a “guided pathways” model for its schools that includes universal access to corequisites with no prerequisites, essentially discarding the legislated model.⁸²

In California, where Governor Jerry Brown signed dev-ed reform in 2017, sustained resistance from administrators and faculty necessitated follow-up legislation to enforce compliance. As documented in a series of reports by the nonprofit California Acceleration Project (CAP), the rhetoric of reform badly outpaced the reality on many campuses. In 2020, a CAP report found that “California community colleges have maintained large remedial course offerings despite clear evidence that these courses do not meet the legal standard of maximizing completion.”⁸³

Moreover, the colleges most likely to be “weak implementers” disproportionately served Black and Latino students, thereby exacerbating existing inequities in college access and completion. Some colleges even added remedial courses. One Los Angeles area college “went from zero sections of remedial English to 14,” for instance, while a campus in San Diego cut seven college-level math classes in favor of adding seven remedial courses instead.⁸⁴

Placement policies remained subpar as well. In a 2021 analysis of 114 California community colleges, CAP found that “none of the state’s 114 colleges could reliably justify placing students into remedial math,” and that the overwhelming majority of schools had

policies that disproportionately assigned Black and Latino students to remediation.⁸⁵

In 2021, the nonprofit legal group Public Advocates sent a demand letter to the Los Rios Community College District on behalf of student Keishan Turner, who had “been trapped in pre-transfer math classes” for nearly two years, despite having passed Honors Algebra II in high school.⁸⁶ Turner “was never informed of his right to be placed in a transfer-level math class,” the letter alleged, and he was “forced to take the remedial math class a total of three times without successful completion.” He eventually dropped out.

California schools exploited a “loophole” in the reform legislation, says CAP co-founder Katie Hern, which required placements into college-level courses but not enrollment. Some colleges created “guided self-placement” mechanisms that purported to offer students choices about their classes but were in truth biased toward remediation. “They not only had their thumb on the scale but their whole hand up to the elbow,” says Hern. “They described the college-level transfer course in scary terms, and they described remedial courses in really warm and supportive ways that sounded really good.” But these same schools, Hern adds, also withheld information from students about how their chances of completion would drop if they chose remediation over direct enrollment with support.

The apparent lack of compliance with the law led CAP, Public Advocates, and a coalition of other advocates to push for much more prescriptive legislation. In

Investments helped produce a remarkably robust body of research and innovation in a relatively short period of time, along with a clear roadmap for fixing remedial education.

2022, Governor Gavin Newsom signed legislation that essentially banned traditional remedial education in California and has been largely interpreted to mandate corequisites.^{87, 88} This new, tougher legislation was strongly opposed, however, by the Faculty Association of California Community Colleges and faculty unions including the American Federation of Teachers (AFT).^{89, 90} These groups argued that corequisites are inappropriate for many students, including those who might prefer traditional remediation if it were offered. As a May 2022 bulletin from the AFT warned, the legislation would leave students “without liberty to elect the educational pathway that best serves their needs and goals.”

Others question if corequisites are still the most effective method of remediation after the widespread learning losses inflicted by the Covid pandemic.

“We have the most diverse group of students on earth in California community colleges, and what we’ve been backed into is a one-size-fits-all,” says Wendy Brill-Wynkoop, president of the Faculty Association of California Community Colleges, in response to the new California law. “The research says that 60 percent of students do well with a corequisite model, and that’s great—that’s kick ass. But that doesn’t mean the other 40 percent are getting through. What do we do about the other 40 percent?”

Brill-Wynkoop, who teaches at College of the Canyons in Santa Clarita, California, is quick to point out that she doesn’t object to developmental education reform generally and that her organization did not oppose California’s first attempt at dev-ed reform: “I don’t think there’s one faculty member in the state that wants to put students in a long slog of five

classes to be successful.” Brill-Wynkoop notes, for instance, that while her college had experimented successfully with summer “bridge” programs for incoming students as well as accelerated remediation that allowed students to test out of topics they knew, these approaches were no longer viable under the new California law.

Under the new law essentially banning prerequisite remediation, Brill-Wynkoop says she’s observed more students withdrawing from college-level classes they don’t feel ready for. “When a student feels that the work is beyond their ability or they’re questioning their confidence, they will bail,” she says. Moreover, she adds, the students most likely to withdraw are older or students of color.

“It’s an open secret that developmental education pays for other parts of the institution.”

Brill-Wynkoop also argues, as other teachers have, that the time commitment required for corequisite remediation disserves many students: “Our students are on average 25 years and older, the vast majority of them have dependents—children and older parents—and they’re working a part- or full-time job,” she says. “Time is the thing least available to them, but we’re placing them into courses that require a lot more time. A course that’s maybe three or four hours a week normally is now eight to ten.”

Mandatory corequisites could even account for some of the enrollment declines her school has experienced, Brill-Wynkoop says: “I know from being in the classroom and watching who disappears that corequisite does not work for everybody.”

Others question if corequisites are still the most effective method of remediation after the widespread learning losses inflicted by the Covid pandemic. According to its administrators, Northern Virginia

Community College (NVCC) has been offering corequisites since the earliest years of reform, but Covid learning loss is stress-testing this approach. “What I’m hearing from faculty is that they are faced with students who are less prepared than they have ever been in their history of teaching,” says J.K. “Jen” Daniels, Dean of Languages and Literature.

Not only are more students unprepared, notes Alison Thimblin, NVCC’s Dean of Math, “their level of unpreparedness is deeper.” Faculty don’t believe corequisites are sufficient to catch students up, says Thimblin. “Our faculty are saying that you can’t make up for a foundation that’s just not there,” she says. “So there’s definitely still a need for developmental education in whatever shape or form that takes to provide students with an opportunity to build that foundation ... I think it’s important to recognize that the corequisite model with just-in-time teaching may not work all the time.”

In other places, problems with corequisite implementation have been practical. “It’s an open secret that developmental education pays for other parts of the institution,” says a foundation official supporting dev-ed reform. While reform proponents argue faculty can be reassigned and revenue recouped through greater numbers of students enrolling in college-level classes, the volume of students assigned to remediation can still generate significant revenue, especially if classes are taught by inexpensive adjunct faculty.

In North Carolina, one set of challenges arose from the varying size and resources among the state’s 58 community colleges. Pamlico Community College in Grantsboro, for example, serves fewer than 400 students, while Wake Technical in Raleigh serves more than 20,000.⁹¹ Scheduling corequisite classes, said administrators, was “very difficult” for smaller colleges with small staffs, and students faced scheduling problems too. “We saw a decrease in students attempting gateway courses,” says James “J.W.” Kelley, Associate Vice President of Student

Services for the North Carolina Community College System Office.

Another set of concerns, notes Kelley, involved serving veterans and military personnel from North Carolina's eight military bases, including the U.S. Army's Fort Liberty (formerly Fort Bragg) and the U.S. Marine Corps' Camp Lejeune. Veterans' education benefits don't cover developmental education online, which meant corequisites must be taken in person even if the college-level class is remote.⁹² Scheduling and staffing complications inevitably resulted.

The biggest barrier to dev-ed reform, however, is that it does not involve quick fixes, such as simply swapping out textbooks. Scaling reform requires change that is both "structural and cultural," acknowledges Victoria Ballerini, Associate Director of Strong Start to Finish. "It's a lot."

IV. Finishing the Job

The nation has made extraordinary progress over the past 15 years in defining the shortcomings of traditional remediation; piloting and evaluating potential solutions; and implementing reform at scale. But there has been stagnation and even reversals of promising reforms. Very different pictures emerged in different states. The challenge for reformers now is to build on the successes, incorporate lessons learned and recapture the spotlight when other urgent priorities are competing for attention. Here are key steps policymakers should take:

1. Engage Faculty

The trajectory of reform in states like Connecticut, North Carolina, and California make clear that faculty buy-in is a crucial ingredient for success. "One of the biggest lessons over my seven years at this system office has been that the more participatory we can be, the better," says North Carolina's J.W. Kelley. "And as soon as you think you've been participatory

enough, you probably need to do more." As a 2022 report for Strong Start to Finish concluded, institutions "that were able to effectively engage faculty, build buy-in for reforms, and provide the support faculty needed were more effective at getting reforms adopted and implemented."⁹³ Accordingly, the next phase of reform should prioritize sustained and concerted efforts to engage, persuade, and accommodate faculty. After all, it is faculty who will deliver the changes in structure and curriculum that reform demands.

Faculty engagement can create converts who enable reforms to take root organically. West Virginia's Corley Dennison, for instance, spent months wooing faculty and administrators over the benefits of corequisites compared to traditional remediation. He created "heat maps" with data showing students' completion and retention rates and hosted regional workshops for faculty that were strategically located so no one would have to drive more than an hour.

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As he describes it, "We gave stipends for course development and stipends for travel—things like that to show that we were willing to put up money and willing to support them." Ultimately, he says, "I found champions among the faculty who were very excited about this and realized how well co-req was working." As a result, he says, "we were able to convince a large number of the schools to go with corequisites before we even wrote the policy."

Retail persuasion was also Tristan Denley's strategy in Tennessee, Georgia, and Louisiana, where he has led reform. (One fellow reformer calls him the "Johnny Appleseed of dev-ed reform.") Denley presents at conferences, on webinars, and through detailed technical memos and briefs for administrators and faculty. A mathematician by training, he collects and analyzes reams of data on enrollments and completion rates to illustrate the damage done by traditional multi-semester remediation.

As vice chancellor for academic affairs at the Tennessee Board of Regents between 2013 and 2017, Denley pushed for statewide adoption of corequisites after a stint at Austin Peay University north of Nashville. As Executive Vice Chancellor for Academic Affairs and Chief Academic Officer for the University System of Georgia, he oversaw the system-wide rollout of corequisite education across 26 institutions and 340,000 students. Most recently in Louisiana, Denley replicated the same feat as the Deputy Commissioner for Academic Affairs and Innovation at the Louisiana Board of Regents.

Faculty buy-in is important, Denley says, because the real work of reform doesn't happen in the statehouse or an administrator's office: "I can write all the policy I want, and any legislator can pass any law they'd like, but in the end, corequisite education happens between a faculty member and students that are in the classroom."

2. Collect Data

Despite the volumes of research now available on developmental education, there's one surprisingly large gap in knowledge: comprehensive, current national data on the number of students assigned to remedial education each year and their outcomes. This is a blind spot that should be remedied in order to measure the effectiveness of reforms.

While some states now closely track student participation in developmental education, federal nationwide data is scanty. The government's most

recent analysis of remedial course taking was published in 2016, based on data drawn from the 2003-2009 Beginning Postsecondary Students Longitudinal Study.⁹⁴ The National Postsecondary Student Aid Study also provides some data, including on racial and economic disparities in remediation. But the survey is administered only every three to four years and prioritizes information about student financial aid.⁹⁵

Better national data would provide a much-needed picture of the effectiveness of reform and help define the scope of the problem left to solve, particularly in states slower to embrace reform.

Better national data would provide a much-needed picture of the effectiveness of reform and help define the scope of the problem left to solve, particularly in states slower to embrace reform. Knowing the numbers of students assigned to remediation each year and their trajectory through college could arm reformers with the evidence they need to build their case; knowing who is assigned to these classes could help illuminate inequities in access to college-level work.

Reliable data standardized across states would also further clarify the effectiveness of various models of reform—corequisite, compression, "hybrid," or other variants. These comparisons, in turn, could help inform policy choices and course design. Finally, better data could help states and systems measure their progress and identify additional barriers to student success.

3. Improve Reform Models

In recent years, developmental education reform has become increasingly synonymous with the adoption of corequisites. Reformers should look beyond this model to reach the students for whom corequisites might not be effective. Some institutions, in fact, are already piloting new models in a wave of experimentation reformers should embrace.

Among the reformers who don't believe corequisites to be "a silver bullet" is Melinda Karp, founder of the educational consultancy Phase Two Advisory. "I think they're a piece of the arsenal," she says. "But there are students who do co-req and still aren't successful, which implies that maybe they do need more time or a different approach."

One necessary shift is a rethinking of college "readiness." Karp believes that despite placement reforms such as multiple measures, students are still judged as "developmental" or "college-ready"—a binary distinction that's too rigid. "College readiness is multifaceted," Karp notes. "It's study skills, it's math skills, it's language skills. It's mindset. There are many pieces, and students can be ready in some of those and not in others."

Karp contends that the next phase of developmental education reform should acknowledge this continuum of readiness and design interventions that can meet students where they are. "All students have some strengths, and all students have some gaps," she says. "We as instructors need to elevate the former and support the latter. That's a cultural change that then leads you into rethinking your pedagogy."

For example, one college begins its corequisites later in the semester so students can decide after several weeks of class if they need the additional support. "It's an interesting way of rethinking this question of who needs support and how to honor student agency," Karp says. At another institution, adult basic education instructors provide on-demand tutoring in any class to any student who

needs it, in lieu of corequisite support. "All the students are going into college credit courses, and the support they need is given in the moment as 'just in time' support," says Karp.

Some corequisite advocates have also been working to refine their versions of the model. Tristan Denley, for instance, has gathered data comparing the impact of variables such as the number of hours offered in a corequisite (e.g., two hours a week versus three); timing (immediately after the college-level class or separately); and instructors (same or different).

Longtime dev-ed researchers encourage this innovation. "I don't think we have enough data to say what an idealized model is, and frankly, we probably don't even really want to get there because we always want to be able to make the model better," observes Nikki Edgecombe, a senior research scholar at CCRC who has authored many of the definitive evaluations of developmental education reform. "Even if we landed on something that is supporting the success of a large proportion of students, we want to continue to build in curricular, psychosocial, academic, and non-academic supports to help propel a student's academic momentum from the moment they enroll in college."

Even if developmental education reform can't by itself solve the completion problem, it remains a necessary step. And as leading-edge educators have discovered, colleges can also build on dev-ed reforms to institute campus-wide transformations that help all students succeed.

These supports could even potentially include prerequisites, argues Melinda Karp, which is why she says reformers shouldn't discard this model

altogether: “I do think there are students for whom an intensive semester of some really, really fundamental work may be necessary.”

One example of how a prerequisite developmental education program might help students is the City University of New York’s CUNY Start. Over one intensive semester, students assessed for developmental help take classes in reading, writing and/or math. Full-time students attend classes in English and math for 25 hours a week, while part-time students receive instruction in one of these subjects for 12 hours a week. The program also includes frequent meetings with advisors and a mandatory college success seminar. Tuition is only \$75.⁹⁶

CUNY Start “increased the percentage of students who completed a gateway course in math or English by 5.2 and 4.4 percentage points respectively,” according to a 2021 evaluation by MDRC.⁹⁷ Most significantly, the program created an on-ramp for students into CUNY’s Accelerated Study in Associate Programs (ASAP), a separate program for developmental students that has had significant impact on completion rates. ASAP in fact embodies a broader set of reforms that build on developmental education as their foundation but hold promise for all students in promoting their success.

4. Use Developmental Education Reform as a Springboard for College Completion

Some of the early energy around developmental education reform stemmed from the hope that ending multi-semester remediation would improve college completion. In truth, developmental education reform removes just one obstacle to degree attainment. As a 2022 report from CAPR conceded, developmental education reform by itself “is not likely to do much to improve graduation rates ... given that developmental interventions take place early in a student’s college experience.”⁹⁸ While ending traditional remediation removes some potential early exit points for vulnerable students, it

doesn’t eliminate the risk of dropping out present in every semester thereafter.

Even if developmental education reform can’t by itself solve the completion problem, it remains a necessary step. And as leading-edge educators have discovered, colleges can also build on dev-ed reforms to institute campus-wide transformations that help all students succeed.

Among these new “whole-college” models is “guided pathways,” an approach proposed by CCRC’s Thomas Bailey and colleagues in the 2015 book, *Redesigning America’s Community Colleges: A Clearer Path to Student Success*.⁹⁹ (As noted earlier, Bailey was among the first to document problems with traditional remediation and was an early champion of pathbreaking reforms like the Community College of Baltimore County’s Accelerated Learning Program.) Guided pathways aims to help students choose a program of study early on in their college experience so they don’t waste time and money on classes that won’t help them reach their career goals.¹⁰⁰ Advisers assist students with these decisions and help to keep students on track.

At Paris Junior College in Texas, for instance, programs of study are organized into seven broad pathways such as health careers, business, STEM, and public services, along with specific majors in each category.¹⁰¹ The school provides a detailed, semester-by-semester list of course requirements for each major, along with a description of the skills students can expect to acquire and the median salaries they can expect to earn once they graduate. Students seeking a degree in radiology technology, for instance, can expect to take five classes their first semester, including anatomy and physiology, a course on patient care, and program-specific classes such as Basic Radiographic Procedures. By their fourth semester, they’re taking Advanced Medical Imaging and finishing out their studies with clinical experience. Once they graduate as radiology technicians, they can expect to earn an average of \$59,860 a year, according to the school.¹⁰²

Though intended to benefit all students, guided pathways incorporate key elements of developmental education reform, including immediate access to college-level courses instead of prerequisite remediation as well as math courses aligned with a student's intended major. More than 400 community colleges nationwide have begun to implement the guided pathways model, and early results already show that more students are earning college-level credits in their first year.¹⁰³

The same logic of purpose and planning infuses the University of Georgia System's "Momentum Year," a strategy designed by veteran reformer Tristan Denley to ensure that students' first-year experiences set them up for success. (Denley has since imported the strategy to Louisiana, where, it being Louisiana, the initiative is called "Meauxmentum.") The Momentum Year approach encourages incoming students to make a "purposeful choice in a focus area or program"; develop a "productive academic mindset"; and follow a first-year course plan that includes a total of 30 credits, including nine in the student's focus area as well as gateway English and math.¹⁰⁴ This latter goal, according to the system, is based on research finding that "[f]irst-year students who take at least three courses connected to what they think they want to study are 40 percent more likely to graduate than students who do not."¹⁰⁵ Louisiana's Meauxmentum framework follows a similar philosophy, with some refinements.

Developmental education reform is a crucial ingredient of both approaches, Denley points out, but it's also one of several "foundational strands" in a strategy that encompasses all students and envisions campus-wide change. "I still believe that co-req is one of the most fundamental and most influential changes that can happen on a campus to increase student success," says Denley. "But it's not the only thing."

The goal of Denley's new thinking about first-year momentum is to create powerful milestones for student success—such as finishing gateway math and English in the first year—and to maximize student

engagement in learning. Creating momentum can also mean attending to students' basic needs, such as housing and nutrition.

Perhaps the apotheosis of this whole-college, whole-student approach is the CUNY Accelerated Study in Associate Programs (ASAP), an intensive, comprehensive initiative now offered to associate-degree students at nine of CUNY's 25 colleges. ASAP provides tuition waivers if a student's financial aid doesn't fully cover their need, along with textbook assistance and MetroCards for the subway. The program also offers "structured pathways" through programs of study, including corequisites for students needing developmental support and special registration options so students can fit classes into their schedules.¹⁰⁶ Participants are assigned their own advisor and have access to tutoring help, career services, and networking opportunities with fellow ASAP students. (In a separate development, in 2023, CUNY completed a system-wide phaseout of traditional remediation in favor of corequisites. Prior to this reform, as many as 78 percent of first-time students had been assigned to remediation.)¹⁰⁷

If every state in the country were to replicate Tennessee's results in dev-ed reform, 226,618 additional students would finish gateway math and English every year. Of this group, more than 100,000, or nearly half, would be Latino or Black.

The three-year graduation rate among ASAP students is more than double that of non-ASAP students, according to an MDRC analysis that also called these impacts "unparalleled."¹⁰⁸ The CUNY system reports that between 2007 and 2014, the three-year graduation for ASAP was 53 percent, compared to 25 percent for a historically comparable group.¹⁰⁹

According to MDRC researchers, the secret to ASAP's success may be the array of supports it offers in a "holistic package." "ASAP targets multiple potential barriers to students' success," said the report. "These services and supports help a variety of students with different barriers as well as students with multiple barriers or different barriers over time."¹¹⁰

Since a pilot launch in 2007, ASAP has served nearly 100,000 students and now aims to serve 25,000 participants a year. ASAP's success has inspired the State University of New York (SUNY) system to replicate its model, as well as colleges and systems in six other states: Tennessee, California, Ohio, West Virginia, Pennsylvania, and North Carolina.¹¹¹ Early results from Ohio from a 2023 report showed that after six years of implementation, 44 percent of ASAP students had earned a degree, compared to 29 percent of non-ASAP participants. ASAP students were also earning higher wages and were more likely to have transferred into a four-year program.¹¹²

Though the ASAP model unquestionably requires a level of resources and commitment that many colleges don't have, its success shows what can be achieved with the evolution, expansion, and extension of insights from developmental education reform.

The dev-ed revolution has made tremendous strides toward ending a traditional remediation system that has become a barrier, not a gateway, for many students. Yet too many students across the country still have no alternative to multi-semester remedial sequences that cost them time and money but earn them no college credit. For too many students today, college is over before it begins.

Finishing the job of developmental education reform would make college a reality for many more students. In their 2023 webinar, Amy Getz and Bruce Vandal argue that if every state in the country were to replicate Tennessee's results in dev-ed reform, 226,618 additional students would finish gateway math and English every year. Of this group, more than 100,000, or nearly half, would be Latino or Black.¹¹³ Students would save time and money while earning college credits, sidestepping a major obstacle to college completion and putting themselves on a path to a more secure future.

Clatsop Community College's Jabrielle Jones was facing multiple semesters of remedial math classes before she got a chance to enroll in corequisite math with Professor Celeste Petersen. The class accelerated her path to an associate's degree, and since graduating she's been hired by Clatsop to work in its student services office. As a member of the welcome center staff, she helps incoming students register for classes, orient themselves on campus, and apply for financial aid. Jones is planning to attend Portland State University this fall, at age 40, to earn a bachelor's degree in urban development. "I'm finally not poverty-stricken anymore, because I have an education," she says.

INTERVIEWS

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Sbeydeh Viveros-Walton, Director of Higher Education, Public Advocates

Wendy Brill-Wynkoop, President, Faculty Association of California Community Colleges, and Professor, College of the Canyons

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