

Investing in Student Success at Community Colleges

LESSONS FROM RESEARCH ON GUIDED PATHWAYS

Investing in community colleges is a central part of the Biden administration’s education agenda, with the goal of strengthening America’s middle class and opening the benefits of education to all Americans. CCRC has conducted 25 years of research on how community colleges can more effectively educate students and set them up to successfully transfer to a four-year college, launch a family-sustaining career, or upskill to get a better job. Our research has led to the conclusion that systemic, whole-college reform is needed to reach all students and to help many more of them reach their goals. Guided Pathways is a comprehensive reform approach whereby community colleges fundamentally redesign their programs and support services in ways that create clearer, more educationally coherent pathways to credentials with strong labor-market value. It is currently being implemented by hundreds of colleges across the country.

Guided Pathways is a comprehensive reform approach. Colleges redesign programs and support services to help all students explore, choose, plan, and complete programs aligned with their career and education goals.

Guided Pathways is not an intervention but rather a framework that the federal government, states, and colleges can use to strengthen community colleges and improve student outcomes. In this brief, we explain what Guided Pathways is, why we think it has promise, what it costs, and how it can help improve student success on a large scale and thus grow a stronger, more prosperous, and more inclusive middle class.

1. What is Guided Pathways? Why is it needed?

Guided pathways is a whole-college reform model designed to help community college students explore, choose, plan, and complete—in a reasonable time and affordably—programs that enable them to secure a good job directly or successfully transfer to a bachelor’s program in a specific major. It is based on more than two decades of research by CCRC and others on how to improve student success in community colleges.¹

The education model evident in most community colleges today evolved in the 1960s and 1970s in response to our nation’s effort to dramatically increase access to higher education. What emerged is the “cafeteria college,” which offers a wide range of programs designed

to appeal to varied student interests. Unfortunately, the cafeteria college is not well suited to helping students complete programs in a timely way or to prepare for family-supporting jobs in today's economy. This is because the sequence of courses that students need to take to complete programs that lead to good jobs or to transfer to a four-year institution in a particular major is often unclear and poorly defined. Academic and career advising and other supports are available, but students have to seek them out, and the students who need these services most are often the least likely to use them. Most students are required to take prerequisite remediation in algebra and writing, which research by CCRC and others indicates fails to prepare and motivate students to succeed in college-level coursework and sorts out too many students from underserved groups. More generally, students' progress is not monitored, so many students meander or become discouraged and drop out. And instructional innovation is focused on discrete courses, which neglects efforts to ensure that students are building essential knowledge and skills across their programs.

It is not surprising, then, that 60% of degree-seeking community college students have not completed any postsecondary credential after six years.² Those who do complete often waste time and money on courses that do not prepare them for a good job or count toward a bachelor's degree in their field of interest.³ Success rates are even lower for students of color, those from low-income families, and older students, who are disproportionately represented at community colleges. These students lack the outside guidance and resources of more privileged students, exacerbating gaps between the educational haves and have-nots in our country.

Guided Pathways provides a framework for the wholesale restructuring of academic programs and student supports to address the barriers to success created by the cafeteria college model. Colleges implementing Guided Pathways redesign programs, practices, and systems to enrich students' experience from the time they first connect with the college in ways that research indicates will help guide them into and through programs of study aligned with their goals. Faculty work with advisors and others to rethink current practice with four key objectives:

- 1) **Clarify paths to student end goals** by organizing programs into broad fields (or meta-majors) to facilitate student exploration and by "backward mapping" program pathways to ensure that they prepare students to secure a good job in fields of economic importance to their communities or to transfer with no excess credits to a four-year college in a particular major.
- 2) **Help students get on a path** by redesigning the onboarding experience to help all students explore interests and options, connect with an academic and career community, and develop a full-program plan.
- 3) **Help students stay on path** by reorganizing advising to enable case management by field and by using students' plans to schedule classes and monitor progress.
- 4) **Ensure students are learning across programs** by enriching teaching in college-level introductory program courses (not just math and English) to build students' confidence as college learners and by ensuring that students have opportunities for active and experiential learning throughout.

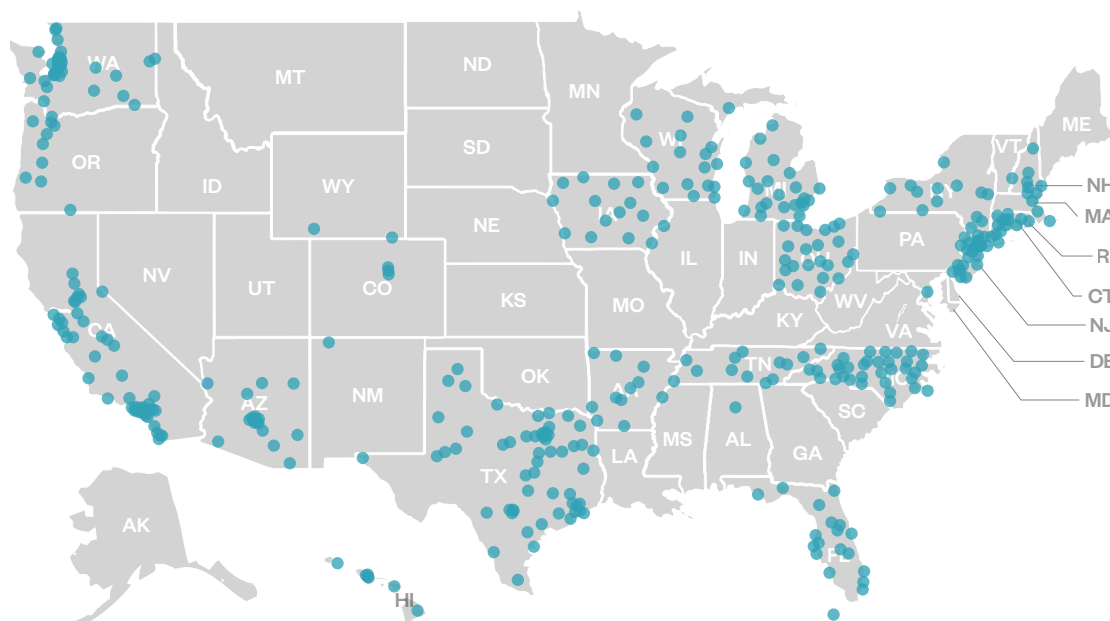
The Guided Pathways model is based on research indicating that the implementation of discrete interventions targeted to particular student groups or phases of the college

experience is not sufficient to substantially increase student success rates.⁴ Rather, colleges need to redesign and align programs, practices, and systems *at scale* using research-based principles. Guided Pathways does not eliminate the need for specific interventions designed for students who may benefit from targeted supports. However, Guided Pathways provides an overarching framework for serving *all* students while helping to identify students needing specific supports and aligning efforts to provide targeted supports.

2. How widespread are Guided Pathways reforms nationally?

Over the past decade, Guided Pathways has become a national community college reform movement, with approximately 400 colleges involved in formal Guided Pathways efforts led by state and national groups such as the American Association of Community Colleges (AACC). Many other colleges are attempting to implement Guided Pathways on their own.

Colleges Involved in Formal Guided Pathways Initiatives



There are statewide Guided Pathways reform efforts in 16 states, including the four with the largest community college enrollments—California, Texas, Florida, and New York. In many states, these efforts are being led by Student Success Centers, which are affiliated with state community college agencies or associations and were started with funding from private foundations. These Student Success Centers have sought to support adoption of Guided Pathways by hosting institutes, workshops, and other training along with coaching from practitioners who have experience implementing Guided Pathways at their colleges. This has proven to be an effective mechanism for spreading Guided Pathways, because these entities provide support for adoption to all colleges in their systems, including small rural colleges and others that have limited resources for training and outside technical assistance.

Even outside these states with statewide Guided Pathways initiatives, community college leaders—faced with declining enrollments, projected declines in high school graduating

classes, and increased competition from online for-profits and other providers—are recognizing that they need to fundamentally rethink their education and business models, and a growing number see Guided Pathways as a framework for that redesign.

3. What have we learned about Guided Pathways?

CCRC has been studying the implementation of Guided Pathways reforms at 116 colleges nationally and has published a series of reports about the practices colleges are employing and how they are managing the reform process. This research has shown that adopting Guided Pathways is a complicated process that requires dedicated leadership and four to five years to implement at scale.⁵ A key reason is that nearly every academic department and functional unit of a college—including admissions, student services, financial aid, institutional research, and the business office—needs to be involved in reviewing current practices and making changes.

Despite the challenges in undertaking such comprehensive reforms, a growing number of community colleges across the country are making the systemic changes that fundamentally alter the experience for their students.⁶ Some of the key insights that we have gained from our research on the implementation of Guided Pathways indicates that colleges should:

- **Organize program development and improvement, student recruitment, onboarding, and advising by field or “meta-major.”** Grouping programs of study by broad field or meta-major facilitates program exploration by students, helps colleges organize information, and creates academic and career communities with opportunities for networking, mentorship, and other engagement that research shows increase students’ likelihood of completing programs.
- **Redesign the new student onboarding process to help all students explore interests and choose and plan a program of study.** Students entering community colleges are generally not given help to explore career interests and academic options or to develop an education plan that shows a path to their goals. Instead, most are referred to remediation or advised to take general education courses. Without clear direction or connections, many students become discouraged and drop out. Colleges should enhance career and transfer information and advising for all entering students; connect entering students with faculty, students, and others in a meta-major from the start; and ensure that students take a well-taught course on a topic of interest in their first term.
- **Help every student develop an individualized full-program education plan by the end of their first term.** The plan should be clearly aligned to students’ goals for employment and further education, and students should be able to see their progress and what they need to do to complete their programs. Colleges should use students’ plans to create predictable class schedules that ensure the courses students need are available, and to monitor students’ progress.
- **Provide case management advising for all students within their field of study.** Community colleges typically have inadequate resources to provide advising for every student. Early adopter Guided Pathways colleges have shown that it is feasible for colleges to provide case management advising by field. One way they have done this is by embedding advisors in meta-majors. This enables advisors to become specialists in programs in their field as well as in transfer destinations and careers that their programs’ graduates are likely to pursue.

There is some evidence that Guided Pathways reforms are improving student outcomes. In colleges that have adopted Guided Pathways reforms, CCRC has observed increases in the rates at which students take college-level courses in their first year and in other “early momentum” metrics that research has shown are leading indicators of higher completion rates, with particularly strong effects for students of color and low-income students.⁷ Colleges that were early adopters of Guided Pathways have reported increased IPEDS retention and completion rates.⁸ Some have reported reductions in non-degree-applicable credits and gains from state performance funding as a result of Guided Pathways reforms.⁹

Colleges that have reported improved student outcomes associated with Guided Pathways reforms have generally seen improvements for all student groups, including Black and Latinx students and those from low-income families. At the same time, outcomes for White and higher-income students have also improved, so that equity gaps in outcomes persist. This suggests that Guided Pathways is not sufficient to address equity gaps. Early adopter colleges that have seen improvements for students generally are now scrutinizing the reforms they have made through an “equity lens” to ensure that these practices do not reinforce tracking by race, income, gender, and other factors. Moreover, even with Guided Pathways, targeted efforts are still needed to support increased success by first-generation students, students of color, veterans, students with disabilities, older returning students, and other groups with special needs.

4. How will we know if Guided Pathways has a causal impact?

All of the evidence on the effects of Guided Pathways so far is observational. In collaboration with higher education agencies in Washington, Tennessee, and Ohio, CCRC is currently conducting a more rigorous evaluation funded by the National Science Foundation on whether Guided Pathways improves STEM outcomes for underrepresented students and students generally. In this research, CCRC is measuring the extent to which community colleges in all three states have adopted Guided Pathways reforms and is using student unit record data to see if adoption of Guided Pathways is associated with better outcomes for students. The quasi-experimental design will assess changes in student enrollment, academic progress, and persistence over a 10-year period, capturing the period before and after Guided Pathways was implemented. Results from the evaluation will be available in late 2022.

Because Guided Pathways is a whole-college redesign model that is scaled to all students, it is difficult to construct randomized controlled trials that prove its efficacy. Yet Guided Pathways is inclusive of interventions, such as student coaching, that are supported by studies that meet What Works Clearinghouse (WWC) standards without reservations.¹⁰ Notably, the Accelerated Study in Associate Programs (ASAP)—which to date has shown the largest effects of any intervention on college completion—shares many features with Guided Pathways, including intensive academic support and an emphasis on graduating in a timely fashion.¹¹ A key difference is that ASAP targets students who agree to attend college full-time and meet other criteria, whereas Guided Pathways is intended to improve outcomes for everyone served by a college, including the large numbers of community college students who attend part-time.

5. What does Guided Pathways cost?

CCRC recently conducted a cost analysis on 12 community colleges that were early Guided Pathways adopters and that are similar in makeup and funding as community colleges nationally.¹² We created an “average” community college in this analysis, one with a full-time-equivalent enrollment of 4,000 and an annual operating budget of \$60 million. For this “average” college, we estimate that implementing Guided Pathways reforms costs \$7.15 million over four years, which is typically the time it takes for colleges to implement core Guided Pathways practices at scale. This works out to about \$450 per full-time-equivalent student per year of added costs, or an additional 3% of annual operating costs.

The largest start-up cost is hiring additional advisors to allow individualized case management of students by field or meta-major. Other substantial start-up costs include providing faculty and staff release time to engage in program mapping, as well as purchasing or upgrading information technology systems to support websites, online catalogs, individualized advising, academic planning, progress monitoring, and class scheduling.

The estimated cost of sustaining Guided Pathways reforms after the initial implementation phase is somewhat lower: about \$350 per full-time-equivalent student per year. Here again, the largest ongoing cost is maintaining enough advisors to allow case management of students by field. So the evidence suggests that while Guided Pathways increases costs, the expense is not prohibitive.

In a companion case study analysis on how colleges funded Guided Pathways, we found that most colleges raised at least some grant funds (including awards from Title III and Title V) to support start-up activities around Guided Pathways.¹³ Yet the colleges tended to rely as much on reorganization, reassignment, and reallocation of staff and resources as on raising new income to cover the ongoing costs of the reforms. The leaders of the colleges indicated that, in the face of an increasingly challenging and competitive higher education environment, investing in whole-college reforms was necessary to attract and retain students and fulfill their educational missions.

6. How can the federal government support Guided Pathways reforms?

The federal government could support Guided Pathways reforms at least three ways:

- 1) Grants or incentives to institutions.** Grants could be provided to community colleges and other institutions that serve disadvantaged students through existing grant programs such as Title III or Title V, or through a new grant program. In FY 2019, 33 of the grant awards to community colleges made under the U.S. Department of Education’s Title III Strengthening Institutions Program, its Title V Developing Hispanic-Serving Institutions Program, and the National Science Foundation’s Advanced Technological Education Program had “guided pathways” in the project title or abstract. So colleges and federal agencies have already recognized that Guided Pathways provides a useful framework for strengthening organizational support for student success in institutions that enroll many underserved students.
- 2) Grants to state agencies or intermediaries.** Federal funding could be awarded to state agencies or intermediaries such as Student Success Centers that provide coordination,

technical assistance, and program monitoring to support statewide adoption of Guided Pathways. This approach has advantages in that it avoids having to fund individual institutions, promotes support of all institutions in a system (not just those that have the resources to successfully support grants), and takes advantage of infrastructure in a state to promote sharing of knowledge across colleges. Such a grant program could also be designed to encourage or require state matching funding of intermediary activities.

- 3) Tighten financial aid and accreditation standards and design new legislation to require that colleges ensure every student has a full-program plan.** Research indicates that having clear learning goals and a learning plan is associated with sustained motivation, better coping in the face of challenges, and higher rates of completion among undergraduate students.¹⁴ Our research on Guided Pathways has shown the benefits for students of having a customized, full-program education plan. Given this, we suggest that the U.S. Department of Education explore reviewing financial aid eligibility rules and accreditation standards to create incentives for colleges to ensure that every certificate- or degree-seeking student has a customized education plan aligned with their career and further education goals by the end of the first term. This should be a requirement for institutions that accept federal funding for College Promise or similar programs that make two years of community college free for students.

For more information contact
Thomas Brock, CCRC Director, at brock@tc.edu or
Davis Jenkins, CCRC Senior Research Scholar, at davisjenkins@gmail.com

525 West 120th St., Box 174, New York, NY 10027
ccrc.tc.columbia.edu | [@CommunityCCRC](https://twitter.com/CommunityCCRC) | 212.678.3091

Endnotes

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