

Implementing Guided Pathways: **Tips and Tools**

A growing number of community colleges and four-year universities are seeking to improve student outcomes by redesigning academic programs and student support services following the guided pathways approach. These institutions are mapping out highly structured, educationally coherent program pathways for students to follow by starting with the end in mind—consulting with education providers at the next level and with employers to ensure that the learning outcomes of their programs are clearly aligned with the requirements for success in further education and careers. They are using program maps to assess and improve learning across programs, not just courses. They are also rethinking their new student intake systems to create program on-ramps that help students choose and enter a program of study as quickly as possible. And they are closely monitoring students' progress toward program completion and giving frequent feedback and support to help keep them on track.

While circumstances at any particular college will influence how best to go about the redesign process, it is clear that for guided pathways reforms to succeed, broad-based communication, engagement, and collaboration—both within the institution and with outside partners—are critical. This guide provides some tips and tools that can aid colleges in gaining buy-in from faculty and staff and in planning and embarking on the process of redesigning programs and support services following the guided pathways model.¹

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This case study is part three of CCRC's guided pathways practitioner packet. For an overview of research supporting the guided pathways model, see *What We Know About Guided Pathways* (part one). For a description of how one college implemented guided pathways, see *Implementing Guided Pathways at Miami Dade College: A Case Study* (part two).

Collaboration Is Key

Collaboration is critical to implementing guided pathways. Faculty and advisors need to work together to map out program pathways, cooperating within and across departments to define sequences of courses that students can take to fulfill program requirements. Once the maps are implemented, they must work together to guide, monitor, and support students as they enter and make progress along program pathways.

Faculty must also collaborate to assess students' mastery of learning outcomes and to improve instruction across programs, not just within individual courses, so that students build skills as they progress through the curriculum. And collaboration is necessary to strengthen teaching—especially in gateway courses that are critical to success in particular programs.

For a reform to succeed, college leaders must therefore offer time and support for faculty and staff collaboration. Professional development at community colleges typically takes the form of information sharing for a wide audience, or skill building for individual faculty members. Colleges can foster collaboration by redirecting some resources from conventional forms of professional development toward training, facilitation, and support for teams of faculty and staff working to create guided pathways.

Starting the Process: Examining Progression and Gaining Buy-In

For guided pathways to be effective, colleges need to know which programs students are in, how far along they are toward completing program requirements, and when they are straying from their plans. To begin the guided pathways redesign process, college leaders should convene a steering team—made up of faculty, student services staff, and administrators from across the college—who will examine the clarity of current pathways and how effectively the college monitors student progress, facilitate discussion of the need for guided pathways among groups of college personnel, and help develop recommendations for a comprehensive plan.

To help the steering team understand current practice, institutional researchers should produce a list of the number of students enrolled in each program in the college using the most detailed program codes available in the college's classification system, and including designations such as undeclared, unclassified (or no program code), developmental education, and any noncredit program designations the college uses. The steering team can then ask how accurately these program designations reflect students' program goals and how far along students are toward program completion. Are there students (e.g., those in liberal arts and sciences, or those seeking entry to nursing and other selective enrollment programs) whose progress is not tracked by any academic department?

Members of the steering team should also work with broader groups of faculty, staff, and deans to examine these issues. The questions in the accompanying table can be used to guide discussion among the steering team and across the institution about how well defined a college's program pathways are, and how well the college tracks students' progress through them.

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KEY QUESTIONS ABOUT STUDENT PATHWAYS

CLARIFYING PATHWAYS TO STUDENT END GOALS

- Are our programs designed to guide and prepare students to enter further education and employment in fields of importance to our region?
- Are further education and employment targets clearly specified for every program?
- How clearly are our programs mapped out? Do students know which courses they should take and in what sequence? Are the courses that are critical for success in each program clearly identified?

HELPING STUDENTS ENTER A PATHWAY

- How do we help new students choose a program of study, particularly the many who do not have clear plans for college and careers?
- How well do we help students succeed in the gateway courses for our main program areas (such as nursing and allied health, business, education and social services, social and behavioral sciences, arts and humanities, STEM, etc.)?
- How do we ensure that students enter a program of study as quickly as possible?
- Do we help students who are unlikely to be accepted into limited-access programs (such as nursing or culinary arts) to find other viable program paths?

KEEPING STUDENTS ON PATH

- How well do we monitor students' program choices and progress toward completing their program's requirements?
- Do students know how far along they are in their programs and what they have left to do to complete them?
- Are we able to identify when students are at risk of deviating from their program plans? How effective are we at intervening to help students get back on track?
- Does the way we schedule courses enable students to take courses when they need them, plan their lives around school from one term to the next, and complete their programs on time?

ENSURING THAT STUDENTS ARE LEARNING

- How well defined are the learning outcomes for each of our programs?
- Are program learning outcomes aligned with the skills and knowledge students need to succeed in the four-year college majors and employment opportunities targeted by each program?
- Are assignments and exams designed to evaluate whether students are building essential skills and mastering learning outcomes across each program?

The Implementation Process

Community colleges and universities that have undertaken reforms following the guided pathways model have found that the process can take four to five years. By this timetable, improvements in indicators of student progression (such as students entering the second year on track to complete their program on time) may not be evident until the end of year 3. When planning a guided pathways reform, it is therefore important to communicate that expected improvements in student outcomes will take time to be realized.

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TIMELINE FOR PLANNING AND IMPLEMENTATION	
YEAR 1	
Engagement/high-level planning	<ul style="list-style-type: none"> • Make the case for change by drawing on student data and experience • Broadly engage faculty and staff in scrutinizing current practices and planning large-scale reform • Communicate vision and goals for change
YEAR 2	
Laying groundwork for implementation	<ul style="list-style-type: none"> • Create program maps (including plans for exploratory majors) for all programs and fields • Plan redesign of intake system—including integration of supports into program gateway courses • Plan reorganization of advising to support timely program entry and completion • Plan upgrade of student information system to support progress monitoring and enable early alerts • Continue broad communication and engagement • Train advisors and faculty for year 3 implementation
YEAR 3	
Initial scale implementation	<ul style="list-style-type: none"> • Begin large-scale implementation of redesigned pathways, reorganized intake system, program advising system, and student e-advising system • Provide training to support initial implementation • Conduct formative evaluation of initial implementation • Continue broad communication and engagement
YEAR 4	
Improved scale implementation	<ul style="list-style-type: none"> • Refine and expand large-scale implementation • Continue training, communication, and engagement • Continue formative evaluation
YEAR 5	
Continuous improvement	<ul style="list-style-type: none"> • Institutionalize structures and processes for formative evaluation and improvement

Year 1

Year 1 should be devoted to making the case for change to faculty and staff, and then engaging them in the process of reviewing current practices and considering how these practices might be improved to increase student success (see part two of this packet for an example of how this was done at one college). Colleges can generate buy-in for large-scale change by taking a multipronged approach. For instance, the steering team may present longitudinal data from the college showing that many students leave after one or two terms; that students who remain often take courses that do not add up to a coherent program of study; that many students linger, accumulating college credits without graduating; and that among students who transfer, the majority do so without having completed an associate degree.²

Presenting the student perspective can also help persuade faculty and staff that reform is needed. Conducting focus groups with students on their experience choosing a program of study, and engaging faculty and staff in exercises to help them view the complex process of navigating program requirements through students' eyes (see the case study in part two of this packet) can demonstrate the need to create clearer pathways.

The steering team can distribute the questions from the table *Key Questions About Student Pathways*, along with a list of students in their programs, to departmental faculty and staff so they can review their current practices, discuss how these practices may need to change in order to improve student success, and identify who should be involved in discussions about specific improvements in each area. Advisors and other student services staff should also be included in these discussions with faculty.

Year 2

A central task of the second year is engaging faculty from across disciplines in the process of mapping out the college's programs, with the assistance of advisors. Each program map should include six main components:

1. a description of the program, including special admission requirements;
2. a detailed list of job types and transfer programs that the program is designed to prepare students for;
3. a full-program sequence of courses that can serve as a default plan for students who intend to pursue the program and that will help ensure skill-building across the curriculum;
4. critical courses that students must pass to progress in the program;
5. academic and nonacademic milestones throughout the entire program that students are expected to achieve to ensure timely program completion; and
6. information on baccalaureate transfer or other further education opportunities, including specific program and selectivity requirements (which can vary by institution and program), sample program plans at common destination institutions, and information on career opportunities for graduates.

Faculty and advisor teams should work with employers and academic departments at universities to ensure that program learning outcomes are aligned with the requirements for the jobs and further education targeted by each program. The maps should also delineate exploratory majors with a prescribed curriculum designed to help new students explore a broad field of study and decide whether to pursue a major in that field (or switch to another field).

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In concert with the development of program maps, advisors and academic departments need to rethink student advising, progress monitoring, and supports so that these services focus on helping students enter and complete their programs in a timely manner. For many students, instead of taking prerequisite remedial coursework focused on college algebra and English composition, foundational skills can be taught in corequisite courses that are integrated with critical program courses.

E-advising systems are critical to enabling the kind of monitoring and support demanded by guided pathways, but they must be understood as tools that are part of a broader reform rather than silver bullets for improving student outcomes.³ Colleges need to carefully consider and plan how to change advising structures and daily practices so that existing advisors can leverage the potential of these technologies to improve student outcomes.

During year 2, colleges should also review committee structures, institutional research activities, program review processes, budgeting practices, policies for employee hiring and performance reviews, and incentive structures for collaborative service to ensure they serve the goal of helping students enter and complete well-designed college programs.

Finally, in year 2 the college can begin to implement extensive training for faculty and staff so that they understand their roles in helping guide students into and through programs and know how to use e-advising, early alerts, and other technology tools to do so more efficiently.

Year 3

In this year, colleges begin large-scale implementation of the program maps and redesigned intake and advising systems. Some colleges have started with a limited number of broad program areas and added more programs over time (see the case study in part two of this packet). But colleges should avoid developing a set of programs and supports that run parallel to their main offerings, since this will discourage full-scale implementation of innovative practices.

Colleges should not expect that the first year of full implementation will be without glitches. Having in place a strong formative evaluation will help colleges learn from what did not go well and ensure that the second round of implementation will be better than the first.

Years 4 and 5

These years are devoted to completing large-scale implementation of the key guided pathways reform measures. During this period, the college should establish processes for reviewing and continuing to improve the effectiveness of guided pathways at the college. College-wide efforts to increase engagement through professional development, training, and broad-based communication should continue in years 4, 5, and beyond.

The Economics of Implementing Guided Pathways

We do not yet have a full accounting of the costs of implementing guided pathways, but we have some sense of the types of costs involved. These costs include faculty and staff training, upgraded computer systems for tracking student progress, and coordination to support systemic changes in organizational practice and culture. Colleges that have implemented guided pathways have also often hired more advisors to help new students choose a program path and to help faculty and academic departments support students who fall off track.

Having in place a strong formative evaluation will help colleges learn from what did not go well and ensure that the second round of implementation will be better than the first.

A CCRC analysis that examined college costs incurred by virtue of having more students progress through college suggests that, to the extent that guided pathways reforms improve student retention, they will likely improve college efficiency by *reducing the cost per student completion*.⁴ At the same time, they will also likely *increase the cost per student enrollment*. This cost increase is due to the fact that as more students persist, more enroll in upper level courses. Advanced courses cost more because they are smaller, are generally taught by full-time faculty, and in some technical fields require expensive equipment. While improving retention will increase revenue, the increase may not cover the increased costs. The estimated revenue shortfall is not large, but CCRC's analysis did not account for the up-front costs of implementing reforms to strengthen student pathways.

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Why Make the Investment?

Given the costs of implementing guided pathways, as well as the difficulties inherent in carrying out such a comprehensive reform, why would college leaders choose to undertake these major changes in college practice? While most college leaders certainly want to increase rates of student success, some who have led guided pathways reforms have also cited the following factors as reasons to pursue guided pathways reforms despite the costs.

Financial Aid Restrictions

Increasing restrictions on financial aid—particularly limits on the number of terms students are eligible for Pell grants and stricter rules regarding satisfactory academic progress—are putting pressure on colleges to help students move through college more quickly and to intervene more aggressively to help students at risk of dropping out.

Performance Funding

The adoption of performance funding in many states, and the consideration of it in others, reflects the growing desire of policymakers to see colleges improve outcomes. Reforms to discrete programs have not led to significant improvements in institutional performance. Guided pathways reforms are comprehensive and thus more likely to lead to the sought-for improvements in completion rates.

Need for Improved Student Recruitment and Retention

In the past, community colleges have been able to attract students because of their low cost and accessibility. But today, they have more competition from other institutions (including for-profit colleges), and they are under greater scrutiny by students who are assessing the costs and labor market benefits of attending college. Increasingly, to attract and retain students, colleges will have to offer programs that enable students to earn credentials of value in a timely fashion. The guided pathways approach is designed to help colleges redesign their programs and support services so that more students complete credentials on time and are well prepared to achieve their goals for further education and job advancement.

Conclusion

A growing number of colleges and universities are redesigning academic programs and support services to create more clearly structured and educationally coherent program pathways. These institutions are working to ensure that program learning outcomes are aligned with the requirements for success in further education and careers. As more institutions engage faculty and staff in this redesign process, we will be able to build on the lessons learned from early adopters about how to implement such reforms in ways that are cost-effective and that lead to improved learning and success for students.

Endnotes

1. Many of the ideas presented in this guide are explored in more depth in Bailey, Jaggars, & Jenkins (2015).
2. For a guide to conducting such analyses, see Clery, Bor, Jenkins, & Cho (2014).
3. Karp & Fletcher (2014).
4. Belfield, Crosta, & Jenkins (2014).

Sources

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