



TEACHERS COLLEGE, COLUMBIA UNIVERSITY

**Get With the Program ... and Finish It:
Building Guided Pathways to Accelerate
Student Completion**

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Abstract

Most community colleges offer a wide array of programs. Yet they typically provide little guidance to help new students choose a program of study and develop a plan for completing it, despite the fact that many new students enroll without clear goals for college and careers. In prior research charting the educational pathways and outcomes of community college students, we found that students who enter a program of study in their first year are much more likely to complete a credential or transfer successfully than are students who do not enter a program until the second year or later.

With so many choices available and without a clear roadmap or someone monitoring their progress, it is not surprising that many community college students indicate that they are confused and often frustrated navigating their way through college. In this paper, we describe efforts by a growing number of colleges and universities to redesign academic programs and support services to create “guided pathways” designed to increase the rate at which students enter and complete a program of study.

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1. Introduction: Many Choices, Little Guidance

In prior research charting the educational pathways and outcomes of community college students, we found that students who enter a program of study in their first year are much more likely to complete a credential or transfer successfully than are students who do not get into a program until the second year or later (Jenkins & Cho, 2012). This is perhaps not surprising. What is surprising is how little attention many community colleges pay to helping students get into and through programs of study.

Most community colleges offer a wide array of programs. Yet, colleges typically provide little guidance to help new students choose a program of study and develop a plan for completing it (Venezia, Bracco, & Nodine, 2010). This is so even though many if not most new students enroll in community colleges without clear goals for college and careers and may not even have a clear idea of what opportunities are available to them (Gardenhire, Collado, & Ray, 2006). While career services and advising are provided to students who seek them out, studies suggest that those who need such services the most are the least likely to take advantage of them (Karp, O’Gara, & Hughes, 2008).

Students who are undecided about what program to enter are often assigned to “general education” by default (Grubb, 2006). One rationale for treating undecided students as “general studies” students is that doing so gives those students the opportunity to explore different subject areas without limiting their future options. However, even in states that have policies guaranteeing transfer of a core general education curriculum, there is no guarantee that credits accrued in a general studies program will be accepted for credit toward junior standing in a particular major, as major requirements are often set by individual departments within transfer destination institutions (Gross & Goldhaber, 2009). Thus, to guarantee the efficient transfer of credits, students need a clear idea not only of what institution they intend to transfer to, but also of what program they plan to transfer into. And even when their goals are clear, students need sound information about the transfer process. Currently, the information provided by community colleges on transfer requirements is often complicated, hard to find, and unreliable (Kadlec & Martinez, 2013).

While community college departments closely monitor enrollment in their courses, they often do not know which students are pursuing programs of study in their fields and thus do not track students in their programs to ensure that they make steady progress toward fulfilling program requirements (Karp, 2013). As a result, many students end up self-advising.

With so many choices and without a clear roadmap or someone monitoring their progress, it is not surprising that many community college students indicate that they are confused and often frustrated in trying to find their way through college (Venezia et al., 2010). The lack of clear guidance can lead students to make costly decisions (Rosenbaum, Deil-Amen, & Person, 2006). Indeed, there is evidence from research on course-taking patterns that many community college students are pursuing suboptimal pathways (Crosta, 2013). When asked, students indicate that being in a program with a well-defined pathway would improve their chances of persisting, completing, and transferring (Public Agenda, 2012).

2. Building Guided Pathways to Success

Under the prevailing model used by community colleges, students are left to navigate a complex and often confusing array of programs and courses and support services mostly on their own. A growing number of colleges and universities are taking a different approach. Instead of letting students find their own paths through college, they are creating “guided pathways” for students. The elements of this approach include three key features, described as follows.

- **Clear roadmaps to student end goals.** In institutions that have implemented guided pathways reforms, academic programs are clearly mapped out by faculty to create educationally coherent pathways with clearly defined learning outcomes that are aligned with requirements for further education and, in occupational programs, for career advancement. Students are given a default sequence of courses to follow for their chosen programs based on maps created by faculty, although they can still opt out to follow an alternative path. Rather than restrict students’ options, the guided pathways approach is

intended to help students make better decisions so that they will be more likely to achieve their goals.

- **On-ramps to programs of study.** Colleges and universities are rethinking new student intake, advising, and remediation as “on-ramps” to programs of study. Mechanisms are in place to help new students develop or clarify goals for college and careers and to create an academic plan that shows a recommended sequence of courses that students should follow to complete their programs. As part of their plan, students are required to choose an initial field of interest (such as business, allied health, education and social services, social and behavioral science, or English, arts and humanities) that includes a default curriculum that gives them a taste of the given field. This will help them to decide whether they want to pursue a particular program in that field or switch to another field. Academic foundation skills and “college knowledge” and success skills are contextualized in college-level coursework in the student’s field of interest. Students who cannot be placed in college-level courses are helped to move as quickly as possible through remediation, which is also ideally contextualized to the student’s initial field of interest.
- **Embedded advising, progress tracking, feedback, and support.** Students’ progress relative to their academic plan is tracked, and frequent feedback is provided to them and to their advisors and instructors. Advising is being redesigned to ensure that students are making progress based on academic and non-academic milestones, such as completing an internship or service learning project, applying for transfer, or updating a resume. Close cooperation between professional advisors and faculty ensures a smooth transition from initial general advising to advising in a program. “Early-alert” systems signal when students are struggling, and they set in motion appropriate support mechanisms. Advising and other necessary supports are designed as defaults that students are expected to use unless they opt out.

Four-year institutions were among the pioneers in developing the guided pathways approach. One example is Florida State University (FSU), where, beginning in the late 1990s, faculty began developing program maps that lay out for every program default course sequences and milestones that students must achieve over the entire course of the program. Students who are undecided are required to choose an “exploratory

major” in one of four broad fields. The exploratory majors give students a structured path for choosing a major. Students can only stay in an exploratory major for up to three terms, after which they have to choose a specific major. FSU has found that even with the guidance provided by the program maps and pre-majors, a robust system of advising and other supports is still needed, especially to help students select majors. Robust advising is particularly needed for transfer students, for other special populations, and for students who are not making progress or who fall off track. FSU officials contend that these efforts are at least part of the reason why the university has been able to improve retention rates and graduation rates for students overall and close the graduation rate gap between minority students and their peers (Carey, 2008).

Another example is Arizona State University (ASU). To help students choose from among the more than 250 majors it offers, ASU asked faculty members to map out the path to a degree in each field.. The “major maps” produced by the faculty lay out a default curriculum for students to follow each semester that indicates the sequence of courses students should take and the milestones they need to achieve to stay on track. They also identify “critical courses” that should be taken early in a student’s program and that can be used to predict a student’s likely performance in the major in which they are interested. ASU uses a sophisticated electronic advising system called eAdvisor to monitor students’ progress along their map and identify when they may be foundering. As at Florida State, undecided students at ASU are required to enter an exploratory major in one of the five most popular program areas. Like students in regular majors, students in exploratory majors are required to follow the “major map,” which shows the prescribed sequence of courses by term. Students in exploratory majors are also required to enroll in a sequence of one-credit college and career exploration courses, which are designed to lead students through the process of choosing a major.

Based on the major maps, ASU has developed transfer admissions guarantees for particular majors with every community college in Arizona. Community college students who complete the sequence of courses specified in the agreement for a particular major are guaranteed admission as juniors into that major at ASU and, if they are Arizona residents, receive a somewhat reduced level of tuition through ASU’s Tuition Commitment Program. In addition, ASU is collaborating with the Maricopa Community

Colleges and others to develop an information system to allow ASU and community college advisors to track student progress along these pathways. ASU has also assigned transfer admissions specialists to work with students and their advisors on the community college campuses. This is an example of two- and four-year institutions working together to develop guided transfer pathways on a very large scale.

Community colleges are also beginning to implement the guided pathways approach. In selecting Valencia College as the first winner of the Aspen Prize for Community College Excellence in 2011, the Aspen Institute cited Valencia's "life map," an academic and career planning system that is linked to clear pathways, including "pre-major" tracks that are aligned with requirements for junior standing in majors at partner universities for students seeking to transfer.

In 2009, Queensborough Community College in New York began requiring all first-time, full-time students to enroll in one of five Freshmen Academies based on their interests and goals. Each academy has a freshmen coordinator who serves as an academic adviser and advocate for students in that academy and at least one faculty coordinator responsible for working with faculty and student affairs staff to promote the adoption of high-impact teaching practices and build within their particular academy academic communities of students, faculty, and others with similar interests and aspirations. The college has surveyed students in the academies extensively. According to the college researcher who oversees evaluation of the academies, "Students say that being in an academy gives them a sense of identity as a student. . . . It causes them to reflect on what they want to do, and what it will take to move ahead in the field." (Jenkins, 2013). Students are not locked into a particular academy once they enroll in one. In fact, students' experiences in an academy can lead some students to change their minds about what they want to study and do: Approximately 20 percent of students switch academies in the first year. The college reports that after implementing the Freshman Academies in fall 2009, first-year retention rates increased. The college's three-year graduation rate for first-time, full-time students has also increased since then. College staff acknowledge that they cannot attribute these improvements to the academies alone, and they point out that the college has implemented many changes during this period to improve student outcomes. Still, these results, along with very positive reviews of the academies by

students and faculty, have convinced the college to require all new students, whether full- or part-time, to enroll in an academy when they enter the college.

In examining why many of its students do not complete, Miami Dade College (MDC) found that the pathways to program completion were often unclear, particularly in the “pre-baccalaureate” program area, where the largest number of students are enrolled and where completion rates are also relatively low. Students had too many choices of courses. Academic support was often misaligned with academic programs, and the information students received to help them navigate programs and services was often inconsistent and unclear.

To address this, in academic year 2012–13, MDC convened a group of 27 faculty members who, in consultation with their departments and college-wide instructional committees, mapped out program pathways in the five largest program areas, which account for over 80 percent of degree-seeking students at the college. The charge to the pathways mapping team was to create maps that specify a default sequence of courses for students pursuing degrees in those fields. The maps, which include versions for full- and part-time students, had to meet three criteria. First, all courses in each pathway should transfer seamlessly to enable students to achieve junior standing in target bachelor’s programs. Second, each pathway should indicate specific general education courses that are relevant to the given major field. For example, the pathway map might say: “This is the social science course recommended for criminal justice majors.” And third, the curriculum should provide opportunities for students to master all 10 MDC learning goals for general education.

All entering students are required to see an advisor and develop an academic plan based on the pathway maps. MDC is also creating “communities of interest,” which are being designed to introduce students to the field so that they can evaluate whether they want to pursue more specialized study or switch to another field. Thus, rather than implement small innovations and then try to scale them up, Miami Dade College, like the other institutions profiled here, is innovating at scale, redesigning programs and support services in ways that affect thousands of students.

3. Research-Based Redesign Principles

While rigorous research on the effectiveness of guided pathways in higher education is just beginning, the results are encouraging. For example, in preliminary findings from a random-assignment study of CUNY’s Accelerated Study in Associate Programs (ASAP), which requires students to attend college full-time in a block-scheduled course of study and which provides a rich array of supports and incentives for up to three years, MDRC found extraordinarily strong effects on student retention and credit accumulation (Scrivener, Weiss, & Sommo, 2012). In addition, research on organizational effectiveness and improvement strongly suggests that to achieve large improvements in student outcomes, piecemeal changes will not suffice. Rather than trying to bring to scale “best practices,” colleges and universities need to redesign their policies, programs, and services at scale (Jenkins, 2011; Kezar, 2011).

The guided pathways approach reflects a set of principles for redesigning programs and services that is supported in the research literature. These include: (1) reate clear roadmaps to success that simplify students’ choices; (2) clearly define program learning outcomes and align with end goals; and (3) monitor student progress, providing frequent feedback and integrated supports. The evidence in support of these principles is described briefly below. None of these principles suggests a single best way that colleges should carry out any of their many functions. Instead, they together represent principles of practice, grounded in research, that colleges can follow in redesigning programs and supports to increase the rate at which students enter and complete a program of study.

3.1 Create Clear Roadmaps to Success That Simplify Students’ Choices

The complex processes students must negotiate to enroll in and navigate through broad-access institutions can be overwhelming for them. A large body of rigorous research from behavioral psychology indicates that too many complex choices can lead to the sorts of behaviors that are often associated with struggling students: indecision, procrastination, self-doubt, and paralysis (Thaler & Sunstein, 2008). In contrast, a simplified set of options that includes clear information on each option’s costs and benefits, or the provision of a “default option” designed by experts, can help people make more optimal decisions. Applied to broad-access institutions, the findings from this

research suggest that colleges would achieve better outcomes by simplifying bureaucratic procedures (such as registering for classes and applying for financial aid) and creating clear program maps or plans for students that clearly define a default sequence of courses and milestones students should follow and achieve (Scott-Clayton, 2011). One reason that community colleges are so dependent on advisors is that the program paths are not clear; students need an expert to help them navigate through the maze of choices they encounter. But because the current paths are often so complicated that even expert advisors sometimes cannot figure them out, the paths not only need to be clarified, they must be simplified as well.

Research on behavioral psychology has shown that people can handle complex decisions if they are helped to think through the options hierarchically. One way to do this is by first organizing complex choices into more manageable sets, and then requiring the chooser to select from among the sets (Keller, Harlam, Loewenstein, & Volpp, 2011). This “active choice” technique is apparent in the practices described earlier by institutions such as FSU and ASU, which organize specific degree programs into a limited set of broad streams or exploratory majors from which new students are required to select, help guide students through the process of choosing a specific major, and enable students to switch to another field if their initial choice is not a good fit.

3.2 Clearly Define Program Learning Outcomes and Align With End Goals

Research on K–12 education has found that schools that are able to achieve greater gains in student outcomes, particularly with students from disadvantaged backgrounds, have higher levels of “instructional program coherence.” This is defined as: “a set of interrelated programs for students and staff that are guided by a common framework for curriculum, instruction, assessment, and learning climate, and that are pursued over a sustained period of time” (Newmann, Smith, Allensworth, & Bryk, 2001, p. 299). The programs and supports offered by community colleges are often lacking in such program coherence. By this principle, in order to improve student outcomes, colleges need to ensure that all aspects of their programs and services—including orientation and intake, placement testing, remediation, curriculum, instruction, assessment, academic support, and so on—are well-integrated and aligned to achieve

program-level learning goals. They also need to ensure that the learning goals themselves are aligned with the requirements for success in further education and, in the case of career programs, employment.

3.3 Monitor Student Progress, Providing Frequent Feedback and Integrated Supports

Research suggests that college students benefit from non-academic supports that help them create social relationships, clarify goals for college and careers, develop college know-how, and address conflicting demands of work, family, and college. Efforts to build on-ramps that help students choose and enter a program of study should include supports that address these four areas (Karp, 2011). These support services should ideally be offered in a way that is integrated into students' primary academic experience, rather than offered separately. Behavioral research and research on learning suggests that it is motivating for students to see how they are proceeding along their chosen path. Thus it is critical to provide frequent feedback to students on how they are progressing, both to encourage students who have reached important milestones and to help students who are not making progress or who are off-track.

4. Conclusion: Collaboration Is Key to Building Clear Pathways

Collaboration is important to any major organizational reform, but it is critical to efforts to implement guided pathways. To map out program pathways, faculty need to work with transfer institutions and employers in order to define meaningful learning outcomes. And they must also collaborate within and across departments to systematically build those outcomes across a clearly defined sequence of courses. To help guide students into program pathways and to keep them on track, faculty and student services staff need to work together to monitor and support students as they enter and make progress.

Thus, for guided pathways reforms to be successful, college leaders need to create time and support for faculty and staff to collaborate. Currently, professional development at community colleges is often viewed either as information sharing geared to a wide

audience on campus—such as at the typical faculty development day—or as an activity designed to build the skills and knowledge of individual faculty members. Colleges might consider redirecting at least some resources currently spent on conventional forms of professional development toward collaborative efforts, such as providing training, facilitation, and other support as needed by teams of faculty and staff working together to create guided pathways. Doing so would reframe professional development as a strategic activity that supports the collective involvement of faculty and staff in organizational improvement rather than as an activity that mainly supports the professional growth of faculty and staff as individuals.

To build an infrastructure that will support ongoing efforts to implement and improve guided pathways, colleges need to rethink not only their approach to professional development but also their committee structures, institutional research activities, program review processes, budgeting practices, and policies for employee hiring, performance review, and incentives. All such practices should be reviewed to ensure that efforts to increase the rate at which students “get with a program ... and finish it” become an integral part of the way community colleges do business.

References

- Carey, K. (2008). *Graduation rate watch: Making minority student success a priority*. Washington, DC: Education Sector.
- Crosta, P. (2013). *Intensity and attachment: How the chaotic enrollment patterns of community college students affect educational outcomes* (CCRC Working Paper No. 60). New York, NY: Columbia University, Teachers College, Community College Research Center.
- Gardenhire, A., Collado, H., & Ray, B. (2006). *A whole 'nother world: Students navigating community college*. New York, NY: MDRC.
- Gross, B., & Goldhaber. (2009). *Community college transfer and articulation policies: Looking beneath the surface* (CRPE Working Paper No. 2009_1R). Seattle, WA: University of Washington Bothell, Center on Reinventing Public Education.
- Grubb, W. N. (2006). "Like, what do I do now?": The dilemmas of guidance counseling. In T. Bailey & V. Morest (Eds.), *Defending the community college equity agenda* (pp. 195–222). Baltimore, MD: Johns Hopkins University Press.
- Jenkins, D. (2011). *Redesigning community colleges for completion: Lessons from research on high-performance organizations* (CCRC Working Paper No. 24, Assessment of Evidence Series). New York, NY: Columbia University, Teachers College, Community College Research Center.
- Jenkins, D. (2013, May). Unpublished interviews with faculty and staff at Queensborough Community College on the college's Freshmen Academies.
- Jenkins, D., & Cho, S. W. (2012). *Get with the program: Accelerating community college students' entry into and completion of programs of study* (CCRC Working Paper No. 32). New York, NY: Community College Research Center, Teachers College, Columbia University.
- Kadlec, A., & Martinez, M. (2013, April 26). *Putting it all together: Strengthening pathways between comprehensives and community colleges*. Prepared for the American Enterprise Institute Private Convening, "Comprehending Comprehensives."
- Karp, M. M. (2011). *Toward a new understanding of non-academic student support: Four mechanisms encouraging positive student outcomes in the community college* (CCRC Working Paper No. 28, Assessment of Evidence Series). New York, NY: Columbia University, Teachers College, Community College Research Center.

- Karp, M. M., O’Gara, L., & Hughes, K. L. *Do support services at community colleges encourage success or reproduce disadvantage? An exploratory study of students in two community colleges* (CCRC Working Paper No. 10). New York, NY: Columbia University, Teachers College, Community College Research Center.
- Karp, M. M. (2013). *Entering a program: Helping students make academic and career decisions* (CCRC Working Paper No. 59, Assessment of Evidence Series). New York, NY: Columbia University, Teachers College, Community College Research Center.
- Keller, P. A., Harlam, B., Loewenstein, G., & Volpp, K. G. (2011). Enhanced active choice: A new method to motivate behavior change. *Journal of Consumer Psychology, 21*(4), 376–383.
- Kezar, A. (2011). What is the best way to achieve broader reach of improved practices in higher education? *Innovative Higher Education, 36*(4), 325–247.
- Newmann, F. M., Smith, B., Allensworth, E., & Bryk, A. S. (2001). Instructional program coherence: What it is and why it should guide school improvement policy. *Educational Evaluation and Policy Analysis, 23*(4), 297–321.
- Public Agenda. (2012). *Student voices on the higher education pathway: Preliminary insights and stakeholder engagement considerations*. San Francisco, CA: WestEd.
- Rosenbaum, J. E., Deil-Amen, R., & Person, A. E. (2006). *After admission: From college access to college success*. New York, NY: Russell Sage Foundation.
- Scott-Clayton, J. (2011). *The shapeless river: Does a lack of structure inhibit students’ progress at community colleges?* (CCRC Working Paper No. 25, Assessment of Evidence Series). New York, NY: Columbia University, Teachers College, Community College Research Center.
- Scrivener, S., Weiss, M. J., & Sommo, C. (2012). *What can a multifaceted program do for community college students? Early results from an evaluation of Accelerated Study in Associate Programs (ASAP) for developmental education students*. New York, NY: MDRC.
- Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. New Haven, CT: Yale University Press.
- Venezia, A., Bracco, K. R., & Nodine, T. (2010). *One-shot deal? Students’ perceptions of assessment and course placement in California’s community colleges*. San Francisco, CA: WestEd.