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Guided Pathways: Improving Completion and Showing Students the Way to Success

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Introduction

In 2013, nearly half of all U.S. undergraduate students (46%) attended a community college; at that time this figure represented 41% of all freshmen college students (AACC, 2015b). Yet, despite a plethora of educational opportunities, many American college students fail to graduate in two years when pursuing an associate degree and within four years when pursuing a bachelor's degree. What we find today are student success rates that are unacceptably low, employment preparation that is inadequately connected to job market needs, and disconnects in transitions between high schools, community colleges, and baccalaureate institutions (AACC, 2012). Consequently, the American community college system has garnered national attention.

In April 2010, six national community college organizations — the American Association of Community Colleges (AACC), the Association of Community College Trustees, the National Institute for Staff and Organizational Development, the League for Innovation in the Community College, Phi Theta Kappa, and the Center for Community College Student Engagement — jointly signed an historic commitment to boost student completion by 50% (AACC, 2015a). To this end, community colleges across the nation are implementing reforms geared towards dramatically improving student completion rates. Guided Pathways is among the many promising initiatives.





The idea behind Guided Pathways is straightforward. College students are more likely to complete a degree in a timely fashion if they choose a program and develop an academic plan early, have a clear roadmap of the courses they need to take to complete a credential, and receive guidance and support to help them stay on a plan (Bailey & Smith Jaggars, 2015). Simplifying and clarifying program pathways requires corresponding changes in other college practices, particularly how the college approaches instruction, student support services, and the new student intake process (Jenkins, 2014). Because of these many requisite changes, there is a cost associated with putting this initiative into practice.

While many institutions across the country, including the City Colleges of Chicago, Miami-Dade College, and Florida State University, have implemented some aspect of Guided Pathways, nonetheless, this is a new concept and many questions remain (Complete College America, 2014). Is this standardized approach to servicing students applicable in every college environment — rural, urban, suburban, large, medium, and small? Are completion rates significant enough to yield a return on the financial investment associated with Guided Pathways? Will this initiative negatively impact future enrollments, college programming, or any other aspect of college administration? Despite the fact that many of these questions cannot be answered today, the Guided Pathways model has the potential to change higher education in significant ways and is a topic worth exploring.

Are We on the Right Paths?

In the recently released book, *Redesigning America's Community Colleges, A Clearer Path to Student Success* (Bailey & Smith Jaggars, 2014), the term "cafeteria style" is used to illustrate the problem students face at many community colleges. Just as when eating at a diner faced with a trough of choices, patrons may feel uncomfortable and confused and end up with an unappetizing plateful, students attending community colleges are similarly facing too many options. This confusion may cause them to waste time and money and never reach their goals: "Students are confused by a plethora of poorly explained program, transfer, and career options" (Bailey & Smith Jaggars, 2015, p. 3).

The result of this style is what many see as the main problem with community colleges — that not enough students complete their academic or career goals. The term "Guided Pathways" describes a process used to redesign and refine programs to counteract

some of these problems. A guided pathway can be defined as a "highly structured, coherent educational experience that is built around and through an area of study" (AACC, 2014, p. 11).

In its 21st Century Commission Report, "Empowering Community Colleges to Build the Nation's Future" (2014), the AACC recommends that community colleges change institutional characteristics from fragmented course-taking to "clear, coherent academic/career pathways" (p. 6). Many different approaches to building guided pathways for students are being implemented across the country. In October 2015, the AACC announced that thirty schools chose to participate in The Pathways Project (AACC, 2015c). Many questions loom about best practices, assessment, and funding for all community colleges pondering pathway initiatives.

Promising Models

Colleges that have embarked on the process of building guided pathways have focused their energies on two general ideas: accelerating the completion of credit and preventing wasted credits (Education Advisory Board, 2012; Kadlec, Immerwahr, & Gupta, 2013). According to the Education Advisory Board (2012), "A growing body of research shows a close correlation between early credit accumulation and ultimate graduation success. The underlying causality is varied — some struggling students sap their credit accumulation totals by failing and withdrawing at high rates while others just do not take enough courses in the first place" (p. 14).

Guided Pathway programs designed to support accelerated completion of credits focus on sustained momentum starting in a student's first year and continuing through graduation and limit lost credits due to failure and withdrawal from courses. Examples of operational processes that support these objectives include automated withdrawal advising, predictive course performance, and flat-rate "15 to Finish" tuition programs (Education Advisory Board, 2012).

Initiatives that focus on preventing wasted credits simplify course selection by creating template program plans that direct a student's choices during the registration process. As long as the students follow the prescribed pathway, they will stay on course toward degree completion (Education Advisory Board, 2012). In addition to scripted degree maps, colleges are implementing default course registration and milestone degree requirements to simplify new course selection.

State and National Perspectives

Based on the national research and several national initiatives, including Complete College America, The Completion Agenda, and Guided Pathways to Success, individual institutions and state systems are redesigning their processes to increase retention, completion, and student learning.

FLORIDA

Miami Dade College. In 2011, Miami Dade College (MDC) — one of the largest community college systems in the U.S. with eight campuses — set out to strengthen pathways to degree attainment, transfer to baccalaureate institutions, and employment advancement (Rodicio, Mayer, & Jenkins, 2014). Upon close examination of the students attending MDC's eight campuses, researchers discovered several factors contributing to student attrition: unclear pathways through programs, too many choices, hard to understand program requirements, inconsistent and vague academic advising information, disconnected academic supports, and a need for academic and career goal development. Because of this research, the institution embarked upon mapping program pathways, creating a comprehensive and engaging intake process, strengthening support throughout the programs, and monitoring student outcomes to inform continuous improvement (Bailey & Smith Jaggars, 2015). The college-wide initiative established maps through the programs to completion. More than 120 faculty, administrators, and staff worked together on initially identifying areas needing improvement. The results of their year-long investigation led to a set of recommendations. After that process, teams were re-formed and worked on plans to develop more structured pathways, set up clearer entries into the paths, and provided better supports along the pathways (Rodicio et al., 2014).

Two and a half years into the reforms, MDC has successfully engaged faculty and staff in mapping out curriculum pathways in the largest program areas of the colleges, creating seamless "on-ramps" to help new students choose and enter programs of study in these fields, and improving ongoing support services to facilitate student progression along the pathways (Rodicio et al., 2014).

MDC has shown that even very large institutions can successfully change their programs and curriculum to provide the guided pathways that should improve outcomes.

Florida State University. As part of the Guided Pathways to Success (GPS) initiative, Florida State University (FSU) (Tallahassee, Florida) designed and implemented default academic program mapping, exploratory majors, and proactive advising. As a result, from 2000-2009, FSU has had an increase in retention rates and an increase in four-year graduation rates, as well as a substantial reduction in students graduating with excessive credits (Lumina Foundation, 2016).

Valencia College. In recognition of the need for Guided Pathways for student success, Valencia College (Orlando, Florida) developed a pathway tool, LifeMap, to guide students in their journey to their career and educational goals. This tool links all of the support components (career planning, academic pathways, courses, technology, programs, services, faculty, and staff) into a single resource. These pathways are also aligned to offer students the ability to transfer to the university with junior standing (Romano & White, 2012).

NEW JERSEY

Thirteen out of nineteen community colleges within the New Jersey Council of County Colleges (NJCCC) are involved in the first cohort of the Guided Pathways redesign work. In partnership with the NJCCC, the Center for Student Success is offering guidance and technical support as well as the establishment of a statewide Guided Pathways Steering Committee comprised of a broad range of institutional stakeholders (presidents, academic officers, student services officers, institutional research officers, and faculty). Each college employs a cross-functional team to identify and facilitate a five-phase process: institutional engagement, program mapping, academic counseling, retention, and continuous improvement (Madas & Venturelli, 2015).

MICHIGAN

Twenty-three of twenty-eight independent community colleges within the state are involved in one of two cohorts of the Guided Pathways redesign work guided by the Michigan Student Success Center (MSSC). With the research and support of the MSSC, the cohorts are working through best practices and examining how these data-driven decisions will impact practices within each institution. Such practices include mapping pathways to the student end goal, ensuring students are learning, assisting students in choosing the appropriate pathway, and keeping students on the path (Michigan Center for Student Success, 2015).

INDIANA

Public Agenda, in collaboration with the Indiana Commission for Higher Education (ICHE), recently conducted focus groups and reviewed recent literature with stakeholder groups. The goals of the study were to (a) understand obstacles to smooth degree pathways and promote completion, (b) examine focus group responses to a set of policy proposals, and (c) review promising practices within the national literature. The research examined practices that reduce time to a degree and categorized these into two main strategic areas: (1) accelerating completion and (2) preventing wasted credits (Kadlec et al., 2013).

NEW YORK

The City University of New York (CUNY). CUNY implemented the Accelerated Study in Associate Programs (ASAP) initiative that groups students into cohorts based on limited majors and consolidated scheduling, resulting in a graduation rate three times the national average for urban community colleges (Bailey, Smith Jaggars, & Jenkins, 2015).

ASAP is gaining national attention as a successful Pathways approach. The program is designed to remove the obstacles that many of CUNY students face — finances, time, and culture (EdCast 87, 2015). By providing answers and support in these areas, the graduation rates have risen for the students participating in ASAP. The first two cohorts had a 55% graduation rate, more than double that of other degree-seeking students (EdCast 87, 2015). The ASAP program provides extra support services in advising, scheduling, tutoring, and career planning. Students receive financial support with funds for transportation, full-time enrollment, and textbooks. The funding for this program is supported by donations from New York City officials and private investors (EdCast 87, 2015).

Queensborough Community College. Queensborough Community College (Queens, NYC) recognized the need for increasing student support, particularly with first time, full-time students. These students are required to enroll in one of five Freshman Academies, based upon their goals and interests. Each Academy has a dedicated coordinator/academic advisor/advocate and at least one faculty coordinator who connects with the Student Affairs division to strengthen the community of students. The academies, along with other promising support practices, have increased retention rates among first time, full-time students (Bailey et al., 2015).

"Guided Pathways is in the early stages of implementation; however, assessment to date indicates colleges seeking to move in this direction need to start planning with the end in mind (Michigan Center for Student Success, 2015)."



Guttman Community College. As a new addition to CUNY, Guttman Community College (midtown Manhattan) was designed around the Guided Pathways practices, such as following a first-year curriculum designed to assist students in exploring career areas and committing to a major. Students requiring remediation find this instruction embedded within the credit courses. The second year students are then required to choose a program of study that is tightly connected to the labor market in New York City. These practices and others have resulted in an attainable three-year goal to graduate 35% of its students compared to an average of 13% for other community colleges in larger cities (Bailey et al., 2015).

CALIFORNIA

One college that is stretching the pathways to include high school through the university is Long Beach City College in Long Beach, California. Through the Promise Pathways program, when students enroll, they sign a commitment to participate in various pathway support actions: "Early results show significant increases in student completion of early educational milestones" (AACC, 2014, p. 13). This community college made connections with the local high school district and California State University-Long Beach to create their own transfer plan.

NATIONAL APPROACHES

On the national level, Student Success Centers within Arizona, California, Connecticut, Michigan, New Jersey, Ohio, and Texas are all active in some variation of the Guided Pathways initiatives. Additionally, the AACC is also engaged in an expanded "institute" approach to Guided Pathways similar to that of the Michigan Student Success Center's approach.

Designing a Guided Pathways Program

Guided Pathways is in the early stages of implementation; however, assessment to date indicates colleges seeking to move in this direction need to start planning with the end in mind (Michigan Center for Student Success, 2015). This requires beginning with a focus on student completion, and then moving backward to build systems to monitor student progress, support successful student entry into selected programs of study, and make initial connections with prospective students considering college entrance (Completion by Design, n.d.). Although working backward may seem unconventional, it allows colleges to lay a foundation upon which more immediate work can be built. According to the Michigan Center for Student Success (2015), implementing Guided Pathways focuses on the following four steps.

STEP 1: COMPLETION — COMPLETION OF CREDENTIAL FOR FURTHER EDUCATION AND LABOR MARKET ADVANCEMENT.

Align program outcomes with requirements for success in further education and the labor market. This step requires that the pathways clearly align with the students' goals, such as transfer to other educational institutions for additional studies or preparation to move directly into employment. For those students moving

directly into the labor market, the pathways must encompass employment projections and data so students are prepared for available jobs.

STEP 2: PROGRESS — FROM PROGRAM ENTRY TO COMPLETION OF PROGRAM REQUIREMENTS.

- Clearly map out Program Paths.
- Rethink advising around Maps.
- Use "eAdvising" to monitor student progress and provide feedback and support as needed.

In this step, students must not only see a clear start and end point on their educational journey, but all points in between must be presented in an equally transparent manner. Students will need to understand the connection between completing courses and other requirements so that their larger goals can be achieved as scheduled. Advising must focus on moving students efficiently along their pathway, and its delivery will require staff armed with new information and tools to be as flexible and helpful as possible.

STEP 3: ENTRY — FROM ENTRY TO PASSING PROGRAM GATEKEEPER COURSES.

- Require exploratory or "meta-majors" for undecided students.
- Integrate basic skills instruction with program gatekeeper courses.

This step will help students lay a solid foundation for future success on their pathway. Although some students will need more support than others, it will be important to embed instruction into introductory courses that will prepare students to succeed in college-level coursework. If students are not ready to select a path, they will need additional guidance with this undertaking as they explore options and make decisions.

STEP 4: CONNECTION — FROM INTEREST TO APPLICATION.

- Effectively market the program paths.
- Build bridges from high school and adult education into program streams (e.g., strategic dual enrollment).

This step requires strategic working relationships with local partners so that pathways can be effectively promoted across the communities served. Partners will need to understand the benefits of pathways for students so they can help move them in a direction aligned with their skills, interests, and future educational and career goals.

According to Bailey et al. (2015), moving through this planning process will require new or enhanced systems be built around academic program structure, new student intake, instruction, and progress monitoring and support. Their work has identified best practices in each of these critical areas to help community colleges most effectively implement Guided Pathways in their community. Following is a comparison of current vs. best practices in implementing this work as presented by Bailey et al. (2015).



COMPONENTS OF EDUCATIONAL SYSTEMS

CAFETERIA MODEL (STATUS QUO)

GUIDED PATHWAYS MODEL

Academic Program Structure

Paths to student end goals are unclear.

Program requirements are confusing; guidelines for progression are not clear and consistent.

There is lack of curricular coherence across courses, and students may not acquire needed skills.

Course schedules are unpredictable and often set to accommodate college needs not student needs.

Curriculum in high schools and other feeders is not aligned to college requirements.

Programs are fully mapped out and aligned with further education and career advancement.

Critical courses and other milestones are clearly identified on program maps.

Student learning outcomes are specified across programs.

Predictable schedules are set based on analytics of courses students need to progress on their plans.

High school and other feeder curricula are designed to prepare students to enter college and programs in particular fields.

New Student Intake

Career and college planning is optional.

Undecided students are allowed to explore career and course options on their own.

Assessment is used to sort students into remediation or college-level courses.

Prerequisite remediation is narrowly focused on college algebra and English composition.

Academic plans, based on program maps, are required.

Students are required to enter exploratory majors and choose specific programs on a specified timeline.

Assessment is used to diagnose areas where students need support.

Instruction in foundation skills is integrated into and contextualized with critical program courses.

Instruction

Learning outcomes are focused on courses, not programs.

Instructors are often isolated and unsupported.

Meta-cognitive skills are considered outside the scope of instruction.

Faculty collaborate to define and assess learning outcomes for entire programs.

Faculty are trained and supported to assess program learning outcomes and use results to improve instruction.

Supporting motivational and meta-cognition is an explicit instructional goal across programs.

Progress Monitoring and Support

Student progress is not monitored, or there is limited feedback on progress.

Students do not have a clear idea of what they need to do to complete program requirements.

Students' performance in critical program courses is not closely monitored.

Communications between advisors and academic departments is poor; advisors lack accurate program information.

Student progress on academic plans is closely monitored, with frequent feedback.

Students can see how far they have come and what they need to do to complete programs.

Early warning systems identify students at risk of failing critical courses and initiate timely interventions.

Advisors work closely with program faculty, with a clear division of labor for monitoring progress.



Possible Issues With Guided Pathways

While these early efforts in implementing Guided Pathways are showing important positive effects, discussion of the approach should also consider what colleges and students could lose if Pathways are widely implemented.

DISAPPEARANCE OF LIBERAL ARTS

One question many educators raise is whether Guided Pathways will adequately expose students to traditional liberal arts courses. Numerous researchers have proclaimed the benefits of a liberal arts education, i.e., an education that focuses on the development of the whole student and teaches self-understanding within the context of democratic society (Freedman, 2000; Pascarella, 2005). Because most Guided Pathways emphasize preparation for employment and market-ready graduates, a liberal arts curriculum, including courses in history, psychology, natural and social sciences, foreign languages, religion, the arts, and English, may not have a future under this system.

Some colleges, it should be noted, incorporate liberal arts courses in their Guided Pathways. For instance, an Associate of Arts degree in Journalism at City Colleges of Chicago includes thirty-nine general education credits, most of them in liberal arts disciplines (City Colleges of Chicago, 2016b). An Associate Degree in Applied Science in Community Health, however, requires the completion of only sixteen hours in liberal arts courses (City Colleges of Chicago, 2016a). Many educators ask if this level of liberal arts is enough exposure to these important foundational courses.

NARROW FOCUS

Another related consideration is whether Guided Pathways are too narrowly defined. Humphreys (2012) asserts that an exclusive focus on efficiency undermines the quality of learning. She believes that today's shortfall of educated workers is due to the job market requiring a broader set of skills than ever before and graduates who are leaving college without clear achievement in new significant areas of learning. She notes, for example, that more than 35% of college students are making minimal or no gains in their critical thinking and writing skills over four years in college (Arum & Roksa, 2011).

LOSS OF INTERDISCIPLINARY THINKING

According to Lane Wallace, as cited in Humphreys (2012), the innovation needed to succeed in today's world requires thinking in flexible, interdisciplinary ways, across many fields of knowledge. Vicki L. Baker, as cited in DiMaria (2010), believes vocational education provides students with an educational experience that will be obsolete in five years or less. While their training may get these graduates a job, studies show that general education graduates are more likely to be employed at age fifty than those with vocational training alone, and that general education is particularly important during times of rapid economic and technological change (Hanushek, Woessmann, & Zhang, 2011).

STAGNATED EDUCATIONAL INNOVATION AND FLEXIBILITY

Other educators feel that innovation in education can also be negatively impacted by Guided Pathways. More flexible curricula can better develop and test innovative educational approaches and pedagogies, and potentially find better ways of educating students (Baker, Baldwin, & Makker, 2012). These researchers feel that Guided Pathways programs, due to their rigid structure, may not offer this opportunity.

Another consideration is whether Guided Pathways allow enough flexibility for students. Some students want to explore several fields of study before deciding on a major. Alternatively, a student may enter college and decide to change majors. Both of these options are more difficult in a Guided Pathway system because there are so few shared courses across program areas. Vicki L. Baker, as cited in DiMaria (2010), fears that a loss of educational options will adversely affect society at large by discouraging some undecided students from entering college in the first place. Baker et al. (2012) believe that a less flexible educational system will be less able to meet the needs of our diverse society.

ABANDONING LIFE-LONG LEARNING AND THE COMMUNITY COLLEGE MISSION

There are also some students who enter college wanting to take only a few courses or to take courses that do not necessarily lead to a degree. Most community colleges embrace lifelong learning as one of their primary institutional values and a key part of their mission. Are community colleges that implement Guided Pathways remaining true to their mission of educating the whole community, or are these colleges altering their institutional purpose?

Using Data to Inform Decisions

For institutions planning to implement a form of a Guided Pathways program, ongoing evaluation of the effectiveness of the changes will be essential. While higher education has a strong history of evaluation, too often this assessment has been narrowly focused on topics such as department-level impact, program review, or sporadic accreditation-required self-evaluation; a more holistic structural approach of planning and evaluation with greater campus-wide engagement of faculty is required for the transformational changes (Bender, Jonson, & Siller, 2010).

The number and variety of research measurements and data collection methods that are now available to colleges have increased dramatically, but analyzing the collected information and using it to drive decisions has proved challenging — colleges

tend to be "data-rich but insight-poor" (Chaplot, Booth, & Johnstone, n.d.). This challenge is compounded by the difficulty in balancing the complex, longitudinal data that are more accurate and meaningful, with the simpler metrics that are easier to calculate and understand, and, therefore, more likely to be used (Bailey & Smith Jaggars, 2015). Research at 110 California community colleges has shown, "the closer practitioners were in contact with students, the less likely they were to have access to or use data" (Chaplot et al., n.d., p. 7). As Jenkins (2014) suggests, one of the key changes that must occur if colleges are going to be able to create a sound foundation and infrastructure for implementing a successful Guide Pathways program is that they must rethink their approach to institutional research activities. The following table, based on Jenkins' work, delineates the differences in assessment approach for traditional, status-quo institutions compared to those implementing Guided Pathways.

ASSESSING SUCCESS: DATA-DRIVEN DECISION MAKING	
STATUS QUO THINKING	GUIDED PATHWAYS THINKING
Number of enrollments: Measured by total and by demographics	Number and percentage of successful completions: Measured by total and by demographics
Number (variety) of programs	Number of programs with high employment opportunities
Course success	Program success
Credits completed	Credits completed that apply to or transfer into program
Number of students graduated	Number of students graduated and employed in field of study
Financial aid awarded	Financial aid awarded in comparison to earnings potential (especially student loans)

Conclusion

The United States, which for generations led the world in college degree completion, now ranks sixteenth in completion rates for 25 to 34 year olds (AACC, 2012). This ranking causes great concern about the economic future of the United States. As colleges consider Guided Pathways as a way to reverse low completion rates and minimize the cost of higher education, they must proceed with caution and awareness of the institutional resources, policies, and culture that will be affected. Solutions that work for the students at one college may not be appropriate at another. Work will need to spread across departments and divisions as each aspect of the pathway is developed, breaking down silos and challenging processes along the way. Interested institutions can learn from the well-documented experiences of others, information available at Student Success Centers, and the examples of the pioneering colleges and universities.

Guided Pathways is a new way of approaching student success, and for those institutions willing to invest, breaking out of long-standing comfort zones will likely be necessary. Nevertheless, Guided Pathways is only one option for improving college

completion rates and student success. Educators are being challenged to find new solutions and identify creative alternatives to outdated educational models.

In its challenge to community colleges, the 21st Century Commission on the Future of Community Colleges established some significant goals, including these: increase completion rates by 50% by 2020, dramatically improve college readiness, close the American skills gap, refocus the community college mission and redefine institutional roles, invest in collaborative support structures, target public and private investments strategically, and implement policies and practices that promote rigor and accountability (AACC, 2012).

As time progresses, the results of initiatives like Guided Pathways will be easier to measure. While initial efforts at implementing Guided Pathways appear to be effective, we are still on untested ground. Undeniably, the challenges of the present have sparked a high level of collaboration and innovation, and the collaboration among six national community college organizations suggests that we are off to a great start. Only time will tell if these efforts will result in the degree of improvement and change we need to see.

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