

Tuesday, December 12, 2017



RIO HONDO COLLEGE

GUIDED PATHWAYS & STUDENT EQUITY

Summit

AN INTEGRATED APPROACH



Pathways

Ensure that
students are
learning

Help students
stay on path

Help students choose
and enter a pathway

Clarify paths to
student end goals



BUILDING CAPACITY FOR GUIDED PATHWAYS

at California Community Colleges

California Community Colleges Guided Pathways Award Program

Designed to provide all California community colleges with the opportunity to implement Guided Pathways, this multi-year state award supports processes that help colleges integrate multiple initiatives and scale up effective practices to improve student success. Thanks to \$150 million in one-time funds, all 114 California community colleges are eligible to participate and receive funding.

AACC Pathways Project

This multi-year demonstration project is intended to help colleges design and implement Guided Pathways at scale. Three California community colleges are participating.

California Guided Pathways Project

Inspired by the AACC Pathways Project, the California Guided Pathways Project is an institute-based model that seeks to demonstrate promising and fully scaled Guided Pathways practices. Twenty California community colleges are participating.

Early Guided Pathways Adopters

Several California Community Colleges have moved forward independently to design and implement Guided Pathways.

09.08.17



Guided Pathways

at California Community Colleges

Principles of Guided Pathways

The Guided Pathways Model creates a highly structured approach to student success that:



Provides all students with a set of clear course-taking patterns that promotes better enrollment decisions and prepares students for future success.



Integrates support services in ways that make it easier for students to get the help they need during every step of their community college experience.



Four Pillars of Guided Pathways



Create clear curricular pathways to employment and further education.



Help students choose and enter their pathway.



Help students stay on their path.



Ensure that learning is happening with intentional outcomes.

Guided Pathways

at California Community Colleges

Key Elements of Guided Pathways



Programs that are fully mapped out and aligned with further education and career advancement while also providing structured or guided exploration for undecided students.



Redesigning and integrating basic skills/developmental education classes to accelerate students to college-level classes.



Proactive academic and career advising from the start through completion and/or transfer, with assigned point of contact at each stage.



Structured onboarding processes including improved placement tests and co-requisite instruction that provide students with clear, actionable, and usable information they need to get off to the right start in college.



Early alert systems aligned with interventions and resources to help students stay on the pathway, persist, and progress.



Instructional support and co-curricular activities aligned with classroom learning and career interests.



Guided Pathways: Planning, Implementation, Evaluation

Creating guided pathways requires managing and sustaining large-scale transformational change. The work begins with thorough planning, continues through consistent implementation, and depends on ongoing evaluation. **The goals are to improve rates of college completion, transfer, and attainment of jobs with value in the labor market — and to achieve equity in those outcomes.**

PLANNING

ESSENTIAL CONDITIONS

Make sure the following conditions are in place – prepared, mobilized, and adequately resourced – to support the college's large-scale transformational change:

- Strong change leadership throughout the institution
- Faculty and staff engagement
- Commitment to using data
- Capacity to use data
- Technology infrastructure
- Professional development
- Favorable policy (state, system, and institutional levels) and board support
- Commitment to student success and equity

PREPARATION/AWARENESS

Understand where you are, prepare for change, and build awareness by:

- Engaging stakeholders and making the case for change
- Establishing a baseline for key performance indicators
- Building partnerships with K-12, universities, and employers
- Developing flowcharts of how students choose, enter, and complete programs
- Developing an implementation plan with roles and deadlines

SUSTAINABILITY

Commit to pathways for the long term and make sure they are implemented for all students by:

- Determining barriers to sustainability (state, system, and institutional levels)
- Redefining the roles of faculty, staff, and administrators as needed
- Identifying needs for professional development and technical assistance
- Revamping technology to support the redesigned student experience
- Reallocating resources as needed
- Continuing to engage key stakeholders, especially students
- Integrating pathways into hiring and evaluation practices

IMPLEMENTATION

CLARIFY THE PATHS

Map all programs to transfer and career and include these features:

- Detailed information on target career and transfer outcomes
- Course sequences, critical courses, embedded credentials, and progress milestones
- Math and other core coursework aligned to each program of study

HELP STUDENTS GET ON A PATH

Require these supports to make sure students get the best start:

- Use of multiple measures to assess students' needs
- First-year experiences to help students explore the field and choose a major
- Full program plans based on required career/transfer exploration
- Contextualized, integrated academic support to help students pass program gateway courses
- K-12 partnerships focused on career/college program exploration

HELP STUDENTS STAY ON THEIR PATH

Keep students on track with these supports:

- Ongoing, intrusive advising
- Systems for students to easily track their progress
- Systems/procedures to identify students at risk and provide needed supports
- A structure to redirect students who are not progressing in a program to a more viable path

ENSURE STUDENTS ARE LEARNING

Use these practices to assess and enrich student learning:

- Program-specific learning outcomes
- Project-based, collaborative learning
- Applied learning experiences
- Inescapable student engagement
- Faculty-led improvement of teaching practices
- Systems/procedures for the college and students to track mastery of learning outcomes that lead to credentials, transfer, and/or employment

EARLY OUTCOMES

Measure key performance indicators, including:

- Number of college credits earned in first term
- Number of college credits earned in first year
- Completion of gateway math and English courses in the student's first year
- Number of college credits earned in the program of study in first year
 - Persistence from term 1 to term 2
 - Rates of college-level course completion in students' first academic year
 - Equity in outcomes

Revisit conditions, sustainability, and implementation. Continuously improve pathways by building on elements that work and adjusting or discarding elements that are not serving all students well.

EVALUATION

IMPLEMENTING GUIDED PATHWAYS: *Defining Roles with a Focus on Collaboration*

Faculty & Staff

- Engage in all stages of Guided Pathways: inquiry, design, implementation and ongoing improvement.
- Work collectively toward common goals and commit to a structured, open process.
- Collaborate to design clearly structured, coherent academic program maps that: reflect curriculum aligned with university transfer programs and labor market needs; provide detailed course sequences and progress milestones; and represent the most efficient path for students to complete academic programs while maintaining the quality of these programs.
- Partner to guide, monitor and support students.
- Collaborate to help students build skills as they explore and progress through curricula and programs.

Students

- Share thoughts on how the institution as a whole can better meet student needs. Share obstacles, challenges and successes experienced in college.
- Engage in all stages of Guided Pathways: inquiry, design, implementation and ongoing improvement.

The Entire College

- Work collectively toward common goals and commit to a structured, open process.
- Think and talk about the unique planning and resource needs at the college.
- Participate in the self-assessment process.
- Solicit input from students, community members, alumni, employers and industry to assist in informing your Guided Pathways efforts.

Administrators

- Provide vision for college restructuring and initiative integration.
- Build a diverse steering team from all college constituencies, including administration, counseling and instructional faculty, staff and students from across the college.
- Offer support and guidance for collaboration and inclusive decision-making.
- Participate in all stages of Guided Pathways: inquiry, design and implementation.
- With faculty and staff, collaborate to design clearly structured, coherent academic program maps that: reflect curriculum aligned with university transfer programs and labor market needs; provide detailed course sequences and progress milestones; and represent the most efficient path for students to complete academic programs while maintaining the quality of these programs.
- Invest in professional development that supports reform efforts.
- Build organizational capability for ongoing innovation and improvement.

Institutional Researchers and Planners


- Support administrators, faculty and staff in inquiry by providing enrollment, persistence and retention data disaggregated by program, cohort and student equity categories.
- Provide support in understanding student throughput and identifying bottlenecks and loss points.
- Help steering team and others use data to examine barriers to student completion.
- Engage in all stages of Guided Pathways: inquiry, design, implementation and ongoing improvement.
- Help in making the case for Pathways through data.
- Assist with locating and interpreting data related to designing and implementing Pathways.
- Assist in providing students a voice through research activities such as surveys and focus groups.
- Provide leadership and support with the integrated planning that is required for Pathways.
- Conduct formative and summative evaluations to help inform and guide Pathways efforts, with a focus on continuous improvement.

09.21.17




Guided Pathways Demystified:

Exploring Ten Commonly Asked Questions
about Implementing Pathways



Dr. Rob Johnstone
National Center for Inquiry & Improvement

OVERVIEW



This report is designed for higher education leaders and explores ten commonly asked questions about implementing guided pathways. It addresses concern about compromising our higher education values, practical considerations about control and enrollment, and apprehensions about the impact on students' learning and development—all issues that will need to be addressed to successfully pursue a guided pathways effort.

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Acknowledgements

Over the past seven years, the movement known as guided pathways has transitioned from relative infancy to more rapid consideration and adoption. I have been heartened to see this evolution, where today seemingly everybody I talk to in my travels around the country is reading and considering the recent book from Tom Bailey, Shanna Jaggars, and Davis Jenkins with the Community College Research Center, Teachers College, Columbia University titled *Redesigning America's community colleges: A clearer path to student success (2015)*. Davis in particular deserves a lion share of the credit for helping drive this movement forward in the early days, and continuing to help lead and shepherd it now and into the future.

It is due to the efforts of many people that I could now write this paper on the most commonly asked questions about guided pathways. Those of us who were national assistance partners in the initial phases of Completion by Design were in the trenches of early work to promote this movement, including Davis Jenkins, Tom Bailey, Peter Crosta and Sung-Woo Cho of CCRC; Michael Collins, Lara Couturier, and Gretchen Schmidt (now with the American Association of Community Colleges Pathways Project) of Jobs for the Future; Alison Kadlec and Isaac Rowlett of Public Agenda; and Priyadarshini Chaplot of the RP Group (and now NCII). It is through my collaboration with these big yet practical thinkers that I honed my own perspective on this proposition for significantly improving the success of hundreds of thousands of students.

Of course, this paper wouldn't have been possible without the support of the Bill & Melinda Gates Foundation for Completion by Design in general, and specifically for the support of the blog post series on www.completionbydesign.org. Thanks also to Jill Wohlford and Cheryl Fong who've been invaluable in making sure the blog post series has the great content it does from a wide range of national leaders in guided pathways.

Finally, I am in deep appreciation to my colleague, friend, and NCII editor-in-chief Kelley Karandjeff, who took a series of ten disconnected blog posts written in my occasionally humorous and always folksy style and helped me turn it into this paper. She does amazing work, and I appreciate her efforts.

Dr. Rob Johnstone

Founder and President
NCII



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Introduction

College educators know the completion agenda is here to stay. In response, practitioners are seeking real solutions that support a fundamental redesign of our nation's colleges so we can ensure that more students can achieve their educational goals and earn family sustaining wages. One such strategy is the guided pathways approach, which aims to better structure student connection, entry, progress, and completion of certificates and degrees with market value or transfer to four-year institutions with junior standing in a major (see textbox, *Guided Pathways Defined*). Multiple efforts are taking root across the country to implement the guided pathways approach at scale, including the Bill and Melinda Gates Foundation's *Completion by Design* (CBD) initiative in Ohio, North Carolina, and Florida; the Lumina Foundation's *Guided Pathways to Success* (GPS) effort in Indiana, Georgia, and Tennessee; The Kresge Foundation's *Pathways* projects in Arkansas and Michigan and *Centers for Student Success* with a pathways focus in Connecticut, New Jersey, Ohio, and Texas; and the *Texas Completes* initiative.

While implementing guided pathways is a relatively new movement, initial evidence from related initiatives demonstrates a positive impact on student progress and completion (see page 8 for more information). The NCII's own experience working with the abovementioned efforts and the work underway among early adopters suggests the guided pathways approach represents an institution's best chance to move past innovating on the margins for a small number of students to fundamentally transforming the learner experience throughout their trajectory at the college. In doing so, we can achieve the gains in outcomes at scale that represent not numbers on a page, but in reality, potentially hundreds of thousands of student lives improved upon achievement of their goals.

At the same time as we share this optimism, enthusiasm, and passion for the futures we

Guided Pathways Defined

These highly structured student experiences encourage completion by:

- *Establishing clear roadmaps to students' end goals that include articulated learning outcomes and direct connections to the requirements for further education and career advancement*
- *Incorporating intake processes that help students clarify goals for college and careers*
- *Offering on-ramps to programs of study designed to facilitate access for students with developmental education needs*
- *Embedding advising, progress tracking, feedback, and support throughout a student's educational journey*

(Jenkins & Choo, 2014; Bailey, Jagers, & Jenkins, 2015)

can improve, we recognize that promoting, let alone enacting, such a significant change is not for the faint of heart. Fundamental redesign means calling into question the traditional paradigm that we have been operating under with our students for at least decades, and perhaps centuries. It requires a hard look at the values and beliefs on which our systems are based and demands we explore whom the traditional system was designed for and for whom it currently works well. In addition to making us feel a bit uncomfortable, this exploration can also surface genuine apprehensions about comprising our institution's effectiveness and sacrificing our students' progress and success as we work to implement and optimize guided pathways approaches.

Through hands-on technical assistance and countless interactions with faculty and administrators, NCII and its national partners including the Community College Research Center (CCRC), Jobs for the Future (JFF), and Public Agenda regularly encounter numerous **inquiries about designing and implementing guided pathways that demonstrate these concerns**. In reflecting on these issues, **ten common questions emerge** (see textbox, *Top Ten Questions about Guided Pathways*). Some are controversial and others are practical in nature; all are genuine issues that represent a deep concern for our students and the institutions at which a wide range of practitioners dedicate their time and energy; as such, these questions will likely arise and need to be addressed in any effort to adopt guided pathways.

Top Ten Questions about Guided Pathways

- **Concerns about compromising our higher education values:**
 1. Isn't college a meritocracy where the strong and smart succeed, and the weak, underprepared, or unmotivated don't?
 2. Isn't free choice the cornerstone of American higher education?
 3. Won't we sacrifice quality when we move to guided pathways?
 4. Won't we lose the heart of a liberal arts education when we make students' journeys more structured?
- **Practical considerations about control and enrollment:**
 5. Won't faculty lose control over what is taught in their discipline?
 6. Won't we lose enrollment at our college if we decrease swirl with increased structure—or by making things mandatory?
- **Apprehensions about the impact on students' learning and development:**
 7. Isn't all of this "hand-holding" going to create graduates that can't navigate the workplace and the "real world"?
 8. Don't students benefit when they "find themselves" by what looks like wandering to the observer?
 9. How can students be expected to make career decisions at age 18 or 19?
 10. Don't students change careers four to seven times? Given this context, why would we put them on structured pathways?

NCII has designed this resource for higher education leaders, particularly community college and state university faculty and administrators who are:

1. Interested in or attempting to implement guided pathways and may be encountering push-back from peers, OR
2. Tentative about a guided pathways movement taking place on their campus

This paper seeks to offer concrete, and in many cases, nontraditional responses to these questions. We organize these questions into three groups:

- Concerns about compromising our higher education values
- Practical considerations about control and enrollment
- Apprehensions about the impact on students' learning and development

These responses are in no way designed to represent what we feel to be the “right” way of answering these important questions or to attempt to establish the final word on any of these subjects. Conversely, we offer these insights specifically to **assist educators in facilitating your own thoughtful, productive dialog with colleagues about these redesign strategies in the quest for strengthening your students' completion and success.**

Concerns about Compromising our Higher Education Values

Four of the most provocative questions we encounter in discussions about guided pathways relate to the very foundation of our country's higher education system. They center on issues of access, choice, quality, and breadth, including the following:

1. Isn't college a meritocracy where the strong and smart succeed, and the weak, unmotivated, or underprepared don't?
2. Isn't “free choice” the cornerstone of American higher education?
3. Won't we sacrifice quality when we move to guided pathways?
4. Won't we lose the heart of a liberal arts education when we make students' journey more structured?

We explore these questions in the following section.

1. Isn't college a meritocracy where the strong and smart succeed, and the weak, unmotivated, or underprepared don't?

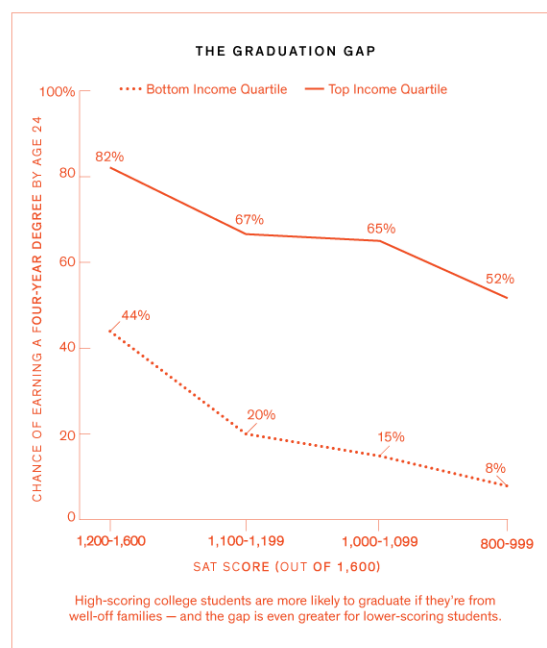
Let's start with one of the most controversial and pervasive questions. It is a concern that typically remains unspoken in large groups yet frequently surfaces in the safety of department meetings and one-on-one conversations with practitioners. This question has deep roots in the history of higher education in general, an institution that traditionally restricted broad access. The notion that strictly those perceived as qualified and smart can and should get a college degree reflect race and class issues dating back centuries. In 15th and 16th century Europe, only the White ruling class attended university. In the past 70 years, the US has certainly traveled a significant distance toward democratizing access to postsecondary education. The passage of the General Infantry (GI) Bill after World War II and the concomitant creation and massive expansion of the community college system across our nation have led far more Americans to pursue postsecondary education.

Yet, **it is debatable that we have sufficiently adjusted our higher education model to ensure everyone we welcome has an equal chance of achieving high quality credentials with clear labor market value.** Data on completion rates at most community colleges and many regional public four-year colleges certainly suggests otherwise. For example, in a chapter of *Rewarding Strivers* (The Century Foundation, 2010) titled "How Increasing College Access Is Increasing Inequality, and What to Do about It," Carnevale and Strohl offer compelling evidence on how income quartile impacts college graduation rates. This research shows that when observing students who score in the middle range on the SAT (between 1,000 and 1,200), 66% from the top income quartile graduate college by age 24. For those in the lowest income quartile, it is 17%.

Simply put, this is a shocking finding. These are students at the **same band of ability** as measured by their SAT scores, and **yet students from the highest income quartile are four times more likely to get a degree by age 24 than students in the lowest income quartile.** If you only look at top performers—students who have above 1,200 SAT scores—the trend persists. The highest income quartile achieves a college degree 82% of the time by age 24, while those in the lowest income quartile do so just 44% of the time.

In reflecting on such data, and likely on our own experience in the field, it is difficult to conclude that

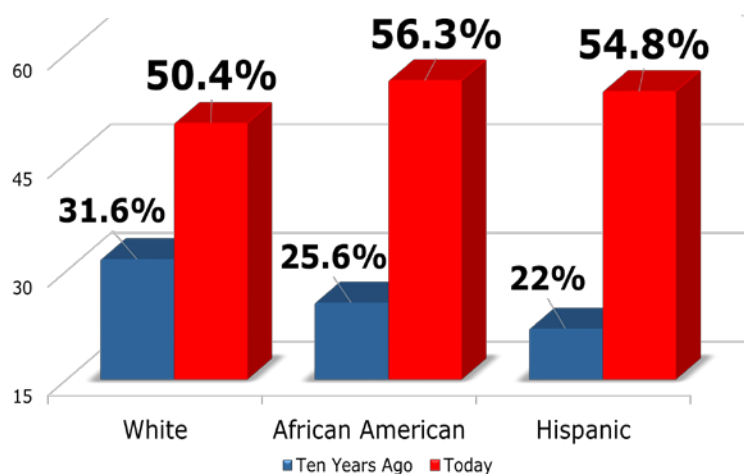
Figure 1. The Graduation Gap by Income Quartile (Tough, 2014)



college actually is a meritocracy where those who are capable and qualified can successfully accomplish their goals. Even further and equally importantly, we posit that higher education has in no way tested the limits of what students are capable of achieving under a new or redesigned set of conditions, structures, and processes, including the guided pathways approach. Systems that have adopted guided pathways strategies (e.g., the Georgia State University and the Florida State University systems), and institutions in the early stages of implementation (e.g., the City University of New York (CUNY) and the City Colleges of Chicago), are beginning to realize notable improvements in completion rates, without sacrificing quality. For example, students participating in CUNY’s Accelerated Study in Associate Programs (ASAP) have realized large and significant differences in terms of retention, movement through developmental course work, credit accumulation, and graduation rates (when compared to non-ASAP students); currently, ASAP’s cross-cohort three-year graduation rate is 52% versus 22% for comparison group students.¹

Even more notable are increases in success rates for the very groups we often quietly surmise cannot succeed—students of color and/or low-income learners (see *Figure 2. Graduation Rates for Georgia State Universities, Before and After Adoption of Guided Pathways*). **We have only scratched the surface on how far we can evolve our efforts to serve and how significantly we can increase the results for our *entire* range of students.**

Figure 2. Graduation Rates for Georgia State Universities, Before and After Adoption of Guided Pathways



2. Isn’t “free choice” the cornerstone of American higher education?

While encounter this question in a range of forms, they all center around the observation that, in moving toward structured pathways, we might be departing from what makes the US higher education system great—the vast amount of choice. Yet, both social science

¹ For more information, visit <http://www1.cuny.edu/sites/asap/evaluation/>.

research and clarification about what choice looks like in a guided pathways system suggest students may be better supported in understanding and selecting options under this model.

First, we know much more now from behavioral economics and social psychology about how humans make choices than we did a half-century ago. Research studies from both fields have investigated the number of options individuals can reasonably process and still make strategic choices. While there's a large amount of scholarly inquiry into and disagreement about the presence, conditions for, and size of these effects, there exists a case for limiting choice which gained steam in the early 2000s, perhaps most popularly with Thaler and Sunstein's *Nudge* (2008). In addition, there is often a quietly held opinion in higher education that students should be able to make the same rational decisions we in the field would make when faced with the similar choices, with the accompanying assumption that there is a clear and easily attainable answer. There's a wealth of research on how relatively irrational many of our decision-making processes are (e.g. Tversky and Kahneman, 1974). So at the very least, if students are like the rest of us, it seems that asking those with expertise to guide and architect their choices would be invaluable.

Currently, the path through general education at most community colleges resembles the menu at the Cheesecake Factory—hundreds of options and never enough time to even read through them before we are asked to order. Not surprisingly, **students faced with this multitude of choices struggle with course selection, and the requirements are often so confusing that they make those “irrational choices”** we refer to above by picking courses off their desired pathway, or satisfying the same requirement multiple times. Another net effect of this vast amount of choice is that it is very hard for students, their faculty, and/or student services advisors to actually identify how far they are along their path to goal completion. The degree audit systems many institutions have put in place are useful in this determination, but they exist *because* our course and program offerings are in such a state of chaos. Essentially, the path through our institutions is so complex that we need a computer program with the ability to parse through literally millions of options to make sense of an individual's student's progression on their transcripts. Given this, it is incredibly rare for anyone to know at a glance where a student is in her/his educational journey and what s/he should take next.

Of course, it does not have to be this way. Parts of our community college and baccalaureate-level institutions have a history of implementing rigorous structure and demonstrating a high degree of completion: cohort-based career technical education (CTE) programs, most graduate programs, transfer paths for community college athletes, and increasingly STEM pathways. The reasons for their strong show of completion are myriad, **yet one conclusion we must reach when reflecting on these programs is that structure matters.**

Second, the implementation of guided pathways does not require *removing* choice; rather, **it encourages organizing it into a “choice architecture” that is planned rather than**

haphazard. Institutions like Queensborough Community College (NY), the City Colleges of Chicago (IL), Guttman Community College (NY), Arizona State University (AZ), and Georgia State University (GA) are employing the “meta-major” or “focus area” approach which asks students who are relatively undecided to choose between one of five to nine paths, which then lead to many other majors downstream in the student trajectory. Again, consistent with the behavioral economics and social psychology literature, this notion seems to map better to what we know about how we can make rational choices. **Combined with structured programs on the back end, it keeps students maintaining forward momentum toward goal completion,** even when they are undecided.

Finally, **structured pathways are designed to shift the focus of student choice from picking courses to selecting programs,** which still enables them to choose from a wide range of options. This structure suggests a significant transition in thinking—for students, educators, and institutions—to the ultimate decision point being which program will either lead to (1) further education with junior standing in a major at the university level after transfer, or (2) direct entry into the workforce. Conversations with student services professionals often reveal that they do not see students until their final semesters at the institution—late in their process under the traditional system, and certainly much too late in an environment that encourages early program selection. **To help students focus on picking a program versus courses, we also need to integrate career planning far earlier in their higher education journey.**

3. Won't we sacrifice quality when we move to guided pathways?

The specter of losing quality or “dumbing down our degrees” (a term we’ve heard in college conversations) is clearly a significant concern on a number of fronts. At the same time, we submit that we are challenged to define the quality that exists in our country’s current higher education system. When specifically considering the community college sector, we have mainly focused our attention in the past decade on measuring the attainment of general education (GE) or liberal arts learning outcomes for students completing associate’s degrees. In doing so, colleges have typically defined anywhere between four and 15 GE or institutional learning outcomes (ILOs), which largely center on some iteration of what we at Foothill College in the mid-2000s coined the four “Cs”: communication, computation, critical thinking, and citizenship.

Given that nearly all colleges have some form of these four topics in their ILO statements, it seems reasonable to treat them as the core set of GE or liberal arts outcomes from which to assess the “quality” of the current system. Admittedly, colleges find it difficult to actually assess learner achievement of these outcomes, with approaches focusing on generalized or standardized tests, portfolio assessment, and/or common rubrics using samples of student

work. Methodological challenges aside, **we are in our relative infancy reaching any conclusions about the quality of these ILOs as achieved under the traditional model. In turn, we suggest that it is hard to compare what we might gain or lose under a new model of guided pathways**; clearly, we need to develop more insight around this issue of assessment.

At the same time, we do have some evidence of what quality exists in achieving these outcomes under the traditional model, which comes from surveys of employers who receive community college graduates. While equally true of graduates of baccalaureate and graduate level programs, the surveys most commonly **suggest that graduates of all three higher educational systems struggle most in the workplace on the exact general learning outcomes we seek to achieve—especially problem solving, communication, and computation**. Rarely do employers express major concerns with graduates' skills and knowledge specific to their degree (e.g. accounting, nursing, automotive technology). While many factors likely contribute to this finding, it certainly does not lend weight to the argument that our current higher education system leads to as high a level of quality as we might desire on GE learning outcomes.

So, how does the guided pathways reform effort relate to these issues of quality? Educators express concern that **a streamlined set of choices for students will lead to decreased quality in the achievement of these GE outcomes, and thus a diminished liberal arts education. Yet, no literature appears to exist supporting the assertion.**

To further make this point, it is important to define what we mean by the "system." In this discussion, the current community college GE system is defined by the ten to 14 courses that each student takes to fulfill her/his liberal arts requirements. Whether or not the student chooses these courses from a list of 500, 50, or 14 default electives, each learner still only takes ten to 14 courses designed to prepare them in the liberal arts. **Nothing actually changes on this front under a guided pathways model. The ten to 14 courses students take still work together to form the GE package and thus are the foundation for attainment of the four key learning outcomes** outlined above (communication, computation, critical thinking, and citizenship). So, it seems hard to argue that quality as defined by the achievement of these GE outcomes would drop under a guided pathways approach.

On the other hand, we posit that our ability to monitor and improve students' achievement of GE outcomes—the hallmark of a liberal arts education—will likely improve under a guided pathways approach. At the moment, the traditional model expects students to select these ten to 14 courses from a long list of possibilities, most often in an unguided way. We also assume they will somehow assemble their chosen courses in a manner that results in a high level of achievement of these GE outcomes. Simply from a backward design standpoint, this reliance on random course selection and arrangement suggests a lower likelihood of consistently producing high achievement of outcomes. Conversely, it seems that **if we**

empower subject matter experts—discipline faculty from the programs in which students are pursuing degrees—to select and arrange courses, we will achieve a more optimal combination of classes for each student and ultimately better results. As a model developed under CBD, Sinclair Community College (OH) recently did just that, asking each of their discipline’s faculty to suggest a short list of GE electives that would be best for students who graduate in that discipline. This clarity is likely to result in the benefits achieved by institutions such as Georgia State University, Florida State University, and Arizona State University (ASU). For example, ASU has greatly reduced the number of students “off-path” from as high as 48% in the first years of their pathways redesign down to under 6% after a couple of years.

4. Won’t we lose the heart of a liberal arts education when we make students’ journeys more structured?

This question surfaces time and again in faculty discussions about guided pathways. Like the apprehensions addressed above, it comes from a very real concern that in moving to guided pathways, we will lose key qualities at the heart of American higher education. In this case, educators worry that we will surrender the breadth that ensures students have broad exposure to a range of subjects and build a foundation of knowledge and skills that prepare students for not only their first job but also career shifts throughout their lives (for further discussion, see questions 8 and 9 starting on p. X). They also express concern that this movement will reduce the likelihood an educated citizenry, believing that society benefits when its members are educated on an array of topics including arts, humanities, social science, mathematics, and natural science courses.

We continue to submit that colleges can realize improved liberal arts education outcomes with their students under a guided pathways model. Let’s build on the above discussion of quality. As part of that exploration, we noted a liberal arts education has always been defined for our associate’s degree and/or transfer students as a series of ten to 14 courses through which they build GE outcomes. We explained that under a guided pathways model, students take the exact same number of courses as they did under the traditional model.

Taking this point further, let’s break those ten to 14 courses down into their component domains. Hop on most community college websites, and you will find a fairly typical set of GE requirements, intended to define liberal arts education for that institution. To illustrate this point, we looked at one California community college’s GE requirements for an associate’s degree:

- Three arts and humanities courses
- Three social science courses

- Two communications/English courses
- Two history/cultures courses
- Two science courses
- One mathematics course

In this college’s case, the GE requirement adds up to 13 courses, which combined with seven more program-specific courses, reach the 60 units necessary for degree completion. If this institution embraced highly structured pathways, it might **ask program faculty to identify default GE electives that best align with their program outcomes and arrange them with program-specific courses into clear pathways to completion.** In doing so, the college could design their programs to have the same distribution of the GE requirements as they do today. In turn, the requirement of breadth—core to a liberal arts education—remains the same. Again, the only change is the empowering of faculty to identify what the optimal courses are for students in their programs. Perhaps more importantly, we would also ask the faculty to consider *how* the courses fit together to produce this liberal arts education we all value. We submit that this type of focus and intentionality would result in improved student GE outcomes.

Ultimately, **nothing is lost in terms of GE under a guided pathways model; rather, we might very well gain** benefit that staunch defenders of the liberal arts education model should embrace—a **more predictable set of liberal arts outcomes that a greater number of students actually achieve upon completion.**



Practical Considerations about Control and Enrollment

Two practical issues also surface in conversations about guided pathways that relate to the day-to-day autonomy of educators and college operations. These include:

5. Won’t faculty lose control over what is taught in their discipline?
6. Won’t we lose enrollment at our college if we decrease swirl with increased structure—or by making things mandatory?

We explore these concerns below.

5. Won't faculty lose control over what is taught in their discipline?

This difficult question requires a nuanced answer, recognizing that the adoption of guided pathway calls for faculty to cede ownership in some respects while gaining it in others. **In reality, faculty control over their discipline has been shifting in recent decades.**

Historically, faculty have operationally controlled their discipline, determining what courses they teach and what content they cover. In a course-focused model, this feature makes sense. If it does not matter which courses students take within a discipline to satisfy requirements, then faculty would be free to teach whatever offerings they so desired. Yet, public universities have not actually used this model in their undergraduate divisions for quite some time, and it certainly is not in place at community colleges where a myriad of articulation agreements specify which courses “count” for junior standing in a given major at a receiving transfer institution.

The recent adoption of clear and structured transfer paths (a close cousin of the guided pathway model) in a number of states reflects this evolution. These transfer paths attempt to (1) ensure students' lower-division units apply after transfer, and (2) reduce the financial and time burden that comes with excess units, a particularly acute problem for low-income learners. States such as Florida, Mississippi, and Washington have relatively established transfer pathway systems, and many other states such as North Carolina and California are working to structurally guarantee that students do not lose the credits they earned at a community college upon transfer. **These stronger transfer pathways have already had the effect of at least partially determining what courses community college faculty will teach;** it is difficult for a community college to justify offering courses that do not count for junior standing in a major at key receiving universities (unless they are for the cohort-based direct-to-career programs or short-term career advancement students).

On the other hand, faculty ownership over the courses they suggest for students in their programs is essential to the effective implementation of the guided pathways model. That is, accounting faculty should know better than anybody else which GE courses would best prepare somebody to serve as an accountant. For example, we can look to the abovementioned effort undertaken by Sinclair Community College (OH) to redesign all 180 of its programs through participation in the Completion by Design initiative. When the college embarked on this reform, it empowered program faculty to identify two-year pathways for full-time students and four-year pathways for part-time learners, including recommended default GE electives that would best prepare participants to enter their given field upon program completion.

So yes, it is true that faculty may experience a shift in the ownership over the courses taught in their discipline as transfer pathways become more common, a shift that has already been in the works for quite some time. At the same time, at the local level, faculty should gain

more control over determining the courses that comprise their programs. Ultimately, this evolution will be better for students in the long run if it helps more of them complete certificates and degrees and transfer without losing so many credits.

6. Won't we lose enrollment at our college if we decrease swirl with increased structure—or by making things mandatory?

This question hits on a primary concern of all community college administrators—enrollment. At present, most colleges have either all or a significant portion of their funding driven by enrollment. Given this financing structure, and an overall funding level that is remarkably low compared to those often found in the university and K-12 systems, community college leaders are rightfully concerned that scaled redesign efforts overall and strategies like guided pathways in particular will hurt enrollment.

However, observation of early adopters of guided pathways indicates that these institutions have not experienced a drop in enrollment. Contextually, it is important to recognize that **community college enrollments across the nation have been down in recent years**. If you compare enrollments at your college or in your system between 2011-2012 and now, you have likely experienced a 10% and 20% decline—likely due to shifts in the economy that often drive community college enrollments. Around 2011, the economy was at its worst in most areas, and community colleges experienced increased enrollment by what tends to be a largely transitory population of individuals who go back to work when the economy improves. Thus, recent drops are not particularly surprising given corresponding improvements in our nation's economic outlook. Yet, **when you look at colleges like Miami Dade (FL) and Guilford Technical Community College (NC) that have simultaneously implemented increased structure and more mandatory onboarding requirements such as advising and orientation, enrollments have not been significantly affected**.

Another consideration related to enrollments is that only *existing* students can leave in response to changes such as the implementation of guided pathways, and we suggest this loss is likely inconsequential. That is, if you change a policy such as requiring advising every semester, only current students know what the policy was like before you made the change. In nearly all cases, **new students will adapt to the structural changes because they do not know anything different**. If a small number of learners leave because of these changes, we submit they were likely to leave anyway. Conversely, **the number of students you retain because of this redesign will likely be far greater**.

Finally, we can make a case for **vastly increased enrollments downstream if these major structural redesigns work**. The overall average number of units per student will actually rise significantly if more of them are able to advance in their programs of study. While colleges will lose some units from students having a tighter roadmap and fewer excess credits, these

reductions are likely to be offset by the increase in learners persisting through certificate and degree completion.

Apprehensions about the Impact on Students' Learning and Development

Finally, educators rightfully raise numerous concerns about the impact of guided pathways on students' learning and development, such as restricting maturation and independence, hampering self-discovery, and tracking students on a specific career trajectory. Frequent questions include:

7. Isn't all of this "hand-holding" going to create graduates that can't navigate the workplace and the "real world"?
8. Don't students benefit when they "find themselves" by what looks like wandering to the observer?
9. How can students be expected to make career decisions at age 18?
10. Don't students change careers four to seven times? Given this context, why would we put them on structured pathways?

We explore these questions below, providing one response to questions 9 and 10 given their collective focus on the effect of structured pathways on students' career exploration and development.

7. Isn't all of this "hand-holding" going to create graduates that can't navigate the workplace and the "real world"?

While this concern surfaces only on occasion, it is worth consideration. The idea here is that the world is a complicated place to navigate, and thus we should make college equally complex to ready graduates for the challenges they will ultimately encounter in life. Two primary responses emerge, one that requires some reflection on the purposefulness of

those complicated systems we have established in our institutions and another that relates to the issue of equity.

To start, **we question the learning value of complex systems and processes that even those of us who work in higher education often have a hard time navigating.** For example, in the mid 2000s, a handful of chief academic and student services officers in the California Community College system asked some of faculty and administrators to apply for college and participate in the onboarding process. They reported the same chaos, frustration, and disenfranchisement that our students do. In another experiment, we gave a portion of the math placement test to some members of a community college board of trustees. More than half of them tested into developmental education, claiming the math was not relevant to their real-world work, and in turn, calling into question why it should be relevant to students.

The experience of Miami Dade’s redesign team offers another example. When reaching an impasse about whether or not to adopt guided pathways, they asked more than 25 non-biology faculty to identify the ideal associate’s degree path for a student seeking to transfer to Florida International University in biology, using only the tools available to students (e.g., website, catalog). Three hours later, these faculty were unable to complete the task, and thus had the epiphany that their college needed to embrace more structured pathways in order to help their students navigate the institution.

It seems the complexity we have developed within our colleges has served less to educate and empower our learners and more to dissuade our students from achieving their goals. Even more disconcerting, this logic has the inevitable consequence of perpetuating inequity across our higher education system and denying college degrees to historically underserved populations and/or first-time college students. These populations often do not have the social capital or the familial experience with higher education to help them navigate the complexities and confusion presented by our institutions. In turn, **this thinking presents a significant equity issue—especially when we have data suggesting that those students can succeed when the colleges create the right conditions,** including the use of guided pathways.

While the real world certainly will present our graduates with a healthy dose of challenge and adversity, it seems unnecessary to make students’ lives complicated to prepare them for that inevitability. Rather, we submit that it would be more purposeful to strengthen student achievement of the GE/liberal arts education learning outcomes that will help them navigate that complex world upon completion.

8. Don't students benefit when they "find themselves" by what looks like wandering to the observer?

This common question, often well intended, hits on a real concern that increasing structure means decreasing the opportunity for students to discover their true passions and calling. Yet a growing body of evidence suggests that students may in fact be seeking greater support in this discovery process. For example, the Research and Planning Group for California Community College's Student Support (Re)design study summarized surveys and focus groups with nearly 1,000 California community college students (including completers, leavers, and those in progress) about what they found supportive of their success. The research team identified "six success factors" both through a review of existing literature on support and through their conversations with students (Booth et al., 2012). Two factors rose to the top: (1) "directed," defined as "students have a goal and they know how to achieve it," and (2) "focused," defined as "students stay on track, keeping their eyes on the prize." Students indicated they were clamoring for structure and guidance to help navigate the maze of choice at community colleges, underscoring themselves the value of guided pathway redesign efforts.

Public Agenda recently found similar findings in a study of Indiana students (Kadlec & Gupta, 2014), and Public Agenda and WestEd (2012) also found related findings in joint CBD focus groups in Florida, North Carolina, Ohio, and Texas. The Community College Research Center Teachers College, Columbia University, has commented on the issue as well in working papers such as *Get with the Program* (Jenkins & Choo, 2014) and *The Shapeless River* (Scott-Clayton, 2011), supporting the idea that increased structure is not only a design strategy that many in the field are confident will help students more quickly achieve their goals and at higher rates, but is also an approach that students themselves are seeking.

While certainly our colleges certainly enroll students who want more time to wander and appreciate less structure, this research suggests the group may be much smaller than originally understood. We also submit that the wandering to find yourself model can work if you have the resources and time to explore. However, with increasingly larger proportions of our students encountering significant financial barriers, we may need to confront that wandering is a luxury of the select few who can afford it. Conversely, low-income students may particularly need a clear picture of the how their investment of time and monetary resources will pay off—another benefit of a structured pathway to a well-defined outcome.

Furthermore, the idea that students will discover their passions by wandering the curriculum and exploring a variety of courses seems inefficient. It requires enrolling in a wide range of courses in a somewhat disconnected nature. Perhaps another way to find out what students like is to provide them with better and earlier career exploration and assessment of personal interests before they start their higher education journey. This way,

students can at least narrow down the possibilities and/or try the most likely candidate. This approach connects to our earlier discussion of providing undecided students structures for guided exploration such as meta-majors and career focus areas such as those at Queensborough College or the City Colleges of Chicago.

Finally, we assert that those who have “found” themselves by wandering tend to be us—those who ultimately chose a career in higher education—and we personally value that type of journey. Yet, a review of completion and student perspectives data tells us that significant numbers of students do not realize their calling this way. It does not make this journey any less meaningful for those who pursue it. However, we submit that we should be able to design a system that allows for both self-discovery and efficiency.

9. How can students be expected to make career decisions at age 18?

And

10. Don't students change careers four to seven times? Given this context, why would we put them on guided pathways?

While these questions differ slightly, with one focusing on the age at which students are making career decisions and the other centering on the number of times most adults change careers, there are more similarities than differences between them. Both deal with the relationship between guided pathways and career decisions and preparation. They are often posed with the general suggestion that community college students will confront more ambiguity than certainty in the workplace, and thus guided pathways might not be the best solution for navigating this maze. However, we posit that this **model actually prepares students to both enter the workplace with clarity about their interests and abilities and develop the foundational skills and knowledge needed to facilitate career advancement over time.**

First, we recognize that there will always be students who change majors and shift career aspirations. However, at least part of the reason this happens so often **in our current higher education context is that students do not receive career services early enough in their community college trajectory.** At most institutions, career services are not integrated into pre-enrollment, college success, or first-year experience programs where they would be most helpful. Students often do not get a chance to discover what they do or do not like about their chosen major until later in the course sequence, typically late in their educational journey. **Guided pathways incorporate this critical career exploration upfront**

in students' experience, helping both our younger and nontraditional learners examine their interests, match them to careers, identify programs leading into those careers, and select a pathway accordingly.

Additionally, this model allows colleges to design the early semesters so that **early common coursework in a career focus area keeps many downstream program options open as long as possible**, as Lorain Community College (OH) has done with their business programs (and is in the process of doing with others). For example, through streamlining and looking holistically at their business programs, Lorain was able to identify seven courses that could be taken in the first two semesters that kept students “on path” with 12 different business degrees, including Accounting, Administrative Office Information Systems, Business Administration and Computer Information Systems. By adopting such an approach, we can **help students explore and make more informed and structured decisions**, and **ensure they lose little ground when they shift within a discipline**.

Additionally, as discussed above in questions two through four, these pathways **include high-quality GE coursework that is intentionally selected for each pathway**, allowing students to achieve communication, computation, critical thinking, and citizenship outcomes in the context of their selected path. With this deliberate and strong GE foundation in place, students are **more likely to have the ability to shift employment within a pathway as well as the capacity to understand how to go about changing careers** if needed or desired.

For some time now, students have been confronted with a work world in which they will likely change careers many times. Has our traditional approach equipped students for these career changes any better than what would happen under a more structured and intentional set of pathways? Data suggests otherwise—indicating that under our current system, too few students complete the preparation required to even enter employment. We submit that through the guided pathways approach, we **can help more students accomplish a certificate, degree, and/or transfer and place them on a path leading to security for their family and personal and professional advancement**.



Conclusion

Clearly, higher education leaders raise these questions about guided pathways with good intentions—surfacing concerns about the students and the institutions they hold dear. Yet, the collective journey through these questions reinforces the idea that guided pathways can

be a strong lever for helping more students complete college and enter the workplace with the preparation needed to achieve security for their families, personal growth, and professional advancement. NCII has never been more hopeful and excited about the future of our colleges than now. As the guided pathways movement takes root in and expands across our public postsecondary institutions, we envision a system transformed over the next decade, and the lives of hundreds of thousands of students improved.

Get Started with Guided Pathways

We invite you to join in this movement. You can begin by opening a discussion with your colleagues about both the authentic issues and merits of implementing guided pathways in the context of your own college. You can use these ten questions to talk with peers and practitioners about the goals you have for your students, the ground-level concerns you hope to address, and the ways your institution might apply a guided pathways approach accordingly. You can also tap the resources listed below and call on NCII to help facilitate your exploration and implementation of guided pathways.

For more information on guided pathways...

- Read *What We Know about Guided Pathways* from Community College Research Center, Teachers College, Columbia University (<http://ccrc.tc.columbia.edu/publications/what-we-know-about-guided-pathways-packet.html>)
- Learn about the American Association for Community College's Pathways Project (<http://www.aacc.nche.edu/Resources/aaccprograms/pathways/Pages/default.aspx>)
- Review *Jobs for the Future's Policy Meets Pathways: A State Policy Agenda for Transformational Change* (<http://www.jff.org/publications/policy-meets-pathways-state-policy-agenda-transformational-change>)
- Discover reports, tools, and resources from the Bill & Melinda Gates Foundation's Completion by Design initiative (<http://www.completionbydesign.org/>)

To learn about the National Center for Inquiry and Improvement...

- Visit www.inquiry2improvement.com
- Contact Dr. Rob Johnstone, Founder and President, rob@inquiry2improvement.com

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Guided Pathways Demystified II:

Addressing 10 New Questions as the
Movement Gains Momentum

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OVERVIEW

This report is the second in a series of resources designed for higher education leaders and explores 10 new “momentum” questions reflective of the uptake in guided pathways across our nation’s colleges. It addresses inquiries related to culture change, implications for the student experience, practical concerns for educators, and operational considerations and is designed to support institutions in ground-level planning and implementation.

Acknowledgements

Much has happened since NCII released *Guided Pathways Demystified: Exploring 10 Commonly Asked Questions* in fall 2015. The guided pathways movement has continued to evolve and spread, due to the great work of numerous people and organizations across the country. As I did in *Guided Pathways Demystified I*, I again thank my good friends at the Community College Research Center (CCRC), Teachers College, Columbia University whose seminal research and writing on the topic of guided pathways have served as a foundation for this movement and whose partnership has help shaped the issues we address here in *Guided Pathways Demystified II: Addressing 10 New Questions as the Movement Gains Momentum*. I also extend many thanks to my friends at Jobs for the Future (JFF), who in addition to supporting the writing and release of this paper, have continued to champion the guided pathways cause with their group of 14 State Student Success Centers (SSCs), all of which are catalyzing guided pathways work across the colleges in their states. While the questions in this paper are assembled from a wide range of sources, it is my time working in the JFF SSC states that has perhaps had the biggest impact on my views on these questions and the conversations they can inspire.

Since the writing of the first paper, other organizations have also significantly evolved this work around the country, most notably the American Association of Community Colleges (AACC) through its national Pathways Project. AACC's leadership sends a vital message to the field. By working in combination with key partners including Achieving the Dream (ATD), the Aspen Institute, the Center for Community College Student Engagement (CCSSE), CCRC, Jobs for the Future, Public Agenda, and NCII, AACC has helped to develop a common voice on guided pathways that provides tremendous and important direction to the development of this movement at the state and local levels.

As with *Guided Pathways Demystified I*, this paper would not have been possible without the support of the Bill & Melinda Gates Foundation for Completion by Design in general, and specifically for the support of the blog post series on www.completionbydesign.org that originally housed the thinking found herein. Thanks again to Jill Wohlford and Cheryl Fong who were invaluable in making sure the blog post series offered great content from a wide range of national leaders invested in the success of guided pathways. The field benefits considerably from this support.

Warmly,

Dr. Rob Johnstone

Founder and President, NCII

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Introduction

Colleges across our country are taking up a change agenda, responding to emerging evidence that shows our historical approach to public higher education, particularly in our community colleges, does not result in the level of success we desire for our students or the outcomes our students hope for themselves. Over the past decade, mounting research on student completion and human behavior and lessons learned from scaled innovations and redesign initiatives have coalesced into a movement called “guided pathways” (see sidebar, *What Are Guided Pathways?*).¹ This fundamentally different approach aims to improve rates of college completion, transfer, and attainment of jobs with value in the labor market; and to achieve equity in those outcomes (American Association for Community Colleges (AACC), 2017).

No doubt, the goals of the guided pathways (GP) movement are motivated by the best of intentions—ensuring millions more students experience personal and economic mobility. At the same time, **embracing guided pathways calls for reconsideration of our long-held beliefs, deliberate culture change, and evolution of well-established policies and practices—a daunting yet exciting endeavor.** In 2015, the National Center for Inquiry and Improvement (NCII) released *Guided Pathways Demystified: Exploring 10 Commonly Asked Questions about Implementing Pathways* based on our early experience

What Are Guided Pathways?

Guided pathways require colleges to take an integrated, institution-wide approach to student success, driven by evidence and intently focused on helping learners move from entry to attainment of their educational and employment goals.

To fully implement a guided pathways approach, colleges must:

1. **Clarify paths to student end goals**, providing fewer choices and clearer program maps that lead to transfer or the workforce.
2. **Help students choose and enter a pathway**, including bridges from high school to college, on-ramps to programs of study, and accelerated remediation.
3. **Help students stay on a path** with intrusive, ongoing advising and integrated educational and nonacademic supports.
4. **Ensure that students are learning** with clear program outcomes aligned to employer and/or transfer institution expectations, engaging and applied learning experiences, and effective instructional practices.

¹ For a full description of the approach, review AACC’s *What is the Guided Pathways Model?* here: <http://www.aacc.nche.edu/Resources/aaccprograms/pathways/Documents/PathwaysModelDescription1021.pdf>

working with postsecondary educators across the nation entertaining the pursuit of guided pathways. This resource responded to a number of valid issues raised by these early adopters, including how to address concerns about compromising our higher education values, practical considerations about control and enrollment, and apprehensions about the impact on students' learning and development.

In the two short years since that time, community colleges and state university systems have demonstrated an explosion of interest in guided pathways. National initiatives such as Completion by Design and the AACC Pathways Project (now in its second phase) are establishing standards in the field for this work, developing an experiential knowledge base, and creating numerous resources that colleges can draw on as they consider and enter this movement. State-level efforts in Arkansas, California, Michigan, Ohio, Tennessee, Texas, and Washington are replicating and customizing national models and providing frameworks and support for colleges to explore, strategize, and move toward implementation. Combined with uptake at individual colleges, these efforts are propelling this movement forward—expanding the reach of guided pathways to touch more students and place them on a positive trajectory.

Through hands-on technical assistance and feedback from countless faculty and administrators, NCII and our national partners—including the Community College Research Center (CCRC), Jobs for the Future (JFF), the American Association for Community Colleges (AACC), the Aspen Institute, the Community College Survey of Student Engagement (CCSSE), Achieving the Dream (ATD), and Public Agenda—are now encountering a new round of questions. While some philosophical pushback to GP continues to surface, many **inquiries bubbling up from the field now relate to the ground-level implications of pursuing this approach.** Notably, many questions put the student experience at the center of the discussion. This shift shows that colleges are accepting that to best support student success at scale, they need to abandon business as usual and rethink and intentionally design the student experience to ensure that more people enter, progress through, and complete programs of study and reach their educational and career goals. In turn, institutions are now turning to GP to help orchestrate that change.

Chances are, if you picked up this resource, you are a faculty leader or administrator working at a community college or state university who is:

- Working to generate broader support for this approach on your campus, and/or
- Interested in or attempting to design and begin implementation of guided pathways

Throughout the following sections, we aim to address **10 new “momentum” questions commonly asked by a wide range of educators and reflective of the current evolution of this movement** (see sidebar on p. 6, *10 New “Momentum” Questions about Guided Pathways*). These questions reveal both real concerns and heartfelt aspirations educators have for the success of their institutions and the students they serve. They also raise

practical considerations that will need to be addressed as educators roll up their collective sleeves to take up planning and implementation.

This paper seeks to offer readers concrete, and in many cases, nontraditional responses to these questions. We organize them into four groups:

- Issues related to cultural change
- Implications for the student experience
- Practical concerns for educators
- Operational considerations

These responses are in no way designed to represent the “right” way of answering these important questions or to establish the final word on any of these subjects. Conversely, we offer these insights specifically to **assist educators in facilitating your own thoughtful, productive dialog with colleagues about these redesign strategies in the quest to strengthening your students’ completion and success.**

10 New “Momentum” Questions about Guided Pathways

- **Issues related to culture change**
 1. What makes guided pathways different (that is, not just another educational fad)?
 2. How do we further emphasize equity and inclusion in the guided pathways approach?
- **Implications for the student experience**
 3. How do we build effective guided pathways for part-time students?
 4. What happens when students are below transferrable English and/or math?
 5. What happens if students change their minds? Do they have to start over?
 6. What should our college do when students fall off their guided pathway?
- **Practical concerns for educators**
 7. How does a focus on teaching and learning need to evolve under a guided pathways approach?
 8. How much will faculty workload increase under a guided pathways model?
- **Operational considerations**
 9. How do we best use technology to keep students on their pathways?
 10. How can we get all the work necessary to plan and execute guided pathways done by (*insert date here*)?

Issues Related to Culture Change

Culture change is fundamental to the success of any organizational redesign, so let us start with two common questions we encounter in our work with educators that relate to the foundational attitudes, customs, and beliefs of our institutions.

1. What makes guided pathways different (that is, not just another educational fad)?
2. How do we further emphasize equity and inclusion in the guided pathways approach?

The first question could demonstrate either the natural desire to hold to past approaches or an understandable reluctance to be drawn into another *initiative du jour*, while the second one reflects a new cultural direction in the field focused on ensuring all students have the conditions for success. Where does guided pathways fit in this mix? We explore these questions in the following section.

1. What makes guided pathways different (that is, not just another educational fad)?

Let's cut to the chase...anyone who has worked for more than a few years in education has experienced the endless wave of initiatives touted as *the* thing that will boost student success, and we have seen many of these reform efforts come and go—despite best intentions. So, it is expected, even encouraging, when this query inevitably surfaces in sessions designed to introduce guided pathways to faculty and front-line staff. It is only when you hear this type of question that you realize **people are thinking—maybe even hoping—that this time might be different.**

It is true that for many decades now, we have witnessed a parade of initiatives, learned dozens of acronyms, and absorbed numerous convocation speeches on how the latest trend will transform our colleges and students. Yet, the baseline culture, models, structure, and delivery modes of higher education have remained relatively constant for somewhere between five decades and seven centuries, depending on your historical frame for education.

So the question then is, why is this one different? Perhaps even better, how do we make it different? To start, as Gretchen Schmidt, Executive Director of the American Association of Community Colleges (AACC)'s Pathways Project states, "Guided pathways needs to be a

‘movement’ and not another ‘initiative.’” Ed Bowling, Guilford Technical Community College’s Executive Director of Completion and Performance and CBD Cadre Lead for North Carolina, is also fond of saying, “Guided pathways is not something we are doing – it’s something we’re becoming.” This statement takes on double meaning. In addition to placing the work in a long-term change process, it also suggests that this progression is a natural evolution of impactful work already started on most (if not all) community college campuses. Some may be farther along than others, but nearly every institution has something on which to build. Efforts to reform developmental math and English, redesign advising and integrate intentional and sustained supports throughout students’ experience, develop stronger ties between programs and careers using wage information, and improve transfer pathways (to name a few) offer vital building blocks when pursuing guided pathways.

Guided pathways is not something we’re doing – it’s something we’re becoming.

-Ed Bowling, Guilford Technical Community College

Thinking of guided pathways as a framework will be key to its success—one that (a) brings together existing effective approaches and emerging student equity and completion initiatives, and (b) inspires even bolder, more substantive change. In a perfect world, **colleges can use the movement as an umbrella or through-line between a series of (sometimes) disconnected initiatives, with the four “big ideas” of guided pathways serving as the pillars of the work over time.** Such transformation will require coherent and targeted vision from leadership throughout the organization; sustained effort focused on that vision; and meaningful and authentic engagement throughout the organization, across historical siloes. If we take this approach, perhaps this time the movement will be different.

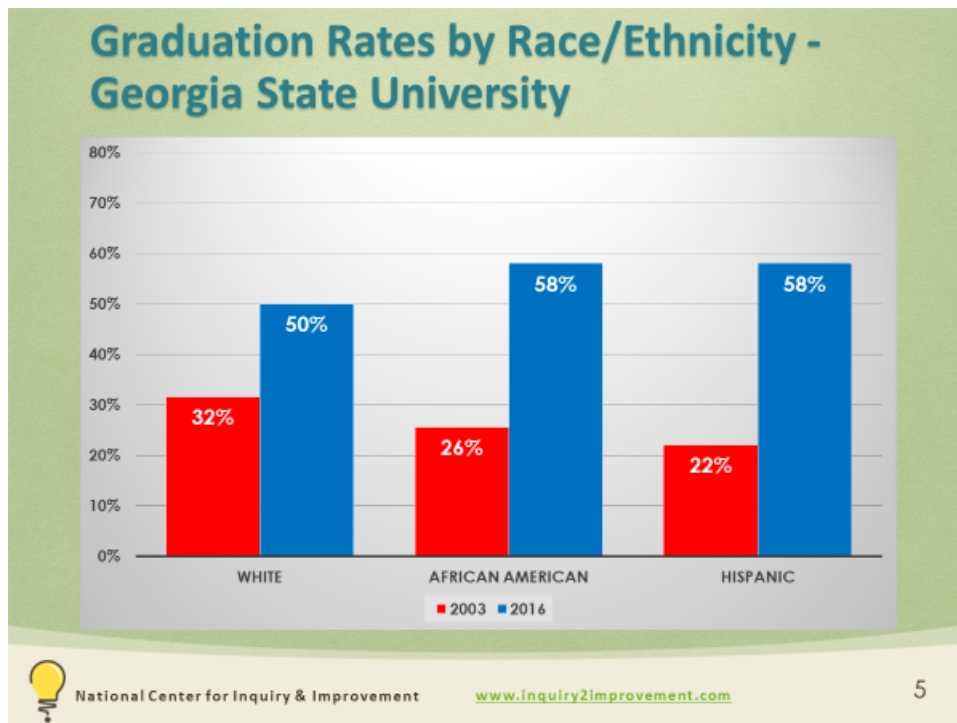
2. How do we further emphasize equity and inclusion in the guided pathways approach?

While the question about guided pathways as a fad reflects where we have been, inquiries about how this movement aligns with the developing equity agenda reflect where we are culturally headed in higher education. This question also has positive undertones as it indicates that the educators who pose it are thinking deeply about how guided pathways can help us further realize the values of equity and inclusion so critical to the future wellbeing of our nation. Without a doubt, the educators, researchers, advocates, and funders who spearheaded this movement and those of us working as national and state-level assistance partners always saw the mission of guided pathways reform as inextricably intertwined with the goal of equitable achievement of outcomes by all of our students. Again, this movement could not be more **about making sure that all of our students**

experience an evolved set of college structures, systems, and cultural features that ensure that they will achieve their goals at equitable rates.

What does this look like in practice? Georgia State University (GSU) offers one of the longest-standing examples of college-wide guided pathways reform in higher education, initiated well before their institutional changes were identified as hallmarks of the guided pathways movement. Yet, the most remarkable part of GSU's story is the real, tangible impact these changes have made on student equity, as seen in a comparison of graduation rates by race and ethnicity from over 10 years ago versus today (see Figure 1 below).

Figure 1. Georgia State University Graduation Rates by Race and Ethnicity, 2003 vs. 2016



Source: Georgia State University Completion Data (T. Renick, personal communication, August 2017)

This data makes a strong case that the so-called “achievement gap” cited at so many educational institutions may not be about the students after all.² The GSU data and emerging equity data from other guided pathways reforms suggest that maybe all along, this gap has resulted from what educational researcher Gloria Ladson-Billings (2006) termed the “educational debt” that the system and its actors have accumulated over time. This line of thinking suggests that our policies, structures, and cultures hinder completion for low-

² Hear more about the GSU approach from Vice Provost Tim Renick here: <http://success.gsu.edu/approach/>

income students and students of color. This assertion is in no way to suggest we have embraced these approaches or allowed them to continue intentionally. Quite the opposite, it is a clarion call that the road forward on **guided pathways is inextricably intertwined with the equity mission many of us hold so dear.**

At the same time, we need to be careful. As Michael Collins from Jobs for the Future (JFF) reminds us, we do not want to funnel low-income students and students of color into “low wage completions.” Rather, we need to make sure student preparation under a guided pathways umbrella leads to jobs with a living wage and places people on a career path that enables them to sustain early economic gains.

Finally, when you address the middle two-thirds of students at a college, you are hitting your equity mission head on. Inevitably, the top 20% of any entering student population at a community college will succeed, and the bottom 10% may struggle to achieve (in the traditional sense)—no matter what a college does. This analysis leaves the middle 70% of the student population, where all the leverage lives. This group also tends to be inhabited disproportionately by low-income students and students of color, which makes it a prime target for improvement initiatives in general and for equity-driven reforms in particular. The GSU data offered earlier suggests that guided pathways can help change our systems and structures to level the playing field for and improve the outcomes of all student groups.

Implications for the Student Experience

Tapping into the student experience is a powerful driver for institutional transformation, and keeping it front and center of redesign efforts helps us stay focused on the task at hand—improving their success. It is heartening—and not surprising—that the questions we increasingly field from educators about guided pathways concentrate on ensuring that different student populations will be able to thrive and attain the goals they set for themselves.

Before we dive into the questions related to the implications of guided pathways for the student experience, let’s take a moment to discuss **which groups this movement uniquely aims to serve.** Community colleges particularly enroll a variety of segments, including: (1) transfer-oriented students, (2) individuals interested in a cohort-based career technical education (CTE) program that results in a certificate or degree and direct entry to the workforce, (3) “reverse” transfer students coming to a community college for one or two

courses, (4) “skills builders” engaged in short-term career advancement and/or retraining, and (5) lifelong learners pursuing enrichment.

While the exact mix of these student segments varies by college, recent data suggests that **transfer-focused students and cohort-based CTE students make up an even larger part of most student populations than we previously thought.** National Center for Education Statistics and National Student Clearinghouse data suggests that 80% of the 1.5 million new students who annually enroll in a community college have a goal of earning a bachelor’s degree at some point in their educational and career trajectories (Horn & Skomsvold, 2011). Given that transfer and cohort-based CTE students make up the strong majority of those entering our community colleges, **we direct our guided pathways efforts toward improving their success.**

Admittedly, reverse transfer students, skills builders, and lifelong learners do not need guided pathways in the traditional sense, although it could be argued that the reverse transfer and skills builders students would still benefit from their efforts being placed in a long-term career pathways context. Yet, we contend that community colleges should not use these groups defensively in reaction to calls for accountability and reform, given that these populations make up a minority of students served. Let’s find a way to tell their success story at the same time as we pursue guided pathways to better serve the large groups of students seeking transfer and/or a CTE certificate or degree.

So, it is in the context of improving the success of transfer students and individuals pursuing a cohort-based CTE program that we explore the following inquiries:

3. How do we build effective guided pathways for part-time students?
4. What happens when students are below transferable English and/or math?
5. What happens if students change their minds? Do they have to start over?
6. What should our college do when students fall off their guided pathway?

We discuss these questions in the next section.

3. How do we build effective guided pathways for part-time students?

Nationally, roughly 60% of students enroll part time, so it is critical to understand how to best serve these learners with guided pathways. At the same time, our completion rate for part-time students in this country is abysmal. Given that evidence, including National Student Clearinghouse data, shows that taking a full load leads to better completion, we clearly **need to work on helping more students enroll full time** (Shapiro, D., Dundar, A.,

Ziskin, M., Yuan, X., & Harrell, A., 2013). This data causes us to ask, “Why *are* so many students part time?”

We know many students enroll part time because of significant financial constraints and a need to support themselves and/or their families. These very real limitations suggest that if we could **do a better job connecting students to resources beyond traditional financial aid**—such as food assistance and childcare and transportation vouchers—more learners could attend full time (or closer to it).³

At the same time, we posit that the community college sector suffers from a “value proposition” problem. That is, students are often unsure of what they are getting from us in return for their financial, emotional, intellectual, and time investment. This uncertainty results in many students “dipping their toes” in the proverbial higher education pool by attending part time. In turn, they start with a few classes, make minimal progress, and seem impossibly far from reaching their goals...and it becomes very easy to leave. If we could **make a better claim about our value proposition to students and their parents**—like so many for-profit schools do by linking their programs to careers and wages—we are likely to get more of students to enroll full-time.

If we could make a better claim about our value proposition to students and their parents—like so many for-profit schools do by linking their programs to careers and wages—we are likely to get more students to enroll full-time.

The movement toward guided pathways can help us communicate this value proposition to students in a number of ways:

- By working with students to clarify career options and make connections between these options and programs of study earlier in their trajectory, we can immediately show students how their education will bridge to a living wage and a career path.
- By getting students into programs of study sooner upon entry, the work they do in a wide range of courses can be placed in a clearer context for when and why they are taking courses, and how their coursework fits into a more cohesive whole (the program of study).

³ For further exploration of this domain, see the Lumina Foundation’s *Beyond Financial Aid* toolkit, developed in partnership with NCII, here: <https://www.luminafoundation.org/beyond-financial-aid>

- By more proactively managing the students' movement through the college and intervening in customized ways, we can continually reinforce the benefits of persisting full-time and on path to students.
- As students experience forward progress toward a clearer goal, their motivation and confidence can grow and further propel them to understand the value of staying focused to completion.

Full-Time Enrollment and Guided Pathways

Now, another question to consider is, **“What do we mean by full time enrollment under the guided pathways approach?”** Generally, guided pathways are typically structured to engage students in 15 units per semester. It is not uncommon for educators to ask if this load is too much to expect from a community college student, which also calls into question the optimal number of units we assume our students could take and be successful. When working as an institutional researcher at California's San Mateo Community College District in the mid 2000s, NCII's founder discovered that the most successful group in terms of course success rate was students taking 18+ units, followed closely by those learners taking 15-18 units. It is true that many of these students were in cohort-based programs; however, we should be careful **not to confuse unit taking with the ability to successfully pass courses**, as students in these programs demonstrate.

Further, students cannot actually complete “on time” in two years by taking 12 units a semester. The notion of 12 units as “full time” enrollment is wholly a construct of financial aid requirements, which call for full time students to take this minimum load in order to access assistance. Complete College America's (CCA) “15-to-Finish” campaign is one very visible national initiative designed to address this issue, and includes an effort to administer year-long Pell grants that allow students to annually achieve 30 units by using the summer term as well. Other financial stability approaches such as offering every student free or reduced tuition for units above 12 may also have a positive effect on the ability to increase their course load. Additionally, ensuring that students have access to and are screened for a wide range of financial stability supports such as nutrition, childcare, transportation, and medical services can support their full-time enrollment and persistence.

Again, when we make clear the value proposition for full-time enrollment and help students understand what they will be able to do upon completion, the more likely they are to devote their time and attention to taking the 15 units per semester needed to complete their program on time. Further, when we structure programs so that the coursework (including suggested electives) does not create an undue burden on students, we may find that more students can succeed at achieving the recommended unit load.

If they in fact **must enroll part time, then students will absolutely need the structure provided by guided pathways**. If a student can only truly take two or three courses a semester out of the 20 or so needed to graduate, these courses better “count” toward the

degree that student is trying to finish. While in the perfect scenario it should take a part-time student seven to 10 semesters to complete, we often find that this timeline starts to creep up to 12 to 20 semesters without the structure achieved through guided pathways. Without laser-focused course selection, it is not surprising that so many part-time students drop out without completing.

4. What happens when students are below transferable English and/or math upon entry?

Developmental education also frequently has a significant impact on the experience of public higher education students. Understanding how to engage and support students who need remediation is absolutely vital to the uptake of guided pathways in the community college and state university context, given the undeniable impact these gatekeepers are known to have on student progress. Addressing this issue is a key component of the “getting students into programs” pillar of the guided pathways approach.⁴ Since educators and researchers have written and presented volumes on this topic in the last decade, we will focus briefly on a few key issues here that directly relate to engaging students in guided pathways who assess below transferrable English and/or math.

With a guided pathways mindset, we first and foremost need to make sure students take the right math (and to a lesser extent English) courses for their pathway. Tristan Denley, recent driver of developmental education and guided pathways transformation for Tennessee’s system and newly appointed Chief Academic Officer for the University System of Georgia, emphasizes that course-level improvements are not enough when it comes to basic skills reform. **“Dev ed reform cannot happen in a vacuum. It’s vital to know what pathway a student is on and ensure the math and English courses they take connect to their program of study and their career goals.”** Numerous observers, including mathematicians and those who study the workforce preparation required of graduates, suggest that over 80% of college degree holders do not need or use the computational skills

Dev ed reform cannot happen in a vacuum. It’s vital to know what pathway a student is on and ensure the math and English courses they take connect to their program of study and their career goals.

-Tristan Denley, University System of Georgia

⁴ CCRC tackles issues of student academic readiness in its *Guided Pathways Essential Practices: Scale of Adoption Self-Assessment*, found here: <https://ccrc.tc.columbia.edu/media/k2/attachments/guided-pathways-adoption-template.docx>

developed in the algebra pathway in their workplace. In turn, it seems that our exploration of what the liberal arts mean in the 21st century should include consideration of the communication and computation outcomes students need now and into the future, and assessment of whether or not our classic math and English sequences lead to those results.

A guided pathways approach prompts this reflection. Starting with student end goals in mind, faculty and student services professionals must think strategically about what communication and computation skills students truly need to develop in alignment with those goals and select coursework accordingly. So, a student who places two levels below transferrable math and who is pursuing an allied health pathway might not need to endure multiple courses leading to calculus, but rather take a more fitting sequence that allows mastery of the statistics and math thinking required when working in a health care setting.

In addition to rethinking *what* communication and computation skills and knowledge students need to succeed, the guided pathways approach calls on us to **consider how we help students attain this preparation**. A growing body of evidence suggests that there is ample opportunity to shorten developmental education sequences and allow students to complete math and English requirements while tackling other coursework. While a meta-analysis of impact has yet to be produced, early reports indicate these co-requisite and “extreme acceleration” models that occur over the span of two semesters have been producing a notable improvement in student outcomes. Program providers indicate that upwards of 55-60% of students who enter two levels below transferrable math and/or English achieve these requirements within one year, versus a 20-30% completion rate under traditional approaches.

Examples include Tennessee’s co-requisite program, Mathways, Statway-Quantway, Community College of Baltimore County’s Accelerated Learning Program, and City University of New York’s Accelerated Study in Associate Programs (ASAP).⁵ To this end, the research field and national partners involved in promoting the guided pathways movement notably achieved a level of consensus recommending the co-requisite and/or extreme acceleration models. This accord is evidenced in the [Core Principles for Transforming Remedial Education](#) statement, released in 2015.⁶

⁵ Find more information on these models here:

- Tennessee's co-requisite program: <https://www.tbr.edu/academics/co-requisite-remediation>
- Mathways: <http://www.utdanacenter.org/higher-education/new-mathways-project/>
- Statway-Quantway: <https://www.carnegiefoundation.org/in-action/carnegie-math-pathways/>
- Community College of Baltimore County’s Accelerated Learning Program: <http://alp-deved.org/#>
- City University of New York’s Accelerated Study in Associate Programs (ASAP): <http://www1.cuny.edu/sites/asap/>

⁶ See the *Core Principals for Transforming Remedial Education* here: http://www.core-principles.org/uploads/2/6/4/5/26458024/core_principles_nov9.pdf

Admittedly, the reforms referenced above may not work for all students; students with very low skill levels may need a different alternative. However, we advocate for **scaling models through guided pathways that prove to do a better job of preparing students in the middle two-thirds of the readiness spectrum as we consider other approaches for the bottom quintile** (who are served even less well by traditional models).

Finally, it is critically important to state that the innovative, dedicated faculty teaching math and English under a traditional model are not the “problem” with students’ preparation in these academic domains. In fact, what we have learned over the last decade about developmental education is more a statement about inadequacies in the structure of the system, not faculty and/or their pedagogy. We need to **take what these very faculty have learned about fostering students’ development and non-cognitive skills—perhaps the true “development” in developmental education—and apply this learning to newer models.** Given that guided pathways advocate for embracing approaches that allow more students to do transfer-level work earlier in their trajectories, leveraging this learning will be vital to their success.

5. What happens if students change their minds about their program of study? Do they have to start over?

This question comes up time and again, rooted in similar concerns about attending to the genuine needs, conditions, and tendencies of our students. Yet unlike issues of enrollment or developmental education in the context of guided pathways, we can address this question with a simple response: **if students change their minds, they absolutely do not have to restart their higher education journey.** This concern has a helpful analogue in current practice. At present, when students shift a major, say from chemistry to psychology, they need to figure out which requirements follow them, hopefully with an advisor. This assessment includes both understanding which of their completed general education (GE) courses apply to their new major (and what gaps remain), as well as what new discipline-specific courses they will need to take in order to fulfill the major requirements.

Under a guided pathways approach, which includes development of program maps that delineate a clear set of discipline-specific and GE elective courses, the same conditions apply. So, if a student changes after her third semester from chemistry to psychology, she would engage in the same sort of evaluation. Presumably, in this scenario, the student on the chemistry pathway would have completed GE elective courses in her first three semesters, in addition to chemistry-specific courses. Those GE requirements would still be considered fulfilled on the psychology program map, even if the courses were not exactly the recommended set on the psychology map. Of course, the student would still need to

complete the psychology-specific requirements; however, this situation is no different than a student changing majors under a traditional cafeteria model.

Yet, what is different is that by using a guided pathways approach, a student and/or an advisor will have an **easier time determining how to make the transition between majors, given that the requirements for both pathways are clearly mapped**. Students, faculty, and counselors will know which courses students have completed that apply to their new trajectory and where the gaps exist. Moreover, under a guided pathways approach, students **will likely have taken courses that optimized the GE package** (rather than the random assortment of GE classes that students often take), enabling them to have something that still places them farther along on their educational journey.

Even further, with well-constructed “meta-majors” or “career-focus areas” that include a common set of first-semester courses, students are **able to explore their academic and professional interests in a controlled manner while at the same time knocking out academic requirements**. So, when a student selects a meta-major planning to pursue one program of study, and then decides to switch gears and enroll in a different program that also falls within that same area, he is no worse for wear—and will have undertaken strengthened career exploration and choice-making opportunities earlier in his college onboarding experience. For example, when Lorain County Community College⁷ established its business pathway, faculty, administrators, and campus researchers worked together to identify seven foundational courses that would position students to pursue multiple related programs of study. Students can now take any one of these foundational courses and be on track for 12 different business majors at the end of their first semester.

Ultimately, we recognize that some students will change their minds and desire to alter programmatic directions. Yet, guided pathways are **designed to help students make more informed decisions from day one**, and are **structured to help mitigate the impact of any shift in educational and/or career goals on the time and effort they must invest** in achievement of that outcome.

6. What should our college do when students fall off their guided pathway?

In addition to inquiries about how to support students who want to change from one program of study to another, we also frequently get questions about what to do when students drop off their pathway entirely. To address this question, we need to consider the reasons a student might fall off path and what a guided pathways approach can do to help get them back on track.

⁷ Explore Lorain County Community College’s pathways here: <https://www.lorainccc.edu/programs-and-careers/>

Let's again reflect on our current context. Sometimes, students stray off path because they take the wrong course. In our traditional cafeteria-style model, many—if not most—general education/pre-transfer students do not have a clear idea of what coursework they should take and in what order to meet their goals. Progression and completion outcomes as well as data on excess units taken suggest that the current approach does not serve students well, and offer motivation for considering another way.⁸

Sometimes students find themselves off path because they fail a course. Presently, when a student does not pass a class, our system assumes they are unable to master all of the course outcomes. In some cases, students are even prohibited from taking that course again for a set period of time or from enrolling in other coursework until they pass the class. Yet, suppose a student fails a course because she was unable to fully master one specific outcome; **we are not currently set up to zero in on students' knowledge gaps and apply supports that help them more quickly learn that skill or concept and move forward.** This practice also begs for evaluation.

Some students fall off their chosen path because the course that they need to take is not available during the semester or at the time in which they need to take it. **Without clear program maps and full-scale implementation of comprehensive educational plans, colleges often grapple with managing enrollments and schedules** in a strategic way that matches up with student needs.

In other cases, students stray off path because they change their transfer destination and suddenly confront a whole new set of requirements. Absent regular, intentional advising, these students struggle to find their way, if not throw in the towel entirely. Still other students drop out when life events intervene, whether it be shifting family obligations, changing job demands, a health problem, financial difficulties, a new transportation challenge, food insecurity, or simply an absence of connection to their campus. Presently, so **many students slip away from our system without anyone noticing, or showing they care.**

Adoption of a guided pathways approach calls for a **fundamentally different student experience, where students have clear maps to end goals that allow them to determine if they have strayed off course and understand what steps they need to recover progress** toward their goal. Once colleges map their programs and help all new students build a full-program educational plan, they can also use the resulting data to deliver a more precise and student-focused scheduling system that enables learners to get the courses they need, when they need them.

In addition, **successful implementation of guided pathways requires intrusive, ongoing advising and integrated support**—both inside and outside of the classroom. Integral to this

⁸ Find more information in the Aspen Institute's *Using Comparative Information to Improve Student Success* here: <https://assets.aspeninstitute.org/content/uploads/files/content/docs/pubs/UsingComparativeInformationGuide.pdf>

level of support are clear intervention strategies for when students do fall off their pathways. These supports help students address academic, personal, and social issues; establish a sense of connection to their campus; and maintain and/or regain forward momentum.

In addition to many examples of early alert programs that aim to prevent students from falling off path at the end of a course, early adopters of guided pathways are testing and finding success with other approaches, including the following:

- **Asheville-Buncombe Technical Community College** (NC) has established three clear types of faculty advisors: first-semester experience advisors, on-track advisors, or “problem experts” who are called in when students fall off track. The goal of the latter is to work to get students back on path as quickly as possible. All receive training to best serve their segment of students.
- **St. Petersburg College** (FL) intentionally created their pathways as an ordinal list of the 21 courses required to complete the AA or AS degree. This approach means that their required courses and recommended electives are placed in order on a list that is provided to students (and to faculty and advisors), which makes it easier for students to see what they need to do even if they do not pass a course.
- **Jackson Community College** (MI) utilizes technology so that students—along with their student success navigator advisor—can view a customized plan and current progress toward completing program requirements. Ongoing advising also explores “what-if” scenarios for different pathway options, adapts to students’ progress, and helps to address any roadblocks that have come up—all with an eye toward helping them complete.
- **Florida State and Georgia State** clearly identify markers and milestones for success in all degree programs. When students miss these markers and milestones (which are related to both course-taking and activities outside the classroom), they are called in for mandatory advising to get them back on track. Additionally, if students persistently stay “off-path,” they are encouraged to seek out an alternative path in which they may have a greater chance of success.

At its heart, the guided pathways movement aims to dramatically reduce the population of students who ever fall off path. By redesigning systems and supports around the student experience and with the strengths, interests, needs, and challenges they bring to our campuses in mind, the guided pathways movement strives to radically increase the number who do reach their academic and professional goals.

Practical Concerns for Educators

Two practical issues also surface in conversations about guided pathways, both related to the role and experience of faculty in establishing and carrying out pathways. Addressing these concerns is key to meaningfully engaging educators in a way that makes sense for both them and their students. These questions include:

7. How does a focus on teaching and learning need to evolve under a guided pathways approach?
8. How much will faculty workload increase under a guided pathways model?

We explore these concerns below.

7. How does teaching and learning need to evolve under a guided pathways approach?

While there is no clear “right” answer to any of the questions addressed in this resource, it is especially true of this one. NCI and our partners have worked iteratively to determine the teaching and learning issues that are most pertinent to guided pathways implementation. As a result, CCRC recently revised its *Guided Pathways Essential Practices: Scale of Adoption Self-Assessment* to reflect what we see bubbling up from the field and from research as faculty both embrace and grapple with this approach. At present, CCRC identifies a number of essential practices under the fourth guided pathways pillar “ensuring students are learning,” a few of which we highlight below. These practices are further undergirded by more than a decade of research conducted by the Center for Community College Student Engagement (CCCSE).

To start, a primary consideration under a guided pathways approach is the **fundamental shift from a focus on courses to a focus on programs**—specifically on program learning outcomes that align with the requirements of transfer institutions and employers receiving our students. As CCRC’s Davis Jenkins frequently reminds educators, “**Real improvement in students’ educational and employment success will require being much more attentive to the skills, know-how, and experience students will need after they leave college.** Teaching of these skills needs to be embedded throughout the curriculum, in both liberal arts and career technical coursework and co-curricular offerings.” At the end of the day, most of us do not remember specific course outcomes from our second year in college or how well we achieved them, but we have a pretty good idea of our skill sets on more global outcomes

such as critical thinking, communication, computation, and creativity (liberal arts-oriented outcomes). Moreover, employers nearly universally tell us they are quite concerned about student preparation in these domains, regardless of where a given job lies on the increasingly blurry blue-collar to white-collar to “new-collar” continuum. We have discussed reclaiming liberal arts outcomes as a key piece of the guided pathways movement,⁹ catalyzing and evolving conversations about how to define and improve liberal arts across the curriculum. Moreover, we aim for this redesign work to ensure that program-level learning outcomes align with the expectations of the employers and universities that will receive our students.

Another aspect of guided pathways implementation is the **integration of experiences into coursework that allow students to actively apply and deepen their learning in an authentic way, and to demonstrate their mastery of the key program and liberal arts outcomes** discussed above.

Over the past decade, national efforts like CCCSE’S high-impact practices research in community colleges the AAC&U’s Liberal Education and America’s Promise (LEAP), and initiatives led by university and community college systems have fostered the adoption of evidence-based “high-impact practices” — including first-year experiences and learning communities, writing-intensive courses and undergraduate research, global studies, service learning and internships, and collaborative and capstone projects—and have begun to develop an evidence base on the value of these instructional approaches.¹⁰ A number of colleges involved in the AACC Pathways Project—including Lansing Community College,

Real improvement in students’ educational and employment success will require being much more attentive to the skills, know-how, and experience students will need after they leave college. Teaching these skills needs to be embedded throughout the curriculum, in both liberal arts and career technical coursework and co-curricula offerings.

-Davis Jenkins, CCRC

⁹ See *Guided Pathways Demystified: Exploring 10 Commonly Asked Questions about Implementing Pathways*, Question 4, “Won’t we lose the heart of a liberal arts education when we make students’ journeys more structured?”

¹⁰ Learn more about high-impact practices and AAC&U’s Liberal Education and America’s Promise (LEAP) here: <https://www.aacu.org/leap/hips>

Community College of Philadelphia, and Western Wyoming Community College—have individually (and hopefully soon collectively) explored the intersection between guided pathways reforms and pedagogy, student learning outcomes (SLO) assessment, and high-impact practices. These efforts offer a useful foundation for colleges to consider which approaches to build on and/or adopt to further strengthen students’ learning.

Further, guided pathways call for **authentic assessment focused on students’ achievement of program-level outcomes and the use of assessment results to improve teaching and learning**. Clearly, colleges have a wide range of approaches to SLO assessment at the course, program, and institutional levels, and nearly all of them have some value. Yet, while it may be relatively easy to have a functional course-level SLO assessment paradigm on paper, it is considerably harder to (a) have a program-level assessment process that is authentic, and (b) produce changes in pedagogy that lead to students actually demonstrating increased achievement of program outcomes. Making this shift may require updates to program review processes, along with investments in professional development and concerted cross-division efforts.

Focusing on program-level outcomes that align with the expectations of employers and universities; integrating high-impact instructional practices; and engaging in authentic, program-level assessment that leads to improved student learning will likely require on-the-ground changes. The guided pathways planning process offers a place to reflect deeply on these teaching considerations, a time to celebrate what your college is already doing in service of these essential guided pathways practices, and an opportunity to identify what needs to happen next to fully ensure students are learning.

8. How much will faculty workload increase under a guided pathways model?

We take questions about the expected day-to-day impact of guided pathways adoption as a positive sign that faculty around the country are perking their collective ears up and saying, “Hey, this actually might happen!” These questions are completely fair and require candid discussion if we have any hope of getting the guided pathways approach off the ground. When considering issues of impact on the time required of faculty, we make an important **distinction between faculty workload when guided pathways models are “up and running” and the work required to get the structured pathways developed and in place.**

Early guided pathways pioneers do not report that faculty workload increases once pathways are implemented; they still teach the same number of courses and are subject to the same obligations and non-instructional activities required of their college’s faculty contract. Educators do report **some increased emphasis on historically “outside-the-classroom” topics and activities in their courses**, such as talking to students about the relevance of their individual coursework to their overall pathway experience, discussing related transfer destinations, tracking progress toward the degree, and incorporating career

exploration and academic planning. Yet, for the most part, faculty experience the same workload per se, primarily focused on teaching in the classroom and creating learning environments that progressively ensure that more students learn the outcomes of their courses and programs.

We should note that at some colleges, the contract requires faculty to do advising; at these institutions, it is likely that a guided pathways reform would actually make this role easier, given that it is **simpler to advise off a GP map than the relative chaos that exists on many student transcripts now**. It does not mean that advising becomes easy or less important under guided pathways. In fact, we create more demand for it when we move from current drop-in models to a required advising approach; just the act of figuring out where a student is and how to advise them to move forward should be more streamlined. As colleges take on pathway implementation, it is also possible that **expectations of faculty advising might shift, hopefully leading to more professional development** designed to provide educators the support they need to fully and effectively inhabit this role and to emphasize consistency in the information students receive.

While there may be relatively little change in their day-to-day load once pathways are established, there is absolutely work required of faculty to get structured pathways in place. Early input from Completion by Design colleges indicated that GP development took upwards of 20 hours per pathway. More recently, CBD and AACC Pathways colleges report **dedicating between eight and 12 hours per pathway, with the variance depending on how much research program faculty do on selection of general education courses**. While 12 hours (on the high side) is not insignificant, it does seem to be a reasonable amount when spread out over a three- to six-month period of time, given that the anticipated net result will be such a positive catalyst for improving student learning and completion.

Admittedly, guided pathways reform will also require campus leaders at all levels and across all functions to catalyze this movement and collectively facilitate a shift in campus culture—faculty included. This **foundational and critical work to evolve campus culture in support of guided pathways cannot be underestimated and can certainly take significant time, depending on your institution's point of departure**. We emphatically encourage campuses to leverage existing structures to pursue this change (rather than create new committees and taskforces that potentially duplicate and/or drain current groups). Moreover, we feel strongly that as leaders ask campus stakeholders to do more and/or change their practice, something has to give; faculty, staff, and administrators are already working at their maximum. We encourage you to think about your college's priorities and ask yourselves, "What will you stop doing from a workload and/or programmatic perspective?" and "Why?" Letting go of policies, procedures, and activities that may no longer be relevant or productive will inevitably free up important time for your college to take up approaches that lead to an improved student experience and improved outcomes.

Operational Considerations

Finally, as colleges come closer to joining the guided pathways movement, some functional questions surface related to what is required of institutions as they plan and carry out implementation. These considerations include:

9. How do we best use technology to keep students on their pathways?
10. How can we get all the work necessary to plan and execute guided pathways done by *(insert date here)*?

We explore these questions below.

9. How do we best use technology to keep students on their pathways?

Today, a host of technology vendors are responding to the shift toward guided pathways in higher education, and the tools these vendors offer could be useful to this reform effort. At the same time, **colleges need to have a solid idea of how to use the technology before buying it, including thinking about the business process reengineering and culture issues mentioned above.** Moreover, we will benefit when we insist that technology vendors that their systems talk to one another, so we do not create technological siloes of information that halt our progress.

Having said this, technology can help make pathways and student progress along these paths clearer to all stakeholders involved—students, faculty, and advisors included. Pre-vendor, home-grown pathways monitoring software at Aspen Prize winning institutions Walla Walla (WA) and Santa Fe (FL) and CBD participant Sinclair College (OH) offer useful examples of where technology, combined with culture change, effectively helps clarify the paths available to students and helps them and their advisors track progression.

Seemingly simple modifications in how we use our technology can also potentially serve as a huge catalyst for improvement. For example, Cuyahoga (OH) is exploring the inclusion of year-long enrollment codes in the student information system, allowing students to register for a full year of courses with a single code. Additionally, predictive analytics has the potential to help colleges identify students at risk of falling off their pathways. That said, institutions need to think ahead about how they will use these targeted lists before they buy the software designed to produce them.

The bottom line? An assessment of local needs drove the technology developed or selected by the institutions mentioned above. **Think about technology as 10% of the solution and the culture shifts and rethinking of the business processes as 90% of the answer.** With this approach in mind, your college is more likely to experience meaningful impact on student success.¹¹

10. How can we get all the work necessary to plan and execute guided pathways done by (*insert date here*)?

Finally, this question indicates that some colleges are moving past skepticism about the approach to embracing guided pathways and considering how to practically carry out the steps required for their effective planning and implementation. Fortunately, this movement is far enough down the pike to have developed **useful tools and supports for colleges as they embark on this journey.** For example, CCRC's *Guided Pathways Essential Practices: Scale of Adoption Self-Assessment*¹² referenced throughout this resource helps colleges to **establish a baseline on the critical building blocks for each of the four domains:** structured pathways, onboarding onto the pathways, monitoring progress on the pathways, and ensuring that students are learning. CCRC and NCII developed an original version of this tool for use on the Arkansas Pathways Project in 2014; over the past three years, CCRC has worked to continuously refine it to reflect the learning of early adopters. NCII, CCRC, and the colleges involved in AACC's Pathways Project have found this tool to be incredibly useful in identifying what needs to happen to fully activate each of the four domains and where successes already achieved by a college can be leveraged in this process.

Coming out of this self-assessment, it is critical to **create a solid project plan on all four domains**, and recognize that this process requires a campus-wide effort—likely crossing traditional siloes—and clear expectations and support from leadership. Once the necessary developments are identified for each domain, colleges must decide how they will move forward, and perhaps most importantly, who will be responsible for spearheading the change. For example, when faced with the task of mapping their pathways, Sierra College (CA)—a large comprehensive suburban institution—paired 15 faculty each with one student services professional to create the first draft of program maps in their area, ensuring that the maps had instructional coherence as well as being functional and accurate from a transfer standpoint.

¹¹ In Fall 2017, AACC, CCRC, and NCII will release a short guide, *Key Considerations: Choosing Technology Solutions to Support Guided Pathways*, to assist colleges with exploring technology solutions to assist with guided pathways-related issues (link forthcoming).

¹² Explore CCRC's *Guided Pathways Essential Practices: Scale of Adoption Self-Assessment* here: <https://ccrc.tc.columbia.edu/media/k2/attachments/guided-pathways-adoption-template.docx>

How long does it all take? **It will of course vary by college.** Asheville-Buncombe Technical Community College (NC)—also a comprehensive institution—completely redesigned all of its pathways, including mapping to their top three transfer destinations, developing a new advising model with associated professional development structures, and creating six career communities with common first semesters for all entering students...all in one academic year! While this timeline was clearly aggressive for this medium-sized college, it does demonstrate the possibilities for initiating, shepherding, and achieving change. AACC Pathways Project institutions and colleges participating in California’s Guided Pathways Project are using a three-year horizon for implementation of their first version of guided pathways with their initial cohort of entering students.

Pioneers of this approach have also shown that for guided pathways to succeed, different components of guided pathways must go live at different points, depending on where an institution has traction and/or existing essential practices on which to build. For example, your institution may be ready to launch a revamped developmental education model in your first year of implementation, and tackle a redesign of student advising in the second year. We encourage colleges to **take the long view on implementation, strategically determining which essential practices to pursue and when, rather than attempting to tackle them all at once**—no doubt a recipe for failure out of the blocks.

Moreover, it is critical to remember that the first time you roll out these changes, they are in “version 1.0,” and will **continue to adapt, evolve, and improve over time.** For example, Miami Dade College launched a new advising model at scale in its first year of guided pathways implementation—no small feat for the one of the largest institutions of higher education in the nation—then revised it in their second year. Keeping this iterative process in mind will help you feel that you do not have to get everything right the first time.

Inevitably, you will encounter bumps in the road, and planning and full implementation of a comprehensive and impactful guided pathways approach will certainly take years. Yet, the **time to get started is now.** We are energized by what this movement can mean for the millions of students who arrive at our colleges each year, seeking a better life for themselves and their families. Stay confident that you are on the right track, because at long last, we are helping more students find and stay on their own path to brighter horizons.

Conclusion

The questions higher education leaders currently raise about guided pathways are inspiring. They indicate that apprehensions and concerns are giving way to broader enthusiasm for this approach. Educators across our country are recognizing that this movement can be a strong lever for helping more students complete college and enter the workplace with the preparation needed to achieve security for their families, personal growth, and professional advancement. The questions addressed in this resource show a turn in the field toward implementation, providing hope that guided pathways can indeed take hold at scale across our nation's colleges and offering motivation to best support the field in efforts to dramatically and equitably improve your students' success. Please keep the questions coming. We will certainly continue to listen and respond.

Help Guided Pathways Gain Momentum on Your Campus

We support you in your work to foster the guided pathways movement on your campus. We encourage you to continue discussions with your colleagues about the authentic issues surrounding implementation in the context of your own college. You can use these 10 questions to talk with peers and practitioners about how your institution might pursue or further a guided pathways approach, based on an assessment of your local needs and aspirations. You can also tap the resources listed below and call on NCII to help facilitate your exploration and implementation of guided pathways.

For more information on guided pathways implementation...

- Read CCRC's incredibly important resource *Implementing Guided Pathways: Early Insights from the AACC Pathways Colleges* here: <http://ccrc.tc.columbia.edu/publications/implementing-guided-pathways-aacc.html>
- Explore *Community Colleges and Student Success: Models for Comprehensive Reform* by CCRC's Tom Bailey here: <http://er.educause.edu/articles/2017/5/community-colleges-and-student-success-models-for-comprehensive-reform>
- Discover reports, tools, and resources from the American Association for Community College's Pathways Project here: <http://www.aacc.nche.edu/Resources/aaccprograms/pathways/Pages/default.aspx>

- Get great tips on building urgency for reform in *Making the Case for Guided Pathways* by CCRC's Davis Jenkins here:
<http://www.aacc.nche.edu/Resources/aaccprograms/pathways/Documents/MakingtheCaseforGuidedPathways.pdf>
- Explore Jobs for the Future's Postsecondary State Policy Resources site here:
<http://www.jff.org/initiatives/postsecondary-state-policy/2017-resources>

To learn about the National Center for Inquiry and Improvement...

- Visit www.ncii-improve.com
- Contact Dr. Rob Johnstone, Founder and President, rob@ncii-improve.com

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