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.

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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?
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> 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.

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[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.pd

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.**

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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

> ## Guided pathways is not something we're doing – it's something we're becoming.
>
> *-Ed Bowling, Guilford Technical Community College*

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.

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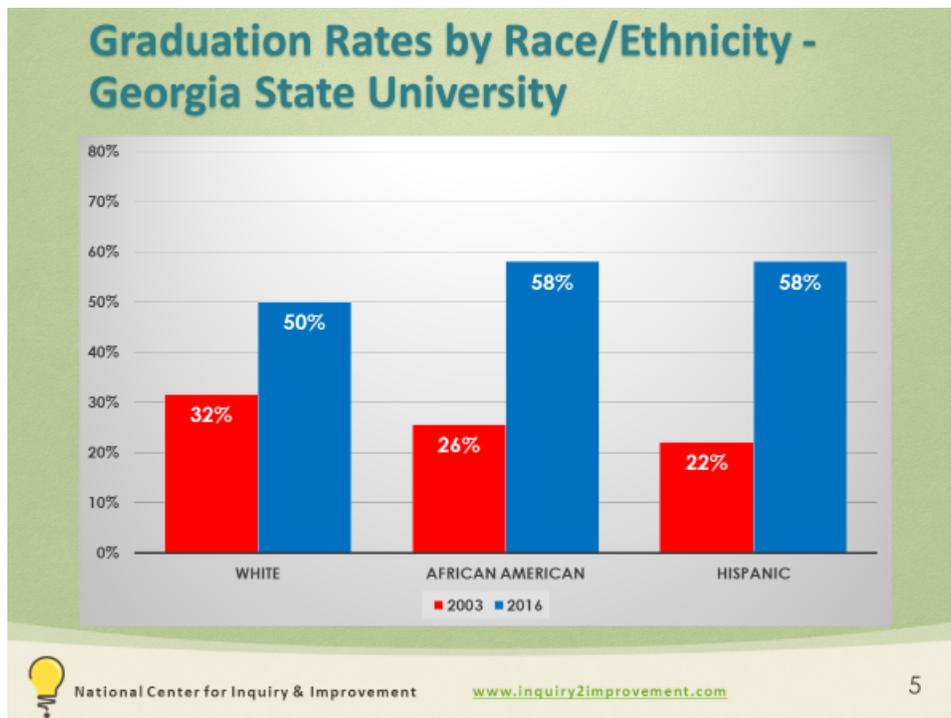
Source: Georgia State University Completion Data (T. Renick, personal communication, August 2017)

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-

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[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.

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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).

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[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*

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[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]

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[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 College[7] 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.

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[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 <u>all</u> 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 forwa**rd. 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

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[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. NCII 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.
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> *-Davis Jenkins, CCRC*

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[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 tim**e, **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 <u>could</u> be useful to this reform effort. At the same time, **colleges need to have a solid idea of how to use the technology <u>before</u> 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.

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[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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