# What Do Students Think of Guided Pathways?

*By John Fink*

Increasingly, colleges and universities across the country are adopting "guided pathways" reforms to create clearly defined, educationally coherent pathways into and through programs of study for their students. Facilitated by built-in supports, the goal of guided pathways is to increase learning and graduation rates, and to help more students complete programs that lead to career advancement and further education as efficiently as possible. The relatively recent movement to implement clearer and better supported pathways from college entry to graduation is grounded in research showing that when students are provided with structure and guidance, they are more likely to enroll in the most appropriate courses, stay on track, and be successful in completing a college credential.[1]

We are now beginning to learn how some of the first colleges that embarked upon guided pathways are implementing these reforms, the challenges they are encountering, and common reactions to them from college faculty and staff.[2] Yet, despite the breadth of the guided pathways movement nationally and the ongoing studies underway to gauge its effect on key outcomes such as credential completion, we do not know enough about what students themselves think of guided pathways. In this brief, I examine data from 48 interviews with first-year students at City Colleges of Chicago (CCC)—a large urban community college system with seven campuses that since 2010 has been implementing guided pathways—to understand students' reactions to CCC's ambitious, system-wide reform. A large majority of the students were enthusiastic about program maps and educational planning—hallmarks of the guided pathways approach—yet a few students had negative reactions to these very same elements of the reform. And nearly half the students reported that they experienced problems with activities such as registration and course planning while new systems and practices were being deployed by the college, pointing to substantial implementation challenges.

One of the first major undertakings carried out by any college implementing guided pathways is clarifying academic program pathways through the creation of default "maps" for each program of study. Alongside information about career and transfer options for students who follow each pathway, these program maps include a faculty- and advisor-recommended semester-by-semester default sequence of courses

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for students to follow from first term to completion. In addition to creating these program maps and redesigning student intake and advising to support the educational planning process which makes use of these maps, a college implementing guided pathways also engages in other components of reform. These include organizing programs of study into broader topical areas (called "focus areas" at CCC and probably best known as "meta-majors" in guided pathways literature) that facilitate efficient student exploration of and choice of major, and reviewing courses and programs to ensure that they lead to viable career and transfer options. In this brief, I focus primarily on how students experience program maps and educational planning, which are particularly student-facing components of guided pathways that many student interviewees at CCC discussed.

### The Guided Pathways Movement

Guided pathways involves rethinking academic programs and support services to help achieve four main objectives: (1) mapping pathways to student end goals, (2) helping students choose and enter a program pathway, (3) keeping students on their pathway to completion, and (4) ensuring that students are learning throughout their programs. Guided pathways reforms entail major changes in college practices and culture. Rather than scale up discrete programmatic interventions, guided pathways requires that colleges redesign academic programs and student supports at scale— that is, for all certificate- and degree-seeking students. The American Association of Community Colleges (AACC) is leading a signature initiative—the AACC Pathways Project—to support adoption of guided pathways at scale at 30 vanguard colleges across the country.[3] Efforts to implement guided pathways at scale statewide across two-year colleges have been launched in several states, including Arkansas, California, Connecticut, Florida, Massachusetts, Michigan, New Hampshire, New Jersey, North Carolina, Ohio, Oregon, Tennessee, Texas, Virginia, and Washington State. CCRC estimates that at least 200 community colleges nationally are undertaking major guided pathways reforms on their campuses.

## Reinvention at the City Colleges of Chicago

In 2010, under the leadership of Chancellor Cheryl Hyman, CCC launched a major guided pathways reform called *Reinvention* to dramatically increase rates of degree and certificate completion, successful transfer to bachelor's programs, and effective career advancement for students.[4] A central thrust of the strategy has been to create more clearly structured program pathways with integrated supports as a means to help students enter and complete a program of study as quickly as possible. Equally important, CCC has worked with Chicago's business community and local four-year universities to ensure that the completion of program curricula prepares students to succeed in further education and employment. Partway through its Reinvention efforts, CCC has already succeeded in dramatically improving student success. The three-year IPEDS graduation rate[5] at CCC increased from 7 percent in 2009 to 17 percent in 2015, and the 2013–2018 five-year plan sets the goal completion rate at 20-plus percent.

The early years of the Reinvention effort focused on (1) engaging campus and community stakeholders to evaluate and clarify college program requirements, (2) defining the ideal set of courses to take for each program in order to create default pathway maps for students, and (3) grouping programs into broad "focus areas" to facilitate student major exploration and selection. Professional advisors were then tasked with providing support as students began to explore focus areas and programs, select a major, and make use of the new program maps to develop a customized, term-by-term educational plan. CCC first rolled out the program maps in the fall of 2014 and has since worked toward the goal of having every certificate- and degree-seeking student create and use an educational plan.

CCC made a major upgrade to its student information system in order to do this. The college initially implemented the use of program maps and educational plans using paper plans and their legacy student information system. Then CCC upgraded to Smart Planner software, an online tool that advisors and students use to: (1) develop an initial plan of courses from first term through to completion, (2) make

any adjustments to the plan as needed over time (they may modify their enrollment intensity, decide they want to take some different variation of courses, or even change majors), (3) register for their courses in advance of each new term, and (4) better understand and visualize how far students have progressed toward graduation (through course completion tracking). By the fall of 2015, CCC had fully scaled the implementation of program maps and the use of individual educational plans.

### CCC Reinvention Terminology

**Focus area:** Broad topical area ("meta-major") in which similar programs of study are grouped to facilitate student exploration and major selection.

**Program map:** Default term-by-term sequence of courses for a particular certificate or degree program. Created by program faculty, the program map is used by students and advisors to create customized educational plans.

**Educational plan:** A customized, term-by-term, individual student plan for the completion of courses in a particular certificate or degree program. In the educational planning process, students and advisors start with program maps and make adjustments to the default choices based on factors such as the level of remedial education needed, the number of courses that can reasonably be taken each term (given other student responsibilities such as work and family care), and particular topical interests of students. CCC upgraded its student information system to assist students and advisors in creating these educational plans and to provide them with tracked student progress over time.

## Research Methods

The data used in this analysis are drawn from student interviews collected by CCRC researchers over the course of two semesters, spring and fall 2015.[6] We visited four of the seven CCC colleges (campuses) once each semester. At the time of our spring 2015 visit, CCC was using paper program maps and their legacy student information system to help most students build their educational plans. By the

time we visited again in the fall of 2015, the use of program maps and educational plans had been fully scaled—virtually all first-year credential- and degree-seeking students had or were developing plans, and the educational planning process had moved primarily online with CCC's rollout of the Smart Planner tool.

We conducted a single one-on-one interview with each of 149 first-year students over the course of the two semesters. Interviews typically lasted 45 minutes with each student. We asked students about their decisions to attend college, how their career and academic interests had developed over time, the process of enrolling and signing up for courses at CCC, how their choice or uncertainty about a program of study affected their onboarding at CCC, if and how they knew which courses to take to achieve their goals, and about their interactions with advisors. Thus, the interviews were conducted to have students describe their early experiences at college, and they focused primarily on the intake process. The interviews were not explicitly aimed at eliciting students' opinions about college practices or CCC's guided pathways reform efforts. (The intake process was necessarily influenced by the reform, but students may or may not have been knowledgeable about the changes undertaken by CCC.)

Interviews were audio-recorded and transcribed for thematic coding analysis using Dedoose. A team of four researchers used a sample of the transcripts to develop a coding scheme rooted in the guided pathways framework for this particular study. Coding reliability and validity was ensured via use of Dedoose's "training center," regular coding checks, and regular meetings to discuss areas of disagreement in interpretation among researchers. Analysis included in this brief relies on codes related to students' opinionated perceptions of guided pathways reforms. While each of the 149 students we interviewed described his or her experience of student intake, advising, and educational planning, we focus on responses from a subset of 48 students who expressed a clear opinion about some aspect of CCC's guided pathways reform that is germane to the early student experience.[7] (I call this subset of students "opinionated interviewees" hereafter.) Though we did not intentionally limit our coding of student reactions con-

cerning guided pathways to program maps and educational planning, students' reactions to guided pathways were largely focused on these components of the reform.

## Findings

Most students' opinions about guided pathways were directed toward program maps, educational planning (including interactions with advisors), and tracking their progress toward completion. A large majority (37) of the 48 opinionated students had a positive impression of these features of CCC's guided pathways reform. While four students were more critical and voiced potential downsides to the use of program maps and educational plans, we found little evidence overall that students disliked the reform generally. Nonetheless, almost half of the students (19) who expressed an opinion about guided pathways reported concerns or frustration about problems they encountered during the implementation of the reform.[8]

### Students Discuss the Benefits and Drawbacks of Guided Pathways

**A few students were troubled by the idea that the program maps and educational plans could limit their choices, and a couple felt that the planning process was discouraging.**

Some concerns that a few students raised about default program maps and individual educational plans echo those we have heard voiced by faculty and staff at a number of different colleges in the past. These students were troubled that program maps and educational plans might restrict their ability to choose the courses they want or make it difficult to change majors. One student noted that the program maps "kind of restricted the ability to really pick [the classes that] you wanted to pick." Two other students felt that not being certain about the selection of one's major is a liability in the structured environment of guided pathways. One hinted at this indirectly by reacting to a description of program maps, stating, "If you know exactly what you want, I think that [the program maps] would be good."

Another student's reaction to program maps highlights the tension between structure and choice at play in guided pathways. On the one hand, the student expressed a fear of losing progress as a result of switching majors: "I'm kind of scared because what if I decide I don't [want this] major, and then I took all those classes and don't need those." Despite this fear, however, she also recognized that the program maps and individual plans are merely well-considered suggestions for courses to take: "But it's just a plan, so you don't really have to stick to it I guess." This student thus expressed the tradeoff between sticking with a major that may no longer seem ideal and changing to a new program toward which some of the courses already taken may not apply. This choice may be understandably difficult for many students. Of course, it may be beneficial for students to face this dilemma sooner rather than later.

Another concern raised by two students is one less often identified by faculty and staff who are uncertain about the consequences of guided pathways reforms. These students found themselves discouraged, at least initially, by the educational planning process. Many students we talked with said that planning their term-by-term pathway to completion was a motivating experience (as we describe below). However, when customized to individual students, a "two-year" degree map may take much longer to complete if a student needs to take remedial coursework and cannot take 15 credits per term (which is commonly the case). Two students described feeling overwhelmed upon seeing their individual educational plans because of the time and many steps it would take to complete their degrees. A returning adult student explained, "I just didn't realize the amount of classes. … They're incredibly long and there's a lot of time involved."

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While the realization about the time and commitment involved in completing a program, particularly on a part-time basis, may be disconcerting, it is probably helpful to the student to understand their circumstances at the start

of college. Indeed, the other student who felt similarly overwhelmed by the amount of time and work needed to complete a degree also stated that he was willing to "take up the challenge" in pursuit of his broader career goals.

## Many students described the program maps, educational plans, and tracking features as helpful and motiving.

The great majority of opinionated interviewees felt that the program maps, individual plans, and tracking information available on Smart Planner were very helpful. They felt that these resources increased their confidence and motivation to make progress toward completion. One student described the program maps as "the best thing in community college because if you stay with the maps it keeps you motivated and on track." Another student said that his educational plan is "something I look up to, something that is motivating me that if you can do this by fall 2017, you're going to be at UIC [University of Illinois at Chicago]." Students expressed comfort in having fully developed educational plans and in being able to check their progress to make sure they are on track as they work toward completion. "If you stick to it you can't help but succeed," one student shared, "… it gets your mind in mode to know what you're going to be tackling." Another said, "The best part about it is you can go on [Smart Planner] and see the map…. I just downloaded it to my tablet so I can check it and make sure I'm on track." Many students mentioned the Smart Planner pie chart feature that provides a real-time estimate of student progress toward completion. Students were particularly enthusiastic about it and noted that it motivated them. One said, for example, "I find [the pie-chart] really helpful…. Like you're on the right track. And it gives you a boost, like, 'Oh I'm almost done. I'm at 60 percent.'"

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In much the same vein, many students expressed relief and reassurance knowing that they had a plan, commenting that they were "happy to know that I had a plan" and feeling "more confident but also I just feel more relaxed." One student said that, prior to creating an educational plan, she questioned, "Am I on the right path? Am I missing a class? Am I going to forget something?" Creating an educational plan helped alleviate these concerns. The student explained, "[The educational plan] really made me feel at ease because I was able to see my next step and not have to worry." Another student described how this assurance was also helpful to her parents: "I remember feeling at peace and being able to go home and tell my parents 'Okay, so here's the plan…. Don't freak out, I've got this under control.' They were like, 'Cool.'" Another student contrasted the guided pathways environment at CCC to the rather unstructured circumstances he found himself in while in high school, which he felt contributed to his delay in deciding where to go to college and what to study. About the educational planning process he went through upon entry at CCC, he said, "I feel like I actually had structure…. It's nice."

## In particular, some students emphasized that online educational planning with an advisor was easier than anticipated, and some felt that program maps clarified requirements and made course selection simpler.

Thirteen of the 48 students reported that the processes involved in choosing a program and planning out their pathway to graduation were straightforward. One student noted that creating the educational plan was simpler than expected: "My reaction [to making an educational plan] was, 'Wow.' … I thought it was going to be a lot more complicated." Similarly, another student anticipated that the educational planning process would be like "ripping off a Band-Aid" and that "it was going to really hurt to sit there and plan out everything right away." This student explained further that an advisor helped to keep the planning process simple; the advisor also assured him that the plan could be changed at any time.

Students also appreciated that they could easily access their plan to track their progress and be confident about which courses to take in subsequent semesters. One student commented, "[Your courses] will be mapped out for you so that you're not struggling each semester to figure out

what you're going to take." Indeed, 17 students positively described how the educational planning process helped them in selecting the appropriate courses given their future goals. The process of planning out courses to graduation helped students to better understand what was required of them to complete. One student did describe the planning process as "challenging," but she still felt that it was worthwhile: "I didn't know it would be that hard, but I realized that it was beneficial because it gave me an idea of the different courses I needed."

Knowing which courses counted toward program completion and which were transferable to another college was a concern of the highest order for students. They therefore appreciated that the program maps and Smart Planner tool clarified degree requirements, helping them figure out, for example, which courses they could take as electives and when it would be best to do so. One student said, "I still can take an extra class…. [Smart Planner] shows me what classes I exactly need for [my program], what classes I'll need in the future." Another student provided a more detailed explanation of how she used the Smart Planner tool to explore courses she was interested in that also met her degree requirements:

> [Smart Planner] doesn't select for you, but it gives you all the options for that. Like, for example, fine arts. It gives you a few different options [for the fine arts requirement]. One option was music. I'm already taking music. So it already has "Satisfied" there or whatever word they use, [so] … you set aside this. You're in that class. With physical science [as a requirement], it tells me it's unsatisfied and I got a big zero there and I've got to find something to plug into that spot. When I click on physical science, it gives me a list of a whole bunch of different things [course options].

Confident in the courses shown on their educational plans and how long it should take to complete their programs, students felt more at ease signing up for courses in subsequent semesters. "I was able to see how long it was actually going to take," one student explained. "I can take these classes this semester and then these ones [next] semester and be able to actually enroll myself instead of going to an advisor and waiting."

## Students Discuss Implementation Problems

During our visits to CCC, the multi-campus system was making major changes to the business, academic, and student services operations throughout all seven of its campuses. Nineteen students described problems they encountered that we attribute to the college being in a state of flux during the implementation of these guided pathways changes. On the one hand, this sounds reassuring in that the problems encountered may be only temporary. On the other hand, they will be temporary only if they are solved in a satisfactory way. And in any case, it is disturbing for the students who are enrolled at a time when they may very likely experience a good deal of disruption and uncertainty.

### A few students felt stymied by course availability issues and changing program requirements.

As a part of the Reinvention, some programs of study were themselves being reshaped and modified, which included changes to program curriculum and requirements. Two students expressed frustration at changing program requirements, outdated information they encountered, and lack of knowledge about program specifics on the part of college staff, including advisors. The transition to guided pathways, including the changing of requirements in some academic programs, thus resulted in confusion and frustration for these students, as demonstrated in this reaction from one interviewee:

> And so they are giving me information and it was—I guess that they would have to be careful because I think one was a requirement in one year and then I think they took it away. And so I mean, I definitely would not want to take that class and then not need it. It's not the end of the world, but I mean it costs money.

The other student specifically mentioned frustration with changes to program requirements as CCC centralized some of its programs to particular campuses, questioning why the advisor at his campus did not know about the changes:

> Why doesn't anyone know that the plans are changing? So I think that was what the most aggravating thing was for me, because I felt like I had started a semester and then I felt like I was going nowhere because nobody was backing me at that moment.

Moreover, two students expressed frustration at the lack of adequate course availability as the college rolled-out guided pathways. One student, who was grateful to have a clear pathway to graduation, said, "When the class is full, it's like, okay I have to wait until next semester." Another student said that she "was enrolled for five classes this semester, but one of the classes got dropped" because of low enrollment. The student planned to take the dropped course over the summer in a readjustment of her plan.

### Some students found the college's online resources to be poorly organized, and some encountered technical difficulties in using Smart Planner.

Most students seemed adept in understanding how to use the Smart Planner tool, which functions as a student portal within the college website, and only one student specifically mentioned being uncomfortable with carrying out educational planning and course registration online. Nonetheless, some students said that they found the redesigned college website, including Smart Planner, confusing. They felt that the website was too busy and that it had too many links, making it hard to find the program maps and other useful resources. One student said, "I don't know where I found [the program map], and I can't find it again."

Students who liked the idea of completing educational planning online expressed mixed feelings about the actual experience of using Smart Planner due to difficulties in its roll-out. CCC carried out a major upgrade of its student information system in association with the launching of Smart Planner, which resulted in unintended technical glitches for some students. For example, in the process of switching over to the Smart Planner tool, a number of students' educational plans were lost, or put in scrambled order, requiring students to repeat the planning process all over again: "You know it was just like I had to start over…. And the next day I get on there, and it's like, 'Welcome to Smart Planner.' Alright. Here's me starting over." Other students who liked Smart Planner and described it as "straightforward" became wary of technical problems that arose. One student commented, "I want to check my class to make sure that it didn't drop anything, and the whole system goes down."

### Many students wanted more guidance as they moved into, through, and out of pathways.

Despite strong and varied efforts to communicate relevant information about program maps and educational planning to students, college personnel did not always succeed in having first-year students understand program and credential options, the step-by-step path to completion, and the connection from programs to careers after graduation. In students' first or second advising appointments at CCC, advisors typically walked through the educational planning process. Yet some students did not have what they felt were extensive enough conversations with an advisor about their educational plans. One student said

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that her advising session was rushed, commenting that because advisors "have to deal with so many students one-on-one, sometimes they just kind of set out a plan for you and they don't get to know you personally." Students also said that they wanted more expansive and specific descriptions of courses when making their educational plans. And they wanted more guidance on balancing course loads. They wanted to know which courses would be good to take together in a particular term and which should be avoided because they might be too difficult in combination.

Four students also noted that they did not fully understand how their particular program was related to the type of job or career that they desired after graduation. For example, with respect to what she was learning in a business course, one student said, "I don't understand what I'm going to be doing in the future with this … or even what job I'm going to have." CCC provides career information with each program map and draws connections between credential options and career opportunities on its website. Indeed, the website provides some information about demand and pay for related jobs in the local area. Yet, students said that they either did not know about the resources, did not follow through on advisor encouragement to use the resources, or did not find the resources useful. Students generally appreciated the program maps and accompanying resources to help in the educational planning process, but many emphasized that advisors should play a greater role in helping to interpret and use those resources.

## Implications for Practitioners

Results from this study indicate that most opinionated first-year students that we interviewed were enthusiastic about program maps and educational planning, hallmarks of the guided pathways reform model. Students generally found the maps, their educational plans, and the tracking of their program progress to be useful and motivating. Such positive experiences are consistent with an underlying premise of guided pathways, that students profit from more clearly defined and educationally coherent pathways. Yet two students felt overwhelmed when they realized how long it would take them to complete their programs, suggesting that additional support and guidance from advisors in the educational planning process may be needed for the theoretical underpinnings of the guided pathways model (e.g., defaults, active choice, structure) to be fully realized.[9]

For many of the students we interviewed, advisors played an important role in helping them make meaning of the educational planning process. This finding accords with previous work on student perceptions of advising which found that—particularly for more complex tasks such as exploring credential options and educational planning—students want more interactive, collaborative relationships with advisors.[10] Interviewees in the current study also highlighted related, somewhat subtle key functions that advisors carry out in a guided pathways environment. By explaining that program maps are merely recommendations for students to adapt to their own interests, or by helping students to understand the benefits of making progress and completing their programs despite the lengthy pathways involved, advisors at CCC played a key role in helping assuage common worries among students. Furthermore, students in this study indicated that they wanted advisors to work with them to clarify their end goals and identify the best pathway to those goals.

Our findings suggest that, while students found the program maps to be a valuable resource in the educational planning process, advisors serve a critical role in helping students to fully utilize the maps and other available resources.

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Importantly, students noted several kinds of problems they encountered as CCC implemented new policies, procedures, and resources for managing course registration and program planning under guided pathways. These included confusion around changing program requirements, uncertainty about course availability, and technical difficulties with program planning software. Practitioners at other colleges implementing guided pathways should therefore anticipate and prepare for potential glitches in the roll-out of program maps and the educational planning process, as it is clear that students bear much of the cost of these difficulties. Nevertheless, despite substantial implementation challenges, most opinionated students we interviewed voiced appreciation for program maps, educational plans, and information about their program progress, often mentioning heightened motivation, increased confidence, and even a sense of relief as a result of having a plan.

# Endnotes

1. For more details on the guided pathways model, see Bailey, Jaggars, and Jenkins (2015a, 2015b).

2. For example, CCRC is in partnership with the AACC Pathways Project, in which 30 colleges are adopting guided pathways. For information on their recent implementation efforts, see Jenkins, Lahr, and Fink (2017).

3. For more on how the AACC Pathways colleges are implementing guided pathways reforms, see Jenkins, Lahr, and Fink (2017).

4. For more on CCC's history and the Reinvention reform effort, see Kazis (2016).

5. Based on data collected at the institution level, the Integrated Postsecondary Education Data System (IPEDS) graduation rate is based on full-time, first-time, degree- and certificate-seeking students who start and finish at the same institution.

6. Members of the research team were John Fink, Davis Jenkins, Melinda Mechur Karp, Elizabeth Kopko, and Marisol Ramos.

7. Among the 48 students who expressed a clear opinion regarding guided pathways, 60 percent were aged 18–21 and 58 percent identified as female. With regard to race/ethnicity, 35 percent identified as Black/African-American, 33 percent identified as Hispanic/Latino, 19 percent identified as White , 8 percent identified as multiple race/ethnicity, and 4 percent identified as Asian. The subsample of these 48 students was representative of the overall sample of 149 students we interviewed in terms of age, gender, and race/ethnicity.

8. The 37 students who expressed something positive about guided pathways and the 19 students who expressed a frustration with the implementation of guided pathways were representative of the sample of students interviewed with regard to age, gender, and race/ethnicity. The four students who expressed something negative about guided pathways included two White students, two Black students, three male students, and three students aged 18–21.

9. See Bailey, Jaggars, and Jenkins (2015b): table on page 3 of *What We Know About Guided Pathways* (CCRC Research Overview): http://ccrc.tc.columbia.edu/media/k2/attachments/What-We-Know-Guided-Pathways.pdf

10. See Kalamkarian and Karp (2015).

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