

TEACHERS COLLEGE, COLUMBIA UNIVERSITY

Building Blocks: Laying the Groundwork for Guided Pathways Reform in Ohio

Davis Jenkins, Hana Lahr, & John Fink

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SUMMARY OF FINDINGS AND RECOMMENDATIONS

Purpose

In 2015, with support from Great Lakes Higher Education Corporation & Affiliates, the Ohio Association of Community Colleges (OACC) launched the Student Success Leadership Institute (SSLI). Through the SSLI, OACC held a series of six workshops for all of the state's 23 two-year colleges and provided coaching on data collection and analysis to help colleges formulate state-mandated completion plans that were submitted to the Ohio Department of Higher Education (ODHE) in spring 2016.

In summer 2016, OACC, in partnership with ODHE and the Community College Research Center (CCRC), was granted additional funding from Great Lakes to provide technical assistance to help colleges implement their completion plans. OACC and its member colleges decided to embrace the "guided pathways" model as the framework both for the colleges' student success efforts and for the technical assistance that OACC would provide to them. They did so because the guided pathways model provides a holistic framework with which to integrate and leverage the multiple improvement strategies the colleges set forth in their completion plans.

Although a handful of the 23 Ohio community colleges are leaders in guided pathways movement nationally, most had not formally started implementing guided pathways before OACC adopted guided pathways as the framework for the SSLI in fall 2016. The goal of the current phase of the SSLI is to help colleges across the state plan and begin to implement full-scale redesigns of programs and student supports following the guided pathways model, building on the foundations they have laid in their reforms to date.

This is a summary of the findings and recommendations of CCRC's first report on our research on the SSLI guided pathways reforms in Ohio. It is based on a baseline analysis, using CCRC's "Guided Pathways Scale of Adoption Assessment,"^{*} of the extent to which each of the 23 Ohio two-year colleges have adopted practices essential to the guided pathways model. It is also based on on-site interviews and focus groups at six of the Ohio colleges that were in the early stages of formally launching guided pathways reforms: Cincinnati State Technical and Community College, Clark State Community College, Edison State Community College, Lakeland Community College, Marion Technical College, and North Central State College. In total, we interviewed 234 faculty, administrators, staff, and students at these six colleges.

^{*} See http://ccrc.tc.columbia.edu/publications/what-we-know-about-guided-pathways-packet.html

Findings

Our most important finding is that even Ohio colleges that have only recently begun concerted guided pathways reforms have nevertheless implemented substantial changes that can serve as building blocks as they seek to further transform their policies, practices, and culture following the guided pathways model. Some colleges are seeing substantial improvements in near-term indicators of longer-term student completion and success.

In the following we present examples of such building blocks for guided pathways that colleges have put in place in each of the four main areas of guided pathways practice.

1. Mapping Pathways to Student End Goals

Central to the guided pathways approach are efforts to more clearly map out pathways for students to the completion of credentials, career advancement, and further education. To help students make sense of the many programs typically offered, colleges are organizing their programs into career-focused "meta-majors."

Several of the Ohio colleges have laid the groundwork for program mapping and meta-majors. For example, Cincinnati State Technical and Community College has organized its programs into "career interest groups," which are listed with photos on the college's home page (http://www.cincinnatistate.edu/). These interest groups include business, computers, culinary, education, engineering, environment, health and fitness, multimedia and design, public safety, and transportation. Clicking on any one of these fields leads to a list of programs. For each program, the site provides a brief description, a summary of potential employment and transfer opportunities, a curriculum map, and contact information for specific individuals on campus—often the program chair and the cooperative education (co-op) coordinator—who can provide more information on the program. Information on transfer-oriented programs and online programs is also provided under separate icons on the college's home page. Cincinnati State has worked with its two main public transfer partners, the University of Cincinnati and Northern Kentucky University, to map out articulated transfer pathways so that students can transfer with junior standing in the most popular majors. Cincinnati State has industry advisory boards for all of its associate degree and certificate programs, and the college regularly surveys employers about how well-prepared students they have brought on as co-op participants from the college are for employment in their industry. In these surveys, the college asks about how well-prepared students are in both technical and soft skills.

Clark State Community College is creating "curriculum guides" that map out course sequences and other requirements for every program. For example, the college's management department reorganized its programs so that all students take the same core courses in the first year. In the second year, students specialize in one of four focus areas: general management, human resource management, logistics and supply chain management, or marketing. The management department conducted focus groups with employers and used their recommendations to design the curriculum both for the core management program and for the four focus areas. Management faculty have also mapped their programs to the bachelor's degree programs in business at Wright State University (one of the college's main transfer partners) and created marketing materials for use by both current students undecided on a major and prospective students. Faculty in the Division of Arts and Sciences are using these management programs as a model and are beginning to develop "curriculum sheets" that

2. Helping Students Choose and Plan a Program Pathway

Implementing guided pathways requires that colleges rethink the student intake experience with the goal of helping new students explore, choose, plan, and successfully enter a program of study that is a good fit with their interests, talents, and aspirations.

College/Career Exploration and Planning from the Start. To help students assess their aptitude to excel in a chosen major or career path, new students at **Edison State Community College** complete a Holland career interest assessment during new student orientation. After taking the Holland assessment, students meet with an advisor to discuss the educational path they would need to take to pursue careers of interest to them. Edison State has also moved to a new model in which success advisors, who advise all entering students, are cross-trained as career advisors. The college is now building on its prior work with student educational plans to implement full-program plans based on program maps developed by faculty and advisors. Since the college already has maps for all programs that include a recommended sequence of courses, it is easy for students to see what courses they need to take in each semester of their plan.

Math Pathways. North Central State College has developed two math pathways: statistics and algebra/calculus. All new students at the college are required to choose a major or career field when they enroll, and the math pathway students take is determined by what field they choose to pursue. For example, students in nursing and allied health programs take statistics. In the past, most students were assigned to an algebra track; now nearly 75 percent take statistics. In addition, the college has implemented corequisite support for nearly all of its math courses. About two thirds of students pursuing the statistics pathway are required to take a two-credit corequisite essential algebra skills course taught by the same instructor as the college-level section in which they are enrolled. The college has seen a substantial increase in the rate of students passing college-level math in the first year. Based on the key performance indicator (KPI) reports that CCRC produced drawing on data from ODHE, the percentage of first-time-in-college students at North Central who passed college-level math in their first year jumped from 20 percent in 2010 to 34 percent in 2015, the year the college first implemented the math pathways with corequisite support.

Corequisite Acceleration. **Lakeland Community College** has been offering a corequisite English Composition course similar to the Community College of Baltimore County's Accelerated Learning Program for a long time. This may be the reason that the rate at which first-time students complete college English in one year at Lakeland is 20 percentage points higher than the Ohio average for two-year colleges.

Building Pathways into High Schools. Two years ago, **Marion Technical College** started to build programmatic pathways in collaboration with local high schools. Students are bussed to the campus to take the courses. The college has partnered with Honda of America and other area manufacturing companies, including Whirlpool, to develop an engineering pathway program, which will include activities that expose students to engineering careers. The program is designed so that students can complete an occupational certificate or applied associate degree while in high school. The college is working with other employers in its region to create similar pathways for high school students in medical assisting, criminal justice, and business. The legislation that established CCP two years ago (and has resulted in a more than twofold increase in the number of Ohio high school students taking college courses) called for "15- and 30-credit pathways" for students. The pathways that Marion has started with its local schools seem to be a promising model for such pathways.

3. Keeping Students on their Path

Colleges implementing guided pathways need to rethink and redesign their advising systems to help students make timely progress on their program plans, intervene when they are struggling, and help students consider a new direction when they change their minds or fail to make progress on their initial path. All six of the Ohio colleges we visited are exploring ways to redesign advising that align with their efforts to better map programs and create student plans.

Over the past couple of years, **North Central State College** has built an advising model consistent with the guided pathways model. Student Success Center advisors (called "success coaches") work with all new students for the first semester or until they complete any remedial requirements. During the first semester, the success coaches meet with all new students to create a two-term plan. Provided they have completed remediation, students are then transitioned to "academic liaisons" who are embedded in each of three main program areas—health care, business and technology, and liberal arts. The academic liaisons help students complete a full-program plan in their major field of interest. If students intend to transfer to a four-year institution, the liaisons help them figure out what courses they need to take to prepare for their intended transfer destination and major. Once students complete 30 credits in their program, they are assigned a faculty advisor to provide field- and career-specific guidance, although the academic liaisons often also provide higher level advising to students in their program area. The liaisons are experts in the requirements of the programs in their respective fields. The combination of initial meetings with a student success coach followed by those with a field-specific liaison and the connection to a faculty member in the student's field of study ensures that students are helped to choose a program direction and receive specialized advice and connections in their chosen field when they need it along their path to completion.

4. Ensuring That Students Are Learning

A key goal of guided pathways reforms is to ensure that students are building essential skills and knowledge across programs, not just in individual courses.

Lakeland Community College faculty, supported by college-wide committees and program review processes, regularly clarify and assess student learning across programs and use results to improve student learning. Student learning outcomes are assessed at three levels: course-level outcomes, general education outcomes, and program-level outcomes. Assessment of program-level learning outcomes occurs not only for career-technical programs but also for pre-transfer programs. Faculty in liberal arts and sciences departments set program learning outcomes by outlining what students should know about their subject area as a result of completing the most commonly taken course or sequence of courses in their department. In addition, a faculty committee organizes in-depth assessments around one of the college's general education learning outcomes each year, which encourages college-wide conversations germane to the learning outcome in focus. Results from these assessments are used during program review and in faculty in-service events to improve teaching and learning. The college uses Taskstream software to keep track of learning outcomes by course and program. The software is used during the program review process to examine results from assessments of general education, course, and program learning outcomes along with data on course enrollments, grades, and instructor evaluations.

Recommendations

In the report, we present recommendations for ways the colleges can build on and align the innovations they have already implemented to improve support for students to explore, choose and complete a program of study that prepare them to succeed in employment and further education.

Continue to develop meta-majors and use them as a framework for program marketing and recruitment, new student intake, and program improvement.

We encourage Ohio colleges to continue to use meta-majors as a framework for marketing programs, recruiting and orienting new students, faculty professional development and improving curriculum and instruction in programs. Colleges should consider how these and other functions could be enhanced by organizing academic and career communities within meta-majors.

> Involve employers and partnering four-year institutions in reviewing and validating program maps.

All of the colleges we visited are taking steps to more clearly map out their programs. Most are asking employers to review maps for their career-technical programs and seem to rely on state and local transfer agreements to validate maps for transfer programs. While such agreements are a good place to start, we strongly recommend involving the academic departments of four-year institutions directly in the review process. One reason is that bachelor's program requirements change, and these changes are not always reflected in transfer agreements (including those established locally, which vary in specificity and need to be updated regularly). Consulting with colleagues at four-year institutions on their major requirements will also help to build relationships among faculty and others that are crucial for strengthening curriculum and teaching at both the community college and the four-year institution.

> Continue to strengthen efforts to help all students explore career and college options from the start.

We encourage the Ohio colleges to continue to move in the direction of making career and college exploration an essential part of the new student experience for *all* incoming students. This will help motivate students and greatly increase the chances that they will find a program pathway that is a good fit for them and not have to spend an undue amount of time doing so. We believe that this will be especially beneficial for students who arrive poorly prepared to succeed in college work. Colleges are beginning to see the benefit of ensuring that all students, including those who are poorly prepared for college, are able to enroll in a course in a program of interest in the first semester and receive help exploring associated careers and college programs from the start.

Rethink the new student intake process to help students develop a full-program plan by the end of the first semester.

An important part of the onboarding process should be to help students create a full-program educational plan that is based on the program maps created by faculty and advisors and customized to each student's prior credits, academic support needs, goals for transfer and employment, and desired timeline for completion. These plans can be helpful to students, advisors, and the college. Once all students have a plan, colleges are much better able to predict course demand further in advance and can move to a full-year schedule based on the courses in students' plans. This change in scheduling practices will help ensure that students are able to take the courses they need on their plan when they need them—and can also help reduce the number of course sections cancelled due to low enrollment. At the same time, once students' customized plans are stored in a program such as DegreeWorks or Colleague Student Planning, students and advisors should be able to more readily follow students' progress and know when they are "off-plan" and thus require intervention. Among the colleges we visited that that are enhancing their student information systems to better monitor students on their plans include: Lakeland, North Central, and Marion Tech.

Continue to scale math pathways and expand corequisite courses—and connect these with program pathways.

Most Ohio colleges are piloting corequisite remediation and other strategies for helping students take and pass college-level courses in math, English, and other critical program subjects in their first year. Lakeland has offered corequisite English for a long time—we believe this may be why new students at Lakeland are on average far more likely to take and pass college-level English in their first year than are students in other Ohio community colleges. Of the six Ohio colleges we visited, only North Central has implemented math pathways with corequisite support at scale, although others, including Marion and Clark, are planning to offer corequisite at scale soon. A key reason that North Central was able to scale math pathways is that students are required to choose a major or exploratory major (similar to a meta-major) upon entering the college. We recommend that other colleges emulate this process by assigning students to a math pathway based on the major or meta-major they are interested in pursuing. We believe that colleges should assume that virtually all new students are not necessarily college-ready; students may need not only academic support but also help in setting goals and making plans, mastering college success skills, and coping with a learning culture much different than they may have experienced in high school. Thus, students' entire first-year experience should be organized around helping students get off to a strong start.

> Continue to rethink advising roles and processes to help students at key decision points as they enter and progress through a program of study.

To develop strategies for advising students effectively at different stages of their college career, we encourage colleges that have not already done so to facilitate conversations among faculty, advisors, and other student services staff about key decision points along students' pathways at which they tend to need support, what supports students need, and who should provide it. Whatever approach a college chooses to guide students into and through programs and beyond, we recommend that advising be mandatory and proactive rather than optional and reactive. Students should not be allowed to register for classes for the next term without approval from an advisor. Some colleges and advisors are accomplishing this via an electronic approval for students who are making steady progress along their plans, freeing time for advisors to work with students who are struggling or want to change course. We encourage colleges to continue to explore how to expand their advising capacity. As we have seen in other colleges nationally, this conversation will need to address how to accommodate increased workloads associated with scaling up proactive student advising, and how to use technology to support the process.

Encourage and support College Credit Plus students and career center students to explore and plan college programs, not just take courses.

Colleges should encourage CCP students and their families to think more strategically about CCP as an entry point to college programs and related transfer and career paths, rather than just as an opportunity to take college classes. Colleges can do this in a number of ways, such as partnering with high schools to educate students, counselors, and parents about the importance of exploring career and college options and the benefits of starting on a program path while in high school. Another strategy is for colleges to expand and highlight 15- and 30-credit CCP pathways in particular fields, emphasizing that students can get on a degree and career path in high school and save money by completing lower division work at the community college before transferring to a bachelor's degree program in their desired major. Finally, colleges should continue to build paths to college programs from the Ohio career centers. We recommend that Ohio colleges monitor more closely the rates at which CCP students matriculate at their institution right after high school and go on to earn a certificate or associate degree from the college. Colleges should

review historical trends and set goals for increasing this rate through activities such as those described above. Increasing enrollment among former CCP students will help the colleges generate tuition and fee revenue as well as state subsidies through improved performance. It will also help to increase students' and Ohio taxpayers' return on investment in the state's community colleges.

> Measure the effects of reforms by tracking first-year momentum.

We recommend that colleges evaluate the effectiveness of pathways reforms by measuring "early momentum" indicators. Research by CCRC and others indicates that students who gain momentum in the first year in college are more likely to complete their programs and to do so at a lower cost to themselves and taxpayers (Jenkins & Bailey, 2017).¹ We encourage colleges to focus on three measures of early momentum in particular:

- *Credit momentum*—defined as attempting (not necessarily completing) at least 15 semester credits (developmental and college-level) in the first term, or attempting at least 30 credits in the first academic year. An emphasis on credit momentum focuses students and the college on the time it will take students to finish their programs and hopefully motivates efforts by both to minimize that time.
- Gateway momentum—defined as taking and passing pathway-appropriate introductory collegelevel math and English in the student's first year. Measuring gateway momentum draws attention to the content of credits students take and encourages colleges to remove barriers created by traditional prerequisite remediation by integrating academic support into collegelevel coursework rather than offering it through a prerequisite sequence.
- Program momentum—defined as taking and passing at least nine semester credits (three courses) in the student's field of study in the first academic year. A focus on program momentum encourages colleges to help students choose a field of study early on and indicates the potential effect of reforms such as program maps and redesigned intake advising on student outcomes. This indicator will be more meaningful if the college's programs are coherent and well organized (another reason why we encourage colleges to continue to develop meta-majors and program maps).

These metrics provide a relatively simple set of leading indicators of longer term success that can be measured over the first year for each student cohort and compared year-to-year. In addition, focusing on these first-year metrics motivates colleges to introduce practices that create the initial conditions necessary for subsequent success.

Next Steps

Over the next year, CCRC will continue to work with OACC, ODHE and Ohio's 23 colleges to study the implementation of guided pathways reforms in Ohio and their effects. We would like to conduct telephone interviews with teams from all 23 colleges on their progress with pathways. We will also analyze data shared with us by the ODHE to project the longer-term improvements in student outcomes we might expect to see based on initial improvements among some colleges in leading indicators of success.

¹ See http://ccrc.tc.columbia.edu/publications/early-momentum-metrics-college-improvement.html