Guided pathways reforms require colleges to rethink how they teach and support students. The case studies below examine how colleges at the forefront of these reforms are transforming their programs and support services by implementing three key guided pathways practices: meta-majors, career exploration, and intensive advising. The three colleges are participating in the American Association of Community Colleges’ Pathways Project, which is supporting more than 40 colleges nationally to implement guided pathways reforms at scale.

How Cleveland State Community College Is Using Meta-Majors

Meta-majors are clusters of programs in similar academic and career fields that can help students and others to understand a college’s offerings—which often run to scores of programs—and help students explore, choose, and plan a major. Colleges are using meta-majors aligned with local and regional labor market needs as a framework for redesigning key aspects of the student experience, including orientation, first-year seminar courses, and academic advising. Meta-majors are also emerging as a framework for marketing and recruitment, program review and improvement, and professional development.

Cleveland State Community College in Tennessee developed its meta-majors, which it calls career communities, “from a student’s perspective,” organizing programs into seven clusters based on students’ career and academic interests rather than around the college’s four preexisting academic divisions. The career communities are advanced technologies; arts and humanities; business; education; healthcare; social sciences; and science, technology, engineering, and math (STEM). As the college was developing these communities, student services and institutional research staff conducted student focus groups to get feedback about the clusters and ensure that the categories made sense to students.

The college has organized its website around these career communities, assigning each community an icon and a color. Students can browse the website by career community or by specific program. Career communities also have been added to recruitment materials. Welcome events, career fairs, and even commencement programs all use the
career community icons and color scheme to allow for instant identification and create a sense of belonging.

Career communities were first used to facilitate student onboarding starting in the 2015–16 academic year. Entering students were prompted to select a career community or a specific major in a community. During fall orientation, the college grouped students by career community for breakout sessions with faculty. By selecting a career community, students who are undecided on their major can begin to explore a broad area of interest and progress toward choosing a major in that field or switching to another field before they have taken too many credits.

The college is also organizing its efforts to redesign and improve its first-year experience course, Student Success Center, and program review process around the seven career communities. The career communities have become a central organizing principle that gives administrators, faculty, and students a clearer understanding of the college’s core academic offerings, keeping students’ interests and end goals in mind.

**Orientation**

One of the first ways that Cleveland State used the career communities was to reorganize its new student orientation. Orientation at Cleveland State is a one-day event, during which students are grouped by their chosen career community and hear a presentation from a faculty member or dean about the different programs of study, career options, and types of degrees (transfer- or workforce-oriented) available in that community. Students who are unsure about their choice of career community attend a session to help them understand their choices. Once students decide on a career community—at least for the first term—they meet with a faculty advisor to select and register for first-semester classes based on academic maps created by faculty and student services staff for each community. Starting in fall 2018, students will register for a default set of first-semester courses that includes two courses related to their career community, English, math, and a first-year seminar. Since scheduling will occur by program rather than by course, registration for the first semester will be straightforward, giving students and advisors time to clarify the students’ interests and intentions for college study.

**First-Year Seminar**

All first-time students are required to enroll in a first-year seminar taught by full-time faculty members or administrators and tailored to each career community. In addition to learning college success skills, students in the seminar complete the FOCUS 2 assessment to guide their career and education decision-making, research careers they are interested in, and create an educational plan to graduation. These plans are based on the sequenced, four-semester degree maps created by faculty and student services staff in each of the career communities, but they are individually customized based on the prior credits students bring to the college, their specific career and transfer goals, and their completion timeline. In fall 2018, Cleveland State is planning to pilot specially designed learning communities that pair first-year seminars in each career community with another course, such as English composition, with career community–specific content.

“We landed on ‘career communities’ because we think that really encapsulates what the purpose is of having meta-majors. It builds community for the students with each other, it builds community for the students with their faculty, and it’s also a place that we can plug in our alumni to connect meaningfully with current students and faculty.”

– Dr. Denise King, Vice President of Academic Affairs, Cleveland State Community College
Student Success Center

To support students along their paths toward graduation, Cleveland State recently created the Student Success Center. The Student Success Center is a group of success coaches who connect students to campus resources, including counseling staff. While the functions of the Student Success Center continue to evolve, Cleveland State’s intent was to supplement faculty advising by having coaches reach out to students between regular advising appointments (which are required in order to register each semester), and to expand capacity to identify and contact struggling students before they fail a course or fall off their program plan. Thus, one of the responsibilities of the student success coaches is to respond to alerts that faculty initiate through the college’s Starfish software when students are struggling. The center was opened in 2016 with no new resources; instead, the college reorganized several positions from other student services areas. Currently, the center has two full-time staff members and several part-time staff members to serve the college’s approximately 3,300 students. As the center expands, the college is planning to place individual success coaches within each career community.

Promising Improvements in Early Indicators

Cleveland State’s reforms have been accompanied by gains in early momentum indicators, or near-term measures of increased completion rates over a longer term. In addition to doubling the percentage of students completing a college-level math course in their first year (from 20 percent of the fall 2014 cohort to 40 percent of the fall 2016 cohort), Cleveland State has shown an upward trend in indicators of credit momentum since fall 2013, as shown in Figure 1, with greater proportions of students reaching credit accumulation milestones in their first term and first year. College leaders believe these improvements reflect the college’s efforts to redesign new student orientation and advising around the career communities.

Figure 1.
Indicators of Credit Momentum at Cleveland State Community College

![Graph showing credit momentum indicators from 2010 to 2016]

How Jackson College Is Redesigning Advising From Entry Through Completion

Redesigning advising is one of the most challenging parts of colleges’ guided pathways work, and colleges are approaching it in many different ways. To provide better support for students along their pathways into and through college, institutions are considering what advising students need at key decision points along the way to a credential. (See Figure 2.) Students face important decisions as they connect to a college, enroll and choose programs, progress through programs, and advance in their careers and to further education.

Figure 2.
Key Decision Points on Students’ Path

<table>
<thead>
<tr>
<th>CONNECTION</th>
<th>ENTRY</th>
<th>PROGRESS</th>
<th>COMPLETION / ADVANCEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>From interest to application</td>
<td>From entry to passing program gatekeeper courses</td>
<td>From program entry to completion of program requirements</td>
<td>From completion to career advancement and further education</td>
</tr>
<tr>
<td>- What are my career options?</td>
<td>- What are my program options?</td>
<td>- Am I making progress?</td>
<td>- How do I transfer?</td>
</tr>
<tr>
<td>- Which college offers programs in my field of interest?</td>
<td>- What are the program requirements?</td>
<td>- What if I want to change majors?</td>
<td>- How do I get a job in my field of interest?</td>
</tr>
<tr>
<td>- How much will it cost, and how will I pay?</td>
<td>- Which program is a good fit?</td>
<td>- How do I get related work experience?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- What courses will I take?</td>
<td>- What if I'm struggling academically?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Will my credits transfer?</td>
<td>- How much time and money will it take to finish?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- How much time and money will it take to finish?</td>
<td>- What if I change my mind about a major?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- How much time and money will it take to complete?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- How do I balance school with my other obligations?</td>
<td></td>
</tr>
</tbody>
</table>

Note: This diagram is adapted from Completion by Design’s (2016) Loss-Momentum Framework.

Changes in Advising Staff and Roles

A successful advising redesign requires student services staff to work closely with academic departments, financial aid, information technology, and other parts of the college to provide optimal guidance and support to students, enabling them to make steady progress and complete their programs on schedule.⁴

Prior to its advising redesign, Jackson College in Michigan had four advisors—one attached to each of its four main program areas—for more than 7,000 students (a student–advisor ratio of 1,750:1). There were long lines and wait times to see advisors, so most students registered for courses without talking to an advisor. Over the past two years, the college has hired 12 new advising staff and tasked other departments (e.g., Veterans Affairs, the International Student Institute, etc.) with providing broader, personalized, relationship-based support. These changes resulted in a total of 21 employees being assigned to the new role of “student success navigator.” Along with lower enrollment, the changes in staffing brought the student–advisor ratio to 250:1.

Navigators are paired with students throughout their time at the college. Although the navigators are trained as generalists, they are assigned to serve students within...
one of six specific *pathways* (the term used for meta-majors at Jackson). Navigators attend meetings of faculty from their assigned pathway and keep other advisors up to date on program changes and new information. With navigators embedded in each pathway, the college is hoping to foster long-term relationships between the navigators and students and faculty in each program area.

**Connection and Entry**

A fundamental component of guided pathways is helping all students explore careers and programs early on. Jackson College starts this process before students enroll. Navigators call all new students before orientation to welcome them to the college and find out more about their goals (asking, for instance, “Do you plan to transfer? If so, to which university?“); their timeline for completion; if the students have any credits from Advanced Placement programs, dual enrollment, or prior study at another college; and what they want to study. For students who are less certain about their career or education goals, the navigators ask questions about their academic and personal interests and hobbies to help them choose a pathway to explore during their first semester. At the end of each call, the navigator confirms which orientation session the student will attend, and the student is registered for an orientation session based on this conversation. Students cannot attend orientation without first having this conversation with their navigator.

The college’s new student orientation sessions are organized by pathway. A new student profile questionnaire, administered during orientation, helps navigators find out more about students’ outside-of-school responsibilities, motivation, and personality; helps identify potential barriers to persistence; and gives students the opportunity to share any other information they want their navigators to know about them.

During the mandatory first-semester student success course, which is taught by faculty members and academically qualified navigators and student services staff, Jackson College holds showcases for each of its six pathways. Faculty members introduce themselves and their areas of interest and lead students on a tour of their facilities and labs to recruit interested students into their programs. Once they choose a program, students make a customized full-program educational plan as a course assignment and upload it to the college’s online registration and planning system, called JetStream. This plan lays out the courses the student will take each semester and once submitted is locked into the system.

**Progression**

Once students have created an educational plan in JetStream, they must meet with their navigator and get approval before changing their plan. Likewise, if students want to register for classes that are not on their plan for the following semester, they must receive approval from their navigator. Navigators, who have been trained in financial aid requirements and have access to students’ financial aid documents through the recently upgraded student information system, ensure that each student’s plan meets financial aid requirements.

All students at Jackson College are required to meet with their navigator face-to-face for registration every semester. Beyond this, navigators connect with each student at least
two additional times per term. These meetings may occur in person, but they can also take place through email, phone, FaceTime, or text. For new students, the first meeting takes place before the term begins or within the first three weeks to welcome students and ensure that they have their textbooks and that their financial aid is in place. The second meeting occurs at midterm to address any issues that have arisen and facilitate next-term registration, and the third meeting occurs near the end of term to ensure completion of coursework and progression to the next term. In addition to the required meetings, students who are struggling with classes or are flagged by faculty members for other issues, like poor attendance, may be required to have additional advising meetings. The college is working to monitor the progress of those students more systematically through its early alert system and additional outreach.

**Completion**

To prepare for internships and employment, students receive career counseling from Jackson College’s Career Services Office and from their navigators. Career Services provides information on internship and job opportunities, as well as resume and cover letter writing assistance. Additionally, three navigators were recently certified as career coaches in an effort to better help students develop career goals and craft their academic plans accordingly. These navigators will soon be certified to train other navigators in career coaching.

An important element of pathways is ensuring that students have contact with faculty members and others in their field who can provide guidance and networking support. As part of its Total Commitment to Student Success (TCS²), Jackson College is building a culture in which responsibility for guiding students into and through programs is shared by all faculty and staff, regardless of their role at the college. As Jeremy Frew, vice president for student services at Jackson, said, the responsibility for advising students must be “distributed”—that is, it needs to be shared by faculty and other staff. Accordingly, faculty members at Jackson informally advise students about careers, internships, and transfer opportunities.

**Promising Improvements in Early Indicators**

Since Jackson’s advising redesign in summer and fall 2016—which was accompanied by other pathways reforms, including robust program maps and corequisite support courses for math and English—the college has reported substantial growth in credit momentum indicators in students’ first year. As shown in Figure 3, the percentage of students earning 24 or more college-level credits in the first year nearly doubled from fall 2015 (8 percent) to fall 2016 (15 percent). The largest gain in credit momentum was in the percentage of students who earned six or more college-level credits in the first term, which increased from 35 percent in fall 2015 to 58 percent in fall 2016. Another impressive increase in Jackson’s early momentum indicators for fall 2016 entrants, shown in Figure 4, was a more than doubling of the rate of college-level math completion in the first year, from 19 percent in 2015 to 43 percent in 2016. (Jackson also showed steady improvement in college-level English completion since 2010.)

The percentage of students earning 24 or more college-level credits in the first year nearly doubled from fall 2015 to fall 2016.
Figure 3.
Indicators of Credit Momentum at Jackson College

![Graph showing credit momentum]

Fall Cohort of First-Time-Ever-in-College Students

Figure 4.
Indicators of Gateway Math and English Momentum at Jackson College

![Graph showing gateway course completions]

Fall Cohort of First-Time-Ever-in-College Students
How Indian River State College Is Helping High School Students Explore Career Options

Guided pathways calls for a different approach to career and major selection than the “self-guided” model that is the norm—one where the new student intake process helps students make informed decisions about careers and academic pathways and develop a plan to reach their goals, ideally by the end of their first semester. Recognizing the importance of students’ major choice to their chances of earning a college credential and to their longer term educational and career trajectories, colleges nationally are grappling with how to help new students explore career and college options, choose a program of study, and develop a plan for completing it. In fact, some colleges have begun considering ways to help students begin this process in middle and high school.

Indian River State College (IRSC), a large, public community college located in southeast Florida, has long been a leader in developing innovations to support student success. Over the past several years, IRSC has revamped its new student intake process to better help all students explore career options, choose a program that is a good fit, and develop a plan for completing that program, and the college continues to refine that process. More recently, IRSC also implemented efforts to help students in its feeder high schools and even middle schools begin the process of career and college exploration.

Using K-12 Partnerships to Encourage Early Career Exploration

As the only broad-access postsecondary institution in its region, IRSC has established strong partnerships with several middle and high schools in surrounding counties. IRSC has leveraged those partnerships to get students thinking about career exploration and major selection through high school-specific career events, such as Great Explorations.

Great Explorations, which takes place on IRSC’s main campus, occurs in the fall semester, during a time when many high school students are learning about and applying to college. To get students thinking about how their college choices will ultimately be related to their careers, IRSC introduces its eight meta-majors to students, who then select up to five programs of interest within their chosen meta-major. Once on campus, students are sorted into groups by their selections, visit with program faculty, and participate in activities associated with their chosen meta-major. In some cases, regional employers make presentations on career options in their field.

Using Dual Enrollment to Help Students Explore Options and Plan for College and Careers

IRSC has thoroughly redesigned its intake and onboarding processes to better support all new students’ (including high school dual enrollment students’) academic and career decision-making, making significant changes to new student orientation, new student advising, and the college’s student success course. Together, these supports help degree-seeking students choose a program of study and build a guided pathway (the college’s
term for a personalized degree plan), ideally prior to their first day of class but no later than the end of their first semester.

**Dual Enrollment Information Sessions and Outreach**

To reach students eligible for dual enrollment and their parents, IRSC hosts various information and recruitment sessions during the spring semester on all IRSC campuses and at several high schools. During the sessions, students and parents are introduced to the benefits of the dual enrollment program, familiarized with IRSC’s programs and the articulation agreements the college has with local universities, and shown how IRSC uses program customization and planning to build degrees around a student’s intended career field and transfer institution. Through this early engagement, IRSC demonstrates to high school students and their families how dual enrollment can propel them onto a path toward degree completion and into a career field of interest.

IRSC also promotes its dual enrollment program at various community and college-based events that have a different focus but attract a high school audience, such as the Men of Color event led by IRSC’s Achievement Taskforce. During this event, male students of color from grades 10 through 12 are connected with male mentors to, among other things, learn more about the college enrollment process and become familiarized with the region’s leading industries and associated career pathways.

**Application and Orientation**

After being accepted into the dual enrollment program, students must participate in a new student orientation, which has been revamped to place a greater emphasis on career exploration. The orientation familiarizes dual enrollment students with IRSC advising processes and program customization and planning. Dual enrollment students can attend new student orientations intended for all students or an online orientation created specifically for dual enrollment students, which emphasizes the importance of early career exploration and major selection in light of the potential impact of dual enrollment participation on future financial aid eligibility.

**Advising**

IRSC assigns all degree- and certificate-seeking students to an advisor who monitors their progress throughout their time at the institution. Dual enrollment students, like other degree-seeking students, are required to develop a full-program academic plan with their assigned advisor during their first term. If a student registers for courses that do not appear on his or her plan, the advisor receives an alert, and a registration hold is placed on the student.

The process by which advisors help dual enrollment students explore their options and develop their guided pathway is similar to the process undertaken with other degree-seeking students. Upon enrollment, students are encouraged to undergo a career assessment, such as Career Coach or Florida Shines, and consider whether their results align with the program they selected or one they may be considering. After completing a career assessment, students participate in an initial advising meeting, ideally before the
first day of classes. During this meeting, students develop a guided pathway plan and determine which courses they should be taking to reach their goals. For dual enrollment students, this includes consideration of which high school courses they should be taking to prepare them for a particular meta-major or program. Recognizing that many high school students will change their minds, the conversation focuses on selecting general education courses that apply to a broad number of pathways in a student’s general interest area (i.e., STEM versus non-STEM).

To keep dual enrollment students on-plan, IRSC has worked with local high schools to establish a shared advising tool that connects a dual enrollment student’s high school counselor with his or her IRSC advisor. This tool, referred to as the DEAN system (Dual Enrollment Advising Network), enables the high school counselor to view the student’s guided pathway, current term schedule, IRSC transcript, and comments from the IRSC advisor. Any changes to the student’s schedule trigger an email to the high school counselor alerting him or her to the change. This shared system encourages the high school counselor and IRSC advisor to collaboratively monitor the student’s academic progress and advise the student to keep him or her on-plan.

**Student Success Course**

All dual enrollment students are required to take IRSC’s student success course during their first term. The course, which is required of all associate-degree-seeking students, is designed to help students home in on a meta-major. The course includes a career exploration module to help students decide whether the career they have selected is a good fit based on their interests and goals. The course also helps students assess meta-major and career fit through assignments focused on learning styles and aptitude assessments. After learning about their potential career through various class assignments, students are required to complete a capstone project in which they present on their chosen career and describe why it is a good fit for them.

**Further Improvements Planned**

In 2016–17, 5,705 high school students took college courses through the dual enrollment program at IRSC. In the same academic year, 275 IRSC dual enrollment students earned an associate degree at the same time they earned a high school diploma. In general, IRSC finds that dual enrollment students who matriculate at the college after high school are much more likely to graduate than are students who start at the college after high school.

That students who get a head start on college through dual enrollment do better than post–high school entrants is not surprising. However, the college is taking steps to increase the rates of college success for its dual enrollment students—and to try to narrow gaps in achievement among students by race/ethnicity and income. All of the aforementioned processes and practices will be extended to home and private school populations through an articulation agreement going into effect for the 2018–19 school year. In addition, IRSC is considering ways to extend the Great Explorations event to middle schools, so that students would become acquainted with career exploration even
earlier. One proposal under consideration is a gateway event that introduces middle school students to the concept of meta-majors prior to their attendance of the Great Explorations event in high school.

More Case Studies to Come

Among the growing number of colleges implementing pathways reforms nationally, no two are putting in place the same practices or approaching the work of institutional redesign in the same way. As we continue to study colleges undertaking pathways reforms, CCRC will continue to publish case studies to help inspire other colleges doing this important work.

Part 3 of this packet describes the phases and general timeline for implementing pathways reforms that we have observed among colleges that are early adopters. It also discusses indicators colleges can use to measure whether their reforms are having an effect, as well as the costs of implementing pathways.

Endnotes

1. For more information about the American Association of Community Colleges’ Pathways Project, visit https://www.aacc.nche.edu/programs/aacc-pathways-project/.
3. For more on momentum, see Jenkins and Bailey (2017).
4. For more on advising, see Kalamkarian, Karp, and Ganga (2017).
5. See https://www.jccmi.edu/jc-spotlight/total-commitment-to-student-success/.
6. For more on dual enrollment, see Fink, Jenkins, and Yanagiura (2017).
References


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