Providing
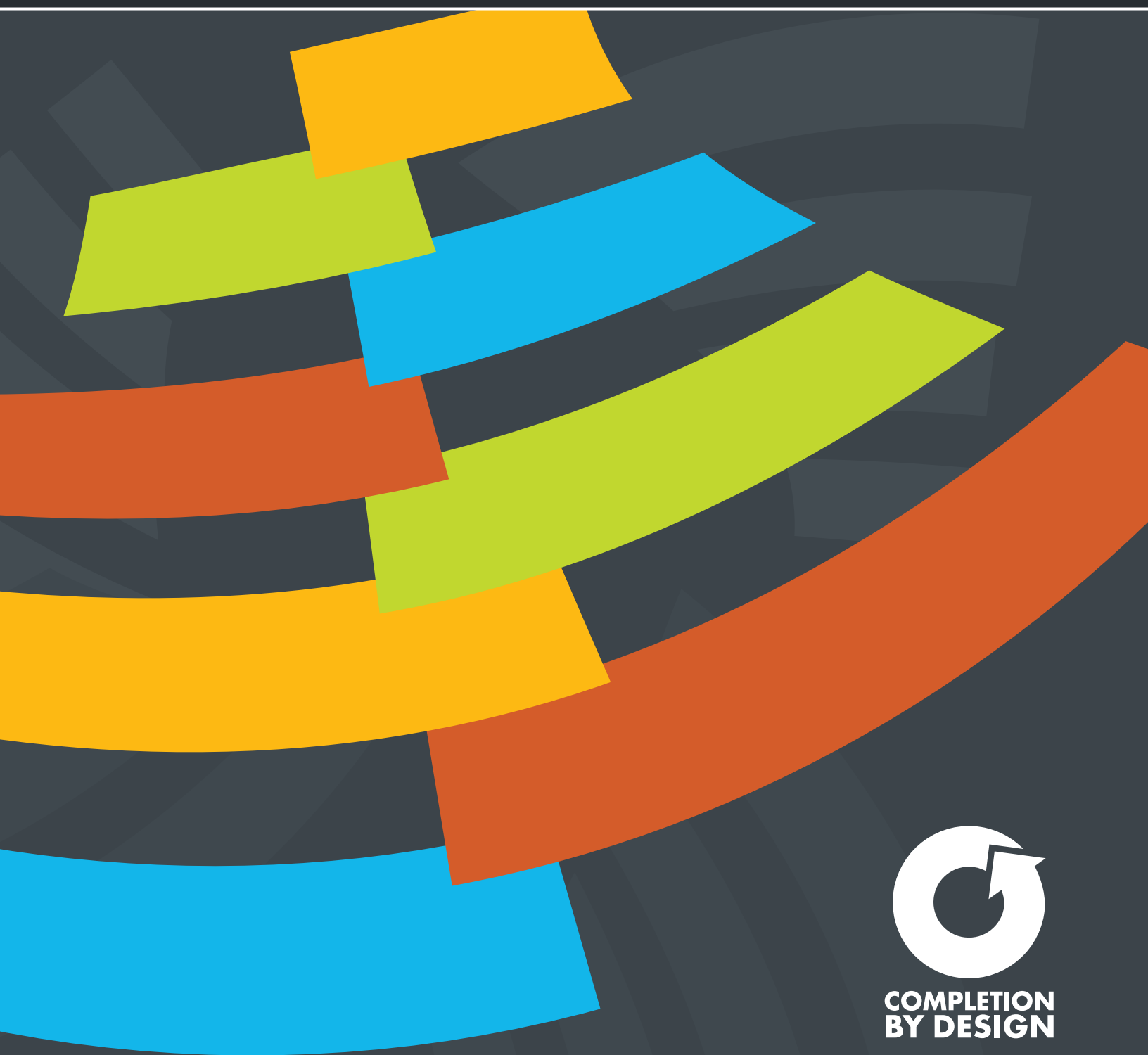# Structured Pathways
to Guide Students Toward Completion

COMPLETION
BY DESIGN

Providing
Structured Pathways
to Guide Students Toward Completion

by Mina Dadgar, Andrea Venezia, Thad Nodine, and Kathy Reeves Bracco

WestEd, a research, development, and service agency, works with education and other communities to promote excellence, achieve equity, and improve learning for children, youth, and adults.

About the Cover: There are various pathways students can explore in community colleges while working toward their credential, and this design reflects that idea. The overlapping of these steps signifies the fortification of the pathway through supports given to the students while completing the program and moving upward to employment or transfer.

TABLE OF CONTENTS

This is one of a series of "Game Changers" documents for use by colleges to generate discussion about innovative models for increasing completion rates substantially. Each topic is addressed through five sections within each report—an overview, examples in practice, implementation challenges, sample engagement questions, and references. The sections are intended to be used separately or as a whole, depending on the audience and needs. Each report is available at http://www.WestEd.org/bookstore.

OVERVIEW

Many students arrive at community college without clear goals for college and career. Once there, they often receive little guidance prior to matriculation, do not meet with an advisor at the college, and accumulate many course credits that do not count toward their eventual program of study—or they drop out of college before selecting a program (Rosenbaum, Schuetz, & Foran, 2010; Zeidenberg, 2012). To begin to address these kinds of issues and to help students reach their completion goals, some community colleges are creating structured pathways that allow students to explore their educational and career options while also making progress toward a credential. The strategies being used vary by college, but generally they aim to help students learn about and commit to a program of study within a defined time frame. Once students commit to an educational program, additional supports are provided (and sometimes required) and course sequencing and degree requirements are designed so that students can complete the program as quickly as possible and be prepared for transfer and/or employment.

This brief outlines some of the major issues that colleges are discussing or experimenting with that are related to the creation of more structured student pathways, including:

◊ *Mandating intake processes* that provide educational and career counseling, inform students about programs that are related to their interests, and help students explore and develop educational goals, career goals, and a degree plan.

◊ *Balancing flexibility and prescription* in student selection of courses and majors.

◊ *Defining clear instructional programs* so that students can complete a program as quickly as possible.

INTERVIEWEES

The information used for this brief is drawn from research materials and from interviews with the following people:

◊ Stephanie Benjamin, New Community College, City University of New York (CUNY)

◊ Stuart Cochran, Head of Strategic Planning and Institutional Effectiveness, New Community College, CUNY

◊ Tristan Denley, Vice President for Academic and Student Affairs, Austin Peay University

◊ Kurt Ewen, Assistant Vice President for Assessment and Institutional Effectiveness, Valencia College

◊ Eric Hofmann, Director, Collaborative Programs, CUNY

◊ Davis Jenkins, Senior Research Associate, Community College Research Center, Teachers College, Columbia University

◊ Rob Johnstone, Senior Research Fellow, Research and Planning Group for California Community Colleges

◊ Joyce Romano, Vice President of Student Affairs, Valencia College

◊ Isaac Rowlett, Senior Public Engagement Associate, Public Agenda

◊ Gretchen Schmidt, Program Director, Postsecondary State Policy, Jobs for the Future

◊ Timothy Stokes, Executive Vice President for Academic Affairs, Tacoma Community College

◊ Julia Wrigley, Associate University Provost, CUNY

◇ *Providing proactive (usually called "intrusive") and ongoing education and career advising, supports, and planning* across each stage of student progress (e.g., creating interactive technology systems that track students' progress and direct them to supports at key stages).

◇ *Increasing program alignment with employment and transfer opportunities.*

Since these activities are not mutually exclusive, some colleges are working on more than one of these reforms. Providing more structured pathways has the potential to affect all support services and instructional programs by requiring better communication and integration of services. Shortening the time it takes for incoming students to commit to an instructional program also requires improvements in developmental education (Nodine, Dadgar, Venezia, & Bracco, 2012). Since college efforts of these sorts are new, research is not yet available about their effectiveness. This brief seeks to help the Completion by Design colleges and the field by explaining terms, providing examples of current efforts, and offering suggestions to help colleges with implementation.

Why are colleges working to provide more structured options for students?

Experiments in behavioral economics and psychology show that when individuals are not presented with clear options, they are more likely to become confused and not reach their goals (Scott-Clayton, 2012). In many community colleges, students report that they do not receive enough information about program requirements and options (Rosenbaum, Deil-Amen, & Person, 2006, p. 104), and they "develop information by taking courses almost at random" (Grubb, 2006, p. 197). Many students are surprised to find out that the courses they completed when they were exploring options do not count toward the major they eventually select (Nodine, Jaeger, Venezia, & Bracco, 2012). In addition, many students accumulate substantially

"I think sometimes a lack of direction is a problem for a lot of people…. Someone just tells you to take whatever you want, and you don't really have a goal in mind…. I think it's really hard for people when there's no end in sight and there's no goal in mind to even continue to go, because you're just probably going to get really frustrated and want to drop out."

—Community college student
(Public Agenda, 2012)

more college-level credits than are required for the credential they eventually receive, and this adds time and money to students' educational trajectories (Zeidenberg, 2012).

"There is a tension between the traditional wide menu of liberal arts choices and more structure. The fact is that most students in our urban college don't get degrees, and we have been saying for a long time that degrees matter. We don't do service to students by offering a wide range of choice combined with a lack of advising."

—Stuart Cochran, New Community College, CUNY

"We have been influenced by literature on choice architecture. We have learned that more choice is not better but is debilitating because you don't know where to start…. There is a difference between checking a box and making an informed decision. When you require students to choose a major by a certain date, all that you are doing is … mandating that they check a box, and I don't expect that to have any specific benefits."

—Tristan Denley, Austin Peay University

Students need assistance and support in selecting their educational and career goals, deciding which college programs are appropriate for reaching those goals, and determining which courses to take each semester to make steady progress in those programs. The development of more structured pathways involves finding an appropriate balance between flexibility and prescription. The liberal arts tradition offers flexibility for course exploration, but selecting among the wide array of courses and programs can be confusing for many students—particularly for first-generation college-goers and students without much exposure to college. At the same time, requiring incoming students to choose a major quickly can be counterproductive for those who are curious about a broad range of career interests.

Equity as an impetus for structuring student experiences toward completion

Providing options for more structured pathways to degrees may particularly benefit first-generation and low-income college students, as these students typically face substantial challenges in developing educational and career goals and in selecting appropriate classes and programs to make progress toward those goals (Scott-Clayton, 2012). Without having a structured opportunity to explore, low-socioeconomic-status students have traditionally pursued shorter-term credentials that tend to have lower labor-market returns than those of their more advantaged peers (Dadgar & Weiss, 2012). Most practitioners who were interviewed for this brief highlighted equity as a key reason for providing more structure and support for student decision-making, particularly in helping first-generation college students make more informed early decisions about course-taking that can lead to a degree. For example, interviewees said that providing more structure can help to guide more students to enroll in general education courses that count toward

"Forty percent of our students are nontraditional, and [many are] first-generation. We know those students don't have strong advice systems about college, so they don't have the know-how to navigate the higher education maze. We have been trying to find ways to make navigation easier and the process more transparent. Our philosophy is that getting a degree should be about doing good work in the classroom and not dependent on know-how and navigating the college policy and procedures."

—Tristan Denley, Austin Peay University

"Looking at the data, we realized our graduating cohort does not reflect the community demographics: We were graduating high-[socioeconomic status] students. But looking at data every quarter, we saw that our retention rates for black students did not look good at all…. Colleges should look at data and ask themselves: 'How do first-generation, low-income, and minority students do two or three years after enrollment? Does the graduating cohort mirror the diversity in our community?' Most people in higher education care about equity, and after we looked at the data, it became clear to all of us there was a problem."

—Timothy Stokes, Tacoma Community College

a wide range of associate degrees as well as transfer requirements. In addition, the practitioners suggested that most courses, including those in vocational degree programs, should be aligned with transfer requirements, so that more students would have the option of pursuing a bachelor's degree if they decide to do so.

STRATEGIES

Providing community college students with structured pathways involves creating an integrated network of supports and clearly defined instructional programs that guide students—even as they explore a range of educational and career options—toward committing to a program and earning a credential. All colleges offer support systems and programs that lead to credentials, but in many cases existing services or courses are experienced by students as ad hoc events that are not connected or integrated (Venezia, Bracco, & Nodine, 2010). The overall purpose of creating more structured pathways is to guide students, through integrated supports and instructional programs, to progress more quickly to completion.

None of the strategies described in this section will necessarily provide more "structure" for students. Rather, the strategies contribute to the development of structured pathways to the extent that they provide students with a network of integrated supports and instructional programs—connecting them to faculty, staff, and peers—that lead students to commit to an instructional program relatively

quickly and complete that program efficiently. For the strategies to be effective, they likely need to involve all faculty and staff in rethinking their own roles, and the roles of their services or programs, in guiding students toward completion. Many of the strategies highlighted in this section are new and are yet to be systematically evaluated.

1. Mandated or proactive intake processes to guide student decision-making

To support students as they transition into college, some community colleges are beginning to require all students to participate in intake processes (such as orientation, advising, student success courses, and summer bridge programs) that inform them about instructional programs and careers related to their interests, introduce them to support systems at the college, provide them with educational and career counseling, and help them explore and develop educational goals, career goals, and a degree plan. Most community colleges already provide these kinds of services as options for some students, but the challenge that colleges now face is determining how to reconfigure their support systems to become

A STRUCTURED APPROACH AT INTAKE: NEW COMMUNITY COLLEGE (NCC)

CUNY's NCC has two information sessions that are required of all students prior to enrollment. The first is organized as a group session that provides general information about the college, its programs, and its unique approaches and requirements. After this session, students who are still interested in NCC attend a second information session, which is a one-on-one session with an advisor to discuss expectations during the first year and to begin to develop an educational plan.

After these information sessions, all incoming students are required to attend a mandatory 12-day summer bridge program prior to fall classes. This non–credit-bearing course further introduces students to the college's educational model and support systems, engages them in team building with their peers, and teaches study habits and other skills associated with success in college. During the bridge program, students are assigned to and meet with a "student-success advocate." They meet with their advocates throughout their first year (in seminars and one-on-one sessions) to provide a central point of contact for consistent information and support in decision-making.

Source: http://www.ncc.cuny.edu/admissions.html

the default mode for all entering students, and how to use these systems to encourage more students to make better decisions about course-taking.

As colleges consider steps in this direction, it is important to consider that some students have expressed concerns about more services becoming mandatory, particularly orientation sessions and student success courses. A recent study based on focus groups with community college students suggests that "if a service is mandatory, [students] want it to be of high quality, engaging, and clearly connected to their plans and goals" (Nodine, Jaeger, et al., 2012). In light of this, colleges that shift toward mandatory orientations and student success courses will need to ensure that their curricula are based on recent research on student engagement/success and are relevant to students (see, for example, McClenney, 2004). In one example of making a student success course relevant to participating students, New Community College (NCC) of the City University of New York (CUNY) has a mandatory summer bridge program in which students are assigned to meet with a "student-success advocate."

2. Balance between flexibility and prescription in student selection of courses and majors

Each college will need to find its own balance between offering students wide flexibility to explore courses across multiple fields and guiding them to select and make progress toward a specific major. Some options currently being used by colleges across the country include:

A. Encourage students to select a program of study and provide them with clearly specified course sequences with limited electives.

Research has suggested that students who select a program of study early (that includes clear course sequences) may be more likely to complete a

A STRUCTURED APPROACH AT INTAKE: VALENCIA COLLEGE (FLORIDA)

Valencia College in Florida has a highly structured intake process. All students attend a mandatory student orientation. During the orientation, students learn about LifeMap, the online system that links them to various services at different stages of the college process. To help students with the registration process, the advisors give students a list of suggested courses; the advisors also bring laptops to the orientation so that students can learn how to use the online registration process and register during the orientation. The advisors stay after the orientation to answer any remaining questions that students may have or to help with any outstanding registration issues.

Sources: Interview with Joyce Romano, Valencia College, and http://valenciacollege.edu/futurestudents/admissions/

certificate or degree (Jenkins & Cho, 2012). Requiring or encouraging students to select a program of study by a specific deadline has several advantages. It allows for developing an educational plan and monitoring students' course-taking against that plan. Advisors can work with students and ensure that students are taking the courses that count towards their chosen credential. In addition, research from behavioral economics suggests that individuals are likely to postpone high-stakes decisions even when procrastination has negative consequences (Scott-Clayton, 2012). This implies that encouraging or even requiring students to declare a major may help them overcome the tendency to procrastinate. At Tacoma Community College, for example, students are required to declare a major during the first year; however, advisors may waive that requirement for students whom they believe need another term to make that choice.

A FIRST-YEAR EXPERIENCE FOR ALL STUDENTS: NEW COMMUNITY COLLEGE (NCC)

During their first year at NCC, all students participate in an experience that includes a core set of classes that are connected to a range of services and supports structured to help students make progress toward a degree. The courses, each of which counts toward any major at the college, include statistics, composition, a seminar focusing on New York City, and "ethnographies of work." In addition to providing academic content, each of the courses also provides students with information and practical skills they need to succeed in college. For example, the course on ethnographies of work helps students choose a major by allowing them to conduct in-depth investigations of specific occupations and careers of interest to them. The class also includes a weekly 90-minute advisement seminar, during which students practice professional skills to prepare for potential internships or other work opportunities during their second year at NCC. Students must commit to attending college full-time during their first year.

"Transcript data pointed us to the problem that nearly 50 percent of the students were changing their majors within the first three semesters and they were losing credits because there were different require-ments for each major.... We wanted a model where, during the first year, students did not have to choose a major and at the same time the credits that they earned could apply to any major and would transfer. That is how we decided to develop the first-year foundation courses."

—Eric Hofmann, New Community College

Source: http://www.ncc.cuny.edu/academics/firstyearoverview.html

B. Encourage students to select an overall field of interest and provide them with a coordinated set of course sequences, advisors, and student supports that explore various options within that field.

Miami Dade College (MDC) is in the draft stages of developing Communities of Interest (COIs). A COI is a cluster of faculty, staff, and students who work together to increase student involvement, engage-ment, and success so that students stay in college, complete at higher rates, and achieve their goals. The COI connects students with one another and with the faculty, staff, and administrators who engender and support student success within that community. The curriculum within the COI consists of a cluster of academic pathways that have related academic and/or career goals. Structures, facilities, spaces, concepts, branding, services, and initiatives collectively give a community its identity, purpose, and mission. Unlike a learning community, participation in a COI does not require a cohort of students to take the same courses together, but it provides opportunities for them to study and engage with others who have similar career interests and goals.

MDC's initial plan is to encourage students to choose a COI soon after enrollment, including those students who test into developmental education or English as a Second Language. As part of the intake process, students would take assessments to gauge career interests and determine readiness in academic and nonacademic knowledge and skills (such as habits of mind). Practitioners within each COI would help students understand, from a practical perspective, what it means to work in their chosen field. In the first semester, most students would take a relatively prescribed course of study that includes mathe-matics, English, and other general education courses. As students' career interests become clearer, they would begin taking subject-matter courses in their chosen program.[1]

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[1] Information about MDC's plan comes from initial discussions and draft documents from MDC's Communities of Interest Design Team.

C. Allow students to experiment across fields of study by selecting from a limited number of courses, all of which count toward a variety of majors across fields.

In supporting students' exploration of various careers and fields of study, some colleges are encouraging or requiring incoming students to choose from a limited number of general education courses that all count toward any major. For example, some colleges are developing first-year or first-semester experiences for all students, in which students are required to enroll in a set number of core courses. As well as encouraging productive course-taking that leads toward a degree, this practice also connects students with their peers.

3. Instructional programs that are clearly defined

In many colleges, faculty can use program reviews and other processes to take steps toward ensuring that instructional programs are more clearly defined and prescribed, in terms of having clear course and program requirements, course sequences and availability, electives, and career or transfer opportunities. This likely includes making information about the programs clearer and easily accessible to students. For example, colleges can use interactive websites to make information about prerequisites, course requirements, and career options associated with each instructional program more accessible, but this information is most helpful to students if the programs are structured in ways that are clearly defined.

Faculty members who have been engaged in these processes report that changes in programs have had effects both across and within programs. At Tacoma Community College, a multidisciplinary team of 20 faculty members was charged with examining program requirements and course offerings across departments. By creating a multidisciplinary faculty team to develop learning outcomes as part of the accreditation process, the college was able to have

better curriculum alignment across departments. At NCC, efforts to improve program definition through the development of student pathways appear to be spurring changes in curriculum within programs. According to Julia Wrigley, "A large project like this requires curricular creativity. Sometimes over time, the curriculum is no longer fresh, but faculty working together on learning outcomes and reviewing courses [can make] the courses fresh and creative."

4. Proactive and ongoing supports at each stage of student progress

To provide students with more structured pathways directed toward completion, some colleges are offering proactive (usually called "intrusive") and ongoing education and career advising, supports, and planning across each stage of students' college experiences (Karp, 2011). Doing so requires rethinking existing support services so that they can be integrated across students' experiences. Examples of these supports include requiring all students to update educational plans periodically; identifying students who are not making progress toward a degree and offering advisement and other services to guide them in course-taking; identifying students who are at risk of failure in a class and requiring them to attend tutoring sessions; contacting students who have left the college, inviting them to return, and showing them how to do so; and offering internships and other services to help students learn about careers and how to connect with employers.

Technology can be particularly effective in this area because it can help identify students in need (for example, based on input from faculty and on students' course-taking records and degree goals) and can send messages to students concerning actions they need to take to stay on track toward their educational goals. In particular, colleges are using technology to track students' progress in their program of study, and to automatically provide them with alerts if they sign up for a course whose credits will not count toward their selected degree. For example, Valencia

College has developed a LifeMap system to organize all support services into stages of student progress and deliver them to students interactively.

5. Instructional programs that are aligned with employment and/or transfer requirements

As part of their program review processes, colleges need to ensure that their programs are aligned with labor-market and/or transfer requirements. In relation to labor-market requirements, many colleges provide information to students about occupations or jobs that are associated with each instructional program and that are generally available locally. Beyond this, faculty in each program may need to compare the skills provided in their program with the skills required by these jobs, and make adjustments if needed. According to Stephanie Benjamin at NCC, "For our transfer programs, we want to make sure not only that students can go on and get a BA in the field but that if they decide to work and study for their BA part-time, they can get an entry-level job, preferably in their field, with the AA degree."

To a large extent, the transfer of credits from two-year institutions to four-year institutions depends on state and local policies, including articulation agreements. In their efforts to develop local agreements with four-year institutions, community colleges have focused on ensuring not only that their courses can fulfill general education requirements or electives, but also that appropriate courses within each program fulfill requirements for the major at four-year institutions. For example, the University System of Georgia developed a 42-credit common-core curriculum for the university's three dozen colleges. The plan was implemented in January 2012 and is one of the most comprehensive guaranteed transfer agreements for transfer of general education courses between institutions (Complete College Georgia, 2011). Although the plan has only recently been implemented, anecdotal information on success with seamless transfer of courses has led CUNY to develop a similar initiative called CUNY Pathways to Completion.

USING TECHNOLOGY TO STRUCTURE COMPREHENSIVE EDUCATIONAL AND CAREER PLANNING: VALENCIA COLLEGE

Valencia College supports student career and degree exploration through an interactive technology called LifeMap. LifeMap helps students find out about careers and majors, and it can be used to allow advisors, faculty, and librarians to assist students with career and educational planning. LifeMap is a guide to help students figure out "what to do when" in order to complete their career and education goals. It links all of the components of Valencia College (including faculty, staff, courses, technology, programs, and services) to a personal account so that students can access the information in one place, tailored to their needs.

Source: http://valenciacollege.edu/lifemap/

USING TECHNOLOGY TO GUIDE STUDENTS IN COURSE-TAKING: AUSTIN PEAY UNIVERSITY

Austin Peay University has developed an online system that suggests courses to the students for the upcoming semester, based on the college's prerequisites, each student's program of study and degree plan, and the student's previous course history. Using these data, the system's strongest recommendations are for those courses that are necessary for a student to graduate (because they are either part of the university's core curriculum or part of the student's major) and courses in which the student is expected to succeed academically. Students can choose whether or not to register for the courses that the system recommends. Student interview data suggest that about two-thirds of the courses that students enroll in are those that were suggested to them by the system.

Source: http://www.apsu.edu/information-technology/degree-compass-what

A LOCAL PARTNERSHIP FOR TRANSFER: VALENCIA COLLEGE

DirectConnect is a partnership involving the University of Central Florida (UCF), Valencia College, and several other local community colleges. DirectConnect guarantees admission to UCF for Valencia College students and offers preferential admission to some bachelor's-degree programs. The community colleges and UCF have developed an exceptional degree of collaboration, including alignment of curriculum and shared information about students' transfer processes and the choices students make about coursework after they transfer. Students can sign up for DirectConnect online. There are also university advisors on the community college campuses to advise students about transferring to UCF.

Source: http://valenciacollege.edu/futureStudents/directConnect/

IMPLEMENTATION

This section provides examples of initial challenges and opportunities that some colleges are experiencing as they are beginning to develop more structured pathways to guide student progress toward completion. Since college efforts in this area are new, available information and research about implementation are not extensive. The information in this section is based on interviews with practitioners and others (see the "Interviewees" text box on page 1).

Getting started

Bringing together faculty, staff, and administrators to work collaboratively across departments is important for most large-scale change efforts in community colleges. According to several interviewees, the process for creating strategies to structure students' experiences and increase completion rates should be inclusive, data driven, and based on clear and shared objectives. Several of the interviewees also mentioned that that both full-time and part-time staff from the instructional and support services sides, as well as institutional research staff, should be involved. Including the institutional research staff helps ensure that necessary data for making the decisions are provided in a timely manner and that decisions are evidence-based. Including student voices can answer specific questions about students' needs that transcript data do not necessarily capture. At Valencia College, for example, these objectives are developed by cross-functional groups that read and discuss the most recent literature and come up with design ideas. This section highlights specific topics that cross-functional teams on campus should discuss in order to develop a shared understanding of how a college can structure students' experiences toward completion.

One of the central challenges in creating more structured pathways for students involves, on one hand, finding a balance between creating structure in course-taking and program selection, and on

"It was important to involve both faculty and the students in the process."

—Tristan Denley, Austin Peay University

"Collaboration has been one of the main ways that we work together with faculty and staff, and it is part of the culture. All of this has been shared work... of breaking down the silos."

—Joyce Romano, Valencia College

the other hand, allowing flexibility for exploration. Currently, the status quo in most community colleges allows for widespread flexibility in taking courses without providing structured guidance to support student decision-making in entering a program and achieving a degree. According to Davis Jenkins of Columbia University's Community College Research Center, community colleges currently offer widespread access to *courses* but not to instructional *programs*. He suggests that transfer programs should be designed to lead students "through a guided exploration toward choosing a major, and that all courses, including both general education and specialized courses, should enable students to enter bachelor's[-degree] programs with junior standing in their chosen majors." Unfortunately, many students drop out before they establish a pattern of taking several courses within an instructional program. It is access to programs, Jenkins says, that provides students with degrees. He also suggests that faculty engaged in this process "need to take the lead in developing curriculum maps for each program and [in] deciding how [the courses required for] specific programs flow from broad streams of core requirements."

Since this area is so new, it is difficult for college faculty and staff to know what options are available for creating structured pathways that still allow for flexibility. This brief is intended to provide some

information about these issues, but the pertinent research remains limited. In particular, interviewees suggested that as colleges take steps in these directions, they will need to discuss the following kinds of issues:

◇ How much structure does the college want to provide for student decision-making? Which models—such as encouraging students to select a program of study, versus encouraging students to select an overall field of interest—would be most appropriate for students? How can departments work together to develop a model?

◇ What program review processes can college faculty use to better define and prescribe their instructional programs, so that program requirements are clear and course sequences efficiently guide students to a degree?

◇ What review processes can faculty and staff use to improve program alignment with local labor-market and transfer requirements?

◇ What are the implications of having more prescribed course sequences toward degrees? Which courses might need to expand enrollments, and which courses might see fewer enrollments? What strategic planning processes can help college faculty and staff address these shifts?

◇ What should be the role of advising, education and career planning, tracking progress toward educational goals, and related technology use in assisting student decision-making toward a degree? Which services should be mandatory, and which should be voluntary? What kinds of tools and services will be provided to students at intake and throughout their college experiences? What kinds of costs are associated with these supports?

◇ How can changes in developmental education assist in helping get students into a program of study more quickly? How can enrollment in general

"The burden should not be on the students to navigate what courses to take; that... is a hard thing for the students to do. The institutions have to help the students."

—Julia Wrigley, CUNY

"The faculty task force recommended to reverse the pattern where our least advantaged students were being taught by adjunct faculty.... We now have full-time faculty teach remedial courses."

—Timothy Stokes, Tacoma Community College

"Right now, developmental education is largely disconnected from programs of study. It is narrowly focused on two college-level courses— Math and English 101. Most of the developmental education reforms are also being done apart from efforts to create programs of study. In my view, this means that they are unlikely to move the needle on student progression and completion."

—Davis Jenkins, Community College Research Center

education courses support a more structured model of course-taking?

◇ What decisions concerning educational goals do students need to make during each semester at the college? How can those decisions be better informed?

Data use and other institutional incentives

Community college faculty with experience in working to create more structured pathways for students pointed to two overall areas that helped move their colleges forward in this area: data use and institutional incentives.

Data use. Interviewees said that they have seen college faculty, staff, and administrators become more interested in developing structured pathways for students after they examined college data related to course-taking, program entry, and degree completion. For example, Timothy Stokes of Tacoma Community College said that by looking at data about graduating cohorts in comparison with the overall student community, faculty and staff could clearly see that the graduates tended to be from high-socioeconomic-status backgrounds. Faculty and staff were very interested in seeing how first-generation, low-income students fared two or three years after entry, and this led the faculty to consider how structuring students' experiences could improve completion.

Interviewees also suggested that examining college data can help in deciding what kind of model to implement to create more structure for students. Examples of data to examine include:

◇ Comparisons between student demographics overall and the student groups that graduate. Examining such comparisons spurred a systems redesign at Tacoma Community College in order to increase the completion rates of low-income and minority students.

◇ Graduation rates by program or major.

◇ Transfer data. Examining such data can help identify the characteristics of students that transfer and the majors they are likely to pursue. Transfer data are also important to examine in order to determine if students are arriving at universities with the necessary prerequisites. For example, Valencia College examined transfer data in science, technology, engineering, and mathematics and learned that students were not completing the required prerequisites. Colleges are also focusing on which credits transferred (e.g., electives, general education, and credits in different majors).

◇ Data from student focus groups and interviews. These data can help identify the specific challenges students face in decision-making. These qualitative data can be supported by quantitative data about students' progress or lack of progress toward their education goals.

◇ The numbers of majors that are offered. CUNY conducted analyses of these data, and officials were surprised that some colleges had more than 80 different programs. After the analyses, a CUNY representative said he "wondered how students made choices" when faced with all of those options.

◇ Percentages of students who change majors in their first and second terms, and completion rates for students who change majors. CUNY found that nearly 50 percent of students changed majors in their first three semesters.

◇ Percentages of developmental education students who pass the pertinent entry-level course in their field after completing a developmental education sequence.

◇ Current labor-market demands for each of the educational programs offered.

Institutional incentives. Interviewees pointed to the importance of providing incentives—both fiscal and non-fiscal—for faculty and staff to collaborate in examining data and developing more structured pathways for students. In terms of non-fiscal incentives, some colleges have been able to use existing program review processes as a way to better define and prescribe their instructional programs. Others have used feedback from accreditation agencies about learning outcomes assessments to begin important conversations about program requirements and course content. As noted earlier in this brief, Tacoma Community College required learning outcomes to be determined not by individual programs but by faculty working together across broader fields, such as the

social sciences, sciences, and humanities. According to Timothy Stokes, this process required faculty to examine their own program within their overall field: "We had an interdisciplinary group work on learning outcomes in social sciences, and the group decided we cannot offer students so many choices. And faculty realized that they have to be very prescriptive."

Currently, most fiscal incentives at community colleges—such as enrollment-driven formulas—are based on improving student access rather than increasing student completion. To spur action toward increasing completion rates, colleges can focus institutional awards and other forms of recognition toward efforts to develop more structured pathways. According to Isaac Rowlett at Public Agenda, colleges can use a wide range of incentives for faculty and staff participation:

> "Incentives can include money, but other [incentives] are more important, such as professional development and creation of collaborative spaces (online and in person) for cross-faculty engagement, particularly for adjuncts. Recognition and awards are very important to teaching faculty for expanding their curriculum vitae. Anything that they can use to advance their careers, anything that recognizes their expertise and honors their work—those are very important to faculty members."

Tacoma Community College has provided awards to departments to examine data related to completion and has funded departmental projects to improve retention and completion rates. These incentives do not provide monetary awards to individuals, but they bring recognition to those involved by funding their departmental plans.

Cost and policy implications

Creating more structured pathways for students has important, and uncertain, implications for college costs, based on a wide range of factors, including

> "We started handing out internal awards to departments and funded the initiatives that the department teams came up with. That really motivated people. For example, the executive team would fund retreats for student support staff and faculty and asked them to look at data and suggest strategies for improving student retention, and we made sure to fund many of those ideas.... When we fund their plan, then faculty or advisors are invested in those.... The teams are overjoyed when they get to implement their ideas."
>
> —Timothy Stokes, Tacoma Community College

existing services and programs provided and the models selected. Partly because support services are directed at large numbers of students, costs per student may increase as costs per completion—if completion rates were to rise—remain steady or decline. New costs may be incurred in several areas and are certain to be incurred whenever colleges provide new supports.

Structuring students' experiences through more extensive career and educational planning, mandatory orientation, or proactive advising may require greater resources in terms of student services staff time. However, using technology may help to contain some of these costs. For example, Valencia College's LifeMap software has an interactive component that helps students choose careers but also refers students to the career center. Similarly, Austin Peay University's Degree Compass is an automated program that suggests courses to students each semester. Likewise, student success courses that offer career and educational planning to groups of students are a relatively low-cost way to guide student decision-making, at least in comparison to

one-on-one advising. Additionally, having programs that are better prescribed and more tightly aligned with transfer and work requirements may reduce the burden on advisors—and students—to sort through different electives and research the transferability of each course, thereby freeing up their time.

By being more efficient in taking courses that count for credit and count toward a degree, students are likely to save money by reducing the time to achieve a degree. From the college's perspective, however, costs per student may increase while costs per degree may decline if more students complete their degrees. This is because the cost per student for offering developmental and lower-level courses at most colleges tends to be much lower than that for offering higher-level courses in the sequence. Colleges' efforts to retain students and move them to second-year courses may be costly for colleges if they are reimbursed only according to the number of students who are enrolled (Belfield, 2012; Romano, Losinger, & Millard, 2010). Therefore, it is important for community colleges' cost considerations to take into account the state's willingness to complement enrollment-based funding formulas with funding components that are linked with completion rates.

In terms of policy issues, efforts to create more structured pathways that guide students toward completion will require supportive institutional, system, state, and federal policies. Students often declare programs of study so that they are eligible for federal financial aid, and financial aid is critical for many students to be able to move towards completion. Strategies being considered by some colleges to address financial aid issues include having students complete financial aid forms early, as part of an intake process or as part of collaborative efforts with local high schools, and providing emergency financial aid and financial aid incentives to encourage selecting a program of study and completing a degree.

Interviewees also emphasized the importance of system-level and state policies concerning articulation agreements, common course numbering systems, and general education requirements. They indicated that these policies are crucial in supporting the development of clearly defined student pathways at the campus level. For states that have more centralized systems, for example, state officials can likely be more effective than can their counterparts in less centralized systems in bringing together two- and four-year institutions to make progress on cross-system issues.

ENGAGEMENT

Creating more structured pathways for students is challenging because it requires rethinking a college's instructional programs and its supports for students; it is also likely to shift the roles and interactions of faculty, staff, and administrators. This section provides questions that faculty, staff, and administrators can use to foster engagement and inquiry in this process. The questions can be adapted based on an institution's needs.

> Imagine that you are a student entering our college. What kind of information would you want to know before you choose which classes to take or which program to select?

> Given how many students arrive at community college without clear goals for college and career, how does our college help students explore various career options, including understanding the day-to-day work and likely pay scales associated with various careers? What could we do to better support the development of career goals for students?

> How does our college encourage students to develop education plans in relation to their career goals, including their goals for transfer? What could we do to better support student decision-making in this area, including making the development and updating of educational plans mandatory?

> How does our college track progress toward education goals? Can the tracking of goals be mandatory and available online as well as through in-person formats? How can tracking systems be used to suggest courses for students and to alert students when they are straying from their goals?

The questions in this section were reviewed and edited by Public Agenda staff.

"If possible, everyone who is affected by a change should be engaged in the process, though not everyone needs the same role. Some people can help plan the changes; others just want to be informed at key times. Student voices are crucial. Both full-time faculty and part-time faculty are probably the most important stakeholders to engage deeply. Adjuncts have a lot to bring to the table. Department chairs are the linchpins in this process because they have the formal power to serve as the connective tissue between the administration and other faculty members. Finally, the early adopters—those who have participated in other reforms and changes—are important."

> —Isaac Rowlett, Public Agenda

How does our college encourage students to select a major and enter into a program of study? More broadly, what is the right balance between allowing for student exploration and encouraging and supporting student progress toward a certificate or degree? For example, what are the pros and cons of each of the following models at our college?

» Encourage incoming students to select an instructional program, and provide them with clearly specified course sequences with limited electives.

» Encourage incoming students to select an overall field of interest, and provide them with common course sequences and student supports that explore various program options within that field.

» Encourage incoming students to experiment across fields of study by selecting from a limited number of courses, all of which count toward a variety of majors across fields.

In considering these three models, what kinds of student supports need to be in place to improve student success? How do those differ from what we have now? For example, what decisions do students need to make concerning their educational goals during each semester at the college? How can those decisions be better informed? Who at our college needs to be involved in making these decisions?

In considering these three models, what kinds of student supports need to be in place to promote student success? How do those differ from what we have now?

Are reviews of our academic and career/technical programs needed to ensure that program requirements are clear and course sequences efficiently guide students to a degree? Who should participate in such reviews? For example, should review teams include developmental education instructors and advisors? Should the teams be cross-disciplinary, such as by field (for example, social

KEY DATA QUESTIONS FROM THE COMMUNITY COLLEGE RESEARCH CENTER (CCRC)

CCRC suggests that colleges track cohorts of first-time-in-college students over at least five years to address the following questions:

What is the distribution of students by intended major or program focus? (Most colleges do not track distribution carefully, but may need to if they want to figure out whether or not students are progressing in a program of study.) How many programs does the college offer? How many students are in each program? If there are programs in which a small number of students are enrolled—or none at all—why is this the case?

How far along are students in a particular major or area toward meeting program requirements? (Most colleges can't answer this, particularly for liberal arts or business students, which constitute the majority of students in most comprehensive colleges.) If the college has a general education core, how far along are liberal arts and sciences students or associate-degree students in meeting the core requirements? What percentage of students has satisfied each distribution requirement after five years? What percentage has taken and passed more courses than are required?

What percentage of students transfers to a four-year institution? What percentage of these students earns an associate degree before transferring?

Among students who transfer, what percentage earns a bachelor's degree (five or six years after first entering higher education), from which institutions, and in what subjects (all of which can be determined from National Student Clearinghouse data)? The latter is especially important because students earn at least a plurality of degrees in a relatively small number of majors. Are the college's associate-degree requirements well aligned with those of the institutions and programs within the institutions to which students are most likely to transfer?

How many students are still enrolled after five years and have earned at least 30 college credits (not counting remedial credits)? What are their majors and other characteristics?

CCRC also recommends examining the courses taken by students who complete each of an institution's major credentials within a given year. Are graduates of a particular program taking pretty much the same courses, or is there wide variation in course-taking? What percentage of courses is in non-core areas?

Source: Email correspondence with Davis Jenkins, Senior Research Associate, CCRC, October 3, 2012.

sciences, sciences, humanities)? What should be the role of electives?

What processes can faculty and staff use to improve program alignment with local labor-market and transfer requirements? What kinds of spaces or supports are needed to allow them to do this work? What system-level policies need to be addressed for progress in these areas?

What are the key challenges to creating more structured pathways for students? How can we prepare for these challenges? For example, which courses might need to expand enrollments, and which courses might see fewer enrollments? What types of strategic planning processes can help college faculty and staff address these shifts? What training and support are needed for faculty? For counselors? For others?

What additional information do we need to create more structured pathways for students?

"Because student support services are an important part of structuring students' experiences, those staff, including advisors and financial aid staff, should be brought to the table when discussing how to structure students' experiences."

—Gretchen Schmidt, Jobs for the Future

"We also had Institutional Research staff at every meeting so they could pull up the data that faculty requested."

—Timothy Stokes, Tacoma Community College

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**COMPLETION
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Providing
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