

Change Management and Guided Pathways: Creating a Plan for Implementation at a Washington  
State Community College

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## Change Management and Guided Pathways: Creating a Plan for Implementation at a Washington State Community College

This paper addresses a problem of practice in community college leadership: how to effectively use change management strategies to implement a guided pathways model at a community college. Using the case study of one Washington State community college that is looking to implement this model—which we will call Suburban Community College (SCC)—we will identify suggested change management strategies for community college leaders to consider when seeking to implement the guided pathways model. Specifically, we gathered information from interviews with national consultants, national experts, college leaders around the country who have effectively implemented this approach, and stakeholders at SCC to come up with recommended steps and strategies for community college leaders to consider in possible implementation of a guided pathways model.

Guided pathways is a recent national movement to create more structured and better coordinated academic pathways within community colleges, which have less room for individual class choice, but also less room for class choice error and wasted/excess credits, and which feature more targeted advising. The focus for this paper will be on completion outcomes for transferable associate's degrees and the efficiency of transfer credits to universities for completion of baccalaureate degrees for students who continue in higher education after gaining transferable associate's degrees.

The guided pathways model requires careful planning and consideration by administration to be implemented effectively and equitably. Building support for this shift, particularly on the part of unionized faculty, and navigating the disruptive changes necessary in the reallocation of resources required to implement this model present a daunting challenge for

community college leadership. However, the potential positive impact for students makes this project worth the investment of time, energy, and resources.

### **Framing the Problem**

Community colleges in the United States provide a critical access point to higher education for more than 10 million students each year (Bailey, Smith Jaggars, & Jenkins, 2015). Getting more students to complete an associate's degree or certificate, or to successfully transfer from a community college to a university and complete a bachelor's degree, is a national issue that has recently gained more attention. Policymakers and practitioners are shifting focus to outcomes rather than simply enrollment in community colleges.

The wage premium placed on higher education attainment is remarkable. In the postindustrial knowledge economy, those who complete higher education have a significant lifetime wage earning potential over those with only a high school education. Completing an associate's degree in and of itself is a worthy goal, with wage potential increasing significantly—especially for certain high-demand technical occupations requiring only an associate's degree. According to a 2014 Pew Research Center report, the median salary for full-time workers aged 25–32 with only a high school degree was \$28,000, with an unemployment rate of 12.2% and a poverty rate of 21.8%. For those with a two-year degree or some college, the median salary goes up to \$30,000, while the unemployment rate drops to 8.1% and the poverty rate significantly lowers to 14.7%. For workers who went on to earn a bachelor's degree or higher, the median salary increases to \$45,500, the unemployment rate drops even further to 3.8%, and the poverty rate drops to 5.8% (Taylor, Fry, & Oates, 2014). Completing postsecondary education garners at least a 73% wage premium over high school graduation; completion of an advanced degree leads to an even higher premium of 124% over high school completion only (Carnevale, 2008).

For some students, it can be a smart move to complete only an associate's degree rather than taking on the tuition and opportunity costs of a bachelor's degree, especially in terms of immediate earning potential. Nearly 30% of associate's degree holders make more than bachelor's degree holders, and on average community college graduates make more directly out of their degree program than do bachelor's degree students (Marcus, 2013). Meanwhile, average in-district tuition and fees for two-year public institutions were \$3,435 in 2015–2016 vs. \$9,410 for in-district tuition and fees at public four-year institutions. For private, nonprofit four-year universities, average annual tuition and fees are currently \$32,405 (Ma, Baum, Pender, & Bell, 2015).

Overall, this is absolutely compelling data showing the importance of higher education as a means to employment with a decent standard of life. Finding suitable paths to and through college continues to be an issue in Washington State. Limited and shrinking resources prevent community colleges and public baccalaureate institutions from developing the capacity needed to meet current and projected employer demand and statewide degree production goals (England-Siegerdt & Andreas, 2012). The cost for individuals, and the state, of not creating better pathways to attaining postsecondary education is a compelling reason to improve the current model and work toward increasing completion rates.

Today, close to 70% of students who enroll in community colleges fail to complete a two-year program within three years (Shapiro et al., 2012). Our nation's higher education institutions need to do more than enroll students in college: They need to ensure they successfully complete their degrees. Occupations requiring higher educational attainment are projected to grow much faster than those requiring lower educational attainment, with the fastest growth among occupations that require an associate's degree or a postsecondary vocational

award. Dramatically boosting community college completion rates in the years ahead is essential if Americans are to compete successfully in a global economy (United States Education Dashboard, n.d.). While the majority of community college students begin studies with the stated goal of transferring to complete a bachelor's degree, the actual rate of students reaching those goals is very low. Only 15% of students who begin studies at a two-year college in the United States complete their bachelor's degree within six years.

At SCC, as is typical of most U.S. community colleges, students must maneuver through a bewildering range of courses and programs to try to reach their educational goals. Frustrated when they make a misstep in course selection or timing, and without a clear way forward to their end goal, too many students end up dropping out. Attrition for students in community colleges has many causes, of which curriculum confusion and poor advising are only a few—but they are major barriers that could potentially be remedied by guided pathways.

## **Literature Review**

### **Guided pathways: An introduction**

Guided pathways provides a response to the problem of high dropouts and low completion rates in community colleges. This national movement is championed and spearheaded by Davis Jenkins, Thomas Bailey, and their colleagues at the Community College Research Center (CCRC) at Columbia University. The trouble with the current system is that it is designed for access, not success. According to Jenkins (2014), community colleges were designed to maximize enrollment at a low cost for students who often were not well-prepared to succeed in college, in response to the need to dramatically increase higher education access in the 1960s and 1970s. The features that have enabled institutions to provide broad access to college make them poorly designed to facilitate completion of high-quality college programs;

specifically, the focus on low-cost enrollment has encouraged colleges to offer an array of disconnected courses, programs, and support services that students are expected to navigate mostly on their own (Jenkins, 2014).

To improve student progression and completion outcomes, the CCRC contends that colleges should redesign their major pathways to create highly structured, educationally coherent program maps that align with career or transfer pathways. Incoming students must be supported to pick a program of study from the start and follow a predesigned course map. Students will benefit from a simplified and optimized set of choices that in turn allow both students and the college to better predict schedules and be more efficient in reaching educational outcomes (Bailey et al., 2015). While guided pathways is a relatively new movement, initial evidence from related initiatives demonstrates a positive impact on student progress and completion (Johnstone, 2015).

Colleges that adopt this approach must redesign their academic programs to make more structured and coherent pathways to educational goals. Students are encouraged to identify their goals early, as studies show that students who track into a program of study within a year of entry into community college are much more likely to complete their program (Jenkins & Cho, 2014), while those who are confused from the start are more likely to drop out entirely, even in their first month (Ashburn, 2007). Support services are simultaneously adjusted and enhanced to provide a “package deal” of more monitoring, help, and feedback along the way (Rosenbaum, Deil-Amen, Person, & Project Muse, 2006). Using the principles of choice architecture, students are guided (but not forced) to take a best-practice pathway by starting in a meta-major such as business or health sciences. A default pathway is not the same as a mandatory one; students could still opt to choose different courses with guidance from an advisor. However, the guided

pathways model is intended to reduce students' confusion and anxiety and minimize wasted time and money on unnecessary coursework (Bailey et al., 2015). A study examining one state community college system found that 49%–89% of graduates of the 25 most popular degree programs completed credits in excess of their degree requirements. For nearly 14,259 degree completers in the period under study, the mean number of excess semester credits was 14, and the median 9. The total estimated cost in just this one state for the excess credits, at in-state tuition rates, is \$36 million per year (Zeidenberg, 2015). Examples of two-year institutions that implemented guided pathways and were successful in assessing student learning outcomes as a key component include: Indian River State College in Florida, LA Trade Tech, and LaGuardia Community College in the City of New York System (Jenkins, personal communication, January 19, 2016).

### **Implication for Racial Equity at Washington's Community and Technical Colleges**

The issue of racial inequality has been center stage for many of Washington State's publicly funded colleges and universities. For a few of the colleges, 2016 has seen students voice their dissatisfaction and take actions against racial inequality. This transformative time has Washington's community and technical college (CTC) system thinking about deep-rooted structures that perpetuate racial inequalities. Education can be the great equalizer, yet Washington State's CTC system continues to show racial inequities in college access and success that threaten the future of the state. Many of the CTCs acknowledge gaps for underrepresented students and students of color in access and success, and often develop quality boutique programs that are deemed successful for a small number. Yet, the CTC system has failed to make a fundamental shift in thinking and approach to equity, which is key to closing racial gaps on a large scale. The guided pathways approach sets a framework for the CTC

system to develop a well-formulated statewide policy on equity in higher education that can be crucial to closing racial gaps. An example of such a policy was instituted by the California Community Colleges Board of Governors in 1993 requiring each of the 113 colleges to develop an annual student equity plan documenting inequitable outcomes and proposing strategies to close gaps. California's equity plan was put in place to ensure equity in access, retention, and success for ethnic minorities, women, and persons with disabilities (Guichard, 1992). Under the guided pathways framework, a similar statewide equity policy can be developed that could lead to racial equity in Washington State community colleges.

A statewide equity policy must recognize that 40% of people under the age of 18 in Washington are people of color (Washington Student Achievement Council, 2013). Yet, from 1990 to 2014, the percentage of 25-to-29-year-olds who had attained a bachelor's or higher degree was 41% for whites compared to 22% for blacks and 15% for Hispanics (Kena et al., 2015). From 1990 to 2014, the gap between whites and blacks in the rate of attaining a bachelor's degree or higher degree widened from 13 to 18 percentage points, and the gap between whites and Hispanics in attaining this education level widened from 18 to 26 percentage points (Kena et al., 2015). Washington state's goal is to award 42,400 baccalaureate degrees by 2030 to meet workforce demand, meaning that an explicit focus on degree completion for underrepresented students and students of color is critical to meeting the state's economic needs (SBCTC, 2015).

The guided pathways approach forces Washington's community college system to address equity for all students instead of focusing on the students experiencing the least success. For example, when a community or technical college discovers inequities for an underrepresented group or students of color, the guided pathways approach recommends that the

college develop systemic strategies to help all students, rather than developing small-scale programs to help a limited number of students. The guided pathways approach represents an institution's best chance to move past innovating on the margins for a small number of students to fundamentally transforming the learner experience throughout their trajectory at the college and, in doing so, achieve the gains in outcomes at scale (Johnstone, 2015).

In the current model for Washington's community college system, students must maneuver through a bewildering range of courses and programs to try to reach their educational goals. For white students with family knowledge of college and support structures in place, this is a daunting task, but for underrepresented students or students of color, a misstep in course selection can be devastating and usually leads to dropouts or frustration. These students find themselves without a clear way forward to their end goals; too many of these students end up dropping out, leading to much higher attrition for underrepresented students and students of color in community colleges. The guided pathways approach allows the colleges to not only propose solutions but to dig into the root causes of the inequities. When campuses change the way they engage underrepresented students or students of color, a fundamental shift in thinking and approach occurs that gets the community college system closer to equity. Inequity is not inevitable, and Washington community college system's commitment to implementing the guided pathways approach might be the best hope for reducing racial inequities in Washington State.

### **Theoretical Framework**

**Choice architecture, libertarian paternalism, and transition theory.** A key component of the guided pathways approach is framing students' decision making in course selection to optimize retention, completion, and employment outcomes. The influential 2004

book *The Paradox of Choice* by Barry Schwartz outlined the premise that people want choices, but too many choices can be paralyzing. Too many small decisions cause stress and anxiety, and lead to worse outcomes for happiness and satisfaction (Schwartz, 2004). Sorting through an overload of information can interfere with the accuracy of decision making, leading people to procrastinate on making important decisions in a timely fashion (Gladwell, 2007). “Choice architects,” who set up a default option, have the opportunity to provide a structure to choices that can greatly affect outcomes (Sunstein & Thaler, 2008). The idea of choice architecture has taken hold across a variety of sectors, from government to law to business and now education. The premise of choice architecture is that institutions inevitably structure the choices that people make, and those choices could be structured well to encourage beneficial choices (Schlag, 2010).

This notion of choice architecture is closely tied with the overarching philosophy of libertarian paternalism, the belief that leaders should strive to maintain or even increase freedom of choice but at the same time understand it is a legitimate goal to influence behavior to improve lives (Iyengar, 2010). Well-designed default choice structures, such as guided pathways, can attract a large market share largely from inertia—people do not want to take the time or energy to make a choice that deviates from the suggested path. People also tend to have confidence that experts put together the default plan, and that it is likely to be in their best interests to follow a default plan (Sunstein & Thaler, 2008).

Without guidance, students can be stuck in “analysis paralysis” when faced with the stunning number of course offerings and many details they have to track to remain on target for their transfer. By contrast, providing a simplified set of options with clear information on benefits and drawbacks, and with an expert-designed default option, increases the chances that students will make optimal academic choices (Jenkins & Cho, 2014).

Schlossberg's transition theory is another useful paradigm to apply when seeking to increase support for students through their transition to college, and then to transfer. Preparing to transfer is an anticipated transition; that is, it is expected to occur predictably, and advanced planning can be helpful. Although successful transfer is a positive transition, it nonetheless is a stressful event because it will significantly alter a student's daily life (i.e., with a move from one school to another, often to another city or even country). The degree to which an individual feels in control of the transition can positively or negatively affect his or her experience of the transition and the resulting concurrent stress. Institutions can play a role in providing support for the transition by framing the situation, helping control the meaning of the problem, and assisting in managing stress (Evans, Forney, Guido, Patton, & Renn, 2009). Goodman, Schlossberg, and Anderson (2006) wrote that system interventions are

designed to change the system in which individuals find themselves. These are based on the beliefs that (a) all elements in a system ... are interrelated; (b) change in any part of a system ... will lead to alteration of the entire system; and (c) systems have inertia and therefore resist change. This leads to the conclusion that it is difficult for individuals to change without a concomitant change in the system in which they are involved. (p. 183)

**Performance-based funding and theories of action.** In recent years, policymakers have started to experiment with performance-based funding, in which colleges receive funding based on specific student outcomes rather than simple enrollment. Those outcomes include such markers as retention, completion of key courses, credit levels, graduation, and job placement. While the evidence is still mixed on whether the funding shifts (which are small at this point, at least in Washington State) have made an impact on college practices, the collection and dissemination of data itself can serve as a catalyst for immediate change within an institution.

Staff and faculty want to feel pride in their work, and comparing their college's outcomes to other colleges may be a motivating factor in seeking to improve outcomes. Dougherty and Reddy (2013) characterized the changes in revenue, the college's learning capacity, and its awareness of the data as "immediate institutional impacts." (Dougherty & Reddy, 2013, p. 35) Those immediate impacts should then catalyze "intermediate institutional changes" to institutional policies, structures, and practices that lead to ultimate student outcome improvement in such markers as bachelor's degree completion or improved job placement (Dougherty & Reddy, 2013, p. 45).

**Kotter and change management.** As colleges seek to implement the broad reforms that guided pathways will require, leaders should plan change management strategies carefully. One of the best-known scholars in the change management field, John Kotter, laid out eight steps for effective organizational transformation that provide a useful lens for evaluating change processes at example institutions and planning change for colleges such as SCC. Kotter's eight steps are:

- 1) Establish a sense of urgency: Marshal the relevant data to show why change must be made, and soon.
- 2) Form a guiding coalition: Bring together a powerful team to lead the change effort.
- 3) Create a vision to direct the change effort that clarifies the direction in which the organization needs to move.
- 4) Communicate the vision by all means possible, and demonstrate the vision through the example of the team in the guiding coalition.
- 5) Empower others to act on the vision: Get rid of barriers to the change, and encourage risk taking.

- 6) Plan for and create short-term wins: Make plans to show visible and measurable improvements as a result of the changes, and recognize those who are leading the effort successfully.
- 7) Consolidate improvements and plan more change by planning further efforts, removing additional barriers, and hiring and promoting employees who embrace the change.
- 8) Institutionalize the new approaches by making the connection between improvements to outcomes and the changes clear and by planning for leadership development and succession. (Kotter, 1995, p. 61)

Applying Kotter's change management strategies to guided pathways implementation is not a new approach: Susan Mayer and Terri Manning (2014) wrote a case study of a large-scale organizational transformation at Miami Dade College using Kotter's taxonomy. The study outlines the scope of the completion challenge, the processes that the college teams implemented to create and sustain change, and the early results of the efforts of guided pathways. The case study showed that a large-scale change took over five years to implement and is still in progress.

**Four frames: Bolman and Deal.** Bolman and Deal's influential 2013 work *Reframing Organizations: Artistry, Choice & Leadership* offers another valuable approach to leadership, and by taking into account different organizational perspectives, leaders can better target change strategies. Leaders who tackle only one or two perspectives will miss the mark in leading a successful whole-organization change.

**Structural perspective.** This is a rationalist approach wherein organizations exist to achieve established goals and objectives, and in which structural remedies can resolve performance barriers. In this perspective, an organization works like a machine; the central

concepts to be kept in mind are clarifying roles, goals, and policies and ordering technology and the environment for optimal performance.

*Human resource perspective.* People are the heart of any organization, and leaders must make sure that employees are operating at the top of Maslow's hierarchy of needs (i.e., their basic health and safety needs are met, and they feel motivated and appreciated) and that they maintain their motivation to do their best for the organization. The organization can be thought of as a family, in which individuals should be empowered and needs, skills, and relationships must be in balance. The central leadership challenge in this frame is to align the organizational needs with the human needs of those who work within it.

*Political perspective.* Organizations are coalitions made up of many constituents with enduring differences who will jockey for position. Power stems from the ability to control the allocation of scarce resources and to control reputation and expertise. Metaphorically, an organization is a jungle, and effective leaders must strategically move their agenda forward with the support of a strong power base.

*Symbolic perspective.* An organization communicates its values, vision, and identity through symbols, rituals, and stories, rather like a theater performance. Each organization has its own culture and group identity, and many organizational processes are theatrical in nature, as the organizational actors play out their assigned roles. Leaders must be inspirational and work to create faith and meaning.

## **Research Design and Implementation**

### **Guiding Questions**

The guiding questions for this study were:

- What are the anticipated obstacles to the implementation of a guided pathways model at SCC?
- What are suggested solutions and best practices in change management to address the identified obstacles?

### **Coding and Analysis**

We interviewed college leaders and faculty members from across the country who have been involved in efforts to effectively implement the guided pathways approach at their campuses, and we interviewed thought leaders in the field. We also approached the question from the perspective of a case study for one particular community college that is considering taking part in this process: the name of this school has been changed to “Suburban Community College,” or SCC. The interview instrument can be seen in the appendix.

We conducted interviews by phone or in person with college leaders (n=2), and faculty members (n=2) at two benchmark colleges that have already implemented guided pathways: one in Washington State and one in Florida. We also conducted interviews with experts in a benchmark state, North Carolina, that has numerous colleges working on implementation of guided pathways (n=2). Additionally, we interviewed Dr. Davis Jenkins and Dr. Rob Johnstone, well-known national consultants in the field (n=2) who work with colleges across the country on guided pathways efforts. Because these two consultants are nationally known and have published work related to guided pathways, they both gave written permission for their interviews to be attributed to their names, rather than keeping their responses anonymous.

We requested in-person interviews and written feedback from 29 administrators and staff and faculty members at SCC. We completed 14 in-person interviews and received six written responses. We also conducted a focus group in-person interview with four students at SCC. The

responses at SCC were distributed somewhat evenly among the participant roles: administrators (n=7), staff (n=7), faculty (n=6), students (n=4).

The interview questions and method were approved by the Institutional Research Boards of both our graduate institution, the University of Washington, and SCC. Participation in the project was role-driven and voluntary. Participants were emailed with a request from the researchers asking for their voluntary participation. Interview participants were told in writing before the start of an interview the purpose and scope of the project and the possibility of future publication. The researchers obtained the subjects' written consent to record their responses if the interview was conducted by phone or in person.

### **Delineation of Work**

As this was a collaborative project between two EdD candidates, we worked together to divide the work relatively evenly. We set up a schedule of regular in-person meetings and checked in frequently by phone and email. Writing of the proposal and final project were divided into sections and edited by both candidates. Literature reviews were collaboratively archived in a shared Google Drive folder and in a shared Mendeley research service account. We divided the interviews and conducted, transcribed, and coded them separately, sharing the audio file, transcript, and coding with each other through the shared Google Drive and a shared audio recording service account.

### **Evaluation Methodology**

Based on our interview transcripts and the written responses, we coded the data to identify themes to create strategy recommendations for SCC's leadership to consider in possible implementation of a guided pathways model. We organized the coding for anticipated barriers within a framework of Bolman and Deal's (2013) lenses of structural, human resource, political,

and symbolic frames. We coded suggestions for successful implementation both into Bolman and Deal's categories and with Kotter's (1995) recommended steps in organizational change management. These tools are outlined below:

### Interview Evaluation Tools

Figure 1

*Change Management: Kotter's State of Change + Bolman and Deal's Four Frames*

	Structural frame	Human resources frame	Political frame	Symbolic frame
Anticipated barriers				
Sense of urgency				
Guiding coalition				
Uplifting vision and strategy				
Communicate vision and strategy through words, deeds, and symbols				
Remove obstacles and empower people to move forward				
Celebrate early wins				
Keep going when the going gets tough				
Incorporate change into the organizational culture				

Each response was coded individually, using direct quotes from the study participants. After individual responses were coded, we summarized all the responses into two master charts using the same framework as we used in coding the individual responses. The first master chart summarized all responses from benchmark institutions and national thought leaders who have already been involved in implementing guided pathways at their institutions or at consulting institutions. The second master chart summarized all responses from SCC respondents, who are anticipating the change to guided pathways but have not yet been through the process. Keeping the two categories separate allowed us to view any differences between those anticipating the changes and those speaking from the perspective of having experienced the process.

### **Findings**

We will first look at the responses from the benchmark institutions that have already been involved in a guided pathways process and national thought leaders and consultants in the movement. We will then turn to the results from the interviews and written responses from the target institution, SCC, in which those involved are anticipating the process but have not yet embarked full-on in a guided pathways project. Separating the SCC respondents and benchmark college/consultant responses will allow us to view differences and similarities between the two groups, thereby laying the groundwork for recommendations later in the paper.

#### **Benchmark Group Responses: Anticipated Barriers**

We will first look at the responses from faculty, staff, and administrators at benchmark community colleges that have already deeply engaged in a guided pathways process, as well as from national consultants and thought leaders (Jenkins and Johnstone) in the guided pathways movement. Hereafter we will refer to this as the “benchmark group.”

Table 1

*Benchmark Group Respondents by Category*

National consultants and thought leaders	N = 2
Administrators/college leaders	N = 2
National experts	N = 2
Faculty	N = 2

In responding to our questions about what kinds of challenges should be anticipated, our benchmark group brought up the following issues:

**Structural frame.** In terms of structural issues that will present challenges to implementing a guided pathways model, the benchmark group identified the following challenges:

- 1) It takes a significant amount of time to accomplish change with full-campus participation vs. top-down decision making (n=4).
- 2) There is a need for funding/resources to support advising and IT support (n=3).
- 3) Changes to advising model are required (n=3).
- 4) It is challenging to figure out how to accommodate different student scheduling needs (n=1).
- 5) Transfer institutions are too picky or capricious about accepting transfer credits (n=1).
- 6) We must figure out how general education integrates into pathways (n=1).
- 7) It is difficult for administrators and presidents to navigate, because guided pathways necessitates a change in the business model (n=1).

One faculty interviewee recalled, “I remember something in Dr. Davis Jenkins’s research saying that on average it takes colleges about five to six years to get an initiative like this off the ground [and] fully implemented. And yes, that’s about the pace that we’re going.”

Jenkins said:

This is a very different business model. . . . In the past, I think we've generated enrollments by churning a lot of students through, especially in developmental courses. [By contrast, guided pathways] is a model in which we recruit and retain students and generate enrollments by offering programs that lead to jobs and good jobs and further education, leading to further advancement in the labor market. I find Washington institutions and presidents more disposed to this than in some other parts of the country, but it's still a risk because by providing more structured programs, you risk [losing] students who want to have a lot of choice. That's a hard thing to sell. [The change] also requires financial resources, particularly to hire new advisors and, secondly, to upgrade IT systems, which I know is a sore subject in Washington State community colleges. (personal communication, March 15, 2016)

**Human resources frame.** Within the human resources frame, where the central concept is balancing organizational with human needs (Bolman & Deal, 2013), respondents from the benchmark group identified the following anticipated challenges:

- 1) Faculty are concerned that some courses will not be included in the pathways, threatening the livelihoods of some faculty members (n=4).
- 2) Advising workloads would increase (n=4).
- 3) Faculty members and their unions are concerned about faculty workloads being negatively impacted (n=3).
- 4) There will not be adequate time for committee members to engage in the necessary work (n=3).

- 5) Students will not participate as necessary in new requirements for advising that guided pathways will introduce (n=3).
- 6) There is a lack of trust among faculty members on advising outside of one's particular subject area (n=2).
- 7) Guided pathways is such a big change that people are overwhelmed and don't know where to start (n=1).

“The colleges have said, ‘This is more that you’re asking us to do. We’re already so overwhelmed,’” said a leader in a statewide guided pathways effort. “I don’t really think there’s been a whole lot of pushback or reluctance to jump in and do the work, just some concerns about time management, really, especially our smaller schools. The individuals there are wearing so many hats.”

There is “no doubt that, particularly in some of the liberal arts disciplines, there was some worry,” said another state leader. “If we become more prescriptive or if the number of electives or the courses that are available to students, if that number decreases, how will that affect me and my livelihood?” The leader continued, “There’s certainly some concerns there, particularly in some of the disciplines that don’t transfer as readily to the four-year colleges.”

Johnstone said faculty unions are:

Interested in things like, are we going to ask faculty to do more for the same amount of pay? It gets murky of course when you get into changing what people do with their time, and that’s where sometimes it gets tricky. One of the other things unions are concerned about is thinking this is all about efficiency and we’re just trying to get rid of people, which is not in any way I think the case. (personal communication, February 16, 2016)

**Political frame.** Within the political frame, where the central concept is negotiating power, conflict, competition, and politics (Bolman & Deal, 2013), respondents from the benchmark group identified the following anticipated challenges:

- 1) There are concerns about who will choose the courses that make it into a pathway, particularly for general education or across disciplines (n=4).
- 2) There are concerns about how to facilitate co-engagement vs. buy-in from faculty (n=2).
- 3) It is difficult to get momentum for the change without leadership with enough authority to activate changes (n=1).
- 4) Influential individuals may act partly in interest of students but also partly in self-interest (n=1).

As a statewide leader put it:

[Pushback] varies by college and how the message was conveyed at the college, whether faculty were included very early on in a lot of the planning that took place, whether it was more of a top-down approach: “These are the changes we’re going to make, and we need you to get on board.” Whether it was buy-in versus co-engagement—I think that made a big difference at each school.

In terms of concerns about which classes would be chosen for pathways, a faculty member acknowledged that “at the beginning the most difficult part of the conversation was ... how this could potentially push some courses out of the pathways that the students were taking.”

**Symbolic frame.** The central concepts for the symbolic frame are creating meaning and inspiration (Bolman & Deal, 2013). Respondents from the benchmark group identified the following anticipated challenges:

- 1) Guided pathways could limit a student's freedom of choice (n=5).
- 2) Guided pathways is a big cultural change (n=2).
- 3) College stakeholders must first admit there is a problem with the current system (n=1).
- 4) There is a perception that guided pathways is a vocational/skills training only (n=1).
- 5) There is a need to frame education more broadly, as educating citizens and not just workers (n=1).

A statewide leader shared the following experience from a recent presentation in a nearby state:

Some liberal arts faculty still have that, frankly, romantic idea about students coming to college and finding their way and exploring different things and being interested and finding what captures their imagination, and this really romantic view of what students do in college. The reality is that I don't really see a whole lot of that. We don't have a whole lot of students that come to community colleges that are here to explore. They're really very focused on the outcome of either getting through a program and getting a job or getting through a program and transferring to a four-year institution. We don't have a lot of folks that just come and want to explore and figure out what they want to study.

There could be some of those, but it's a very, very small group of students.

One of the biggest obstacles is that "the system's been the same for 500 years," said Johnstone. "The university model where you go and wander and find yourself—it's always worked really well for rich students because they have the time and a capacity to wander without it costing them," he continued. "It doesn't work well for a lot of the other students to go into higher education." (personal communication, February 16, 2016)

**Benchmark Group Respondents: Suggestions for Change Management**

The benchmark group had several suggestions for change management based on Kotter's (1995) eight steps. They are outlined below.

**Sense of urgency: structural frame.** Respondents from the benchmark group identified the following structural recommendations for creating a sense of urgency for implementing guided pathways changes:

- 1) Demonstrate to faculty how they themselves can't figure out how to map a successful pathway based on currently available advising resources (n=3).
- 2) Identify a clear need for students, especially in terms of top transfer destinations (n=3).
- 3) Changes to state laws on developmental education, and allocation models based on completion, may drive need for change (n=2).
- 4) It is better advising to provide clear, professionally designed pathways for students (n=2).
- 5) Grant timeline and requirements may drive need to start some of the process (n=2).

A number of respondents suggested that it was a useful exercise to have faculty try their hand at mapping out a transfer plan based on just their school website and a transfer school website. Johnstone tells the story of one school, where nearly 30 faculty from different departments were called to a room to complete this exercise:

They asked the biology faculty to leave the room, and they asked the rest of the faculty to design the ideal two-year pathway in biology to transfer to their top transfer destination.

A couple of hours later, they couldn't do it. It was that confusing to the people who

worked at the college, much less the students. That was their epiphany moment.

(personal communication, February 16, 2016)

As Jenkins put it, this and other similar exercises that put “faculty and advisors in the students’ shoes” are useful. “Ultimately, all these exercises are really engaging the faculty and advisors and stepping back and asking the question: ‘What’s happening to the student outside my advising session, outside my individual class?’” (personal communication, March 15, 2016)

**Sense of urgency: human resources frame.** Respondents from the benchmark group identified the following human resource–framed suggestions for creating a sense of urgency for implementing guided pathways changes:

- 1) Preparatory meetings about the issues and the idea of guided pathways beforehand will prepare people to engage in the work when it is time (n=2).
- 2) Someone needs to take responsibility for the majority of students who are currently in developmental education, general education, or pre-nursing (n=1).

“We had some meetings with the discipline, and there had actually been quite a few focus groups ... that I had been part of as well with other colleagues in my department and across the college and the campuses,” said a faculty respondent. “There was some understanding of what was coming; it wasn’t just a new project.”

“In many cases, the largest groups of students ... the gen ed students, the pre-nursing or pre-health students, and the dev ed students—no one’s really responsible for, outside of the classroom or if they go to an advisor,” said Jenkins. “By responsible, I mean no one’s responsible for ensuring that they are getting on a program path and, once they get on a program path, progressing in it,” he continued. “If that’s okay with people, then fine, but most places, I think, will argue and agree that that is not fine, especially if they talk to students,” Jenkins said,

“because students tend to be really confused about this and when asked, students really want guidance” (personal communication, March 15, 2016).

**Sense of urgency: political frame.** Respondents from the benchmark group identified the following suggestions for convincing constituents of a sense of urgency for implementing guided pathways changes, from the viewpoint of the political frame:

- 1) Solid data on the problems sway faculty and others to understand the need for change (n=4).
- 2) The number-one obstacle is just the challenge of organizational change (n=3).
- 3) Focused and determined leadership is necessary to start and sustain the process (n=2).
- 4) It is helpful to bring in outside consultants to start the process (n=1).

Providing full data on student outcomes and challenges was identified as a key factor in influencing buy-in, especially for faculty members.

A statewide leader said:

There certainly was some concern on the part of people who felt like they wouldn't be able to teach pet courses anymore. In some cases, particularly with some adjuncts [they might say], “My courses aren't going to be taught” or “Maybe I won't be able to teach as much anymore. The reality is, they look at the data and they looked at the information that we provided to them. They understood that it was not in the best interest of the students who wanted to transfer to take certain courses. No one was going to step up and say, “I don't care whether it's in their best interest or not. We need to have these courses.”

“You need leadership in all levels of the institution,” said one respondent. “You need leadership focusing the colleges on, ‘We're going to do this, we want everyone to be part of the

solution, but we're going to do this.'" The respondent continued, "Someone at the end of the day means the college has to be galvanized behind us. You're not going to have 100% of the people galvanized behind anything; that's true of any organization."

**Sense of urgency: symbolic frame.** Respondents from the benchmark group identified the following advice on using the symbolic lens to impart a sense of urgency for implementing guided pathways:

- 1) Hearing student needs will drive faculty and others to respond, because they care about student success (n=1).
- 2) We must believe the current situation is unacceptable and that we can do better (n=1).
- 3) It is our responsibility to create a nurturing environment for students, helping them understand why they are pursuing education (n=1).

Faculty and advisors "care about students," said one respondent. "They don't give a damn about other stuff, which is good. They don't care [about] performance funding," the respondent continued. "They care what happens with the students. That's why they're in this business. If you can couch [this change] in terms of the student experience, it's very powerful."

Another respondent said:

The idea is to create a nurturing environment for [students] to explore the issue that most of them are struggling with: "Why am I here in the first place? I have this vague idea that I needed to be in college." They don't know what it means. Creating that environment is crucial.

**Guiding coalition: structural frame.** Respondents from the benchmark group had the following structural suggestions for building a guiding coalition:

- 1) Create a system of steering committees that do the work and then report out or gather feedback before returning to modify work (n=4).
- 2) Start with a conference or retreat to engage faculty and form a team (n=3).
- 3) Include someone in the guiding coalition who can help with practicalities such as course numbering and degree requirements (n=1).

One administrator said:

That piece about the collaboration is important. You have to be able to—and we sort of call it this accordion structure—you need to have small groups of individuals that can come together quickly to sort of develop an initial idea that then gets taken out to a larger group for feedback and input, then it comes back to the first group for refinement, and then finally out to the larger group for final approval. I think that's important because if you try and do some of this work in a large setting with all of the faculty and all of the administrators, things get lost in the weeds. I have a small representative group that can do the hard work, bring it back out to the larger group, and kind of go through that iterative process.

A faculty respondent reported:

We had a meeting. We took some time during a winter break, and there were ... about 17 to 18 faculty members involved, and again a few administrators, and I think one or two staff members also involved in a three-day retreat over the winter break. [The group engaged in] just looking at what are our issues with our current advising model, and what could we do to change it and also looking at the Dr. Davis Jenkins's research. That is where our model was born.

**Guiding coalition: human resources frame.** Benchmark group participants did not have any advice coded into the area of human resources needs in building a guiding coalition.

**Guiding coalition: political frame.** Respondents from the benchmark group had the following guidance for building a guiding coalition, with a view to the political frame:

- 1) Include faculty members from across various disciplines (including English and math) in developing each pathway (n=6).
- 2) Include faculty union leaders and other influencers in the guiding coalition (n=3).
- 3) Identify faculty members who are passionate about advising (n=1).
- 4) Create an open nomination/volunteer process for faculty members to be included in the guiding coalition (n=1).
- 5) Include a counselor and/or advisor in each pathway group (n=1)
- 6) Deans and department chairs must be part of the guiding coalition (n=1)

One administrator said:

When you are creating guided pathways, you are deliberately creating environments which invite students with vaguely similar interests to explore together potential programs of study with some relationships to that vague area of interest; that's where we get pathways from. To make that work, you need to pull in faculty from a variety of disciplines. The program of study needs to be very clearly represented by faculty who populate that pathway—but to be effective, there needs to be access to faculty from outside the program of study. To give you an example: Every program of study contains a general education core; it really relies heavily on the expertise of math and English faculty. We found it important to distribute our math and English faculty equally among all advising pathways [to assist with] the important choices for students [and help them]

navigate through gen ed and not only fulfill their developmental requirements but [understand] which cadre of courses [they take] and why.

It was critical “that the pathways would not be developed unilaterally by any one discipline or workforce area, but in consultation and collaboration with all of the faculty who have courses in the pathway,” said another administrator. “So, because we have a general education distribution, there had to be an English faculty involved in the conversation, a math faculty, a humanities faculty.”

In engaging the faculty union leaders in guided pathways work, this same administrator noted that “three of the faculty, who really lead the charge in a lot of this work around the advisement model [and] the development of the guides, are presidents in our faculty union.” The administrator went on to note, “So, they have helped to keep the organization open [and] transparent for all of the faculty.”

An open nomination process and call for volunteers for faculty participation also helped build a guiding coalition on that campus, leading to broad faculty support. “We were asked who wanted to volunteer, and there were some nominations that were also done,” noted a faculty respondent from that campus. “That’s how I came about in being [elected] and then appointed to represent.”

**Guiding coalition: symbolic frame.** One respondent from the benchmark group suggested the following perspective in building a guiding coalition from the symbolic frame:

- 1) Emphasize change is being made by a broadly representative group, and though the process will be difficult, it is in the interests of the students (n=1).

“You need to get people brought into this, and we’re doing this for students,” said Johnstone. “We understand that we have a problem that we think this can help us address, and

it's a wide range of solutions, but the colleges that have gone down this path have made a commitment to it," he continued. "They know some of this stuff is going to be controversial [and] hard, but they've gotten the engagement of people throughout the organization to continue to make the ongoing commitment to the types of things you need to do" (personal communication, February 16, 2016).

**Uplifting vision and strategy: structural frame.** A benchmark group respondent had the following suggestion for crafting an uplifting vision from the structural frame:

- 1) The goal is to make sure students graduate on time with the right credits (n=1).

It is important to emphasize that "the goal is to have our students graduate without the excess credits, [or] to not be able to have enough when then they transfer to other institutions as a junior," said this respondent. "Besides that, we want them to make sure they are choosing a pathway so they're not wandering for so long and that they take those prerequisites ... to be able to take upper division courses once they do transfer."

**Uplifting vision: human resources frame.** Respondents from the benchmark group identified the following human resource–framed suggestions for creating an uplifting vision for implementing guided pathways changes:

- 1) Emphasize transparency, and communicate that this is for the students and not about taking jobs (n=1).
- 2) Faculty will find the conversations about guided pathways very engaging once they believe they will actually be used (n=1).
- 3) Faculty can be engaged if they feel they will be empowered to influence the process (n=1).

“It’s, how do we make this huge shift as an institution, trying to get this [change] to stay?” noted a faculty respondent. “It’s massive work, and the intention is for our students to be able to continue and graduate and get what they need versus having [a situation where] if we know what you need to take, why are we not telling you?” The concluded, “I think ultimately if we are transparent with that message, the faculty really would get on board versus feeling defensive and then they don’t cooperate.”

Jenkins said:

Once you get to the point of mapping ... then faculty believe that these maps are going to be used, they aren’t just something that’s going to sit on a table, that they’re going to actually be the default by which students’ plans are made. When faculty believe that, we’ve found that these conversations—because they involve conversations across disciplines, both within liberal arts and career workforce programs and with advisors—people would say they’re some of the most interesting and stimulating professional conversations they’ve had because they just never have time. It’s not a critique of people. They don’t have time to meet, even within their own departments, to really think of the big picture of, “What is the overall program or educational path for students in our programs.” (personal communication, March 15, 2016)

**Uplifting vision: political frame.** Respondents from the benchmark group had the following suggestion for creating an uplifting vision in terms of the political frame:

- 1) Identify that faculty will be the main players in developing the guided pathways course maps and will be held accountable (n=2).

Jenkins noted:

Although it's important advisors be involved, faculty ultimately have to be charged with deciding on the maps. They have to be held accountable for what the maps are. They can't just put whatever they want. It has to be transferable. It has to meet gen ed learning outcomes. If it's an occupational workforce program, it has to meet employer needs, etc., but they need to decide the content of those maps because they're the faculty. (personal communication, February 15, 2016)

**Uplifting vision: symbolic frame.** Respondents had numerous suggestions for crafting an uplifting vision from the point of view of the symbolic frame:

- 1) Tie guided pathways to previously set learning outcomes (n=1).
- 2) See guided pathways as a way to tie in many initiatives already underway (n=1).
- 3) Guided pathways can be seen as creating a way for students to bond with and support each other over common interests (n=1).
- 4) Reframe "resistance" as exploring the issues (n=1).

"We made a commitment about 13 years ago now that we would hold as standards of student learning or liberal education learning outcomes," said an administrator. "In collaboration with the faculty, we set up a series of ground rules for how the sequence pathways were going to be developed," the administrator continued. "And the first ground rule was that we needed to ensure that whenever the pathways were completed, the students would have had ample opportunities to attain the 10 learning outcomes that the college had established previously."

"If you see [guided pathways] as another initiative, I think it's just dead," said Jenkins. "But, if you see guided pathways as a way to integrate and leverage many of the things you've been doing, tie them together, then I think it is helpful" (personal communication, February 15, 2016).

**Communicate vision: structural frame.** Benchmark group respondents identified the following structural suggestion to keep in mind related to effectively communicating the vision and strategy to campus constituents through words and deeds:

- 1) Invest in the necessary technology tools to support the effort (n=2).

Said one faculty respondent:

Our tech services department has been really integral and helpful in creating a tool for us that gives you an updated list of advisees, shows you the progress of that advisee, and how close they are to being released from mandatory advising. It's a homegrown tool. An advisor can also decide to release an advisee before those 30 college-level credits, so that's built into the tool if they just feel like they have a really competent advisee, and they want to release them after one quarter. That's absolutely possible and built into the system. They can also chose to keep someone on mandatory advising beyond the 30 college-level credits if [they'd] like, but I don't see that happening. Not yet.

**Communicate vision: human resources frame.** Benchmark group respondents had the following suggestions for specific actions that would signal the strategy within the human resources frame:

- 1) Spend the time to deeply engage people in efficient, useful meetings (n=2).
- 2) Show that you take people's concerns seriously, and involve them in the process (n=1).

Jenkins said:

A lot of it has to do with really engaging people honestly, having well-organized, well-facilitated meetings that actually lead to results so that people feel like they're not wasting their precious time. Things like that seem common sense, but as Alison Kadlec

of Public Agenda says, people think that they don't have time to engage people and to do all this stuff, but the time you spend trying to correct the problems you create by not engaging people is so much greater than if you just take the time from the start. (personal communication, March 15, 2016)

**Communicate vision: political frame.** Respondents suggested the following for communicating the vision within the political frame:

- 1) Build a guiding coalition and/or lead to push out regular information to campus to showcase transparency (n=3).
- 2) Plan that it will take political capital to manage the change (n=1).

A faculty respondent noted:

We do have pathway leads. Their main roles are getting information out to all the faculty that are in that pathway about when are we meeting, what's our advising process going to look like for this quarter and reminders [to] email all your advisees to come at this time [and give] updates on the tools.

"One of our really small schools has gotten really creative with how they communicate within the college, both to their faculty/staff and their students," said a statewide leader. "I think they've done a great job of engaging everyone in their data."

**Communicate vision: symbolic frame.** In terms of communicating the vision from the viewpoint of the symbolic frame, one respondent suggested the following:

- 1) Brand the pathways with an institutional symbol (n=1).

In this case, the college named its guided pathways course maps after the college's mascot, giving them an institutional identity.

**Remove obstacles: structural frame.** Interviewees brought up the following guidance for removing obstacles and empowering people to move forward from the structural frame:

- 1) Call guided pathways course maps templates, and emphasize that these templates can be modified to fit student needs (n=1).
- 2) Train advisors on the templates to change habits of advising on course convenience and timing (n=1).
- 3) Use the pathways to connect students more efficiently with the right faculty advisors (n=1).
- 4) Provide support through ample institutional data analysis (n=1).

An administrative respondent explained:

We created the pathways so they are templates. The first is a full-time template, where we looked at, for our full-time students, what was the average number of credits that they took, and it's about 12. So, we created a full-time template of 12 credits per term. And then we created a part-time template. Most of our part-time students take six credits a semester. So, we created that part-time template. The goal is that when the advisors first meet with the students at orientation they tweak [the course map] depending on the student.

Another important consideration, noted this administrator, “is the advisor and the staff training [on] how to use these templates ... as a guide [and] how to modify them depending on a particular student's circumstances.” The administrator added, “And how to not fall into the trap of, ‘Well it's okay, you can still take that course instead because it fits your schedule better.’”

A faculty respondent said:

Sitting down and putting something together on paper was a different story with having data. We got a lot of the numbers of the students that are registering, that are enrolled but are not graduating, what our top programs of study [were] that students were entering. The data that the institution gathered was very helpful in understanding the need to be able to have more sequence and structure so that students were not wandering and floundering and wasting all these credits when they didn't need to take certain courses.

**Remove obstacles: human resources frame.** Respondents called out the following strategies to remove obstacles in terms of the human resources frame:

- 1) Be sure to address issues that bring out fear (n=1).
- 2) Make sure faculty workloads are rebalanced appropriately to account for the changes (n=1).

An administrator said:

The whole process of getting buy-in for us starts with recognizing the important role that faculty play and validating that and speaking to the areas [in which] they might have suspicion and innate fear and making sure that we address that. For example, they may have an innate suspicion and fear of the roles that the deans play through the right of assignments in determining what roles and responsibilities that they'll have and how they'll be compensated and evaluated for those roles. So we make sure that the faculty and the deans that they report to are all in the room as we are holding conversations about the advising process. We will specifically bring up subjects that we have been told or that we have reasons to think are the source of concerns for faculty and try to tease those out in conversations. Then it becomes the administration's role to give explicit reassurance to the faculty about their areas of concerns. And they also have to see that

reflected in the collecting bargaining process. So I think that's how we try to be transparent as possible and [have] key people in the room at all times.

**Remove obstacles: political frame.** Within the political frame, a respondent from the benchmark group identified the following recommendation:

- 1) Create incentives and build buy-in slowly based on the guiding coalition (n=1).

“We try to create movement based on incentives, not based on creating new expectations or requirements and imposing structure,” said this administrator. “Try to create an environment in which you can convince your friends to help engage their colleagues to begin creating an environment which welcomes changes in our system.” The administrator continued, “Begin to create that first of all. Work from a small group of friends, slowly begin exposing them to ideas, giving them opportunities to expand their numbers.”

**Remove obstacles: symbolic frame.** Anticipating that one obstacle may be objections to the small amount of data currently available to support guided pathways, respondents from the benchmark group had the following advice:

- 1) Acknowledge that there is not yet a large amount of data to back up guided pathways, but point out that it could hardly be worse than our current outcomes (n=2).
- 2) Emphasize that the college is striving to create an atmosphere that welcomes change (n=1).

A statewide leader said:

It's taken a little bit of a leap of faith on the part of colleges, that we don't have this huge body of quantitative data to show that this all works. What we do know, what we do have a huge quantitative body of, is that the stuff that we've been doing doesn't seem to work all that well. I think the idea of the guided pathways, of taking the best practices

and weaving them into a holistic approach to moving students from start to finish through their programs ... is something that cannot be worse than what we already have.

**Celebrate early wins: structural frame.** Interviewees brought up the following examples of early wins that were visible and could be celebrated early on, from the perspective of the structural frame:

- 1) Mandatory advising check-points were created (n=4).
- 2) Orientation was redesigned and made mandatory (n=3).
- 3) Students are committing earlier to programs of study (n=2).
- 4) Benchmark colleges are showing positive progress in student success such as progression, taking classes on the pathway, transfer outcomes, and English and math success rates (n=2).
- 5) Benchmark colleges are showing increases in retention and enrollment (n=1).
- 6) Pathways for most popular majors were rolled out before starting work on other majors (n=1).
- 7) Grants were obtained to continue work on guided pathways (n=1).
- 8) New articulation agreements were created with four-year colleges (n=1).
- 9) Getting to the level of mapping out coursework is when real progress is made (n=1).
- 10) Some programs reduced graduation requirements after going through the mapping process and looking at labor market outcomes (n=1).

One year after the guiding coalition was formed at one of the benchmark colleges, a faculty respondent noted:

Four out of the programs of study that had the most enrollment, those core sequences were submitted and they were done. That was a huge task because those were disciplines

like social sciences that have over 30 faculty. To get a consensus and to get what we needed, it took that whole year.

The same faculty member brought up other early wins that could be celebrated: students “have orientation that they have to go to. We have a cut-off for registration that we didn’t have before. These were huge things that because of the guided pathways [are] very visible.”

A faculty respondent at another college reported that one of the early changes was that “if the student does not meet with their pathway advisor, then they are blocked from registering for the following quarter, and they’ve got to go and find that person.” The respondent added, “That’s where having a dedicated [advising] day and getting all the marketing out and everything, is really, really helpful.”

Fifteen colleges in one state have responded to guided pathways and related initiatives recently by making “major changes to their advising, making it mandatory, and [for] some of them, using advising software. [The colleges] have totally revamped their front-door experience and made orientation mandatory,” noted a leader in that state.

Another statewide leader said:

In the technical programs, faculty were very much on board with looking at the programs and restructuring their programs of study. In fact [after a year of work at one college, faculty] were able to reduce the total number of courses necessary for the degree by about three, to nine credit hours. They did that by looking at all of the student learning outcomes across all the courses in those programs, and looking to see where maybe there were two courses that had about 90% overlap on student learning outcomes. They figured out how to accommodate the other 10% that was the difference and turn two

courses, essentially, into one and still give the students the same learning outcomes that they needed to complete the program.

**Celebrate early wins: human resources frame.** In terms of the human resources frames, respondents highlighted the following:

- 1) Hire additional advisors (n=1).
- 2) Improve process for faculty in connecting students with the right faculty advisor more efficiently (n=1).

One large college system hired an additional 25 advisors as part of its guided pathways work. A faculty respondent at this school said:

There were many visible things that we were seeing based on the work that was positive. Just getting 25 more people was a big deal. It's a lot of money, and it was a big deal. We were very happy with that because we knew students were going to get more personnel to go to and that they [now] get an assigned advisor.

“Once students are committed into a program of study,” noted an administrator, “a good advisor can connect students to faculty that have expertise in that field, and then students are really off and running. [That] facilitates their completion of a program or successful transfer with junior standing at a baccalaureate institution.”

**Celebrate early wins: political frame.** Within the political frame, respondents from the benchmark group recommended the following:

- 1) Highlight certain programs or schools that are doing a good job of implementing guided pathways, as an example to other programs (n=3).

“Our business pathway has been a model pathway,” said a faculty respondent. “They’re really good at being organized and marketing themselves, at sharing information, getting it out to each other and to the students.”

“One of the things that we’ve learned in this process is that you don’t have to wait until it’s all done to begin sharing the learning,” said a statewide leader. “A lot of stuff, it’s not quite this bad, but we learned it on Friday and shared it on Monday. Especially for those things that we found didn’t work, because we didn’t want people going down the wrong path.”

Another statewide leader said:

If another school in our system has done something really well, they’ve been successful at it, let us hear about that. Let us find out how to do that, so we’re not reinventing the wheel. We’ve tried to engage as many of our colleges in panel discussions and speed dating and just opportunities for them to learn from one another. I think, within any system, that it is important [to present] the colleges with an opportunity to share information.

**Celebrate early wins: symbolic frame.** One faculty respondent suggested the following in celebrating early wins, in terms of the symbolic frame:

1) Host regular sharing sessions on progress (n=1).

The respondent stated:

We’re in our almost fifth year. We have sessions that have just been dedicated to the sharing and explaining of what we have seen and the progress that we have made and where we still need to continue to push. That has been something that we have seen more and more than when I started or when other of my colleagues have been here. There’s

been a lot of different areas that we see improvement in, and they have been shared. I sat in a couple of them, and we're talking about auditorium-sized town hall meetings.

**Keep going: structural frame.** From the view of the structural frame, respondents had the following advice to keep going when the going gets tough:

- 1) Assign a specific person to be in charge of keeping the momentum going and handling the necessary updates (n=4).

A statewide leader said:

The colleges that seem to be the most successful in moving forward with their action plans are the ones that have really appointed someone to be in charge of their initiatives at their college, with someone really driving the train at their school and just keeping it going and keeping it all together. Those schools seem to be having an easier time of implementing and sustaining the changes than some where it's just a bunch of committees working together.

**Keep going: human resources frame.** Benchmark group respondents provided the following guidance on how to keep going through tough times, from the perspective of the human resources frame:

- 1) Do not be too quick to go off-track to appease faculty requests (n=1).
- 2) Be responsive to unanticipated impacts on course enrollments (n=1).
- 3) Faculty will be invested in what they created (n=1).

In the first year of the guided pathways initiative at one school, faculty members in a combined academic area asked to redesign the pathway before implementation, as they were struggling to integrate their faculty advising. The administrator at this college reported:

I declined their requests with a fairly detailed response in which I reiterated for them the theory behind the formation of these pathways. What was the thinking locally that would cost us to break this specific pathway at this particular time from these programs and disciplines? What would be lost if we were to pull the plug on this experiment before it even had a chance? We have a history of pulling the plug on experiments, [and if we did,] we would lose the opportunity to consider longitudinal data. That's a long way of saying that we turned them down and stayed the course.

A faculty respondent at another college reported:

Yes, there was concern [about] enrollment in particular. It turned out in the end where we didn't see such an impact. I do believe there was that one point where we saw a dip in enrollment for some courses. We went back and made sure that it wasn't something that was locked [in the pathway that was preventing] the students [from taking] a course. That has alleviated some of the dips that we saw. Yes, there was a lot of concern and that's why I think ultimately in the end, it's really about transparency and communication and understanding that this isn't about taking anybody's jobs away or classes away.

**Keep going: political frame.** Benchmark group respondents provided the following guidance on staying the course, from the political frame:

- 1) Make changes to leadership if necessary (n=1).
- 2) Use guiding coalition faculty to help troubleshoot problems (n=1).
- 3) Make sure person assigned to oversee initiative has enough authority to keep momentum going (n=1).

A faculty respondent said:

When you're launching an initiative and asking people to do work, you need that kind of authority to be able to call a meeting and to expect people to show up and expect people to be where they say they are going to be at a certain time, and that would be one of my recommendations. Have a full-time person dedicated to it, and have that person be someone with authority—but hopefully offer someone that “speaks faculty” and someone that can be a collaborator, that can move between those different groups of administration and faculty and students and tech services and the community relations folks. Every piece needs to be involved.

**Keep going: symbolic frame.** Recommendations from the benchmark group on how to keep going when the going gets tough, employing the symbolic frame, included:

- 1) Acknowledge that people get tired during the process of change (n=1).
- 2) Recognize that courses that had to be excluded from the pathways might have been well-taught and well-liked by students (n=1).

A statewide leader gave an example of a particular communications course that was found to transfer to only four out the 16 schools in the state:

It was a matter of taking that information and going back to faculty and saying, “Look. We know you love teaching these courses. There's no doubt that you're doing a great job at it. Students love the course. The reality is that students are not getting the credit that they need to get when they transfer with these courses.”

**Incorporating change: structural frame.** In the final step, incorporating the changes into the organizational culture, benchmark group respondents made the following structural recommendations for moving on with the process:

- 1) Move beyond current majors or number of terms in pathways to make more complete array of options (n=2).
- 2) Work on the next level of articulation agreements (n=2).
- 3) Make sure someone is responsible for updating the coursemaps (n=1).
- 4) Work on improving success/pass rates in courses next (n=1).
- 5) Further improve advising touchpoints and technology tools (n=1).
- 6) Make sure maps lead to specific job or transfer outcomes, not just generic degrees (n=1).

A faculty respondent said:

I think at this point we just need to continue going back to it, we need to go back and revise. It needs maintenance, it needs to be maintained, it needs to be taken care of. It's like a plant. We planted it, it's firmly planted, it's really nice, it has good soil. We need to now trim it and water it and talk to it and do all of that. We're firmly planted, but we need to maintain.

**Incorporating change: human resources frame.** In terms incorporating changes from the human resources perspective, one benchmark respondent noted the following:

- 1) Improvements with guided pathways energize faculty and staff to continue to make other improvements (n=1).

The culture of improvement “allows the college to begin thinking about, how can we improve the processes that maybe we've gotten used to over the years and have become stale?” said a statewide leader. “It's changing the roles that some people have at the college, but it's also very energizing for people who are really wanting to find a better way to do things.”

**Incorporating change: political frame.** From the point of view of the political frame, respondents from the benchmark group noted the following:

- 1) The process brings about closer connections between faculty and advisors (n=1).
- 2) The same organizational change structure used for guided pathways work can be used to implement other changes (n=1).

Guided pathways work has “helped us to create this dynamic structure, where whenever we need to make changes to a process ... [and] bring things together to help refine it, we can do so quickly and we can change on the fly,” reported an administrator. If “we see that something is not being [done], we can quickly come back together and change it.” The administrator concluded, “I think aside from the more tangible results of the students being better retained ... it’s really helped us to create a more dynamic institution that’s more agile, works more closely together than it did before.”

The same administrator noted:

[The process] has created a much stronger relationship between academic affairs and student affairs personnel. There’s a much greater appreciation by the faculty of what the advisors do. And we’ve greatly encouraged communication between the faculty and the advisors. And that’s key, because also [they are] the two groups of individuals who are the first contact with our students, and for them to be so much more on the same page now has been a tremendous help.

**Incorporating the change: symbolic frame.** Lastly, benchmark group respondents suggested the following points when considering the symbolic viewpoint of incorporating the changes into the organizational culture:

- 1) Colleges that have done the most work are seeing the most results (n=1).

- 2) Ultimately, this process was and continues to be about improving the labor market and educational outcomes for students (n=1).

Johnstone said:

We are not changing only one thing. We're not saying, "Everything else stays the same." We're going to change, this is not an experimental design. Right? We are changing a number of things at the same time, so I don't think that we can say we know exactly what the secret sauce is. When you look overall, you're talking about a number of things that we're working on at the same time. We're talking about structured programs of study, or we're talking about changing onboarding. We're talking about changing how we monitor progress. This is not one thing; it's many things. I think the colleges [that] have done the most and the deepest type of reform are the ones who are seeing the most change. We're early in this game. (personal communication, February 16, 2016)

### **SCC Responses: Overview**

We now turn to responses from faculty, staff, students, and administrators from the target institution, SCC, in which those interviewed are anticipating the process but have not yet fully embarked in a guided pathways project.

Table 2

#### *SCC Respondents by Category*

Administrators/college leaders	N = 7
Faculty	N = 6
Staff	N = 7
Students	N = 4

**SCC Respondents: Anticipated Barriers**

In responding to the questions about anticipated challenges to implementing guided pathways at SCC, the group of administrators, staff, faculty, and students identified several challenges.

**Anticipated barriers: structural frame.** Within the structural frame, in which the central concepts are clarifying roles, goals, and policies and aligning technology and the environment (Bolman & Deal, 2013), respondents from SCC identified the following anticipated challenges:

- 1) There is not adequate time for staff and faculty to engage in the necessary work (n=7).
- 2) There is not adequate funding (n=9).
- 3) There are technical challenges, such as the implementation of the new PeopleSoft system, called ctcLink (n=6).
- 4) Class coding and transfer agreements are not in alignment statewide (n=4).

Time for faculty and staff to work on this project, while also keeping up with their other essential duties, is a major concern. Implementing guided pathways “is a huge endeavor that I would compare to ‘flying the plane while building it,’” reflected one respondent. “We still have to teach our classes while we are in the process of changing the curriculum and structures (instruction and student services) at the same time.” Another wrote:

Some of this work requires people to stop their everyday work and reconsider whether it is the simplest, best, or cleanest way to do something—and that takes time off the front lines of serving students, which most community college employees feel like they do not

have. We are so lean-structured and lean-funded that there often doesn't feel like there is space to re-envision a new way to do things.

In terms of technical challenges, Washington CTCs are in the early stages of implementing a new statewide data management system dubbed ctcLink. This system is meant to handle everything from course registration to payroll. The first stage of the rollout has been fairly disastrous, with numerous glitches affecting all campus constituents and many limitations placed on customizing the system to meet particular campus or project needs (Camden, 2015). One respondent brought up the concern that the CTCs "are in the middle of a multiyear statewide migration to PeopleSoft, so implementing new business processes right now is especially difficult." The respondent continued, "If the guided pathway solutions developed require any deviation from standard enrollment or student tracking practices currently in place, we may be hard-pressed to accommodate those changes for the next few years."

Another respondent wrote:

It is hard to believe that Washington State is the home of Microsoft and a hub for the high-tech industry, but our entire CTC system is told what is or is not possible to undertake by the limitations of an antiquated computer network. Yes, ctcLink is coming, but the problems we have seen with that whole debacle thus far are equally mortifying. If we are asking employees at every level to invest time and mindshare in a radical change like guided pathways, we simply must simultaneously invest in the necessary and functional technological infrastructure to make their jobs do-able. Progressive thinking has to be supported by progressive capacity for change, or else it's moot. That's a systemic statewide issue that must be addressed soon.

**Anticipated barriers: human resources frame.** Within the human resources frame, where the central concept is balancing organizational with human needs (Bolman & Deal, 2013), respondents from SCC identified the following anticipated challenges:

- 1) There will be pushback from individuals or groups who are generally threatened by change (n=6).
- 2) There will be pushback from those who see it as their role to defy authority, in general (n=5).

As one respondent reflected, changing to guided pathways “means giving up the way we’ve always done [things] in favor of new practices.” Leaders will be challenged to help people “deal with the sense of loss that comes any time you make big changes.”

**Anticipated barriers: political frame.** Within the political frame, where the central concept is negotiating power, conflict, competition, and politics (Bolman & Deal, 2013), respondents from SCC identified the following anticipated challenges:

- 1) We must get buy-in from all faculty, not just a few (n=6).
- 2) There will be pushback from faculty who would find their course offerings limited if those offerings did not fit the agreed-upon pathway or staff who would see their jobs change the most (n=5).

Concerns about which classes will not be included in the pathways are a major factor, as the departments and individual faculty members offering those courses will likely have to shift resources and jobs to other courses instead. As one respondent wrote, “There could be some classes off the beaten path that will not make it into guided pathways, and that will be an unfortunate casualty of this change.”

Another noted:

Change of any sort is always going to create some resistance. I worked with a team who tried to implement an online fixed-track degree here at the college several years ago. The biggest resistance we ran into was from faculty who taught elective courses. When you select the courses that will go into the degree, you eliminate the whole notion of electives in favor of a simple consistent path for students. Those faculty whose elective sections were not selected for the degree were very upset. That will be an issue when we attempt to do this again.

**Anticipated barriers: symbolic frame.** The central concepts for the symbolic frame are creating meaning and inspiration (Bolman & Deal, 2013). Respondents from SCC identified the following anticipated challenges:

- 1) Guided pathways will run counter to the notion of academic freedom for faculty (n=4).
- 2) Some faculty prize the ideal of academic discovery over practicality of time and cost to degree (n=4).

In terms of academic discovery, a respondent wrote:

I think [guided pathways] might be embraced or resisted as part of a larger generational leadership shift in higher ed. White middle-class baby boomers often share positive memories of academic aimlessness as a key component of their path to self-discovery, and lucky them. Every generation since has had less time, less money, and more pressure to get into the workforce, both to survive and advance professionally. I think Gen X and Y tend to understand and support guided pathways, both in prof tech and transfer, because they are less likely to have had the same level of exploratory academic privilege as the boomers. That's based on observation and it's early, but I see it pretty clearly here.

Meanwhile, another respondent brought up resistance to guided pathways from a more positive symbolic viewpoint. “I think there is also fierce defense of academic freedom for lifelong learning as a higher ed paradigm—this will likely be (and should be) championed by our faculty,” the respondent said. “I imagine they will be the check and balance to be sure we don’t become too mechanical and forget our educational identity.”

### **SCC Respondents: Suggestions for Change Management**

**Sense of urgency.** Establishing a sense of urgency, and therefore strong motivation for the necessary change to happen, is a crucial first step in any successful change management process. The change must be framed in such a way that constituents see the reason to change or perish—to make sure that this change is successfully implemented, or risk seeing their institution fail and their livelihoods threatened. Strategies to establish the sense of urgency, and the next steps in Kotter’s change management process, can be viewed through the same Bolman and Deal lenses as the anticipated barriers.

***Sense of urgency: structural frame.*** Respondents from SCC identified the following structural recommendations for creating a sense of urgency for implementing guided pathways changes:

- 1) Improve outcomes for students (n=12).
- 2) Students already want and expect this; institutions must keep up (n=8).
- 3) Students are frustrated with course availability, timing, and transfer outcomes (n=6).
- 4) Better processes would help students retain and best use financial aid (n=5).
- 5) More structure is more support (n=8).
- 6) Define the problem clearly at the start (n=6).

The student respondents expressed myriad frustrations with the current system. One student said:

Advisors, they just gave me the sheet of paper, right? Like just go, and just read it, and I just kept on reading. I didn't get it because I'm an immigrant, so I didn't know what to do. All the papers, but it's not clear for me, but I came [to the advising center] many times. Even more than 10 times just to ask, what should I do? That's the most frustrating part for me. Which classes do I have to take?

This same student, who wants to be an engineer, relayed his frustration with how the community college and the state's largest university coordinated transfer advising:

The one thing I wanted to point out is that on the [community college] website, let's say in my degree program, [it] is recommended that you must take some math requirements for the [University of Washington]. I just look on the UW website for the requirements for civil engineering, and on the website it says there is no requirement over there. You know, it's not okay. Like, why is it saying that? ... The website is not clear.

"Sometimes I feel like advisors will throw stuff at you that you don't need or plan something out for you that you don't want to do, but you have to take it," said another student respondent. "It's frustrating to talk to advisors, but I know they're just trying to get us out of here at the best timing point for our future."

The students also called out course timing and availability as a problem with the current cafeteria-style model of course offerings.

"Let's say a student will have to take a course spring quarter and graduate or he [won't be able to transfer] to the next university," said one student. "But over [at another university that

same] course will not be accepted. [Meanwhile, the course] will be not offered for a winter quarter or in any quarter. It is not efficient.”

One staff respondent wrote:

Students are already starting with the end in mind—we just have to keep up. They are already coming to us with the purpose of getting the career they want, the job they want—and if not that, at least the lifestyle they want to have, and are looking to us as a means to get there. Less college students are attending college for the sake of lifelong learning, critical thinking, and broadening their worldview—the Internet appears to be filling that role more and more. It seems like today, students want to get in and out of college as quickly and simply as possible—our world is an increasingly complex network of too much information. If we want to stay relevant to that changing culture, higher ed will have to help tailor our pathways to help students reach their goals in as direct a way as possible.

Another wrote, “Many (most?) of our students need to progress through their degree tracks as quickly and efficiently as possible. They struggle to get registered for the right courses each quarter, and there are far too many different pathways for students to consider.” The respondent concluded, “We can help by simplifying the process, and guided pathways offer[s] one way to do so.”

***Sense of urgency: human resources frame.*** Respondents from SCC identified the following human resource–framed suggestion for creating a sense of urgency for implementing guided pathways changes:

- 1) Faculty will enjoy having more involvement (n=3).

This response, from an administrator, was a very positive framing of the motivation for faculty in the process. As the administrator wrote, “Faculty also benefit by becoming more engaged with the students and working more closely with faculty on the curriculum for the entire pathway rather than individual courses.”

***Sense of urgency: political frame.*** Respondents from SCC identified the following suggestions for convincing constituents of a sense of urgency for implementing guided pathways changes, from the viewpoint of the political frame:

- 1) Hear from experts outside campus (n=8).
- 2) Learn how guided pathways and choice architecture principles work well in areas outside of education (n=4).

Demonstrating the success of choice architecture in fields outside of education and within education, from experts outside SCC, could help build political consensus for the need for these changes. One respondent suggested that leaders use comparisons to the fields of healthcare, mortgages, banking, and retirement: “We all want those to be simple, straightforward, and clear. I know I’d like a guided pathway for my retirement plan.”

***Sense of urgency: symbolic frame.*** Respondents from SCC identified the following guidance on using the symbolic lens in imparting a sense of urgency for implementing guided pathways:

- 1) Guided pathways is the work we are already doing and should do (n=7).

One respondent wrote:

In a way, guided pathways is an umbrella for everything we already know we need to do—even without the catch-all title, I believe colleges would continue to work toward these outcomes to serve students with or without a “guided pathways” movement.

**Build a guiding coalition.** The next step in Kotter's suggested change management process is to build a central group of champions for the cause, who are empowered enough to successfully lead the change effort.

***Guiding coalition: structural frame.*** Respondents from SCC had the following structural recommendations for building a guiding coalition:

- 1) Leaders of the process should be the vice president of student services and vice president of instruction (n=9).
- 2) A specific project leader should be identified, with this project as the priority (n=5).
- 3) The leaders should be the catalyst to identify specific changes (n=8).

A respondent suggested that "there needs to be a formal project manager assigned, and ideally it should be someone dedicated to the project (rather than assuming someone will do this on top of their other work)."

***Guiding coalition: human resources frame.*** Respondents from SCC did not have advice for building a guiding coalition from the human resources frame.

***Guiding coalition: political frame.*** Respondents from SCC had the following suggestions for building a guiding coalition, with a view to the political frame:

- 1) Get a champion involved from each area (n=10).
- 2) Involve the faculty senate (n=12).

"There should also be a steering committee comprised of representatives from each unique constituency (identify which constituencies have unique needs or concerns about such a program and identify a liaison for each of those constituencies)," wrote one respondent. "The members of the steering committee should ensure critical dialog takes place with those various groups and that everyone is represented at the project table." Similarly, another respondent

believes buy-in could be achieved by asking faculty “who are formal and informal leaders for their wisdom, their experience, their insight, their patience, and their help.”

***Guiding coalition: symbolic frame.*** Respondents from SCC did not identify suggestions for building a guiding coalition from the viewpoint of the symbolic frame.

***Uplifting vision and strategy.*** The third step in Kotter’s suggested change management process is to create an uplifting vision and strategy for the change. This vision should be feasible and easy to communicate and one that inspires all involved to become shared authors in the change process (Kotter, 2012).

***Uplifting vision: structural and human resources frames.*** SCC respondents did not identify any guidance related to building an uplifting vision that were coded into one of these two frames.

***Uplifting vision: political frame.*** Respondents did have a suggestion for creating an uplifting vision and strategy that would benefit the outcome and process in terms of its political support:

- 1) Point out the professional and technical faculty have already successfully provided a version of guided pathways for many years (n=6).

***Uplifting vision: symbolic frame.*** Likely because vision is strongly aligned with symbolism, multiple SCC respondents had suggestions related to building an uplifting vision and strategy that can be categorized within the symbolic frame.

- 1) Leadership should provide a strong vision (n=11).
- 2) Innovative spirit and student-centeredness of employees should be called out in building the uplifting vision (n=4).

- 3) This work should go ahead with or without additional funding or support, because it is an imperative (n=6).

As a preview to what would likely be part of the uplifting vision for campus, one administrator wrote:

Our faculty and staff are intelligent, student-centered individuals who want our students to be successful and also work well with each other, across disciplines. There is a very innovative spirit at [SCC] that also explains part of our willingness to try new things and see how they impact students.

Meanwhile, a staff respondent conveyed a call for action: “Start NOW. Don’t wait for a grant, or someone else to do it. Begin now.”

**Communicate the strategy and vision through words, deeds, and actions.** The fourth step in Kotter’s suggested change management process is to communicate the vision and strategy through words, deeds, and actions. A vividly formulated vision, promulgated through all means by the guiding coalition, will prompt others to engage in the change process without cynicism (Kotter, 2012).

*Communicate vision: structural frame.* SCC respondents did identify structural ideas to keep in mind related to effectively communicating the vision and strategy to campus constituents through words and deeds:

- 1) President must keep the board of trustees informed (n=3).
- 2) Show good intent by identifying which parts of the change are win-win (n=4).
- 3) Be specific about anticipated changes (n=6).

“The key is to be specific about what [the changes] look like and mean, not having general conversations about it,” wrote one respondent. “General conversations allow everyone

to live with their creation about what it means, rather than really see what specifically it means in terms of class offerings and courses needed on any given path.”

***Communicate vision: human resources frame.*** Respondents suggested the following specific actions that would signal the strategy within the human resources frame:

- 1) Plan for the time this process will take and adjust workloads accordingly (n=7).
- 2) Deluge employees with information to get their buy-in (n=6).

“Anticipate that people may feel like this is ‘one more thing’ to do on top of being spread very thin,” suggested a respondent. “Have realistic conversations about what would need to be taken off people’s plates to reasonably accommodate this new work.” The respondent concluded, “For all employees (not just unionized), do not underestimate the amount of time, energy, and work guided pathways will be to implement—it is extra work!”

***Communicate vision: political frame.*** Respondents provided quite a lot of feedback in this area of the change management process, suggesting it is a critical piece for successful implementation:

- 1) If faculty and staff are included early, they will buy in (n=7).
- 2) Transparency and data sharing will encourage buy-in (n=8).
- 3) Include students in the conversation early and often (n=4).
- 4) Be specific about changes so there is not fear about things that actually would not be affected (n=5).
- 5) Emphasize that change cannot be top-down (n=5).

Negotiations with faculty and other unions will be an important part of the process, and the guiding coalition must show its good faith through both its words and deeds in tackling this part of the change process early. One respondent had this suggestion for leadership:

Discuss what the potential changes mean for faculty workload or working conditions and be prepared to negotiate those changes. Do that work before much other work takes place. Engage the union in finding ways for the project to be successful by both student and faculty definitions rather than waiting to negotiate what you need faculty to do after the fact.

***Communicate vision: symbolic frame.*** Respondents had the following suggestion for communicating the vision in terms of the symbolic frame:

1) Acknowledge the amount of time and effort needed for the process (n=4).

“Don’t minimize the amount of people power (time, energy, and heart) that this will take,” one respondent said. “Own it, and respond accordingly.”

***Additional steps.*** The four final steps in Kotter’s change management process are: remove obstacles, celebrate early wins, keep going when the going gets tough, and incorporate change into the organizational culture. As the SCC interviewees have not yet gone through the guided pathways changes, there was only one suggestion made in terms of these additional steps. That suggestion related to celebrating early wins.

***Celebrate early wins: political frame.*** A few initial mini-grant projects related to guided pathways have already been awarded at SCC, which were offered as a way to lay the groundwork for the coming larger process.

1) Point out that many successful guided pathways mini-grant proposals came from the faculty ranks (n=3).

“We just offered some guided pathways mini-grants at [SCC], and faculty were the heaviest responders and offered up some brilliant ideas to try out,” wrote one respondent.

Emphasizing faculty participation in the mini-grant process will pave the way for more faculty support of the larger process.

### **Summary and Conclusions**

The guided pathways movement is starting to gain momentum in Washington State. As evidence, Skagit Valley College, Pierce College and South Seattle College were selected to participate in the nationwide American Association of Community Colleges' guided pathways project. Furthermore, the State Board partnered with the College Spark Foundation to select and fund five colleges to implement the guided pathways approach starting in summer of 2016, with another five colleges selected for grant funding to begin in 2018. As SCC prepares to take part in the guided pathways movement, the concerns and recommendations from stakeholders at SCC, benchmark colleges, national experts, and national consultants can be used as a guide to ensure that the implementation is as smooth as possible. The findings from this research project illustrated that change management is difficult and at times, painful to endure. The shift of institutional culture to accept change is key. With that in mind, below are the summary of the top concerns and recommendations from the findings to successfully implement a guided pathways approach for SCC.

#### **Top concerns with guided pathways**

A review of the data detailed above shows some responses as being the most mentioned by those we interviewed. In summary, the top concerns were as follows:

- 1) Faculty are concerned that some courses will not be included in the pathways, threatening the livelihoods of some faculty members.
- 2) Advising workloads will increase.

- 3) Faculty members and their unions are concerned about faculty workloads being negatively impacted.
- 4) There will not be adequate time for committee members to engage in the necessary work.

### **Top Recommendations for Implementation of Guided Pathways**

Similarly, some recommendations emerged as the most critical, as weighted by the number of respondents who gave them. Those recommendations included:

- 1) If faculty and staff are included early and often and given an important role, they will be invested in the process.
- 2) Know that it will take a significant amount of time to accomplish change with full-campus participation vs. top-down decision making.
- 3) Plan for funding/resources to support advising and IT support.
- 4) Address concerns about shifting faculty workloads and time allocation for committee work.
- 5) Transparency as well as frequent and useful sharing of relevant data will increase and sustain support for the change process.
- 6) Include faculty members from across various disciplines (including English and math) in developing each pathway.
- 7) Assign a specific person to be in charge of keeping the momentum going and handling the necessary updates.
- 8) Emphasize that the change is being made to improve outcomes for students.

### **Suggested guided pathways implementation plan for SCC**

The design of this implementation plan was developed from the findings in the benchmark data and the findings at SCC.

**Define roles of stakeholders for creating and implementing guided pathways.**

- The role of the instructional faculty and librarians is to be instructional and discipline experts with autonomy to construct pathway content.
- The role of student services is to be the support and career guidance experts embedded alongside faculty.
- The role of administration is to be the resource providers and coaches for guided pathways construction and implementation.
- The role of IT and marketing is to support SCC as requested for successful implementation.
- The role of external partners such as business and industry, accreditation agencies, transfer institutions, and K–12 schools is to advise seamless and successful pathways for students.

**College leadership must address concerns at SCC.**

- Faculty are concerned that some courses will not be included in the pathways, threatening the livelihoods of some faculty members.
- Advising workloads will increase.
- Faculty members and their unions are concerned about faculty workloads being negatively impacted.
- There will not be adequate time for committee members to engage in the necessary work.

**Recommendations to keep in mind when implementing guided pathways at SCC:**

- Involve faculty and staff early and often, and given an important role, they will be

invested in the process.

- Know that it will take a significant amount of time to accomplish change with full-campus participation vs. top-down decision making.
- Plan for funding/resources to support advising and IT support.
- Address concerns about shifting faculty workloads and time allocation for committee work.
- Transparency as well as frequent and useful sharing of relevant data will increase and sustain support for the change process.
- Include faculty members from across various disciplines (including English and math) in developing each pathway.
- Assign a specific person to be in charge of keeping the momentum going and handling the necessary updates.
- Emphasize that the change is being made to improve outcomes for students.

### **Recommended possible measurements for SCC by researchers:**

Completion rates, year-to-year retention rates, fall to spring retention rates, student achievement index numbers, financial aid debt loads by intent, average credits completed in Years 1–3, math and English placement rates, developmental education program completion rates, percentage of students completing college-level work prior to transfer, baccalaureate graduation rates, employment rates, outcomes assessment, Community College Survey of Student Engagement (CCSSE), culture-climate survey

### **Timeline for Implementation**

Based on our interviews and conversations with the benchmark colleges, national consultants, and state system experts who have undertaken reforms on the guided pathways model, we

estimate the process takes a minimum of five years. This is consistent with the research of Davis Jenkins. Below is the timeline suggested by Jenkins (2014) for successful implementation:

Figure 2

Year 1	Engagement/High-Level Planning	<ul style="list-style-type: none"> <li>● Make case for change.</li> <li>● Broadly engage faculty and staff in scrutinizing current practice, planning scale redesign.</li> <li>● Constantly communicate vision and goals.</li> </ul>
Year 2	In-Depth Planning/Initial Implementation	<ul style="list-style-type: none"> <li>● Map pathways for largest programs.</li> <li>● Plan redesign of intake system, including dev ed, into program “on-ramp.”</li> <li>● Plan reorg of advising to support timely program progress and completion.</li> <li>● Plan upgrade of SIS to support student progress monitoring and e-advising.</li> <li>● Continue broad communication and engagement.</li> <li>● Train advisors and faculty for Year 3 implementation.</li> </ul>
Year 3	Initial Scale Implementation	<ul style="list-style-type: none"> <li>● Begin scale implementation of: <ul style="list-style-type: none"> <li>○ redesigned pathways for largest programs</li> <li>○ reorganized intake system</li> <li>○ program advising system</li> <li>○ student e-advising system</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>● Provide training to support initial implementation.</li> <li>● Formatively evaluate initial implementation.</li> <li>● Continue broad communication and engagement.</li> </ul>
Year 4	Improved Scale Implementation	<ul style="list-style-type: none"> <li>● Refine and expand scale implementation.</li> <li>● Continue training to support implementation.</li> <li>● Continue formative evaluation.</li> <li>● Continue broad communication and engagement.</li> </ul>
Year 5	Scale Implementation	<ul style="list-style-type: none"> <li>● Institutionalize structures and processes for formative evaluation and improvement.</li> </ul>

Based on the implementation plan and timeline outline above, the expected returns on guided pathways reforms in terms of improved student retention will take several years to be realized. For example, improvements in early indicators of student progression would not be evident until the end of Year 3, and data would not be available until the following year.

### **Conclusions and next steps**

The guided pathways model shows definite promise as a way to improve student outcomes, close racial equity gaps, and help Washington and its CTC system better prepare students for further education and success in the workforce—in manner that is both more efficient and more supportive than current practices. However, campus leaders will need to be strategic and patient in bringing about those changes. Our research shows that gaining support and understanding for the changes across campus, and particularly with faculty, is a critical part of the change management process. Making the deep changes required to fully implement a

guided pathways approach will be a long and sometimes painful process. Failure to provide concrete solutions to mitigate faculty, staff, and student concerns, and failure take the time to lay the groundwork for this change will likely lead to failure, or at least significant delay. Once in motion, the momentum for change must be kept going through a clear system of committees and deadlines and by ensuring there is a lead person in charge of the process to keep it on track.

**Statewide implications.** According to the findings from benchmark institutions, national consultants, and national experts, guided pathways has direct impacts on CTCs' expenses and revenue. The benchmark colleges indicated they have seen improved student retention and improved efficiency with instruction and support services. They also indicated that investment in guided pathways increased costs of operations. The increased costs are the result of more student persistence, and in turn the colleges needed to provide students with more instruction and support services. Yet, with more students persisting, the cost per completion is reduced and the college's revenue could therefore increase to cover the costs of the improvements to the college's structure and student engagement. Based on the findings of this study, the implications of guided pathways will lead to a bumpy ride, because the implementation process will require rigorous and widespread reform that must be embraced at all levels. Colleges will need to continue to build IT capacity to implement pathways, and the change to ctcLink will potentially add layers of complexity to the process. The reform will require significant resources; colleges must have a strong commitment to students and must work hard to implement a guided pathways approach that will benefit students greatly and close the racial equity gap in the state of Washington.

**SCC implications.** Why should SCC make the investment? SCC, like many of its sister colleges, is facing declining enrollment due to many factors (SBCTC, Annual Enrollment

Reports 2015). The fallback from the boom in enrollment following the recession and the improving job market are only a few of the reasons. The department of education also increased restrictions on financial aid for students, specifically, limiting the number of quarters students are eligible for Pell grants and tightening satisfactory academic progress policies (Federal Financial Aid an Office of the U.S. Department of Education). According to the findings from the interviews and conversations, the benchmark colleges found guided pathways a worthwhile investment to improve student completions. SCC has a long history of entrepreneurial innovations, as well as recent Achieving the Dream efforts, and that authentic self-assessment and ongoing revision has led to institutional improvements. Guided pathways can serve as the string that ties these successful initiatives together, weaving a more sustainable and collaborative movement. SCC's highly successful programs, grants, interventions, and offices that function to serve students and increase enrollment, retention, and completion rates can be brought under one umbrella of guided pathways. Guided pathways can be the mandate that creates the cohesive structure needed to guide, hone, and inform SCC's next steps as an institution. SCC can follow the leads of benchmark colleges in using the guided pathways approach as a response to make structural changes to combat declining enrollment and low student completion rates. For SCC to implement guided pathways, the college would need to reallocate existing resources and address the concerns from faculty and staff. SCC must look at programs that produce low transfer and high employment outcomes. SCC must question the value of programs and services that are not closely aligned to the college's academic programs. According to Jenkins, A growing trend around the nation is for colleges to connect developmental instruction and learning support programs to college-level programs to help students complete college-level gatekeeper courses in each student's area of study (personal communication, March 15, 2016). Despite the daunting

challenges, SCC is positioned to move forward with guided pathways, as both the faculty senate council and board of trustees have expressed unanimous support. Students have also voiced their support with recommendations to simplify and streamline degree paths and for the college to offer more support to students. Again, SCC leaders will need to be strategic and patient in bringing about those changes. Our research shows that gaining support and understanding for the changes across campus, and particularly with faculty, is a critical part of the change management process.

**Next steps.** Learning from the triumphs and failures of campuses that have already implemented guided pathways changes is of critical importance as Washington State's CTCs look ahead toward following this movement. Even more important will be sharing our challenges, data, and successes across the state's CTC system as we move forward. As we share our findings with SCC and other colleges in the CTC system, we must all recognize that when students must navigate an unclear or confusing "cafeteria style" of course selections, they are simply more at risk to not complete their programs. In particular, our first-generation and under-prepared students may not understand how to fully use college resources, and they may not feel comfortable even talking to an instructor or an advisor as they negotiate an array of choices. The time for colleges like SCC to implement an all-compassing and cohesive reform is now, because it is what our students need and deserve. Our shared goal is student success; our shared responsibility is to make sure that we, as campus leaders and stakeholders, do everything in our power to improve the student experience and the employment and educational outcomes for our students. In today's competitive global economy, we owe it to our students to work together to redesign and refine our systems to be better shepherds of our resources, and for the betterment of our students.

## References

- Ashburn, Elyse. (2007). Some Community-College Students Fall through the Cracks in Their First Month. *Chronicle of Higher Education*, 54(12), *Chronicle of Higher Education*, 2007, Vol.54(12).
- Bailey, T. R., Smith Jaggars, S., & Jenkins, D. (2015). *Redesigning America's community colleges: A clearer path to student success*. Cambridge, MA: Harvard University Press.
- Bolman, L., & Deal, T. E. (2013). *Reframing organizations artistry, choice, and leadership* (5th ed.). Hoboken, NJ: Wiley.
- Camden, J. (2015, October 7). Community colleges of Spokane caught in computer system snarl. *The Spokesman-Review*. Retrieved from <http://www.spokesman.com/stories/2015/oct/07/scc-new-computer-system-a-year-late>
- Carnevale, A. P. (2008). College for all? *Change*, 40(1), 22.
- Dougherty, K., & Reddy, V. (2013). *Performance funding for higher education: What are the mechanisms? What are the impacts?* (ASHE Higher Education Report No. 39:2). Hoboken, NJ: Wiley.
- England-Siegerdt, C., & Andreas, M. (2012). Washington State's model and programs: Applied baccalaureate degrees at community and technical colleges. *New Directions for Community Colleges*, 2012(158), 25–33. doi:10.1002/cc.20014
- Evans, N. J., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2009). *Student development in college: theory, research, and practice*. San Francisco, CA: Jossey-Bass.
- Federal Student Aid an Office of the U.S. Department of Education. Information for Financial Aid Professionals (IFAP). Retrieved from <http://www.ifap.ed.gov/ifap/>

Gladwell, M. (2007). *Blink: The power of thinking without thinking*. New York, NY: Back Bay Books.

Goodman, J., Schlossberg, N. K., & Anderson, M. L. (2006). *Counseling adults in transition: Linking practice with theory*. New York, NY: Springer Publishing Company.

Guichard, G. (1992). *Student equity policy*. Retrieved from <http://files.eric.ed.gov/fulltext/ED351071.pdf>

Iyengar, S. (2010). Nudge: Improving decisions about health, wealth, and happiness. *Journal of Pension Economics and Finance*, 9(1), 156–157.

Jenkins, D. (2014). Redesigning community colleges for student success: Overview of the guided pathways approach. Retrieved from [https://www.ccsse.org/docs/CCRC\\_Guided\\_Pathways\\_Overview.pdf](https://www.ccsse.org/docs/CCRC_Guided_Pathways_Overview.pdf)

Jenkins, D., & Cho, S. W. (2014). Get with the program ... and finish it: Building guided pathways to accelerate student completion. *New Directions for Community Colleges*, 164, 27–35.

Johnstone, R. (2015). *Guided pathways demystified: Exploring ten commonly asked questions about implementing pathways*. Retrieved from <http://www.inquiry2improvement.com/attachments/article/12/PWs-Demystified-Johnstone-110315.pdf>

Kena, G., Musu-Gillette, L., Robinson, J., Wang, X., Rathbun, A., Zhang, J., . . . Velez, E. (2015). *National Center for Education Statistics*, National Center for Education Statistics.

Kotter, J. P. (1995). Leading change: Why transformation efforts fail. *Harvard Business Review*, 73(2), 59.

Kotter, J. (2012). ACCELERATE! *Harvard Business Review*, 90(11), 44–58.

- Ma, J., Baum, S., Pender, M., & Bell, D. (2015). *Trends in college pricing 2015*. Retrieved from College Board website: <http://trends.collegeboard.org/college-pricing>
- Marcus, Jon. (2013, February 26). Community college grads out-earn bachelor's degree holders. *CNN Money*. Retrieved from <http://money.cnn.com/2013/02/26/pf/college/community-college-earnings>
- Mayer, S., Manning, T. M. (2014). A Case Study: Miami Dade College: Organizational Transformation at Large Scale. Retrieved from [http://ATD%20kickoff%20presentation%20June%202014\\_Scaling%20Susan%20Mayer%20.pdf](http://ATD%20kickoff%20presentation%20June%202014_Scaling%20Susan%20Mayer%20.pdf)
- National Center For Education Statistics. (2015). *Educational attainment*. Retrieved from [http://nces.ed.gov/programs/coe/indicator\\_caa.asp](http://nces.ed.gov/programs/coe/indicator_caa.asp)
- Rosenbaum, J., Person, A. E., Deil-Amen, R., & Project Muse. (2006). *After admission from college access to college success* (UPCC book collections on Project MUSE). New York: R. Sage Foundation.
- SBCTC. (2015). *Applied baccalaureate degrees at community and technical colleges*. Retrieved from [http://www.sbctc.ctc.edu/college/e\\_appliedbaccalaureates.aspx](http://www.sbctc.ctc.edu/college/e_appliedbaccalaureates.aspx)
- SBCTC. (2015). Annual Enrollment Reports. Retrieved from <https://www.sbctc.edu/colleges-staff/research-data/annual-reports/enrollment.aspx>
- Schlag, P. (2010). Nudge, choice architecture, and libertarian paternalism. *Michigan Law Review*, 6(106), 913–924.
- Schwartz, B. (2004). *The paradox of choice*. New York, NY: Ecco.
- Shapiro, D., Dundar, A., Chen, J., Ziskin, M., Park, E., Torres, V., & Chang, Y. (2012). *Completing college: A national view of student attainment rates*. Retrieved from National

Student Clearinghouse Research Center:

[http://content.nwacc.edu/publicrelations/CostContainment/NSC\\_Signature\\_Report\\_4.pdf](http://content.nwacc.edu/publicrelations/CostContainment/NSC_Signature_Report_4.pdf)

Sunstein, C. R., & Thaler, R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. New Haven, CT: Yale University Press.

Taylor, P., Fry, R., & Oates, R. (2014). *The rising cost of not going to college*. Retrieved from Pew Research Center website: <http://www.pewsocialtrends.org/files/2014/02/SDT-higher-ed-FINAL-02-11-2014.pdf>

United States Education Dashboard. (n.d.). Retrieved from <http://dashboard.ed.gov>

Washington Student Achievement Council. (2013). Educational attainment for all: Diversity and equity in Washington State higher education. Retrieved from [http://www.wsac.wa.gov/sites/default/files/Diversity\\_Report-2013.pdf](http://www.wsac.wa.gov/sites/default/files/Diversity_Report-2013.pdf)

Zeidenberg, M. (2015). Valuable learning or “spinning their wheels”? Understanding excess credits earned by community college associate degree completers. *Community College Review*, 43(2), 123–141.

**Appendix: Interview Instruments****Interview Questions for Stakeholders at SCC****Leadership**

Does Guided Pathways sound like a potentially effective strategy for increasing student progression and completion? Why or why not?

Do you believe that Guided Pathways will have any other benefits beyond progress and completion? Which ones?

What complications do you foresee Guided Pathways would bring to the college?

Do you expect push-back or opposition with moving toward guided pathways? If not, why? If so, why and by what stakeholder group(s)?

What are some anticipated obstacles/challenges do you expect in implementing guided pathways at your campus?

As a campus leader, how do you engage faculty in the planning and implementation of guided pathways?

What are some strategies to navigate and engage faculty unions at your campus?

What strategies should be used to gain buy-in?

**Staff**

Does Guided Pathways sound like a potentially effective strategy for increasing student progression and completion? Why or why not?

Do you believe that Guided Pathways will have any other benefits beyond progress and completion? Which ones?

What complications do you foresee Guided Pathways would bring to the college?

Do you expect push-back or opposition with moving toward guided pathways? If not, why? If so, why and by what stakeholder group(s)?

What are some anticipated obstacles/challenges do you expect in implementing guided pathways at your campus?

What are some strategies to navigate and engage staff on campus?

What strategies should be used to gain buy-in?

### **Faculty**

Does Guided Pathways sound like a potentially effective strategy for increasing student progression and completion? Why or why not?

Do you believe that Guided Pathways will have any other benefits beyond progress and completion? Which ones?

What complications do you foresee Guided Pathways would bring to the college?

Do you expect push-back or opposition with moving toward guided pathways? If not, why? If so, why and by what stakeholder group(s)?

What are some anticipated obstacles/challenges do you expect in implementing guided pathways at your campus?

What are some strategies to engage faculty in this process?

What strategies should be used to gain buy-in?

### **Students**

How did you decide what you want to study?

What frustrations have you encountered when trying to plan out your classes?

What people or online tools have been the most helpful to you in deciding your course plan?

If you came to school as a new student and had a pre-determined two year course plan handed to you, that had a clear list of what exactly to take based on your major at what time, would this have been helpful to you? What do you think are the advantages or disadvantages to this approach?

### **Interview Questions for Those Who Have Already Implemented the Move in Whole or Part Leaders**

Do you get push-back or opposition with moving toward guided pathways? If not, why? If so, why and by what stakeholder group(s)?

What were some obstacles/challenges that you faced in implementing guided pathways at your campus?

As a campus leader, how did you engage faculty in the planning and implementation of guided pathways?

What were some strategies to navigate and engage faculty unions at your campus (if applicable)?

What strategies did you use to get buy-in?

How did you move from conversations to actions?

Did student success (progression and completion) increase after implementation? If not, what are some reasons? If, yes what are the reasons?

What have been some other benefits, or complications, that Guided Pathways has presented to your college?

What are the next steps for your campus?

### **Faculty**

Why did you decide to align, or not align, with the Guided Pathways move on your campus?

What were some obstacles/challenges that your college has faced implementing guided pathways at your campus?

How were faculty engaged in the planning and implementation of guided pathways? How about the faculty union (if applicable)?

What strategies did the campus use to get buy-in?

How did the campus move from conversations to actions?

Has student success (progression and completion) increased after implementation? If not, what are some reasons? If, yes what are the reasons?

What have been some other benefits, or complications, that Guided Pathways has presented to your college?

What are the next steps for your campus?