Recommendations for a Successful Implementation of Guided Pathways Model in North Carolina Community Colleges

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Abstract

This research aims to study challenges of implementing Guided Pathways model in 17 North Carolina community colleges. The findings indicated that most colleges struggled with implementing programs for student success.
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For more than 50 years, North Carolina's community colleges have consistently embraced their mission to improve student success. The North Carolina Community College System (NCCCS) has a history of statewide reform including development and execution of the Student Success Learning Institutes (SSLI). SSLI was a year-long, multi-faceted professional development program, involving coaching from institutional leaders who had participated in the Completion by Design (CBD) initiative (WestEd, 2022).

In 2018, 17 of North Carolina's 58 community colleges began participating in the first cohort of Guided Pathways implementation that builds upon the state's work with Completion by Design to help college implement key reforms aimed at improving student success.[1] This research aims to understand the early implementation process, challenges, and best practices of Guided Pathways implementation in 17 community colleges in North Carolina. The cohort colleges were asked to complete Scale of Adoption Assessment (SOAA) prior to the in-depth and member-checking interviews. SOAA is designed to help colleges to assess how far along they are toward adopting essential guided pathways practices at scale (SOAA, 2017). The aggregate data were presented to inform statewide work during the guided pathways framework. The research findings were discussed using Diffusion of Innovation Theory.

Guided Pathways Models

Jenkins et al. (2018) ascertained that community colleges need to make changes in their mindset about institutional practice and policy for pathways reforms to be implemented effectively. According to Bailey et al. (2015), the guided pathways model is divided into four main practice areas: (1) mapping pathways to student success, (2) helping students choose and enter a program, (3) keeping students on a path, and (4) ensuring students are learning.

Diffusion of Innovation Theory

Guided pathways implementation is a multi-year endeavor that requires significant cultural and structural changes. The implementation process typically involved multiple levels and stages of understanding, adoption, and acceptance. Rogers (1995) instigated Diffusion of Innovation (DOI) Theory to explain how, over time, an idea or product gains

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momentum and diffuses (or spread) through a specific population or social system. The diffusion will result in people changing and adopting to new ideas, behaviors, and/or products.

Innovation can be adopted or rejected by the change agent (i.e., human, company, organization, to name a few), albeit rather driven by specific reasons (such as culture, technology, economic, etc.) (Infante et al., 1997). Acceptance and adoption of the innovation, though, is not an instantaneous act, rather it is a process that consisted of four stages include (1) dissemination, where administrators are made aware of programs and encouraged to adopt them; (2) adoption, where administrators develop attitudes about the intervention and commit to initiate the program; (3) implementation, when practitioners begin using the innovation; and (4) maintenance, when the group moves from implementation to institutionalization of the innovation, and decide whether to continue or discontinue using it (Dingfelder & Mandell, 2011).

Rogers (1995) expected adopter distributions to follow a bell-shaped curve over time. He contended that there are five established adopter categories, such as innovators, early adopters, early majority, late majority, and laggards.

According to Rogers (1995), innovators are the first people who want to try the innovation (Figure 1). They are willing to take risks and are often the first to develop new ideas. Early adopters are those who represent opinion leaders. They are change agents who are very comfortable adopting new ideas. Adopters in the early majority, on the other hand, are rarely leaders—they typically need to see the evidence of innovation in order to make sense of the situations before they adopt changes. Strategies to appeal to this population include sharing success stories and providing evidence of the innovation's effectiveness. Another group is late majority—these people may be skeptical of change, and they will adopt the majority opinion when it comes to new ideas and innovation. They are prompted to changes only by seeing the successful implementation that has been supported by the majority. Last, laggards refer to those who are bound by tradition, and they are very conservative when adopting new innovations. These people will buy into changes only when there are statistics, fear and pressure from people in the other adopter groups.

Methods

In this qualitative inquiry, researchers conducted convenience sampling in order to ensure that the participants have experiences relevant to the research purposes and interest (Miles & Huberman, 1994; Yin, 2014). This research is a collaborative project between Community College Research Center (CCRC), North Carolina Student Success Center (NCSSC) which is housed at the North Carolina Community College System office (NCCCS), and North Carolina State University (NCSU). As part of North Carolina's implementation of guided pathways, the selected institutions were asked to take the Scale of Adoption Assessment (SOAA) that was developed by the CCRC for colleges as a self-assessment during implementation and to measure progress around increasing student access, completion rate, and transfer to four-year institutions or enter the workforce from year to year and to ensure changes applied to all students versus ad hoc or boutique efforts.

In order to address the research objective, the collaborative team conducted validation calls (the 90-minute in-depth interviews) with leaders, project coordinators, and guided pathways coaches across the 17 community colleges. Validation calls helped college reflect on their self-assessment of Guided Pathways implementation progress through the SOAA. Prior to the in-depth interviews, the selected institutions completed the SOAA and as a normal part of the program evaluation, they signed a consent form that allowed the NCSSC to aggregate the college's results.

Findings

The research results indicated that the selected institutions had planned their guided pathways implementation based on essential conditions, which include (a) building North Carolina (NC) talent by identifying and training pathways implementation coaches who help guide colleges through Guided Pathways; (b) building NC talent by identifying and training regionally-affiliated coordinators for Reinforced Instruction for Student Excellence (RISE) to help coordinate efforts and share promising practices; (c) conducting policy advocacy; (d) one door, one college: simplifying students' entry into and progress through college, regardless of their entry point (e.g., non-credit or credit); (e) improving the quality of data available, including disaggregated data, to all stakeholders to allow for data-based decision making; (f) instilling an equity framework for every aspect of the college's work to ensure all students are well-served through their college experience. To measure and reflect on progress, colleges conducted the SOAA annually.

Additionally, the findings showed the implementation processes, best practices, and challenges encountered by the 17 North Carolina's community colleges in four main areas of the guide pathways, which include (1) mapping pathways to student end goals; (2) helping students choose and enter a pathway; (3) keeping students on the path; and (4) ensuring that students are learning.

Challenges of Guided Pathways Implementation in 17 Community Colleges

During the in-depth interviews, these colleges readily admitted that they ran into three challenges during their mapping pathways to student end goals, which include (1) every program is not yet well-designed to guide and prepare students to enter employment and further education in fields of importance to the college's service area; (2) detailed information is not provided on the college's website on the employment and further education opportunities targeted by each program; and (3) programs are not clearly mapped out; students, thus, did not know which courses they should take and in what sequence.

Discussion and Conclusion

The findings revealed that majority of the community colleges in North Carolina still struggled with 1) mapping programs to prepare students for employment, 2) helping students succeed in gateway courses, 3) identifying when students are at risk of falling off their program plans, and 4) assessing effectiveness of educational practices. Such practices are considered as indicators of observability, which is known as one of the factors that influenced adoption of an innovation—observability measured the extent to which the innovation (the guided pathways implementation) provided tangible results (Dingfelder & Mandell, 2011).

Recommendations for Successful Implementation of Guided Pathways Model

Community colleges implemented the Guided Pathways model with purposes of improving students' experiences and outcomes as well as advancing educational equity through Guided Pathways reforms. While the Covid-19 pandemic has impacted every individual—including leaders, instructors, staff, and students—it is important that community colleges pay attention to current challenges that students have encountered, in addition to the pre-Covid problems. Some common challenges that community college students are currently facing include 1) struggling to pay for college, 2) struggling to complete coursework due to a lack of childcare, and 3) struggling to access the internet from home (Royal, 2021). It is thus essential that community colleges pay attention on students' learning issues and needs and be able to help students to stay on a path. For example, community colleges can guide students towards college resources, including financial or technological support department if students express need of financial or technological support. Colleges should also provide courses

based on a majority of students' needs so that students will not have to end up taking courses that they don't need for their graduation, or they don't have to delay their graduation because they cannot find the course that they need in a certain semester.

In order to resolve both the previous and current challenges presented by community college leaders, staff, and students, Future Training program suggests that community colleges adopt creative solutions by practicing Imaginal Education, the education that represents "a fresh design based on principles of transformational learning and built around the needs of historically underserved students who embark on a semester-long journey of transformation in order to become successful professionals (Hoggan & Browning, 2019).

Imaginal Education consists of 1) immersion into the culture of the professional workplace; 2) increasing intentional support community of diverse peers; 3) directing exposure to the workplace and professionals, including guest presentations by employers, computer coaching, and email practice with business volunteers; 4) quoting conversations at the start of each course module; and 5) personalizing support services, including regularly scheduled consultations with a faculty advisor, accessing to a professional counselor or social worker, and volunteer coaches and tutors as needed (Hoggan & Browning, 2019).

In the wake of Covid-19 pandemic, the Community College Research Center (CCRC) realizes that community colleges leaders, staff, and students have experienced more challenges than they used to, especially when it comes to improving student access and success at community colleges. They thus recognize that it is essential to deepen their understanding of how community colleges can improve students' experiences and outcomes and advance educational equity through guided pathways reforms. They thus generated creative solutions to implement the Guided Pathways by focusing on five major areas: 1) program organization and design, 2) new student onboarding, 3) remediation and academic support, 4) ongoing student advising, and 5) teaching and learning.

Area 1: Program Organization and Design

While previous implementation of Guided Pathways in the 17 community colleges focused on organizing programs into meta-major and create default program maps for students, CCRC suggests that the area one should focus on building academic and career communities and making sure every student has an individualized educational plan. Essential practices for colleges should include preparing students for good jobs or transfer with junior standing in their major field of study by backward mapping all programs. Colleges should also organize programs by meta-majors—this includes career-technical and baccalaureate transfer. Colleges should also examine program enrollments to ensure that students get all the supports they need in order to complete and succeed in their programs (Jenkins et al., 2021).

Area 2: New Student Onboarding

The previous implementation of the Guided Pathways in the 17 community colleges suggested that colleges focus on ensuring new students receive career and transfer information and advising. However, because some students are dealing with inadequate support or a lack of helpful information or advice in order to choose their field of study, and these issues are still ongoing, CCRC suggests that colleges should ensure new students participate in guided exploration to choose a pathway of interest and help them make connections with other students and faculty in academic and career communities. When colleges have new students onboard, they will be able to ensure that every student has at least a preliminary full-program educational plan by the end of their first term. Students are also able to take a well-taught college-level course on a topic of interest in their first term. This practice helps address the needs of diverse groups of students, especially younger students and older working students (Jenkins et al., 2021).

Area 3: Remediation and Academic Support

Previous implementation of the Guided Pathways model in the 17 community colleges suggested that colleges use multiple measures to measure students' qualifications and determine whether they are underprepared students who need to complete developmental education classes before being allowed to take college-level courses. Because the implementation of the developmental education did not yield satisfactory results, especially some students tend to drop out before they even completed their courses (Yadusky et al., 2021), CCRC suggests that it is high time to focus on teaching students to be effective college learners in college-level program foundation courses (not just Math and English) so that students will realize that they are working towards something that is meaningful and relevant to their field of interest and they would not be inclined to drop out or give up on their education in community colleges (Jenkins et al., 2021).

Area 4: Ongoing Student Advising

While the previous Guided Pathways implementation focused mainly on providing holistic wraparound advising and other support, CCRC suggests that community colleges might as well start to focus on providing case-management advising by meta-major and use students' educational plans to schedule classes and monitor progress. This will help ensure that students are taking necessary classes that they need to graduate from their chosen program, and it will reduce the odd of having the classes that are not efficient/effective in helping students to graduate and/or transfer to their preferred four-year college or enter the workforce in the timely manner (Jenkins et al., 2021).

Area 5: Teaching and Learning

The implementation of Guided Pathways in the 17 community colleges suggested that colleges focus on establishing program learning outcomes and promote faculty development through collaborative inquiry. While supporting the motivation and instructions are considered crucial steps towards improving teaching and learning, numerous studies delineated that student success relies heavily on active and experiential learning, which include the engagement to critical thinking, problem-solving skills, questioning, analyzing, and perspective transformation (Theobald et al., 2020; Kheang, 2019, 2022). CCRC thus suggests that community colleges integrate opportunities for active and experiential learning across programs, including liberal arts and sciences, both in and outside the coursework (Jenkins et al., 2021).

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Figure 1

Adopter Catego