

Institutional change to support online learners: A case study for student success

Carrie Bartek¹ | Lauren Pellegrino² | Carol Cutler White³  |
Ashley B. Clayton⁴ 

¹ College Initiatives and Assessment
Department, Wake Technical Community
College, Raleigh, North Carolina, USA

² Business Administration Division, Jefferson
Community and Technical College,
Louisville, Kentucky, USA

³ Community College Leadership,
Mississippi State University, Starkville,
Mississippi, USA

⁴ School of Education, Louisiana State
University, Baton Rouge, Louisiana, USA

Correspondence

Carrie Bartek, College Initiatives and Assess-
ment Department, Wake Technical Com-
munity College, Raleigh, NC 27603, USA
Email: cebartek@waketech.edu

Abstract

The article presents a case study on institutional change within the context of an online improvement initiative. As part of its quality enhancement plan (QEP) improvement process in support of accreditation reaffirmation, Wake Technical Community College (Raleigh, NC) implemented a multistage change process to engage the college in data-driven change resulting in the eLearning preparedness initiative (EPIC). EPIC targeted student success in online courses by improving both student and faculty preparedness for online learning and teaching. The article first describes the need for change, provides an overview of the change initiative, then describes the transformational change process and lessons learned. The article closes with guiding questions for community college leaders and online learning change-agents to consider when planning for and implementing strategies for improving the student experience and supporting online student success.

INTRODUCTION

It is estimated that at any given point in time, 30% of college students are taking at least one online course with numbers increasing every year (Vallade & Kaufman, 2021). Technological innovations in teaching and learning, growth in online course offerings, the availability of mobile and portable devices from which students can complete coursework, and the availability of high-speed internet are among the contributing factors of increases in online learning among college students. Approximately 50% of all online college students are enrolled in community colleges, and growth in online course-taking has been steadily increasing (Francis et al., 2019). However, challenges exist with online enrollment for community college students where course outcome withdrawal rates are higher and course success rates are lower than face-to-face courses (Francis et al., 2019; Xu & Jaggars, 2013). Underprepared community college students may struggle to adapt

in the online environment, after a face-to-face primary and secondary education experience (Xu & Jaggars, 2013). This struggle is particularly problematic given community college students taking online courses may be doing so while juggling caregiving, full-time work responsibilities, availability of transportation, and other basic needs (Wladis et al., 2015).

Over the past decade, there has been extensive interest in studying online learning, particularly in how students perform in online courses versus face-to-face courses (Xu & Jaggars, 2013). Some studies find positive outcomes for online students while others find negative outcomes, sparking speculation that student characteristics—such as background, adaptability to technology and self-directed learning, and general academic ability—are factors in why some students succeed while others do not (Xu & Jaggars, 2013). Hino and Kahn (2016) found no significant differences between hybrid (a combination of online and face-to-face instruction) and traditional face-to-face course learning outcomes for community college students; however, the study found student satisfaction in the hybrid environment was considerably lower. Similarly, Yen et al. (2018) found no difference in course performance between students enrolled in three different course modalities—online, hybrid, and face-to-face. Further, some studies find that despite overall lower course retention rates, after controlling for relevant background characteristics, community college students who take some of their early courses online have a higher probability of attaining a credential than those who only take face-to-face courses (Shea & Bidjerano, 2014). Though taking 40% or more of their course load online may impede degree completion, “community college students who successfully complete online courses nearly double their chances of earning a degree or transferring to a four-year college” (Shea & Bidjerano, 2019, p. 19). Thus, while some students may struggle to successfully complete individual online courses, overall, taking online courses may increase the likelihood of completing a program.

However, the benefits of online learning are not the same for all students. Shea and Bidjerano’s (2019) study reported specific students for whom completing online courses was challenging, including older, male, economically disadvantaged, and some racial minorities who were more prone to course withdrawal and dropout regardless of other factors. Combined with the potential for community college students to accelerate their credential attainment, the flexibility and convenience of online learning presents both an opportunity and challenge for community college students who need these credentials to improve their lives through economic mobility.

Teaching, peer and instructor interaction, course design, and the delivery of online courses and programs influences student outcomes and student satisfaction in online courses and programs (Badia et al., 2017; Glass, 2017). The perceived presence of the instructor and peer interaction have been linked to positive student outcomes and satisfaction. Dilling et al. (2020) stated, “Quality, timely interactions with the instructor, and a sense of connectedness can positively influence the learner’s overall online experience” (p. 862). Typically, students describe their experiences and levels of satisfaction much more positively in face-to-face courses than in online courses. Huang (2019) attributes this outcome to the “decentralized” role of online teachers in their courses and the notion that students must take more responsibility for learning in an online environment (p. 200). There is also evidence that instructor attitudes and beliefs influence how they teach online (Badia et al., 2017; Eichelberger & Leong, 2019; Glass, 2017). Due to the outcome disparities within community colleges in online versus face-to-face courses, researchers have called on policymakers and community college leaders to identify ways to improve online instruction, particularly given the diverse needs and backgrounds of community college students (Xu & Jaggars, 2013).

The purpose of this article is to present a case study on institutional change within the context of an online improvement initiative. The article describes efforts at institutional improvement through the Succeed, Achieve, Improve, Learn (SAIL) initiative, a process to improve online learning course outcomes through the eLearning Preparedness Initiative (EPIC) across the college, and the quality enhancement plan (QEP) institutional change process at Wake Technical Community College (Wake Tech) in Raleigh, North Carolina. EPIC targeted student success in online courses by assisting both students and faculty to become better prepared for online learning and teaching. The article first describes the planning process and need for change, followed by an overview of the change initiative, then describes the transformational change process, and closes with recommendations and lessons learned for institutional change leaders.

PLANNING FOR MAJOR CHANGE TO IMPROVE OUTCOMES FOR ONLINE STUDENTS

Wake Tech is North Carolina's largest community college, serving more than 70,000 credit and non-credit students annually. Viewing distance education as a vehicle to fulfill its dual mission of student access and success, Wake Tech currently offers more online credentials than any community college in the United States, with online enrollments growing to 40% of all for-credit course enrollments in the 2019–2020 academic year (North Carolina Community College System [NCCCS], 2020a). However, in 2012, institutional research comparisons of student performance in online sections versus face-to-face sections of the same courses revealed access was not a guarantee of student success in online courses. The college identified an overall 5% performance gap between online and face-to-face courses, with performance in online sections persistently lower than face-to-face sections. The disparity was even greater in high-demand, high-enrollment gateway courses. Course evaluations indicated students felt they lacked the online skills to do well and felt like they were taking online courses alone.

At the same time, Wake Tech became part of a team of colleges in the Bill and Melinda Gates Foundation's Completion by Design (CBD) initiative (Grossman et al., 2015). CBD aimed to increase graduation and transfer of community college students and provided the framework for the guided pathways model for community colleges (Bailey et al., 2015; Jenkins et al., 2019). The basis of CBD was driving and managing change at the institutional level. Given the importance of course completion in the overall CBD focus on completion of credentials, and the large and growing proportion of students taking online courses at Wake Tech, the college decided to strategically focus its efforts on improving the quality of student learning and performance in the online environment.

Change researchers cite the importance of not only informing practitioners who are required to implement change, but directly engaging them and raising up informal leaders in the planning and development (Aiken & Keller, 2009; Klempin & Pellegrino, 2020). Recognizing this fact, Wake Tech's leadership knew that faculty and staff needed to support improvement in online education and be willing to do the hard work of change. To that end, the leadership team developed a grassroots planning initiative to engage all employees in creative, collaborative problem solving, called SAIL.

The SAIL process took place between 2012 and 2014. It gave faculty and staff the time and space they needed to discuss and deeply engage with student success data, develop teams who championed the changes they were designing, and gave them opportunities to communicate the need for change to the college community and administration. The SAIL process involved three phases: Phase I: Initial topic identification based on data and

need; Phase II: Proposal development and implementation planning; Phase III: Proposal evaluation, final topic selection and approval by the President, further development, and implementation. SAIL Phase I took place during the fall of 2012 when college faculty, staff, and administration were invited to submit short proposals for QEP consideration. Faculty and staff, reviewed, rated, and ranked 19 proposals through both a survey and a rubric, and chose the first three topics: college readiness, information literacy, and distance education.

SAIL Phase II was initiated in the spring of 2013 with the formation of multi-disciplinary/cross-college teams of faculty and staff to fully develop a proposal for each topic. The teams were responsible for conducting literature reviews, gathering data to make a business case for their topic, and planning the project implementation, assessment, and budget. Faculty and staff who were assigned official leadership roles received stipends for participation. In support of this teamwork, Wake Tech invited internal and local external experts to provide workshops on assessment, project management, and change management. Throughout Phase II, the teams met with multiple stakeholders, including the President and his cabinet, throughout the college to get feedback on their proposals. Teams also met on multiple campuses with faculty groups, staff groups, student groups, and various levels of administration. Based on internal and external feedback, final proposals were submitted to a QEP Steering Committee in early December 2013 for final topic selection. Once EPIC was selected, Phase III (2014) consisted of identifying faculty and staff co-Directors and development teams, developing an evaluation plan, and preparing the final version of the proposal. The final proposal was submitted to the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) in March 2014, and the initiative was launched in January of 2015.

USING DATA AND EVIDENCE TO CREATE URGENCY AND COMMUNICATING A VISION

For faculty, staff, and students to engage in the hard work of change, they must understand, accept, and agree to act on information indicating a change is needed (College Excellence Program, 2017; McChesney et al., 2012). Specifically, they need to personally identify with how their actions affect the outcomes, as well as the solutions to improving those outcomes. Therefore, the Institutional Research office provided the SAIL teams with detailed analyses of 31 gateway courses with the highest online enrollments at Wake Tech (200 or more students) from the Fall 2012 through Spring 2014, disaggregated by online versus face-to-face modalities. These data indicated that course success rates (the percentage of students earning an A, B, C, or pass grade) in face-to-face sections were greater than online sections by 5% or more in about half of these courses, and by 10% or more in 11 courses. Success rates in online sections were greater than face-to-face sections by 5% or more in seven courses. Actual success rates in face-to-face sections were greater than online sections by as much as 40% in some semesters for some courses. The withdrawal rates for these courses generally follow the same pattern as success rates, in that most online sections had higher withdrawal rates than their face-to-face counterparts.

By disaggregating the data by course and modality, comparing the performance of those courses with end-of-course surveys, and reviewing past online courses, the EPIC team learned that overall, students were not aware of the requirements or skills necessary for successfully completing online courses. Additionally, while some online courses included the design and delivery elements needed to help students learn, persist, and succeed in online courses, others did not. The team also learned from literature reviews that when students complete an orientation program assessing online learning skills and characteristics

and when faculty are trained in online course pedagogy, online learning and student success improve (Koehnke, 2013; Xu & Jaggars, 2013).

Armed with this data analysis and evidence-based best practices, the faculty-led SAIL planning team recommended to the Wake Tech President and Vice Presidents that the college embark on a QEP focused on distance learning with a two-pronged approach: 1) Student Preparedness, and 2) Faculty Preparedness. The product of the SAIL institutional change process was the decision to recommend the implementation of EPIC as Wake Tech's QEP to meet accreditation requirements. The EPIC QEP aimed at increasing student success in online courses by helping both students and faculty become better prepared for online learning and teaching. Student preparedness included a mandatory orientation before students registered for online courses, basic computer literacy, and understanding the learning management system (LMS). These priorities were modeled after factors identified as critical to student success online (Xu & Jaggars, 2013). Faculty preparedness focused on mentoring new online faculty, understanding the LMS (Blackboard), and building capacity for effective online teaching through overall course design, instructional techniques, and accessibility. Further, faculty were required to be certified in online teaching.

The Student Preparedness strategy addressed the problem of student readiness for online learning, and the Faculty Preparedness strategy addressed the challenge of effectively teaching in the online environment. Both strategies addressed complex issues requiring both students and faculty to change the way they behaved and functioned in the online teaching and learning environment, and as such, represented adaptive challenges (Heifetz & Heifetz, 1994). Whereas technical problems are well defined and can be solved by one unit or department through a particular program or intervention given enough resources and time, improving online learning at the college required the input of many stakeholders, with no one department having all the answers or being able to impose a one-program or one-department solution on the others. The solution required collaboration among faculty and staff to innovate and learn new ways of online teaching and learning. Accordingly, the college took steps to facilitate and prepare for the change.

ASPEN INSTITUTE'S COMMUNITY COLLEGE EXCELLENCE PROGRAM

One way to view the steps the college took to manage and implement the EPIC changes is through the lens of a community college leadership framework supporting transformation. One such framework is provided in the curricular resources of the Aspen Institute's College Excellence Program (2017) module titled, "*Leading Internal Transformational Change*." The framework and the associated steps the college took to lead and manage the EPIC change are detailed in the next section.

Transformational change: Aligning structures and resources to support technology use

Wake Tech had a long and growing history of offering distance education courses, which is aligned with the open-access mission. In 1996, it began computer-facilitated distance learning, and by 2015, totally online-asynchronous courses represented the largest learning modality at the college. However, Wake Tech's involvement in CBD set the stage for the college to begin a move toward identifying key student success issues and strategically budgeting and resourcing the solutions to those issues, a key component of bringing about transformational change (College Excellence Program, 2017). The EPIC became one of the

first completion initiatives that were strategically financed by the college to improve student success. Recognizing the opportunity for improvement, college structures, policies, and resources were aligned to support technology use.

As Karp and Fletcher (2014) note in their “Readiness for Technology Adoption Framework,” even though Wake Tech had begun offering distance education well before EPIC, having access to technology did not mean that students and faculty were ready to use that technology. While implementing technology requires changing structures and processes, representing “technical” challenges, it is the adaptive challenge that seems to control whether or not that technology is successfully adopted and used (Heifetz & Heifetz, 1994). Throughout the college’s online education history, they developed a strong technology infrastructure for online learning called the Department of eLearning Support and Instructional Design, which supports faculty transition to online teaching, with an effective LMS and professional development. The demonstrated commitment to resourcing faculty and students with technology was used as justification for expanding support of the change initiative and leveraging of existing resources. Wake Tech leadership decided to strategically leverage the eLearning resources already in place, and to strengthen the ability of online instructors and students to effectively use technology to improve online learning. They did this by reallocating college budget resources to hire additional eLearning Support staff, including instructional technologists, instructional designers, and accessibility technologists. The college also reorganized to help faculty design effective course content for the online environment and to assist with the development of online modules for both the eLearning orientation and the faculty online teaching certification.

Enculturating change: Disciplined execution and routines of data use

One of the reasons why many strategic initiatives fail is because of a lack of structure and process to ensure what is planned is both implemented and evaluated to ultimately determine what did or did not work (Bryson, 2018; McChesney et al., 2012). Similarly, in their seminal work on collective impact initiatives to solve adaptive challenges, Hanley Brown et al. (2012) emphasized the importance of “backbone organizations” (p. 6) to support solutions for adaptive challenges, which are essentially project management structures to support execution. Accordingly, Wake Tech leadership provided the support and structure needed for the disciplined execution of EPIC by providing the resources for a project director to support faculty and staff teams, as well as a data scientist to analyze student performance data. An assessment team of faculty and staff led by a seasoned faculty member analyzed and reported on the quantitative and qualitative data. The project director reported EPIC results to a Steering Committee of Vice Presidents, team leaders, the Chief Online Campus Officer, and the faculty representing all divisions. The Steering Committee voted on action plans to adapt and change over the lifecycle of the initiative.

Reinforcing change: Regular routines of communication and rewards

Throughout the life cycle of the EPIC initiative, incentives including polo shirts, computer tote bags, and digital badges were awarded to faculty and staff who completed EPIC training. Faculty were recognized for their certifications through badging and certificates, and exemplary course snapshots were posted on Wake Tech’s website. Information sessions were held at division meetings and professional development days and videos, social media, digital signage, e-newsletters, and emails were used to promote EPIC and to

celebrate milestones. Students shared videos about their experiences with online learning, and testimonials appeared in college publications. EPIC success was shared across the college in monthly newsletters and communicated at higher-level functions such as the President's cabinet meetings, board meetings and convocations.

OUTCOMES

Several outcomes occurred due to the programming. The sections that follow highlight both student outcomes and performance, and faculty outcomes from the process.

Student outcomes

The interactive *e-Learning Intro Student Orientation* (ELI) modularized student training within the LMS equipping students with the skills, tools, and awareness they needed to be successful in an online course. ELI focused on the three skills necessary for a successful online student: basic computer literacy, expectation management, and Blackboard boot camp. Students had the opportunity to self-assess and remediate within the ELI modules. Since the platform launched in April 2015, over 30,000 students have participated in the three modules that comprise ELI. The assessments and learning activities in these modules required students to identify online learning barriers and strategies to overcome them, to demonstrate online learning skills and the ability to use those skills in online courses, and the ability to navigate online courses to complete tasks. The results were dramatic with the Expectations Management pass rate improving from 36% to 95%, the Computer Skills pass rate improving from 13% to 95%, and the Blackboard Skills pass rate improving from 6% to 95% after completing ELI. The 95% pass rate exceeded the target pass rate of 90% for all three modules (Smith et al., 2020).

In surveys taken immediately after completing the ELI modules, students were asked to reflect on what they learned and whether they perceived they had gained strategies for overcoming online learning barriers and skills needed to be successful. Overall, 94% of the student respondents perceived that taking the modules had increased their skills for online learning. End-of-course surveys administered in EPIC Priority Courses offer insights into students' perspectives on the extent to which they are communicating with online instructors, collaborating with peers, as well as the quality of these interactions. Of students who provided responses, over 90% (92% in fall 2018 and 93% in fall 2019) "strongly agreed" or "agreed" with positive statements related to faculty presence and communication. Many students described their instructors as supportive, accessible, and willing to provide feedback and answer questions quickly. One student said, "Since it was an online course, I appreciated that my instructor made it clear that she can be reached at any time with any questions. She made it clear she wanted us to succeed from the beginning." Another student said, "The teacher was very responsive to my many, many emails and typically ended the email with a note of encouragement:-)!" (Smith et al., 2020).

Students also noted how their instructors created an online learning environment that was interactive, which, for some students, came as a surprise. One explained, "It was a very interactive class ... unlike any other online class I have taken." The comments indicated increased student-faculty interaction that helped to dissolve the communication barriers that can be present in virtual instruction: "I enjoyed this class because my professor made the class seem as if I was in an actual classroom where it was ok to ask questions and the feedback is always on point" (Smith et al., 2020).

Results from these same surveys also indicated an increase in the extent to which students collaborated with their peers. By Spring 2018, 94% of student respondents reported they had opportunities to interact with peers in EPIC Priority Courses. While some students commented that group work is difficult and prefer to avoid collaboration, some students commented on how helpful and enjoyable they found the opportunities to interact and collaborate with their peers. For example, a student wrote, “One thing I also enjoyed were the discussion boards...they helped me understand various concepts in different ways that were beneficial.” Another student stated, “I liked the weekly collaboration assignments. They fostered interesting and engaging interactions between classmates. I always learned a different perspective” (Smith et al., 2020).

Most survey respondents indicated that these opportunities for interaction with other students helped to mitigate feelings of isolation or disconnectedness that can occur in virtual learning experiences. By Spring 2018, 88% of the student respondents confirmed this statement: “The opportunities for interaction with other students helped me feel like I was not taking this course alone” (Smith et al., 2020).

Student course performance

Data on course success and withdrawal rates before and after the implementation of EPIC provide evidence of improved student persistence and student success in Priority online courses, which were identified in the QEP as the 31 high enrollment but lower success online courses that were in need of improvement. Prior to EPIC, online course success rates were decreasing, and withdrawal rates were increasing (Smith et al., 2020). After the EPIC Priority course implementation, online course success rates improved from approximately 61% in fall 2014 to 66% in fall 2018. Spring course success rates also improved from approximately 59% in spring 2015 to 65% in spring 2018. In addition to improving online performance, the gaps between online and seated performance had narrowed. Among all courses, the gap between online and face-to-face courses had closed to 2% in 2016–2017 and remained at 2% until entirely closing in 2019–2020 during the COVID-19 pandemic (North Carolina Community College System, 2020b).

However, in its early stages of implementation, there were signs that some components of the EPIC initiative—those requiring faculty to change their teaching practices after they were EPIC certified—were not being implemented as intended. Several predictive models built to tease out the effect of ELI versus the teaching certification program on online student performance show the ELI was having a significant and immediate effect on student performance, but the online teaching certification was not having as much of an effect. Analysis of student and instructor data indicated age, gender, high school grade point average, course choice, Pell eligibility, and completion of ELI were all statistically significant predictors of online course success. In contrast, a certified primary instructor was not shown to be a statistically significant predictor of online course success. Other evidence described in the next section indicates underlying issues that may have impacted the effectiveness of the online certification program on student success in the early stages of the initiative.

Faculty early outcomes

After all instructors were certified (Fall 2017), Wake Tech conducted course reviews by randomly sampling 10% of archived Spring 2018 online courses from 400 online faculty. Each

of the 40 randomly selected courses was reviewed and then normed by a three-person team: two faculty peer reviewers and one instructional designer using a faculty-developed rubric from the *EPIC eLearning Quality Standards*. These reviews provided insight into which quality standards online courses most frequently “Met,” as well as areas most in need of improvement. Insights gleaned from these reviews were aggregated and shared with deans, department heads, and faculty for future improvement. The review of courses indicated only 33% of courses used the approved online template, which fell, well, short of the EPIC goal of 95%. Additionally, just under 70% of the courses met all of the EPIC standards, falling short of the 90% goal. Courses did however meet the EPIC standards in student support, structure, intellectual property, course policies, and faculty welcome message (Smith et al., 2020).

There was also a disconnect between what was being observed in course reviews and what faculty perceived they were able to do in their courses. For example, data from an online faculty opinion survey show that the majority of the online faculty believed they adhered to the *EPIC eLearning Quality Standards* (86% in Spring 2017 and 88% in Spring 2018). Online faculty also reported improvement in their ability to meet Americans with Disabilities Act (ADA) compliance standards, with 35% reporting that they experienced trouble with ADA compliance in 2016 compared to 29% in 2018. Yet ADA compliance was most often cited as “Not Met” in course reviews. This disconnect between what faculty reported they could do versus what course reviews showed they were doing was discussed frequently through faculty professional development days, through normal chains-of-command channels, and with the QEP Steering Committee. Feedback across these channels noted that in general, while there were many examples of exemplary courses, some faculty and departments were not translating their EPIC learning by fully implementing the EPIC standards in their online courses. Requests for greater department involvement and accountability were made, but the EPIC team was unable to put additional professional development, accountability, or communication structures in place to bolster implementation. As the EPIC team learned, communication was likely a key factor underlying these implementation issues.

CHANGE LEADERSHIP LESSONS LEARNED

To understand how EPIC as a major change initiative was unfolding among faculty and staff, Wake Tech commissioned a semi-external evaluator who was a part-time faculty and an EPIC Assessment Team member. During year three of the initiative, the evaluator conducted 18 confidential interviews with faculty who were required to engage in the EPIC activities (training and subsequent evaluation). The findings revealed that faculty perceptions of the EPIC evolved as new components of the initiative emerged; ongoing communication at levels of the organization was critical to maintaining momentum and fostering sustained buy-in; that despite some criticisms, faculty reported learning some important skills through the EPIC professional development experience; and that microcultures and departmental colleagues were more influential on how faculty perceived EPIC than the broader institutional culture and leadership messaging. This section will illuminate the four major lessons learned at an individual and institutional level. Given that colleges had to pivot to nearly entirely online course delivery during the COVID-19 era, these lessons are particularly salient as community colleges wrestle with new approaches for enabling students to access high-quality, engaging instruction in modalities that work best for lives.

Lesson 1: Documenting the work is beneficial

Wake Tech took a unique approach to EPIC by ensuring that all of the decisions, reasoning, and activities were recorded, regardless of how iterative. Individual committees took copious notes in meetings, used project management software to store documents and record communications, and prepared annual reports with crucial information, including the major decisions made and any metrics that reflect the work. Through commissioning a part-time employee and doctoral student to collect confidential information about how individuals were responding to new structures and processes and developing perceptions of the work, Wake Tech leaders were able to learn about what was perceived to be working, where there were communication challenges and misunderstandings, and what faculty needed and wanted to feel confident and be successful. These efforts enabled college leaders to be responsive in a dynamic and complex context and, in some cases, prevent small issues from becoming big ones. Further, documentation and qualitative data collection activities provided transparency to the work across all stakeholder groups at the college.

Lesson 2: Change happens at the department level

Initial communication regarding the implementation of EPIC was primarily targeted to Deans and individual faculty members. As various components of the initiative were being implemented, some departments were unclear about their involvement with EPIC and the role they should play in successful implementation. It was not that departments were not supportive, but communication and direction about EPIC's integration into departments were inconsistent, resulting in confusion and uneven implementation. It was soon evident that department-level leaders needed more assistance with establishing an online course quality culture. For EPIC to make a true impact, departments had to take ownership of the continuous improvement of online learning.

Lesson 3: Knowing “How” does not always translate into practice

Early in the initiative, there was excitement and a sense of urgency. All levels of administration encouraged faculty to earn their certification. The names of the newly certified faculty were included in college newsletters and periodic reports so that by August 2017, Wake Tech achieved its goal of having all online faculty certified. In that same semester, course quality checks had begun to see if faculty had integrated what they learned into their online courses. As noted, these checks indicated many faculty had not yet translated all of their newly learned skills into their courses and that they needed additional opportunities and coaching to translate their learning to their classroom practice. To this end, the sustainability plan for the EPIC Certification includes incorporating eLearning support and instructional design check-ins and continued coaching into the program.

Lesson 4: Continuous collaboration, communication, and leadership vision is critical

The EPIC initiative was developed using a “grass-roots” approach through the SAIL initiative previously described. The first major goal was to certify all online faculty, which

provided a clear measure of success that could be worked toward and achieved. Initial gains in student achievement and retention received a great deal of attention. However, as the goal of certification was met and initial gains plateaued, faculty attention began to wane. Also, at this time, when random course quality checks were being implemented, the reviews revealed that all faculty had not fully embraced the changes needed to improve their courses. Favorable attitudes and support toward the initiative began to change to one of compliance. To mitigate this reaction, the Director of the initiative was transferred to report directly to the Vice President of Curriculum Education Services to strengthen relationships with Deans, department heads, and faculty and to elevate the importance of the initiative. The groundwork laid through the EPIC initiative received a renewed focus and accelerated due to the COVID-19 crisis when all courses were quickly transitioned online.

READYING FOR CHANGE: GUIDING QUESTIONS FOR COLLEGES

As community colleges consider how to continually improve the quality of and outcomes associated with online courses and programs, Kezar's (2014) *structures, processes, and attitudes* framework may serve as a useful guide for planning for and implementing new strategies to support online course delivery. Through utilizing this three-pronged framework to develop a logic model or theory of action, college leaders can holistically consider the many aspects of the technological and pedagogical enhancements that may be needed to move the work forward. However, Klempin and Karp (2018) caution that only using one or two aspects of the framework can lead to unintended consequences. For example, if a college has a robust online LMS and a talented information technology staff (structures) without having consistent standards and usage (process) or supporting faculty in believing using these resources can lead to improved outcomes (attitudes), college leaders will likely not see substantive changes in students experiences or in their ability to be successful.

First, structural changes are sometimes thought to be the least politically fraught and the most straightforward. However, they can also be very costly if they are done in a vacuum. Consider the following questions when thinking about structural changes: What do we need to purchase or upgrade (e.g., software, servers, computers, and other devices, facilities to accommodate online learners without access to the Internet off-campus)? Who are the people that need to be involved in product acquisition and structural changes to personnel (such as adding instructional designers and IT personnel)? Have we considered the input and involvement of end-users and students in planning for and implementing new and/or enhanced structures? When considering what changes to the process will support improved student experiences and outcomes, it is also important to be inclusive of those who will monitor the processes (supervisors, leads), execute the processes (end users), and be influenced by the new ways of working (students).

Second, guiding questions about the process might include: Who will be involved in discussions about processes? What activities and behaviors are feasible, actionable, and impactful? If there is a new or drastically altered process, how will people learn how to do new things and how can we facilitate ongoing training as processes evolve? How will students respond? Do the processes have equity implications such as favoring end-users and students with certain abilities or privileged access? Could certain groups of end-users and/or students feel disenfranchised by these actions and behaviors? Certainly, in the case of EPIC, including department heads in thoughtful conversations regarding how to help implementation at the department level may have improved departmental understanding of their role in the initiative and how best to support faculty in the implementation of the EPIC standards.

Finally, attitudinal aspects of the framework—often thought of as the most difficult—should be considered at every phase. Most major changes are facilitated through a series of smaller, incremental changes, which can be viewed as “first-order” or superficial change that does not necessarily result in changes to underlying assumptions, behaviors, and attitudes (Kezar, 2014). Throughout the change journey, it may be useful to conduct “temperature checks” with the relevant stakeholders (including students) to get a sense for how individuals are processing and operationalizing the new ways of working, and how their underlying assumptions are, or are not changing, a requirement of transformational change. Some guiding questions may include: As we think about structures and processes, are there times when a pilot should be launched to check functionality and gauge the response and assumptions of individuals? How will we garner feedback along the way (e.g., surveys, regular meetings, listening tours, etc.)? What will we do with that information and how will we develop and sustain a feedback loop to the stakeholders?

CONCLUSION

Wake Technical Community College embarked on a journey to improve student success in online education and in the process, learned what is needed for the college to plan for and implement change, and how to affect change in the future. By strategically leveraging, reallocating, and aligning existing resources, Wake Tech put the structures and processes in place that helped increase online student success and close success gaps between face-to-face and online sections of high enrollment gateway courses. It should be noted that a key component missing from the EPIC initiative was a disaggregation of data by gender, race, ethnicity, and socioeconomic status, which may have shed light on how to further adjust the initiative to support populations where the gaps between online and face-to-face performance was widest. Though success rates in online courses improved over time and the gaps between online and face-to-face instruction narrowed, the new online teaching certification did not appear to have an immediate impact on the success gaps between seated and online courses. In retrospect, qualitative research indicated that faculty and department-level attitudes about the change could have been helped by employing some key principles from the Aspen framework for leading institutional change (College Excellence Program, 2017), specifically having clear and consistent communication about what was to be done and why it is important at the department level. With the onset of COVID-19 as well as a new presidency, fresh urgency and value was placed in online teaching and learning and in closing equity gaps. With this renewed impetus, opportunities exist for the college to learn from its EPIC experiences and continue the change process to help students succeed in the online environment.

ORCID

Carol Cutler White  <https://orcid.org/0000-0001-8492-3117>

Ashley B. Clayton  <https://orcid.org/0000-0003-1800-4504>

REFERENCES

- Aiken, C., & Keller, S. (2009). The irrational side of change management. *McKinsey Quarterly*, 2(10), 100–109. <https://www.mckinsey.com/business-functions/organization/our-insights/the-irrational-side-of-change-management#>
- Badia, A., Garcia, C., & Meneses, J. (2017). Approaches to teaching online: Exploring factors influencing teachers in a fully online university. *British Journal of Educational Technology*, 48(6), 1193–1207. <https://doi.org/10.1111/bjet.12475>
- Bailey, T., Jaggars, S. S., & Jenkins, D. (2015). *What we know about guided pathways: Helping students to complete programs faster*. Community College Research Center, Teachers College, Columbia University.

- Bryson, J. M. (2018). *Strategic planning for public and nonprofit organizations: A guide to strengthening and sustaining organizational achievement*. John Wiley & Sons.
- College Excellence Program. (2017). *Leading for community college excellence: Leading internal transformational change*. Aspen Institute. <https://collegexcellencecurriculum.aspeninstitute.org/module/leading-internal-transformational-change/>
- Dilling, J., Varga, M. A., & Mandernach, B. J. (2020). Comparing teaching and social presence in traditional and online community college learning environments. *Community College Journal of Research and Practice*, 44(10–12), 854–869.
- Eichelberger, A., & Leong, P. (2019). Using TPACK as a framework to study the influence of college faculty's beliefs on online teaching. *Educational Media International*, 56(2), 116–133.
- Francis, M. K., Wormington, S. V., & Hulleman, C. (2019). The costs of online learning: Examining differences in motivation and academic outcomes in online and face-to-face community college developmental mathematics courses. *Frontiers in Psychology*, 10(2054), 1–12. <https://doi.org/10.3389/fpsyg.2019.02054>
- Glass, C. R. (2017). Self-expression, social roles, and faculty members' attitudes towards online teaching. *Innovative Higher Education*, 42(3), 239–252.
- Grossman, J. B., Quint, J., Gingrich, J., Cerna, O., Diamond, J., Levine, A., & Willard, J. (2015). *Changing community colleges: Early lessons from completion by design*. MDRC. <https://files.eric.ed.gov/fulltext/ED560063.pdf>
- Hanley Brown, F., Kania, J., & Kramer, M. (2012). *Channeling change: Making collective impact work*. Stanford Social Innovation Review. <https://mappofskp.net/wp-content/uploads/2015/05/SSIR-Collective-Impact-2.pdf>
- Heifetz, R. A., & Heifetz, R. (1994). Leadership without easy answers (Vol. 465). Harvard University Press. *Higher Education*, 89(1), 81–105. <https://doi.org/10.1080/00221546.2017.1341754>
- Hino, J., & Kahn, C. (2016). Hybrid teaching in Extension: Learning at the crossroads. *Journal of Extension*, 54(4), 1–5. Clemson University. <https://tigerprints.clemson.edu/joe/vol54/iss4/17/>
- Huang, Q. (2019). Comparing teacher's roles of F2f learning and online learning in a blended English course. *Computer Assisted Language Learning*, 32(3), 190–209. <https://doi.org/10.1080/09588221.2018.1540434>
- Jenkins, D., Lahr, H., Brown, A. E., & Mazzariello, A. (2019). *Redesigning your college through guided pathways: Lessons on managing whole-college reform from the AACCC pathways project*. Community College Research Center, Teachers College, Columbia University. <https://files.eric.ed.gov/fulltext/ED598443.pdf>
- Karp, M. J. M., & Fletcher, J. (2014). *Adopting new technologies for student success: A readiness framework*. Community College Research Center, Columbia University. <https://ccrc.tc.columbia.edu/publications/adopting-new-technologies-for-student-success.html>
- Kezar, A. (2014). *How colleges change: Understanding, leading, and enacting change*. Routledge.
- Klempin, S., & Karp, M. M. (2018). Leadership for transformative change: Lessons from technology-mediated reform in broad-access colleges. *The Journal of Higher Education*, 89(1), 81–105.
- Klempin, S., & Pellegrino, L. (2020). A complex ecosystem: A qualitative investigation into dynamics affecting the implementation of college advising redesigns CCRC Working Paper No. 117. Community College Research Center, Teachers College, Columbia University. <https://ccrc.tc.columbia.edu/publications/dynamics-affecting-college-advising-redesign.html>
- Koehnke, P. J. (2013). *The impact of an online orientation to improve community college student retention in online courses: An action research study* (Doctoral dissertation). ProQuest Dissertations & Theses Global.
- McChesney, C., Covey, S., & Huling, J. (2012). *The 4 disciplines of execution: Achieving your wildly important goals* (Vol. 34, No. 10). Simon and Schuster.
- North Carolina Community College System. (2020a). *Curriculum course enrollments*. North Carolina Community Colleges. <https://www.nccommunitycolleges.edu/analytics/dashboards/curriculum-course-enrollments>
- North Carolina Community College System. (2020b). *Curriculum course outcomes by course characteristics*. North Carolina Community Colleges. <https://www.nccommunitycolleges.edu/analytics/dashboards/curriculum-course-outcomes-course-characteristics>
- Shea, P., & Bidjerano, T. (2014). Does online learning impede degree completion? A national study of community college students. *Computers & Education*, 75, 103–111.
- Shea, P., & Bidjerano, T. (2019). Effects of online course load on degree completion, transfer, and dropout among community college students of the State University of New York. *Online Learning*, 23(4), 6–22. <https://files.eric.ed.gov/fulltext/EJ1237832.pdf>
- Smith, J., Madsen, R., Sumithran, S., & Bartek, C. (2020, September). Quality enhancement plan impact report [Internal Report], Wake Technical Community College. Submitted to the Southern Association of Colleges and Schools Commission on Colleges. <https://sacscoc.org/>
- Vallade, J. I., & Kaufmann, R. (2021). Instructor misbehavior and student outcomes: Replication and extension in the online classroom. *Journal of Research on Technology in Education*, 53(2), 206–222. <https://doi.org/10.1080/15391523.2020.1766389>

- Wladis, C., Conway, K. M., & Hachey, A. C. (2015). The online STEM classroom—Who succeeds? An exploration of the impact of ethnicity, gender, and non-traditional student characteristics in the community college context. *Community College Review*, 43(2), 142–164.
- Xu, D., & Jaggars, S. S. (2011). *Online and hybrid course enrollment and performance in Washington state community and technical colleges*. CCRC Working Paper No. 31. Community College Research Center, Teachers College, Columbia University. <https://ccrc.tc.columbia.edu/publications/online-hybrid-courses-washington.html>
- Xu, D. & Jaggars, S.S. (2013). *Predicting online student outcomes from a measure of course quality*. CCRC Working Paper No. 57. Community College Research Center, Teachers College, Columbia University. <https://ccrc.tc.columbia.edu/publications/predicting-online-student-outcomes-and-course-quality.html>
- Yen, S. C., Lo, Y., Lee, A., & Enriquez, J. (2018). Learning online, offline, and in-between: comparing student academic outcomes and course satisfaction in face-to-face, online, and blended teaching modalities. *Education and Information Technologies*, 23(5), 2141–2153.

AUTHOR BIOGRAPHIES

Carrie Bartek, EdD serves as Executive Director of College Initiatives and Assessment at Wake Technical Community College and was the Executive Director of the EPIC project.

Lauren Pellegrino, PhD is a former Senior Research Associate at the Community College Research Center, a QEP Assessment Team member at Wake Technical Community College, and current Assistant Professor of Business at Jefferson Community and Technical College in Louisville, KY.

Carol Cutler White, MPA, PhD is an Assistant Professor of Community College Leadership and Executive Director of the Community College Advocacy Lab at Mississippi State University where she researches advocacy practices of community college leaders, college access and attainment, and community college leadership.

Ashley B. Clayton, PhD, is the Jo Ellen Levy Yates Endowed Assistant Professor in the School of Education at Louisiana State University where her research agenda focuses on practices and policies that address postsecondary access, equity, and success.

How to cite this article: Bartek, C., Pellegrino, L., Cutler White, C., & Clayton, A. B. (2022). Institutional change to support online learners: A case study for student success. In C. Cutler White & A. B. Clayton (Eds.), *Expanding community college opportunities: Access, transfer, and completion*. *New Directions for Community Colleges*, 198, pp. 135–148. John Wiley & Sons, Inc. <https://doi.org/10.1002/cc.20516>