



Navigating the Journey

(A Narrative Case Study of Online Teaching Experience from the Novice to Advanced Levels)

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ABSTRACT

This case study observes the development of the teaching capacity for electronic learning (e-learning) initiatives at a Saudi University, focusing on the progression a novice to an advanced level. This study employed a purposeful sampling approach, selecting an instructor who redesigned and taught an e-course, along with an instructional designer, who supported this. Data collection methods included semistructured interviews and documents. The findings highlight the critical role that strong leadership plays in establishing a clear vision and strategic plans for the implementation of e-learning. This leadership was present in the provision of essential infrastructure, opportunities for educational development, and incentives. However, this study also identified significant challenges, including a culture that is deeply rooted in traditional teaching methods, heavy teaching workloads, and a lack of recognition and reward for e-learning efforts. This study contributes to the understanding of e-learning capacity development in higher education, particularly in the Saudi Arabian context.

Keywords: Teaching capacity, e-learning, higher education, educational development.



Introduction

The global educational landscape has undergone a profound transformation in recent years, particularly in the delivery of instruction in higher education. Electronic learning (e-learning) has emerged as a fundamental educational approach, complementing and sometimes replacing traditional face-to-face teaching methods. This revolution has given rise to various models of instruction, including fully online courses and hybrid or blended learning environments, which combine virtual and face-to-face elements.

The importance of e-learning is underscored by recent global events, most notably the COVID-19 pandemic. This unprecedented event accelerated the adoption of digital learning platforms and methodologies across educational institutions worldwide. For this reason, e-learning suddenly evolved from being an alternative or supplementary approach to becoming an essential, irreplaceable component of modern education strategies.

An e-learning approach to education leverages technology to enhance teaching effectiveness and to foster deeper learning experiences. Integrating technology into educational practices, educators must rethink traditional teaching methods and develop innovative learning opportunities to transcend the constraints of conventional classroom-based instruction. In this context, the development of teaching capacity refers to the implementation of policies, strategies, or actions that enhance educators' collective efficacy to improve student learning (Fullan, 2007).

However, the development of teaching capacity in e-learning faces significant challenges. A primary obstacle here is the insufficient preparation for e-learning, which often results in instructors' low level of digital literacy (Johnson et al., 2014). In addition, inadequate administrative support impedes educational development in online teaching. There is a pressing need for effective institutional support and leadership extending from the presidential level down to the individual departments, if these issues are to be addressed (Johnson et al., 2014).

Understanding the development of teaching capacity is crucial in identifying supportive factors, essential resources and infrastructure, and current challenges. These insights are vital for guiding e-learning initiatives in the context of higher education.

Therefore, this study investigated the experience of developing teaching capacity for e-learning in an in-depth examination of an instructor's journey from novice to advanced level. By investigating this development, the researcher contributes valuable knowledge to the field of e-learning, providing practical insight for administrators in educational institutions who seek to enhance their e-learning capabilities.

Literature Review

Teaching Capacity

Teaching in higher education forms a multifaceted process that encompasses a range of responsibilities, including creating learning activities, setting course



expectations, evaluating student performance, offering support, and engaging with learners, all of which is intended to achieve desired learning outcomes. Four essential tasks are required for teaching: 1) knowing about the subject matter; 2) designing the learning experience; 3) interacting with students; and 4) managing courses (Fink, 2008). For teaching quality, two more tasks need to be in place: 1) using diverse instructional strategies to enhance students' learning quality and 2) continuously developing teaching skills and knowledge. Hénard and Roseveare (2012) defined quality teaching as the use of pedagogical methods to “produce student learning outcomes” (p. 7). This involves effective curriculum design, appropriate selection of content, diverse learning contexts, and comprehensive strategies of assessment. Quality teaching, requires expertise in both subject matter and pedagogy in the design and facilitation of learning processes that guide students toward desired outcomes. Scott and Scott (2007) highlight that university academics who do not have formal pedagogical training are at a disadvantage when seeking to meet high-quality teaching expectations.

Fostering quality teaching in higher education is a multilevel endeavor that involves collaboration among the institution, the faculty as a whole, and the individual to create and

implement effective vision and strategic plans. Scott and Scott (2007) proposed a seven- point model for the development of teaching quality:

1. Visionary leadership for quality teaching and learning
2. Reward and recognition of quality teaching
3. Performance review
4. Pedagogically focused academic development opportunities
5. Resourcing of the teaching and learning infrastructure
6. Creating collaborative cultures
7. Promoting systematic reflection and implementation of change and innovation

Instructors require support in developing their teaching capacity through educational development. This includes recognition of students' learning needs, acquiring pedagogical knowledge, sharing knowledge in academic communities, and receiving institutional recognition and reward (Taylor & Colet, 2010). This comprehensive approach to the enhancement of teaching quality in higher education seeks to create a more effective and engaging learning environment for students while supporting educators' professional growth of educators.

A primary challenge in higher education lies in overcoming traditional practices to adopt new paradigms. Palmer et al. (2010) propose that cultural change requires

transformative conversations in a community that is built on trust. These conversations evolve through as members share personal stories, generate ideas, and, ultimately take action. The act of sharing stories plays a crucial role in



fostering a trusting community. As Palmer et al. note, “the more one knows about another person’s story, the less one is able to dislike or distrust” (p. 139). This foundation of trust sets the stage for transformative conversations that demand open, honest, and focused dialogue if they are to progress toward meaningful change. The outcomes of such transformative conversations among colleagues can have far-reaching impacts that go beyond the immediate campus environment. The ideas and practices emerging from these discussions can be disseminated across various public channels, such as conferences, faculty meetings, teaching portfolios, and online platforms. This broader sharing of insights and innovations helps catalyze change across the wider landscape of higher education, fostering a culture of continuous improvement and adaptation to the evolution of educational needs. E-learning is one aspect of teaching in higher education.

To effectively develop teaching capacity in higher education, particularly in e-learning environments, adequate resources and a range of support systems must be in place.

Instructors must develop a profound understanding of the interplay between technology and pedagogy to enhance learning outcomes (Benson & Ward, 2013; Koehler, Mishra, Hershey, & Peruskiet, 2004). The Technological Pedagogical Content Knowledge (TPCK) model, proposed by Mishra and Koehler (2006), delineates the essential knowledge domains instructors must master to effectively integrate technology into their teaching practices.

This model includes three primary components:

1. Technological knowledge: Understanding of the technological tools and resources that facilitate teaching and learning.
2. Pedagogical knowledge: Familiarity with the methods, processes, and practices of teaching and learning.
3. Content knowledge: Expertise in the subject matter that is being taught.

The TPCK model identifies four overlapping areas representing the combined knowledge types:

- a) Pedagogical content knowledge: Intersection between subject matter and instructional design.
- b) Technological content knowledge: Selection and application of specific tools to address the subject matter.
- c) Technological pedagogical knowledge: Understanding how technology can impact teaching and learning.
- d) TPCK: The synthesis of all components, representing "good teaching with technology" (Mishra & Koehler, 2006).



Instructors must understand the relationships that extend between and among each area of the TPACK model. For instance, they need to identify appropriate technological tools for the delivery of specific learning content to particular audiences (Januszewski & Molenda, 2008). In addition, instructors must take account of which pedagogical approaches are most suitable for various communication settings, such as in facilitating asynchronous weekly discussions and establishing instructor presence. It is important to

note that the possession of high levels of technological knowledge and utilizing a range of technologies does not by itself guarantee success in e-learning. Benson and Ward (2013) caution that relying on technological knowledge in isolation can negatively impact instructors' ability to use technology in pedagogically and contextually appropriate ways. Consequently, several scholars (e.g., Schmidt, Tschida, & Hodge, 2016; Vaill & Testori, 2012) call for educational development providers to incorporate both pedagogical and technological aspects of online teaching in their training. This comprehensive approach is crucial for the effective preparation of and support for online instructors, ensuring that they are able to navigate the complex landscape of technology-enhanced education to deliver high-quality learning experiences to their students.

Several strategies to develop teaching expertise in e-learning have been identified, ranging from formal programs and communities of practice to mentoring. Effective development programs help instructors transition to e-learning, equipping them with the necessary skills, knowledge, and confidence to design engaging and interactive learning experiences for their students (Vaill & Testori, 2012). Yet, such programs may fall short if they concentrate on the technological aspects of e-learning alone (Taylor & McQuiggan, 2008). Schmidt et al., (2016) emphasize that development programs should address the development of curricula and e-learning pedagogy, together with technological tools.

The concept of communities of practice (CoP) has gained popularity in education as a method for professional development (Baran & Cagiltay, 2010; Carter, 2014). Schaler and Fusco (2003) argued that teachers' professional development goes beyond traditional training workshops that involve a process of learning to apply knowledge by means of engagement in a community of practitioners. The collaborative nature of learning in CoPs can surpass individual knowledge (Johnson, 2001), as members present perspectives, challenge ideas, provide feedback, and enhance their connection with existing knowledge (Bryan & Bates, 2015).

Peer mentoring is another approach to professional development. This method puts experienced instructors to work with novices to help them navigate e-learning and develop the necessary skills. By means of observation and reflection, instructors learn from their mentors how to design, facilitate, and evaluate e-



learning (Vaill & Testori, 2012). Then, peer observation allows instructors to offer feedback and suggestions with respect to design, facilitate, and assessment, as well as sharing their successes and challenges in e-learning (Baran & Correia, 2014). Peer mentoring could be part of a formal program or take place under the auspices of an informal relationship (Herman, 2012).

The diversity of these approaches to professional development in e-learning show the importance of comprehensive strategies addressing pedagogical and technological aspects of this development, fostering collaborative learning environments and providing targeted support for instructors at various stages of their e-learning journey.

Lack of administrative support can hinder the development of teaching capabilities (Johnson et al., 2014). To enhance teaching capacity in e-learning, strong institutional backing and leadership are necessary at all levels, from the university president to individual departments and heads of departments (Johnson et al., 2014). The organizational culture that surrounds e-learning has a crucial role to play in motivating instructors to improve their teaching practices in this domain (Baran & Correia, 2014). Where institutions value and reward e-learning initiatives, faculty members will tend to invest more in developing their expertise in this area (Baran & Correia, 2014).

E-learning

The OECD defines e-learning as the use of application of information and communication technologies (ICT) to enhance and support learning in higher education institutions. This encompasses a range of practices, from using ICT to complement traditional classroom instruction to fully online courses or blended learning approaches that combine both elements. E-learning is characterized by its learner-centric approach, offering interactive, iterative, self-paced, and adaptable learning experiences (Licen et al., 2023). E-learning diverges from traditional educational methods in three key aspects: asynchronous delivery (eliminating time constraints), decentralization (removing spatial limitations) and electronically mediated interaction (Prosen et al., 2022). It is important to note that e-learning extends beyond mere digital delivery of content. It involves the thoughtful design of courses aimed at enhancing learning outcomes and ensuring positive student experiences (Licen et al., 2023). This holistic approach considers not just the technology, but also pedagogical strategies and learner engagement.

The development of e-learning materials involves several key components. When content has been created, it needs to be effectively managed, delivered, and standardized. Here, content refers to all instructional materials, organized in a meaningful manner, often linked to specific learning objectives in a defined curriculum. Examples of certain materials



include tutorials, lecture presentations, case-based learning modules, hypermedia, and web resources. Content management involves administrative functions such as storage, indexing, and cataloging to ensure that the e-learning content is accessible to the learners. This could involve the use of portals, repositories, digital libraries, learning management systems, search engines, and e-portfolios. For instance, learning management systems are internet-based software platforms that used to facilitate some or all aspects of e-learning (i.e., preparation, delivery, communication, interaction) and allow these aspects to be accessible (Cheung et al., 2010).

E-learning readiness (ELR) is a critical concept in the implementation of e-learning initiatives in educational institutions. Majid and Lakshmi (2024) define ELR as the physical and mental preparedness of an organization to engage in e-learning experiences. This encompasses the capability of the institution and its stakeholders to participate effectively in an e-learning environment. Successful e-learning implementation requires institutions to establish a comprehensive strategic plan that includes technological infrastructure, strategic educational support mechanisms, and continuous technical assistance. Alshammari and Adaileh (2018) identified five key factors that influence ELR: technology, management, pedagogy, interface design, and administrative and resource support. Their research emphasizes the need to increase awareness of e-learning among stakeholders through the creation of a clear vision and strategic plan, setting specific goals, and implementing continuous assessment procedures. These findings underscore the multifaceted nature of ELR, highlighting that successful e-learning adoption extends beyond mere technological readiness to encompass organizational, pedagogical, and administrative dimensions. The integration of these elements ensures a comprehensive, responsive, and adaptive e-learning system that can effectively meet the diverse needs of modern educational institutions. By prioritizing technological readiness, pedagogical support, and continuous technical assistance, institutions can create a resilient and dynamic e-learning environment that fosters effective teaching and learning outcomes in the digital age.

Research Context

This study explored the experience of developing teaching capacity for e-learning in the context of higher education in Saudi Arabia. The e-learning initiative at the university was launched in Summer 2021. It had the following three primary objectives:

1. Build institutional capacity to support the implementation of e-learning and instruction
2. Develop faculty teaching capacity to integrate educational technologies into learning and teaching practices



3. Enhance student learning quality and outcomes

This initiative adopted a top-down approach, inviting 17 colleges across the larger university to participate, of which 11 responded positively, namely, Medicine, Languages and Translation, Social Science, Education, Business, Islamic Studies, Design and Art, Science, Communication and Media, Computer Science, and Applied Medicine Science.

Participating colleges were asked to provide a list of courses requiring development and technological integration to enhance student engagement and interactivity, including face-to-face, blended, and online formats. This list was then analyzed to select courses for the initiative, resulting in the identification of 122 courses for development.

The initiative set an ambitious timeline of one year for the complete development of the 122 courses. Each participating college nominated faculty members to engage in this development and redesigning the curricula of the selected courses in a way that integrated e-learning approaches and educational technologies.

This structured was conducted to ensure a comprehensive and systematic implementation of e-learning across diverse disciplines, fostering institutional capacity building and faculty development for the integration of educational technology. The initiative's design reflects the strategic effort to transform teaching and learning practices at the university level, being adapted to the evolution of the landscape of higher education, leveraging technology to enhance educational outcomes.

For this study, following criteria that aligned with the research objectives, one instructor was selected to participate. This instructor was chosen for two key reasons:

1. Lack of prior e-learning experience: The selected instructor had no previous experience with e-learning before the university's e-learning initiative. This was crucial as, it enabled the study to explore the development of e-learning teaching capacity as observed from a novice perspective, to provide insights into the challenges and learning curve that are associated with the transition to e-learning.
2. Recognition of excellence: The instructor was awarded the university president's award for her work in e-learning, including under the auspices of this project. This recognition indicates that the instructor went beyond successfully navigating the transition to e-learning but excelled in implementing e-learning practices, which made her experience particularly valuable for this study.

Focusing on this specific case, this study investigated in-depth insight into the learning journey of an instructor who successfully transitioned from having no e-



learning experience to becoming an award-winning practitioner of e-learning. This allowed for detailed examination of the factors that contributed to successful e-learning implementation, the challenges that were encountered, and the support mechanisms that facilitated the instructor's development.

The study was conducted to examine the instructor's experience of navigating e-learning field, with a specific focus on the identification of enablers and hindrances of their development. In addition, the research examined the institutional support and scaffolding that was provided during this process.

Research Methodology

A case study is defined as "an empirical inquiry that investigates a contemporary phenomenon (the case) in-depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 2014, p. 16). This methodology was chosen for two main reasons: the complexity of the phenomenon under investigation and the nature of the research questions. Use of a case study allows for the holistic examination of a phenomenon through the integration of multiple data sources to facilitate a deep understanding and rich description of the subject (Merriam, 1998). Yin (2014) posits that a case study design is particularly suitable for investigations of "how" or "why" questions. In this study, the focus was on how teaching capacity is developed in e-learning initiatives and how academic institutions can support this development. As Merriam (1998) notes, "The interest is in the process, rather than outcomes, in context rather than a specific variable, in discovery rather than confirmation. Insights gleaned from the case study can directly influence policy, practice, and future research" (p. 19). The case study approach enables an in-depth exploration of the complex process of developing teaching expertise in the context of the development of e-learning. This methodology's strength lies in its ability to provide a comprehensive understanding of the phenomenon in its real-world context, potentially informing policy, practice, and future research in e-learning and faculty development.

The study was guided by two main questions:

1. How do instructors develop their capacity to design a professional e-learning experience?
2. What role can academic institutions play in supporting instructors to develop their teaching capacity in the e-learning domain most effectively?

The Participants

This study employed purposeful sampling in selecting two key participants who could provide rich, detailed insights in the development of e-learning teaching



capacity:

1. Instructor: An academic from the College of Social Science was selected based on the two following critical criteria:
 - a) She successfully redesigned a course for blended learning delivery as part of the university's e-learning initiative.
 - b) She was awarded the president's prize for her outstanding work in e-learning, indicating exemplary performance in this new teaching modality.

Instructional Designer: A professional who had worked directly with the selected instructor during the course redesign was chosen to represent the university's support system. This participant provided insight into the institutional perspective and the support mechanisms that are in place for faculty development in e-learning.

The selection of these participants provided for a comprehensive exploration of the development of the e-learning in relation to the faculty and institutional support perspectives. The instructor's experience offered insight into the challenges, strategies, and personal growth that went into transitioning to e-learning, while the instructional designer's input provided valuable information concerning the support structures, resources, and collaborative processes that facilitated the transition. By including both perspectives, this study sought to capture a holistic view of the development of the e-learning, examining not only individual experiences but also the interplay between faculty members and institutional support systems. This approach enabled a nuanced understanding of the factors that contribute to the successful implementation of e-learning and the development of teaching capacity in this domain.

Data Collection

A case study methodology allows for the integration of diverse data sources, which providing the researcher with a holistic and in-depth understanding of the subject being examined. This approach serves two primary purposes: 1) obtaining a holistic picture of how instructors develop their teaching capacity in designing and evaluating e-learning experience, and 2) cross-validate information through triangulation (Gay, Mills, & Airasian, 2009). Two main data collection methods were employed: interview and documentary review.

Semistructured interviews were the primary data collection tool due to their flexibility and ability to generate rich, in-depth data. The interview format allows for additional questions to emerge during the conversation, based on participants' responses, leading to more nuanced and comprehensive data (Merriam, 2009). As Merriam (2009) notes, semistructured interviews enable the researcher "to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic" (p. 90). This adaptability is particularly valuable in explorations of the complexities of developing teaching expertise.

The interview questions were carefully crafted to address four key areas of inquiry:



1. Exploration of e-learning design and teaching experience: These questions delved into the participant's journey in the development and implementation of e-learning courses. They were intended to uncover the challenges faced, strategies employed, and lessons learned through the transition to e-learning.
2. Identification of the supportive factors and essential resources: This set of questions focused on uncovering the elements facilitating the participant's development of e-learning teaching capacity. These could include technological tools, professional development opportunities, peer support, or other resources that were crucial in the journey.
3. Recognition of the academic institution's role: These questions examined institutional contexts and support systems. They investigated how various university stakeholders, such as leaders, instructional designers, and professional development providers, contributed to the participant's growth in e-learning competence.
4. Elicitation of suggestions and recommendations: The final set of questions provided an opportunity for the participant to offer insight based on their experience. These questions gathered recommendations for ways to develop a more effective teaching capacity in e-learning, potentially informing future institutional practices and policies.

Structuring the interview questions around these four areas, this study gathered comprehensive data that could address the research questions and provide a holistic understanding for the process of developing instructional capacity for e-learning. This approach allowed for the exploration of both individual experiences and institutional factors, leading to a nuanced understanding of the complexities that are involved in transitioning to e-learning in higher education.

Each interview, which lasted from 45 to 50 minutes, was audio-recorded and then transcribed verbatim. The transcript of each interview was sent to corresponding participants to ensure their accuracy. One of the two participants made minor changes to the interview transcripts.

The use of multiple data sources in this case study provided a more complete picture of the phenomenon and enhanced the credibility and trustworthiness of the findings through methodological triangulation. By combining interview with documentary data, the researcher could corroborate the findings, identify potential discrepancies, and gain a more nuanced understanding of the contextual factors influencing the development of the teaching capacity for e-learning initiatives. Various resources were collected from the participants, including guidelines, how to materials, templates, records, and instructional videos. These materials provided valuable insight into the tools and resources that are utilized in the e-learning development.

Data Analysis

Thematic analysis was used to analyze the collected data. Thematic analysis is widely used in qualitative research, defined by Lapadat (2010) as follows:



A systematic approach to the analysis of qualitative data that involves identifying themes or patterns of cultural meaning; coding and classifying data, usually textual, according to themes; and interpreting the resulting thematic structures by seeking commonalities, relationships, overarching patterns, theoretical constructs, or explanatory principles. (p. 926)

This approach features three primary steps: identifying emerging themes, analyzing them, and reporting patterns in the data (Braun & Clarke, 2006). The process begins with data encoding, followed by reorganizing these codes into groups based on similarity or relevance. Themes are then identified using the number of codes that are clustered together, and they are assigned titles that represent the underlying concepts emerging from the data.

For each individual theme, a detailed analysis is conducted, which includes identifying the theme's characteristics and its relationship to the research questions (Braun & Clarke, 2006). As Braun and Clarke (2006) assert, "A theme captures something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set" (p. 28).

This systematic approach to qualitative data analysis allows researchers to identify meaningful patterns and insights addressing their research questions. By identifying, analyzing, and reporting themes, researchers can provide a rich, detailed, and nuanced account of a case's data, producing valuable insights into the phenomenon being investigated. The flexibility of thematic analysis makes it a valuable tool across qualitative research designs, including in case studies, where it can help elucidate complex processes and experiences.

Research Findings

The data analysis showed three main themes: meaningful experience, supportive factors, and challenges. Each of these themes is described in the following paragraphs.

Meaningful Experience

The participants indicated that the e-learning initiative was a transformative experience for them, contributing to their professional growth and presenting both excitement and challenges. The instructor expressed a sense of pride and accomplishment, stating, "I was so proud of myself that I was able to complete the redesign and teach the course. I encountered a lot of difficulties, but it was worth it." She further noted the positive outcomes of the redesign process, commenting that "the redesigned course became engaging and interactive."

The course redesign process followed a structured, step-by-step approach. The course was redesigned using the ADDIE model. The instructor described the initial phase of this phase, saying, "it was a step-by-step process, where I completed the required design files such as the course outlines including course objectives and goals, learning tasks, topics, and assessment." These course design



elements were reviewed by instructional designers, who provided feedback to refine the structure of the course.

Following approval of the course outlines, the process moved to content development. This phase involved preparation of the learning content for each module, together with discussion questions and quizzes. The subsequent stage required instructors to collaborate with a supportive team, including instructional designers, graphic designers, and sound/video producers, to create audio or video content for each learning module. The participating instructor noted, “The team was dedicated to ensuring the quality of the produced videos; they paused the recording multiple times to verify my pronunciation and clarity.”

The instructional designer reported that the university studio is well-equipped, stating, “We have an excellent studio that is outfitted with high-end tools, which truly facilitates our work and enhances our professionalism.” He also noted that “We have a highly qualified support team that excels in both instructional design and technical aspects.”

The final phase involved the design and organization of the Blackboard course shell, ensuring that it was ready for instructor use. This comprehensive process demonstrates the initiative’s collaborative nature and the multiple stages involved in transitioning a course into an e-learning format.

This experience highlights the multifaceted nature of the development of e-learning courses, which involves not only individual effort but also significant institutional support and a team-based approach. This underscores the complexity of the process and emphasizes the potential for meaningful outcomes in terms of course engagement and interactivity.

Supportive Factors

The participants indicated four key factors that facilitated and scaffolded the development of e-learning teaching capacity: First, it was crucial to have a clear vision and strategic plan. This initiative established a well-defined vision for all stakeholders. The instructional designer stated, “Our vision for this e-learning initiative was developing teaching capacity to redesign an engaging course that increases the quality of learning outcomes...transferring heavy learning materials to interactive ones through multimedia resources and authentic learning tasks.” The strategic plan followed a top-down approach, originating from the level of the university administration and cascading down to individual programs and courses. This process involved communication with colleges to select courses for the initiative that are based on specific criteria, such as being a generally required course with high student enrollment. The development process was collaborative, following the ADDIE model.

Second, a sufficient infrastructure was put into place. This included an equipped studio, the necessary programs and applications, and a robust learning management system. The participant noted, “We had an excellent equipped studio in the region. Our friends from other universities visited us to see what good staff



we have. I believe we started at a very good point.” The participant also noted the availability of various programs and applications that supported e-course development, as well as an accommodating learning management system.

The third factor was having a supportive staff. The instructional designer explained, “Our team consisted of instructional designers, graphic designers, video/audio producers, and IT staff. All worked collaboratively during the design, implementation, and evaluation phases.”

The fourth factor was the provision of opportunities for educational development. These included a range of workshops, one-to-one coaching, how to resources, and models. This initiative began with numerous workshops intended to convince the faculty to adopt more engaging and interactive teaching styles. These formative workshops “took more time than we planned; the timeline to complete the project was a year, the workshops took about six months.” The workshops involved modeling e-learning approaches to demonstrate the way that traditional courses could be transformed into engaging and interactive e-learning experiences. Both pedagogical and technological workshops were offered, producing additional one-on-one support available for the instructors who needed it. Drawing from best practices nationally and internationally, comprehensive how to resources were created and offered to assist instructors in redesigning their courses and navigating the e-learning field.

These factors collectively created a supportive system enabling instructors to develop their e-learning teaching capacity more effectively, highlighting the importance of a holistic approach for implementing e-learning initiatives in higher education.

Challenges

This initiative-encountered several challenges at both the individual and institutional levels. At the level of the individual instructor, two primary challenges were reported.

1. Heavy workload: The participating instructor reported a full teaching schedule of 16 hours per week, distributed over five days. She explained that the work that was involved in redesigning the course was not accounted for in her teaching schedule. As she put it, “Every day I went to the campus giving my lecture, offering office hours for students, and then I went to the studio...sometimes it was difficult to arrange time with the supportive team that worked for us.” To address this issue, the instructor suggested “redesigning courses with the instructor teaching schedule and giving 1 day a week at least for designing.”
2. Limited recognition and rewards: The instructor noted that initially, there were no rewards for participating in the initiative. Later, incentives were introduced, including “a certificate of experience, a record of 100 hours of volunteering, and a honorarium.” However, she commented that “These rewards were not enough to entice instructors with a heavy workload to



join unless they had a strong desire to change.”
At the institutional level, three main challenges emerged:

1. Changing traditional culture: The instructional designer explained that the faculty age range was predominantly 45–50 years old, with many of them resisting changes. Numerous informative workshops were offered to facilitate cultural change, but this phase took more time than anticipated.
2. Limited faculty participation: The instructional designer noted that the “faculty have a full-time schedule, teaching and working on their research, and they have family commitments. It is really hard for them to find time to participate with us. I do not blame them as we did not offer enough rewards.” Some faculty members even withdrew midway through the project, citing an unexpected challenge. To address this, solutions were implemented, including providing a record of 100 hours of volunteer work, a certificate of experience, and an honorarium (2000 R.S.) for each completed course. These incentives proved effective in improving participation.
3. Sustainability concerns with seminal instructors: The designer highlighted that course development requires an iterative process of design, implementation, and assessment, performed over time. The participation of seminal instructors who may not continue with the university in the coming semesters posed a challenge to the long-term sustainability and improvement of the redesigned courses.

These challenges indicate the complex nature of the implementation of e-learning initiatives in higher education, emphasizing the need for comprehensive support systems, appropriate incentives, and long-term planning to ensure the success and sustainability of these programs.

Discussion and Conclusion

Due to the growing interest in incorporating e-learning in higher education, attention needs to be given to the development of teaching capacity, including the knowledge and skills required for designing, developing, and facilitating learning in technology-enabled environments (Lock et al. 2019).

Setting the stage for change is critical for success. Institutions must create a clear vision and strategic plan for e-learning initiatives. To align with this, essential infrastructure must be in place, multiple types of educational development opportunities should be offered, ongoing support should be provided, and institutions should be responsive to instructors’ needs. Moreover, recognition and award systems should be established to motivate instructors in redesigning their courses and modifying their teaching approaches.



Thoughtful support for educational development should involve pedagogical, technological, and content knowledge that is related to e-learning (Schmidt et al., 2016; Vaill & Testori, 2012). Modeling and evidence-informed practice for instructors provide them with examples and images of what e-courses look like. “Modeling practices in terms of the design, the facilitation, and the experience is just not about offering a way to do the work—it also provides an opportunity for discussion” (Lock et al., 2019, p. 16). Engaging in open discussion facilitates change in higher education (Palmer et al., 2010).

Coaching can build will, skill, knowledge, and capacity because it can go where no other professional development has gone before: into the intellect, behaviors, practices, beliefs, values, and feelings of an educator. Coaching creates a relationship in which a client feels cared for and is therefore able to access and implement new knowledge. (Aguilar, 2013, p. 8)

Sufficient time must be given to understand e-learning pedagogy and then gradually redesign courses and modify the teaching style. Research has found that the lack of time to develop teaching practices is the main barrier for instructors in higher education (Scott & Scott, 2015).

From the vision and strategic plan down to the redesign and implementation, the e-learning initiative should be sufficiently resourced and supported to ensure not only successful implementation but also sustainable continuation. This comprehensive approach is what will lead to enhanced teaching capacity. As instructors become more proficient in the design and facilitation of e-learning, their improved skills and knowledge are reflected in improved student outcomes.

This case study investigated the implementation process for e-learning initiatives.

The findings are context-specific and may not be broadly generalizable, but the rich, detailed descriptions offered in this study enable readers to assess the potential transferability of the insights to their own educational settings (Schwandt, 2007). Based on the experiences and outcomes of this research, several recommendations for future studies have emerged. In particular, there is a strong rationale in favor of conducting a more extensive study that incorporates a diverse range of instructors from various academic disciplines. This expanded investigation would offer a broader perspective on e-learning implementation across subject areas, potentially revealing discipline-specific challenges and opportunities.

Availability of data and materials

The datasets used and/or analysed during the current study are available from the



corresponding author on reasonable request.

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Authors' contributions

The author confirms sole responsibility for the following: study conception and design, data collection, analysis and interpretation of results, and manuscript preparation.

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Competing interests

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