

A Phenomenological Study of Instructors' Experiences in Online Higher Educational
Environments

by
Leonardo Borrazá

An Applied Dissertation Submitted to the
Abraham S. Fischler College of Education
and School of Criminal Justice in Partial
Fulfillment of the Requirements for the
Degree of Doctor of Education

Nova Southeastern University
2025

Approval Page

This applied dissertation was submitted by Leonardo Borrazá under the direction of the persons listed below. It was submitted to the Abraham S. Fischler College of Education and School of Criminal Justice and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova Southeastern University.

Jennifer Reeves, PhD
Committee Chair

Beverly Knox-Pipes, EdD
Committee Member

Kimberly Durham, PsyD
Dean

Statement of Original Work

I declare the following:

I have read the Code of Student Conduct and Academic Responsibility as described in the *Student Handbook* of Nova Southeastern University. This applied dissertation represents my original work, except where I have acknowledged the ideas, words, or material of other authors.

Where another author's ideas have been presented in this applied dissertation, I have acknowledged the author's ideas by citing them in the required style.

Where another author's words have been presented in this applied dissertation, I have acknowledged the author's words by using appropriate quotation devices and citations in the required style.

I have obtained permission from the author or publisher—in accordance with the required guidelines—to include any copyrighted material (e.g., tables, figures, survey instruments, large portions of text) in this applied dissertation manuscript.

Leonardo Borrazá
Name

April 28, 2025
Date

Abstract

A Phenomenological Study of Instructors' Experiences in Online Higher Educational Environments. Leonardo Borrazá, 2025: Applied Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education and School of Criminal Justice. Keywords: online learning, instructor readiness, teaching presence, social presence, phenomenological study

Modern education underwent a rapid transformation, primarily driven by technological advancements that reshaped both instructional delivery and how students engaged with learning. Nowhere was this transformation more evident than in higher education, where online education expanded significantly in recent years. While online learning environments offered increased flexibility and autonomy for students, they also presented persistent challenges, including reduced instructor-learner interaction, social isolation, and varying levels of student engagement and motivation.

This phenomenological study explored instructors' lived experiences in online higher educational environments, specifically focusing on perceived deficiencies in instructor-learner interaction, instructor readiness to teach, student readiness to learn, and challenges related to social presence. The study addressed how a lack of engagement and structured instructor-student interaction contributed to disengagement and isolation. It further examined how students' time-management skills, self-directedness, and self-motivation ultimately influenced the quality of their learning experiences.

Drawing from in-depth interviews with higher education instructors experienced in online teaching, the study sought to understand the complexities of online instruction from the instructors' perspectives. The findings contributed to the growing body of research on online education by highlighting best practices, revealing potential gaps in faculty preparation, and offering insights to support professional development. These findings aimed to inform training programs and institutional strategies that enhance the overall quality of online learning, providing value to instructors, instructional designers, administrators, and policymakers dedicated to improving online education.

Table of Contents

	Page
Chapter 1: Introduction	1
Statement of the Problem.....	1
Setting of the Study.....	6
Researcher’s Role and Justification	6
Purpose of the Study	8
Definition of Terms.....	9
Chapter 2: Literature Review.....	11
Theoretical Framework.....	12
Historical Perspective of Online Learning Environments	17
Instructor Roles in The Online Learning Environment	26
Learner Roles in The Online Learning Environment	32
Instructor and Learner Readiness in The Online Learning Environment	35
Characteristics of Effective Online Learning Environments	41
Conclusion	44
Research Questions.....	46
Chapter 3: Methodology	48
Purpose Statement.....	48
Research Questions.....	48
Aim of the Study.....	49
Research Design.....	49
Sampling	49
Participants.....	50
Data Collection Instruments	50
Procedures.....	54
Data Analysis	55
Ethical Considerations	56
Trustworthiness.....	57
Potential Researcher Bias	60
Conclusion	61
Chapter 4: Findings	62
Introduction.....	62
Research Questions.....	62
Summary of Chapter 3	63
Overview of Chapter 4	63
Participant Demographics	64
Data Collection and Analysis Process	67
Emergent Themes	73
Unique Experiences or Outliers	101
Summary	103
Chapter 5: Discussion	105

Overview of Study	105
Discussion and Implications	106
Recommendations	122
Limitations	140
Considerations for Future Research	143
Conclusion	147
References.....	152
Appendices	
A Interview Guide.....	170
B Group Experiential Themes	173
C Common Core Principles	179
Tables	
1 Milestones in The History of Distance Education	22
2 Commonalities in Learner Roles	34
3 List of Themes	74
4 Emergent Codes for Theme 1	76
5 Emergent Code for Theme 2	80
6 Emergent Codes for Theme 3	82
7 Emergent Codes for Theme 4	86
8 Emergent Codes for Theme 5	92
9 Emergent Codes for Theme 6	97
10 Divergent Responses Compared to Dominant Themes	102
11 Correlation Between Themes and Research Questions	104
12 Core Components of the Online Educational Ecosystem Framework	123
13 Key Components of Lesson Audits	139
Figures	
1 Interview Guide Development Process	52
2 Expanded Community of Inquiry (CoI) Framework	119

Chapter 1: Introduction

Statement of the Problem

It is axiomatic that the educational paradigm (the comprehensive frameworks and models that encapsulate the fundamental principles, beliefs, practices, and methodologies that characterize a particular approach to education) is changing rapidly, not just in the United States but in the rest of the world. Consider for a moment the many educational technologies (e.g., computer hardware, software, Learning Management Systems, interactive smartboards, and collaboration platforms) that have been developed over the last 20 years or so. These advancements have arguably brought about many radical changes that have affected learning institutions, educators, and learners alike. Perhaps it can be argued, however, that the distance education component, which stands above the aforementioned list of educational technologies in both scope and breadth, serves as the inexorable, *sine qua non* impetus that is driving this revolution, or better yet, evolution that is taking place right now in education. Undergirding the distance education model is the online learning environment, which offers the learner, among other things, an unprecedented level of flexibility and autonomy. However, although the online learning approach to education is useful and beneficial in many ways, some aspects can be improved.

The Research Problem

When discussing online learning within the context of higher education, one is referring to an educational approach where the learner takes, among other things, the primary charge and direction of their learning experience (Muhammad, 2020). In the realm of online learning environments, learners undoubtedly wield considerable

autonomy in discerning their learning requirements, setting objectives, and selecting suitable learning methodologies—a level of control far surpassing that afforded in conventional educational frameworks. However, this does not mean that the instructor or educator does not play an indispensable or essential role in the overall success of the online learning experience--on the contrary.

The problem that will be addressed in this study will be the perceived deficiencies in instructor roles in the online learning environments that are commonly used in distance education at higher educational institutions. Instructor roles (i.e., content resource, resource locator, interest stimulator, positive attitude generator, creativity and critical thinking stimulator, and evaluation stimulator) will play an indispensable part in the educational approach to online learning (Shalan, 2019). However, the qualities that will make online learning so flexible, accessible, and appealing may also contribute to an instructional approach in which engagement will vary. In some cases, this flexibility will lead to challenges in responsiveness and interaction, resulting in learning experiences in which students will navigate much of the material independently, with limited direct instructor presence. The result will be a learning environment that lacks instructor involvement, structured guidance, and interaction between the instructor and the learner. All this will contribute to a learning experience in which students will find it challenging to stay motivated, stay on track, contact instructors, and interact with classmates, as well as causing them to experience a sense of social isolation.

Background and Justification

A preliminary and cursory reading of the literature, as well as evidence obtained through student feedback, suggests ongoing challenges and areas for improvement in the

instructor roles that are integral to the online learning approach used in distance education. On the one hand, it is clear that learners endeavoring to successfully engage in an online learning environment can be greatly helped by instructors who fulfill their proper roles by providing the content and the resources that are needed, by instructors who are willing to aid students as they develop confidence in what they are doing, and by instructors who offer guidance and opportunities that stimulate interest and stimulate a positive attitude in the learner (Du Toit-Brits, 2019). On the other hand, the literature also demonstrates that instructors who do not fulfill their roles in the online environment have an undesirable impact on the overall learning experience (Richardson et al., 2016).

There are various reasons that might explain why instructors fail in their roles as facilitators of instruction in the online learning environment. One of those reasons is the misconception or the misunderstanding of what constitutes effective teacher roles in online learning (Beard, 2013). For example, Guevara et al. (2021) observed that some online instructors mistakenly believe their primary role is limited to making course materials available, assuming that learners require little additional support, empathy, or interaction. These misconceptions are unfounded. The role of the online instructor extends far beyond content delivery; it is a multifaceted position that involves facilitating learning, fostering communication, and serving as a mentor (Shalan, 2019).

Another possible reason that might explain why educators fail in their roles in online learning environments is the lack of proper training (Alhabeeb & Rowley, 2018). In December of 2019, the entire world was hit by a menace that could not be controlled, stymied, or prevented--COVID 19. As the coronavirus disease rapidly spread throughout the world, colleges and universities scrambled to quickly deliver instruction online to

ensure the safety of both educators and learners. This rapid change in the way instruction was delivered to students caught many teachers and instructors off guard; they were forced, in some instances overnight, to change their entire instruction delivery approach. These rapid and, in some instances, impromptu ad-hoc changes that took place in institutions of higher learning all around the United States caused a multitude of problems for educators as well as for learners.

Unquestionably, many students appreciate the flexibility and accessibility that online learning provides. Discussions with other learners indicate that they value the ability to balance their studies with personal and professional commitments, an opportunity that traditional in-person education may not always afford. The researcher also recognizes these advantages, acknowledging that online learning environments create opportunities that might not otherwise exist, making education more accessible to diverse students.

However, there is also experiential evidence, including testimony from learners and the researcher, who have also encountered challenges while engaging in online college courses. For example, one student expressed frustration with the structure and clarity of an online course, stating, “This may be my last semester at...” (T. Alexander, personal communication, 2021). Similarly, another student reached her tolerance limits when she exclaimed, “I’m extremely frustrated with this program... it’s all so confusing” (M. Williams, personal communication, 2021). Beyond these individual experiences, discussions with online learners have revealed that some students feel isolated and disconnected from the learning experience, which can impact their engagement and overall satisfaction. The researcher has also personally encountered similar feelings of

isolation and disconnectedness in online learning environments, further highlighting the importance of fostering meaningful instructor presence and interactive learning opportunities. The sentiments expressed by these students align with findings in the literature, which suggest that while some learners perceive challenges related to instructor roles in online learning—particularly in areas of communication, clarity, guidance and social presence—others benefit from the flexibility and accessibility that these environments offer (Kohan et al., 2017).

Deficiencies in the Evidence

Some of the evidence in the literature discusses the importance of instructor roles in online learning environments. However, the discussion mostly revolves around the idea of how instruction within online learning environments is changing how instructor roles are defined. For example, Beaudoin (1990) writes that instructors experienced with the more traditional teaching styles, such as in-person and face-to-face instruction, will need to acquire new skills to help them adapt to the online delivery approach. Yes, the literature discusses the importance of instructor roles, the many changes that are taking place when it comes to interaction between instructors and learners, and their importance in online learning environments. However, much of the literature appears to lack a comprehensive discussion on the matter (Du, 2013).

Audience

A systematic Stakeholder Analysis (SA) was conducted to identify, assess, and prioritize the individuals, groups, and entities that have a vested interest or influence in this study. A Systematic Stakeholder Analysis is a structured process designed to recognize and evaluate the key stakeholders associated with a particular project,

initiative, or research study. It helps to understand their level of influence, interests, and potential impact on decision-making and outcomes (Brugha & Varvasovszky, 2000; Memon et al., 2023). By systematically analyzing stakeholders, researchers can determine the expectations, concerns, and roles of various individuals or organizations, ensuring that engagement efforts are both effective and strategic.

The primary stakeholders identified are (a) the online college or university learners, (b) instructional designers of online instruction, (c) instructors, professors, and school administrators, and (d) institutions of higher learning. The secondary stockholders that have been identified are parents and society. The primary stakeholders will benefit from the results of the study because of its potential to enhance instructional practices, improve education outcomes, and foster a more dynamic learning environment that addresses the diverse needs of online students. Both parents and society as a whole, on the other hand, will find the study useful through the services that skilled graduates of online learning will render.

Setting of the Study

The study incorporated a snowball sampling recruitment technique during the fall semester of 2025 at a large, non-profit university in the southeast. The study explored how perceived deficiencies in instructor roles affected instructors' teaching readiness and students' learning readiness within online college learning environments.

Researcher's Role and Justification

As a doctoral candidate in Education with a background in instructional design and technology, the researcher is uniquely qualified to conduct this study on instructors' experiences with online learning. The researcher has experience with both online and

traditional classroom teaching and has observed the challenges that instructors face when transitioning from one mode of instruction to another. Moreover, the researchers' interests align with this study's topic, and has conducted previous research on instructional design and online learning. The researcher is, therefore, well-equipped to design and conduct this study using rigorous research methods to ensure the validity and reliability of the findings. In addition to his academic qualifications, he has also worked as an instructional designer in a corporate setting for several years, designing online courses and supporting other trainers and instructors in developing effective online teaching practices. This experience has given him valuable insights into the challenges faced by instructors when teaching online and has provided him with the necessary skills to design and implement effective training programs for instructors.

Furthermore, the researcher has developed relationships with several universities and colleges that have implemented online learning programs and has access to instructors with experience teaching in-person and online. This access will allow him to recruit participants for the study and gather valuable data that will provide insight into the research question. Overall, the researcher has a unique background and experience, making him the best person to conduct this proposed study on instructors' experiences with online learning. With his expertise in instructional design and technology and his understanding of the challenges faced by instructors when teaching online, the researcher is confident he can provide valuable insights into this important topic.

Justification

The COVID-19 pandemic forced many institutions to shift to online learning, highlighting the need for instructors to adapt to this mode of instruction. However, at the

time of this study, little was known about instructors' experiences with online learning, and there was a lack of research exploring the challenges they faced when teaching online. This study was therefore conducted to fill this gap in the literature and provide valuable insights into how instructors could be better supported when teaching online.

By exploring instructors' experiences with online learning, this study informed the development of potential training programs and resources to support instructors in developing effective online teaching practices. The study held significance as it had the potential to optimize online learning experiences, ensuring effectiveness and student engagement. Moreover, it sought to equip instructors with the requisite skills to proficiently navigate this mode of instruction. Overall, the study was important because it provided valuable insights into how instructors could be better supported when teaching online and informed the development of training programs and resources to ensure that online learning was delivered in a way that was effective and engaging for students. As such, the study was timely and relevant, and the researcher's unique background and experience made him well-suited to conduct this important research.

Purpose of the Study

The purpose of this phenomenological study was to explore instructors' experiences with their role, readiness to teach, students' learning readiness, and awareness of social presence of the online education environment. The study also attempted to understand better how learners perceive the social presence aspect of the online learning experience—social presence refers to the degree to which students in a virtual environment feel personally connected. These and other issues were explored exclusively from the instructor's perspective.

Definition of Terms

Asynchronous Learning is an approach to education where the instruction and the learning do not occur live or in real-time. Examples of asynchronous learning include online discussion forums and email correspondence. In these scenarios, there exists a delay between each interaction (United Nations Educational, Scientific and Cultural Organization, n.d.).

Educational Community of Inquiry refers to a group of individuals working together to actively participate in thoughtful discussions and introspection actively, aiming to build individual understanding and validate shared ideas (Garrison et al., 2000).

Learning Management Systems (LMS), also known as a course management system or virtual learning environment, refers to a web-based software platform designed to aid educators in organizing and delivering online courses. It facilitates various aspects of course administration, tracking, and reporting. Typically, an LMS comprises key elements, including content creation, organization, delivery, learner support interactions, assessment, grading, and overall learning process management (United Nations Educational, Scientific and Cultural Organization, n.d.).

Personalized Learning Movement refers to an educational approach that tailors instruction, content, pace, and learning pathways to meet the individual needs and preferences of the learner. It is a way of adapting the educational experience to accommodate students' diverse learning styles, strengths, weaknesses, and interests (Houchens et al., 2014).

Prussian Model is an educational framework that was implemented in Prussia following educational reforms in the late 18th and early 19th centuries, a system that has

exerted considerable influence ever since (Prussian Education System, 2018).

Research Framework serves as a foundational structure or model that bolsters one's collaborative research endeavors (Research framework, n.d.).

Online Learning, also known as distance education or eLearning, pertains to providing educational instruction through an online environment (United Nations Educational, Scientific and Cultural Organization, n.d.).

Student-Centered Learning encompasses diverse educational initiatives, instructional methods, and support strategies designed to meet individual students' and student groups' unique learning requirements, interests, goals, or cultural contexts. To achieve this objective, educational stakeholders such as schools, educators, counselors, and specialists may implement various learning approaches, from adjusting classroom assignments and teaching techniques to completely reconfiguring student grouping and instructional methods within a school setting (The Glossary of Education Reform, 2014).

Synchronous Learning occurs when a learner engages with instructors and/or peers online simultaneously despite being in separate geographical locations (United Nations Educational, Scientific and Cultural Organization, n.d.).

Teacher-Centered Learning is an instructional approach that involves the teacher taking on the traditional role of the classroom lecturer, delivering information to students who are expected to passively receive and absorb the instructional material (Lathan, n.d.).

Theoretical Framework furnishes the theoretical underpinnings for the broader context of a study, serving as the cornerstone or perspective through which a study is crafted (Swanson, 2013).

Chapter 2: Literature Review

The field of education has arguably experienced a radical, systemic shift in the last few years as a result of new and innovative instructional delivery approaches and methods, such as the online learning delivery approach, which emphasizes, among other things, learner autonomy, flexibility, and accessibility to instruction anytime. Online learning environments have gained considerable acceptance from both teaching institutions as well as educators because of their potential to foster student-centered instruction in online settings. There is little doubt that in these student-centered learning environments, the learner has more flexibility to set their own pace, determine their learning goals, and engage in self-reflection activities, all of which may contribute to a more efficacious learning experience (Collier, 2011; Nwankwo, 2015; Peterson, 2008; Rhode, 2008; Shirk, 2020).

Two essential and sometimes overlooked or neglected aspects of the online learning environments that will be discussed in this literature review are the instructors' role and the learner's readiness or preparedness to learn. Understanding instructors' experiences with their role, readiness to teach, and the students' learning readiness, as well as their awareness of the social presence aspect of the online learning environments, is crucial for developing and optimizing effective instructional practices. By understanding the instructor's experiences within these and other community of inquiry components of the online learning environments, institutions of learning can develop more effective educational experiences for the online learner community.

Therefore, this literature review endeavored to discover what the research has to say about instructors' rich and subjective experiences in online learning environments. It

also aims to explore the lived experiences of instructors, providing insights into their perceptions, challenges, and opportunities related to their role, readiness to teach, as well as how the students' learning readiness and preparedness, and the student's awareness of social presence affects their learning experience. This literature review allows for an in-depth examination of the phenomenon under investigation from the perspective of those directly involved.

To achieve the goals of this study, a comprehensive review of relevant literature and scholarly works was undertaken. A thorough search was performed across reputable academic databases such as Eric, ProQuest Central, EBSCOhost databases, Google Scholar, and Education Database. Keywords such as "online learning," "online college courses," "instructors' experiences," "role of instructors," "readiness to teach," "students' learning readiness," "social presence," "empirical studies in online learning," "empirical online learning research," and "empirical investigation of the critical factors influencing online learning" were utilized to identify articles published in peer-reviewed journals. Studies published in the last ten years were included to ensure up-to-date and relevant perspectives on the topic. Finally, the aim of this literature review is to gain insights into the instructors' experiences within online learning environments.

Theoretical Framework

The Community of Inquiry (CoI) Framework is a theoretical framework that can provide valuable insights and guidance for a study focused on investigating instructors' experiences in the online learning environment (Arbaugh, 2007; Garrison et al., 2000; Geng et al., 2019; Gregory, 2022; Rhode, 2008). The CoI Framework emphasizes the importance of three essential elements: social presence, cognitive presence, and teaching

presence, which are interconnected and necessary for the creation of a meaningful and effective online learning experience. The following section breaks down these three key elements, examining their significance and how they collectively shape the online learning environment.

Social Presence

Social presence refers to the degree of perceived sociability and interpersonal connection among participants in an online learning community. Instructors' awareness of social presence and their experiences with building rapport, fostering collaboration, and facilitating meaningful interactions among students can significantly influence the effectiveness of the online learning experience. This element of the CoI Framework is particularly relevant to exploring instructors' experiences with students' learning readiness and their own awareness of social presence (Castellanos-Reyes, 2020; Ebersole, 2021; Lau et al., 2021; Widick, 2018).

Cognitive Presence

Cognitive presence refers to the extent to which learners can construct meaning and engage in higher-order thinking through reflection, discourse, and critical inquiry. A good understanding of this important element of the CoI framework can help instructors create a stimulating and intellectually challenging online learning environment for the learner. Moreover, understanding instructors' experiences with their role in the online learning environment through a cognitive presence lens can provide valuable insights into instructional strategies, interventions, and approaches that promote deep learning and critical thinking skills (Castellanos-Reyes, 2020; Ebersole, 2021; Lau et al., 2021; Widick, 2018).

Teaching Presence

Teaching presence encompasses the design, facilitation, and direction of the educational experience, highlighting its multifaceted role in guiding learners effectively. It involves the planning and organization of learning activities, the provision of guidance and support, and the assessment of student learning. It also involves understanding the instructors' experiences with the teaching presence, readiness to teach, and their awareness of the dynamics within the online learning environment. Notably, by using the CoI Framework as a lens to examine the instructors' experiences with the teaching presence aspect of online learning, educators and instructional designers can better understand how to develop effective instructional practices and strategies to support learners as well as understanding the challenges instructors face in balancing their roles as facilitators and guides. (Castellanos-Reyes, 2020; Ebersole, 2021; Lau et al., 2021; Widick, 2018).

Development of the CoI Framework

It was previously noted that the CoI framework, developed by researchers Garrison, Anderson, and Archer, is a theoretical framework that focuses on three essential elements (i.e., social, cognitive, and teaching presence), which are used to gauge or determine the effectiveness of an online learning experience. The framework was developed by the researchers who conducted an explanatory literature review, a type of review that seeks to clarify how and why certain phenomena occur by analyzing and synthesizing existing research on a topic, in this case, the topics were Computer-Mediated Communication (CMC) and computer conferencing in higher education (Garrison et al., 2000). CMC refers to any form of learner communication that occurs

through and by using two or more systems, such as email or virtual classrooms or webinars (Garrison et al., 1999). Computer conferencing, on the other hand, refers to the use of online communication tools or platforms that allow multiple users to engage in synchronous discussions or meetings (Garrison et al., 1999).

Examining various established models and theories in the field of education, the researchers identify several key themes, concepts, and principles relevant to the research topic. Using the CoI framework as a blueprint, the researchers then categorized and analyzed the reviewed studies to identify common patterns and relationships and to pinpoint gaps in the literature. Notably, the framework played a crucial role in interpreting and explaining the interactions between a number of elements within the review studies, thereby providing a unified, coherent narrative that enhances the understanding of the subject matter.

Critical Literature Synthesis

The research consistently affirms that by utilizing the CoI Framework as a theoretical lens, researchers in the field of education can better understand, among other things, instructors' experiences in the online learning environment. For example, a mixed-methods study that was conducted by Kramer (2021), endeavored to investigate the perceptions of 11 higher education language instructors concerning the integration of technology in online language instruction during the COVID-19 pandemic. The research by Kramer involved gathering data from a plethora of sources, such as class observations, which involve the systematic and structured observation of teaching and learning activities within a classroom setting. It looked at student reflection papers, which are written documents in which students critically analyze their own learning experiences,

thoughts, and feelings related to specific educational activities, assignments, or topics. It also examined semi-structured individual interviews, which are used in qualitative research to conduct one-on-one interviews that are guided by open-ended questions. The researcher found that the CoI framework was indispensable for comprehending the instructor's perceptions and experiences in online learning.

Although helpful, the study by Kramer has some limitations that should be noted. Kramer acknowledges that his study has its limitations, which stem from its restricted geographic focus, participant selection, and content area. Notably, the research focused on a single university in the Midwest, and although the participants were equally divided by gender, with a good number of them holding tenure or tenure-track faculty positions, it only included 11 contributors. These limitations suggest that the findings may have limited generalizability and stress the need for future research to include language instructors from diverse institutions, thereby offering a more in-depth perspective on the integration of technology in language instruction settings. Nonetheless, despite the study's limitations and potential for a lack of broader applicability to other educational contexts, the findings provided valuable insights regarding the use of the CoI framework.

In another study by Telmesani (2017), the researcher delved into the experiences and teaching practices of nine instructors who were responsible for delivering at least one academic blended learning course at the University of Manitoba. Employing in-depth interviews, Telmesani explored the instructors' insights into teaching with blended learning in higher education. The researcher writes that using the CoI framework is *sine qua non* for understanding the instructors' experiences in online learning environments. Telmesani goes on to argue that the Community of Inquiry (CoI) framework offers a

structured approach for institutions of learning as well as educators to enhance the online learning experience. Telmesani notes that by incorporating the CoI framework and using it as a lens to examine online education, institutions, as well as instructional designers, can create courses that prioritize social presence, cognitive presence, and teaching presence, while fostering a sense of community and interaction among the learner community. Educators, too, will find the framework useful in creating engaging online learning environments that incorporate activities and assessments that align with the presences to promote higher-order learning and critical thinking skills. Perhaps an added benefit of using the framework, is that it can guide instructors in establishing a strong teaching presence through the development of active communication and guidance strategies, there by ensuring the learner feels supported throughout the entire learning experience.

The study by Telmesani does have some limitations that should be noted. The primary limitation of this research was the small participant pool, with only nine interviews conducted over the course of a year. Additionally, the study acknowledged potential biases stemming from the researcher's position, which could have influenced the interpretation and emphasized specific themes within the findings. These limitations and potential biases underscore the need for caution when generalizing the study's results, particularly in the context of broader blended learning practices in higher education. Nonetheless, despite these limitations, the study's findings provided valuable insights into the use of the CoI framework.

Historical Perspective of Online Learning Environments

When discussing the topics related to the historical perspective of online learning

environments, it is perhaps helpful to first talk about the many evolutionary aspects of these instructional approaches through a historical and developmental lens. Arguably, online learning environments have significantly impacted and will continue to impact education, fostering a more personalized and autonomous, student-centered learning experience. Tracing its roots from early theories of adult learning and educational psychology, the following section explores the key milestones, influential thinkers, and technological advancements that have shaped these methodologies into effective and widely recognized models for facilitating instruction for the modern learner.

Early Education in the United States

To better understand the historical context in which online learning environments evolved and to explain their popularity within modern learning approaches, it is important to trace their roots back to early education in the United States. The evolution of these learning approaches can be observed or understood through various educational movements and shifts in pedagogical and andragogical practices. This brief, albeit accurate, historical perspective provides valuable insights into the development and significance of contemporary online learning environments.

Early Education in the United States was characterized by a teacher-centered approach, which operated primarily through direct instruction and rote memorization (Roos, 2019, August 13). However, the progressive education movement of the late 19th and early 20th centuries challenged this traditional model, leading to the development of more student-centered learning. Progressive educational theorists such as John Dewey (1859-1952), Francis Parker (1837-1902), Maria Montessori (1870-1952), William Heard Kilpatrick (1871-1965), and Helen Parkhurst (1887-1973), advocated for a more student-

centered approach, emphasizing the importance of active learning, experiential education, and individualized instruction (Rauscher & Oh, 2021).

One of the primary architects of the early American educational system was a man named Horace Mann. Often referred to as the “Father of the Common School Movement” Mann arguably made significant contributions to the American educational system during the mid-19th century. Influenced by the Prussian education model, Mann would go on to use many of its principles to shape the American education system (Ellis et al., 2014). Mann served as the Secretary of the Massachusetts Board of Education and used his position of influence to advocate for educational reforms during his time. As previously noted, he was particularly influenced by the Prussian education system, which emphasized a structured and standardized approach to education. Generally speaking, Prussian education focused on compulsory attendance, state control, standardized curriculum, and teacher training institutions. Mann advocated for the adoption of a similar educational approach in the United States and proposed the adoption of the following key elements that are found in the Prussian model (Ellis et al., 2014):

1. **Compulsory Attendance:** Mann advocated for mandatory school attendance, believing that a universal education system was essential for social progress and individual advancement.

2. **Standardized Curriculum:** He emphasized the need for a standardized curriculum to ensure that all students receive a consistent and quality education. This was in line with the Prussian model, which had a uniform curriculum across schools.

3. **Teacher Training:** Mann stressed the importance of training teachers to improve the quality of education. He advocated for the establishment of teacher training

institutions to prepare educators effectively.

4. State Control and Funding: Mann believed in strong state involvement and funding for education. He proposed that the state should oversee and support public education to ensure its accessibility and quality.

Mann's advocacy of these Prussian principles comprehensively influenced the development of an educational model that has dominated the American education system to this day. His vision for reforming education in America played a pivotal role in establishing public schools, promoting compulsory education, and standardizing curriculum and teaching methods across the United States. Mann's contributions laid the foundation for the modern American public education system that is based on accessibility, uniformity, and government involvement (Ellis et al., 2014).

However, it was not until the 1960s and 1970s that the concept of online learning emerged as an extension of the personalized learning movement. The personalized learning movement, championed by educators such as Fred Keller, was an educational approach that endeavored to tailor instruction to meet each learner's individual needs, interests, and learning preferences (Eyre, 2007). It emphasized, among other things, the use of technology, data, and flexible learning environments to personalize the learning experience and enable learners to progress at their own pace. This approach improved upon the outdated, somewhat rigid teacher-centered approach of the day, by allowing learners to control the timing, sequence, and depth of their learning experience (Grant & Spencer, 2003).

As education technology advanced, bringing about the advent of online learning in the late 20th century, new and exciting possibilities for implementing online learning

environments became a reality. Furthermore, online platforms and learning management systems, discussed later on in this chapter, provided the infrastructure for delivering educational content online, enabling learners to access resources, engage in interactive activities, and progress through modules from anywhere (Gustafson, 2010; Nwankwo, 2015). The flexibility and accessibility of online learning further advanced the development and implementation of the distance education paradigm (Bundy, 2022).

Primitive Forms of Distance Learning/Education

Primitive forms of distance education refer to the earliest methods of distance learning that were developed before the advent of modern computer technology. Correspondence courses, radio and television broadcasts, teleconferencing, and study centers were some methods used to deliver instruction to students who were geographically separated from their instructors (Association for Educational Communications and Technology, 2001). A lack of interactivity, personalization, and multimedia characterized these methods. While primitive and outdated by today's standards, these earlier forms of distance education nonetheless offered valuable opportunities to students of that era who could not participate in traditional classroom settings. They also provided the foundation for the development of modern online learning (Collier, 2011).

Distance education has a long history that can be traced back to the 1800s. The first instance of distance education can be attributed to Sir Isaac Pitman, who introduced shorthand by correspondence in 1840 (Bates, 2019). Some of the major milestones in the history of distance education can be found in Table 1 (Keegan, 2013). It should be noted that many of the aforementioned primitive forms of distance education were often limited

in their reach and effectiveness due to technological limitations and a lack of access to resources. Nonetheless, they paved the way for the development of modern distance education methods, all of which rely extensively on the Internet (discussed later on in this chapter) and digital technologies.

Table 1

Milestones in The History of Distance Education

Period	Historical Milestone
1800s	Correspondence schools gained popularity in Europe and the United States. These schools provided courses and materials to students through the mail.
1900s	Radio broadcasting was used for educational purposes. The BBC launched its first educational radio program in 1924.
1950s	The first televised courses were broadcast in the United States. This marked the beginning of using television as a medium for distance education.
1960s	Saw the development of computer-assisted instruction and the first online courses.
1970s	The widespread adoption of videoconferencing technology allowed students to participate in live classes from remote locations.
1980s and 1990s	The Internet, discussed further in the following section, became a key platform for delivering distance education. Online courses, e-learning platforms, and virtual classrooms became more prevalent.

The Modern Online Learning Model

By the end of the 20th century, a novel paradigm in education, commonly known as online learning, rapidly proliferated across the United States and globally, capturing the imagination of educators and learners alike. One of the first totally online programs was the online Executive Education program launched in 1982 by the Western

Behavioral Sciences Institute (Gustafson, 2010). In contrast to the rudimentary methods previously explored in distance learning, such as correspondence between educators and students, the advent of digital online learning heralded a transformative era. This model promised to deliver quality education seamlessly, transcending temporal and spatial constraints, courtesy of a revolutionary technology known as the Internet, a topic to be elaborated upon later in this chapter. Online learning would forever change how education was delivered in the US and the rest of the world (University of Illinois, n.d.).

In the 1960s, the technology that combined the use of computers and educational software to facilitate and enhance the learning process, referred to as computer-assisted instruction (CAI), was developed. Incidentally, the PLATO (Programmed Logic for Automatic Teaching Operations) system, developed at the University of Illinois, was one of the first CAI systems (Nazimuddin, 2015). Although not widely adopted by the general education sector, PLATO significantly impacted the subsequent development of educational technology and CAI that followed.

In 1972, Nova University of Advanced Technology, now Nova Southeastern University, offered the first doctoral distance education program in the United States (Nova Southeastern University, n.d.). Then, in the 1980s, the concept of TCP/IP (Transmission Control Protocol/Internet Protocol) became the standard communication protocol for connecting wide-area networks. The Internet, which ultimately became a vast network of interconnected computers and devices, was made available to colleges and universities, allowing for the creation of online learning environments (Grech, 2001). The first online courses were developed in the late 1980s, with the University of Phoenix offering the first online degree program in 1989 (University of Phoenix Online Campus:

Distance Learning Programs, n.d.). In the 1990s, online learning continued to develop, with the creation of the first Learning Management System (LMS) called Blackboard and the establishment of the Sloan Consortium to promote the use of online education (Watters, 2014).

As previously mentioned, in 1997, with the launch of the pioneering commercial LMS, Blackboard, a watershed moment occurred, unlocking a plethora of educational opportunities previously inaccessible to the masses. This pivotal event effectively decentralized education, heralding a new era of online accessibility and choice. In the 2000s, online learning became dominant in education, with many traditional universities offering online courses and degree programs. The development of Massive Open Online Courses (MOOCs) in the late 2000s provided free online courses to anyone with an internet connection. By 2018, most universities and colleges in the United States offered some form of an online program (Allen & Seaman, 2017). Today, online learning has firmly established itself as a mainstream educational avenue, boasting millions of students globally enrolled in fully accredited online courses and degree programs. (Simonson, Smaldino, & Zvacek, 2019).

Modern Online Learning Environments

Some may be surprised to learn that the modern online learning environment has its roots in ancient education systems, such as the Socratic method. The Socratic method emphasized critical inquiry and critical thinking, among other things. (Katsara & De Witte, 2019). Distance learning and subsequently the online learning delivery approach, which also encourages critical inquiry and critical thinking, emerged in the mid-20th century as a response to the changing nature of work and the need for working

professionals to continuously develop new skills and knowledge throughout their careers (Collier, 2011).

One of the earlier adoptions of distance learning environments occurred in the 1950s when educational psychologist B.F. Skinner proposed the concept of programmed instruction, which allowed learners to progress through instructional materials at their own pace, receiving immediate feedback and reinforcement as they completed each step (Molenda, 2008). This approach emphasized the individualization of learning, allowing learners to focus on their own learning needs and interests. This was followed in the 1960s and 1970s by the concept of open learning, which extended the principles of distance learning to a wider range of educational contexts. Interestingly, the concept of Open learning emphasized learner autonomy, flexibility, and the use of a range of resources and learning strategies to achieve learning objectives. This approach also emphasized the use of technology to support the distance learning paradigm, such as through the use of multimedia materials and computer-based instruction (Brookfield, 1984; Jossey-Bass & Knowles 1975).

Today, online learning environments are commonplace in almost every learning context. Whether the learner is in academia or in a corporate environment, a plethora of online and hybrid learning models are available to them. These learning models allow learners to customize their learning experiences to suit their learning styles, needs, goals, and objectives. Nevertheless, the notion of online learning undergoes continual evolution alongside the emergence of novel technologies and educational methodologies, underscoring the significance of perpetual learning and adaptability in the dynamic landscape of today's world (Kebritchi et al., 2017). This evolution sets the stage for an

exploration of the roles that instructors and students play within these environments.

Instructor Roles in The Online Learning Environment

In the online learning arena, the role of the instructor is a crucial and indispensable component of the learning experience that plays a pivotal part in the development and implementation of an effective educational setting. For example, the instructor's guidance in online learning helps students through the intricate landscape of the courses being taught, ensuring clarity in the deliverance of educational content. This is because instructors assume the role of enthusiastic motivators, infusing vitality into virtual classrooms, nurturing engagement, and stimulating an intellectual quest for knowledge in the learner. Moreover, they provide tailored support and timely constructive feedback, fostering the growth and accomplishment of individual learners. Additionally, through the promotion of collaborative learning, educators cultivate a cohesive learning community responsive to the diverse requisites of the learners. Furthermore, by demonstrating adaptability and flexibility, educators enhance online education's domain, imbuing each student's educational voyage with enrichment. Their diverse and intricate roles undeniably form the fundamental cornerstone of an effective and meaningful online learning experience, shaping future scholars and academics (Achwarin et al., 2017; Richardson et al., 2016; Thanasi-Boçe, 2021).

The evidence found in the research underscores the significance of instructor roles in the online learning arena, emphasizing their pivotal role in shaping and facilitating effective educational experiences in virtual settings. For example, Richardson et al. (2016) conducted a study to investigate and explain instructors' perceptions of their roles in the online learning environment. Using an explanatory multiple-case study approach,

the researcher conducted interviews with 13 instructors from a prominent Midwestern public university. The participants were all involved in teaching a graduate-level program delivered online. The study revealed that these faculty members believed that the instructor played a critical role in creating a sense of community in the online learning environment, which is important to distance education learners who often report feeling isolated and disconnected from the professor and other students in these learning contexts. The participants in the study also identified several strategies that instructors could use to improve the sense of community in online learning environments and mitigate many students' disconnectedness, including being present and responsive, promoting student interaction and collaboration, setting clear expectations, and effectively communicating with the learners. Ultimately, the study's results indicate that instructors of online courses should prioritize the development of an online learning community as a means to enhance student engagement, foster collaboration, and promote academic success (Richardson et al., 2016).

While the study conducted by Richardson et al. in 2016 provides valuable insights and contributions regarding the role of instructors in the online environment, it is important to acknowledge some of its limitations. The most notable limitation is that the study focused on the instructor's role in a single program at a particular university, which may limit the generalizability of the findings to other online master's programs. Additionally, since the study centered on a graduate-level program, its results may not be as directly applicable to undergraduate instruction, and caution should be exercised when applying the findings to different educational settings (Richardson et al., 2016).

Achwarin et al. (2017) conducted another study that explored instructor roles in

the online learning environment. The researchers utilized a qualitative case study, a type of research method where researchers closely examine a particular individual, group, or situation to understand it better. Rather than collecting lots of numerical data, researchers use a qualitative case study approach to gather detailed information through interviews, observations, and document analysis. This approach helps researchers gain deep insights into the specific case they are studying and often focuses on understanding the “how” and “why” of a situation rather than just the numbers. The study comprised 15 faculty members hailing from five online graduate programs within the esteemed confines of the Graduate School of eLearning, each boasting a minimum of 9 years of invaluable experience in the realm of online teaching.

Achwarin et al. (2017) examined three key aspects of the instructor’s role in the online environment: andragogical strategies, managerial skills, and technological proficiency. The study’s findings revealed that instructors primarily perceived their role in the online environment as managerial, encompassing responsibilities and skills such as the following:

1. **Organizational Skills:** Managing an online course involves juggling various tasks, such as course planning, content creation, assessment, and student support.

Effective organization and time management are essential for keeping everything on track.

2. **Interpersonal Skills:** Building relationships with students in a virtual setting can be challenging. Instructors should have strong interpersonal skills to engage with students, provide support, and foster a sense of community.

3. **Feedback and Assessment Skills:** Providing timely and constructive feedback

to Students is crucial for their learning progress. Instructors should be skilled in designing assessments and offering feedback that helps students improve.

4. **Problem-Solving Skills:** Online instructors often encounter technical issues, student concerns, and other challenges. Strong problem-solving skills are essential for resolving issues and ensuring a smooth learning experience.

5. **Data Analysis:** Instructors should be able to analyze student performance and course engagement data. This skill helps in identifying areas for improvement and making data-driven instructional decisions.

6. **Leadership and Motivation:** Online instructors act as leaders in their virtual classrooms. They should motivate and inspire students to stay engaged and excel in their studies.

7. **Time Management:** Time management skills are indispensable for instructors who wish to succeed in delivering instruction online. Time management and time management skills involve allocating time for course development, student interaction and guidance, grading assignments, and keeping up to date with the latest methods, theories, and educational strategies through professional development.

8. **Cultural Sensitivity:** Online courses, by their very nature, attract a diverse student population, often from different cultural backgrounds, and a variety of ethnic groups. It is incumbent for instructors to be both knowledgeable and sensitive to these differences, thereby providing for the needs of the learner and promoting inclusivity in their teaching practices.

9. **Conflict Resolution:** Conflict among students or between instructors and students in any learning environment is perhaps inevitable. It is therefore necessary that

instructors can address conflicts that may arise in a fair and unbiased way.

Although andragogical strategies and technological proficiency are viewed as important skills for any online instructor wishing to succeed in online learning, the study by Achwarin et al. found that participants placed greater emphasis on their managerial responsibilities—such as Organizational Skills, Interpersonal Skills, Feedback and Assessment Skills, Problem-Solving Skills, Data Analysis, Leadership and Motivation, Time Management, Cultural Sensitivity, and Conflict Resolution--as key contributors to student success.

Despite, however, the ample availability of research studies related to online learning, little empirical research, that is, research that acquired its evidence through observation or experimentation, exists as to how the instructor's role affects the overall success of this approach to delivering instruction. Rhode (2008) writes that there is limited empirical evidence at present regarding how learners perceive the importance of different types of interactions in the online learning environment, including that of the instructor's role. Several factors contribute to the scarcity of available empirical evidence in this area. One of these factors is the rapidly evolving nature of online learning and instructional technologies, which may be outpacing research efforts. Another factor is the diverse nature of online learning environments, including variations in learners, instructional formats, and subject domains, all of which pose challenges for designing robust studies. Moreover, the field of online education research is still in its early stages of exploring the intricate dynamics of instructor roles and evidence in the online learning environment.

Another reason that might explain the limited amount of empirical research is that

there appears to be a limited focus on investigating the influence of instructor roles and of how it affects the overall success of the online experience. Perhaps it can be argued that at the moment, most research on online learning concentrates on broader aspects, such as instructional design and technological aspects, neglecting the specific influence of instructor roles and evidence in online learning environments. Also, some evidence suggests that the available empirical studies often suffer from methodological limitations, including research design, sample size, and data collection methods (Shao, Hong and Zhao, 2022). Additionally, the absence of standardized measurement tools tailored to assess instructor roles and evidence in online learning further contributes to the scarcity of reliable empirical evidence.

Despite the scarcity of empirical research, however, there is evidence that the role of the instructor plays a pivotal part in the overall success of the online learning experience. For example, Rhode (2008) writes that the results of his study indicate that the instructor's role in fostering an interactive and captivating online community should not be overlooked. According to another researcher, Thanasi-Boçe (2021), research suggests that when instructors actively encourage interactions among students, it results in heightened motivation for learning. Thanasi-Boçe goes on to argue that the interactions between the instructor and the learner should be regarded as a crucial aspect of how instructors motivate their students, thereby facilitating the learning process.

On the other hand, this scarcity of empirical evidence presents significant research opportunities within online learning environments. Understanding the role of instructors in supporting learners in online learning contexts could be crucial for optimizing instructional strategies and improving learner outcomes. The importance of evidence-

based practices in online learning, particularly for learner motivation and engagement, cannot be overstated so future research should focus on investigating the impact of instructor roles in online learning environments. The bottom line is, that the scarcity of empirical evidence regarding instructor roles and evidence in online learning highlights a significant gap in the literature. Addressing this gap in the literature through comprehensive studies can lead to the development of evidence-based instructional strategies and the improvement of learner outcomes in online learning environments.

Learner Roles in The Online Environment

In the very same way that understanding the role of the instructor in online learning can lead to the development of evidence-based instructional strategies and improving learner outcomes in online learning environments, understanding the role of the learner within these environments is crucial to grasping how these influence the success of the online learning experience. It might prove beneficial to delve into the existing literature to explore insights regarding the interplay between the learner's and the instructor's roles, and ascertain whether this dynamic directly correlates with the overarching success of the learning journey. On the one hand, the literature is clear that the roles learners assume in online learning environments can vary depending on individual preferences, cultural contexts, and specific learning goals. On the other hand, the literature notes some commonalities regardless of the diversity of the online learner population (Shalan, 2019). The commonalities that can be found in the roles learners assume in online learning settings can be found in Table 2.

There are some research studies that delve into the aspect of the role of the learner in online learning and how these affect the overall learning experience. One study, for

example, conducted by Geng et al. (2019) revealed that learner roles in online learning environments are by in large, multifaceted and multidimensional, and are crucial for a successful learning experience for several reasons. The data for the study conducted by Geng was collected using a questionnaire that was developed corresponding to the factors in a research model. A total of 102 blended-learning (BL) engineering students participated in the study. Blended learning, called hybrid learning, combines the online learning model with traditional classroom teaching. The study confirmed that learner autonomy, goal setting, information seeking, reflection, and metacognition are key areas that contribute to learners' engagement, motivation, and achievement in the online learning experience. This is important because by understanding these learner roles, instructors can effectively design and facilitate instruction in online learning environments that support learners' needs and promote meaningful learning experiences. The study by Geng et al. provided helpful insights into the importance of the role of the learner in the online learning environment, albeit with one limitation. The sample size in the study was relatively small due to the intentional selection of students with similar backgrounds to ensure better experiment control.

Another study conducted by Monson (2003) looked at the perceived learner role in the online learning environment from both the learner's and the instructor's perspective. The study looked at 265 undergraduate students at a large private university in the western United States and 19 instructors representing various academic disciplines. The data for the study were collected online using a survey research method. Much of the study focused on how both learners and instructors perceived the overall importance of the community, communication, and collaboration aspects of the learner's role in the

online learning experience. The results of the study revealed that both learners and instructors perceived that the collaboration, communication, and interaction aspects of the learners' role played an indispensable part in the success of the learning experience.

Table 2

Commonalities in Learner Roles

Learner Role	Summary
Goal Setter and Planner	Learners in online learning environments actively participate in goal setting and planning. They identify their learning objectives, define the desired outcomes, and create a roadmap for achieving them. These learners plan strategically, organize their learning activities, and allocate time and resources effectively. Goal setters and planners exhibit metacognitive skills, reflecting on their progress and making adjustments as needed (Garrison, 1997; Kilde, 2022; Siemens, 2005).
Information Seekers	Learners in online learning environments actively seek information. They demonstrate a proactive approach to locating, accessing, and evaluating relevant resources and information. Information seekers utilize various tools and technologies to explore diverse sources, critically analyze information, and integrate it into their learning process. They demonstrate information literacy skills and the ability to adapt to different learning contexts (Garrison, 1997; Siemens, 2005).
Reflective Thinkers	Reflective thinkers engage in introspection and critical reflection on their learning experiences. They actively analyze and evaluate their knowledge, skills, and understanding. Reflective thinkers engage in self-assessment by examining their strengths and areas that need improvement. They utilize reflective practices like journaling to deepen their understanding of the different topics and subjects (Garrison, 1997; Siemens, 2005).
Collaborators and Community Members	Learners in online learning environments recognize the value of collaboration and community engagement. They actively participate in collaborative activities like online discussions, group projects, or peer feedback. Collaborators and community members foster a sense of belonging, support their peers' learning, and contribute to a collaborative and inclusive learning environment. Additionally, they also demonstrate effective communication and interpersonal skills (Garrison, 1997; Oyarzun, B. & Martin, F. 2023; Siemens, 2005).

While the study by Monson (2003) provided helpful insights into the importance of the role of the learner in the online learning environment, it does have some limitations that are noteworthy. First, the study is based on perceptions and is descriptive and explanatory in nature. Descriptive research findings provide a snapshot of the current situation, while explanatory research findings delve deeper into understanding the reasons and relationships underlying the observed phenomena (Aggarwal & Ranganathan, 2019; Tosh, Soares-Weiser & Adams, 2011). Descriptive and explanatory data are an essential part of the scientific process and are effective in generating a comprehensive understanding of various aspects of the studied topic. Nonetheless, this approach has several limitations, including lack of causality, limited generalizability, subjective interpretations, inability to control variables, ethical concerns, time and resource constraints, artificial settings, and interpretation challenges (Aggarwal & Ranganathan, 2019; Bhattacharjee, 2012). Additionally, the study only looked at undergraduate students' perceptions at a single college. Therefore, while the researcher made efforts to ensure that the participants in the study were representatives of the student body, the findings from this one institution may not necessarily be generalizable to other learning contexts or settings (Monson, 2003).

Instructor and Learner Readiness in The Online Environment

Earlier, the topic of instructor and learner readiness or preparedness as it relates to the online learning environment was briefly touched on, and it was noted how these could significantly impact the success of online learning experiences. As previously noted, instructor readiness encompasses their readiness to teach, including technological competence, instructional design skills, online andragogical strategies, communication

and facilitation skills, ability to provide effective assessment and feedback, and continuous professional development (Bedford, 2009). At the same time, key factors influencing the students' learning readiness include technical proficiency, time management skills, self-motivation, and the ability to work independently (Bedford, 2009; Pete & Soko, 2020). Additionally, for learners, the idea of readiness involves having the necessary skills and resources to engage in learning activities and the motivation and self-discipline to manage their learning experiences effectively (Garrison, Anderson, & Archer, 2000; Moore, 1989).

Instructor Readiness

Some studies have explored the impact that an instructor's readiness may have on online learning experiences. One such article by Bolliger and Halupa (2021), explored the topic of instructor readiness or preparedness for teaching online. The authors conducted a quantitative study, utilizing questionnaires to gather data from a sample of instructors experienced in online teaching. A total of 57 instructors participated in the study.

The study by Bolliger and Halupa (2021) aimed to identify key components of online teaching readiness in order to understand, among other things, the challenges that instructors face when transitioning from a traditional, face-to-face learning environment to online instruction. Bolliger and Halupa highlight several noteworthy aspects of instructor readiness for online teaching, such as technological proficiency, which emerged as the most significant factor affecting instructor preparedness. Additionally, effective online communication skills were identified as essential for fostering engagement and interaction with students in the virtual classroom. Course design and organizational skills were also identified as critical components of instructor readiness

(Bolliger & Halupa, 2021).

It should be noted, however, that the findings from studies regarding the topic of instructor readiness, such as the one conducted by Bolliger and Halupa (2021), underscore a crucial duality in the landscape of online teaching. On the one hand, the readiness and preparedness of instructors play a pivotal role in influencing the success of the learning experience and, consequently, impacting learning outcomes. This highlights the significance of instructors possessing the necessary skills and competencies for effective online teaching. On the other hand, some of the research also reveals a concerning trend – a substantial number of instructors lack the appropriate training to navigate the intricacies of online course delivery. This discrepancy between the importance of instructor readiness and the insufficient or lack of training many educators possess underscores a pressing need for targeted professional development initiatives in online andragogy to enhance the overall quality of online education. Addressing this need becomes imperative in ensuring that instructors are well-equipped to provide optimal learning experiences in the ever-evolving landscape of online education.

Because of this, other studies have examined the phenomenon of instructors' unpreparedness for the online learning arena. For instance, Martin, Budhrani, and Wang (2019) conducted a study probing into faculty perceptions regarding their preparedness for online teaching. Data for this research endeavor were gathered via a survey disseminated through the SurveyShare electronic survey tool to three distinct distribution lists in the United States. These lists were tailored for individuals affiliated with the Association for Educational Technology (AECT), the Online Teaching and Learning Special Interest Group of the American Educational Research Association (AERA), and

faculty members at a public university in the southeastern region. Two hundred and five instructors responded to the survey invitation, of whom 70% were female and 27% were male. Interestingly, the findings revealed that a majority of faculty lacked formal education or training for online teaching, relying mainly on their experiences as students and face-to-face instructors.

The researchers in the study concede a low response rate as a limitation, with only 205 complete responses from a 2,763 sampling frame, potentially introducing response bias. Additionally, the reliance on self-reported data and the possibility that faculty might not be familiar with all competencies for online teaching were acknowledged as methodological limitations. Despite these limitations, the research highlighted the need for technical and andragogical support and time-management strategies for faculty who are new to online teaching, suggesting a potential impact on students' learning outcomes based on faculty readiness to teach in the online learning environment (Martin, Budhrani, & Wang, 2019).

Another study conducted by Vang, Kao, Martin, and Wang (2020) investigated the perceptions of 101 community college faculty regarding the importance of online teaching competencies, self-efficacy, and preparedness to teach online. This survey-based research endeavor was geared towards delving into the realm of preparing community college faculty for online teaching, with a focus on elucidating the significance of competencies, assessing faculty perceptions of self-efficacy, and examining how demographic factors might influence these perceptions. A survey was distributed to faculty who had taught an online course across three community colleges, with a low response rate identified as a methodological limitation. As with the study by Martin,

Budhrani, and Wang, (2019), the findings from Vang, Kao, Martin, and Wang, revealed that many faculty lack formal training in online course design and course delivery, indicating a need for training to enhance their preparedness for online teaching. The researcher acknowledged that the study has some limitations, including the potential for response bias in self-reported data and the incompleteness of the list of competencies considered. Although the study by Vang, Kao, Martin, and Wang has some limitations that may restrict or, in some cases, impede the generalizability of the findings to other educational contexts, the results demonstrate a greater need for research in the area of instructor preparedness.

The highlighted research studies in the previous section, emphasize the essential role that instructor preparedness plays in online learning environments. According to the research, instructor readiness is crucial, directly impacting both the learning experience and outcomes in the online setting. However, the findings also show the prevalent issue where many instructors lack the required training for online teaching, often relying on personal experiences as students or as providers of traditional face-to-face instruction. Furthermore, it suggests a deficiency in research on this subject, indicating a gap in the existing literature. Overall, the content underscores the significance of addressing instructor readiness to enhance the quality of online education.

Learner Readiness

In the same way that instructors' readiness affects the viability of the online learning experience, student readiness is believed to significantly impact the learner's overall success and learning outcomes. Historically, educators and institutions of learning have had a difficult time gauging or determining if a learner or a community of learners

has the necessary skills, attitudes, and experience to thrive and succeed in this learning environment. Over the years a plethora of assessments and examinations, such as self-assessment questionnaires, technical skills assessments, orientation and training sessions, learning style assessments, time management and organizational assessments, communication skills evaluations, internet and device access verification, online pre-course assignments, instructor interviews, learning readiness workshops, and previous academic performance analysis have been used to establish the learners readiness or preparedness for online learning (Martin, Stamper, & Flowers (2020).

Another approach to learning about the learners readiness for online learning, is to review what the literature has to say on the matter. One study conducted by Tuntirojanawong (2013) investigated the readiness of online graduate students majoring in educational administration. The study employed a quantitative approach and used questionnaires to collect the data. The study comprised of 162 participants, who were from 21 to 60 years of age. The research findings revealed that access to technology, such as internet access, computer devices, and technological skills, were among the top factors affecting learner preparedness. Other factors, such as self-determination, self-discipline, and self-motivation, were also deemed indispensable in establishing learner readiness for online learning (Tuntirojanawong, 2013).

Instructor and Learner Readiness Summary

Other research studies, such as the ones conducted by Bedford (2009), and Bolliger and Halupa (2021) have revealed that instructor and learner readiness can and does affect the success of the online learning experience in a variety of ways. Instructors who lack the skills to provide effective feedback or guidance may struggle to support

learners in achieving their learning goals. Likewise, learners who lack technical proficiency or time management skills may struggle to navigate online learning platforms or complete learning tasks on schedule. The literature, however, is clear that both instructor and learner readiness are paramount to the success of the online learning experience (Kearsley, 1998).

Characteristics of Effective Online Learning Environments

The characteristics of an effective online learning environment and experience can vary depending on the specific educational context and the needs of the learner community. However, some commonalities have been identified in the research that are deemed to be essential. One study that delved into the characteristics that are deemed essential for effective online learning was a narrative review study conducted by Saiyad et al. (2022). A narrative review of the literature is a type of study where the researcher gathers information from various sources and presents it in a way that helps people grasp the current understanding of a particular subject. Although this type of study does not follow a strict research methodology like an experimental study, it summarizes and interprets existing research, providing a broad overview of the matter.

Saiyad et al. (2022) found, among other things, that targeted and well-defined institutional goals and clear learning objectives and outcomes that are communicated to the learner are essential characteristics of an effective online program. Well-defined institutional goals, learning objectives, and outcomes that are clearly communicated to the learner constitute an important characteristic of online learning environments for a variety of reasons. First, they offer clarity of purpose. Learners who understand the goals and learning objectives have a clear sense of the purpose and expectations of the online

course. They are more likely to be motivated by giving them a sense of purpose. Online learners are self-regulated, so understanding the goals and objectives allows them to identify areas where they may need more effort or seek additional resources to achieve the desired outcomes. Additionally, clearly communicating goals and objectives ensures learners' expectations align with the course's intent (Saiyad et al., 2022). The study by Saiyad et al. also concluded that understanding the student's learning preferences is another important characteristic of effective online learning. A student's learning preference refers to their tendencies or styles regarding learning and processing information. This may include things such as learning modalities, interaction styles, communication, content presentation, and assessment formats (Saiyad et al., 2022).

A conceptual study by Garrison and Kanuka (2004) found that the online learning paradigm needs to have flexibility and autonomy. A conceptual study is a detailed discussion or exploration of ideas, theories, or concepts related to a particular topic or subject. This type of study does not involve conducting experiments or collecting new data. Rather, it gathers and examines existing knowledge, theories, and perspectives to develop a deeper understanding and generate new insights. The study by Garrison & Kanuka concluded that online learning environments should provide learners with the flexibility and autonomy to choose their own learning paths, allowing them to proceed at their own pace and giving them access to learning resources and activities at their convenience. According to the researchers, this can enhance learners' motivation and engagement and help the learner take ownership of the learning process (Garrison & Kanuka, 2004).

Although helpful, the study by Garrison and Kanuka has some limitations that

should be noted. Typically, conceptual studies include potential biases in the selection and interpretation of literature, reliance on existing sources, the absence of original data collection, and the subjective nature of synthesizing and interpreting information from various sources (MacInnis, 2011; Peterson & Crittenden, 2012). Additionally, the study's findings and insights are based on the existing literature and may not be based on new empirical evidence.

The research also shows that collaborative learning activities that may include things such as group discussions and debates, think-pair-share, case studies, peer teaching, collaborative projects, role-playing, using online collaboration tools, peer review and feedback, and collaborative writing, is an indispensable and important characteristic of online learning environments. For example, a mixed-method study conducted by Faja (2013) found that students felt a sense of connectedness in the online learning environment as a result of well-developed collaborative learning activities. The study enlisted the participation of 58 undergraduate students currently enrolled in a Management Information Systems course at a reputable Midwestern university. The researcher collected data using surveys and questionnaires to gather the perceptions, attitudes, and experiences related to collaborative learning in online courses. The results of the study found that perceived structure and effectiveness of the collaborating activities and peer interaction that were developed for the course positively influenced the overall learning experience for students.

The study by Faja (2013) provides valuable insights into the importance of collaborative learning activities in the online learning environment. Nonetheless, the study does have some limitations that should be noted. Only 58 undergraduate students

from one Midwestern university participated in the study. This is a small sample size with little diversity or representativeness and may limit the generalizability of the findings. Because of the nature of the study, there may be issues with self-reporting bias. It is possible that the participants may have provided responses they thought were socially desirable or that they believed researchers wanted to hear, affecting the accuracy of the findings. Additionally, there are some contextual limitations. Findings may be specific to the context of the study (i.e., Management Information Systems course), limiting the generalizability to other settings. Furthermore, the accuracy and consistency of the data and the tools used to collect it could be a limitation if they were not carefully designed and validated. Finally, the study might reflect the perceptions and experiences of students at a specific point in time, and these perceptions could change over time due to evolving technologies or educational practices.

Conclusion

This literature review has explored the various aspects of online learning environments, especially as it relates to the instructors' experiences with their role as educators, their readiness to teach, and the students' learning readiness and awareness of social presence in the online learning environment. Through a review of relevant studies and scholarly works, several key findings were identified, providing a deeper understanding of the topic. Additionally, the investigation into instructors' experiences within online learning environments revealed, among other things, their crucial roles as facilitators of learning, coaches, mentors, as content experts and as builders of learning communities. Not surprisingly, the findings from the research show that instructor's roles in online learning environments are essential in creating a supportive and engaging

learning environment that fosters learner autonomy, motivation, self-directedness, and achievement among the learner community. These findings emphasize the significance of instructors' ability to effectively facilitate learning, provide personalized support, deliver accurate and relevant content, assess learner progress, and cultivate a sense of community and social presence (Thanasi-Boçe, 2021).

In addition to discovering valuable information about the instructors' roles, the literature review also sheds light on learners' roles within online learning environments. In online learning environments, learners are viewed as active agents who take responsibility for their learning, and who demonstrate a high level of autonomy, goal-setting abilities, information-seeking skills, the ability to reflect and introspect, and who possess metacognitive skills. Understanding these aspects of the learner roles in the online learning environment is critical for instructors in order for them to be able to design effective instructional strategies and provide the necessary support to optimize learners' engagement, which results in an effective learning experience (Geng et al., 2019; Thanasi-Boçe, 2021).

Social presence is another important aspect related to the learner's experience within the online learning environment. It was previously noted that social presence refers to the sense of being connected and engaged with others despite the absence of physical presence. As with the other aspects of the online learning environment, the literature's findings underscore the significance of social presence in online learning environments. Instructors' awareness of the social presence and of their ability to create a supportive and collaborative online community positively impact learners' engagement, satisfaction, and learning outcomes (Geleni & Tozluoglu, 2021; Ebersole, 2021; Gregory,

2022; Lau et al, 2021; Widick, 2018).

This literature review has provided broad and valuable insights into the instructors' roles, their experiences and readiness to teach, the learner's role and of their readiness or preparedness to learn, and of the awareness of the social presence aspect in online learning environment, all of which are essential for the development of a successful learning experience. The combination of the existing research highlighted the importance of instructors' roles as facilitators, coaches, experts, assessors, and community builders and of other important aspects of the instructor's role such as being adequately trained, knowledgeable, and attentive to creating engaging and effective learning environments. The findings of the reviewed literature also highlighted the significance of learner roles, which include things such as learner autonomy, goal setting, self-directedness, and metacognition and of the awareness of the social presence aspect of the learning experience, which contributes to a sense of community and is ultimately conducive to learners' engagement and satisfaction. These findings will serve as a foundation for the subsequent empirical study, providing valuable guidance for the investigation of instructors' experiences in online learning environments (Ebersole, 2021; Gregory, 2022; Widick, 2018).

Research Questions

The following research questions will guide this phenomenological study.

1. What are instructors' experiences regarding the instructor's role in the online education environment?
2. What are instructors' experiences regarding the instructor's teaching readiness in the online education environment?

3. What are instructors' experiences regarding the students' learning readiness in the online education environment?

4. What are instructors' experiences regarding social presence in the online education environment?

Chapter 3: Methodology

This chapter provides an overview of the methodology used to conduct a qualitative, phenomenological study on the experiences of professors in the online learning environment. The purpose of this study was to explore the lived experiences of professors in online learning environments, with a focus on the challenges they face, the strategies they use to overcome these challenges, and the ways in which they perceive the quality of the learning experiences. The study adopted a phenomenological approach to qualitative inquiry, a research methodology aimed at delving into the lived experiences of individuals and unraveling the significance embedded within those experiences. (Moustakas, 1994).

Purpose Statement

The purpose of this phenomenological study was to investigate instructors' experiences with their role, readiness to teach, students' learning readiness, and awareness of social presence of online learning environments.

Research Questions

1. What are instructors' experiences regarding the instructor's role in the online education environment?
2. What are instructors' experiences regarding the instructor's teaching readiness in the online education environment?
3. What are instructors' experiences regarding the students' learning readiness in the online education environment?
4. What are instructors' experiences regarding social presence in the online education environment?

Aim of the Study

The aim of the study was to understand instructors' experiences with regard to the instructor's role, teaching readiness of the instructor, and learning readiness of the student in the online education environment. The study also endeavored to gain a deeper understanding of the different aspects or dimensions of the social presence component of the online learning experience. These issues were explored solely from the instructor's perspective.

Research Design

The study used a qualitative, phenomenological research design, which is appropriate for exploring the experiences of individuals in a particular setting (Creswell, 2013a, 2013b). The research design involved conducting semi-structured interviews with a sample of professors who have experience in online learning environments. The interviews were conducted and recorded via a Zoom session and then transcribed verbatim for analysis.

Sampling

The study used a purposive sampling technique to select participants who have experience in online learning environments. This method, known as purposive sampling, involves selecting individuals based on predetermined criteria or objectives, ensuring relevance to the research focus. The purposive sampling technique that was used is expert sampling. Expert sampling refers to selecting participants who have the expertise or specialized knowledge relevant to the research question. The other purposive sampling technique that will was used is snowball sampling. This is where the participants are asked to refer other individuals who have similar experiences or characteristics (Patton,

2015).

The sample consisted of professors who have experience delivering instruction online at a large, private university in the United States. Participants were recruited through email invitations and through announcements posted on the university's learning management system. The sample was diverse in terms of gender, race/ethnicity, age, and academic discipline.

Participants

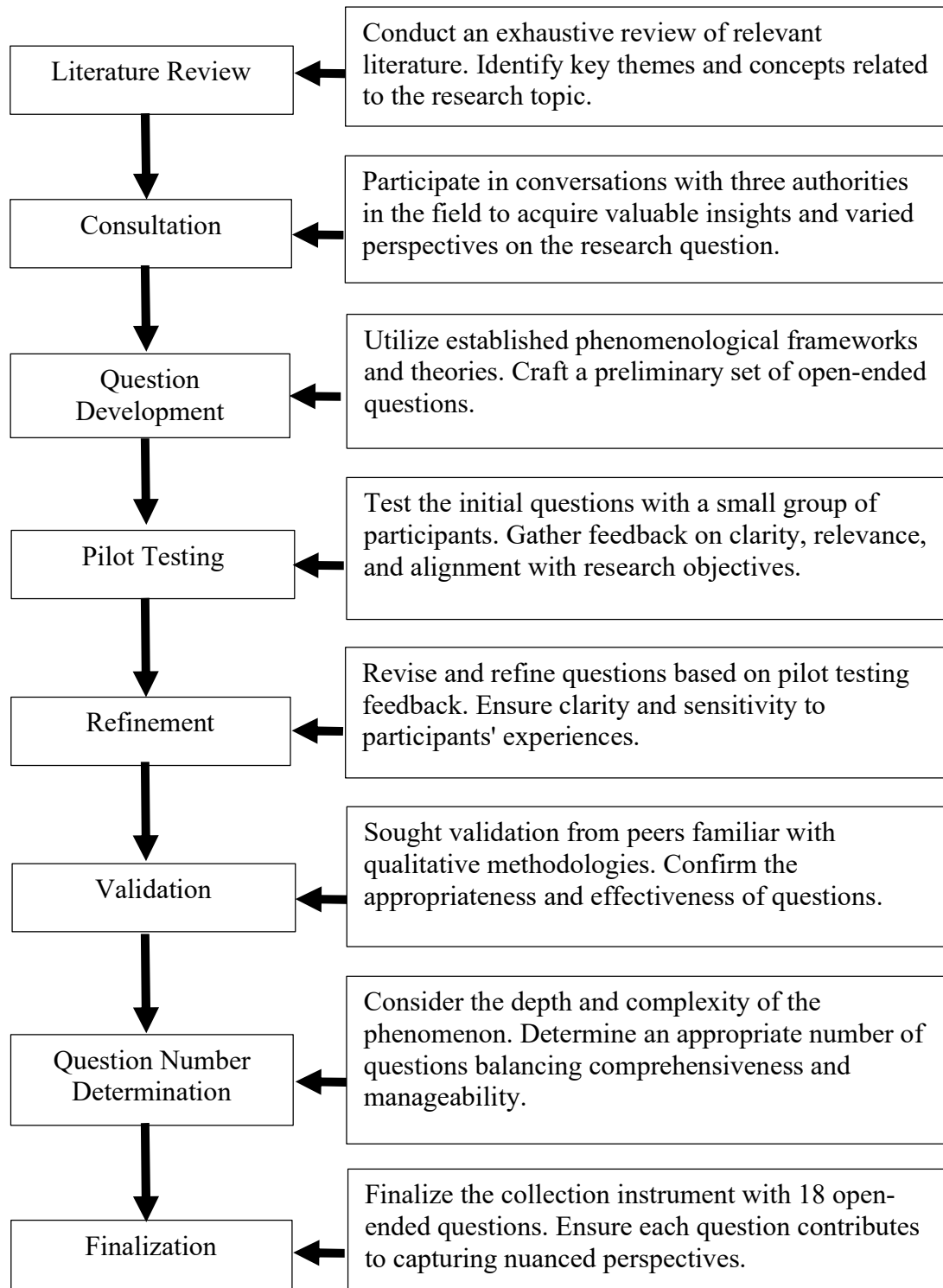
Thirteen instructors from a large private university in the United States were recruited to participate in this study. Participants were selected using purposive sampling, which aimed to include a range of disciplines and levels of teaching experience. To be eligible for the study, participants needed to have taught at least one online course in the past academic year. Participants were recruited through email invitations sent to department chairs, who then forwarded the invitations to their faculty members. The email invitation included information about the purpose of the study, the time commitment required, and the voluntary nature of participation. All participants received comprehensive written informed consent before their involvement in the study. The study required approval by the university's institutional review board (IRB), and all participants were assured of their confidentiality and privacy throughout the study (Smith & Jones, 2021).

Data Collection Instruments

In developing the data collection approach for this study, the researcher concluded that the primary method would be semi-structured interviews. Semi-structured interviews are characterized by a flexible and open-ended format that contributes to a more in-depth

and nuanced understanding of the participant's experiences or perspectives. By asking open-ended questions, the researcher encourages detailed responses, facilitates exploration of perspectives, and promotes participant engagement. Unlike structured interviews, which adhere to predetermined or fixed questions, or unstructured interviews, which lack set questions altogether, semi-structured interviews strike a harmonious balance between structure and flexibility. In this approach, the researcher has a set of core questions or topics to cover, providing a framework for the interview.

In developing the interview guide for this phenomenological study, the researcher first embarked on a meticulous journey that began with an exhaustive review of pertinent literature to discover key themes and concepts central to the research topic (see Figure 1). The researcher then engaged in discussions with seasoned scholars and experts in online learning, who provided valuable insights and perspectives that enriched the process further. Drawing from established phenomenological frameworks and theories (i.e., Husserlian Phenomenology, Existential Phenomenology, Merleau-Ponty's Phenomenology of Perception, Van Manen's Phenomenology of Practice, Gadamer's Hermeneutic Phenomenology, and Psychological Phenomenology), the researcher designed and created a preliminary set of open-ended questions aimed at delving deep into participants' lived experiences (Dowling, 2007; Suddick et al., 2020). The crafted preliminary set of open-ended questions underwent rigorous scrutiny through pilot testing and constructive feedback from two professors well-versed in qualitative methodologies, ensuring their clarity, relevance, and alignment with the research objectives. Aware of the complexities of the phenomenon under investigation, the researcher carefully fine-tuned the number of questions to strike a judicious balance between breadth and depth.

Figure 1*Interview Guide Development Process*

Next, the researcher sought validation from peers familiar with qualitative methodologies and confirmed the appropriateness and effectiveness of the questions. Finally, the collection instrument emerged through iterative refinement and validation processes, comprising 18 open-ended questions precisely tailored to capture the nuanced perspectives and insights of the 13 participants who will be interviewed via Zoom.

The iterative refinement and validation process that the researcher performed involved a series of steps designed to improve and validate the collection instrument, ensuring that it effectively captures the desired data from participants:

1. **Initial Draft Review:** After crafting the preliminary set of open-ended questions based on the literature review and expert consultations, the researcher reviewed the questions to assess their clarity, relevance, and alignment with the research objectives.

2. **Pilot Testing:** The initial set of questions was administered to two professors with similar professional experience and academic credentials to the target participants. This pilot testing helped identify any questions' ambiguities, redundancies, or gaps. The feedback on the questions from the two participants was gathered.

3. **Feedback Incorporation:** Based on the feedback received from pilot testing, the researcher revised and refined the questions, addressing any issues identified during the testing phase. This involved things such as rephrasing questions, eliminating redundant ones, or adding new ones to fill gaps.

4. **Expert Review:** The revised set of questions was then reviewed by experts in the field who possess expertise in qualitative methodologies. These experts provide feedback on the questions' validity, ensuring they effectively capture the intended

phenomena.

5. Further Iteration: The questions underwent further rounds of revision and refinement based on the feedback from both pilot testing and expert review. This iterative process continued until the questions were deemed clear, relevant, and aligned with the research objectives.

6. Validation: Once the final set of questions was developed, it underwent validation to ensure it adequately captures the nuanced perspectives and insights of the target participants. This involved assessing the questions' ability to elicit rich, detailed responses through mock interviews or discussions.

7. Finalization: After successful validation, the collection instrument comprising of 18 open-ended questions were finalized.

By following these steps, the researcher iteratively refined and validated the collection instrument, ensuring it effectively captures the desired data and facilitates a thorough exploration of participants' lived experiences and perspectives.

Procedures

The data for this study was collected through semi-structured interviews with the 13 instructors who participated in the study. Participants were interviewed individually, via video conferencing, and the interviews lasted between 45 to 60 minutes each. The interviews were conducted by the researcher, who is an experienced qualitative researcher with expertise in the area of online learning.

All interviews were be audio-recorded and transcribed verbatim. The interview were conducted remotely, and recorded via Zoom. The researcher reviewed the transcripts to ensure accuracy and completeness. After member checking, the transcripts

were then be imported into an AI platform (OpenAI ChatGPT) for analysis. The data analysis entailed a thematic analysis, a method that entails identifying recurring patterns and themes within the data and organizing them into coherent categories (Smith & Jones, 2021).

A couple of strategies were employed to enhance the study's trustworthiness. First, member checking was used, whereby participants were given the opportunity to review a summary of their interview to ensure that their views are accurately represented. Second, peer debriefing was used, whereby the researcher discussed the findings with a colleague who is also an experienced qualitative researcher.

Data Analysis

The data analysis for this study followed a phenomenological method analysis, which involved, among other things, identifying patterns and themes in the participants' experiences (Moustakas, 1994). There are, of course, several different approaches that can be employed for phenomenological analysis, including descriptive, interpretive, and hermeneutic methods (Van Manen, 2014). Interpretative phenomenological analysis (IPA) was used for this study. The characteristics of IPA are (Smith, Flowers, & Larkin, 2009):

1. Familiarization: Researchers read and re-read transcripts of the participants' accounts to gain a thorough understanding of the data.

2. Initial Coding: Researchers pinpoint initial codes that encapsulate the essence of participants' experiences.

3. Searching for themes: Researchers look for patterns in the codes to identify themes that represent the participants' experiences.

4. Reviewing themes: Researchers meticulously examine and fine-tune the identified themes to ensure they faithfully reflect the participants' experiences.

5. Defining and naming themes: Researchers define and name the themes and develop a conceptual map to represent the relationships between the themes.

6. Producing the report: Researchers write up their findings, including illustrative quotes from participants, to convey the essence of their experiences.

Overall, the analysis will involve several stages, including reading and re-reading the transcripts, identifying meaningful statements or phrases, clustering these statements into themes, and interpreting the themes in relation to the research questions.

Ethical Considerations

This study adhered to the ethical principles outlined by the University's Human Subjects Protection, Institutional Review Board (IRB). Prior to their participation, all participants received written informed consent, ensuring their voluntary involvement. Participants were also informed of their right to withdraw from the study at any point without facing any repercussions. To ensure the confidentiality and privacy of participants, all data was anonymized. Participants received pseudonyms to safeguard their identities, and any identifiable details were redacted from the transcripts. Only the researcher has access to the data, which will be stored securely on a password-protected computer (Smith & Jones, 2021).

In addition, the researcher took steps to minimize any potential harm to participants. Hence, participants were not asked to disclose any personal information that they do not feel comfortable sharing, and they were not asked to disclose any information that could potentially harm their professional reputation or relationships with colleagues.

Moreover, participants were also provided with information about support resources at the university, should they experience any emotional distress as a result of participating in the study (Smith & Jones, 2021).

Trustworthiness

Several strategies were used to ensure the validity and reliability of the study. First, the researcher established rapport with the participants and created a comfortable environment for the interviews. Establishing rapport with participants is an essential aspect of conducting qualitative research. Researchers can use various strategies to build trust and foster a positive relationship with participants, including the following:

Building a relationship of mutual respect and trust: Researchers should demonstrate a genuine interest in the participants and their experiences, and show respect for their perspectives and opinions (Sandelowski, 2000).

1. Providing clear and accurate information: Participants should be provided with clear and accurate information about the research, including the purpose of the study, the procedures involved, and their rights as participants (Polit & Beck, 2017).

2. Active listening: Researchers should listen attentively to participants and provide feedback that demonstrates their understanding of the participants' perspectives (Creswell, 2014).

3. Maintaining confidentiality and anonymity: Researchers should ensure that the confidentiality and anonymity of participants are protected throughout the research process (Sandelowski, 2000).

4. Showing empathy: Researchers should be empathetic and compassionate in their interactions with participants, acknowledging the emotional aspects of their

experiences (Creswell, 2014).

5. Being flexible and responsive: Researchers should be flexible and responsive to participants' needs and preferences, adjusting the research methods and procedures as necessary to accommodate their preferences (Polit & Beck, 2017).

Second, the researcher used open-ended questions to allow the participants to freely express their experiences and perceptions. Third, the researcher used member checking to validate the findings by asking the participants to review and provide feedback on the transcripts and the themes identified. Member checking is a technique used in qualitative research to verify the accuracy and credibility of findings by involving participants in the analysis process. This procedure involved presenting the research findings to participants and seeking their input regarding the precision and significance of the results (Lincoln & Guba, 1985). The process of member checking involved the following steps (Lincoln & Guba, 1985):

1. Develop a plan: Researchers should plan how they will involve participants in the member checking process, including the timing, method of contact, and materials to be shared.

2. Share findings: Researchers should share their findings with study participants, either in person or through written reports, providing a summary of the key findings and conclusions.

3. Ask for feedback: Researchers should ask participants to provide feedback on the accuracy, relevance, and comprehensiveness of the findings. Participants may also be asked to provide additional insights or perspectives on the data.

4. Analyze feedback: Researchers should analyze the feedback received from

participants, looking for patterns or themes that may indicate a need to revise or refine the findings.

5. Make revisions: Based on the feedback received, researchers may need to make revisions to the findings, including clarifying or expanding on certain points or revising interpretations.

6. Report results: Researchers should report the results of the member checking process in the final research report, including a description of the feedback received and any revisions made to the findings.

Fourth, the researcher will use peer debriefing to ensure the credibility of the findings by seeking feedback from other researchers with expertise in qualitative research. Peer debriefing is a technique used in qualitative research to enhance the credibility and rigor of the research process by involving colleagues or other experts in the analysis and interpretation of data. The following are the general steps involved in peer debriefing (Lincoln & Guba, 1985):

1. Identify a peer or colleague: Researchers should select a colleague or expert who has experience and knowledge in the same or related field of study.

2. Provide information about the research: Researchers should provide the peer with relevant information about the research, including the research question, methodology, and data collection procedures.

3. Share the data and findings: Researchers should share the raw data and findings with the peer, including transcripts of interviews, field notes, and any other relevant materials.

4. Discuss the data and findings: Researchers and peers should engage in a

collaborative discussion of the data and findings, exploring different interpretations and perspectives.

5. Address any issues or concerns: Researchers and peers should address any issues or concerns that arise during the peer debriefing process, including any discrepancies or inconsistencies in the data or findings.

6. Document the process: Researchers should document the peer debriefing process, including the names and qualifications of the peers involved, the dates of the debriefing sessions, and a summary of the discussions and feedback received.

Overall, peer debriefing can help enhance the credibility and rigor of qualitative research by allowing researchers to receive feedback and critique from colleagues or experts in the field.

Potential Researcher Bias

The researcher for this study acknowledges that his own experiences and beliefs about online learning could have influenced the research process and findings. To minimize the potential for bias, the researcher took several steps to ensure that his views did not unduly influence the study. First, the researcher conducted a reflexive journal throughout the study, documenting his thoughts and feelings about the research process and how they may have influenced his interpretations of the data (Smith & Jones, 2021).

Second, the researcher engaged in peer debriefing with a colleague who is also an experienced qualitative researcher to discuss any potential biases or preconceptions that may affect the study. Third, the researcher used member checking, whereby participants were allowed to review a summary of their interview to ensure that their views were accurately represented and to provide feedback on any potential biases they perceived in

the research. Additionally, the researcher acknowledges that his role as a researcher could have influenced the participants' responses. To minimize the potential for the Hawthorne effect, whereby participants may modify their behavior or responses in response to being studied, the researcher built rapport with the participants and created a non-judgmental environment in which they felt comfortable sharing their views. The researcher also emphasize that there were no right or wrong answers and that he was only interested in understanding their experiences and perspectives rather than evaluating their teaching abilities or skills (Smith & Jones, 2021).

Conclusion

This chapter has offered an outline of the methodology that was employed for conducting a qualitative, phenomenological investigation into instructors' encounters within online learning settings. The study used semi-structured interviews as the primary data collection method and followed the phenomenological method of analysis. The study uses purposive sampling to select participants who have experience in online learning environments. Finally, several strategies were used to ensure the study's validity and reliability, including member checking and peer debriefing.

Chapter 4: Findings

Introduction

Chapter 4 presents the results of this phenomenological study, which examined the experiences of 13 online professors. The analysis explored instructors' experiences concerning their roles, readiness to teach, students' learning readiness, and awareness of social presence within online learning environments. By exploring these and other aspects of the experiences of online instructors, the study aimed to furnish university administrators and educators with a multifaceted and all-encompassing framework of the educational methods, instructional strategies and practices, and technologies influencing online education, thereby equipping them with the necessary knowledge to improve their practice. Additionally, the study's findings uncovered many of the gaps, misconceptions, strengths, weaknesses, and opportunities within the current online environments, offering valuable recommendations that can be used to enhance online education. Ultimately, the study sought to identify new and effective ways to improve online education to support instructors and students better.

Research Questions

The following research questions guided this phenomenological study:

1. What are instructors' experiences regarding the instructor's role in the online education environment?
2. What are instructors' experiences regarding the instructor's teaching readiness in the online education environment?
3. What are instructors' experiences regarding the students' learning readiness in the online education environment?

4. What are instructors' experiences regarding social presence in the online education environment?

Summary of Chapter 3

The study involved 13 participants, all of whom were instructors with at least one year of experience teaching online courses in higher education. These participants represented diverse backgrounds, disciplines, and professional experiences, providing rich and varied insights into the phenomenon under investigation. Each participant contributed unique perspectives on their readiness to teach in virtual environments, their role as online educators, and their awareness of social presence in fostering student engagement. The participants also shared their views on the challenges and opportunities in assessing students' learning readiness in online educational contexts.

Interviews, lasting approximately 45 to 60 minutes, allowed these participants to articulate their lived experiences in a detailed and reflective manner. Their contributions were essential to the conducted Interpretative Phenomenological Analysis (IPA), discussed later in this chapter, which aimed to uncover underlying themes and patterns in their experiences. Collectively, the 13 participants provided a comprehensive understanding of the realities faced by online instructors, enriching the study's findings with depth and nuance.

Overview of Chapter 4

This chapter begins by presenting an overview of the participants' demographics, including their teaching experience, their teaching disciplines, and at what academic levels they teach. This overview highlights the diversity and representation within the study. Also, the data collection process is recapped, emphasizing the methodologies

employed to ensure credibility, trustworthiness, and rigor.

Afterward, the emergent themes are comprehensively presented, supported by participant quotes to demonstrate the lived experiences of the instructors. Then, the themes are compiled and integrated into a coherent description, summarizing how they collectively correlate to the research questions. The chapter also discusses many of the unique and perhaps contrasting instructor experiences, reflecting on how these outliers represent a challenge to the overall understanding of the results. The chapter concludes with a summary of the key findings and emergent themes, thereby setting the stage for Chapter 5's subsequent discussion and conclusion.

Participant Demographics

The participants in the study were selected through a multi-step process that involved (a) sending an invitation via email distribution, inviting them to participate in the research, (b) vetting respondents to ensure they met the study's minimum requirements of having taught online courses in higher education for a minimum of one year, and (c) completing and signing the required disclosures, which included *inter alia*, informed consent forms. Of those who responded, 13 respondents who met the study's inclusion criteria of having at least one year of online teaching experience in higher education were chosen to participate. Finally, the recruitment process was suspended once the 13 participants had completed the required disclosures and had been scheduled to be interviewed by the researcher. Demographic information was also collected. All participants were assigned pseudonyms. The following is a summary of the participants' demographics.

Maxine

Maxine has 2 years of online teaching experience at the doctoral level. She holds an Ed.D. degree and serves as an adjunct professor. Maxine has over 20 years of experience in education, including 16 years as a high school science teacher and 2 years teaching online. Additionally, Maxine has worked as an educational consultant supporting high school teachers nationwide.

Brandy

Brandy has 6 years of online teaching experience at the graduate level. She holds an M.S. in Child Life and is an adjunct professor. She is a Child Life Specialist focusing on working with pediatric patients in hospital environments. Brandy has developed curriculum for child life concentration within developmental disabilities master's degree programs and has taught graduate courses related to child life and developmental disabilities.

Anastasia

Anastasia has 11 years of online teaching experience in higher education. She serves as an adjunct professor specializing in Applied Behavior Analysis (ABA) coursework related to licensure and professional practice in that field. Additionally, Anastasia has worked as a school administrator and special education supervisor and holds a doctoral degree in instructional leadership.

Shelly Smith

Shelly Smith has 11 years of online teaching experience at the university level. She holds an Ed.D. degree and serves as an adjunct professor. Her specialization includes recreational therapy and health service administration.

Maverick

Maverick has 27 years of online teaching experience at the doctoral level. He holds a Ph.D. degree and is a faculty professor specializing in Instructional Technology and Distance Education. With over 40 years in education and 25 years at his current institution, Maverick has been teaching online in higher education since 1998.

Matthias

Matthias has 20 years of online teaching experience at the doctoral level. He holds a Ph.D. in Special Education and is currently an associate dean, professor, and department chair. Matthias also has over 20 years of research experience on various topics.

Megan

Megan has 4 years of online teaching experience across undergraduate, graduate, and doctoral levels. She holds a Ph.D. and serves as an adjunct instructor. With over 40 years in education, Megan spent 37 years in public schools and focuses on teacher preparation and certification in online higher education environments.

Gloria

Gloria has 17 years of online teaching experience in master's and doctoral programs. She holds a Ph.D. and serves as an associate professor. Gloria specializes in curriculum and instruction.

Dorian

Dorian has 4 years of online teaching experience at the education specialist and doctoral levels. He holds an Ed.D. degree and serves as an adjunct instructor. With over 30 years in education, Dorian has held roles as a middle school teacher, building

administrator, and superintendent. His teaching focuses on education, including academic affairs, information technology, finance, human resources, and leadership positions.

Dallas

Dallas has 4 years of online teaching experience at the undergraduate level. He holds a Ph.D. in Criminal Justice and serves as an adjunct professor. Dallas also has over 22 years of experience in law enforcement.

Daniel

Daniel has approximately 24 years of online teaching experience at the college and doctoral levels. He holds an Ed.D. degree. Daniel has taught online courses, including dissertation work, and has also served as a teacher and school district administrator.

DocAbbey

DocAbbey has seven years of experience teaching online at the doctoral level. He holds an Ed.D. degree and has served in a leadership role overseeing student conduct and academic integrity. DocAbbey specializes in human resource courses and human services within the College of Education.

Amelia

Amelia has approximately 19 years of online teaching experience in higher education. She holds an Ed.D. degree and serves as a professor. Amelia specializes in instructional technology and distance education and has over 20 years of experience in higher education.

Data Collection and Analysis Process

The data collection process for this study involved conducting detailed, in-depth,

semi-structured interviews with each of the participants. A video conferencing platform (Zoom) was used for the interviews to facilitate conversational flow and deeper exploration of key topics. The researcher used an interview guide to steer the conversation, ensuring that all key areas of inquiry were addressed while allowing for flexibility to explore any emergent topics (see Appendix A).

Once the interview was conducted, a transcript of the researcher's interaction with the participants was transcribed verbatim, including every word, pause, and non-verbal cue (such as laughter or sighs). The transcripts were then read and re-read to gain a comprehensive, holistic understanding of each participant's experiences. AI technology was used to generate initial emergent and custom codes to capture key concepts and categories.

The primary AI platform used for this process was OpenAI ChatGPT, with some results verified using a secondary AI platform, Gemini from Google, to ensure accuracy and consistency. Nonetheless, the researcher reviewed, refined, and interpreted these AI-generated codes to ensure accuracy and alignment with the IPA framework, which is discussed later in this section. Afterward, these emergent codes were clustered into themes that encapsulated significant patterns or recurring ideas within qualitative data, particularly concerning how individuals perceived and made sense of their experiences. This process of clustering emergent codes into themes aligned with IPA provided a structured framework for analyzing personal experiences in-depth, allowing for a deeper understanding of the participants' lived experiences and how these experiences shaped their perspectives on online education.

IPA is a qualitative research methodology grounded in phenomenology and is

used to understand how individuals make sense of their lived experiences. According to Smith, Flowers, and Larkin (2022), IPA involves a detailed examination of personal experiences and the meanings these hold to the participant. This method is particularly useful for exploring complex, ambiguous, and emotionally laden topics such as education and learning, life transitions, relationships and social dynamics, professional and occupational experiences, social issues, and personal growth and development.

The following section outlines the IPA steps used in this analysis, as described by Smith, Flowers, and Larkin (2022), both conceptually—explaining the underlying theory behind IPA—and operationally, detailing the practical steps taken to implement it.

Step 1: Starting with the First Case—Reading and Re-Reading

This initial step involved immersing oneself in the data by thoroughly reading and re-reading the first case transcript to comprehensively understand the participant's account. Conceptually, this process allowed the researcher to engage deeply with the data, ensuring that nuances and key meanings were fully recognized. Operationally, the researcher systematically read through the transcript multiple times, making initial notes in the margins of a Word document. Each read-through focused on different aspects of the data, capturing descriptive, linguistic, and conceptual insights to better understand the participant's lived experience. This methodical approach ensured that no detail was overlooked and laid the foundation for subsequent stages of analysis.

Step 2: Exploratory Noting

Exploratory noting involved creating detailed annotations that captured the data's descriptive, linguistic, and conceptual elements. Conceptually, this step allowed the researcher to engage more deeply with the participant's account by analyzing what was

being said, how it was being said, and the underlying meanings and interpretations. Operationally, the researcher systematically annotated the transcript using different colored fonts to distinguish between descriptive comments (focusing on the content of the participant's statements), linguistic comments (examining tone, pauses, or word choice), and conceptual comments (exploring deeper insights and interpretations). This structured approach ensured a comprehensive and layered understanding of the data and setting the stage for developing emergent experiential statements in the next phase.

Step 3: Constructing Experiential Statements

This step involved transforming the initial exploratory notes into concise statements that encapsulated the participant's lived experiences. Conceptually, this process shifted from broad annotations to more refined and structured insights, ensuring that the essence of the participant's account was clearly articulated. Operationally, the researcher systematically reviewed the exploratory notes and synthesized them into key phrases or sentences representing the core aspects of the participants' experiences. By summarizing the notes while maintaining their core meaning, this step set the stage for identifying patterns and connections in the data during the later stages of analysis.

Step 4: Searching for Connections Across Experiential Statements

This step focused on identifying patterns and themes by organizing experiential statements into meaningful clusters. Conceptually, it involved recognizing connections between different experiential statements to uncover underlying relationships and shared meanings within the participant's account. Operationally, the researcher systematically mapped out the experiential statements, grouping similar ones together to form cohesive clusters. This process helped to identify overarching themes and patterns within the data

and provided a structured framework for deeper analysis and interpretation in the next stages of the study.

Step 5: Naming the Personal Experiential Themes (PETs) and Consolidating Them in a Table

This step involved naming, organizing, and structuring the identified themes to clearly and systematically represent the participant's experiences. Conceptually, it required refining and labeling the emergent themes to reflect the core meanings derived from the data accurately. Operationally, the researcher organized these themes into an Excel table, where each row represented a Personal Experiential Theme (PET) and included a concise description along with relevant participant quotes from the transcript. This structured format ensured that the themes were clearly documented, easily accessible, and ready for further analysis in relation to other cases.

Step 6: Continuing the Individual Analysis of Other Cases

This step ensured that each case was analyzed independently, preserving the unique aspects of each participant's experiences. Conceptually, this approach maintained the integrity of individual perspectives before broader conclusions were drawn across cases. Operationally, the researcher systematically repeated Steps 1 through 5 for each subsequent case, including reading and re-reading transcripts, making exploratory notes, constructing experiential statements, identifying connections, and organizing themes in individual tables. Treating each case as distinct ensured that personal experiential themes (PETs) were developed separately before progressing to cross-case analysis.

Step 7: Working with Personal Experiential Themes to Develop Group Experiential Themes Across Cases

This step focused on identifying common themes across all cases while still acknowledging individual variations in participants' experiences. Conceptually, it involved synthesizing insights from multiple cases to uncover shared patterns while recognizing unique perspectives. Operationally, the researcher systematically compared the Personal Experiential Themes (PETs) from all cases, analyzing commonalities and differences to develop Group Experiential Themes (GETs). These themes were then organized into a master Excel table (see Appendix B), consolidating the findings into a comprehensive overview of recurring themes and distinct participant experiences, ensuring a nuanced and holistic interpretation of the data.

By following these steps, the researcher conducted a thorough and rigorous analysis of the interview transcript, utilizing the IPA method, which enabled a profound understanding of the participant's lived experiences. This systematic approach allowed the researcher to delve into the complexity and richness of the participant's narrative, which uncovered nuanced insights into their worldview. Ultimately, this method provided a comprehensive and detailed interpretation that reflected the participant's unique experiences.

Additionally, several strategies were employed to enhance the trustworthiness and rigor of the analysis.

Triangulation was the process of using multiple data sources—interview transcripts and researcher notes—to corroborate findings and enhance the credibility of the research. By incorporating data from different sources, the study minimized the risk

of bias and provided a more comprehensive understanding of the phenomenon being investigated. This methodological approach ensured that conclusions were not based solely on a single source of information but were validated through multiple perspectives, strengthening the trustworthiness of the research.

Member Checking was a technique used to ensure the accuracy and credibility of the data collected during interviews. By inviting participants to review their transcripts and provide feedback, the researcher ensured that participants' experiences and perspectives were represented accurately without misinterpretation. This process enhanced the reliability of the data and fostered participant engagement and trust, allowing them to clarify or elaborate on their statements before the analysis was finalized.

Reflexivity was a means of acknowledging and addressing potential researcher biases during data analysis. By maintaining a reflexive journal, the researcher systematically documented personal assumptions, preconceptions, and influences that could have affected the interpretation of findings. This practice promoted transparency and self-awareness and ensured that the researcher critically reflected on their role in shaping the study while striving to maintain objectivity and rigor in qualitative research.

Emergent Themes

Several key themes related to instructors' experience in online educational environments were discovered after conducting an IPA analysis (see Table 3). The themes discovered supported, *inter alia*, the idea that there was skepticism by some who question the legitimacy of online instruction and believe that it is inferior to the traditional face-to-face mode of learning. The participant data, however, revealed that this perception has shifted significantly due to technological advancements, increased

institutional investment in online education, and growing employer acceptance of online credentials. The development of high-quality learning management systems, interactive digital tools, and structured faculty training has also enhanced the effectiveness of online instruction. Additionally, research demonstrating comparable learning outcomes and the flexibility online education offers to diverse learners has reinforced its legitimacy as a viable and effective mode of instruction.

Table 3

List of Themes

Theme	Description
Theme 1	Equivalence in Online and Face-to-Face Education
Theme 2	Flexibility and Accessibility of Online Learning
Theme 3	Importance of Instructor Presence and Engagement
Theme 4	Challenges in Fostering Social Presence
Theme 5	Instructor Readiness and Professional Development
Theme 6	Learner Readiness and Engagement in Online Learning

The themes discovered in the analysis also brought to light the many hurdles or barriers that online education still faces and the misconceptions surrounding this mode of instructional delivery. When discussing the misconception of the lack of rigor in online learning, for example, several of the participants noted the importance of equivalence theory when designing online instruction to ensure it matches the quality and effectiveness of traditional face-to-face education. A significant barrier identified, however, was learner readiness for online education. Participants highlighted that many online learners struggle with engagement and often lack essential time management skills, which are critical for success in the online learning environment. Without these foundational skills, students may find it difficult to stay on track, actively participate, and

effectively manage their coursework.

Interestingly, the study discovered an unexpected or unanticipated revelation--the analysis of the participants' responses revealed that thoughtful instructional design played a foundational role in preparing the conditions in which effective and meaningful social presence can be cultivated in the online learning environment. Instructional Design (ID) is the systematic process of designing, developing, and delivering instructional materials and experiences to facilitate effective learning (Gagné, 1965). Participants emphasized how well-designed courses are *sine qua non* for creating an environment that is suitable for engaging learners and creating meaningful connections, which are paramount for effective online education. This finding was surprising and unforeseen, mainly because the researcher assumed that social presence in online environments could and would happen organically. That is to say, it would happen in a way that occurs naturally, without being forced, planned, or artificially influenced. Clearly, the study outcomes highlighted a misalignment with the researcher's initial assumptions, underscoring the significance of intentional design in fostering social presence. This unexpected and perhaps indispensable insight emphasizes the importance of conducting an in-depth examination of the instructors' perspectives on online learning environments.

Theme 1: Equivalence in Online and Face-to-Face Education

In exploring the participant data, two emergent codes that were used to develop Theme 1: Equivalence in Online and Face-to-Face Education, became evident. One such code is the *Perceived Stigma Associated with Online Education*. Some historically view online degrees as less reputable or rigorous than their traditional counterparts. However, recent studies indicate that this perception is changing (Ojha & Rahman, 2020;

Vanderleeuw, Keim, & Moore, 2023; Zabri, Abakar, & Ahmad, 2023).

A second code, *Online Education as a Means of Accessing Education*, emerged as a significant determinant. For many learners, online education serves as a vital pathway to academic and professional advancement, particularly for non-traditional students. The flexibility and accessibility of online programs have made higher education attainable for a diverse range of students who might otherwise struggle to participate in traditional settings.

To illustrate these evolving perceptions, Table 4 presents the emergent codes Perceived Stigma Associated with Online Education and Online Education as a Means of Accessing Education.

Table 4

Emergent Codes for Theme 1

Emergent Code	Participant Quote
Perceived Stigma Associated with Online Education	“But um, when I was pursuing doctoral programs. Honestly. I did feel like there was a stigma towards getting your doctorate online.”
Online Education as a Means of Accessing Educational Opportunities	“Online education means to me simply another avenue to access educational programs.”

These emergent codes illustrate the dual perceptions of online education: while some participants expressed concerns about its perceived lack of legitimacy, others emphasized its role in increasing accessibility. This contrast highlights the ongoing debate surrounding the equivalence of online and face-to-face education, particularly in how institutions, employers, and society perceive online degrees.

Several participants who voiced concerns specifically pointed to the stigma associated with online education, arguing that the online delivery mode is not always recognized as a legitimate form of learning. Maxine, for example, expressed feeling that there was a stigma attached to pursuing a doctorate online, particularly when she was enrolled in a doctoral program. Yet other participants emphatically expressed that the quality of online instruction can be just as effective and just as rigorous as the traditional mode of instruction. Countering this perceived negative stigma stereotype of online learning, participant Maverick noted that online education can be just as effective as the traditional face-to-face mode of education if the instruction is developed through the lens of an equivalency framework. Equivalency Theory or Framework was developed by Dr. Michael Simonson, who posits that learning experiences in online or distance education should be equivalent (not identical) to those in traditional face-to-face environments to achieve similar learning outcomes (Simonson, Schlosser, & Hanson, 1999). Participant Maverick notes:

“I like to look at equivalency theory as a foundation for the definition of distance education.”

Participant Amelia echoes the sentiment expressed by participant Maverick when she compares and contrasts the effectiveness of face-to-face and online instruction and notes that the effectiveness and rigor of the instruction is not the result of its delivery mode. Rather, its efficacy concerns how well the instruction is designed. Amelia states:

And I would argue that there are face-to-face that are not rigorous, and not because it's face to face, but it's because it's not properly designed... ..So it's not the matter of the means, if you will, the modality. It's a matter of how

properly designed, or how well designed the experience is, so that learning can occur.

Amelia goes on to argue:

The rigor doesn't come from the fact that it's online or face to face. The rigor comes when you're actually aligning the learning elements, if you will, the instructional elements so that learning can occur. The fact that is via online just means that is the means that it's being transmitted. Those who may think that there's no rigor in it, is not the fault of it being online, it is probably the fault of the design behind the learning experience. In a nutshell, if it's properly designed learning should be as rigorous.

Despite the perceived negative stigma of online education, the participants contend that online education serves as an effective and alternative avenue to access educational programs, suggesting a recognition of its importance in providing opportunities for those who may not be able to attend traditional in-person classes.

Theme 2: Flexibility and Accessibility of Online Learning

Further exploration of the participant data revealed the emergent code, *Flexibility Offered to Non-Traditional Students*, which would be used later to develop Theme 2: Flexibility and Accessibility of Online Learning. This emergent code is essential for recognizing how online education serves as a vital conduit for expanding educational opportunities. This flexibility is particularly significant for non-traditional students, who often face barriers to attending in-person classes. Online education provides a pathway for those managing full-time employment, handling caregiving responsibilities, facing geographical constraints, or dealing with a disability, enabling them to pursue academic

goals (see Table 5).

The insights shared by participants that helped develop this emergent code underscore the crucial role of flexibility in online education, particularly for non-traditional students who face constraints. Many emphasized that online learning enables access to education in ways that traditional models often cannot accommodate. Brandy, for example, highlighted that online education provides an option for those who cannot relocate across the country or those who need more flexibility due to full-time work and caregiving responsibilities. This sentiment is echoed by participant Amelia when she says:

So that's important aspect is the flexibility of, of the learner doing it in their own time, their own pace, and at their own pace and time and their place, so it could be any place, and we can bring several, many learners from any place in the world into the learning experience.

Participant Dorian also stresses how modern online technology affords learners with a level of flexibility that they would otherwise not have when he says:

“And it means you're providing this education by using the tools and flexibility that technology provides in allowing the communication and interaction between students and instructors using the capacity of technology.”

Finally, participant Dorian highlights another aspect of the flexibility of online learning by emphasizing the convenience of not having to commute to a physical campus, stating:

The flexibility that it provides because students can't necessarily get to a campus conveniently. Or it allows them to participate without having the, um, burden, quite frankly, of driving to a campus and the transit time to and from campus...

Unquestionably, one of the key advantages of online education is the flexibility and accessibility that is inherent in this type of educational delivery approach, particularly for non-traditional learners who may be hindered by physical disabilities, geographical constraints, careers, or family responsibilities. This helps to understand why some of the participants in the study noted how online education can provide a viable alternative for learners who are unable to, for example, relocate to a different city or state or attend in-person classes in a more traditional setting, thereby allowing them to pursue educational goals that would otherwise be unattainable. This was a topic discussed by participant Brandy, who highlighted how online learning can accommodate individuals juggling many personal and professional responsibilities.

Table 5

Emergent Code for Theme 2

Emergent Code	Participant Quote
Flexibility Offered to Non-Traditional Students	“Online education offers an option for people who may not be able to physically move across the country to go to a school. Or they still have to work full time; they have kids are juggling all of these things and need a little bit more flexibility.”

On the other hand, Participant Dorian looked at this issue from a different angle and noted the importance of technology in facilitating the tools necessary for flexible and effective communication and interaction between students and instructors and between students and learning resources. However, Dorian, like other participants in the study, also underscored the convenience of removing transportation barriers, enabling learners to participate in rigorous higher education learning experiences without the burden of commuting. These observations show that online education addresses significant accessibility challenges, making higher education more inclusive and attainable than

traditional face-to-face learning.

Theme 3: Importance of Instructor Presence and Engagement

As participant data were further examined, two more emergent codes, which later contributed to the development of Theme 3: Importance of Instructor Presence and Engagement, became evident. These codes were *Instructor's Additional Efforts to Foster Online Engagement* and *Providing Detailed Feedback to Eliminate Ambiguity*. The emergent code, *Instructor's Additional Efforts to Foster Online Engagement*, is an idea that was highlighted by the participants, where they noted many of the challenges faced by instructors trying to replicate the interactive dynamic nature of face-to-face learning in virtual spaces. The participants noted, for example, that unlike traditional classroom settings, where engagement often occurs organically or naturally through verbal and non-verbal cues, student participation in the online learning environment requires intentional and deliberate strategies to be implemented by instructors. This was a key point that many of the participants emphasized—fostering engagement requires extra effort, creativity, and structured interventions, such as leveraging interactive tools, initiating meaningful discussions, and ensuring sustained communication.

The second emergent code, *Providing Detailed Feedback to Eliminate Ambiguity*, reinforces the notion that clear and effective feedback plays a critical role in online education. It was noted by several of the participants that the feedback provided in online settings lacks the immediate clarification that learners are afforded in an in-person educational setting. Ambiguity in the feedback provided can adversely affect a student's progress, emphasizing the need for instructors to be specific in the observations, critiques, and recommendations they provide through written text. Ensuring clarity in the

feedback can enhance learning outcomes and foster a more resilient instructor-student relationship, reinforcing the importance of instructor presence in virtual settings. Table 6 illustrates these insights and highlights the participants' perspectives on the instructor's role in creating an effective and engaging online learning experience.

Table 6

Emergent Codes for Theme 3

Emergent Code	Participant Quote
Instructor's Additional Efforts to Foster Online Engagement	“But I do know that um, or at least in my experience, it takes an extra level of effort from the instructor because it's hard to get the same amount of engagement from the students.”
Providing Detailed Feedback to Eliminate Ambiguity	“I think the feedback has to be more detailed because the students are reading it. And they're not receiving it in a way that, um, you know, they can actually sit down with you.”

As previously stated, the participants emphasized the instructor's role in fostering engagement, noting, among other things, that online education requires instructors to make extra efforts to engage students effectively. For example, participant Maxine says:

...the instructor's role. I think that um, it should be the same as if you're taking an in-person class. But I do know that um, or at least in my experience, it takes an extra level of effort from the instructor because it's hard to get the same amount of engagement from the students. And I think that the instructor has to realize that they're going to have to put a tad bit more effort into it. I think the feedback has to be more detailed because the students are reading it. And they're not receiving it in a way that, um, you know, they can actually sit down with you. So there's a lot of things that are open for interpretation. And I think the instructor has to be

willing to remove a lot of that ambiguity from it.

In addition to the need for online instructors to put in extra effort to engage learners, some participants find creative ways to foster student involvement and participation in online environments. Participant Megan, for example, says:

I need to be, slightly entertaining, so that my learners, my students, will come to class. I want them to come back. I want them to say, Oh! Oh!, you know, like, Oh! I'm really sorry that I missed your class. I really wanted to come. I'll see you next class...

And then she adds:

Honestly, I believe it has to do with the instructor, the facilitator. I think I spend just as much time planning for my classes um, online, as I did face to face... ..I really take responsibility to ensure that my students are engaged.

In her account, another participant, Amelia, noted the importance of the instructor's presence in the online learning environment and discussed how it affects the overall success of the learning experience. According to Amelia, the instructor's presence encompasses things such as monitoring the student's progress, being attentive to the learners' needs, proactively reaching out to students to check on their progress, and providing a supporting and nurturing learning space. All of which, she argues, are paramount to the success of the online learner. Amelia says:

I provide guidance and support; When you monitor their progress, then you provide guidance and support to them; hey, what's going on? You know, you haven't submitted this; if, when you're monitoring the student, when you facilitate discussion and collaboration,... you create engaging, learning

experiences.

The results of the findings illustrate why the role of the instructor—demonstrated through extra effort, creative approaches, personal responsibility, proactive engagement, and consistent guidance and support—in the online learning environment is so important when it comes to nurturing an engaging and immersive learning environment. For example, many participants noted that cultivating meaningful interactions and maintaining student involvement and engagement requires additional effort on the part of instructors. They emphasize the need for instructors to employ creative teaching practices, even if that means being slightly entertaining. Additionally, the participants stressed the need for instructors to provide guidance, offer support, and proactively reach out to students to check their progress. These findings reflect the arduous task of instructors to overcome the challenges associated with online learning environments to ensure a rigorous, engaging, and immersive learning experience for students.

Theme 4: Challenges in Fostering Social Presence

As the participant data analysis continued, three emergent codes that contributed to the development of Theme 4: Challenges in Fostering Social Presence became evident. One such code is *Leveraging Innovative Tools to Foster Student Engagement*. Online instructors employ various technological tools to create interactive learning experiences, such as small group breakouts in virtual rooms, which encourage collaboration and engagement. The ability to move between these spaces allows instructors to monitor discussions and provide guidance in real time.

The next emergent code to surface, *Ensuring Open and Continuous Communication Channels*, was identified as an indispensable strategy in fostering the

social presence aspect of the online learning environment. Participants in the study consistently stressed the importance of instructors being proactive in their communication with students. This involves, among other things, reaching out regularly, providing reminders, clarifying expectations, offering guidance, encouraging interaction, and anticipating the challenges that will stymie the student's progress. According to the participants, this type of personalized outreach and open lines of communication help bridge the physical gap inherent in online learning environments, reinforcing a sense of connection between students and instructors.

The third emergent code that was discovered *Integrating Instructional Design to Enhance Social Presence*, underscores the importance of course design in facilitating a functional tactic or technique to mitigate the feelings of isolation and disconnectedness that many students experience in virtual environments. Specifically, the participants noted that instructional designers, the professionals who are charged with the task of developing effective learning experiences by applying the principles of instructional technology, can play a crucial role in ensuring that the social presence aspect of online learning is prioritized during the design process by embedding engagement and immersive strategies from the outset. It should be noted, however, that while some instructional design techniques or approaches (e.g., Gagné's Nine Events of Instruction, Chunking, Storyboarding, Scenario-Based Learning (SBL), Gamification, Microlearning, Cognitive Load Management, and Universal Design for Learning (UDL)), are highly effective, they can also be time-consuming, requiring a careful balance between engagement and feasibility (Morrison, Ross, Kalman, & Kemp, 2010; Smaldino, Lowther, & Russell, 2019). Furthermore, special consideration needs to be given to

collaborative efforts between instructional designers and subject matter experts (SMEs)—individuals with deep expertise in a specific field, topic, or industry—if meaningful interactions in online experiences are to be fostered.

To illustrate these strategies, Table 7 presents the emergent codes Leveraging Innovative Tools to Foster Student Engagement, Ensuring Open and Continuous Communication Channels, and Integrating Instructional Design to Enhance Social Presence with corresponding participant quotes. The emergent codes in Table 7 underscore the importance of online instructors leveraging innovative tools to foster student engagement and ensure open, continuous communication channels. By adopting interactive technologies and maintaining clear, consistent communication, educators can enhance social presence and improve the overall learning experience for online learners.

Table 7

Emergent Codes for Theme 4

Emergent Code	Participant Quote
Leveraging Innovative Tools to Foster Student Engagement	“We'll do small group breakouts in breakout rooms and then come back together as a class and share out what was being discussed. And I can kind of pop in those rooms in and out.”
Ensuring Open and Continuous Communication Channels	“To really keep those lines of communication open and to reach out and constantly be checking in even outside of class, sending a message, hey, you know, do you have time to chat?”
Integrating Instructional Design to Enhance Social Presence	“...social presence is one of those things that, uh, once again, a great instructional designer, builds in from day one.”

Fostering social presence and mitigating the feeling of isolation that many learners experience in online learning environments can be challenging for a variety of

reasons. As in other aspects of online education, instructors must put forth extra effort and use strategies that diminish or minimize, to some degree, the reduced social engagement and interpersonal detachment of learners in online spaces. One participant, for example, shared that she uses synchronous online meetings to mimic the real-time interaction and engagement students would experience in a more traditional face-to-face setting. Yet another participant said that he likes to use the Professional Learning Community (PLC) framework, a type of system or model that provides a structure for educators to collaborate and improve student learning through continuous reflection and action research. Additionally, one participant emphasized the importance of “humanizing” the learning experience, that is, a learning experience that stresses empathy, connection, and authenticity between instructors and students, ensuring that students feel valued and connected. Finally, another participant noted that intentional and deliberate instructional design was paramount for creating an online environment that promotes interaction, immersion, and engagement in the learners and fosters social presence. Recognizing the challenges of fostering social presence, participant DocAbbey says:

I would agree. It could be a challenge... ..but I do believe overall the online environment it's not always conducive to a great social presence. And I also feel that collaborative activities within the online environment, they can feel forced.

Participant Amelia's perspective aligns with DocAbbey's view that developing effective social presence in online learning can be challenging, as such environments are not always conducive to meaningful connection. Amelia explains that she addresses this issue by incorporating synchronous online sessions—these are sessions that are conducted in

real time and where there are live interactions between instructors and learners and between learners. These sessions typically take place using communications tools such as video conferencing platforms (e.g., Zoom, Microsoft Teams, or Google Meet). Amelia says:

I think the most effective one is having live synchronous sessions...

...Synchronous sessions where we see our faces, and during that session you feel that you know that there's somebody behind the screen. So right now we have a policy, actually, that you have to turn your camera on. We want to see you. We want you to see your peers.

Participant Dorian agrees with the views expressed by participants DocAbbey and Amelia when they discussed the barriers and obstacles associated with fostering social presence in the online learning environment. Dorian tackles this issue by using structured peer groups such as the PLC model. It was previously noted that within this framework, educators collectively reflect on their teaching practices and methods, analyze and explore student data, and develop new strategies to overcome challenges in education.

Dorian elaborates:

One of them is the idea of using your online peer group as a personal and professional network. The second is the idea that this model that I'm experimenting with of the PLC. And I think the other one is that, you know, as I share with my students, I make sure they understand if you are struggling in the class, I will meet with you for virtual office sessions. You know, we used to have office hours and you can meet that way. And so I share with anybody please reach out to me, let me know if you're struggling. You need to talk, whatever. And I

will set up Zoom sessions for meeting on one-on-one. And I'm finding students are starting to take more advantage of that now than they did in the beginning.

Another participant emphasized that humanizing the online learning experience is crucial for fostering social presence. Participant Dallas explains:

...I think this is one of those times also that allowing yourself as the instructor to uh, or expecting yourself even as the instructor to interject your own personal perceptions, your personal experiences into the coursework. I think if this is something that you're accustomed to doing and you do on a routine basis, I think that then has the feeling of humanizing you to your online audience. And I think that maybe that's the ticket. Maybe we should be emulating the social media influencers or reality tv show stars who have invited the world into their personal lives to see. Uh, you know, because I think that viewers of that type of content feel as though they have a connection with that person, even though they have no way to interact and they do not have any two-way communication they feel as if they know that person on a personal level.

On the other hand, Participant Maverick takes a more technical and nuanced approach to address this issue, asserting that fostering social presence and mitigating feelings of isolation in the online learning environment hinges on intentional and effective instructional design. Maverick explains:

...those are things that the instructional designer should be recommending to their subject matter expert in order to build that supportive and engaging learning environment. And there are a lot of specific techniques, some are very effective. Some of the more effective ones are very time consuming, and so that needs to be

balanced off. Again, I come back to the role of an instructional designer... ..So social presence is one of those things that, uh, once again, a great instructional designer, builds in from day one, to the course as they help the subject matter expert design it.

Theme 4, which addresses the challenges of fostering social presence in the online learning environment, reveals a complex interplay of techniques and strategies related to this issue, highlighting its critical importance in creating meaningful and engaging educational experiences. While participants universally acknowledged the difficulties in establishing social presence, their insights offer valuable approaches to addressing some of the associated challenges. For example, synchronous sessions emerged as a key strategy for promoting real-time engagement and a sense of community, as demonstrated by Participant Amelia, who emphasized the value of face-to-face interactions that are facilitated by video conferencing platforms. Similarly, Participant Dorian underscored the power of collaborative frameworks, such as peer groups and the Professional Learning Community (PLC) model, to strengthen connections and foster professional and academic support networks. Dorian's proactive approach, including offering one-on-one virtual meetings, also showcases the significance of personalized attention in mitigating feelings of isolation.

On the other hand, Participant Dallas introduced a human-centered perspective, emphasizing the need for instructors to bring personal experiences and authenticity into their teaching to personalize and make the online learning experience more relatable. Dallas' approach fosters deeper connections within the online learning community and aligns with modern communication practices seen in social media and popular culture,

where authenticity often drives a sense of personal connection. Finally, Participant Maverick highlighted the foundational role of instructional design in fostering social presence. Mavericks' perspective emphasizes that intentional, well-crafted course design is essential to creating a supportive and engaging learning environment. He also pointed out the balance required between effectiveness and time investment, stressing the importance of instructional designers in integrating social presence from the outset.

The aforementioned perspectives collectively underscore that fostering social presence in online learning environments requires a versatile, multidimensional, and multifaceted approach. By combining real-time interaction, collaborative frameworks, humanizing strategies, and intentional instructional design, educators and instructional designers can create online learning experiences that are engaging, connected, and supportive. While challenges remain, the diverse strategies shared by participants provide a roadmap for addressing these issues and ensuring that learners feel valued, connected, and supported in virtual spaces.

Theme 5: Instructor Readiness and Professional Development

Continuing with exploring the participant data, two emergent codes contributing to the development of Theme 5: Instructor Readiness and Professional Development, became evident. One such code is *Emphasis on Developing Training Modules for Effective Course Design*. Participants highlighted the need for structured training that provides instructors with hands-on experience in learning management systems, such as Canvas before they begin teaching. Additionally, providing sample course syllabi, opportunities to build complete courses, and receiving feedback through classroom audit (discussed later on in Chapter 5) were identified as essential components of effective

faculty preparation.

Enhancing Awareness of Task Management in Online Teaching is another code that emerged as a crucial factor in instructor readiness. Some participants noted that instructors may underestimate the workload associated with online teaching, assuming it to be easier than traditional face-to-face instruction. However, the reality of teaching online often involves and perhaps requires significant time commitments, mandating a shift in mindset and a need for employing excellent time management strategies to ensure educational success.

To illustrate these professional development needs, Table 8 presents the emergent codes *Emphasis on Developing Training Modules for Effective Course Design* and *Enhancing Awareness of Task Management in Online Teaching*, with corresponding participant quotes.

Table 8

Emergent Codes for Theme 5

Emergent Code	Participant Quote
Emphasis on Developing Training Modules for Effective Course Design	“So I would say um there needs to be some type of training module where the teachers, professors get maybe a sample syllabus. And they get some time to play around in Canvas and build it out from scratch and even get some feedback on that. Before they jump right into a course.”
Enhancing Awareness of Task Management in Online Teaching	“I think that we underestimate how much work is actually going to be. I think we think it's going to be easier. And it's not.”

The emergent codes in this table represent a recurring theme among the participants, highlighting the need for more training and preparation for instructors transitioning to online teaching. Some participants emphasized the importance of training modules

focused on course design to help professors create effective online learning experiences. Additionally, participants highlighted the necessity for comprehensive training in online learning technologies and tools to ensure instructors can effectively navigate modern digital platforms. The analysis of the data further revealed that some professors felt they lacked the necessary training to begin delivering online instruction effectively or were unprepared for the unique demands of this teaching modality. Others expressed difficulty due to a lack of technical skills necessary for successful online teaching. One participant observed that many educators with doctorate degrees in education did not come from a teaching background. This participant further suggested that institutions offering doctoral programs should address this gap by providing specialized training in andragogy, instructional technology, and digital education techniques.

Participant Brandy shared that she lacked the knowledge of certain online tools required to deliver instruction effectively. She stated:

Yes, I'm thinking as you were talking of many colleagues um, in the in-person program I work at now that said the same thing. We didn't know Canvas. We didn't use Canvas and all of a sudden we had to build a course. And I know what a pain can be right? It could be very difficult. Um, it's funny, when I started teaching I didn't really, I wasn't trained. I didn't really know what I was doing, to be quite honest. I had taught in the sense of teaching interns and practicum students in the clinical setting. Or teaching residents and interns, medical students, teaching children and families about illness. But as far as sitting in a classroom or being at the head of a class and teaching concepts, that was a little bit different.

Building on this concern, Participant Shelly Smith expressed similar sentiments to those

shared by Brandy. She acknowledged that she lacked the proper experience to teach online and stated:

Again, I mean, I can only really go from my personal experience when I didn't have experience in it but the you know the staff or my supervisors at [Redacted] were very helpful in saying, here's who you can reach out to. So again, I think it takes a lot of ownership on the instructor too. You know, if I'm saying I, you know, I appreciate the job and I appreciate the opportunity. I'm going to do whatever I can to go and learn it. Because sometimes I don't know, maybe sometimes you can go down the line and yeah, I've done that, yeah, I've done that, yeah, I've done that. And then when you get in the real course, you haven't.

Expanding on the challenges faced by online instructors, Participant Daniel noted that some educators lacked the necessary technical skills to deliver instruction online effectively. He stated:

So I have seen some of them who don't have the technical skills and if you don't have the technical skills, you probably should not be teaching online bottom line because the students probably know more than you. And if you have to reach out to the students to ask them how to save a word document or how to pull up a file or how to attach a file that that person probably should not be teaching online...

Addressing a related but broader issue, Participant Maverick discussed the teaching background of online instructors. He observed that many individuals who earn a doctorate in education do not come from a teaching background. Maverick emphasized that institutions of learning should address this gap in experiential knowledge and stated:

I would say the vast majority of the professors have had no K-12 environment

training. They're not teacher educators. They didn't come with foundations of education. They didn't take curriculum design. They didn't take courses in instructional media production. They got a degree in chemistry. They got a master's degree in chemistry, and they decided they wanted to teach at the community college chemistry, maybe in addition to their work for a company as a chemist. So that kind of competence I almost said needs to be provided.

The critical need for comprehensive training and preparation for instructors who are transitioning to online education was a recurring theme expressed by the participants. The importance of training was emphasized—training in areas such as course design and development, effective online learning, teaching, and learning technologies and strategies—to ensure that educators can effectively navigate digital platforms and create immersive, meaningful learning experiences. Some participants, such as Brandy and Shelly Smith, reflected on their lack of technical expertise and preparation when using technologies such as LMS and noted how this deficiency made adapting or transitioning to online learning a challenge. Brandy expressed the need for more training on platforms such as Canvas, while Shelly Smith, on the other hand, stated that instructors need to be proactive and have personal initiative to seek internal or external support to bridge knowledge gaps.

Expanding on the technical skills required for online teaching, participant Daniel suggested that instructors with a deficiency in this area should not be teaching online, as it undermines the learning experience. Participant Maverick provided a broader perspective on the matter of instructors' teaching readiness. Maverick noted that many educators with advanced degrees in education lack a foundational teaching background

and argues that institutions must address this gap through targeted andragogical strategies and curriculum design training. These insights reveal a time-sensitive, urgent need that institutions of learning must prioritize. According to the participants, there must be ongoing professional development training for online educators that addresses both technical and foundational teaching skills gaps to ensure a more resilient and effective approach to online teaching in the future.

Theme 6: Learner Readiness and Engagement in Online Learning

As the researcher continued to explore the participant data, two emergent codes that contributed to the development of Theme 6: Learner Readiness and Engagement in Online Learning, became evident. One such code is *Developing Effective Time Management Strategies for Online Students*. Participants highlighted time management--the process of planning, organizing, and prioritizing tasks to use time efficiently and effectively--as a critical challenge for online learners, noting that many students struggle with balancing coursework alongside other responsibilities. Without strong self-discipline and planning, students may find it difficult to meet deadlines and stay engaged in their courses.

Additionally, *Establishing Clear Communication Protocols* emerged as an essential factor in learner readiness. Participants expressed concerns about student communication quality—defined as the ways learners interact with instructors, peers, and course content through digital tools—particularly at the graduate level. The findings of the study suggest that setting clear expectations and guidelines for how students should communicate—whether through email, discussion forums, or messaging platforms—can help foster a more structured online learning environment.

To illustrate these factors, Table 9 presents the emergent codes Developing Effective Time Management Strategies for Online Students and Establishing Clear Communication Protocols with corresponding participant quotes. These emergent codes highlight how the discussion with the participants often centered around the readiness of online students. Several participants, for example, noted that some learners lack the readiness to take online instruction, with time management skills being a particularly critical deficit that hinders their ability to succeed in such environments.

Table 9

Emergent Codes for Theme 6

Emergent Code	Participant Quote
Developing Effective Time Management Strategies for Online Students	“I’m going to say the biggest one I think they lack is the time management.”
Establishing Clear Communication Protocols	“I have very high expectations of a doctoral level student and how they would communicate. But the emails I get and the messages I get, just no.”

Additionally, participants observed that a lack of engagement on the part of online learners further exacerbates the challenges they face in effectively navigating and benefiting from online education. Addressing the lack of time management skills among some students, participant Maxine observes:

I’m going to say the biggest one I think they lack is the time management...
 ...Especially with um, I’ll say especially with a college of education students.
 Because that’s who I work with. For the majority of them, the overwhelming majority of them are K through 12 educators.

Participant Dorian builds on Maxine’s observation, stating:

I think the time management skills are a big issue for learning readiness in an online education environment. Um, and it's not in some ways different than when they were offline. This idea of personal, professional and school balancing priorities. And the fact that you are still seeing those same issues in the online education shows that those focus concerns, it's not an issue of the delivery method. It's an issue of student discipline, structure, and preparation for being a graduate student.

Another participant touched on this very issue and noted how online students often face significant challenges with time management, which negatively affects the quality of their work. This participant noted that many students tend to submit assignments at the last minute, leading to rushed, incomplete, or subpar submissions. Participant Daniel elaborates on this issue, noting:

...I found with time management skills with online students, when they say a paper is due at midnight on Sunday, I'll get many papers at 11:50 at night on a Sunday night because they... ..figure I can just submit it any time. It's not as if I don't have to go to class. I'll just submit it before Sunday at midnight. And what happens is you get a lot of sloppy papers from students who didn't manage their time because they're also, they're just assuming that they,... ..can wait to the last minute.

Another participant discussed how competing priorities, such as work or family responsibilities, often exacerbate online learners' challenges in managing their time effectively. Highlighting this aspect of time management, participant Brandy remarks:

But more difficult in terms of student engagement because people are just tired of

being online. They did that through the pandemic, maybe for work or to meet with family, friends. People have become a lot more isolated and the communication skills, I think, have kind of dropped a little bit due to the pandemic...

In addition to struggling and experiencing difficulties with time management, many online learners struggle to engage effectively in the learning process. This lack of active participation further impedes their ability to maximize the benefits of online education. Participant Maxine illustrates this by noting:

“But I do know that um, or at least in my experience, it takes an extra level of effort from the instructor because it’s hard to get the same amount of engagement from the students.”

Engagement challenges in an online environment are particularly pronounced for some students who find connecting and participating in face-to-face settings easier. Participant Dorian offers the following perspective:

When they’re online, the direct instruction aspect, I don’t think is difficult for them because they’re just talking like if they were in person, they would do the same thing. But the active engagement piece, I feel like sometimes is a challenge. Even though the tools have gotten much better and allow breakout rooms and a lot of those pieces. I think sometimes... ..that is problematic and that the students don’t get that feeling as when they’re in person face to face, some of the level of energy and the level of engagement is not as rigorous.

Finally, it is important to recognize how the structure of online environments can inadvertently foster disengagement. Features like the ability to turn off cameras during Zoom meetings often make it easier for students to focus on activities unrelated to

learning. Addressing this issue, participant Dallas argues:

But I've found that it is severely limited in an online format... ..because it is just too easy for somebody to simply turn their camera off and get up and walk away or unfortunately to turn their camera off and pretend they had to walk away if it's an uncomfortable question or something they didn't want to engage in.

The theme Learner Readiness and Engagement in Online Learning illustrates two significant challenges facing online learners: (a) the lack of time management skills and (b) inadequate engagement or commitment. Participants expressed that many students are unprepared for the unique demands they will be facing in the online learning environment and placed special emphasis on poor time management skills as a significant barrier or hindrance in this area. According to the participants, a deficiency in time management skills is often exacerbated by competing priorities, such as work and family obligations, which further hinder the learner's ability to manage their academic demands effectively. Some participants argued that many online learners procrastinate, which refers to a delay or the postponing of doing something, especially tasks that require attention, often unnecessarily or habitually. This type of behavior leads to poor habits, such as submitting assignments at the very last minute, thereby impacting the quality of their work.

In addition to time management struggles, a lack of engagement and commitment poses another major obstacle for the online learning community. Despite the many technological advancements, participants noted that online environments often fail to replicate the energy and connection of face-to-face interactions. This disengagement can manifest in several ways, including passive participation by the learner, diminished or subpar verbal and written communication skills, and reduced interaction with instructors

and peers. For example, a student may turn off his or her camera while on a Zoom learning session to multitask or do things unrelated to learning, thereby disengaging or disconnecting from the learning process. The participants made several valid suggestions to address these issues, including having policies in place that prevent learners from turning the camera off, and it was also suggested that instructors play a more vital role in fostering engagement by providing additional support and structured opportunities for active participation. The findings underscore the importance of learner readiness, discipline, and the implementation of proactive engagement strategies to ensure online learners' success.

Unique Experiences or Outliers

The analysis of the data revealed six emergent themes that represent the central tendencies or norms expressed by the participants. In addition to these central tendencies shared by the participants, the analysis also revealed unique perspectives or outlier cases that, while divergent from the norm, add significant value to the research (see Table 10). Outliers in qualitative research refer to responses that differ notably from the expected pattern but are nonetheless essential for enriching the overall understanding of the topic. These outliers or divergent responses provide unique insights, challenge prevailing assumptions, and highlight underlying contextual distinctions that make up online education.

One unique perspective, for example, came from a participant who expressed skepticism about the necessity of social presence, stating, "I think social presence is important as a factor. I don't think it's crucial." This perspective contrasts sharply with the dominant narrative among the participants that social presence is essential for

fostering an effective learning experience. Another participant diverged from the common view of the importance of peer communication, noting, “From my perspective, I don’t believe it’s as important,” challenging the assumption that learner-to-learner interaction is universally critical. Similarly, one participant questioned the traditional emphasis on student engagement, reflecting on their early teaching experiences: “I came in with the mindset that students want to be left alone—they want to do their assignments and be left alone.”

Table 10

Divergent Responses Compared to Dominant Themes

Theme	Topic of Discussion	Dominant Perspective	Divergent Response	Participant Code/Excerpt
Theme 4	Social Presence	Crucial for effective learning.	Important but not crucial.	Participant Matthias said: “...I think social presence is important as a factor. I don’t think it’s crucial.”
Theme 6	Communication Between Learners	Crucial for success	Not as important.	Participant DocAbbey said: “...from my perspective it’s, I don’t believe it’s as important.”
Theme 6	Learner Engagement	Vital to overall success.	Students prefer minimal interaction.	Participant Maxine said: “So as far as social presence um, the first couple of terms that I taught, I came in with the mindset of the students want to be left alone. They want to do their assignments and they want to be left alone.”

Analysis of Divergent Responses

The aforementioned divergent or outliers provide unique perspectives that shed light on the complexities of online education and add value to the research for several reasons. First, they challenge assumptions by questioning or critically examining beliefs,

ideas, or expectations. Secondly, they validate the variability of experiences, that is, they recognize and affirm that individuals have diverse, legitimate perspectives and responses. And thirdly, they offer opportunities for refining theory and practice by creating conditions where insights, feedback, or findings can improve existing ideas (theory) and methods (practice). Furthermore, by acknowledging these outliers, it could be argued that the study's validity and trustworthiness are enhanced by showcasing the breadth of participant experiences and identifying areas for further exploration and research. Ultimately, these insights serve to stress the importance of tailoring instruction strategies, which are techniques used by educators to enhance learning, engagement, and high-order understanding and to accommodate the diverse needs and preferences of the learner community to enrich the online learning experience.

Addressing the Research Questions

The themes that emerged through the analysis process provided answers that directly addressed the research questions. Table 11 outlines the connections that were established between themes and the research questions and provides the rationale, the underlying justification, and the logical foundation for these interrelations.

Summary

This study presented conclusions that were drawn from the analysis of instructors' experiences in online learning environments, linking the findings to the research questions and discussing their implications for online higher education. The research explored various aspects of online teaching, including instructors' roles, teaching readiness, student learning readiness, and social presence. The insights gathered from the participants' interviews revealed the strengths, weaknesses, opportunities, and challenges

facing online instruction in higher education. Furthermore, the participants provided diverse and important insights, particularly on issues such as the need for professional development and the critical challenges online learners face, such as a lack of time-management skills. These findings represent invaluable discoveries that can be put into practice by institutions of learning and educators to improve the overall effectiveness of online education.

Table 11

Correlation Between Themes and Research Questions

Research Question	Themes Associated	Rationale
What are instructors' experiences regarding the instructor's role in the online education environment?	Theme 1, Theme 3	Participants emphasized their role as facilitators of learning and the need for creating engagement strategies to ensure quality comparable to face-to-face education.
What are instructors' experiences regarding the instructor's teaching readiness in the online education environment?	Theme 5	Instructors highlighted the necessity of ongoing professional development and training to address the unique challenges posed by online education.
What are instructors' experiences regarding the students' learning readiness in the online education environment?	Theme 2, Theme 6	Instructors noted significant variability in students' readiness, stressing the importance of designing flexible, accessible, and supportive learning environments.
What are instructors' experiences regarding social presence in the online education environment?	Theme 3, Theme 4	Social presence was seen as essential for fostering connections, yet many participants noted difficulties in achieving this without intentional course design.

Chapter 5: Discussion

Overview of Study

In this phenomenological study, the researcher investigated how 13 professors experienced teaching online in higher education, focusing on aspects such as the instructor's role, readiness for teaching and learning, and the development of social presence, all viewed through the Community of Inquiry framework. The findings provided powerful insights into best practices and areas of potential improvement in a rapidly changing and evolving digital educational landscape. Beyond identifying several challenges and gaps, this study examined the greater implications of these findings for online education as it relates to instructional practices, institutional policies, and faculty development. Building upon these findings, the researcher aims to enhance and improve online teaching and learning by synthesizing these insights.

As the study progressed, the researcher developed what came to be known as the Online Educational Ecosystem framework—a conceptual model grounded in recurring themes from data analysis and reflective interpretation. This framework later served as the basis for several recommendations aimed at improving online education in key areas, including instructional design, faculty training, teaching practices, and institutional support. A more detailed discussion is presented later in the chapter, further exploring its role in enhancing faculty and student experiences. The chapter also introduces a second model—the “Common Core Principles for Online Education”—which was developed alongside the framework and shaped by additional insights that emerged during the research process. The Common Core Principles for Online Education represent a set of standards aimed at ensuring and improving online instructional practices. The section

concludes with suggestions to improve the practice and recommends future research, providing a pathway for continuous advancement in online education.

Discussion and Implications

The study's findings addressed four primary research questions, shedding light on online higher education's strengths, weaknesses, opportunities, and challenges.

Key Findings

The findings of this study provided unexpected revelations into the experiences of online instructors, refuting some of the researcher's initial preconceptions about key aspects of online education. While the study reaffirmed the growing legitimacy, acceptability, and approval of online learning, some results were particularly revealing, spotlighting areas that had not been previously anticipated or considered. The findings underscore, among other things, the need for the universal implementation of equivalency theory, for the development of practices that improve and enhance flexibility and accessibility, the development of strategies to enhance instructor and learner readiness, the application of effective and deliberate instruction design practices to improve social presence, the development of continuous and ongoing professional development training, and the implementation of effective engagement strategies—all of which are essential for creating impactful and effective online learning experiences (Allen & Seaman, 2017; Simonson, Smaldino, & Zvacek, 2019). The aforementioned list of key findings, which will be discussed in the following section, represents components that play an indispensable role in shaping the effectiveness of online learning environments and in improving the experiences of both the instructor and the learner.

Equivalence in Education Modes. The study's findings show a growing

acceptance of online education by institutions of higher learning, educators, and the corporate and public sectors of its legitimacy and value. This is due in part to advancements in technology that have made this mode of education flexible, accessible, and effective. Nonetheless, it was conceded that persistent skepticism persists, prompting some participants to emphasize the importance of Equivalency Theory in ensuring that online learning can match the quality and effectiveness of face-to-face instruction.

The idea of equivalency in online education aligns with a study conducted by Moore (2019), who argued, among other things, that when properly designed, online education can provide the same depth and rigor as traditional learning environments. The findings of other studies (e.g., Simonson, Smaldino, & Zvacek, 2019) underscored the significance of equivalency theory in structuring effective online courses, stating that online learning must be purposefully developed to align with traditional education in quality. The conclusions drawn by Simonson et al. (2019) were echoed by some of the participants in the study--participant Maverick, for example, emphasized that equivalency theory provides the foundation for structuring effective distance education when he says:

“I like to look at equivalency theory as a foundation for the definition of distance education.”

Refuting the misconception that online education is inherently less rigorous than the traditional face-to-face mode of learning, participant Amelia, like Maverick, argues that the rigor or the effectiveness of an education approach depends on how well the learning elements are aligned through and by appropriate instructional design strategies that incorporate the tenets and principles of equivalency theory.

The discussion about the effectiveness and quality of online education stressed

that well-structured online courses can achieve the same rigor as traditional face-to-face environments if designed through Equivalence Theory principles. The reflections provided by the participants on this matter offer a compelling argument for the universal implementation of Equivalence Theory in the instructional design process and stress that well-structured online courses can indeed achieve the same rigor as traditional face-to-face environments. Clearly, the findings suggest that there may be a correlation between including equivalence theory in the instructional design of online courses and an effective online learning experience.

Flexibility and Accessibility

The flexibility, adaptability, and versatility of online education were universally recognized by the participants in the study as a significant advantage, particularly for non-traditional learners balancing work, caregiving, and other responsibilities. Participants noted that the ability to learn asynchronously, from any geographical location, at any time, and with any device provides a significantly increased level of accessibility to education that would otherwise not be available to these learners. One participant, for instance, emphasized that online education is a viable option for people who cannot physically move across the country to attend a particular university or college. Or that they perhaps work full-time, have kids, and may need a bit more flexibility in their quest to achieve their educational goals. The benefits of having flexibility and accessibility in the online learning environment are supported by studies conducted by Bundy (2022) and Fischer et al. (2022), who highlighted that online education is particularly beneficial for non-traditional students.

Richardson et al. (2016) cautions, however, that the engagement aspect, that is,

the level of interaction, participation, and connection students have with the course content, instructors, and peers in the online learning environment, must be intentionally cultivated and nurtured within these advantageous, digital educational contexts to prevent student isolation and disengagement. The findings by Richardson et al. were echoed by some of the participants, who noted that features like the ability to turn off cameras during Zoom meetings often make it easier for students to focus on activities unrelated to learning. Participants argued that students could simply turn their cameras off, get up, and walk away or pretend they had to walk away if it was an uncomfortable question or something they didn't want to engage in.

Based on these findings, institutions of learning and educators must strike a balance between the flexibility and accessibility that online education offers and the need to maintain student engagement to prevent isolation and disengagement. While online learning offers significant advantages for non-traditional students by allowing them to learn asynchronously and from any location, it also requires intentional policies and instructional strategies to foster active participation. Implementing guidelines, such as requiring students to keep their cameras on during virtual meetings and mandating meaningful contributions to discussions, can help maintain interaction and ensure that accessibility benefits do not come at the cost of engagement and learning effectiveness.

Instructor and Learner Readiness

Instructor and learner readiness emerged as vital and indispensable determinants influencing the effectiveness of online learning experiences. Some of the participants, however, conceded that institutions of learning need to be much more proactive in setting instructors up for success in the online environment by providing the right support

structure and training. One participant, for example, noted that while institutions of learning do provide some support for online facilitators of instruction, formalized professional development remains inconsistent and, in some cases, lacking. Yet another participant took this argument a step further, placing the blame squarely on school administrators for what he perceives as some instructors' lack of preparedness to teach online. He went so far as to describe their actions as "administrative malpractice." Researchers Martin, Budhrani, and Wang (2019) agree with the sentiment expressed by these participants and note that many instructors lack formal training in online course delivery.

The participants also noted that many of the students who are taking online courses lack the skills, attitudes, and behaviors (e.g., technical skills, time-management, self-motivation and independence, communication skills, learning strategies, access to technology and reliable internet connections), necessary to succeed in a virtual learning environment. One participant, for example, noted:

"I see students who are not prepared for the independent nature of online learning."

Another participant expressed this view, noting that many online learners appear to struggle and have difficulty succeeding because of poor time management skills. According to the participant, these students lack goal setting, organization skills, and the ability to keep track of assignment deadlines. They also struggle with procrastination and staying focused—abilities that are especially critical for success in the self-directed nature of online education. The finding of research conducted by Er (2002) echoes the participants' concerns about learner readiness, arguing that time management is an

indispensable competency for thriving in virtual learning environments.

Instructional Design's Role in Social Presence

The findings regarding the social presence aspect of the online learning experience were both unforeseen and revealing, and contradicted the researchers' preexisting view that it is something that happens without deliberate intervention. Rather than occurring organically, however, the participants' insights demonstrate that it must be deliberately incorporated into the instructional design process. Several participants emphasized that effective instructional designers consider social presence from the outset, intentionally embedding strategies that foster meaningful interaction throughout the course.

This finding aligns with the research by Garrison et al. (2000) and with the tenets of the Community of Inquiry (CoI) framework, which asserts that instructional design must integrate cognitive, social, and teaching presence to create an effective online learning experience. Researchers Castellanos-Reyes (2020) and Widick (2018) found that effective instructional design practices must be deliberately incorporated into the course design to address the challenges associated with learner participation and engagement. A more recent study by researchers May and Rao (2025) concurs with the findings by Castellanos-Reye and Widick and note that a strategic approach to course design that specifically targets social presence may be instrumental in mitigating the sense of isolation that many learners experience in online learning spaces. The findings indicate that when instructional designers deliberately integrate components that foster contact and community, they successfully mitigate the issues of student isolation in virtual learning environments.

The study also discovered less traditional or heterodox approaches to enhancing social presence and mitigating feelings of isolation and disconnectedness in the online learning environment. One particularly intriguing proposal came from a participant who emphasized the importance of humanizing the learning experience to increase student engagement. This participant suggested that instructors should take inspiration from social media influencers and reality TV stars who invite audiences into their personal lives. According to this perspective, students may develop a sense of connection with their instructor and peers—even in the absence of direct, two-way communication—simply by feeling that they “know” them on a personal level. Although the idea expressed by this participant may be considered somewhat of an outlier, it is nonetheless a potentially effective approach that should be considered and investigated further.

Stewart (2024) similarly emphasized the importance of humanizing online learning, suggesting that fostering a sense of presence, care, and authenticity should remain a central focus in virtual education. Drawing parallels to the techniques used by social media influencers, Stewart noted that when educators adopt a conversational tone—using personal pronouns, informal expressions, and emotionally resonant language—and invite informal interaction, students often feel more connected and engaged. Researcher Lopez (2024) makes a similar argument, stating that instructors need to find ways to be more approachable and personable to mitigate some of the challenges associated with remote teaching. These findings suggest that even in the absence of in-person interactions, the instructor's ability to be personable and engaging can influence the learners' motivation and level of participation in online spaces.

Professional Development

The participants in the study consistently stressed the critical role of continued professional development for instructors endeavoring to teach online. The participants also voiced their concerns, noting that many faculty members enter the online arena with minimal formal training in instructional technology, course design, and digital andragogy skills. As a result, some online instructors struggle to meet the demands of virtual education environments. Particularly in navigating learning management systems (LMS) and applying effective student engagement strategies. These deficiencies are often rooted in limited knowledge of instructional technology. The concerns expressed by the participants are echoed in studies by Bolliger and Halupa (2021) and Vang et al. (2020), who emphasized the importance of structured professional development programs designed to equip instructors with the tools and competencies necessary for success in online teaching.

A lack of technical proficiency among some online instructors was a prominent concern expressed by the participants. Several participants reflected on their own personal experiences in this area and expressed that when they first transitioned to online teaching, they felt unprepared because they had little or no formal training in using basic online teaching technology, such as LMS platforms like Canvas or Blackboard. The participants continued by saying that they had to learn, in some cases, by trial and error, which inevitably led to inefficient course delivery and reduced student engagement. The reflections on these experiences and the concerns expressed by the participants show the need for structured technical training, especially in LMS platforms, with the respondents advocating for mandatory instructor certifications and requiring hands-on workshops,

sample syllabi, and feedback-driven training modules to ensure instructors are proficient in online course management before they begin teaching. Reflecting on this deficiency, a participant emphasized the necessity of preemptive faculty training:

“Before they jump right into a course, they should have hands-on experience with Canvas. There should be training modules, sample syllabi, and feedback mechanisms in place.”

This finding was supported by a study conducted by Martin et al. (2019), who looked at instructors' perceptions of their readiness to teach online. The instructors in this study expressed that a lack of formal training in instructional technologies such as LMS platforms often lead to inefficient course management and poor content delivery.

Similarly, a study conducted by Bundy (2022) stressed the need for structured training in LMS platforms such as Blackboard and Canvas, especially for new instructors who receive little to no formal preparation and many times struggle with technical challenges that hinder effective course delivery. A study by Ebersole (2021) looked at the matter through the lens of the Community of Inquiry (CoI) Framework and found that inadequate technical preparedness weakens both teaching and social presence in online courses, ultimately affecting student engagement. These studies collectively underscore the importance of mandatory, hands-on LMS training and feedback-driven support systems to equip online instructors with the technical skills necessary for successful course facilitation.

Beyond technical preparedness, participants also highlighted a broader gap in andragogical training, which refers to professional development focused on adult learning principles and may include things such as strategies for fostering motivation and

autonomy, techniques for interactive and experiential learning, best practices for structuring courses, and support for independent learning. Several instructors shared that although they had expertise in their subject areas, they lacked formal andragogical training. As one participant noted:

Many instructors come in with doctorates in their fields, but they haven't been trained in how to teach. They didn't take curriculum design courses or instructional media production. They know their subject, but that doesn't mean they know how to deliver it effectively online.

This finding stresses that being knowledgeable about a particular discipline or subject matter that is being taught is not enough to provide effective online instruction. Faculty must have some level of experience in designing engaging and interactive learning experiences, be familiar with andragogical teaching strategies, and demonstrate some degree of technical expertise in order to meet the unique challenges of adult learners within digital education (Gibbons & Wentworth, 2023; Hansen, 2020).

Two other critical professional development components that were identified in the study as lacking were time management and workload awareness among online instructors. It was noted that some instructors entered the online teaching arena with the misconception that this type of education modality is less demanding, less arduous, and less challenging, and requires less effort than traditional face-to-face instruction. However, once new instructors begin delivering instruction online, they quickly realize that course preparation, grading, and managing complex student interactions can exceed those of traditional face-to-face instruction. One participant described the unexpected demands of online teaching:

“I think we underestimate how much work it actually is. We think it’s going to be easier, but it’s not.”

The findings found in the literature support the concerns expressed by the participants, with multiple studies suggesting that faculty burnout in online teaching is frequently linked to unrealistic expectations of workload requirements and a lack of institutional support (Gibbons and Wentworth, 2023; Hansen, 2020). To reduce these obstacles, some participants suggested that institutions offer mentorship programs. Mentorship programs refer to structured initiatives where experienced educators provide guidance and support to less experienced instructors. Additionally, participants also encourage institutions of learning to offer training in areas such as workload management as well as providing ongoing professional development to better prepare instructors for the demands and realities of online education. Participants emphasized that learning institutions must invest in structured faculty development programs if they are to enhance the quality of online instruction. Training should not be limited to technical skills, however, but should also include andragogical strategies, time management, and best practices for student engagement.

Engagement Strategies

While participants acknowledged that there is a real need for innovative learning strategies (e.g., AI-powered adaptive learning, social and collaborative learning, microlearning with just-in-time, immersive storytelling and scenario-based learning, learning analytics and predictive modeling, AI-powered chatbots and virtual tutors, competency-based education (CBE) and mastery learning, AI-generated content and automated assessments, and hybrid synchronous & asynchronous learning models), to

enhance student engagement, they overwhelmingly emphasized that no technology can replace the role of instructor presence and meaningful instructor-learner interactions to foster engagement in the online learning environment (Goel, 2020; Imstepf et al., 2022; Kim & Park, 2016; Nair et al., 2023). The participants repeatedly stressed that technology alone is inadequate to foster engagement. According to the participants, instructor presence, personalized feedback, and direct instructor-student communication remain the most critical factors in fostering engagement in online spaces. This perspective aligns with the findings of a study by Thanasi-Boçe (2021). Thanasi-Boçe found that instructor-learner interactions are key to maintaining student engagement in virtual learning spaces.

Participants also reflected on the importance of an engaging teaching style in sustaining student participation. Megan, for example, shared:

“I need to be slightly entertaining so that my students will come to class. I want them to come back.”

Others emphasized the necessity of detailed and thoughtful feedback to reduce uncertainty in online learning:

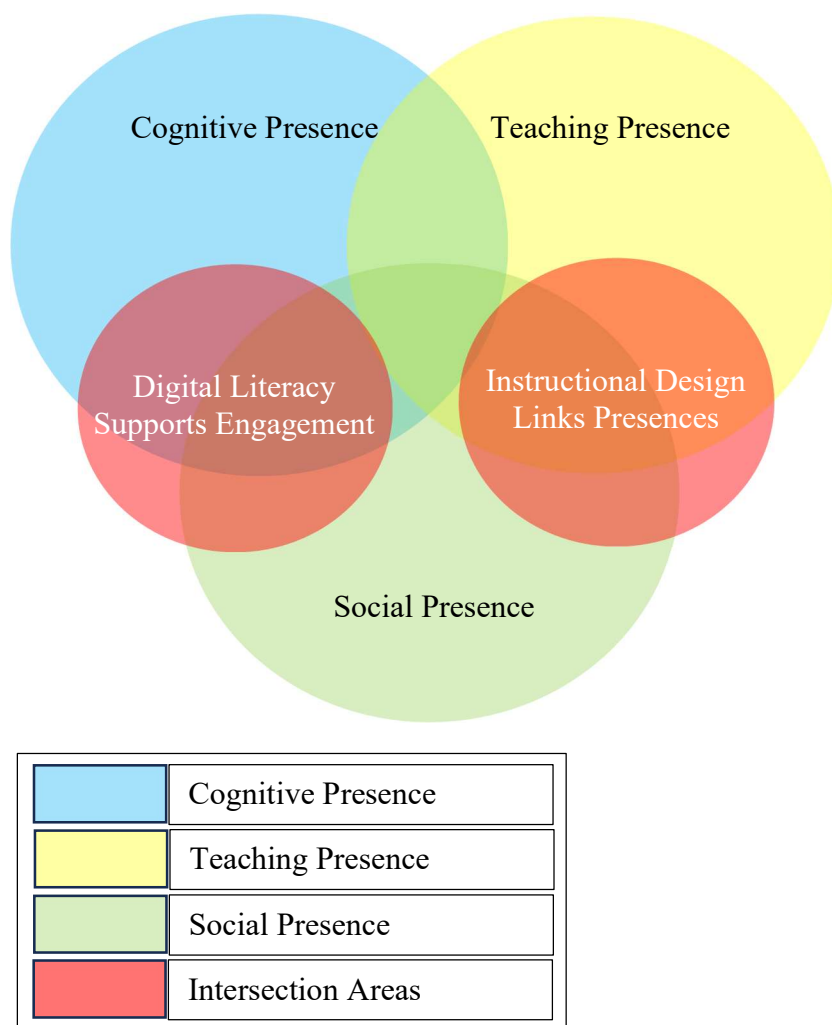
“I think the feedback has to be more detailed because students are reading it, and they’re not receiving it in a way where they can just ask for clarification.”

These findings underscore, among other things, the perspective that technological tools and advancements (e.g., learning management systems, artificial intelligence, adaptive learning platforms, online assessment tools, video conferencing software, and learning analytics), cannot substitute or supersede the human element of online education, no matter how advanced, sophisticated, or beneficial that technology may be. Nothing can replace the effectiveness of a proactive and responsive online instructor who fosters

meaningful student participation and learning in online spaces through professional expertise.

Theoretical Implications

By focusing on the importance of social presence, the study's findings offer a notable contribution to the theoretical discussion surrounding the CoI framework and its application in the advancement of online education. There is little doubt that the CoI framework's tripartite model, which includes cognitive, teaching, and social presences, has been widely validated in online learning research, but the findings of this study point out the unique role of social presence, especially in mitigating the feelings of isolation that are often associated with virtual learning environments. The findings highlight, on the one hand, the applicability and suitability of the framework while stressing that the need for deliberate instructional design, one that cultivates social presence, is equally indispensable. Therefore, the study broadens and amplifies the theoretical understanding of the CoI framework, specifically as it relates to the finding that social presence does not just happen naturally or organically in online learning. Rather, based on the findings and perspectives provided by the participants, fostering social presence in online learning spaces requires intentionality. It requires deliberate instructional design practices based on Equivalence Theory, including collaborative activities, meaningful peer interactions, and instructor-led initiatives (see Figure 2). Within the CoI framework, there is the assumption that social presence is a natural result of learner participation within online learning spaces. The findings of this study, however, challenged this supposition and suggest that the theoretical model must account for the deliberate intervention that is required to foster it.

Figure 2*Expanded Community of Inquiry (CoI) Framework*

It is evident from the study's findings that the CoI framework, although robust and proven, could benefit from a careful analysis of digital literacy as a complementary component within the tripartite model, influencing all three presences. This is because of a perspective that was echoed by several participants, who noted that gaps or deficiencies in students' digital literacy and lack of technical proficiency adversely impacted their ability to meaningfully engage with course content (cognitive presence), to connect with

peers and instructors (social presence), and fully benefit from instructor-directed activities (teaching presence). While the CoI framework traditionally emphasizes cognitive presence, such as how learners construct and confirm meaning through reflection, dialogue, and instructional strategies, this study suggests that the model could be strengthened by integrating digital literacy as a moderating factor within the tripartite framework. This enhancement may help address current barriers faced in online learning environments.

The study's findings strengthen the important connection between instructional design practices and the CoI Framework, particularly in defining social and teaching presences in measurable terms. In their reflections on how to foster social presence and how to make the teaching presence more effective in online learning, several of the participants emphasized the importance of instructional design strategies that align with best practices. They emphasized that the instructional design process should use proven strategies that incorporate things such as interactive tools (e.g., discussion boards, video conferencing, interactive quizzes, virtual whiteboards, breakout rooms, collaborative documents, forums and social media integrations, and interactive videos), and the design of timely and constructive feedback mechanisms. This alignment between practice and theory demonstrates that the CoI framework remains a dependable theoretical frame lens. Nonetheless, the framework could be further enhanced and improved by explicitly integrating effective instructional design practices as a complementary component within the tripartite model.

As previously noted, although the findings of the study align well with the CoI framework's purpose and design, they also highlight opportunities for future theoretical

refinement that will be beneficial for enhancing future research in the area of online education. For example, the framework could potentially be expanded to address, among other things, the evolving role of online instructors. This is because, in traditional educational settings, the instructor was primarily charged with delivering lecture-based instruction without considering digital platforms. On the other hand, the online instructor needs to balance content with facilitation and technological mediation. This paradigm shift in the role of the instructor challenges the traditional teaching presence and suggests that enhancing the theoretical lens to incorporate these complexities would be beneficial.

The study's findings also contribute to the broader theoretical understanding, particularly in learner immersion and engagement in online education. The study highlights, for example, certain learner self-regulated or self-directed behaviors or practices, such as time management and motivation, as prerequisites of meaningful participation in the online learning experience. And while the CoI framework does emphasize relational and interactive dimensions within online education, the findings suggest that individual learner characteristics, such as those previously described, play a critical role in the success of the learning experience. It would be beneficial for future theoretical models to integrate these factors to provide a more holistic and complete understanding of the engagement component of virtual settings.

The study's findings both support and extend the CoI framework while providing revelations regarding equivalency in education, instructional design, and social presence that can be used for future theoretical refinement and enhancement. In addition to advocating an emphasis for a more intentional focus on strategies and conditions necessary to cultivate and foster social presence, the study calls for an expanded

consideration of factors such as digital literacy and learner self-regulation. Clearly, the contribution made by the findings of the study helps advance the theoretical discourse surrounding online education and provides a foundation for further research to meet the needs of contemporary online learners.

Recommendations

As the evolution, expansion, and acceptance of online education grow, institutions must adopt strategic, evidence-based methods to improve the quality, accessibility, and engagement of digital learning environments. Enhancing these environments assures stakeholders that the virtual corridors of the institution resemble those of the physical institution in quality and student engagement. This section outlines the main recommendations that arise from the findings and suggests practicable ways to strengthen online education. The recommendations align directly with the Framework of the Online Educational Ecosystem—an element of this study that illustrates through a model the connected parts of any online educational endeavor and the positive, sustainable experiences that should emerge from it.

The Online Educational Ecosystem Framework

As part of this study, the researcher developed the Online Educational Ecosystem Framework, a conceptual model that defines online education as a dynamic, interconnected system composed of institutions of higher learning, administrators, educators, students, curriculum, technology, and assessments. This framework highlights the interdependence, that is, the mutual reliance between these elements and their function and purpose in shaping a viable online learning environment. Fundamentally, the Online Educational Ecosystem operates as a living organism that continuously adapts

to the evolving needs of online education. See Table 12.

Table 12

Core Components of the Online Educational Ecosystem Framework

Core Element	Summary
Institutions & Governance	Universities, policymakers, and accrediting bodies that define the structure, accessibility, and credibility of online education.
Learners (Students)	Active participants who acquire knowledge, apply skills, and shape the learning environment through engagement and feedback.
Educators & Learning Designers	Facilitators who apply digital andragogy, adaptive teaching methods, and personalized learning strategies to create equivalent, not identical, learning experiences that meet the needs of diverse online learners.
Curriculum & Learning Models	Frameworks that integrate competency-based learning, project-based assessments, and personalized pathways for skill mastery.
Technology & AI-Driven Tools	Learning management systems (LMS), adaptive learning platforms, immersive simulations (VR/AR), and AI-powered tutoring.
Assessment & Data Analytics	Real-time performance tracking, AI-driven feedback systems, and alternative assessments beyond standardized testing.
Equality in Digital Accessibility	Ensuring inclusion through universal design for learning (UDL), assistive technologies, and diverse content formats.
Community & Industry Partnerships	Employers, professional organizations, and mentors who help bridge education and workforce readiness.

Recognizing that online education thrives on synergy among these components, this study will present recommendations based on the findings that align online education practices with the Online Educational Ecosystem Framework. These recommendations will focus on enhancing Equivalence in Education Modes, Flexibility and Accessibility, Instructor and Learner Readiness, Instructional Design's Role in Social Presence, Professional Development, and Engagement Strategies. In addition, this study will present recommendations for Establishing Common Core Principles for Online

Education—a set of foundational best practices developed by the researcher through this study. These principles serve as a guiding framework to ensure high-quality, engaging, and accessible online learning experiences. By integrating these core principles, institutions can establish consistent standards that enhance instructional effectiveness, support learner success, and promote equity in online education. These recommendations will provide, as previously mentioned, actionable strategies (e.g., Clear Objectives, Step-by-Step Plans, Timelines & Milestones, Resource Allocation, Accountability Measures, and Feedback & Adjustment) to help institutions align their practices with the Online Educational Ecosystem Framework while maintaining academic rigor, inclusivity, and adaptability in digital learning environments.

Recommendations for Equivalence in Education Modes

The findings of this study reveal a developing viewpoint about online education held by institutions of education, credentialing agencies, employers, and learners. The gap between online and traditional face-to-face education has narrowed, but at least three areas require further work if that gap is to be completely closed. One is the investment of both educational institutions and employers in the online format; that narrative seems to be changing for the better. The second is ensuring quality, rigor, and effectiveness in the online space, which requires a more intentional focus on instructional design and adherence to equivalence theory or some similar framework. The third is ensuring that the most important resource in online education—the instructor—has the same level of investment, accessibility, and presence in the online space as he or she does in face-to-face instruction.

Applying equivalence theory is essential in ensuring that online learning

experiences provide the same level of quality and engagement as face-to-face instruction, even if the modalities differ in delivery. According to Dr. Michael Simonson, Equivalence theory posits that learning outcomes should be comparable across educational formats, regardless of physical presence (Simonson, 1999). Therefore, instructional design must prioritize learning activities, assessments, and interactions that promote similar levels of comprehension, skill development, and critical thinking. Therefore, to address the lack of equivalence that exists in online education, it is recommended that institutions adopt an intentional instructional design approach grounded in equivalence theory. This can be accomplished by (a) consistent learning objectives development, (b) active learning strategies implementation, (c) communication channels enhancement (e.g., live Q&A sessions, regular feedback opportunities), (d) accessible instructional material prioritization, and (e) training educators in digital andragogy.

Though the Online Educational Ecosystem Framework underscores the significant presence of instructional design, technology integration, and stakeholder engagement, the study's findings highlight a discrepancy between the concept of “equivalence in education modes” and the actual practices that make up the online education ecosystem. This gap stems from inconsistent applications of instructional design principles and a lack of structured training for educators in equivalence theory. To better align the concept of equivalence in educational modes with the tenets of the Online Education Ecosystem Framework, institutions should consider the following recommendations: (a) ensure that Dr. Michael Simonson’s Equivalency Theory undergirds online education, (b) institutional support for equivalence initiatives, (c), collaboration between instructional

designers and subject matter experts (SMEs) and (d) leveraging technology for equivalence (e.g., AI-powered adaptive learning platforms and real-time assessment tools).

By implementing these recommendations, institutions can ensure that the concept of equivalence in education modes is fully integrated into the online education ecosystem. Aligning the three components will lead to online courses that offer students equitable, high-quality, and face-to-face-instruction-comparable learning experiences. If put into practice, the recommendations being discussed here could result in a more robust and effective online learning environment for all students.

Recommendations for Flexibility and Accessibility

The findings of this study reinforce the significant role of flexibility and accessibility in online education, particularly for non-traditional learners balancing work, family, and academic responsibilities. However, while online learning provides unmatched convenience, it can also unintentionally foster disengagement, as students may take advantage of flexible policies—such as turning off cameras during synchronous Zoom sessions to minimize participation and accountability. This issue highlights a critical gap between the ideal of flexibility and accessibility and the broader online education ecosystem, where engagement and interaction are essential for academic success. To bridge this gap, institutions must implement structured policies that promote both inclusivity and accountability, ensuring that flexibility does not compromise educational rigor. A key method to attaining this balance between flexibility and education excellence is by adopting the Universal Design for Learning (UDL) framework, which emphasizes, among other things, creating a flexible, inclusive learning

environment that accommodates the diverse needs of all learners. In addition to incorporating the UDL framework into the instructional design process, institutions of learning must develop policies and procedures that require and expect students to engage and participate in the learning experience by, for example, keeping their cameras on during synchronous sessions, except in cases where documented accessibility accommodations apply. Also, course design should integrate interactive elements such as live polls, breakout discussions, and collaborative digital whiteboards to reinforce student participation.

Beyond fostering engagement, UDL plays a crucial role in ensuring that online education is accessible to a diverse student population by providing multiple options for content delivery and interaction. This involves providing auditory descriptions of visual content; enlarged text; high-contrast color schemes; and even tactile representations of information to ensure that students with visual, auditory, or sensory impairments can engage with the same course materials as their seeing, hearing, or sensing peers. The UDL framework can extend support for cultural considerations, allowing for alternative assessment types or methods that reflect diverse customs and ethnographic variances. Implementing these strategies can help ensure that flexibility in online education promotes inclusion and structure, not disengagement.

Recommendations for Instructor and Learner Readiness

The findings of this study reinforce the notion that instructors and learners need to be sufficiently prepared to succeed in the online educational arena. Although online education allows for greater accessibility and flexibility, the wildly disparate availability of professional development for online instructors and the staggeringly poor time-

management skills of many online learners create a couple of significant roadblocks to engagement and excellence in the online learning context. The Online Education Ecosystem Framework pushes the conversation forward, focusing not just on the much-overdue professional development of online instructors but also on better equipping online learners to engage in self-regulated learning.

To address these challenges, institutions of learning must implement ongoing professional development training programs, which refer to activities that help individuals improve their skills, knowledge, and effectiveness in their professional roles. This type of training should prioritize equipping instructors with technical proficiency in learning management systems. It should also include real-world application of adaptive teaching strategies, student engagement techniques, and assessment methods, specifically tailored to online environments. The training should consist of proven digital andragogy strategies, a method and practice of teaching adult learners that emphasizes self-direction, practical application, and drawing on the learner's prior experiences. Furthermore, professional development should also include exposure to new and emerging instructional technologies such as Artificial Intelligence (AI) tools, adaptive learning platforms, learning analytics systems, mobile learning applications, immersive simulations, and microlearning platforms. Such training is essential for keeping instructors abreast of cutting-edge technologies that are continuously transforming the education sector. Additionally, offering mentorship programs (e.g., peer mentoring, culturally responsive mentoring, group mentoring) and success coaching (e.g., goal-setting facilitators, accountability partners, and skill development professionals), to new instructors can further facilitate best practices and continuous improvement in online

instruction.

Equally important is developing learners' time management skills, as self-regulation is essential in asynchronous and hybrid learning environments. A large number of students entering the online education arena struggle with creating an effective study plan or with planning their study time, leading to bad habits or practices such as procrastination, disengagement from the learning experience, and, ultimately, poor academic performance. Institutions of learning could and should address this issue by providing time management workshops, self-paced training modules, and digital planning tools as part of an onboarding program for online learners. Furthermore, embedding goal-setting tasks, structured study plans and progress-tracking mechanisms within the instructional design process can potentially help develop the disciplines and skills these learners need. Additionally, faculty can play a role by implementing scaffolded deadlines, regular progress check-ins, and structured feedback loops to reinforce accountability and encourage proactive learning behaviors.

Aligning instructor and learner readiness with the Online Education Ecosystem Framework requires institutional commitment to faculty support, student development, and data-driven instructional design. Institutions of learning should put comprehensive feedback mechanisms in place where both instructors and learners can continuously assess their preparedness and receive focused support. Integrating learner analytics (e.g., data collection on student behavior, performance tracking, engagement monitoring, predictive modeling, academic risk identification, learning pattern analysis, progress visualization tools, and institutional decision-making aid) to predict at-risk students and tailor interventions can create a more responsive and adaptive learning environment. The

online education ecosystem can become more sustainable and effective by embedding professional development and training for instructors and emphasizing time management skill-building for learners, ensuring that both educators and students are adequately equipped to thrive in digital learning spaces.

Recommendations for Instructional Design's Role in Social Presence

The study's findings highlighted the important role of intentional and well-crafted instructional design practices in fostering social presence within online learning environments. It was previously noted that social presence refers to the ability of learners to feel connected or engaged as part of an interactive and personal learning community. But, according to the study's findings, there is a significant gap between the role that social presence plays and its implementation within the online education ecosystem. This gap suggests that instructional design is often underutilized, leading to a learning experience that feels disconnected, detached, and aloof.

To address the deficiency in social presence within the online learning environment, stakeholders—including school administrators, instructors, subject matter experts (SMEs), instructional designers, and instructional developers—must collaborate in the instructional design process to create learning experiences that are interactive, engaging, and aligned with best practices in online education. Institutions should establish formal design frameworks prioritizing discussion-driven activities, interactive multimedia, collaborative assignments, and synchronous engagement opportunities to cultivate a sense of community among learners. Designing courses with clear communication channels, such as structured discussion boards, scheduled virtual office hours, and live Q&A sessions, can enhance instructor presence and student interaction,

making the learning experience more dynamic. Additionally, using adaptive learning technologies, AI-driven feedback systems, and immersive tools such as virtual reality (VR) and augmented reality (AR) can further enrich the social dimensions of online education.

A key recommendation is the implementation of instructional design standards that embed social presence into every stage of course development. These standards should include integrating group-based learning activities, collaborative problem-solving tasks, and peer review mechanisms that encourage students to engage with their instructors and peers. Institutions should also train faculty and instructional designers on strategies for increasing engagement, such as crafting discussion prompts that promote critical thinking, using storytelling techniques to make content more relatable, and incorporating gamification elements to encourage participation.

Institutions of learning need to formalize social presence as a measurable component and determinant of an effective online course by harmonizing the role of instructional design in fostering social presence within the Online Educational Ecosystem framework. Formalizing social presence as a measurable component can be achieved by leveraging learning analytics tools that can, for example, assess engagement levels, participant trends, and student feedback. It was also previously noted that instructional designers need to work closely with SMEs to ensure that course content is structured to encourage discourse, interaction, and a community-driven learning experience instead of purely content-delivery-focused. Additionally, institutions of learning can strengthen the role of instructional design in its ability to foster social presence, ensuring that online learning environments are not only accessible and flexible but also interactive, engaging,

and conducive to meaningful student-instructor and peer-to-peer interactions and relationships. Integrating these strategies will create a more socially connected online education environment that enhances learner engagement and immersion.

Recommendations for Professional Development

The findings of this study underscore the critical role of professional development in ensuring that online instructors are equipped with the andragogical, technological, and engagement strategies necessary to foster high-quality learning experiences. It was discovered, however, that a significant gap exists between the professional training and development required by online instructors and their integration within the Online Education Ecosystem Framework. According to the participants, many times, institutions of learning lack formal, structured onboarding, which includes things such as training in online andragogical strategies, leading to inconsistencies in both instructional and engagement strategies. On the one hand, the participants consistently noted how online education continues to advance, evolve, and expand. On the other hand, they also noted that online instructors, especially those transitioning from face-to-face education, often receive little or no preparation in digital andragogy, instructional design, and effectively using and managing learning management systems (LMS). This discrepancy that exists between proficiency in instructional technology and the instructor's abilities highlights the need for comprehensive, formal, structured, and continuous professional development initiatives that better support emerging educational technologies and methodologies.

To bridge this gap, institutions must implement a structured onboarding and certification program that provides a progressive learning pathway for new and experienced online educators. New instructors should engage in hands-on training with

learning management systems (LMS) to gain proficiency in course design, student engagement, assessment strategies, and accessibility considerations. This training should include a sandbox environment, that is, a training environment that is a controlled, isolated space designed for learning, experimentation, and testing without affecting real systems or data, where instructors can practice course-building, experiment with instructional tools, and receive feedback before launching their courses. Mentorship and peer support networks should also be established, connecting new online faculty with experienced instructors to facilitate knowledge sharing and best practice exchange. These networks should be reinforced through faculty learning communities (FLCs) that encourage collaborative problem-solving, shared experiences, and continued andragogical refinement.

Beyond foundational training, professional development must keep pace with evolving trends in online education. Institutions should offer advanced digital andragogy and emerging technologies training, ensuring faculty remain proficient in adaptive learning technologies, AI-driven analytics, virtual reality (VR)/augmented reality (AR) applications, gamification strategies, and data-informed instructional decision-making. This training should be supplemented with research-based best practices in online instruction, providing faculty with evidence-based strategies to improve learner engagement, retention, and academic success. Professional development should also embrace microlearning and short-term professional development models, allowing instructors to participate in brief, focused workshops, self-paced learning modules, and on-demand webinars on emerging topics such as student motivation in virtual settings, cognitive load management, and online mental health support.

A sustainable and scalable professional development ecosystem must be institutionally supported and incentivized to encourage faculty participation and continuous improvement. Institutions should offer professional development grants, certification incentives, and promotion opportunities for faculty engaged in ongoing training, innovative course design, and research on best practices in online education. Recognizing faculty contributions through awards, publication opportunities, and leadership roles within the professional development community can further encourage engagement. Additionally, universities should consider adopting collaborative learning frameworks, such as the Professional Learning Community (PLC) framework, which is designed to help foster a culture of continuous learning and collaboration among faculty members through peer coaching, interdisciplinary workshops, and collaborative research on digital teaching strategies.

Aligning professional development with the Online Education Ecosystem Framework requires an integrated, data-driven approach that leverages faculty feedback, learning analytics, and instructional design support to refine training programs continuously. By embedding structured onboarding, mentorship programs, hands-on training, and continuous learning initiatives into institutional practice, universities can enhance instructional quality, improve student learning outcomes, and create a sustainable, adaptable online education ecosystem. These recommendations will ensure that faculty are prepared for the transition to online teaching and are empowered to innovate, engage, and evolve alongside the rapidly changing landscape of digital education.

Recommendations for Engagement Strategies

The findings of this study underscore the critical need for engagement strategies that foster active participation, social presence, and meaningful learning experiences in online education. While online learning provides flexibility and accessibility, the study reveals a significant gap between engagement strategies and the Online Education Ecosystem Framework, particularly in the application of emerging technologies and innovative methodologies to enhance student engagement. Many online courses still rely on traditional lecture-based models that fail to leverage interactive, immersive, and adaptive learning experiences that have been proven to increase student motivation, knowledge retention, and performance (Bond et al., 2021; Hew et al., 2020). To align engagement strategies with the Online Education Ecosystem Framework, institutions must adopt a multifaceted approach that integrates cutting-edge technologies and evidence-based andragogical methodologies that foster learner interaction, participation, and persistence.

A key recommendation is the integration of emerging technologies to enhance student engagement. AI-powered personalized learning can be utilized to adapt course content based on individual student needs, providing real-time feedback and tailored learning pathways (Zawacki-Richter et al., 2019). Virtual Reality (VR) and Augmented Reality (AR) can create immersive learning environments where students can engage in simulations, virtual labs, and experiential learning activities that replicate real-world scenarios (Radianti et al., 2020). Gamification and game-based learning can be implemented to increase motivation, competition, and collaboration by incorporating leaderboards, rewards, and interactive challenges (Subhash & Cudney, 2018).

Additionally, learning analytics and predictive engagement monitoring should be leveraged to track student behaviors, predict at-risk learners, and provide targeted interventions to ensure student success (West et al., 2022). Social learning and collaborative technologies, such as AI-powered discussion forums, peer review platforms, and collaborative digital workspaces, can foster a greater sense of community and social presence in online learning environments. Furthermore, spatial computing and mixed reality classrooms offer opportunities for real-time collaboration and interactive engagement in 3D virtual spaces, while blockchain and decentralized learning models provide transparent credentialing, peer-to-peer knowledge exchange, and greater autonomy in learning pathways (Chen et al., 2022).

Looking past technological innovations, instructors must use engagement strategies that are reinforced through effective andragogical practices that foster, among other things, active learning, student agency, and personalized learning experiences. HyFlex learning (Hybrid + Flexible Learning Models) should be implemented to allow students to choose between in-person, synchronous online, and asynchronous learning modes, thereby promoting greater flexibility and engagement based on individual preferences (Beatty, 2019). Flipped Learning 3.0, which combines pre-recorded instructional materials with synchronous active learning sessions, should be utilized to shift the focus from passive content consumption to collaborative problem-solving and applied learning (Bishop & Verleger, 2013). Microlearning and nano-learning, which break content into bite-sized, focused learning units, can enhance knowledge retention and accommodate the needs of busy learners (Leong et al., 2021). Competency-based learning, which refers to an approach where students progress by demonstrating mastery

of specific skills or knowledge, and adaptive learning, which refers to an approach that uses technology to adjust the learning experience based on a student's performance, should be incorporated to allow the learner to progress at their own pace, demonstrating mastery through real-world applications (Klein-Collins, 2018). Furthermore, culturally responsive teaching and inclusive digital andragogy should be prioritized to ensure diverse representation in course content, provide multilingual resources, and accommodate varying learning styles (Gay, 2018). AI-augmented teaching assistants and human-AI collaboration can be leveraged to provide real-time feedback, facilitate discussions, and automate administrative tasks, allowing instructors to focus on high-impact teaching (Luckin et al., 2021). Student-generated content and user-created learning modules can enhance engagement by encouraging learners to actively participate in knowledge creation and peer teaching (Wiley & Hilton, 2018). Augmented peer learning and AI-driven collaboration matching should be used to connect students based on shared interests, skills, and learning goals, fostering deeper engagement and collaboration (Holliman et al., 2022). Additionally, ethical AI and student well-being in online education should be addressed through AI-powered sentiment analysis tools that detect emotional distress and provide personalized academic and mental health support (Zawacki-Richter et al., 2019). Finally, immersive assessment and interactive grading methods, such as VR-based oral exams, project-based evaluations, and blockchain-verified digital portfolios, which are tamper-proof, decentralized records of an individual's skills, credentials, and achievements stored on a blockchain network, should replace traditional high-stakes testing to provide more authentic and meaningful assessments of student learning (Lubarda et al., 2024; Vijayalakshmi, Patil, & Karikatti,

2022; Wang & Siau, 2021).

Aligning engagement strategies with the Online Education Ecosystem Framework requires institutions to integrate emerging technologies with innovative teaching methodologies while ensuring faculty receive ongoing training in digital andragogy. By embedding AI-driven personalization, immersive technologies, gamified experiences, social learning, and adaptive assessments into the curriculum, universities can enhance student engagement, foster deeper learning, and create a more interactive and inclusive online education experience. Implementing these strategies will address the current engagement gap, promote student persistence, and ensure that online education remains dynamic, learner-centered, and aligned with the evolving digital learning landscape.

Recommendations for Establishing Common Core Principles for Online Education

The Common Core Principles for Online Education, which was previously noted to have been developed as part of this study by the researcher, refer to a set of foundational best practices that ensure high-quality, engaging, and accessible online learning experiences (see Appendix C). These principles emphasize structured instructional design, learner-centered engagement, accessibility, technology integration, and data-informed decision-making. This recommendation will guide institutions of learning and educators in designing courses that promote active learning, critical thinking, digital literacy, and inclusive andragogy while supporting faculty through continuous professional development and effective use of educational technology.

Recommendation for Implementing Systematic Lesson Audits

A systematic evaluation of online teaching practices is essential to maintaining and enhancing course quality. The study recommends implementing lesson audits (see

Table 13), a structured process for assessing virtual teaching methodologies, digital resource effectiveness, and learner engagement levels. By systematically identifying strengths, weaknesses, opportunities, and challenges, lesson audits offer actionable insights to enhance course quality. These evaluations ensure that online education remains dynamic, responsive to learner needs, and aligned with institutional objectives.

Table 13

Key Components of Lesson Audits

Audit Component	Description
Course Design	Evaluating course structure, alignment with learning objectives, and clarity of instructional materials.
Digital Tools	Reviewing the appropriateness, accessibility, and effectiveness of digital tools used in courses.
Instructional Strategies	Assessing teaching methods and their alignment with best practices for online learning.
Accessibility Features	Ensuring that courses meet accessibility standards to accommodate learners with diverse needs.
Student Engagement	Measuring the level and quality of student interaction with course content, peers, and instructors.

Note: The audit process relies on various methods, including analytics, feedback from students and faculty, peer reviews, and direct observation by an institution administrator, dean, program director, or faculty member. This process involves the assigned education professional attending a class session, reviewing assigned materials, completing homework assignments, and evaluating assessments to provide comprehensive feedback.

Data sources for lesson audits may include (a) analytics from Learning Management Systems (e.g., participation rates, time spent on tasks), (b) direct feedback from students and faculty (via course evaluations and surveys), (c) peer review and

instructional coaching to ensure alignment with best practices, and (d) an administrator or faculty member attending a class session, reviewing assigned materials, analyzing homework assignments, and evaluating assessments. By systematically identifying strengths and areas for improvement, lesson audits provide data-driven insights to refine online course quality and instructional effectiveness continuously.

Limitations

While this study provides valuable observations and perspectives regarding the experiences of online instructors in higher education, the researcher concedes that certain limitations may have influenced the findings. It is, therefore, important to consider limitations when interpreting the results, especially as they relate to their implications for practice and future research.

Sample Size and Generalizability

The study employed a qualitative phenomenological approach with a sample size of 13 online instructors who held at least one year of experience teaching online in higher education. On the one hand, there was variability in the disciplines taught, professional background, and years of experience teaching online among the participants. On the other hand, the relatively small sample size limits the generalizability of the findings to the broader population of online educators. This is partly due to the fact that the study's findings are contextually bound to the experiences of these participants and may not fully represent the perspectives of instructors teaching in different institutional settings, subject matter, or geographic regions.

Self-Reported Data and Subjectivity

The study drew upon self-reported data through semi-structured interviews, which

refers to participants' information about themselves. On the one hand, using this approach provides a rich, firsthand account of the participants' lived experiences. On the other hand, the information collected is highly subjective and could potentially have been influenced by recall biases, social desirability biases, and inaccurate self-perceptions. Because of this, the researcher concedes that the participants may have provided consciously or unconsciously responses that presented their experiences in ways they believed were expected or favorable.

Potential Researcher Bias

Despite efforts to maintain objectivity and enhance the credibility and trustworthiness of the research through member checking, triangulation, and reflexivity, the researcher's perspective inevitably shapes the interpretation of qualitative data. Furthermore, the use of AI-assisted coding (e.g., ChatGPT and Google Gemini) may have further influenced the initial thematic analysis, requiring subsequent researcher validation to ensure alignment with the Interpretative Phenomenological Analysis (IPA) framework. So, although these measures were implemented to minimize bias, complete neutrality in qualitative research may not be possible.

Focus on Instructor Perspectives

This instructor-centered study explored their experiences, challenges, and perceptions regarding online education. While these insights are invaluable for improving the effectiveness of instructional practices, they do not capture the learners' perspective on things such as engagement, readiness, and social presence in online learning. Ergo, a more comprehensive understanding of online education could be achieved by incorporating student voices or conducting a comparative study examining both instructor

and student experiences.

Technological and Institutional Variability

Participants in this study have taught in various institutions, each with different technological infrastructures, learning management systems (LMS), institutional policies, and faculty training programs. On the one hand, these variations may contribute to the generalizability of the findings. On the other hand, they may have influenced participants' experiences and responses, making it difficult to isolate specific factors affecting online instruction. It should be noted that the findings may not be directly applicable to institutions with significantly different online learning models, policies, or resource availability.

Time Constraints and Dynamic Nature of Online Education

The study reflects participant experiences at a specific point in time, yet online education is continuously evolving due to advancements in technology, andragogical strategies, and institutional policies. As new frameworks, tools, and methods emerge, the relevance of some findings may change. Additionally, time constraints in conducting the research meant that longitudinal data, which refers to data collected over an extended period of time, tracking the same subjects or variables at multiple points, was not feasible. The researcher believes that a longer-term study could provide deeper insights into the changing landscape of online instruction and its long-term impact on faculty and student engagement.

Despite these limitations, this study provides meaningful contributions to understanding online instructor experiences in higher education. The findings highlight critical themes, including instructor presence, engagement strategies, learner readiness,

professional development, and challenges in fostering social presence that are of the utmost importance to online learning. Recognizing these limitations presents opportunities for future research on the topic. Researchers could improve and expand upon the findings of this study by incorporating a larger sample size, using student instead of instructor perspectives, implementing longitudinal approaches, or a mixed-methods design. All of which could potentially enhance the field's understanding of effective online education.

Considerations for Future Research

This study explored the lived experiences of online instructors in higher education, focusing on their roles, teaching readiness, students' learning readiness, and social presence within the online learning environment. There is little doubt that the findings of the study provided valuable insights into the strengths, weaknesses, opportunities, and challenges of the current state of online education. Nonetheless, the study also revealed areas that warrant further investigation. It is recommended that future researchers expand upon the themes identified to deepen the field's understanding of online education and its evolving and changing landscape.

Expanding the Scope of Participants

This study focused exclusively on instructors' experiences teaching in online higher education settings. While their perspectives are crucial for understanding instructional challenges and best practices, future research should include students' voices. Examining both instructor and student perspectives in a comparative study would provide a more comprehensive understanding of online learning engagement, social presence, and instructional effectiveness. Additionally, research could explore online

teaching experiences across different institutional types, such as community colleges, research universities, and private institutions, to determine how institutional resources and policies impact online instruction. Investigating the experiences of faculty teaching at institutions with varying levels of technological infrastructure and professional development support could yield further insights into the disparities that exist in online education.

Longitudinal Studies on Online Instructional Practices

This study presents a snapshot of instructors' experiences at a particular moment in time. However, online education is constantly evolving due to, for example, advancements in technology, changes in andragogical approaches, and shifts in institutional policies and practices. Future research should adopt a longitudinal approach, tracking the experiences of online instructors over an extended period instead of relying on data gathered from a single interview, allowing for a deeper examination of how their perceptions, challenges, and teaching strategies evolve over time. Longitudinal research could also assess the long-term impact of instructional interventions, which refers to targeted actions, programs, or strategies designed to improve teaching effectiveness and student engagement and may include things such as faculty training programs, professional development initiatives, and instructional design strategies. Understanding whether these interventions lead to sustained improvements in instructor effectiveness and student engagement would offer critical insights for higher education institutions to improve the practice.

The Role of Instructional Design in Enhancing Social Presence

One of the unexpected findings of this study was the importance of intentional

instructional design in fostering social presence within online learning environments. It was discovered that social presence does not occur organically or naturally. Rather, it requires deliberate and intentional design strategies that are based on equivalence theory. It is because of this that future research on the topic should examine specific instructional design models (e.g., ADDIE Model, Dick and Carey Model, Backward Design, Merrill's First Principles of Instruction, TPACK Framework, and ASSURE Model) and their effectiveness in fostering social interaction and reducing student isolation in online environments. Studies could also investigate how emerging technologies, such as artificial intelligence (AI), virtual reality (VR), and gamification, influence or impact the social presence aspect of online learning spaces. Given that some participants in this study suggested unconventional strategies—such as adopting techniques from social media influencers to enhance student engagement—future research could explore the impact of these modern digital engagement strategies on social presence and learning outcomes.

Learner Readiness and Self-Regulation in Online Education

This study identified learner readiness as a key challenge in online education, with instructors frequently observing that students struggle with self-regulation, time management, and digital literacy. Future research could examine the factors influencing online learner readiness, including demographic variables (e.g., age, prior online learning experience, and academic discipline). Moreover, research could explore the effectiveness of interventions designed to enhance self-regulation skills among online students. For example, studies could investigate the impact of scaffolding strategies, self-paced learning modules, or AI-driven personalized learning tools on improving students' ability

to manage their learning experiences effectively.

Faculty Development and Training for Online Teaching

The findings of this study highlight that many instructors lack formal training in online andragogy before transitioning to virtual teaching environments. Future research could explore best practices for faculty development programs, assessing the most effective training models for preparing instructors to teach online. For instance, comparative studies could analyze different faculty training approaches, such as workshops, peer mentoring programs, or instructional design support services, to determine which methods yield the most significant improvements in instructor readiness and course effectiveness. Additionally, research could examine the role of institutional policies in supporting faculty transitioning to online instruction, identifying gaps that institutions need to address to better equip educators for digital teaching environments.

The Impact of Institutional Support on Online Teaching Effectiveness

This study's findings suggest that online instructors benefit from strong institutional support, including access to professional development, instructional designers, and technological resources. However, the extent and quality of institutional support vary significantly across higher education institutions. Future research should investigate how different levels of institutional support impact instructor performance, student engagement, and overall course effectiveness. A potential area of inquiry could involve cross-institutional studies comparing how universities with robust online education infrastructure differ from those with minimal support services. Such research could provide data-driven recommendations for institutional leaders to enhance faculty support structures and improve online education delivery.

Accessibility in Online Education

While this study explored accessibility and flexibility in online education, further research is needed to examine how online learning environments impact different student populations, particularly those from underserved communities. Future research could explore the extent to which online learning accommodates students with disabilities, non-traditional learners, and those from diverse socioeconomic backgrounds. Additionally, research could investigate the effectiveness of Universal Design for Learning (UDL) principles in making online education more inclusive. Examining how adaptive learning technologies, assistive tools, and alternative assessment methods improve accessibility would provide valuable insights for policymakers and instructional designers.

As online education continues to evolve and expand, future research must address the gaps identified in this study to improve the quality, accessibility, and effectiveness of virtual learning experiences. By expanding participant perspectives, conducting longitudinal analyses, investigating instructional design innovations, and exploring the role of faculty development, researchers and academics can contribute to a more comprehensive understanding of online education. Additionally, examining the impact of institutional support, student readiness, and accessibility measures will ensure that online learning remains a viable and effective educational pathway. Building on these priorities, the findings of this study provide a foundation for future research, offering a starting point for further scholarly inquiry.

Conclusion

This study explored the lived experiences of online instructors in higher education, focusing on their roles, teaching readiness, students' learning readiness, and

social presence within online learning environments. By examining these dimensions through the Community of Inquiry (CoI) framework lens, the study provides a nuanced understanding of digital education's challenges, opportunities, and evolving dynamics. The findings reinforce the critical importance of instructor presence, instructional design, learner readiness, and institutional support in shaping effective and engaging online learning experiences.

One of the key contributions of this study is the development of the Online Educational Ecosystem Framework, an original conceptual model that emerged from the data analysis. This framework underscores the interconnected nature of online education, highlighting the ways in which institutions, instructors, learners, instructional design, technology, and assessment interact to create an effective learning environment. By integrating these elements, the framework offers a practical foundation for improving faculty training, course design, and institutional policies in online education.

Key Takeaways

The Growing Legitimacy and Challenges of Online Education. The findings suggest that online education has gained increasing legitimacy due to technological advancements, greater institutional investment, and employer acceptance of online credentials. However, skepticism persists, particularly regarding the rigor and effectiveness of online learning compared to traditional face-to-face instruction. Participants emphasized that Equivalency Theory can serve as a guiding principle to ensure that online learning experiences are as engaging and meaningful as traditional learning, provided they are designed with the intention to uphold high standards of educational rigor.

The Importance of Instructor Presence and Engagement. Instructor presence emerged as a crucial component affecting both student engagement and learning outcomes. Unlike the traditional face-to-face mode of education, where personal interactions occur naturally, online instructors must intentionally cultivate engaging environments through structured interactions, personalized feedback, and active communication. The study's findings reinforce the idea that technology alone cannot replace the human element in education; rather, the effectiveness of online learning appears to be largely predicated on how well instructors facilitate meaningful connections with students.

The Role of Instructional Design in Social Presence. An insight from this study that was both unexpected and counterintuitive was the idea advanced by several of the participants, who argued that instructional design plays a pivotal role in fostering social presence in online courses. The presumption by the researcher that social presence would naturally develop was challenged, as participants highlighted the need for intentional course design strategies to foster interaction and reduce or mitigate feelings of isolation in the online learning environment. This finding extends the Community of Inquiry (CoI) framework, suggesting that social presence does not emerge organically but must be deliberately built into the course structure. Future research should further explore the connection between instructional design and social presence.

Learner Readiness as a Barrier to Online Success. The study identified learner readiness as a significant challenge that could hinder the effectiveness of the online learning experience. According to the participants, many students struggle with self-regulation, time management, and technological proficiency, which impacts their ability

to engage effectively in online courses. To address this issue proactively, universities should implement assessments to evaluate whether students are adequately prepared for online learning before enrolling in virtual courses. These assessments could measure students' ability to manage their time, navigate digital platforms, and engage in self-directed learning. Additionally, universities should offer onboarding workshops or webinars to help students develop the necessary learning strategies for success in online education. Providing these structured support systems would better equip students to navigate the online learning environment and improve overall course outcomes.

Institutional Support for Faculty Development. Many participants emphasized the lack of formal training in online andragogy before transitioning to virtual instruction. The study found that many instructors were expected to adapt to online teaching without adequate institutional support, leading to inconsistencies in course quality and engagement strategies. The findings suggest that faculty development programs should be expanded to include training in instructional design, digital andragogy, and engagement strategies to better prepare instructors for online teaching.

The Need for a Balanced Approach to Flexibility and Engagement. While flexibility is often considered a key advantage of online education, participants cautioned that it can also contribute to disengagement if not carefully managed. Features such as camera-off policies in synchronous sessions and passive discussion board participation can lead to reduced accountability and student isolation. The study suggests that institutions should strike a balance between flexibility and engagement by incorporating interactive elements, structured discussions, and real-time student feedback mechanisms to foster a sense of community in online courses.

Final Thoughts. This study contributes to the broader discourse on online education by shedding light on digital instruction's complex and evolving nature. It highlights the critical role of instructor presence, instructional design, student readiness, and institutional support in shaping meaningful online learning experiences. The findings challenge assumptions about online education and emphasize that effective digital learning environments require deliberate, well-structured strategies that promote engagement, social presence, and high-quality learning experiences. As online education continues to expand and evolve, institutions must remain proactive in adapting best practices, leveraging new technologies, and prioritizing faculty and student support. By aligning instructional strategies with the Online Educational Ecosystem Framework, educators and administrators can create more accessible, engaging, and effective online learning environments that meet the needs of diverse learners in higher education.

References

- Achwarin, N., Brahmakasikara, L. M., & Cleesuntorn, A. (2017). Investigating virtual instructor roles and online teaching experience: A program-level case study. *AU E-Journal of Interdisciplinary Research*, 2(2).
<https://www.proquest.com/scholarly-journals/investigating-virtual-instructor-roles-online/docview/2384091608/se-2>
- Aggarwal, R., & Ranganathan, P. (2019). Study designs: Part 2 – Descriptive studies. *Perspectives in Clinical Research*, 10(1), 34–36.
https://doi.org/10.4103/picr.PICR_154_18
- Alhabeeb, A., & Rowley, J. (2018). E-learning critical success factors: Comparing perspectives from academic staff and students. *Computers & Education*, 127, 1–12. <https://doi.org/10.1016/j.compedu.2018.08.007>
- Allen, I. E., & Seaman, J. (2017). *Digital Compass Learning: Distance education enrollment report 2017*. <https://files.eric.ed.gov/fulltext/ED580868.pdf>
- Arbaugh, J. B. (2007). An empirical verification of the Community of Inquiry framework. *Journal of Asynchronous Learning Networks*, 11(1), 73–85.
<https://eric.ed.gov/?id=EJ842689>
- Association for Educational Communications and Technology. (2001). *History of distance education*. <https://members.aect.org/edtech/ed1/13/13-02.html>
- Bates, A. W. (2015). Fundamental change in education. In *Teaching in a digital age: Guidelines for designing teaching and learning* (2nd ed.). BCcampus.
- Beard, R. (2013). *Exploring the lived experiences of participants in simulation-based learning activities* [Doctoral dissertation, Lindenwood University].

- <https://digitalcommons.lindenwood.edu/dissertations/441>
- Beatty, B. J. (Ed.). (2019). *Hybrid-flexible course design: Implementing student-directed hybrid classes*. EdTech Books. <https://edtechbooks.org/hyflex>
- Beaudoin, M. (1990). The instructor's changing role in distance education. *The American Journal of Distance Education*, 4(2), 21–29.
<https://doi.org/10.1080/08923649009526701>
- Bedford, L. (2009). Web-based course content: An emerging consideration for authenticity from a learner perspective. *Academic Leadership: The Online Journal*, 7(1), Article 34. <https://doi.org/10.58809/HPFN3217>
- Bhattacharjee, A. (2012). *Social science research: Principles, methods, and practices* (Textbooks Collection, 3). https://digitalcommons.usf.edu/oa_textbooks/3
- Bishop, J. L., & Verleger, M. A. (2013, June). The flipped classroom: A survey of the research [Paper presentation]. *120th American Society for Engineering Education (ASEE) Annual Conference and Exposition*, Atlanta, GA.
- Bolliger, D. U., & Halupa, C. (2024). An investigation of instructors' online teaching readiness. *TechTrends*, 66, 185–195. <https://doi.org/10.1007/s11528-021-00654-0>
- Bond, M., Bedenlier, S., Marín, V. I., & Händel, M. (2021). Emergency remote teaching in higher education: Mapping the first global online semester. *International Journal of Educational Technology in Higher Education*, 18, Article 50.
<https://doi.org/10.1186/s41239-021-00282-x>
- Brookfield, S. (1984). Self-directed adult learning: A critical program. *Adult Education Quarterly*, 35(2), 59–71. <https://doi.org/10.1177/0001848184035002001>
- Brugha, R., & Varvasovszky, Z. (2000). Stakeholder analysis: A review. *Health Policy*

- and Planning*, 15(3), 239–246. <https://doi.org/10.1093/heapol/15.3.239>
- Bundy, J. (2022). Blackboard, Canvas, and learning management systems. In M. Ramlatchan (Ed.), *Instructional systems design and the diffusion and adoption of technology* (Vol. 1). Kindle Direct Publishing.
- Castellanos-Reyes, D. (2020). 20 years of the Community of Inquiry framework. *TechTrends*, 64(4), 557–560. <https://doi.org/10.1007/s11528-020-00491-7>
- Chen, X., Li, Q., & Zhang, Y. (2022). Artificial intelligence in education: A systematic literature review. *Journal of Educational Computing Research*, 60(1), 123–145. <https://doi.org/10.1177/07356331221103829>
- Collier, C. (2022). *Self-directed learning: Historical and theoretical arguments for learner-led education* [Doctoral dissertation, Georgia State University]. <https://doi.org/10.57709/25841999>
- Creswell, J. W. (2013a). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson.
- Creswell, J. W. (2013b). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Sage Publications.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.
- Dowling, M. (2007). From Husserl to van Manen: A review of different phenomenological approaches. *International Journal of Nursing Studies*, 44(1), 131–142. <https://doi.org/10.1016/j.ijnurstu.2005.11.026>
- Du, F. (2013). Student perspectives of self-directed language learning: Implications for teaching and research. *International Journal for the Scholarship of Teaching and*

Learning, 7(2), Article 24. <https://doi.org/10.20429/ijsotl.2013.070224>

- Du Toit-Brits, C. (2019). A focus on self-directed learning: The role that educators' expectations play in the enhancement of students' self-directedness. *South African Journal of Education*, 39(2), 1–11. <https://doi.org/10.15700/saje.v39n2a1645>
- Ebersole, E. A. (2021). *Using the Community of Inquiry Framework to examine instructor strategies for emergency remote online teaching during the COVID-19 pandemic* [Doctoral dissertation, Seattle Pacific University]. Digital Commons @ SPU. https://digitalcommons.spu.edu/soe_etd/62
- Ellis, A., Golz, R., & Mayrhofer, W. (2014). The education systems of Germany and other European countries of the 19th century in the view of American and Russian classics: Horace Mann and Konstantin Ushinsky. *International Dialogues on Education*, 1(1), 7–28. <https://doi.org/10.53308/ide.v1i1.224>
- Eyre, H. L. (2007). Keller's personalized system of instruction: Was it a fleeting fancy or is there a revival on the horizon? *The Behavior Analyst Today*, 8(3), 317–324. <https://files.eric.ed.gov/fulltext/EJ800986.pdf>
- Faja, S. (2013). Collaborative learning in online courses: Exploring students' perceptions. *Information Systems Education Journal*, 11(3), 42–48. <https://files.eric.ed.gov/fulltext/EJ1145013.pdf>
- Fischer, C., Baker, R., Li, Q., Orona, G. A., & Warschauer, M. (2021). *Increasing success in higher education: The relationships of online course taking with college completion and time-to-degree* (EdWorkingPaper No. 21-427). Annenberg Institute at Brown University. <https://doi.org/10.26300/m9ra-kr67>
- Gagné, R. M. (1965). *The conditions of learning*. Holt, Rinehart & Winston.

- Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly*, 48(1), 18–33. <https://doi.org/10.1177/074171369704800103>
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2–3), 87–105. [https://doi.org/10.1016/S1096-7516\(00\)00016-6](https://doi.org/10.1016/S1096-7516(00)00016-6)
- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105. <https://doi.org/10.1016/j.iheduc.2004.02.001>
- Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice* (3rd ed.). Teachers College Press.
- Gelen, İ., & Tozluoglu, E. (2021). Evaluation of online language exchange platforms: The example of “Free4Talk”. *International Journal of Progressive Education*, 17(2), 352–364. <https://doi.org/10.29329/ijpe.2020.332.22>
- Geng, S., Law, K. M. Y., & Niu, B. (2019). Investigating self-directed learning and technology readiness in blended learning environment. *International Journal of Educational Technology in Higher Education*, 16, 1-22. <https://doi.org/10.1186/s41239-019-0147-0>
- Gibbons, H. S., & Wentworth, G. P. (2001). Andragogical and pedagogical training differences for online instructors. *Online Journal of Distance Learning Administration*, 4(3). https://www.westga.edu/~distance/ojdla/fall43/gibbons_wentworth43.html
- Goel, A. (2020). *AI-powered learning: Making education accessible, affordable, and*

achievable [Preprint]. arXiv. <https://arxiv.org/abs/2006.01908>

Grant, L. K., & Spencer, R. E. (2003). The personalized system of instruction: Review and applications to distance education. *The International Review of Research in Open and Distributed Learning*, 4(2). <https://doi.org/10.19173/irrodl.v4i2.142>

Grech, V. (2001). Publishing on the WWW. Part 5 – A brief history of the internet and the World Wide Web. *Images in Paediatric Cardiology*, 3(3), 15–22.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3232505/>

Gregory, M. R. (2022). Charles Peirce and the community of inquiry. *Analytic Teaching and Philosophical Praxis*, 43(1), 1–16.
<https://digitalcommons.montclair.edu/educ-fdns-facpubs/121/>

Guevara, K., Fattah, L., Ritt-Olson, A., Yin, P.-L., Litman, L., Farouk, S. S., O'Rourke, R., & Mayer, R. E. (2021). Busting myths in online education: Faculty examples from the field. *Journal of Clinical and Translational Science*, 5(1), e149.
<https://doi.org/10.1017/cts.2021.808>

Gustafson, K. Y. (2011). *Assessment of self-directed learning in an online context in the community college setting* [Doctoral dissertation, University of California, San Diego; California State University, San Marcos].

<https://eric.ed.gov/?id=ED518264>

Hansen, B. (2020, November 25). #33: Andragogy in online education and strategies for teaching adult learners [Blog post]. *Bethanie Hansen*.

<https://bethaniehansen.com/33-andragogy-in-online-education-and-strategies-for-teaching-adult-learners/>

Hew, K. F., Jia, C., Gonda, D. E., Bai, S., & Chiu, D. K. W. (2020). Transitioning to the

“new normal” of learning in unpredictable times: Pedagogical practices and learning performance in fully online flipped classrooms. *International Journal of Educational Technology in Higher Education*, 17, Article 57.

<https://doi.org/10.1007/s41239-020-00234-x>

Holliman, A. J., Cheng, X., & Waldeck, D. (2022). Examining the relationship between adaptability, social support, and psychological wellbeing among Chinese international university students in the UK. *Frontiers in Education*, 7, Article 874326. <https://doi.org/10.3389/educ.2022.874326>

Houchens, G. W., Crossbourne, T.-A., Zhang, J., Norman, A. D., Chon, K., Fisher, L., & Schraeder, M. (2014, November 5–7). *Personalized learning: A theoretical review and implications for assessing kid-FRIENDLY student outcomes* [Conference presentation]. Annual Meeting of the Mid-South Educational Research Association, Knoxville, TN.
https://www.wku.edu/rocksolid/documents/personalized_learning_a_theoretical_review_and_implications_for_assessing_kidfriendly_student_outcomes_houchens_et_al_2014.pdf

Imstepf, N., Senn, S., Fortin, A., Russell, B., & Horn, C. (2022). *A learned simulation environment to model student engagement and retention in automated online courses* [Preprint]. arXiv. <https://arxiv.org/abs/2212.14693>

Katsara, O., & De Witte, K. (2019). How to use Socratic questioning in order to promote adults’ self-directed learning. *Studies in the Education of Adults*, 51(1), 109–129.
<https://doi.org/10.1080/02660830.2018.1526446>

Kearsley, G. (1998). *Online education: Learning and teaching in cyberspace*. Wadsworth

Publishing Company.

- Kebritchi, M., Lipschuetz, A., & Santiago, L. (2017). Issues and challenges for teaching successful online courses in higher education. *Journal of Educational Technology Systems*, 46(1), 4–29. <https://doi.org/10.1177/0047239516661713>
- Keegan, D. (2013). The historical roots of distance education. In T. Hülsmann & F. Schöberl (Eds.), *Distance education and open learning* (pp. 7–20). Waxmann Verlag.
- Kilde, L. (2022). Self-directedness in non-formal online business English courses: Adult learners' perspectives. *PUPIL: International Journal of Teaching, Education and Learning*, 6(1), 44–55. <https://doi.org/10.20319/pijtel.2022.61.4455>
- Kim, P., & Park, E. (2016). A case study exploring student engagement with Stanford Mobile Inquiry-based Learning Environment (SMILE). *GLOKALde*, 2(4), 45–52. <https://www.glokalde.com/pdf/issues/4/Article5.pdf>
- Klein-Collins, R. (2018). *Never too late: The adult student's guide to college*. The New Press.
- Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. <https://eric.ed.gov/?id=ED114653>
- Kohan, N., Soltani Arabshahi, K., Mojtahedzadeh, R., Abbaszadeh, A., Rakhshani, T., & Emami, A. (2017). Self-directed learning barriers in a virtual environment: A qualitative study. *Journal of Advances in Medical Education & Professionalism*, 5(3), 116–123. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5522903/>
- Kramer, S. N. (2021). *Instructors' perceptions of the opportunities and challenges of integrating technology in crisis-prompted online language instruction in the times*

of COVID-19 [Doctoral dissertation, University of St. Thomas, Minnesota].

University of St. Thomas Research Online.

https://ir.stthomas.edu/caps_ed_lead_docdiss/158

Lathan, L. (n.d.). *Complete guide to student-centered vs. teacher-centered learning*.

University of San Diego. <https://onlinedegrees.sandiego.edu/teacher-centered-vs-student-centered-learning/>

Lau, Y.-Y., Tang, Y. M., Chau, K. Y., Vyas, L., Sandoval-Hernandez, A., & Wong, S.

(2021). COVID-19 crisis: Exploring community of inquiry in online learning for sub-degree students. *Frontiers in Psychology, 12*, Article 679197.

<https://doi.org/10.3389/fpsyg.2021.679197>

Leong, W. H., Sung, A. Y. S., Au, D. W. H., & Blanchard, C. (2021). A review of the

trend of microlearning. *Journal of Work-Applied Management, 13*(1), 88–102.

<https://doi.org/10.1108/jwam-10-2020-0044>

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.

Lopez, M. (2024, October). *Inclusive teaching: Humanizing your online classes*. Office of Online Education, Wake Forest University.

<https://oe.wfu.edu/2024/10/inclusive-teaching-humanizing-your-online-classes/>

Lubarda, M. V., Phan, A. M., Schurgers, C., Delson, N., Ghazinejad, M., Baghdadchi,

S., Minnes, M., Kim, M., Pilegard, C., Relaford-Doyle, J., Sandoval, C. L., & Qi,

H. (2024). Virtual pair programming and online oral exams: Effects on social interaction, performance, and academic integrity in a remote computer

programming course. *Computer Science Education, 34*(2), 123–145.

<https://doi.org/10.1080/08993408.2024.2344401>

- Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson Education.
- MacInnis, D. J. (2011). A framework for conceptual contributions in marketing. *Journal of Marketing*, 75(4), 136–154. <https://doi.org/10.1509/jmkg.75.4.136>
- Martin, F., Budhrani, K., & Wang, C. (2019). Examining faculty perception of their readiness to teach online. *Online Learning*, 23(3), 97–119. <https://doi.org/10.24059/olj.v23i3.1555>
- Martin, F., Budhrani, K., Wang, C., Sadara, W., & Sardone, N. B. (2019). Examining faculty readiness to teach online: A comparison of US and German educators. *European Journal of Open, Distance and e-Learning*, 22(1), 53–65. <https://files.eric.ed.gov/fulltext/EJ1235070.pdf>
- Martin, F., Stamper, B., & Flowers, C. (2020). Examining student perception of their readiness for online learning: Importance and confidence. *Online Learning*, 24(2), 38–58. <https://doi.org/10.24059/olj.v24i2.2053>
- Memon, I., Grey, J., Thakhampaeng, P., & Morley, K. (2023). *Conduct a stakeholder analysis when designing an educational intervention*. Centre for Medical Education, Cardiff University. https://www.cardiff.ac.uk/__data/assets/pdf_file/0004/2741431/How-To-Conduct-a-Stakeholder-Analysis-When-Designing-an-Educational-Intervention.pdf
- Molenda, M. (2008). The programmed instruction era: When effectiveness mattered. *TechTrends*, 52(2), 52–58. <https://www.learntechlib.org/p/65566/>
- Monson, J. A. (2003). *The importance of human interaction in online learning: Learner*

- and instructor perceptions and expectations* (Publication No. 3119243) [Doctoral dissertation, Capella University]. ProQuest Dissertations and Theses Global.
- Moore, M. G. (1989). Editorial: Three types of interaction. *American Journal of Distance Education*, 3(2), 1–6. <https://doi.org/10.1080/08923648909526659>
- Moore, M. G. (Ed.). (2019). *Handbook of distance education* (4th ed.). Routledge.
- Morrison, G. R., Ross, S. M., Kalman, H. K., & Kemp, J. E. (2010). *Designing effective instruction* (6th ed.). John Wiley & Sons.
- Moustakas, C. (1994). *Phenomenological research methods*. Sage.
- Muhammad, M. (2020). Promoting students' autonomy through online learning media in EFL class. *International Journal of Higher Education*, 9(4), 320–326. <https://files.eric.ed.gov/fulltext/EJ1263288.pdf>
- Nair, R. R., Babu, T., & Pavithra, K. (2023). *Enhancing student engagement in online learning through facial expression analysis and complex emotion recognition using deep learning* [Preprint]. arXiv. <https://arxiv.org/abs/2311.10343>
- Nazimuddin, S. K. (2015). Computer assisted instruction (CAI): A new approach in the field of education. *International Journal of Scientific Engineering and Research (IJSER)*, 3(7), 234–237. <https://www.ijser.in/archives/v3i7/SjgwNzE=.pdf>
- Nova Southeastern University. (n.d.). *First-rate and flexible education*. Nova Southeastern University. <https://education.nova.edu/aboutus/online.html>
- Nwankwo, A. A. (2015). *Students' learning experiences and perceptions of online course content and interactions* [Doctoral dissertation, Walden University]. Walden Dissertations and Doctoral Studies. <https://scholarworks.waldenu.edu/dissertations/188/>

- Ojha, M., & Rahman, M. A. (2020). *Do online courses provide an equal educational value compared to in-person classroom teaching? Evidence from US survey data using quantile regression* [Preprint]. arXiv.
<https://doi.org/10.48550/arXiv.2007.06994>
- Oyarzun, B., & Martin, F. (2023). A systematic review of research on online learner collaboration from 2012–21: Collaboration technologies, design, facilitation, and outcomes. *Online Learning Journal*, 27(1), 71–94.
<https://files.eric.ed.gov/fulltext/EJ1382685.pdf>
- Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Sage.
- Pete, J., & Soko, J. J. (2020). Preparedness for online learning in the context of Covid-19 in selected Sub-Saharan African countries. *Asian Journal of Distance Education*, 15(2), 37–47.
<http://www.asianjde.com/ojs/index.php/AsianJDE/article/view/483/318>
- Peterson, D. S. (2008). *A meta-analytic study of adult self-directed learning and online nursing education: A review of research from 1995 to 2007* [Doctoral dissertation, Capella University].
<https://www.proquest.com/openview/e328d014c440bb9f967e7ad3bd14e908/1.pdf>
- Peterson, R. A., & Crittenden, V. L. (2012). On the impactfulness of theory and review articles. *Academy of Marketing Science Review*, 2(1), 1–4.
<https://doi.org/10.1007/s13162-012-0025-6>
- Polit, D. F., & Beck, C. T. (2017). *Nursing research: Generating and assessing evidence for nursing practice*. Wolters Kluwer.
- Prussian education system*. (n.d.). *Semantic Scholar*. Retrieved April 25, 2025, from

<https://www.semanticscholar.org/paper/Prussian-education-system/e2f813c7689d81be3776b39b1c71119a351ea17c>

Radianti, J., Majchrzak, T. A., Fromm, J., & Wohlgenannt, I. (2020). A systematic review of immersive virtual reality applications for higher education: Design elements, lessons learned, and research agenda. *Computers & Education, 147*, Article 103778. <https://doi.org/10.1016/j.compedu.2019.103778>

Rauscher, C., & Oh, Y. (2021). Schooling in the United States. In J. A. Banks (Ed.), *Encyclopedia of diversity and education* (pp. 2009–2015). SAGE Publications.

Research framework. (n.d.). *ScienceDirect Topics*.

<https://www.sciencedirect.com/topics/computer-science/research-framework>

Rhode, J. F. (2008). *Interaction equivalency in self-paced online learning environments: An exploration of learner preferences* [Unpublished doctoral dissertation]. Capella University.

Richardson, J. C., Besser, E., Koehler, A., Lim, J., & Strait, M. (2016). Instructors' perceptions of instructor presence in online learning environments. *International Review of Research in Open and Distributed Learning, 17*(4), 82–104. <https://doi.org/10.19173/irrodl.v17i4.2330>

Roos, D. (2019, August 13). *How the Cold War space race led to US students doing tons of homework*. History. <https://www.history.com/news/homework-cold-war-sputnik>

Saiyad, S., Virk, A., Mahajan, R., & Singh, T. (2020). Online teaching in medical training: Establishing good online teaching practices from cumulative experience. *International Journal of Applied and Basic Medical Research, 10*(3), 149–155.

https://doi.org/10.4103/ijabmr.IJABMR_358_20

Sandelowski, M. (2000). Focus on research methods: Whatever happened to qualitative description? *Research in Nursing & Health*, 23(4), 334–340.

[https://doi.org/10.1002/1098-240X\(200008\)23:4<334::AID-NUR9>3.0.CO;2-G](https://doi.org/10.1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G)

Shaalan, I. E. A. W. (2019). Remodeling teachers' and students' roles in self-directed learning environments: The case of the Saudi context. *Journal of Language Teaching and Research*, 10(3), 549–556. <https://doi.org/10.17507/jltr.1003.19>

Shao, M., Hong, J.-C., & Zhao, L. (2022). Impact of the self-directed learning approach and attitude on online learning ineffectiveness: The mediating roles of internet cognitive fatigue and flow state. *Frontiers in Public Health*, 10, Article 927454.

<https://doi.org/10.3389/fpubh.2022.927454>

Shirk, J. (2020). Designing a self-paced learning experience to support learner self-regulation. *Journal of Teaching and Learning with Technology*, 9(1), 133–157.

<https://doi.org/10.14434/jotlt.v9i1.29527>

Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 3–10.

http://www.itdl.org/Journal/Jan_05/article01.htm

Simonson, M., Schlosser, C., & Hanson, D. (1999). Theory and distance education: A new discussion. *The American Journal of Distance Education*, 13(1), 60–75.

<https://doi.org/10.1080/08923649909527014>

Simonson, M., Smaldino, S., & Zvacek, S. (2019). *Teaching and learning at a distance: Foundations of distance education*. Information Age Publishing.

Smaldino, S. E., Lowther, D. L., & Russell, J. D. (2019). *Instructional technology and*

media for learning (12th ed.). Pearson.

Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. Sage.

Smith, J. A., Flowers, P., & Larkin, M. (2022). *Interpretative phenomenological analysis: Theory, method, and research* (2nd ed.). Sage.

Smith, J., & Jones, K. (2021). Exploring instructor experiences of online learning: A qualitative study. *Journal of Online Learning Research*, 7(3), 125–140.
<https://www.learntechlib.org/p/220034/>

Stewart, O. G. (2024). Understanding what works in humanizing higher education online courses. *Issues and Trends in Learning Technologies*, 11(2).
<https://doi.org/10.2458/itlt.5566>

Subhash, S., & Cudney, E. A. (2018). Gamified learning in higher education: A systematic review of the literature. *Computers in Human Behavior*, 87, 192–206.
<https://doi.org/10.1016/j.chb.2018.05.028>

Suddick, K. M., Cross, V., Vuoskoski, P., Galvin, K. T., & Stew, G. (2020). The work of hermeneutic phenomenology. *International Journal of Qualitative Methods*, 19, 1–14. <https://doi.org/10.1177/1609406920947600>

Swanson, R. A., & Chermack, T. J. (2013). *Theory building in applied disciplines*. Berrett-Koehler.

Telmesani, M. T. (2017). *Effective blended learning for post-secondary learners: Instructor perspectives* [Doctoral dissertation, The University of Manitoba]. MSpace. <https://mspace.lib.umanitoba.ca/handle/1993/32225>

Thanasi-Boçe, M. (2021). The role of the instructor, motivation, and interaction in

building online learning satisfaction during the COVID-19 pandemic. *The Electronic Journal of E-Learning*, 19(5), 401–415.

<https://doi.org/10.34190/ejel.19.5.2475>

Tosh, G., Soares-Weiser, K., & Adams, C. E. (2011). Pragmatic vs explanatory trials: the pragmascope tool to help measure differences in protocols of mental health randomized controlled trials. *Dialogues in Clinical Neuroscience*, 13(2), 209–215.

<https://doi.org/10.31887/DCNS.2011.13.2/gtosh>

Tuntirojanawong, S. (2013). Students' readiness for e-learning: A case study of Sukhothai Thammathirat Open University, Thailand. *Journal of Learning in Higher Education*, 9(1), 159–167. <https://files.eric.ed.gov/fulltext/EJ1143992.pdf>

United Nations Educational, Scientific and Cultural Organization (UNESCO). (n.d.).

TVETipedia glossary. Retrieved from

<https://unevoc.unesco.org/home/TVETipedia+Glossary/lang=en/show=term/term=+self-directed+learning>

University of Illinois. (n.d.). *A brief history of online learning*. Retrieved August 10, 2023, from <https://citl.illinois.edu/citl-101/online-learning/history>

University of Phoenix Online Campus: Distance learning programs. (n.d.).

Encyclopedia.com. Retrieved July 2023, from

<https://www.encyclopedia.com/education/news-and-education-magazines/university-phoenix-online-campus-distance-learning-programs>

van Manen, M. (2014). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. Left Coast Press.

Vanderleeuw, J., Keim, S., & Moore, G. (2023). Student acceptance of online learning.

Journal of Higher Education Theory and Practice, 23(3).

<https://doi.org/10.33423/jhetp.v23i3.5841>

Vang, K., Martin, F., & Wang, C. (2020). Examining community college faculty perceptions of their preparedness to teach online. *Journal of Applied Research in the Community College*, 27(1), 45–63.

Vijayalakshmi, M., Patil, P., & Karikatti, G. (2022). Effective assessment strategies for project-based learning. *Journal of Engineering Education Transformations*, 36(Special Issue), 154–160. <https://doi.org/10.16920/jeet/2022/v36is1/22187>

Wang, Y., & Siau, K. (2021). Artificial intelligence, machine learning, automation, robotics, future of work and future of humanity: A review and research agenda. *Journal of Database Management*, 32(1), 61–79.

<https://doi.org/10.1145/3445815.3445821>

Watters, A. (2014, January). The history of the future of education technology. *EdTech Magazine*. <https://www.edtechmagazine.com/higher/article/2014/01/history-future-education-technology>

West, M., Cohodes, S., Goldhaber, D., Hill, P., Ho, A., Kogan, V., Polikoff, M., Sampson, C., & Chingos, M. (2022). *Student achievement gaps and the pandemic: A new review of evidence from 2021–2022*. Center on Reinventing Public Education. <https://crpe.org/students-achievement-gaps-and-the-pandemic-a-new-review-of-evidence-from-2021-22/>

Widick, S. R. (2018). *Relationship of student online readiness to student perception of teaching presence and sense of community in online courses* [Doctoral dissertation, Oklahoma State University]. <https://hdl.handle.net/11244/317648>

- Wiley, D., & Hilton, J. L. III. (2018). Defining OER-enabled pedagogy. *The International Review of Research in Open and Distributed Learning*, 19(4), 133–147. <https://doi.org/10.19173/irrodl.v19i4.3601>
- Zabri, S. M., Abakar, Y. M., & Ahmad, K. (2023). Exploring the acceptance of online learning among students in technical and non-technical programmes at a higher education institution. *Cogent Education*, 10(1), Article 2284552. <https://doi.org/10.1080/2331186X.2023.2284552>
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education: Where are the educators? *International Journal of Educational Technology in Higher Education*, 16(1), Article 39. <https://doi.org/10.1186/s41239-019-0171-0>

Appendix A
Interview Guide

Interview Guide

1. Tell me a little about yourself.
 - 1.1 Could you please share how many years you have been teaching online courses in higher education?
2. Describe what online education means to you.
3. What are your feelings regarding the online education paradigm?
4. What do you believe are important and effective aspects of online education?
5. What are your experiences with regard to the instructors' role in the online education environment? Consider things such as providing the learner with guidance and support, facilitating discussion and collaboration, providing effective feedback, monitoring student progress, and creating a supportive and engaging learning experience.
6. What are your experiences with regard to the instructors' teaching readiness? Consider things such as the technical skills needed, andragogy knowledge, communication skills, time management skills, flexibility, and adaptability.
7. Can you walk me through the process of determining the teaching readiness of the instructor? Consider things such as: Training and Professional Development, Review of Technical Competence, Evaluation of Course Design Skills.
8. Describe what constitutes students' learning readiness in the online education environment? Consider things such as technical skills, time management skills, self-motivation, learning strategies, communication skills, self-determination, etc..
9. How would you describe the social presence aspect of the online education experience? Consider things such as group discussions and collaborative activities, opportunities for students to share personal experiences and perspectives, opportunities for students to give and receive feedback, and establishing clear expectations for communication and engagement.
10. Can you describe the importance of communication between the instructor and the learner in the online education environment?
11. Can you describe the importance of communication between learners in the online education environment?
12. What are your experiences with sharing personal experiences and perspectives with the learner?
13. What are your experiences with providing the learner with prompt and

constructive feedback?

14. What are your experiences with demonstrating enthusiasm and interest in the online community and with its members?
15. How do you foster a sense of community and connectivity among your students in an online course?
16. Can you walk me through the steps of how you mitigate the feelings of social isolation and disconnectedness that is common in the online environment?
17. Tell me about the feedback you have received from online learners?
 - 17.1 What did you notice about the feedback provided from online learners?
 - 17.2 What stood out about the feedback provided from online learners?
18. In what ways do you think online education environments can be improved to better support both instructors and students?

Appendix B
Group Experiential Themes

Group Experiential Themes

Superordinate Theme	Subtheme(s)	Frequency	Participant ID(s)	Excerpt/Quote	Interpretation
Theme 1: Equivalence in Online and Face-to- Face Education	Perceived Equivalence of Learning Modalities Perceived Learning Parity	Low	Maverick, Amelia	"I like to look at equivalency theory as a foundation for the definition of distance education."	The quote by Maverick highlights the significance of perceived learning parity within the equivalence of learning modalities, emphasizing the broader implications for theme 1: equivalence in online and face-to-face education. However, not all participants share this perspective.
Theme 1: Equivalence in Online and Face-to- Face Education	Comparative Learning Experience	Low	Amelia, Maverick	"So it's not the matter of the means, if you will, the modality. It's a matter of how properly designed, or how well designed the experience is, so that learning can occur."	The quote by Amelia highlights the significance of comparative learning experience within perceived equivalence of learning modalities, emphasizing the broader implications for theme 1: equivalence in online and face-to-face education. However, not all participants share this perspective.
Theme 1: Equivalence in Online and Face-to- Face Education	Adequate Instructional Design for Engaging and Effective Online Learning	Low	Gloria, Maverick, Amelia	"It's important having a well designed class where students know what they have to do clearly when they can see when the class is organized in a way that is student-friendly. They can see what we have to do. There is a structure. The class is divided in modules and weeks, so they can see every week what they have to do."	Participant Gloria emphasizes the importance of a well-structured and clearly organized online class. She highlights that when a course is designed in a student-friendly manner, with a clear structure divided into modules and weeks, students can easily understand their tasks and expectations. According to Gloria and a couple of other participants, this level of instructional design, enhances student engagement and reduces confusion, ultimately supporting a more effective learning experience. However, not all participants share this perspective.

Theme 2: Flexibility and Accessibility of Online Learning	Geographical Flexibility Student-Centered Learning Flexibility	High	Brandy, Daniel, DocAbbey, Dorian, Matthias, Maverick, Maxine, Megan, Amelia, Anastasia	"Online education offers an option for people who may not be able to physically move across the country to go to a school. Or they still have to work full time; they have kids are juggling all of these things and need a little bit more flexibility."	Brandy's quote highlights the significance of geographical flexibility within student-centered learning, emphasizing its broader implications for Theme 2: Flexibility and Accessibility of Online Learning. Her perspective aligns with the sentiments expressed by nearly all participants in the study, who overwhelmingly recognize flexibility—particularly in terms of location and scheduling—as a fundamental advantage of online learning. This near-universal agreement underscores the critical role that accessibility plays in supporting diverse learners and accommodating their individual needs.
Theme 2: Flexibility and Accessibility of Online Learning	Autonomous Learning	Medium	Amelia, Dorian, Anastasia, DocAbbey	"So that's important aspect is the flexibility of, of the learner doing it in their own time, their own pace, and at their own pace and time and their place, so it could be any place, and we can bring several, many learners from any place in the world into the learning experience. "	Amelia's quote highlights the significance of autonomous learning within student-centered learning flexibility, emphasizing its broader implications for Theme 2: Flexibility and Accessibility of Online Learning. While her perspective is not universally expressed by all participants in the study, it emerges as an important component or benefit of online learning. Several participants recognize that the ability to learn independently allows students to manage their time effectively and tailor their learning experiences to their individual needs, reinforcing the value of flexibility in an online environment.
Theme 3: Importance of Instructor Presence and Engagement	Instructor Engagement & Andragogical Strategies Instructor Support & Monitoring	High	Amelia, Anastasia, Brandy, Dallas, Daniel, DocAbbey, Dorian, Matthias, Maverick, Maxine, Megan	"I provide guidance and support; When you monitor their progress, then you provide guidance and support to them; hey, what's going on? You know, you haven't submitted this; if, when you're monitoring the student, when you facilitate discussion and collaboration, you create engaging, learning experiences."	Amelia's quote highlights the significance of instructor support and monitoring within instructor engagement and Andragogical strategies, emphasizing its broader implications for Theme 3: Importance of Instructor Presence and Engagement. Her perspective was considered paramount by most participants in the study, who emphasized that consistent instructor presence, guidance, and proactive monitoring play a crucial role in student success. Many participants noted that when instructors are actively engaged, students feel more supported, fostering a sense of connection and improving overall learning outcomes in the online environment.

Theme 3: Importance of Instructor Presence and Engagement	Student Engagement Strategies	High	Maxine, Anastasia, DocAbbey, Dorian, Megan, Brandy	"But I do know that um, or at least in my experience, it takes an extra level of effort from the instructor because it's hard to get the same amount of engagement from the students."	The quote by Maxine highlights the significance of student engagement strategies within instructor engagement & andragogical strategies, emphasizing the broader implications for theme 3: importance of instructor presence and engagement.
Theme 4: Challenges in Fostering Social Presence	Social Connections Through Instructional Design	Medium	Maverick, Amelia, Dorian, Mathias	"...social presence is one of those things that, uh, once again, a great instructional designer, builds in from day one."	The quote by Maverick highlights the significance of challenges of social connection within social connection & online learning barriers, emphasizing the broader implications for theme 4: challenges in fostering social presence.
Theme 4: Challenges in Fostering Social Presence	Relationship Barriers in Online Learning	Medium	Dallas, Daniel, Matthias, Maxine	"I think this is one of those times also that allowing yourself as the instructor to uh, or expecting yourself even as the instructor to interject your own personal perceptions, your personal experiences into the coursework. I think if this is something that you're accustomed to doing and you do on a routine basis, I think that then has the feeling of humanizing you to your online audience. And I think that maybe that's the ticket. Maybe we should be emulating the social media influencers or reality tv show stars who have invited the world into their personal lives to see. Uh, you know, because I think that viewers of that type of content feel as though they have a connection with that person, even though they have no way to interact and they do not have any two-way communication they feel as if they know that person on a personal level."	The quote by Dallas highlights the significance of relationship barriers in online learning within social connection & online learning barriers, emphasizing the broader implications for theme 4: challenges in fostering social presence.

<p>Theme 5: Instructor Readiness and Professional Development</p>	<p>Instructor Preparation & Support Needs Technological Preparedness</p>	<p>High</p>	<p>Maverick, Amelia, Anastasia, Brandy, Dallas, Daniel, DocAbbey, Dorian, Matthias, Maxine, Megan</p>	<p>"I would say the vast majority of the professors have had no K-12 environment training. They're not teacher educators. They didn't come with foundations of education. They didn't take curriculum design. They didn't take courses in instructional media production. They got a degree in chemistry. They got a master's degree in chemistry, and they decided they wanted to teach at the community college chemistry, maybe in addition to their work for a company as a chemist. So that kind of competence I almost said needs to be provided."</p>	<p>The quote by Maverick highlights the significance of educational foundation preparedness within instructor preparation & support needs, emphasizing the broader implications for theme 5: instructor readiness and professional development.</p>
<p>Theme 5: Instructor Readiness and Professional Development</p>	<p>Professional Development Gaps</p>	<p>Medium</p>	<p>Maxine, Dallas, DocAbbey, Dorian, Anastasia</p>	<p>"So I would say um there needs to be some type of training module where the teachers, professors get maybe a sample syllabus. And they get some time to play around in Canvas and build it out from scratch and even get some feedback on that. Before they jump right into a course"</p>	<p>The quote by Maxine highlights the significance of professional development gaps within instructor preparation & support needs, emphasizing the broader implications for theme 5: instructor readiness and professional development.</p>
<p>Theme 6: Learner Readiness and Engagement in Online Learning</p>	<p>Student Preparedness & Engagement Strategies and Time Management</p>	<p>High</p>	<p>Maxine, Amelia, DocAbbey, Daniel, Dorian, Gloria</p>	<p>"I'm going to say the biggest one I think they lack is the time management. Especially with um, I'll say especially with a college of education students. Because that's who I work with. For the majority of them, the overwhelming majority of them are K through 12 educators. "</p>	<p>The quote by Maxine highlights the significance of time management within student preparedness & engagement strategies, emphasizing the broader implications for theme 6: learner readiness and engagement in online learning.</p>

Theme 6: Learner Readiness and Engagement in Online Learning	Student Accountability & Time Management Engagement through Digital Interaction	Medium	Daniel, Dallas, DocAbbey, Maxine, Megan	"I found with time management skills with online students, when they say a paper is due at midnight on Sunday, I get many papers at 11:50 at night on a Sunday night because they figure I can just submit it any time. It's not as if I don't have to go to class. I just submit it before Sunday at midnight. And what happens is you get a lot of sloppy papers from students who didn't manage their time because they're also, they're just assuming that they can wait to the last minute."	The quote by Daniel highlights the significance of engagement through digital interaction within student preparedness & engagement strategies, emphasizing the broader implications for theme 6: learner readiness and engagement in online learning.
Theme 6: Learner Readiness and Engagement in Online Learning	Engagement Fostered Through Effective Instructional Design	Low	Brandy, Maverick, Amelia	"So in terms of course design, I think incorporating all of those different elements of different activities. Like I said, the breakout rooms, having discussion leaders, not only using PowerPoints, but having them read research articles before class and having just an open discussion."	Participant Brandy and two other participants expressed the importance of diverse instructional strategies in course design to enhance student engagement and participation. Brandy emphasizes the value of incorporating various activities, such as breakout rooms, discussion leaders, and a mix of instructional materials beyond PowerPoints, including research articles and open discussions. This perspective aligns with the other participants who highlighted that a dynamic and interactive course structure fosters deeper engagement and encourages active learning in online environments.

Appendix C
Common Core Principles

Common Core Principles

Common Core Principle(s)	Summary
Professional Development and Training	<p>Continuous Learning: Provide ongoing opportunities for educators to stay updated with evolving technologies, andragogical strategies, and best practices for online teaching.</p>
	<p>Instructional Design Proficiency: Train educators to design and deliver effective online courses, incorporating multimedia, interactive elements, and accessible content.</p>
	<p>Learner Engagement Strategies: Equip educators with techniques to foster active participation, collaboration, and motivation in a virtual learning environment.</p>
	<p>Technological Competency: Ensure educators are proficient in using the institution's learning management system (LMS), video conferencing tools, and other relevant technologies.</p>
	<p>Data-Driven Decision-Making: Emphasize the use of analytics and assessment tools to track student progress and adapt instruction based on performance metrics.</p>
	<p>Effective Communication: Develop educators' skills in clear, concise, and empathetic communication, essential for online teaching and feedback.</p>
	<p>Time Management and Organization: Offer guidance on managing workload, scheduling, and maintaining work-life balance in the online teaching context.</p>
	<p>Learner Support Knowledge: Ensure educators are familiar with available student resources, such as technical support, tutoring, and mental health services, to provide holistic support.</p>
	<p>Community of Practice: Foster collaboration among educators through peer mentoring, discussion groups, and shared learning experiences to build a supportive professional network.</p>

Critical Thinking and Problem-Solving in Digital Contexts	Design courses that integrate interactive tools, such as simulations and scenario-based learning, to encourage analytical thinking. Incorporate peer collaboration through virtual platforms to solve real-world challenges collaboratively.
Emphasis on Real-World Application in Professional Fields	Develop training modules tailored to specific industries, integrating case studies and practical projects to enhance relevance. For example, a course in business could include simulations of market analysis using industry-standard tools.
Clear and Consistent Standards for Online Learning	Establish measurable learning outcomes and clear participation guidelines to ensure consistency. Courses should also meet standardized quality benchmarks for instructional design and accessibility.
Development of Digital Literacy and Core Competencies	Teach students essential digital skills such as navigating learning management systems, collaborating virtually, and practicing online etiquette. These skills can be incorporated into assignments like group projects and reflective discussions.
Intentional Progression and Scaffolding in Online Learning	Use instructional design to build skills progressively from foundational to advanced levels. Frequent formative assessments and feedback loops can help students stay engaged and supported.
Evidence-Based Design and Professional Development	Base online courses on research about effective virtual learning practices. Provide instructors with professional development opportunities to apply evidence-based methods for fostering social presence and engagement.

Fostering Social Presence Through Intentional Instructional Design	Leverage the power of good instructional design to create engaging activities that build connection and collaboration among learners. Require students to record video introductions to personalize their presence in the course. Facilitate debates on course topics to encourage critical thinking and interaction. Incorporate mini-research projects involving interviews to promote real-world engagement. Schedule live project presentations on Zoom to enhance communication skills and collaboration. Replace traditional written discussion forums with video presentations to create a more dynamic and humanized learning experience.
Interdisciplinary and Integrated Online Learning	Design courses that encourage cross-disciplinary learning through projects and discussions that apply knowledge from various fields.
Quality Assurance Standards	Introduce frameworks like Quality Matters (QM) or Online Learning Consortium (OLC) standards to maintain consistent and high-quality course delivery.
