THE EXPERIENCES OF HIGHER EDUCATION ONLINE INSTRUCTORS WITH THE

IMPLEMENTATION OF DIGITAL LEARNING MATERIALS: A PHENOMENOLOGICAL

STUDY

by

Monica C. Schreiber

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

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ABSTRACT

The purpose of this transcendental phenomenological study was to describe the experiences of online instructors at Christian colleges with the implementation of digital learning materials within online learning environments. At this stage of the research, digital learning materials can be generally defined as e-texts, learning materials accessible through tablet technology, interactive textbooks, or any other course materials in digital format. The theory guiding this study is the unified theory of acceptance and use of technology (UTAUT), which explains the factors involved in accepting or rejecting technology use and applies to higher education online instructors' implementation of digital learning materials. The central research question guiding this phenomenological study was: What are the experiences of online instructors at Christian colleges with the implementation of digital learning materials? This transcendental phenomenological study used purposeful and criterion sampling which aims for maximum variation and saturation in order to select online instructors from three Christian colleges with experiences regarding the implementation of digital learning materials. Data was collected through interviews, focus groups, and journal entries, and analyzed through the processes of epoché, phenomenological reduction, imaginative variation, and synthesis. The four primary themes identified through analysis were: (a) ease of use, (b) learning enrichment, (c) professional community, and (d) initiative to expand knowledge and resources; these themes were used to describe the essence of the phenomenon of the implementation of digital learning materials by online instructors in higher education. Implications for this study were also discussed.

Keywords: digital learning materials, critical thinking, deep reading, online instructors

Dedication

This work is dedicated first to my family. Derek, you are my constant. Evangeline, Harper, and Sawyer, I thank the Lord for you every day; you are my greatest blessing. Mom and Aunt Dixie, your unwavering support and sacrifice make my goals possible. Secondly, and ultimately, this work is dedicated to the Lord. Psalm 100:5 (ESV): "For the Lord is good; His steadfast love endures forever, and His faithfulness to all generations." This work was done only by His grace; may the results of this work be used for His glory.

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Thank you, Jesus, for calling me to this work and for sustaining me with your grace and steadfast love.

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List of Abbreviations

Artificial Intelligence (AI)

Connected Classroom Climate (CCC)

Dressel Online Learning (DOL)

Information and Communication Technology (ICT)

Learning Management System (LMS)

Massive Open Online Courses (MOOC)

Specialized Learning Management System (SLMS)

Teaching English as a Second Language (TESL)

Technology Acceptance Model (TAM)

Technology Acceptance Model, Extended Model (TAM2)

Unified Theory of Acceptance and Use of Technology (UTAUT)

Unified Theory of Acceptance and Use of Technology, Extended Model (UTAUT2)

CHAPTER ONE: INTRODUCTION

Overview

Chapter one highlights the research regarding digital learning materials utilized in higher education learning environments, their impact on student learning, and the role of instructors in the implementation of these materials. Following a brief outline of the historical, social, and theoretical contexts of the implementation and use of digital learning materials is a discussion of the theoretical and philosophical assumptions for this phenomenological study. Next, the problem and purpose of the study are stated, followed by an explanation of the significance of the study, which is to specifically describe the experiences of higher education online instructors with the implementation of digital course materials. Chapter one concludes with an overview of the research questions, which will guide this transcendental phenomenological study, and a list of defined terms used throughout this study.

Background

The perceived impact of digital technology on education cannot be ignored. The trend toward digital learning materials is only going to grow due to the many benefits of these tools provided to students and instructors; these benefits include low-cost options, variety, and learner motivation (McKnight et al., 2016; Moro, 2018; Reid et al., 2017; Yoo & Roh, 2019). Additionally, digital learning tools can ease instructor workload and promote collaboration (Guri-Rosenblit, 2018). Textbook publishers have tapped into the digital course material trend by offering interactive textbooks to promote learner interactivity (O'Bannon et al., 2017; Sun et al., 2018) and tablet technology can be used to support mobile learning (Bagdasarov et al., 2017). However, although many of these benefits are clear, due to the quick and sudden boom of digital learning tool development, research on the impact of these tools has been insufficient (Guri-

Rosenblit, 2018; Kong et al., 2018). Although recent research by Singer Trakhman et al. (2019), Cavanaugh et al. (2016), and Carr (2011) highlights the ways in which digital learning materials negatively impact student learning, a call for more dependence on printed materials is unreasonable. Rather, the emphasis is placed on continued research regarding this impact and the development of new strategies for using digital learning materials in ways that combat their negative impact (Cavanaugh et al., 2016; Singer Trakhman et al., 2019).

Historical Context

McKnight et al. (2016) cite several U.S. efforts toward utilizing technology and implementing digital learning tools into educational environments over the past decade, including the ConnectED initiative in 2013 and the Leading Education by Advancing Digital Commission (LEAD) report in 2013. However, before these efforts, Greenfield (2009) explored the role of digital technology in education, noting benefits like visual intelligence and multitasking skills, as well as challenges to learning like a decrease in critical thinking and mindfulness. Carr (2011) similarly explored the role of digital technology in intellectual development and found that the neuroplasticity of the brain meant that extensive engagement with digital technology led to a reshaping of the mind, negatively impacting the user's deep reading and critical thinking skills. Following the lead of Greenfield (2009) and Carr (2011), Cavanaugh et al. (2016) explored the impact of the digital medium on student critical thinking and deep reading skills within higher education learning environments and found that these skills are being replaced with multitasking and skimming skills. Cavanaugh et al. (2016) place the responsibility on educators to defend students against the negative influence of digital course materials on learning, not by returning to the use of print format, but by pursuing a deeper understanding of how the digital medium influences learning. Similarly, Ugúr (2020) calls for

more research regarding instructor experiences with technology in order to better understand the role of instructors in effectively utilizing digital technologies for learning. Guri-Rosenblit (2018) and Cavanaugh et al. (2016) ultimately view research efforts on the use of digital course materials as both insufficient and slow; too often digital learning tools are implemented, with research regarding their features and impact lagging behind.

Social Context

Much of the current research involving the use of digital learning materials in higher education looks specifically at how these tools influence learning and seeks to highlight various strategies and features to improve student reading comprehension through the use of digital learning materials (Delgado et al., 2018; Guri-Rosenblit, 2018; Singer Trakhman et al., 2019). Singer Trakhman et al. (2019) and Singer and Alexander (2017a) look specifically at student calibration and reading comprehension and conclude that students overestimate their reading comprehension when using digital learning materials and learn better using printed course materials. Although much of the research on digital learning materials has focused on student experiences and learning, the research concerning instructor experiences is limited to decision-making factors for implementing these tools (Moro, 2018) as well as the digital literacy of instructors, with hardly any consideration for the experiences of online instructors specifically (Moro, 2018; Schneider, 2015). The benefits of digital learning materials for instructors are numerous, and the research exploring these benefits encourages the use of these tools (Guri-Rosenblit, 2018; McKnight et al., 2016; Ross et al., 2017). However, research pertaining specifically to online instructors and the implementation of digital learning materials is extremely limited, with consideration given mainly to the need for digital literacy and other

instructor resources (Moro, 2018). Higher education online instructor experiences with the implementation of digital learning materials are seemingly absent from the research.

Theoretical Context

The technology acceptance model (TAM), developed by Davis et al. (1989), attempts to predict user acceptance of technology based on the factors of perceived ease of use and perceived usefulness, as well as an individual's attitude toward technology (Davis et al., 1989). This theory is used by Morris and Lambe (2017) to study the use of e-books in higher education and by Olaniran et al. (2017) to study preservice teacher use of digital learning materials. The unified theory of acceptance and use of technology (UTAUT) is an extension of TAM (and other models) which explores user acceptance and use and "posits three direct determinants of intention to use (performance expectancy, effort expectancy, and social influence)" (Venkatesh et al., 2003, p. 467). Additionally, UTAUT proposes "two direct determinants of usage behavior (intention and facilitating conditions)" (Venkatesh et al., 2003, p. 467). Yoo and Roh (2019), Mohammadyari and Singh (2015), Altanopoulou and Tselios (2017), Fagan (2019), Kaliisa et al. (2019), Khechine and Lakhal (2018), Liebenberg et al. (2018), Sidik and Syafar (2020), Thomas et al. (2020), and Yakubu and Dasuki (2019) utilize UTAUT to study student acceptance and use of digital learning materials and technology in higher education. UTAUT has also been used in studies to analyze faculty acceptance and use of learning management systems (LMS) and other educational technologies (Buabeng-Andoh & Baah, 2020; Garone et al., 2019; Ouedraogo, 2017; Padhi, 2018; Radovan & Kristl, 2017).

Cognitive load theory, according to Sweller (2020), provides a framework for understanding how digital learning materials may influence student learning differently than printed learning materials. Burin et al. (2015) and Reid et al. (2017) also utilize cognitive load

theory to study the influence of digital learning materials on student learning in higher education. Ultimately, although TAM, and variations of this model, like UTAUT, have been more widely applied to the topic of the implementation of digital learning materials in order to look at both student and instructor experiences with these digital tools, cognitive load theory has been applied to look directly at the influence of these tools on student learning. Other theories, like Mayer's multimedia learning theory, and self-regulated learning theory, have been utilized to study the topic of the implementation of digital learning materials specifically from the perspective of the learner (O'Bannon et al., 2017; Stoten, 2019).

Situation to Self

The impact of technology on the mind is an issue I take seriously. The value I place on the development of the mind along with the knowledge of how technology influences this development formed an axiological assumption that was present in my study (Creswell & Poth, 2018). I agree with Cavanaugh et al. (2016) and Guri-Rosenblit (2018), who emphasize the responsibility of online instructors to make informed decisions regarding the implementation of digital learning materials, and I am burdened by the perceived negative impact of the digital medium on student learning. My experiences as both a student using digital learning materials and a higher education online instructor implementing such learning tools have affirmed my view of this responsibility and shaped the axiological framework through which I approached this research.

Creswell and Poth (2018) explain the ontological assumption within qualitative research as an approach to understanding reality that considers multiple realities or multiple views of reality within the research. My ontological perspective for this study assumes that online instructors will have different experiences with digital learning materials, which in turn shape

their realities (Creswell & Poth, 2018). These realities are valid and important and may contribute to a better understanding of the experiences of online instructors regarding digital learning materials and their implementation. These experiences and differing perspectives also constitute the "subjective evidence," situated within the appropriate context of online learning, that will lead to knowledge on the topic (Creswell & Poth, 2018, p. 20). This epistemological assumption, that knowledge is subjective and will come from the experiences and descriptions of my participants, provides the opportunity for various experiences and even realities to emphasize themes within the research (Creswell & Poth, 2018).

Social constructivism proposes that meaning is connected to context and experience, can be constructed through social interaction, and will vary among individuals, depending upon cultural norms and personal experiences (Creswell & Poth, 2018). Social constructivism as the paradigm guiding this study highlights the meanings constructed by instructors regarding digital learning materials and how that meaning is formed by instructor experiences with these tools (Creswell & Poth, 2018). Within a social constructivist worldview, it was expected that multiple meanings would be associated with the implementation and use of digital learning materials; my position as an online instructor and online learner contributed to my interpretation of these meanings (Creswell & Poth, 2018).

Problem Statement

The problem is that although research has shown that students learn better with printed learning materials, there is a growing dependence upon digital learning materials in higher education (Carr, 2011; Cavanaugh et al., 2016; Delgado et al., 2018; Moro, 2018; Singer & Alexander, 2017a; Singer Trakhman et al., 2019). The digital medium has been shown to negatively impact college student learning (Cavanaugh et al., 2016; Delgado et al., 2018). Carr

(2011) and Cavanaugh et al. (2016) explain that engagement with digital learning materials in place of printed texts for learning leads to the development of multitasking and skimming skills at the expense of deep reading and critical thinking skills. Although the use of digital learning materials and other tools in place of printed materials in higher education is growing (Delgado et al., 2018; Moro, 2018), students are not always benefitting from these tools (Singer Trakhman et al., 2019). Recent research by Singer Trakhman et al. (2019) demonstrates that students tend to overestimate their reading comprehension when engaging digital course materials as opposed to printed materials. Finally, Sweller (2020), creator of cognitive load theory, recently examined the influence of educational technology on cognitive load and determined that digital learning tools may contribute to an increase in student cognitive load, highlighting a need to evaluate how digital learning tools can be used more effectively.

Although current research continues to explore the influence of digital learning materials on student learning, these studies are often limited to student experiences (Guri-Rosenblit, 2018) and do not sufficiently explore online learning environments or online instructor experiences. Guri-Rosenblit (2018) states that "there is a noticeable scarcity of discussion on the essential role of teachers in the relevant literature on online learning" (p. 93). Because instructors have a responsibility to make informed decisions regarding the implementation of digital learning materials (Cavanaugh et al., 2016; Singer Trakhman et al., 2019), this phenomenological study sought to describe the experiences of online instructors at Christian colleges regarding the implementation of digital learning materials.

Purpose Statement

The purpose of this transcendental phenomenological study was to describe the experiences of online instructors at Christian colleges with the implementation of digital learning

materials within online courses. At this stage of the research, digital learning materials can be generally defined as e-texts, learning materials accessible through tablet technology, interactive textbooks, or any other course materials in digital format (Bagdasarov et al., 2017; Delgado et al., 2018; Sun et al., 2018). The theory that guided this study was the unified theory of acceptance and use of technology (UTAUT) by Venkatesh et al. (2003), which explains the factors involved in accepting or rejecting technology use and applies to higher education online instructors' implementation of digital learning materials (Venkatesh et al., 2003).

Significance of the Study

As the trend toward utilizing digital learning materials and other educational technology in place of printed materials continues, the impact of the digital medium on learning is frequently the subject of quantitative research, although much less qualitative research appears to exist on this subject. Carr (2011), Cavanaugh et al. (2016), Singer Trakhman et al. (2019), and Singer and Alexander (2017a) have explored the influence of digital learning materials on reading comprehension, critical thinking, and ultimately learning, and have found that the digital medium negatively impacts student learning. Although much of the discussion regarding this impact has revolved around student experiences, far less is known about online instructor experiences with digital learning materials, given this impact (Garone et al., 2019; Hu et al., 2020). This study sought to add to the understanding of these online instructor experiences and potentially highlight their role in navigating the impact of digital learning materials on student learning.

Empirical

Although limited research regarding instructor experiences explores common factors involved in the decision-making process for implementing digital tools (Moro, 2018), online instructors at the higher education level are rarely separately considered, even though their

options for course materials and teaching strategies are potentially more limited (Guri-Rosenblit, 2018). While a study by Moro (2018) explores online instructors and highlights the need for digital literacy and increased instructor resources for effectively implementing digital learning materials, the implication is that instructors should use digital learning materials because they are available and provide benefits for students and instructors related to cost, accessibility, and ease of use (Guri-Rosenblit, 2018; Moro, 2018). Gilbert and Fister (2015) call for more research on the influence of instructor attitudes toward e-books for learning, citing the role of faculty in emphasizing digital learning tools. McKnight et al. (2016) highlight the lack of consistent data regarding the effectiveness of digital learning tools, and state "one potential reason for the lack of consistent findings is the lack of documentation of how teachers are using technology to improve learning" (p. 195). Hu et al. (2020) and Garone et al. (2019) similarly point out the scarcity of research that considers higher education instructor perspectives of digital learning tools. This phenomenological study sought to address this gap in the research by exploring the experiences of online instructors with digital learning materials.

Theoretical

The unified theory of acceptance and use of technology (UTAUT) developed by Venkatesh et al. (2003) frames the motivations for behavioral intention use of technology and considers effort expectancy, performance expectancy, social influence, and facilitating conditions as potential influences on the user's intention and use of technology. Exploring online instructor experiences with the implementation of digital learning materials through the lens of UTAUT may provide additional insight into the acceptance of learning technologies specifically in online higher education learning environments. While UTAUT has been used to study online learning environments in both developed and developing countries, these studies have focused

primarily on student acceptance of learning technologies; far fewer studies have utilized UTAUT to study online instructor acceptance of digital learning materials and technologies (Chaka & Govender, 2017; Chen & Hwang, 2019; Fagan, 2019; Garone et al., 2019; Kaliisa et al., 2019; Liebenberg et al., 2018; Padhi, 2018; Sidik & Syafar, 2020; Thomas et al., 2020; Yoo & Roh, 2019). This phenomenological study considered online instructors, who are not only technology users themselves, but who may be choosing technology use for their students as well; these instructors may serve as a major line of defense against the perceived negative impact of digital learning materials on student reading comprehension and critical thinking (Cavanaugh et al., 2016).

Practical

There is a gap in the research regarding higher education online instructor experiences with the acceptance and implementation of digital learning materials (Garone et al., 2019; Hu et al., 2020; McKnight et al., 2016; Moro, 2018). Utilizing a phenomenological study to explore online instructor experiences at Christian colleges regarding digital learning materials will allow for an in-depth understanding of the experiences of instructors implementing these tools specifically in online learning environments. As Singer Trakhman et al. (2019) explain, even if printed course materials are more beneficial to learning, utilizing print format in place of digital is not feasible or realistic; therefore, more research exploring instructor experiences is needed because instructors are the ones strategizing how best to utilize digital learning materials. Dailey-Hebert (2018) similarly acknowledges the need to focus on online instructors concerning the effective use of digital learning materials, specifically given the (potentially overwhelming) increase in responsibility that comes with teaching online. A phenomenological study exploring online instructors at Christian colleges will provide valuable insight as these instructors work

closely with students and some are responsible for designing their own online courses and implementing digital learning materials.

Research Questions

This transcendental phenomenological study sought to understand the experiences of higher education online instructors with the implementation of digital learning materials. A phenomenological study seeks to describe or explain the essence of a particular phenomenon and includes the use of open-ended questions to uncover an in-depth understanding of the phenomenon (Creswell & Poth, 2018). The following open-ended research questions, including a central question and four sub-questions, were meant to guide these research efforts by prompting in-depth description and exploration of instructor experiences:

Central Research Question

What are the experiences of online instructors at Christian colleges with the implementation of digital learning materials?

This question seeks an understanding of the general experiences of online instructors concerning the implementation of digital learning materials. While there is limited research on instructor decision-making with digital learning tools (Guri-Rosenblit, 2018; Moro, 2018), there appears to be a gap concerning higher education online instructors, whose experiences with digital learning materials may be different than in-class instructors. Cavanaugh et al. (2016), Guri-Rosenblit (2018), Moro (2018), Singer Trakhman et al. (2019), and Ugúr (2020) place at least some of the responsibility for effectively implementing digital learning materials and tools on instructors.

Sub-Question One

How do online instructors describe ease of use as a factor in implementing digital learning materials?

Venkatesh et al. (2003) define effort expectancy as "the degree of ease associated with the use of the system" (p. 450). Ease of use is included as a component of effort expectancy, a factor within UTAUT, that has been shown to directly influence a user's intention to use technology (Venkatesh et al., 2003). Bagdasarov et al. (2017) and Moro (2018) have listed ease of use as a factor influencing the use of digital learning materials, but Singer and Alexander (2017a) explain that just because digital learning materials may require low effort to use, that does not mean these tools are necessarily beneficial. Exploring online instructor experiences regarding ease of use of digital learning materials will provide further insight into UTAUT and specifically effort expectancy as an influencer of technology use.

Sub-Question Two

How do online instructors describe usefulness as a factor in implementing digital learning materials?

Usefulness is framed within performance expectancy, a factor of UTAUT which has been shown to influence intent to utilize technology (Venkatesh et al., 2003). Performance expectancy is explained by Venkatesh et al. (2003) as "the degree to which an individual believes that using the system will help…to attain gains in job performance" (p. 447). Research by Bringula (2017) and Chapman et al. (2016) proposes that instructors are pushed to utilize digital learning materials simply because they are available, but as Morris and Lambe (2017) point out, availability does not necessarily equal usefulness. Research by Morris and Lambe (2017) suggests that some instructors are hesitant to implement digital learning materials due potentially to performance expectancy. By exploring online instructor experiences regarding the

implementation of digital learning materials based on performance expectancy will provide further insight into UTAUT and the influence of usefulness on user acceptance and use of technology.

Sub-Question Three

How do online instructors describe social influence as a factor in implementing digital learning materials?

According to Venkatesh et al. (2003), social influence, a factor of UTAUT, pertains to "the degree to which an individual perceives that important others believe he or she should use the new system" (p. 451). Social influence has been shown to directly influence user intention to utilize technology, along with effort expectancy and performance expectancy (Venkatesh et al., 2003). Social influence appears to be the focus of less research regarding educational technology, unlike ease of use and usefulness, which have been consistently shown to be influences of technology acceptance and use (Bagdasarov et al., 2017; Moro, 2018; Stoten, 2019). While Bringula (2017) and Chapman et al. (2016) highlight the emphasis placed on using the digital learning materials available to instructors, exploration of online instructor experiences regarding the social influence to accept or reject digital learning materials in online environments may provide new insight into this factor of UTAUT.

Sub-Question Four

In what ways have facilitating conditions influenced online instructors' experiences with the implementation of digital learning materials?

Facilitating conditions is a factor of UTAUT shown to directly influence usage behavior (rather than just intentional behavior) (Venkatesh et al., 2003). According to Venkatesh et al. (2003), facilitating conditions refers to "the degree to which an individual believes that an

organizational and technical infrastructure exists to support use of the system" (p. 453). Research by Moro (2018), Guri-Rosenblit (2018), and Schneider (2015) demonstrates the need for expanding digital literacy among online instructors and increasing training opportunities to maximize the efficient and (potentially) effective use of digital learning materials and other digital tools. Exploring the experiences of online instructors at a smaller institution with fewer facilitating conditions will provide deeper insight into the influence of this factor on user acceptance and use of technology, specifically within online learning environments.

Definitions

The following terms and their definitions are provided here in order to provide context and clarity for this study on instructor experiences with the implementation of digital learning materials.

1. *Calibration* – the accuracy with which students assess their reading comprehension and learning performance with various mediums, like digital and print (Singer Trakhman et al., 2019).

2. *Cognitive load* – within cognitive load theory, cognitive load is the strain on cognitive processing due to increased cognitive tasks (including those related to the digital medium), which can hinder the development of schemas needed for learning (Sweller, 1988, 2020).

3. *Deep reading* – the process of achieving depth of thought through "slow sustained book reading" (Cavanaugh et al., 2016, p. 375).

4. *Digital learning materials* – refers to e-texts, materials accessible through tablet technology, interactive textbooks, or any other course materials in digital format (Bagdasarov et al., 2017; Delgado et al., 2018; Sun et al., 2018).

5. *Digital literacy* – the possession of a complex set of "socio-emotional, cognitive, and technical" skills needed by instructors and students to maximize the many features of digital learning tools (Mohammadyari & Singh, 2015, p. 14).

6. *Digital Natives* – today's students representing a new generation that has grown up with the influence of technology and are therefore wired to "think and process information fundamentally differently from their predecessors" (Prensky, 2001, p. 2).

7. *Technology Acceptance Model (TAM)* – a theory which attempts to predict acceptance of technology-based mainly on the factors of perceived ease of use and perceived usefulness (Davis et al., 1989).

8. *Unified Theory of Acceptance and Use of Technology (UTAUT)* – a theory which attempts to predict acceptance and use of technology by considering the factors of effort expectancy, performance expectancy, social influence, and facilitating conditions (Venkatesh et al., 2003).

Summary

This chapter has provided a look at the research exploring the impact of digital learning materials on student learning and the ways in which student and instructor experiences have been considered within the research. Although the digital medium has been shown to negatively impact student learning (Cavanaugh et al., 2016; Singer Trakhman et al., 2019), there is still an increasing dependence on these tools (Delgado et al., 2018). Singer Trakhman et al. (2019), Moro (2018), and McKnight et al. (2016) emphasize the need for more research concerning the role of instructors in implementing digital learning materials and admit that student experiences, rather than instructor experiences, are frequently the subject of studies concerned with measuring and improving learning with digital learning materials. The problem is that although research has

shown that students learn better with printed learning materials, there is a growing dependence upon digital learning materials in higher education. This phenomenological study sought to describe the experiences of online instructors at Christian colleges regarding the implementation of digital learning materials specifically in online learning environments. One central research question and three sub-questions research were designed to aid in the development of an in-depth description of these experiences and highlight consistent themes that will be viewed through a social constructivist worldview. Ultimately, due to the potential for instructors to influence student dependence on and preference toward digital course materials for learning (Moro, 2018) instructors must be able to make informed decisions regarding the implementation of digital course materials (Cavanaugh et al., 2016; Singer Trakhman et al., 2019).

CHAPTER TWO: LITERATURE REVIEW

Overview

This literature review explores the research on digital learning materials used in higher education learning environments in order to outline a gap in the research concerning online instructor experiences. First, this review covers UTAUT, the theoretical framework used to understand the factors contributing to technology acceptance, and specifically the acceptance of digital learning materials, by students and instructors (Venkatesh et al., 2003). UTAUT proposes several "determinants of intention and usage" that can be used to explain technology use (Venkatesh et al., 2003, p. 425). Second, the impact of digital and print mediums on learning is discussed, including benefits, negative impacts, and features of digital learning materials. Third, student perspectives on digital learning materials are explored, with an emphasis on calibration, choice of medium, and digital literacy of students. Next, the review focuses on higher education instructor perspectives of digital learning materials, with a focus on decision-making factors, digital literacy in instructors, and instructor responsibility. Finally, research regarding general online instructor experiences is explored, including topics of student engagement, creation of online learning communities, the need for training in online instruction, and the general experiences of instructors adapting to online instruction. This review reveals a gap in the research regarding the experiences of online instructors in higher education specifically with choosing and implementing digital learning materials given the perceived negative impact of such tools on student learning (Carr, 2011; Cavanaugh et al., 2016; Delgado et al., 2018; Singer & Alexander, 2017a).

Theoretical Framework

The unified theory of acceptance and use of technology (UTAUT) was designed in an effort by Venkatesh et al. (2003) to further explain technology acceptance. Eight models were reviewed and ultimately synthesized into UTAUT, which was then tested and confirmed as a valid model for predicting and understanding user acceptance of technology (Venkatesh et al., 2003). One of the eight models included in UTAUT is the technology acceptance model (TAM) developed by Davis et al. (1989), which seems to serve as one of the original theories for understanding technology acceptance. TAM aims to predict the acceptance of technology based on influential factors, mainly, perceived ease of use and perceived usefulness (Davis et al., 1989). TAM proposes that an individual's attitude toward a behavior, like using technology, influences behavioral intention, which leads to engaging in the behavior (Davis et al., 1989). Therefore, according to TAM, ease of use and perceived usefulness influence the individual's attitude toward technology use, which then leads to the decision to accept or reject the technology (Davis et al., 1989). According to research presented by Davis et al. (1989), perceived usefulness outweighs perceptions of ease of use when it comes to accepting or rejecting technology. TAM2, an extension of TAM, adds social influence as a factor influencing user acceptance of technology (Venkatesh & Davis, 2000). UTAUT extends TAM and TAM2 to consider facilitating conditions and intention as factors influencing usage behavior (Venkatesh et al., 2003). Finally, within UTAUT, "significant moderating influences of experience, voluntariness, gender, and age were confirmed as integral features" (Venkatesh et al., 2003, p. 467).

UTAUT2 is an extension of UTAUT that seeks to explain technology acceptance and use within "a consumer context" (Venkatesh et al., 2012). This extension, which includes "hedonic

motivation, price value, and habit," enabled the model to better explain behavioral intention and use within a consumer context (Venkatesh et al., 2012). UTAUT2 has been used by Hu et al. (2020) to explore faculty acceptance of mobile technology; Hu et al. (2020) found that habit and hedonic motivation both affected intention and use, along with certain factors within the original UTAUT model. While this study effectively utilized UTAUT2, the majority of studies focused on higher education learning environments seem to employ UTAUT or a combination of UTAUT and TAM to better understand behavioral intention and acceptance of educational technology (Altanopoulou & Tselios, 2017; Buabeng-Andoh & Baah, 2020; Chaka & Govender, 2017; Chavoshi & Hamidi, 2019; Chen & Hwang, 2019; Khechine & Lakhal, 2018; Liebenberg et al., 2018; Olaniran et al., 2017; Ouedraogo, 2017; Padhi, 2018; Sidik & Syafar, 2020; Yoo & Roh, 2019).

According to Venkatesh et al. (2003), UTAUT equips researchers with the necessary "explanatory power of the individual models" and therefore serves as a useful framework for studying the acceptance and use of various technologies in professional work environments (p. 467). TAM has been used to frame various studies on the topic of educational technology, including a study by Olaniran et al. (2017) on pre-service teacher use of digital learning materials. Olaniran et al. (2017) discovered that acceptance and use of these technologies were influenced by the factors of perceived ease of use and perceived usefulness, aligning with TAM. Other studies have utilized UTAUT, the more recent extension of TAM, to explore student and instructor use of digital learning tools in higher education (Altanopoulou & Tselios, 2017; Chaka & Govender, 2017; Chen & Hwang, 2019; Fagan, 2019; Garone et al., 2019; Kaliisa et al., 2019; Khechine & Lakhal, 2018; Liebenberg et al., 2018; Mohammadyari & Singh, 2015; Morris & Lambe, 2017; Ouedraogo, 2017; Sidik & Syafar, 2020; Thomas et al., 2020; Yakubu & Dasuki,

2019; Yoo & Roh, 2019). For example, Morris and Lambe (2017) found that perceived usability and ease of use were factors in student adoption of e-books, and a study by Yoo and Roh (2019) reveals that "performance expectancy is the primary factor in the digital textbook adoption," while the factors of facilitating conditions and effort expectancy matter more to users with technology experience (p. 136). Mohammadyari and Singh (2015) call for more research on the role of digital literacy as a potential predictor of technology acceptance and use.

Chaka and Govender (2017), Sidik and Syafar (2020), and Thomas et al. (2020) all explored student intention to use mobile learning technology in higher education and found that UTAUT helped to predict behavioral intention. Other studies utilized UTAUT to explore the behavioral intention of students toward the use of various educational technologies, including online courses, wiki technology, webinar technology, e-books, specialized LMS (SLMS), and Canvas LMS (Altanopoulou & Tselios, 2017; Chen & Hwang, 2019; Khechine & Lakhal, 2018; Liebenberg et al., 2018; Yakubu & Dasuki, 2019). Finally, Garone et al. (2019), Ouedraogo (2017), and Padhi (2018) apply UTAUT to faculty acceptance of digital learning tools and materials, highlighting performance expectancy (Ouedraogo, 2017; Padhi, 2018) and social influence and ease of use (Garone et al., 2019) as factors influencing acceptance and use of these tools.

Studies by Aliaño et al. (2019), Buabeng-Andoh and Baah (2020), Chavoshi and Hamidi (2019), Radovan and Kristl (2017), and Yang et al. (2019) have sought to better understand student and faculty acceptance of digital learning materials and technology by integrating UTAUT with other theoretical models or adding to UTAUT. Aliaño et al. (2019) explored student acceptance of mobile technology for learning and found that while UTAUT proved to be useful in explaining student acceptance, the factor of effort expectancy should be reconsidered

within the context of mobile learning because students "do not attribute it to the use of mobile devices" (p. 11). Yang et al. (2019) integrated UTAUT with "Connected Classroom Climate (CCC)" to explore student acceptance of cloud classroom technology and found that CCC, along with effort expectancy and social influence contributed to student acceptance of this tool (p. 1258). Radovan and Kristl (2017) explored instructor acceptance of learning management systems in online learning environments by integrating UTAUT with the "community of inquiry (CoI) framework" and found that social influence and perceived usefulness functioned as influential factors of instructor acceptance of the LMS (p. 11). Buabeng-Andoh and Baah (2020) integrated UTAUT with TAM to study the acceptance of an LMS by pre-service teachers in order to "evaluate the efficacy of the integrated model of TAM and UTAUT" (p. 455). In a study exploring student acceptance of mobile learning in Iran, Chavoshi and Hamidi (2019) similarly integrated these two models (TAM and UTAUT) but this integration was to account for the "cultural and social conditions of Iran" (p. 140). These studies demonstrate the versatility and usefulness of UTAUT to explain technology acceptance and behavioral intent of students and teachers in a variety of contexts.

This transcendental phenomenological study also utilized UTAUT in order to better understand the various predictors of higher education online instructor use of digital learning materials amidst a growing trend toward the dependence upon these tools despite their perceived negative impact on student learning (Cavanaugh et al., 2016; Singer Trakhman et al., 2019). Specifically, the factors of performance expectancy, effort expectancy, facilitating conditions, and social influence were considered within an online-only learning environment (Venkatesh et al., 2003). Although UTAUT has been used to predict technology acceptance and use in various professional work environments, in higher education outside the United States, and extensively

for the study of student intent and use of technology, this study presents its "explanatory power" in the field of higher education online learning (Venkatesh et al., 2003, p. 467). Although students are often the focus of studies regarding the use of digital learning materials and their effectiveness, instructors are often responsible for choosing and even distributing the digital learning materials used by students (Cavanaugh et al., 2016; Gay, 2016; Perry & Steck, 2019); UTAUT was used to further understand online instructor decision-making regarding these tools and the influence of the listed determinants within UTAUT in this decision-making process.

Related Literature

As the field of education continues to advance in the development of digital tools for learning, much research has been done to understand the impact of the digital medium on deep reading, critical thinking, and ultimately learning. Research by Cavanaugh et al. (2016) and Singer and Alexander (2017a) reveals a disconnect between digital learning materials and learner comprehension. College students (though not necessarily online students) have been the focus of much research regarding this disconnect in order to better understand the influence of digital learning materials on student learning and the advantage that print still seems to present for students (Cavanaugh et al., 2016; Kong et al., 2018; Singer & Alexander, 2017a; Singer Trakhman et al., 2019). Research exploring student calibration, choice of medium, and digital literacy has revealed mixed attitudes toward digital learning materials (Singer & Alexander, 2017a; Yuan et al., 2018). Much less research exists on instructor perspectives regarding the impact of digital learning materials on student learning, as the focus is mainly on decision-making factors and ways to equip instructors with digital literacy to maximize efficient (but not necessarily effective) use of these materials (Garone et al., 2019; Guri-Rosenblit, 2018; Hu et al., 2020; Moro, 2018). While some focus is placed on online instructors within the context of online

learning environments, such research tends to focus on the more general experiences of online

instructors (Bonk, 2020; Hansen & Gray, 2018; Holzweiss et al., 2019; McGee et al., 2017). The

following review further illustrates the impact of the digital medium on learning, as well as the

growing dependence upon digital learning materials despite this impact. To better understand the

central role that instructors play in influencing student opinion and use of digital learning

materials (Moro, 2018), as well as the responsibility of instructors to be informed and trained in

the effective use of these tools (Cavanaugh et al., 2016; Gay, 2016; Guri-Rosenblit, 2018; Moro,

2018; Schneider, 2015; Singer Trakhman et al., 2019), requires a deeper understanding of

instructor experiences with the implementation of digital learning materials.

Impact of Digital Medium on Learning

According to research by Cavanaugh et al. (2016) and Carr (2011), extensive use of

digital technology can impact the reading and thinking habits of the user. Both Kong et al. (2018)

and Hou et al. (2017) extend this research by examining the impact of digital versus print

medium on student learning in higher education. The study by Kong et al. (2018) concludes that

print medium posed an advantage for student reading comprehension and although Hou et al.

(2017) agree, they stated that along with print text, digital text that allows the user to create a

cognitive map of the content also benefits reading comprehension. A meta-analysis by Clinton

(2019) further highlights the differences in digital and printed text relating to their impact on

student learning, specifically concerning comprehension and calibration. Clinton's (2019) meta-

analysis concludes that students performed better when utilizing print rather than digital text.

However, Singer and Alexander (2017b) explain that while there are differences between digital

and print mediums regarding impact, there is a place for both in education. More research is

needed to better determine the proper place for digital and print mediums within education (Singer & Alexander, 2017b).

Singer Trakhman et al. (2019) and Singer and Alexander (2017a) explore these impacts of digital and print mediums from the perspective of the student, looking specifically at differences in student calibration and comprehension for digital and print texts. A study by Singer and Alexander (2017a) illustrates the presence of screen inferiority (inaccurate learner assessment of digital text comprehension) and considered scrolling, navigation issues, and multitasking as potential factors contributing to screen inferiority. There are benefits and disadvantages to both print and digital mediums, but because of the rapid development of educational technology and increased dependence upon digital learning tools in educational environments, the digital medium, including both its benefits and drawbacks, demands further exploration.

Benefits of Digital Learning Tools

The benefits of digital learning materials at the institutional and instructor levels include low-cost options and variety (Moro, 2018; Reid et al., 2017; Yoo & Roh, 2019). Whereas costs of printed textbooks are exceptionally high, higher education institutions are now able to offer students lower-cost options in the form of digital learning materials (Moro, 2018; Reid et al., 2017). As technology continues to develop at a rapid rate, traditional textbook publishers are beginning to offer more digital options, giving educators more variety in teaching tools (Moro, 2018; Ross et al., 2017). Innovation is one motivation for the use of digital learning tools (McKnight et al., 2016), and e-books in particular are not only a nice option for students but a necessary one, as the field of education pursues technological innovation (Yoo & Roh, 2019). As long as instructors achieve high levels of digital literacy, digital learning materials can be

developed collaboratively and ultimately ease the workload many higher education professors

are used to (Guri-Rosenblit, 2018). According to Chatterjee and Bhattacharjee (2020), digital

learning technology like Artificial Intelligence (AI) can also be used to help institutions manage

a workload that has increased due to the "massification of higher education" (p. 3443). Finally,

an emphasis is placed on the importance of institutions offering students choice and opportunity

for greater responsibility in learning, which digital learning tools provide (McKnight et al.,

2016). For institutions wanting to keep up with the innovative trends of educational technology,

and instructors pursuing new ways to teach students, digital learning materials seem to be a

major part of the answer.

 Digital learning materials offer plenty of benefits for the learner as well. These benefits

include learner engagement, ease of use, variety, availability, and usefulness (Moro, 2018;

O'Bannon et al., 2017; Yoo & Roh, 2019). These features help place the learner at the center of

the learning environment and provide an opportunity for the learner to assume greater

responsibility for and control over their education (McKnight et al., 2016). In a study by

O'Bannon et al. (2017), students noted stronger motivation to learn, increased excitement for

learning, and increased interest as benefits of digital learning materials. Bagdasarov et al. (2017)

explain that mobility and usability are great advantages for the learner, and also listed

collaborative learning opportunities and "increased information sharing" as potential benefits of

digital learning materials (p. 55). A study by Stoten (2019) suggests that students see the search

function of digital learning materials as a benefit, along with the autonomy provided by e-book

platforms, empowering students to utilize digital learning materials when useful. Finally, some

online instructors may use "instructor-provided infographics," which are tools that summarize

"key learning objectives and content…in graphical form" (Gallagher et al., 2017, p. 129). These

tools have been shown to aid students in "retaining, clarifying, and understanding learning graphics" (Gallagher et al., 2017, p. 129). These examples of usefulness align with the principles of UTAUT (Venkatesh et al., 2003). This type of learner engagement, which encourages more direct, hands-on interaction with the course material is commonly found throughout the research on students and educational technology (O'Bannon et al., 2017).

Negative Impact of Digital Learning Materials

However, as digital learning materials have gained in popularity, recent research has begun to explore the differences between print and digital texts to determine which medium is most effective for learning. Cavanaugh et al. (2016) explored the impact of the digital medium on learning and found that extensive exposure to digital material can lead to the weakening of deep reading and critical thinking skills while strengthening skimming and multitasking skills. In fact, printed text offers many benefits for reading comprehension (Kong et al., 2018; Singer & Alexander, 2017a). Delgado et al. (2018) state that "digital environments may not always be best suited to fostering deep comprehension and learning" (p. 33). One reason for this could be the concept of cognitive map construction; digital texts which allow users to construct a cognitive map of the text (mimicking printed text) are less likely to struggle with reading comprehension (Hou et al., 2017). Singer and Alexander (2017a) also explore the negative effects on reading comprehension when "navigational issues" with the digital text are involved (p. 167). When students are prompted to engage in multitasking while accessing digital texts, this can lead to increased superficial learning, which is even more of an issue for digital native students whose engagement in digital media is constant (Shtepura, 2018). As Sweller (2020) proposes through a recent study on cognitive load theory, the digital medium can cause an increase in cognitive load, which can hinder learning (Sweller, 2020). Additionally, Holzweiss et al. (2019) explain that the

compressed nature of online instruction, although perhaps not directly to the use of digital learning materials, was shown to contribute to a loss of "good academic practices such as reading in depth and writing drafts of papers" among students (p. 299).

Students have also acknowledged certain drawbacks to digital learning materials, including eye strain, the distractibility of digital learning tools, and even cost (Alsadoon, 2020). Additionally, Fredskild and Frederiksen (2020) explain that students often prefer printed text over digitally formatted texts for learning due to the overload of information and loss of structure experienced with digital learning materials. A study by Morris and Lambe (2017) reveals a tendency for students to view digital learning materials only as a complementary learning resource rather than a replacement for printed text and suggests issues with usability as well as a dependence upon instructors for support as drawbacks to using digital learning materials. Ultimately, although students may be more used to digital learning materials today than they were in the past, recent research by Anderson and Cuttler (2020), Fredskild and Frederiksen (2020), and Yoo and Roh (2019) indicates that students tend to prefer printed texts over digital ones in certain cases. This has prompted Alsadoon (2020) and Singer Trakhman et al. (2019) to suggest a focus on enhancing the features of digital learning materials to make them more effective and ultimately worthwhile for students.

Features of Digital Learning Materials

As the research on the impact of the medium on student learning is continuing to expand, the features of digital learning materials have also come into focus. Because digital learning tools are here to stay and are continuing to develop, the question is no longer whether or not digital learning materials should be used at all, but how these digital tools can be used to foster effective learning. Although many digital learning tools come with several bells and whistles, some

specific features are geared toward enhancing learning (Sun et al., 2018) and have been the

subject of limited research. For example, a study by Sun et al. (2018) reveals the benefits of an

interactive textbook called Learnsmart, which contains an "adaptive learning system to evaluate

students' knowledge levels" (p. 324). This technology then adjusts the content to foster effective

learning based on what the student does or does not understand (Sun et al., 2018). This type of

interactivity also works to engage the learner and boost learner participation (Sun et al., 2018).

Learner interactivity is also emphasized through various features of digital learning materials

(Bagdasarov et al., 2017). Tablets used to access digital learning materials provide for more

mobile learning and ease of use and may even enhance the development of various

communication skills (Bagdasarov et al., 2017).

Student acceptance and use of mobile learning technology within higher education has

been the subject of much international study (Aliaño et al., 2019; Chaka & Govender, 2017;

Chavoshi & Hamidi, 2019; Kaliisa et al., 2019; Sidik & Syafar, 2020). Chavoshi and Hamidi

(2019) emphasize the various features of mobile learning technology, including versatility,

accessibility, and ultimately the promotion of equal access in developing countries among

disadvantaged students, females with religious restrictions, and students with disabilities. Certain

studies have demonstrated optimism among students toward mobile learning and positive

acceptance and use of mobile learning technologies in Spain (Aliaño et al., 2019), Nigeria

(Chaka & Govender, 2017), and Iran (Chavoshi & Hamidi, 2019). This optimism could be due to

the suggestion by Chavoshi and Hamidi (2019) that "the mobility feature that m-learning brings

with it will improve learning in less developed areas" (p. 159). Kaliisa et al. (2019) emphasized a

difference between developed and developing countries regarding the acceptance and use of

mobile learning, pointing to the influence of "socio-economic differences" in Uganda and

Australia, the subjects of the study (p. 558). However, even with limitations to infrastructure and digital technology, Uganda students still viewed mobile learning technologies favorably. Finally, a study by Sidik and Syafar (2020) exploring behavioral intention toward mobile learning technology in Indonesia reveals that students rely on experience with mobile technology and require additional training in order to effectively utilize mobile learning technology.

However, although digital learning materials come with several features that have been shown to enhance learning, they also include other features that can hinder learning. Scrolling, for example, could hinder learning comprehension if frequently required by digital texts (Delgado et al., 2018; Singer & Alexander, 2017a). Specifically, scrolling may increase the cognitive load of the learner which leads to less efficient learning comprehension (Delgado et al., 2018; Sweller, 1988, 2020). Hou et al. (2017) explain that an inability of readers to construct a cognitive map of the digital text due to a disrupted layout led to less reading comprehension, less immersion in the text, and added fatigue for the reader. Additionally, hyperlinks embedded in digital learning materials could contribute to non-linear navigation of the text which proved problematic for learners with low domain knowledge (Burin et al., 2015). If these issues are shown to increase cognitive load and strain the cognitive processing for the learner, it follows according to cognitive load theory that reading comprehension might suffer (Sweller, 1988, 2020). Again, the option to disregard digital learning materials altogether in favor of printed texts may seem like a possible conclusion to the research, but the digital medium is not going anywhere; online student and instructor perspectives on digital learning materials are important to understanding effective uses for these digital tools moving forward.

Student Perspectives: Calibration and Choice

Much of the research on digital learning materials has focused on learner perspectives. Preference, calibration, trends, and digital literacy have been the focus of several recent studies, and researchers have even begun to look deeper into the cognitive processes involved when accessing digital texts to understand the impact of the medium on the learner (Singer & Alexander, 2017a). However, even though the reach of digital learning materials is extending throughout various learning environments, trends in usage have shown that students still lean toward printed text in certain cases (Yoo & Roh, 2019; Yuan et al., 2018). Research explaining how the digital medium can hinder learning comprehension also emphasizes the value of printed text for learning (Cavanaugh et al., 2016; Delgado et al., 2018). However, as digital learning materials continue to take hold in education, research regarding student perspectives and experiences with the digital medium matters.

Calibration, which is the accuracy with which students assess their performance, is explored by Singer Trakhman et al. (2019) in the context of reading comprehension using digital versus printed text. Research by Singer and Alexander (2017a) as well as Singer Trakhman et al. (2019) shows that students tend to inaccurately predict higher reading comprehension performance with digital text than with printed text. One suggested reason for this miscalibration could be due in part to the quickened speed at which students read digital texts (Singer Trakhman et al., 2019), and ease of use could also cause students to assume they are performing better than they actually are (Singer & Alexander, 2017a). Research by Reid et al. (2017) suggests that "embedded cognitive and metacognitive strategies in digital text" can improve student calibration accuracy (p. 43). Although students do not tend to accurately predict their level of performance with digital text, and incorrectly assess their performance as better than it actually is, students do tend to utilize digital learning materials in certain situations (Ross et al., 2017;

Sun et al., 2018). As UTAUT proposes, performance expectancy serves as a major motivation for technology acceptance (Venkatesh et al., 2003).

Student preference regarding digital learning materials depends on a variety of factors; Yoo and Roh (2019) state that students prefer digital texts when the reading is for leisure but gravitate toward printed text for rigorous reading tasks. A study by Gilbert and Fister (2015) similarly reveals that students express appreciation for the ease of use of digital learning materials but gravitate toward printed text for research-based tasks. When exploring preference based on the subject matter, Yuan et al. (2018) found that students preferred printed text much more frequently than digital text. Although students may express a preference for digital text, they often tend to utilize printed text (Peterson & Alexander, 2020) and perform stronger in the area of reading comprehension with printed text (Singer & Alexander, 2017a). A study by Bringula (2017) suggests that students may choose to utilize both print and digital learning materials, depending on the task at hand and the perceived usefulness of the resource. Bringula (2017) proposes that students should be encouraged to view digital learning materials as a complementary resource, rather than a replacement for printed texts.

Research by Bagdasarov et al. (2017) illustrates a positive relationship between students and tablet technology in particular, with students reporting learning benefits through the use of digital learning materials. Fagan (2019) reported that "students perceived iPads to be useful and enjoyable tools for accomplishing educational tasks and improving learning outcomes" (p. 105). Similarly, a study by O'Bannon et al. (2017) reveals high levels of excitement, motivation, and engagement with the use of an interactive textbook. A study by Liebenberg et al. (2018) explored student acceptance and use of e-books in South Africa and found that the UTAUT factors of performance expectancy, effort expectancy, and facilitating conditions all contributed to

students' behavioral intention to use e-books. However, Liebenberg et al. (2018) also emphasize the need for training in effective use of digital learning materials like e-books.

Student choice regarding online courses and acceptance of learning management systems (LMS) has been the focus of studies by Yakubu and Dasuki (2019) and Chen and Hwang (2019). Both studies found that effort expectancy and performance expectancy, both factors of UTAUT, strongly influenced behavioral intention to use e-learning technology (Yakubu & Dasuki, 2019) and enroll in online courses (Chen & Hwang, 2019). Additionally, both studies found that social influence did not strongly influence behavioral intention to utilize these technologies (Chen & Hwang, 2019; Yakubu & Dasuki, 2019). Chen and Hwang (2019) state that "students with a more self-regulated learning process may…have greater confidence to deal with the new technology involved in online courses" and that students may be more likely to choose online courses if the LMS is user-friendly (p. 91). Yakubu and Dasuki (2019) concur with this conclusion based on their study of student acceptance of Canvas, an LMS used to facilitate e-learning, and emphasize the importance of both school administration and instructors in providing user-friendly e-learning technology.

Bryan et al. (2018) acknowledge the important role of educational technologies as a means to promote student engagement and interaction while also explaining that "the role technology plays in engaging students in online courses has received less attention" when studying student engagement (p. 256). Hannigan and Gonzalez (2019) demonstrate that students emphasize the role of digital learning tools in creating student engagement with each other and with instructors. Experience with digital and printed materials has also been shown to be a factor in student decision-making regarding learning materials. A study by Anderson and Cuttler (2020) indicates that students with experience using open education resources in digital format

are more likely to utilize that format, while students used to print text tend to prefer that format. Although in general, students may habitually lean toward printed text due to their experience with the medium, as Kong et al. (2018) observe, "the age of digital reading is inevitably coming" (p. 148). Chapman et al. (2016) acknowledge the increasing dependence upon digital learning materials and suggest that the experience and time students gain with these tools will work to increase their comfort level with them. Alsadoon (2020) and Chapman et al. (2016) acknowledge this trend as well and suggest a need for the consideration of ways to enhance digital learning materials to make them more appealing to students. Students and instructors alike must continue to adjust to keep up with the growing reach of digital learning materials.

Digital Literacy in Students

One aspect of learning with digital learning materials is digital literacy. Digital literacy is explained as a complex skillset related to various aspects of digital technology (Mohammadyari & Singh, 2015). These skills are "socio-emotional, cognitive, and technical" and are needed to truly maximize all digital learning tools have to offer (Mohammadyari & Singh, 2015, p. 14). Within the research, digital literacy is viewed as a crucial aspect of student learning with digital learning materials, and more research on the topic of student digital literacy is called for (Mohammadyari & Singh, 2015). Although research on the topic of the development of digital literacy in students is lacking, research does reveal that many in education take for granted the digital literacy of their students (Ross et al., 2017; Ugúr, 2020). Both Ross et al. (2017) and Ugúr (2020) state that many educators view their digital native students as possessing high levels of digital literacy because students either profess to be digitally literate, as the name digital native implies, or they have extensive experience with technology outside the learning environment.

Some students who identify as digital natives do not possess appropriate skills for utilizing digital learning materials, which highlights a need for digital literacy to be taught or emphasized within the learning environment (Ross et al., 2017). Some educators assume digital native students have the digital literacy necessary and move forward with the use of educational technology (Ugúr, 2020). Educators are cautioned against this assumption and are encouraged to take the time to assess their learners before deciding to utilize digital course materials (Ugúr, 2020). Familiarity and experience with digital learning tools could contribute to the student's perception of the ease of use of digital learning materials, as a study by Ward and Edmondson (2019) suggests. Finally, a student's self-efficacy regarding the use of digital learning materials, as well as "acceptable screen size", were shown in a study by Liaw and Huang (2016) to positively influence the effective use of digital learning materials by students (p. 625).

Instructor Perspectives and Decision-Making Factors

Although extensive research has been done on perspectives and experiences of students regarding digital learning materials, fewer studies exist which look at the experiences of instructors with implementing these materials (Garone et al., 2019; McKnight et al., 2016; Moro, 2018). In a study of faculty acceptance of mobile learning technology in China, Hu et al. (2020) point out that "there is still a paucity of research from a teaching perspective across disciplines within higher education" (p. 4615). Online instructors specifically are rarely separately considered, even though their options for learning materials and strategies are potentially more limited (Radovan & Kristl, 2017). Studies that have explored instructor experiences seem to focus on common decision-making factors, such as cost, ease of use, and availability (Moro, 2018), as well as levels of digital literacy in instructors (Schneider, 2015). Buabeng-Andoh and Baah (2020) studied preservice teachers' behavioral intention and use of an LMS in Ghana; the

factors of social influence and attitude were found to influence preservice teacher decision-making regarding the use of an LMS. Buabeng-Andoh and Baah (2020) emphasize the role of the institutional leaders in providing awareness, training, and support for the effective use of an LMS moving forward. Ouedraogo (2017) similarly explored faculty acceptance and use of "information and communication technology (ICT)" and found that performance expectancy influenced acceptance and use of ICT (p. 101). Ouedraogo (2017) also points to institutional leaders to provide the necessary support for instructors to effectively utilize digital learning tools. The conveniences of digital learning materials, as well as the features designed to help students learn, are important aspects for instructors to consider when designing and providing instruction. However, the potential negative impact of the digital medium on student learning should be considered by instructors as well (Cavanaugh et al., 2016; Kong et al., 2018; Singer & Alexander, 2017a). As dependence upon digital learning materials continues to grow, more consideration of instructor experiences with the implementation of these materials is needed to better understand this trend.

When considering the use of digital learning materials, cost is one of the most common and significant factors involved in the decision-making process (Moro, 2018). Excessive textbook pricing is just one reason instructors may opt for digital learning materials (Moro, 2018), although other factors like ease of use and accessibility are also relevant, at least for the student (Bagdasarov et al., 2017), though perhaps less relevant for the instructor (Guri-Rosenblit, 2018). Various measures have been taken by educators to address the issue of textbook prices; one such measure is the adoption of open educational resources (Hilton, 2016; Ozdemir & Hendricks, 2017; Padhi, 2018; Salaz et al., 2018). The major benefits of open educational resources are that they are free for the user, are often available in various formats (including

online), and can be used in place of a traditional, costly, textbook (Ozdemir & Hendricks, 2017; Padhi, 2018). Studies by Salaz et al. (2018) and Ozdemir and Hendricks (2017) look specifically at instructor experiences utilizing open educational resources, and the results of these studies suggest that the free, online availability of these resources made them more accessible, and therefore, useful. Digital availability also provides the opportunity for online instructors to provide direct access through a learning management system (Ozdemir & Hendricks, 2017). A study by Padhi (2018) explores instructor use of open education resources in India and similarly found that instructors favorably view and accept these digital learning materials due to their ease of use and performance expectancy. However, Padhi (2018) acknowledges a lack of necessary training, knowledge, and resources to effectively utilize these tools, as well as a lack of clarity regarding institutional support for the use of these materials. Finally, Hilton (2016) seems to emphasize the option to access open educational resources in digital format as the greatest advantage of these tools, leading both instructors and students to view them positively. However, Hilton (2016) also suggests that the positive view of open educational resources does not necessarily mean that the digital nature of these resources contributes to greater learning, and Ozdemir and Hendricks (2017) conclude that faculty are most motivated by cost savings to utilize open educational resources.

Another driving factor for instructor decision-making seems to be the interpretation of students as digital natives, which does not necessarily mean students are as comfortable with digital course materials as instructors believe them to be (Ross et al., 2017; Ugúr, 2020). However, regardless of what instructors (or even students) are comfortable with or equipped for, there are plenty of digital options for course materials, and the implication is that instructors should utilize these tools because they are there and they are beneficial for instructors and

students (Chapman et al., 2016; Guri-Rosenblit, 2018; Moro, 2018). The creation of digital learning materials can save instructors time, and the implementation of digital learning tools can increase student engagement (Hannigan & Gonzalez, 2019; Moro, 2018). Digital learning materials are just one aspect of a broader category of educational technology, which can improve access and communication as well as save teachers time by streamlining time-consuming tasks (McKnight et al., 2016).

Instructor Responsibility and Digital Literacy

Although the majority of research on the topic of digital learning materials focuses on student rather than instructor perspectives, Moro (2018), Chapman et al. (2016), Ugúr (2020), Cavanaugh et al. (2016), Gay (2016), and Schneider (2015) place the responsibility for effective use of these tools on the instructors. Cavanaugh et al. (2016) prompt instructors to consider their role in selecting appropriate digital learning materials:

> But in the classroom we must decide not only *what* we want our students to know, but *how* we want our students to know. And, this will require us to take an unsparing look at both conventional and emerging pedagogic and curricula practices. (385)

Similarly, in a study that explores the e-readiness of online instructors, Gay (2016) recognizes the role of instructors in "the success or failure of electronic learning systems" (p. 199). Gay (2016) explains that expertise and proper use of digital learning tools will contribute to a successful online learning environment. Instructors not only serve as support systems for student users of these digital tools (Morris & Lambe, 2017), but they can influence student opinion and adoption of these tools as well (Chapman et al., 2016; Khechine & Lakhal, 2018; Moro, 2018). In fact, instructors who increasingly choose digital learning materials over printed text are

contributing to the growth of digital textbooks as well as increased student preferences for digital course materials (Moro, 2018).

Altanopoulou and Tselios (2017) explored student acceptance of wiki technology, a collaborative digital learning tool, and concluded that student perceptions of this tool may be positively influenced through instructor promotion and use of wiki technology. Similarly, Khechine and Lakhal (2018) explored student acceptance of webinar technology for learning and highlight the role of instructors in influencing student opinion and use of this learning tool. However, Khechine and Lakhal (2018) propose that voluntary use of learning technologies should be emphasized by instructors, stating "teachers can emphasize the usefulness of technology, but they have to let the students have a sense of freedom" (p. 88). According to Chapman et al. (2016), regarding e-books, "many of the areas that students feel are important can readily be influenced and improved by faculty" (p. 11). What these studies illustrate is the important role instructors play in influencing student opinion and use of digital learning materials and technologies and the responsibility of instructors to make informed decisions regarding these learning materials.

Some teachers, however, are hesitant to rely too heavily on digital learning materials because, as Morris and Lambe (2017) state, "the simple addition of technology to educational environments does not necessarily improve learning" (p. 39). Ultimately, if Moro's (2018) claim that instructors have the power to boost student preference for digital learning tools is accurate, then students are going to be driven toward or away from using digital learning materials based at least in part on the decision-making processes of their instructors. Therefore, more insight is needed into the experiences of online instructors with the implementation of digital learning materials.

One major contributing factor to instructor reluctance to digital learning materials the need for more digital literacy among instructors (Guri-Rosenblit, 2018; Schneider, 2015). Although various digital learning tools exist and are continuing to expand, instructors do not necessarily have the knowledge to take full advantage of these tools (Guri-Rosenblit, 2018). Students must know how to take full advantage of all the features available to them through digital learning materials to learn effectively (Moro, 2018). This means that instructors must first have this knowledge; the problem is they do not always have it (Guri-Rosenblit, 2018; Schneider, 2015). According to Hannigan and Gonzalez (2019), a lack of digital literacy on the part of online instructors can also cause them to lose credibility among their students. Therefore, digital literacy among instructors should be emphasized, and training and other supports should be provided for instructors to effectively utilize digital learning materials (Guri-Rosenblit, 2018; McKnight et al., 2016; Schneider, 2015).

Chapman et al. (2016) acknowledge the role of instructors in student adoption of digital learning materials and emphasize the need for digital literacy in instructors to effectively promote the use of these tools. Sanga (2018) similarly found that instructors utilizing digital learning materials need the training to develop necessary digital literacy to effectively implement these digital learning tools. Dailey-Hebert (2018) emphasizes the need for instructor "competency development," citing the increase in responsibilities for online instructors who must not only stay up to date on new digital learning tools but are also in charge of selecting the best tools for their students (para. 3). Professional development is also an important part of fostering digital literacy in instructors (McKnight et al., 2016; Perry & Steck, 2019). Yamaç and Öztürk (2019) similarly emphasize the need for focused training on the effective use of digital learning technologies at the pre-service level, acknowledging the growing trend of online

learning and dependence upon digital learning materials. Ultimately, instructors need digital literacy as much as students do to thrive in an increasingly digital world (Guri-Rosenblit, 2018); this fact applies additionally to online instructors functioning in online learning environments (Perry & Steck, 2019).

Consideration for Online Instructors

Although experiences of higher education instructors on digital learning materials have been explored, research on online instructors within the context of online learning environments is more limited. Online learning environments rely more heavily on digital learning tools, so a better understanding of instructor experiences may shed light on this reliance. One study by Radovan and Kristl (2017) does consider online instructor use of digital learning tools; Radovan and Kristl (2017) emphasize the potential limits that come with an online learning environment, explaining that "the formation of the learning process largely depends on the characteristics of the LMS tools" (p. 11). Robinson et al. (2017) also consider the limitations within online learning environments by studying instructor perspectives of collaborative learning. Robinson et al. (2017) state that "in the online classroom, additional factors must be considered in order to develop successful online collaborative learning" (p. 29). These studies by Robinson et al. (2017) and Radovan and Kristl (2017) illustrate some of the differences in research considerations for online learning environments when compared to face-to-face or even synchronous learning environments.

A study by Perry and Steck (2019) compares faculty perspectives regarding online instruction from surveys conducted in 2002 and 2016. Educational technology use was considered in this study, which concluded that faculty "strive to provide quality ODL instruction" but have grown less concerned with the factors involved in delivering this

instruction (Perry & Steck, 2019, para. 43). Suggested reasoning for this trend includes more knowledge and training regarding the use of digital learning tools and technological advancement (Perry & Steck, 2019). However, Perry and Steck (2019) state that faculty should not rely on these advancements because "responsibility for instruction quality and control still rest with course faculty" (para. 43). Therefore, online instructors may need more professional development opportunities to further enable control over the use of these digital learning tools (Perry & Steck, 2019). A study by Gay (2016) examined the e-readiness of online instructors "before, during, and after course delivery" (p. 199). Gay (2016) differentiates between technological expertise and "lifestyle readiness and pedagogical readiness" and found that readiness in all three categories is needed for effective online instruction (p. 216). The results of this study by Gay (2016) prompt consideration for UTAUT as a means to better understand the factors contributing to online instructor acceptance and use of technology for online learning (Venkatesh et al., 2003).

Most research regarding online instructors seems to focus more generally on the areas of student engagement, creating and sustaining an effective online community and culture, and the need for faculty training regarding educational technology (Berry, 2019; Bolliger & Martin, 2018; Bonk, 2020; Cicco, 2017; Doo et al., 2020; Martin, 2019; Ouyang et al., 2020; Stott, 2016). Bolliger and Martin (2018) explore online instructor and student perceptions of the importance of student engagement and emphasize the importance of engagement between learners, between the learner and course content, and between the learner and the instructor. Martin (2019) also emphasizes the importance of student engagement, labeling it one of the "crucial foundations" for effective online instruction (p. 1). Martin et al. (2019) examined the roles of online instructors by interviewing several "award-winning online faculty members"; this

study found that effective online instructors see student engagement, or mentorship, as part of their role (p. 184). A study by Ouyang et al. (2020) examined the "instructor-student collaborative partnership" in an online learning environment and found that collaboration between students and the instructor was achieved and used to foster learning (p. 183). Finally, Ornelles et al. (2019) propose a framework for better understanding the ways in which online instructors can foster student engagement specifically with adult learners. While Ornelles et al. (2019) highlight the connection between course design and adult learner engagement in online environments, educational technology is not specifically explored.

Cicco (2017) and Berry (2019) list effective student engagement as a sign of a positive online learning culture and place the responsibility for cultivating a positive online learning community and culture on the instructor. Berry (2019) explains that while instructors do attempt to connect with students within the confines of the "classroom," more support may be needed to help online instructors engage students more broadly, therefore creating a more effective community. Aside from the perspectives of online instructors regarding community, Cicco (2017) states that "the pedagogical techniques and strategies selected to deliver online learning modules will also foster or impede student engagement and interaction" (p. 1). While these strategies include selecting appropriate tools to promote a sense of community, Cicco (2017) does not specifically discuss the role of digital course materials in fostering a positive learning culture or community. Bonk (2020) explores the influence of the Covid-19 pandemic on education in both the K-12 and higher education learning environments and ultimately argues for more experimental use of various educational technologies as a way to enhance the online learning culture that so many educators and students have now been forced to engage. Specifically, Bonk (2020) calls for a shift in the mindset of educators from that of an emergency

learning situation to one of "effective and robust teaching" (p. 595). By engaging various digital learning tools available, educators can promote a positive online learning community that promotes "the rich sharing of ideas and perspective taking" (Bonk, 2020, p. 595).

Unfortunately, the use of these digital learning tools will not be completely effective if online instructors do not have the necessary knowledge and training. Doo et al. (2020), Kebritchi et al. (2017), and McGee et al. (2017) all advocate for more online faculty training in the area of online instruction. Doo et al. (2020) look specifically at "massive open online courses (MOOCs)" and instructor perspectives regarding these courses and conclude that due to the potential for MOOC course offerings to greatly expand in the coming years, online instructors with training and professional development will be needed (p. 41). A literature review by Kebritchi et al. (2017) highlights the integration of multimedia and other materials within online learning environments as a content issue; the responsibility to resolve this issue falls to online instructors, who do not always have access to needed training in the development and distribution of digital materials for online learning. Mendez (2019) offers a glimpse into higher education online learning environments from an instructor perspective and suggests more consideration is needed for the increasingly "horizontal relationship" between instructors and students (p. 20). Specifically, Mendez (2019) states that digital learning materials can be implemented and used more effectively when instructors are given "a voice in the decision-making process related to the adoption of deeply digital…materials" (p. 21). Ultimately, Mendez (2019) acknowledges the time, support, and training instructors need to effectively utilize digital learning materials.

However, beyond the area of digital learning materials, Kebritchi et al. (2017) call for more professional development opportunities for online instructors to resolve the instructor,

learner, and content issues that come with teaching online. McGee et al. (2017) also emphasize the need for professional development opportunities for online instructors, stating that although these instructors are experts in their field, they are not necessarily experts at teaching in online learning environments. McGee et al. (2017) also point out that while institutions may provide support and training to further promote instructor growth within a particular field, this same effort is needed from institutions to provide sustained training and professional development in online teaching practices. While this training should include consideration for the design and implementation of digital learning tools, McGee et al. (2017) explain that such training should consider all the needs of online instructors.

Online instructor experiences have been more generally considered, without a specific focus on the use of digital learning materials (Bonk, 2020; Ghazi-Saidi et al., 2020; Holzweiss et al., 2019; Perry & Steck, 2019). For example, Bonk (2020) and Ghazi-Saidi et al. (2020) explore online instructor experiences related to the Covid-19 pandemic and conclude that training with online instruction is a necessary element moving forward. Bonk (2020) explained that while some online instructors embraced the opportunities brought forth by a transition to remote learning, others continued in "survival mode" (p. 589). The study by Ghazi-Saidi et al. (2020) revealed that while students and instructors alike demonstrated resilience amidst the transition to remote learning, more preparation and training for online instruction is needed.

Holzweiss et al. (2019) conducted a case study in order to understand student and instructor perspectives of compressed online courses. The study showed that due to the compressed nature of the course, instructors "reduced the quality of their feedback and became overwhelmed with the workload" (Holzweiss et al., 2019, p. 299). Other negative impacts of a compressed online course on online instructors include lower evaluation scores and less time and

attention on other academic-related endeavors (Holzweiss et al., 2019). Stott (2016) also points to negative teaching evaluations as a potential negative impact of online teaching on the instructor; Stott (2016) explains that students may underestimate the rigorous nature of online courses and then take out their frustrations on the instructor. Hansen and Gray (2018) also explore online instructor experiences and look specifically at the "work-life balance" of these instructors (p. 1). By imposing certain boundaries and engaging in various strategies for online instruction, Hansen and Gray (2018) argue that online instructors can potentially achieve a balanced life. Effective use of digital learning materials is briefly mentioned as a means to reduce instructor workload by promoting student self-management (Hansen & Gray, 2018).

Robinson et al. (2017) also explore the perspectives of online instructors regarding their experiences teaching online and emphasize the role of collaborative learning. Robinson et al. (2017) do conclude that digital learning tools should be used in tandem with the pedagogical approach selected by the online instructor in order to utilize these tools effectively, although the study looks more generally at collaborative learning strategies and learner support. A study by Olaniran et al. (2017) focuses on the use of digital learning materials by online pre-service teacher trainees for both teaching and learning. Although this study does explore the implementation of digital learning materials for teaching, it is limited to the experiences of pre-service teachers (Olaniran et al., 2017). Ultimately, there appears to be a gap in the research pertaining to a specific focus on the experiences of higher education online instructors with implementing digital learning materials within the context of online learning environments.

Summary

The impact of digital learning materials on student learning has been the focus of much research, and although research by Carr (2011), Cavanaugh et al. (2016), Singer Trakhman et al.

(2019), and Singer and Alexander (2017a) demonstrates a perceived negative influence of the digital medium on student learning, the trend in education today is toward a greater dependence upon these tools. UTAUT has been applied to several studies on the topic of educational technology to better understand the factors influencing student and instructor acceptance of technology (Mohammadyari & Singh, 2015; Morris & Lambe, 2017; Yoo & Roh, 2019). UTAUT, which considers the factors of performance expectancy, effort expectancy, social influence, facilitating conditions, and behavioral intention, offers a lens through which to better understand instructor experiences with the implementation of digital learning materials (Venkatesh et al., 2003). Features, benefits, and drawbacks to digital learning materials all factor into student and instructor attitudes toward the use of these tools (Bagdasarov et al., 2017; Fredskild & Frederiksen, 2020; Guri-Rosenblit, 2018; Morris & Lambe, 2017; O'Bannon et al., 2017; Stoten, 2019; Sun et al., 2018). Student perspectives and experiences with digital learning materials have been the focus of several studies, with attention to calibration, choice, and digital literacy (Mohammadyari & Singh, 2015; Singer & Alexander, 2017a; Singer Trakhman et al., 2019).

Instructor experiences have been the focus of more limited research related to decision-making factors and digital literacy (Moro, 2018; Schneider, 2015). Research exploring the general experiences of online instructors has focused on issues like student engagement, creating a positive online learning community, and the need for instructor training and professional development in the use of digital learning materials (Berry, 2019; Bolliger & Martin, 2018; Cicco, 2017; Doo et al., 2020; Martin, 2019; McGee et al., 2017; Perry & Steck, 2019; Stott, 2016). Other research topics related to the general experiences of online instructors include adjustments during the Covid-19 pandemic, the compressed timeframe for online instruction, and

the impact that delivering online instruction has on the well-being and work-life balance of online instructors (Bonk, 2020; Ghazi-Saidi et al., 2020; Hansen & Gray, 2018; Holzweiss et al., 2019). More research is still needed to explore how online instructors, in particular, select and implement digital learning materials given the perceived negative impact of the digital medium on learning (Cavanaugh et al., 2016; Delgado et al., 2018; Singer Trakhman et al., 2019) and the responsibility of instructors to make informed decisions regarding the use of these tools to teach students (Cavanaugh et al., 2016; Chapman et al., 2016; Guri-Rosenblit, 2018; Moro, 2018; Perry & Steck, 2019; Robinson et al., 2017; Schneider, 2015; Singer Trakhman et al., 2019). A transcendental phenomenological study of higher education online instructor experiences with the implementation of digital learning materials aided in the pursuit of this understanding. UTAUT and its specific determinants of technology use were applied to this study to better understand the phenomenon of digital learning materials in online environments (Venkatesh et al., 2003).

CHAPTER THREE: METHODS

Overview

The purpose of this transcendental phenomenological study was to describe the experiences of online instructors at Christian colleges with the implementation of digital learning materials. This chapter explains the transcendental phenomenological research design chosen for this study, the rationale for that choice, and the procedures involved in the study. Following a description of the sites and participants for the study, data collection methods are outlined and linked to the central research question and sub-questions. Data collection consisted of open-ended interviews, focus groups, and participant journaling. Next, data analysis methods are detailed, including the processes of epoché, phenomenological reduction, imaginative variation, and synthesis (Moustakas, 1994) Finally, researcher efforts to ensure trustworthiness through credibility, dependability, and transferability within the study are explained and ethical considerations are listed. This chapter concludes with a summary of key sections.

Design

A qualitative, transcendental phenomenological research design was chosen for this study. A qualitative research design is used to study individuals within a natural setting to undercover the meanings they "ascribe to a social or human problem" (Creswell & Poth, 2018, p. 8). Stake (2010) describes qualitative research as "interpretive, experience based, situational, and personalistic" (p. 31). Phenomenological research, a specific qualitative approach to research, is a deeply philosophical approach with foundational ties to the work of Edmund Husserl (Creswell & Poth, 2018; Moustakas, 1994). Phenomenological research is seen in education, psychology, sociology, health care, and various other disciplines (Creswell & Poth, 2018; Van Manen, 2016). The purpose of phenomenological research is to uncover the essence of a phenomenon by

describing the shared experiences of individuals who have personally experienced the phenomenon (Moustakas, 1994). Within transcendental phenomenology, researchers, who ultimately anchor their studies, employ the process of epoché, which is where researchers acknowledge and attempt to "set aside…prejudgments, biases, and preconceived ideas" in order to view the phenomenon from a fresh perspective (Moustakas, 1994, p. 85).

A qualitative, transcendental phenomenological research design aligns with this study which attempted to describe the experiences of higher education online instructors with the phenomenon of digital learning materials. Exploring the shared experiences of online instructors for this study added qualitative research to the discussion of educational technology, a topic that has generated much quantitative data and focused more heavily on student, rather than instructor experiences (McKnight et al., 2016; Moustakas, 1994). Specifically, transcendental phenomenology allowed for a better understanding of online instructor use of digital learning materials "in order to develop practices or policies" that could be useful for online education (Creswell & Poth, 2018, p. 79). Some of the participants for this study were heavily involved in the decision-making process surrounding the creation of online courses and the implementation of digital learning materials. The participants for this study were uniquely positioned as co-researchers alongside the researcher to provide details of their shared experiences of the phenomenon; they brought to the study similar training, education, and work experience, as well as the potential for a shared intense interest in the topic of digital learning materials (Moustakas, 1994). Finally, phenomenological research attempts to answer a "what" question regarding the essence of a phenomenon; rather than analyses or explanation, this study also pursued a "what" question through a description of participants' shared experiences (Creswell & Poth, 2018; Moustakas, 1994).

Research Questions

This transcendental phenomenological study utilized the following central research question and four sub-questions:

Central Research Question

What are the experiences of online instructors at Christian colleges with the implementation of digital learning materials?

Sub-Questions

How do online instructors describe ease of use as a factor in implementing digital learning materials?

How do online instructors describe usefulness as a factor in implementing digital learning materials?

How do online instructors describe social influence as a factor in implementing digital learning materials?

In what ways have facilitating conditions influenced online instructors' experiences with the implementation of digital learning materials?

Setting

The setting for this study was three Christian colleges: Dressel Bible College (pseudonym), Crouse University (pseudonym), and Karlson Institute (pseudonym), all located in the Eastern United States. Dressel Bible College offers three avenues for learning: onsite, online, and teaching sites. The focus for this study was on their online program and its instructors. The online program, Dressel Online Learning, or DOL (pseudonym) currently has approximately 80 students enrolled but is expected to see an increase in enrollment in the coming years due to the relocation of the main site and new marketing strategies. DOL is currently undergoing major

changes at the institutional level, including a switch in learning management systems in Fall 2020 from Blackboard to Canvas and the addition of new online faculty members. The online program currently offers 97 courses over fall, spring, and summer semesters, and employs approximately 16 online instructors. Degrees offered online include one-year certificates in Bible and TESL, AAS degrees in Bible and Theology, and a Bachelor's in Religious Education with various concentrations, which include Christian Counseling, Pastoral Ministries, and Organizational Leadership. Under the leadership of the Academic Dean, online instructors are tasked with creating or modifying courses regularly, which includes the evaluation and implementation of digital course materials.

Dressel Bible College was chosen as one of three sites for this study as it provided necessary access to data to conduct interviews and focus groups (Yin, 2017). More importantly, this site provided an environment in which online instructors are currently implementing and utilizing digital learning materials in the creation and modification of online courses. Additionally, as recent institutional changes have impacted the online learning program, including a shift to a new LMS, online instructors are being asked to create, assess, and improve online courses, which includes decision-making regarding digital learning materials. Due to the smaller size of Dressel Bible College, online instructors, rather than program chairs or instructional designers, have been given the freedom to make these decisions. Therefore, Dressel Online Learning, where online instructors are engaged in an ongoing process of building courses with digital learning materials, was an appropriate site for this study, which considered the experiences of online instructors regarding the phenomenon of digital learning materials.

Crouse University offers on-site and online learning at undergraduate, graduate, and doctoral levels. The focus for this study was on online instructors at the undergraduate level. In

2018, there were 250 undergraduate students enrolled in online courses at Crouse University.

There are currently 10 Bachelor's Degree majors offered online at Crouse University, including

Bible and Theology, Counseling, Criminal Justice, and Business Administration. The online

program at Crouse University currently offers over 120 undergraduate courses in a single school

year, including approximately 40 courses in a single eight-week semester. There are over 40

online instructors teaching courses across two eight-week semesters, all at the undergraduate

level. Finally, Crouse University offers six online, eight-week semesters, providing flexibility for

students in their online education.

Crouse University was chosen as a second research site because it provided appropriate

data access, includes a large online program with a variety of online instructors, and offered the

opportunity for purposeful and criterion sampling (Creswell & Poth, 2018; Gall et al., 2007; Yin,

2017). The established online program at Crouse University, which uses Schoology as the LMS,

offers an online resource hub along with other support systems for online students. With a

different LMS than DOL and expansive online learning supports, Crouse University as a

research site provided a large variety of online instructor experiences with digital learning tools

and materials. Ultimately, the phenomenon of digital learning materials is linked to the context

of this online learning program, and the ongoing interaction of the online instructors with digital

learning materials provided an ideal setting for this transcendental phenomenological study

(Creswell & Poth, 2018).

Larger than both Dressel Bible College and Crouse University, Karlson Institute employs

around 57 resident instructors and offers 24 undergraduate majors in addition to several graduate

and seminary programs. Over 1,000 students attend Karlson Institute, which offers more than 30

degrees completely online and employs around 180 online instructors. Online degree programs at

Karlson Institute include Business Administration, Human Services, and Healthcare Services at the undergraduate level, and Addictions Counseling, Intercultural Studies, Theological Studies, Master of Business Administration, Education, Youth Ministry Leadership, and other programs at the graduate level.

Karlson Institute was chosen as a third research site due to its larger size and the opportunity for purposeful and criterion sampling (Creswell & Poth, 2018; Gall et al., 2007; Yin, 2017). The focus for this study was on online instructors within various programs. The online learning program at Karlson Institute includes multiple resources for online instructors, who are highly experienced in teaching in online learning environments. Because Karlson Institute is even larger than the other two research sites, it provided a variety of online instructor experiences with the implementation of digital learning materials. Although the online learning program is firmly structured, the extensive experience of the online instructors at Karlson Institute provided the appropriate context for the transcendental phenomenological study of the phenomenon of the implementation and use of digital learning materials (Creswell & Poth, 2018).

Participants

Participants in phenomenological research are known as "co-researchers" and are considered to be positioned alongside the primary researcher (Moustakas, 1994). These co-researchers, whom are referred to moving forward as participants, were selected using a purposeful sampling strategy, which focuses on participants who will "purposefully inform an understanding of the research problem and central phenomenon of the study" (Creswell & Poth, 2018, p. 158). 11 participants were selected for this study in order to work toward saturation, which "occurs when continued data collection produces no new information or insights"

(Merriam & Tisdell, 2015, p. 199). However, as one participant did not complete all data collection steps, 10 participants were ultimately used for this study. Saturation was achieved with 10 participants, so no more were added (Merriam & Tisdell, 2015). Participants selected for this study experienced the phenomenon of implementing digital learning materials (Moustakas, 1994). For this phenomenological study, criterion sampling (Gall et al., 2007) was used to select participants based on the following criteria: (1) an online instructor under contract to teach at least one course for their institution annually; and (2) an online instructor responsible for creating, modifying, or utilizing digital learning materials within their online courses. Additionally, sampling aimed for maximum variation, which reflects the "range of variation in the phenomena to be studied" (Gall et al., 2007, p. 182). With the goal of maximum variation, differentiating criteria was applied to the sampling process (Creswell & Poth, 2018), which included program and course type, years of online teaching experience, and job title.

For this study, participants included both full-time and adjunct online instructors, instructors of general education, program-specific, and elective courses, and both new and experienced instructors. A purposeful sampling strategy that includes criterion sampling and maximum variation sampling allowed for the study of rich data representing the shared experiences of online instructors with the implementation of digital learning materials (Creswell & Poth, 2018; Gall et al., 2007). The online faculty at Dressel Bible College is approximately 55% male and 45% female, and approximately 40% hold doctoral degrees. At Crouse University, of the approximately 40 online instructors employed to teach over two Spring 2021 online sessions, eight hold doctoral degrees and approximately 44% of courses offered during the Spring 2021 semester were taught by online instructors with doctoral degrees. Additionally, of these approximately 40 online instructors, around 33% are female. Finally, the online faculty at

Karlson Institute is approximately 60% male and 40% female and 60 % hold doctoral degrees.

Procedures

When deciding how to proceed with a study on online instructor perceptions of digital learning materials, the first step was determining that a transcendental phenomenological study was the appropriate approach. Creswell and Poth (2018) state that a transcendental phenomenological study is used when "it is important to understand several individuals' common or shared experiences of a phenomenon" (p. 79). The shared experiences of higher education online instructors are a valuable source of data for uncovering the essence of the phenomenon of the use of digital learning materials. Transcendental phenomenology has ties to the field of education and offers a philosophical lens on the topic of educational technology; this lens was needed to truly get to the depth of the phenomenon of the use of digital learning materials (Creswell & Poth, 2018; Moustakas, 1994; Van Manen, 2016)

The second step was choosing various sites for this study that would allow for an in-depth exploration of the shared experiences of online instructors. After receiving initial approval from the Academic Dean at Dressel Bible College and the Executive Director of Online Learning at Crouse University, I secured official site approval for both sites. I received official site approval from the Associate Provost of Online Studies at Karlson Institute immediately. Following my proposal approval, I submitted my application for IRB approval (Appendix A). Once I received IRB approval, I was able to move forward with my data collection, beginning with selecting and securing participants. Initial contact with potential participants happened via email and based on those email responses, I then engaged in conversations with all potential participants to identify those appropriate for the study. Participants completed a consent form to take part in the study (Appendix D) (Creswell & Poth, 2018). Once my participants for this study

were selected through purposeful and criterion sampling (Creswell & Poth, 2018; Gall et al., 2007), I began data collection. Data collection consisted of face-to-face interviews (Appendix B), focus groups (Appendix C), and participant journaling (Appendix C). Face-to-face interviews, which were conducted through video conferencing software, were recorded and transcribed, and follow-up interviews were utilized as needed. The standardized, open-ended questions were reviewed by experts in the field and then piloted with an outside sample following IRB approval, to ensure clarity and appropriate wording. Focus groups were conducted through video conferencing software following the face-to-face interviews. Finally, participant journaling was guided by open-ended prompts distributed following the conclusion of the individual interviews, and entries were utilized for data analysis along with the interview and focus group transcripts. Data analysis took place through the processes of epoché, phenomenological reduction, imaginative variation, and synthesis of textural and structural descriptions of the data (Moustakas, 1994).

The Researcher's Role

I am currently employed by Dressel Bible College as an online adjunct professor, where I have worked for ten years in various roles. I have worked alongside a few online instructors at the college but there are also several with whom I have no working relationship. As an online instructor for Dressel Bible College, I have created several online courses, and I continue to modify and teach between five to eight courses annually over fall, spring, and summer semesters. As an online instructor in higher education, I am a part of the shared experience of implementing digital learning materials for teaching. I am a witness in real-time to the trend toward digital learning materials and am having to adjust to this trend in my career, including making decisions pertaining to the perceived impact of these materials on my students' learning. As a current

online graduate student at a separate university, I am also subject to my own instructors' use of digital learning materials and the perceived impact of those tools on my own learning.

Within transcendental phenomenological research, as the researcher, I must engage in the process of epoché, which is acknowledging my biases, setting them aside, and attempting to view the phenomenon from a fresh perspective (Moustakas, 1994). The process of epoché was ongoing; I needed to make every effort throughout the study to rigorously acknowledge and set aside whatever judgments I may have brought with me (Moustakas, 1994). I engaged in this process through researcher journaling, where I recorded my own experience with the phenomenon of utilizing digital learning materials and attempted to clear away my prejudgments about the topic (Ahern, 1999; Creswell & Poth, 2018; Moustakas, 1994). While I attempted to bring a fresh perspective to the data, remaining open to every possibility for meaning (horizonalization), my experiences related to the research topic were useful for this study (Moustakas, 1994). Specifically, I believe my experience as an online instructor dealing with the implementation of digital learning materials allowed me to form connections and develop a rapport with the participants in my study (Creswell & Poth, 2018; Gall et al., 2007). Aside from my own experiences, I also brought to this study a burden for the influence of digital technology on the mind; this burden is what motivates me to better understand the experiences of online instructors in order to uncover the essence of the use of digital learning materials. However, I needed to acknowledge this axiological element of my research and set aside this burden (epoché) from my collection and analysis of the data (Creswell & Poth, 2018; Moustakas, 1994).

Data Collection

Data collection for this study consisted of open-ended interviews, focus groups, and participant journaling. The process of triangulation is foundational to transcendental

phenomenological research; providing multiple sources of data works to corroborate the consistency of findings (Creswell & Poth, 2018; Gall et al., 2007). Gall et al. (2007) explain the benefits of interviews for collecting data within phenomenological research, stating "the interview process…is wide-ranging, and therefore it is capable of detecting many aspects of experience" (p. 497). Although open-ended interviews serve as the primary method of data collection within phenomenological research, utilizing focus groups and participant journaling along with interviews provided the opportunity for triangulation of data (Creswell & Poth, 2018). First, participants were interviewed face-to-face using video conferencing technology. Following the interviews, focus groups were conducted utilizing the same video conferencing technology. Finally, participants were asked to submit journal entries based on a provided set of journaling prompts for guidance. Following the conclusion of these data collection methods, follow-up interviews were conducted as needed.

Interviews

The first and central form of data collection for this transcendental phenomenological study was the standardized, open-ended interview, which was conducted one-on-one using video conferencing software to allow for face-to-face communication. Creswell and Poth (2018) describe an interview as a form of social interaction and Merriam and Tisdell (2015) explain that interviews are used to collect information that is specifically from the participant's point of view and is phrased in their own words. This is especially important within transcendental phenomenological research, where the shared experiences of participants are the central focus (Moustakas, 1994). The goal of the long, open-ended interview is that the "co-researcher shares the full story of his or her experience of the bracketed question" (Moustakas, 1994, p. 114). To reach this goal, standardized questions (which allow for consistency and may limit bias) may

need to be changed or discarded (Gall et al., 2007; Merriam & Tisdell, 2015; Moustakas, 1994;

Patton, 2015). However, the following open-ended questions developed for this study were

designed to allow for flexibility, comfort, and openness within the interview (Merriam & Tisdell,

2015; Moustakas, 1994; Patton, 2015):

Teaching Experience Questions:

1. Please introduce yourself to me, as though for the first time.

2. How long have you been teaching as an online instructor?

3. What are the circumstances that led to you becoming an online instructor?

4. Describe your experiences as an instructor in an online learning environment.

5. Describe some of the challenges you have faced as an online instructor.

Questions Related to Experiences with Digital Learning Materials:

6. What are your feelings regarding the use of digital learning materials?

7. What do you feel are the benefits of digital learning materials for online instructors?

8. What do you feel are the benefits of digital learning materials for online students?

9. Describe your current use of digital learning materials compared to your beginning use of these tools.

10. Describe your decision-making process when deciding upon digital learning materials for your courses.

Questions Related to Ease of Use:

11. Describe your skills pertaining to the implementation and use of digital learning materials.

12. Describe some of the challenges you have faced when using digital learning

materials.

13. How would you describe "user-friendly" features of digital learning materials?

14. Describe your experiences with user-friendly digital learning materials.

Questions Related to Usefulness:

15. Describe your goals for the use of digital learning materials.

16. In what ways do you consider digital learning materials to be useful for teaching and learning?

17. Under which circumstances have you found it useful to provide students with the option to access digital learning materials in printed format?

Questions Related to Social Influence:

18. In what ways have others in your professional circle (peers, administration, students, etc.) persuaded you toward or against the use of digital learning materials?

19. Describe your experiences with utilizing digital learning materials based on the recommendations of others.

20. Describe your utilization of digital learning materials as compared to your peers' utilization of these tools.

Questions Related to Facilitating Conditions:

21. Describe the supports and structures currently in place at your institution that facilitate your use of digital learning materials.

22. Describe the supports and structures currently lacking at your institution thereby hindering your use of digital learning materials.

23. Describe your experiences pursuing your own training, supports, and structures

outside the institution in order to effectively utilize digital learning materials.

Concluding Question:

24. Is there anything else you would like to add regarding your experiences with

digital learning materials and their implementation?

Questions two through five are experience questions designed to get participants thinking about their general experiences as online instructors (Patton, 2015). Guri-Rosenblit (2018) and McKnight et al. (2016) emphasize this need to focus specifically on online instructor experiences with the implementation of digital learning tools. These questions helped establish rapport with the participants and encouraged them to use descriptive language (Patton, 2015). These questions also provided the groundwork for the remainder of the interview, which emphasized descriptions of experiences (Moustakas, 1994; Patton, 2015). These questions addressed the central research question regarding instructor experiences.

Questions six through ten specifically addressed the central research question regarding experiences with digital learning materials but were more open-ended to encourage participants to share a complete picture of their experiences (Moustakas, 1994). These questions also represented a shift in the question sequence from a broad to a specific focus on digital learning materials. Burin et al. (2015), Cavanaugh et al. (2016), and Delgado et al. (2018) acknowledge the trend toward dependence upon digital texts and other digital learning materials. Benefits of digital learning materials include cost, learner engagement, and variety, among other benefits (Moro, 2018; O'Bannon et al., 2017; Yoo & Roh, 2019); questions exploring the benefits of these tools could support or add to this research. Questions six through eight are feeling questions designed to connect the participant more personally to the topic of digital learning materials and encourage further descriptive language (Patton, 2015). Questions nine and ten are

experience questions that prompted the participant to begin considering specific experiences regarding technology acceptance and use and the study's theoretical framework, UTAUT (Patton, 2015; Venkatesh et al., 2003). Decision-making factors for instructor use of digital learning materials include cost, availability, and digital literacy (Moro, 2018; Schneider, 2015). However, research focusing solely on online instructors in higher education is limited; these questions exploring instructor decision-making may add to the current research (Guri-Rosenblit, 2018; Moro, 2018).

Questions 11 through 14 addressed the participant's use of digital learning materials through the framework of UTAUT and specifically the factor of effort expectancy (Venkatesh et al., 2003). Ease of use is a component of effort expectancy, which refers to "the degree of ease associated with the use of the system" (Venkatesh et al., 2003, p. 450). Moro (2018), Guri-Rosenblit (2018), and McKnight et al. (2016) explore instructor use of digital learning materials and have concluded that instructors often lack the level of digital literacy needed to effectively utilize these tools. Question 11 is a knowledge question specifically inquiring about the participant's knowledge and skills regarding digital learning materials, and questions 12 and 14 are experience questions focusing on these skills and knowledge when put to use (Patton, 2015). Question 13 is an opinion and value question directing the participant to describe their own connections drawn between ease of use and use of digital learning materials (Patton, 2015). These four questions specifically addressed sub-question one.

Questions 15 and 16 are opinion and value questions addressing the usefulness of digital learning materials (Patton, 2015). Question 17 served as an experience question, prompting a response regarding experiences with useful digital learning materials (Patton, 2015). These questions all addressed the perceived usefulness (or performance expectancy) component of

UTAUT, which has been shown to influence intention to utilize technology (Venkatesh et al., 2003). The perceived benefits of digital learning materials have been shown to factor into instructor decision-making regarding the implementation of digital learning materials (Moro, 2018; Reid et al., 2017; Yoo & Roh, 2019). The research tends to focus more heavily on usefulness from the perspective of students, so addressing the experiences of instructors regarding the usefulness of digital learning materials may add to the research (McKnight et al., 2016; Moro, 2018; O'Bannon et al., 2017; Yoo & Roh, 2019). Finally, Kong et al. (2018) and Delgado et al. (2018) explain the differences in student learning with print and digital format and have emphasized the benefits of printed materials over digital learning materials. Question 17 addressed this issue of formatting within the context of usefulness and UTAUT (Venkatesh et al., 2003). Questions 15 through 17 addressed sub-question two.

Questions 18 through 20 addressed the social influence component of UTAUT which has been shown to influence user intention to utilize technology (Venkatesh et al., 2003). Questions 18 and 19 are experience questions that targeted how social influence has played a role in participant experiences with the implementation of digital learning materials (Patton, 2015; Venkatesh et al., 2003). Question 20 is an opinion and value question that prompted participants to measure this influence alongside their peers (Patton, 2015). While much of the research explores the more common factors of cost, ease of use, and accessibility as motivations for implementation of digital learning materials (Moro, 2018), far less is known about how social influence impacts online instructor decision-making regarding the implementation of digital learning materials. Questions 18 through 20 addressed sub-question three.

Questions 21 through 23 are experience questions that addressed the UTAUT factor of facilitating conditions, which has been shown to be a direct influencer of user behavior toward

technology (Patton, 2015; Venkatesh et al., 2003). Chapman et al. (2016), Guri-Rosenblit (2018), McKnight et al. (2016), Sanga (2018), and Schneider (2015) all emphasize the need for proper training for instructors in digital literacy and other aspects of educational technology to effectively utilize digital learning materials. Therefore, participant experiences regarding the existence or absence of supports and structures may provide valuable insight into the factor of facilitating conditions within UTAUT (Venkatesh et al., 2003). Questions 21 through 23 addressed sub-question four.

Question 24 acted as a conclusion to the interview, prompting the participant to provide any extra insight or information that may be relevant but was not referenced by the other questions. This question addressed all research questions.

Focus Groups

Focus groups are interviews with smaller groups of participants that focus on a specific topic of study (Patton, 2015). These group interviews are used to generate a social experience through which to collect meaningful data (Patton, 2015). Additionally, focus groups may be used for validation purposes and to "increase confidence in whatever patterns emerge" (Patton, 2015, p. 475). Creswell and Poth (2018) recommend multiple interviews for a phenomenological study, and focus groups not only serve as an additional interview but also provide participants with the opportunity to share additional information that may not have been brought out in an individual interview. Patton (2015) states that focus groups are used "to get high-quality data in a social context where people can consider their own views in the context of the views of others" (p. 475). While they may be altered based on previous data collected from individual interviews, the following standardized focus group questions were meant to create a relaxed and constructive environment where participants could consider their own experiences with digital learning

materials alongside those of their peers (Merriam & Tisdell, 2015; Patton, 2015):

1. Describe how you began teaching as an online instructor.

2. Describe some of the challenges you have faced teaching in an online-only environment.

3. Which experiences with using digital learning materials in your online courses stand out the most to you?

4. How would you describe your experience with the successful or effective use of digital learning materials?

5. What would you say are the factors most likely to influence your use of digital learning materials?

Questions one and two are experience questions meant to create a relaxed and nonintimidating environment for discussing the topic of digital learning materials (Patton, 2015). Research regarding online instructor experiences with the utilization of digital learning tools for effective teaching is limited and may be aided by further exploration of instructors teaching online (Guri-Rosenblit, 2018; McKnight et al., 2016). These questions addressed the general experiences of online instructors and were designed to facilitate a social, conversational interaction (Creswell & Poth, 2018; Patton, 2015). Question three is an experience question that represented a shift in focus toward the use of digital learning materials and addressed the central research question of this study (Patton, 2015). Because instructors have both the responsibility to effectively utilize digital learning materials and the influence over student acceptance of these tools, a deeper understanding of defining experiences with digital learning materials is needed (Chapman et al., 2016; Moro, 2018; Schneider, 2015; Ugúr, 2020).

Question four is an experience question that prompted the participant's recollection

regarding the successful use of digital learning materials (Patton, 2015). Chapman et al. (2016) highlight the role of instructors in influencing and supporting students regarding the effective use of digital learning tools. A question exploring positive experiences with digital learning tools may provide a better understanding of instructor influence with these tools. This question may address sub-questions one and two. Finally, question five is an opinion and values question that focused specifically on UTAUT and the factors involved with user acceptance of technology (Patton, 2015; Venkatesh et al., 2003). Morris and Lambe (2017) highlight the hesitancy of some instructors to embrace digital learning tools; a question exploring influential factors of digital learning tools may address this hesitancy. This question may address all four sub-questions.

Participant Journaling

Participant journaling was guided by a set of journal prompts encouraging the participant to reflect deeply on their experiences regarding the implementation of digital learning materials (Creswell & Poth, 2018). This form of participant journaling added another source of data for the purpose of triangulation and provided data that may not be otherwise accessible (Yin, 2017). Participants were provided with open-ended prompts following the conclusion of the individual interviews and had four weeks to submit responses. The following open-ended journaling prompts were provided to participants:

1. In 1-2 paragraphs, describe an experience where implementing and utilizing digital learning materials for your course led to positive results for you and your students.

2. In 1-2 paragraphs, describe an experience where you were limited in your effective implementation and use of digital learning materials and what factors led to those limitations.

3. In 1-2 paragraphs, describe an experience where you provided your students with learning materials in both digital and print format and the decision-making process that led to that choice.

Prompts one and two are experience questions that encouraged the participant to look reflectively at positive and negative experiences with digital learning materials (Patton, 2015). Prompt three is an experience question that addressed the decision-making process behind user acceptance and use of technology and encourages the participant to discuss their motivations for utilizing digital learning materials (Moro, 2018; Patton, 2015; Venkatesh et al., 2003).

Data Analysis

Within transcendental phenomenological data analysis, the processes of epoché and horizonalization was engaged during the interview processes (data collection) as well as the data analysis process (Moustakas, 1994). According to Moustakas (1994), data analysis for transcendental phenomenology involves four major processes that can be carried out through a specific model; the four processes are epoché, phenomenological reduction, imaginative variation, and synthesis. For this study, data analysis was conducted through the Stevick-Colaizzi-Keen model modified by Moustakas (1994).

Epoché

The process of epoché, which is "setting aside prejudgments" and engaging the data with a fresh perspective, is continual throughout data analysis (Moustakas, 1994, p. 180). This process involves bracketing, which, according to Moustakas (1994) is the process of clearly outlining the phenomenon to be studied. However, Creswell and Poth (2018) equate Moustakas' (1994) epoché with bracketing, and Ahern (1999) describes bracketing as "an iterative, reflexive journey" (p. 408). For the sake of this study, epoché was distinguished as the process of "setting

aside prejudgments" to achieve a fresh perspective (Moustakas, 1994, p. 180), and bracketing

was understood as the defining of the phenomenon (Moustakas, 1994).

During and following data collection, I continually worked to engage both epoché and

bracketing, processes that can be aided through researcher journaling (Creswell & Poth, 2018;

Moustakas, 1994). Researcher journaling is a reflexive process that allowed me to detail my own

experience with utilizing digital learning materials and marked the first step in the data analysis

process (Ahern, 1999; Creswell & Poth, 2018; Moustakas, 1994). This journaling included my

understandings of my own biases, prejudgments, and defining experiences, and was updated

throughout the data collection and data analysis (Creswell & Poth, 2018; Moustakas, 1994).

Phenomenological Reduction

Through the interviews, focus groups, and participant journaling, I gathered all data and

began to engage in a series of steps to evaluate, organize, and label the data (Moustakas, 1994).

This process is described as coding (Creswell & Poth, 2018), and within transcendental

phenomenology, requires horizonalization, which is considering all statements as potential

sources of meaning (Moustakas, 1994). While my own biases and prejudgments may have

influenced me to overlook or disregard certain statements as not holding potential meaning,

engaging in epoché helped me to separate these biases and fend off such influence (Moustakas,

1994).

Horizonalization, which is a component of phenomenological reduction, is carried out by

listing all relevant statements from my data that do not overlap (Moustakas, 1994). By

considering all possibilities for meaning and listing out relevant statements, I took tangible steps

to keep my own perspective free of prejudgments or assumptions and also used the statement

lists to guide my analysis (Moustakas, 1994). Next, I engaged in phenomenological reduction

and grouped invariant horizons ("meaning units") from the interview transcripts and journal entries into themes and labeled them (Moustakas, 1994, p. 122). This step was necessary to begin organizing the data and identifying themes in an attempt to search for meaning (Moustakas, 1994).

Once the labeled invariant horizons were grouped by theme, the next step was the construction of an individual textural description for each experience gathered in data collection (Moustakas, 1994). The textural description is a written representation of the invariant horizons and included verbatim content from participant interviews, focus groups, and journal entries (Creswell & Poth, 2018; Moustakas, 1994). Textural descriptions are essentially written representations of all potentially meaningful content and identified themes that have been revealed through data collection and the previous stages of analysis (Moustakas, 1994). This process of writing textural descriptions provided me with the opportunity to look in-depth at the data while still maintaining a fresh perspective by focusing on what is present in the data and the themes that have been uncovered (Moustakas, 1994).

Imaginative Variation

The next step of analysis required imaginative variation, which is searching for potential meanings by using imagination or other approaches to uncover the "how" of the phenomenon that has been texturally described (Moustakas, 1994). Within transcendental phenomenological research, imaginative variation is truly anchored by the researcher, who uses imagination and other methods to discover "the underlying and precipitating factors that account for what is being experienced" (Moustakas, 1994, p. 98). This process is represented first through individual structural descriptions (the "how") and constituted the next step in the analysis process (Moustakas, 1994).

Once I had individual textural descriptions ("what") and individual structural descriptions ("how") of each experience, the next step was to construct a composite textural and structural description for each participant's experience (Moustakas, 1994). This is the process of descriptively linking together the "what" (themes, invariant horizons) with the "how" (underlying factors) for each participant (Moustakas, 1994). This process falls solely on the shoulders of the researcher; I depended upon my processes of imaginative variation to connect the "what" with the "how" for each participant experience without letting my prejudgments get in the way (Moustakas, 1994).

Synthesis

The final step in the analysis process was to take the composite textural and structural descriptions for all participants and engage in the process of synthesis to "intuitively-reflectively" construct a composite textural and structural description that represented the entire essence and meaning of the phenomenon (Moustakas, 1994, p. 181). Put more simply, this process involved taking the "what" and "how" descriptions for each participant's experience and synthesizing them into a single description of the essence of the phenomenon (Moustakas, 1994). This textural-structural composite, which began with bracketing the topic (Moustakas, 1994) and then coding the data, was used to ultimately "develop the essence" of the phenomenon of utilizing digital learning materials (Creswell & Poth, 2018, p. 199). Presenting this essence (or meaning) in writing, although not exhaustive, provided a tangible representation of the results of the study, constituting new and perhaps actionable knowledge (Creswell & Poth, 2018; Moustakas, 1994). By providing a synthesized description of participant experiences with the phenomenon of implementing digital learning materials, such knowledge may be used in the

field of education, and specifically within online learning environments, to further understand and guide such use of these digital tools (McKnight et al., 2016; Moro, 2018)

Trustworthiness

Trustworthiness refers to the validity and reliability of the study and can be achieved through triangulation and other methods (Creswell & Poth, 2018; Merriam & Tisdell, 2015). Different terms have been used to explain the concept of trustworthiness within quantitative and qualitative research, but the goal of qualitative researchers regarding trustworthiness, validity, and reliability is "conducting the investigation in an ethical manner" (Merriam & Tisdell, 2015, p. 237). Ensuring ethical practice within this transcendental phenomenological study was achieved through an emphasis on credibility, dependability, and transferability. Member checks and triangulation were utilized to establish credibility, dependability was addressed through triangulation and rich description, and finally, transferability was sought through maximum variation sampling and rich description (Creswell & Poth, 2018; Merriam & Tisdell, 2015; Moustakas, 1994).

Credibility

Credibility, which Merriam and Tisdell (2015) compare to internal validity within quantitative research, refers to how closely the research matches reality. Qualitative research provides a unique opportunity for credibility because as "human beings are the primary instrument of data collection and analysis," reality can be accessed more directly (Merriam & Tisdell, 2015, p. 243). Achieving this accurate depiction of reality creates research that is credible and ultimately trustworthy (Merriam & Tisdell, 2015). For this transcendental phenomenological study, member checks and triangulation were used to achieve credibility. Member checks involved following up with participants after the study and presenting them with

transcripts "so that they can judge the accuracy and credibility of the account" (Creswell & Poth, 2018, p. 261). Triangulation involves corroborating results by accessing data from multiple sources and using various methods of collection (Creswell & Poth, 2018; Merriam & Tisdell, 2015). For this study, triangulation included collecting data from multiple participants through interviews, focus groups, and participant journaling to achieve credibility in the research.

Dependability and Confirmability

Dependability, or reliability of research deals with "the extent to which research findings can be replicated" (Merriam & Tisdell, 2015, p. 250). Although the process of replication is different in qualitative research due to the existence of multiple interpretations involved, the goal of dependability within qualitative research is essentially the consistency between the data and the results (Merriam & Tisdell, 2015). This consistency provides dependability, which is needed within phenomenological research that provides in-depth descriptions of shared experiences (Creswell & Poth, 2018). To obtain dependability, this study again utilized triangulation, along with rich description. Triangulation, or the collection of multiple forms of data through various methods, included the analysis of interview transcripts, journal entries, and focus group transcripts; these collection methods provided the opportunity to cross-check and validate the research (Creswell & Poth, 2018). Rich description was achieved through the phenomenological processes of textural and structural descriptions of the data and provided the detail and thick description needed to achieve dependability (Creswell & Poth, 2018; Moustakas, 1994).

Transferability

Transferability is compared by Merriam and Tisdell (2015) to external validity in quantitative research and involves generalizability. This process of transferability is one undertaken by the individual seeking to apply data and is referred to as user generalizability

(Merriam & Tisdell, 2015). Qualitative research that achieves transferability positions any user of the research to apply findings for their own purpose, adding value and meaning to the study (Merriam & Tisdell, 2015). For this study, transferability was sought through rich description and maximum variation. Rich description of the data was obtained through a follow up with the data immediately following its collection to record details and descriptions that will aid user generalizability later on (Creswell & Poth, 2018). Maximum variation sampling was utilized to involve a wide range of participants and their perspectives within the research (Merriam & Tisdell, 2015).

Ethical Considerations

Ethical considerations will ensure appropriate and ethical practices within this phenomenological study (Creswell & Poth, 2018). Before data collection began, IRB approval was secured to ensure proper ethical guidelines are followed (Creswell & Poth, 2018). Data collection included the use of pseudonyms to protect participants from any negative results that may come from the study as well as to provide confidentiality (Creswell & Poth, 2018). Ethical considerations for data storage included password protection for all electronically stored data (Creswell & Poth, 2018). To prevent the presentation of one-sided or solely positive data, multiple perspectives were presented, and contradictory results were included (Creswell & Poth, 2018). The researcher engaged in the process of epoché to separate bias and view and present the data from a fresh perspective (Moustakas, 1994). All appropriate and official consent was sought and secured through proper processes to ensure adherence to ethical standards (Creswell & Poth, 2018). This included informed consent, which informs participants of the purpose of the study, risks involved, benefits, the right to withdraw, and confidentiality measures taken (Creswell &

Poth, 2018). To ensure the protection of data, all data will be securely stored for five years and then deleted (Creswell & Poth, 2018).

Summary

Utilizing a transcendental phenomenological study to research online instructor experiences with digital learning materials provides the opportunity to explore the shared experiences of these instructors with the phenomenon of utilizing digital learning materials (Creswell & Poth, 2018). Transcendental phenomenology as a research design applies a qualitative approach to the topic of digital learning materials in order to get at the essence of the phenomenon (Moustakas, 1994). The sites chosen provide this context as well as necessary access, and the participants represent a broad range of perspectives needed to provide rich, detailed descriptions of participant experiences (Creswell & Poth, 2018; Yin, 2017). Multiple forms of data collection were used to achieve triangulation, and data analysis included the coding of data as a means to uncover themes, creating a composite textural-structural description of the essence, and ultimately understanding the meaning of the phenomenon of digital learning materials (Creswell & Poth, 2018; Moustakas, 1994). Efforts toward credibility, dependability, and transferability helped to establish trustworthiness within the study (Merriam & Tisdell, 2015), and considerations for confidentiality, fairness, and proper consent established adherence to ethical standards (Creswell & Poth, 2018).

CHAPTER FOUR: FINDINGS

Overview

The purpose of this transcendental phenomenological study was to describe the experiences of online instructors at Christian colleges with the implementation of digital learning materials. The central research question guiding this study was: *What are the experiences of online instructors at Christian colleges with the implementation of digital learning materials?* The theory guiding this study was the unified theory of acceptance and use of technology (UTAUT), which applies to online instructor implementation of digital learning materials by explaining the factors involved in technology acceptance and use. This chapter presents the findings of this study, beginning with an introduction of each participant involved in the study. Next, the five themes, along with sub-themes, generated through the transcendental phenomenological data analysis process are discussed. Finally, the central research question and four sub-questions are answered.

Participants

The participants for this study, which were selected through purposeful and criterion sampling (Creswell & Poth, 2018; Gall et al., 2007), are all higher education online instructors with experience regarding the implementation and use of digital learning materials. Two participants were selected from Dressel Bible College, three were selected from Crouse University, and five were selected from Karlson Institute. In order to achieve maximum variation (Creswell & Poth, 2018), the participants selected represent a variety of years of experience, program and course types, and job titles. While some participants had also maintained roles as content developers for online courses at their institutions, all participants were responsible for the implementation and use of digital learning materials in their courses to some extent. The

following descriptions of the participants highlight their experiences both generally, as instructors in an online learning environment, and specifically regarding their use of digital learning materials. Quotes are used alongside these descriptions in order to present an authentic picture of each participant. Pseudonyms are used for each participant to protect their anonymity.

Rose

Rose is new to online teaching, with only one year of experience teaching in an online learning environment. Rose, a Caucasian female, is 56 years old and has teaching experience in psychology, counseling, health and fitness, and math. As an adjunct for Dressel Bible College, Rose has taught both face-to-face and online. Rose described various challenges within the online learning environment, including a feeling of disconnect with students:

> Very different from the classroom; had been in the classroom for many years. But it was different because I didn't get to see the students, didn't get to know them. It was much more academic. Just, here's material, do it. Here's your grade. Um, sometimes those that didn't do the work, I got to know a little bit better, because I'd follow up with them and email with them. But again, mostly email and not online, which is something I think, doesn't have to be that way.

Amidst the disconnection with students and other drawbacks to online learning, Rose also noticed many benefits of online teaching and the use of digital learning materials, including immediate feedback for students on assignments and increased interaction with course content. Ultimately, Rose acknowledged her limited experience with online teaching and expressed a willingness to continue enhancing the online learning experience through the use of digital learning materials.

Molly

Molly is relatively new to online teaching, having started in 2018. Molly, a 41-year-old Caucasian female, has a master's degree in mental health counseling and teaches counseling, TESL, and health and fitness courses full-time for Dressel Bible College. Regarding her experience as an online instructor, Molly similarly pointed to a disconnect with students and the importance of cultivating connections with them:

> So, what I notice most about the online learning environment is…to really have that communication with the kids, whether it's through discussion boards, or emails, and just really getting to know them, outside of the classroom, as well as within… I think probably most of the challenge is when you have a student that isn't really participating. And even when you reach out to them, and you try to establish what might be going on, if they are not responding, then you're at a loss. So that's probably the biggest challenge for me.

However, Molly was encouraged by the direction of Dressel Bible College, having just implemented a new learning management system making it easier to navigate the online learning environment and to create and upload digital learning materials.

Pam

Pam began teaching online approximately four years ago, after Crouse University, the university she teaches for, added an online program. Pam, 42, is a Caucasian female with an MBA, CPA, and CMA, and teaches accounting courses as a part-time professor for Crouse University. While comparing online and face-to-face learning environments, Pam emphasized the versatility of the online learning environment:

> It's definitely different. Sometimes I feel like I don't interact as much with the students as I do on campus students…It was very interesting because I had some, I had a much

broader range of students. I had adult learners as well as 18-year-olds, which, there was a grandmother and an 18-year-old in the class and teaching to that age spectrum definitely changes. But it is much easier to do online than, that, because it's more one-on-one than in the classroom, where they're sitting there and they're all kind of around the same age group. So, it is very different from, from on-campus, in-person teaching.

Regarding the use of digital learning materials, Pam noted that some of the difficulty in utilizing them effectively could be due to the subject matter itself (accounting) and the need for uniformly formatted content for all students. Pam described herself as "old school" and acknowledged that her own outlook on digital learning materials may be influenced by that characterization.

Phillip

Phillip, 39, is a Caucasian male with an M.A. and an M.S. Ed. who teaches social studies courses as a part-time adjunct for Crouse University. Phillip has ten years of online teaching experience and also teaches at the high school level. Although Phillip was hesitant to begin online teaching, he ultimately enjoyed the work and has since been pursuing other opportunities to teach online. Regarding his experience teaching online for Crouse University, Phillip highlighted various positives and drawbacks:

The online environment is great in the sense of schedule, right? You can, you can kind of do your own thing, and grade at your own time, you don't have to have a specific class time. Obviously. I do love having a class though, in the sense of that…you can see what the what the kids are doing. And if they're really getting it. And I'm, you know, I'm convinced that, of course, some kids taking online, they're really not getting that much out of it. I mean, they're, they're doing their duty, I guess, but they're not really clicking

with the material, it's more of a check mark…So, I mean, I like the online thing, it's really

cool in some ways, in other ways, it's not quite as good.

Although Phillip does not enjoy e-texts, he does utilize various other digital learning materials

and considers them useful in communicating the content for his courses. Phillip acknowledged

that the subject matter within his history courses could also be enhanced through the use of

digital learning materials.

Maria

Maria transitioned into online teaching following the completion of her graduate work.

Maria, a Caucasian female, is a licensed counselor with her own practice who teaches counseling

and psychology courses online for Crouse University and has eight years of online teaching

experience. Maria values the opportunities presented through the online learning environment

but also acknowledged various issues she wrestles with, particularly when teaching counseling

courses:

I think some of the fun things is being able to work with students literally around the

globe, that bring a unique perspective, lots of different dynamics from different

cultures…So, there's a lot of perspectives...It's also good to get experience from people

who might be doing like adjacent work in the field already, as opposed to just learning it

from scratch. So, it's always fun to kind of be able to engage students on that level,

challenge presuppositions, really kind of, hopefully give them something different than

what they walked in with…everyone has a different level of technology understanding

and literacy and so a lot of times, some of my job is really just kind of troubleshooting

that piece of it. And then, as much as you spell out everything, there's somebody that

doesn't understand something somehow…So, there's some over communication that

happens in the online environment, that may not necessarily happen if you are face-to-face…In a classroom setting you can hide, your opinion isn't necessarily brought out for everyone to kind of dissect. But that's not true in the online environment, you have to have an opinion, you have to be able to kind of present what your ideas are.

Maria emphasized her role as the instructor in ensuring all students correctly understand the material and described her use of digital learning materials as a part of that process. Along with utilizing the common types of digital learning materials, like PowerPoints and PDF files, Maria also looks for other ways to engage students to provide them with a deeper understanding of the course content.

Dean

Dean holds a Ph.D. and currently teaches full-time in the criminal justice and sociology programs for Karlson Institute. Dean, a 46-year-old African American male, has 15 years of online teaching experience and is also in the Army Reserves. When describing his experiences with online learning, Dean focused on the many benefits of that environment:

But when I graduated from there and got my first tenure track position, which is where I currently work at now, it was more so being an introvert and just having a preference for online. I think that's my strong points. And also, I'm very innovative. So, they give me the opportunity to create classes where online students can really learn and benefit from. And also, flexibility, because I'm also in the Army Reserve. So, I'm an adjunct for different schools…so having the opportunity to teach for different schools and not having to be there physically. That's an asset as well.

Dean prioritizes simplifying his online courses and content, acknowledging that students will benefit from a course layout and materials that are easy to navigate. Dean considers digital

learning materials to be "the wave of the future" and emphasized the generational influence on utilizing digital learning materials.

Michael

Michael, 59, is a Caucasian male who is a Pentecostal Assemblies of God clergy with both an M.Div. and a doctoral degree in leadership. Michael has 21 years of higher education teaching experience, with 16 years of online teaching experience, and currently teaches online courses in Bible, theology, leadership, and ethics for Karlson Institute. Although Michael was not eager to begin teaching online, the experience is one that he appreciates because of the convenience:

> I would much rather teach online than on site. There's far less classroom drama. I don't have to commute. I've got a 25, literally a 25-step commute from my bedroom to my library, where I teach. It's, it's all pretty well black and white, zoom. I'm a fan of it…it's great. I love it. I wish my grandfather was alive so he can see this. I mean, it would just blow his mind. Long answer to his question, but I was forced into it. Now I'm sold, hook line and sinker…It's generally cleaner. Meaning it's more cut and dried. I'll be on at seven, I'll be off at nine. I know what I'm getting into. Zoom is not complex. Blackboard is probably my favorite LMS, and I can, I can get around that pretty, pretty well. Grading, setting up zoom meetings. Meeting individually with students.

Along with the many benefits described, Michael also emphasized various issues that come up within an online learning environment, including poor writing, grade inflation, and the misguided use of certain digital learning tools. However, Michael also described the benefits of digital learning materials, and specifically e-texts, and the ways in which those materials are beneficial to the student and the instructor.

Steve

Steve currently works as a part-time online instructor and has been teaching in the online learning environment since 2004. Steve, 65, is a Caucasian male who holds a doctoral degree and currently teaches organizational leadership courses for Karlson Institute as an adjunct. For Steve, his on-site teaching work created a natural transition for him into online teaching, which, for Steve, included many benefits for everyone involved:

> I found its rich with opportunities to actually make relationships and create discussion among every class member, as opposed to only a few. I've also found it's a way to help students not only grow academically, but spiritually. I've seen it be effective that way. On a broader scale…I've seen it be effective for the universities that I've taught...So, it's helped them but as far as my teaching…I found it a good way to communicate important academic content.

Steve did not see many challenges to online teaching for him as the instructor, listing only plagiarism issues and the potential for online teaching to be time-consuming. Ultimately, Steve viewed the online learning environment in a positive light and described the implementation of digital learning materials as "only natural". Steve specifically praised the transition away from hard copy texts in favor of e-texts for online courses.

Juliet

Juliet, a 39-year-old Caucasian female, began teaching college English courses as a teaching assistant in 2006 and went on to teach as an online instructor in 2013. Juliet, who currently teaches online in the composition and rhetoric field at Karlson Institute, had an interest in technology and sought out opportunities to teach in an online learning environment. Juliet

characterized her experiences as an online instructor based on her role as both a content creator and an instructor:

> One is where I created, I have created all of the content from conception to implementation. And that was originally in the, when I first started, what I was doing. And then as, in more recent years, what's happened is, the course has been developed by an instructional designer or subject matter expert. And it's already pre-loaded. And I'm basically the facilitator. And it, you know, it, inevitably things come up where students need additional resources and things like that, that I'll create and give to them. But it's kind of what I would call a "plug and play" type, of course. And that's where more of it has gone recently for me.

Juliet listed both time and a disconnect with students as challenges to online instruction, but also emphasized the valuable role that digital learning materials play in an online learning environment. Specifically, Juliet described the value of having a variety of resources for students to learn from and the time that can be saved by utilizing digital learning materials that have already been created.

Ron

Ron is a Christian school superintendent and also teaches online for Karlson Institute, where he earned his Ph.D. Ron, a 41-year-old Caucasian male, began teaching online in 2019 after he was pursued by Karlson Institute to fill a position within the organizational leadership Ph.D. program. Having teaching experience in both online and face-to-face environments, Ron described some of the differences that come with teaching in an online learning environment:

> I find it to be very sterile, in all honesty. You know, the, one of the reasons I went into education is I like interacting with students. And the online classroom is very difficult for

me because it seems like students only want to communicate with you, one, if they have a

problem, or in their personal life, and they need an extension on something, or two, they

don't like a grade that you've given them on one of their assignments. And so that's when

they, they will reach out to communicate. Whereas I try to provide a lot of feedback on

assignments. I was an English teacher before this, so it comes naturally to me. And often

I hear nothing…Also, I think, especially if the student's new to online learning, they

think it's going to be easy. Click here, click there, get this done, get that done, and I'm

done. Whereas there's a lot of work you've got to put into completing an assignment since

you're not in class listening to my lectures, you're doing more of your own independent

reading, looking at videos, or watching videos that have been made, going through

PowerPoint presentations, things like that in order to learn the material.

Aside from these challenges, Ron also listed benefits of online learning and specifically the value

of digital learning materials. Ron prefers to utilize digital learning materials, emphasizing the

value of search features as well as the opportunity to keep the course current by incorporating

up-to-date materials.

All of the participants for this study completed individual interviews, journal entries, and

focus group interviews. These data were then collected and analyzed using the Stevick-Colaizzi-

Keen model for transcendental phenomenological analysis process modified by Moustakas

(1994). This process included the following four processes: epoché, phenomenological

reduction, imaginative variation, and synthesis. In the following section, the results of this

analysis process are discussed within the context of the four themes generated from analysis, and

the research questions guiding this study are answered.

Results

Within transcendental phenomenological data analysis, the first step is epoché, which is also a continual process throughout analysis (Moustakas, 1994). To engage in epoché, which is the attempt to "set aside…prejudgments, biases, and preconceived ideas" (Moustakas, 1994, p. 85) in order to view the phenomenon from a fresh perspective, researcher journaling was used. This process included keeping records of the data collection processes as well as noting times when the researcher may have been surprised at certain data. This allowed the researcher to once again consider personal expectations and potential biases and put those aside in an attempt to gain a fresh perspective.

This process of epoché continued through data analysis, especially when engaging in phenomenological reduction, which includes the process of horizonalization, or considering all statements as potentially meaningful (Moustakas, 1994). After data were collected, they were transcribed using otter.ai, which produced key words along with transcriptions. During the process of horizonalization, transcriptions (along with journal entries) were explored for statements containing potential meaning (Moustakas, 1994). Those statements were then listed and coded by labeling and grouping into themes. These themes were guided in part by the key words produced by otter.ai but were also developed through the process of phenomenological reduction (Moustakas, 1994). The following themes were explored through the use of narrative descriptions derived from the analysis process.

Theme Development

This study was guide by Unified Theory of the Acceptance and Use of Technology (UTAUT) which explains the factors involved in technology acceptance and use (Venkatesh et al., 2003). The factors put forth by Venkatesh et al. (2003) within UTAUT, which are effort

expectancy, performance expectancy, social influence, and facilitating conditions, were used to develop the research questions that informed this study and also correlate to the four primary themes discovered through the transcendental phenomenological analysis process of Moustakas (1994). The four primary themes discovered were (a) ease of use; (b) learning enrichment; (c) influence of professional community; and (d) initiative to expand knowledge and resources. Within each theme, various sub-themes were also identified.

Ease of Use. When considering implementation and use of digital learning materials in online courses, the significance of ease of use was made clear. All participants emphasized the need for finding digital learning materials that were easy to use. When asked about preferences toward certain digital learning materials, Maria stated "I can't say that I personally have a preference on which I use, it's more just how easy that stuff integrates with the system." Similarly, Juliet also described her preference toward user-friendly digital learning materials:

 I would say, websites tend to be the easiest. Because a lot of times people hire website creators who are good at that visual component and making it user friendly. And a lot of times they will have those accessible features that other forms may not have. And so, I tend towards that.

Regardless of other goals or motivations for utilizing digital learning materials, the participants consistently included ease of use as a significant consideration for utilizing these tools. Michael emphasized ease of use when describing his goals for the use of digital learning materials:

I want to be able to utilize it quickly, effortlessly...I don't want it to have to be complex. When I'm in class, you know, when I'm, when I'm in class, tonight, I'll have four or five tabs open; I want to be able to navigate through those tabs easily. If something is clunky,

or complex, I just won't use it. Because it's just too disruptive to the learning process. I

like to keep things moving when I teach.

The primary theme of ease of use emerged throughout descriptions of how the participants

utilized digital learning materials themselves, but also became evident when participants

considered their students. Factors including accessibility, simplicity, and avoiding the need for

troubleshooting all emerged throughout discussions on the ease of use of digital learning

materials when considering student use of these tools.

Accessibility. The first sub-theme identified under ease of use is accessibility, and

particularly refers to how easily students are able to access digital learning materials. Molly

described accessibility as a benefit of digital learning materials:

I think the way that, especially with Canvas, how it's set up for them is that they're really

easy to access. So, I think that that is helpful. And then also too, the materials that we

actually choose to share with them, I think, again, the convenience of having those right

at their fingertips.

As online instructors are implementing digital learning materials, part of ease of use has to do

with the ease in which students can access those materials. Participants recognized that even if a

digital learning material is of high quality, students may not have the ability or the patience to

jump through multiple hoops to gain access. Juliet described this importance of easy access of

digital learning materials, but specifically for those with disabilities:

Is this accessible for somebody who has a hearing impairment or has some kind of vision

impairment or any kind of disability that might affect the way that they access it? And,

and that's, that's another piece that's challenging is that sometimes I have this really great

resource in one form. But if somebody has a disability that affects their ability to use it, I

don't always have the tools or the means to try to translate it or transform it into…to

make it accessible and user friendly.

Participants acknowledged that digital learning materials cannot be used to enrich learning if they are not easily accessible. When asked about factors most likely to influence the use of digital learning materials, Pam answered "How easy they are to get to." Similarly, Molly added "Yeah. Ease. Accuracy. You know, just making sure that they are available for the students, and there hasn't been any issues with them." Steve recognized the lifestyle of some students who may want to engage the course content while traveling, stating that digital learning materials provide "easier access for them. I find a textbook. They can do it anytime anywhere. They have a short commute maybe, or 15 minutes, they can jump right into a digital learning material."

Phillip described his use of digital learning materials as more measured, emphasizing simplicity along with accessibility: "So, you know, it's really great for the ease of access, but it can get overwhelming if it's not put together well." Phillip described how students can become overwhelmed when accessing digital learning materials if they are not paired down and simplified. Molly echoed this perspective, explaining that for digital materials, "having it available right there with less clicks…just some things, there's so much going on that it's hard to kind of figure out what…a teacher is wanting. So, for it to be easy to access is important." Participants described their experiences with accessibility as also relating to simplicity; in order to access digital learning materials, making them easy to find and navigate was an important part of accessibility.

Simplicity. The second sub-theme identified under ease of use is simplicity, which refers in this case to the simplicity of layout, navigation, and instructions for utilizing digital learning materials. Multiple participants considered digital learning materials easy to use if they contained

a simplistic layout, were easy to navigate, and needed simple or zero instructions. Phillip described the importance of simple navigation for ease of use:

> So, as a result, I'm not trying to do anything terribly crazy or flashy, or just be innovative for the sense of being innovative. I just want them to be able to understand what's going on, be able to navigate it fairly quickly and easily, and then be able to get to the end goal.

A simplistic layout and ease of navigation cut down on the time a student has to spend accessing and utilizing the digital learning tool and frees up more time to spend actually engaging the material. Ron included simple layout and navigation in his description of user-friendly features of digital learning materials:

> The more simplistic the user interface, I think, the easier it is for the students, the less clicking students have to do to get to places, so if you have modules with folders, the fewer folders students have to go into to find something, the better for them. I like big buttons, that when you hover over them, it tells you what the tool is for. I like a "What you see is what you get" text editors, so the students get to see what the final product is going to be.

Like Ron, Dean also emphasized the importance of a simple layout and straightforward navigation. When describing his own online courses, Dean explained how valuable simplistic features are for digital learning tools:

> Sometimes meaning can get lost in translation if you don't actually hear the person. So sometimes I may have students who ask me to clarify an email I sent or clarify an assignment or clarify a discussion question, how they should answer a discussion question. So that's probably the biggest thing that I face is sometimes I have students ask me questions about discussion questions, clarify different points. But as far as operability

of my classes, I found students have given me high marks because they said that my

classes are very easy to navigate.

In addition to a simple layout and easy navigation, simple instructions (or none at all) also

contribute to the ease of use of digital learning materials. For Rose, user-friendly features include

"simple, bullet-point instructions that you don't have to flip back and forth…and not a lot of

words. Pictures." Pam agreed, stating "Can I do it without reading the instructions? Cause I

know you're not gonna sit here and read the instructions." In locating or creating digital learning

materials that are easy to use, online instructors consider not only themselves but also their

students. Simplicity in layout and navigation, as well as simple instructions were all recognized

as factors contributing to the ease of use of digital learning materials.

Troubleshooting. The final sub-theme identified under ease of use was troubleshooting,

and specifically how ease of use may decrease the need for troubleshooting various issues and

cut down on user errors when utilizing digital learning tools. Rose described the need for ease of

use when learning or implementing a new digital learning material:

So yeah, ease of learning for me. And so, students don't have to say, "Oh, how do I do

this?" "It's not working." "I imported it, and it gave me this." I'm not having to

troubleshoot their problems. Cause then it's no longer making it easier for me… and it's

just frustrating for both people, cause young people aren't necessarily as tech savvy as we

think they are.

Because troubleshooting often involves both the instructor and the student, it impacts the online

learning environment for both. Therefore, the participants expressed a motivation to avoid

technical issues if possible. When discussing the challenges of teaching in an online learning

environment, Maria explained:

There's also challenges of, you know, everyone has a different level of technology understanding and literacy and so a lot of times, some of my job is really just kind of troubleshooting that piece of it. And then, as much as you spell out everything, there's somebody that doesn't understand something somehow. So, like, that always is a challenge too.

Juliet similarly described the difficulty that comes with having to troubleshoot issues with digital learning materials, highlighting the difficulty to solve technical problems remotely, as opposed to troubleshooting face-to-face. When asked about challenges regarding digital learning materials, Juliet stated, "Students saying, oh, that file doesn't work, that link doesn't work. And not being, not being able to troubleshoot when it's working for me, why it's not working for them." Juliet went on to explain that it "seems easier to troubleshoot if you're in person trying to help somebody. But again, that time and space distance just can sometimes make it difficult to really get at the heart of why they're having a problem with a resource."

Ron also described efforts taken to avoid troubleshooting needs by creating more digital learning materials to offer more help to the student. He stated, "Troubleshooting with students, if they have to make like a narrated PowerPoint, I'm offering them easy tutorials on how they can go to presentation mode and click record and start talking and click their way through the slides." For these participants, ease of use when utilizing digital learning materials was more than just for the sake of convenience; rather, they described a need for these materials to be easy to use in order to aid both themselves and the students. By emphasizing accessibility and simplicity, and working to prevent troubleshooting needs, online instructors are cutting back on the time they and students spend on the technological aspect of online education and can focus more on teaching and learning.

Learning Enrichment. The second primary theme to emerge during data analysis was learning enrichment, or the use of digital learning materials to provide variety to the students and therefore enrich their learning. Juliet specifically emphasized the value of variety in digital learning materials:

It gives them another voice other than just mine to learn from; it gives them different perspectives for that, they can access them, whenever it's convenient for them…And so even if the digital learning resource doesn't come from me, they know that there are things available to them. And so, they can even take some initiative of them for themselves to find things.

By providing various digital learning materials that cover the same content in different ways, instructors may be able to reach students that could be struggling with the material. If students are unable to grasp the material presented through traditional materials or even through the textbook, online instructors have the opportunity to find different formats that may effectively appeal to those students. Pam specifically looks for materials in the field of accounting that will appeal to students in different ways:

For online education, it's really helpful to have it phrased in another set of words. Especially because, so far, I haven't used a lot of synchronous type of teaching. So, it's, here's the PowerPoint, which is worded slightly different than the text. Here's the text. Can you figure it out between those two items? So, if I put in another teaching aid, a video or a game or something like that, it has to be phrased in a different way so that the student can, it's just another explanation of how to do things…the student may be able to understand a little bit better.

Similarly, Ron also described the value of having digital learning materials to supplement the course textbook. By providing more variety of learning materials, students do not need to rely solely on the textbook to gain an understanding of course content. Ron described his use of digital learning materials as supplemental materials:

> I also think it gives the students an opportunity to have a much broader foundation of texts and articles to draw from. I don't feel like I have to use one textbook, I feel like I can, there's many different articles that I can bring in. Each one of them is excellent on the, that one point I'm bringing in, whereas you choose a class textbook, and it may be good in 75% of the cases, but those other 25% you're like, "why do I make the kids have to read this?".

Juliet also views digital learning materials as a supplemental resource used to enrich student learning: "Like a textbook that they may be required to buy for the course, I view that more as kind of the core for our learning, and then a digital resource is going to come in more as a supplement." Juliet also considers the ways in which digital learning materials can be used specifically to reach students who may be struggling with the course content: "So I can target it to particular areas of struggle for them…in terms of learning, it's it just broadens and enriches the learning, in a way that if you just have a traditional textbook, isn't necessarily available." For Molly, utilizing digital learning materials is a valuable way to reach students with different learning styles and strengths:

> …to enhance what it is that they're gaining from their textbook, and to just be able to see it or, you know, in a different way, because everyone kind of learns different. So, where someone might be better at just reading it, other people might need that interaction.

Steve described the value of bringing other voices and perspectives into the course through the use of digital learning materials. When discussing his decision-making process for utilizing these tools, Steve described his efforts to find perspectives outside of what the student may be used to:

> I look for materials too, that are written by minorities, or people outside the United States to give the students a chance to understand it's a small world, that our world is not just made up of these states. So, whether they're just female leaders in a leadership class, or leaders in foreign countries of companies maybe, I worked to include them. So, I think about diversity when I'm selecting materials.

Various participants described the need for digital learning materials to be current, relevant, interesting, and visually appealing in order for these tools to enrich learning and provide variety to the students. Ron described some of the benefits of digital learning materials, stating "it keeps them reading more current things as well, because professors can switch out articles, you know, pretty easily when they find something that's newer and better." Steve similarly utilizes current articles as a form of digital learning materials and sees them as beneficial for the learner: "It allows me to use really current journals to expose the students to things that are out there in a digital world that they may not have known about." For Dean, the use of current digital learning materials provides online instructors with the opportunity to extend student learning beyond the classroom and course content. Dean states:

> But if I see something in the news or media or something like that, I send that as well. So, it gives me the opportunity to kind of flow at my students with relevant information of what's going on. Because to me, it is more than just knowing information in the book, how can you integrate it and apply it to real world?

Dean also emphasized this outlook on current digital learning materials at the institutional level, stating, "I would say that it's important for institutions to keep…encouraging professors to think outside the box... And also encourage them to use current events and also historical events in order to explain the reality of, of what exists today."

In addition to being current, participants described the value of digital learning materials that are relevant, interesting, and visually appealing. Steve, Dean, and Phillip all describe the usefulness of digital learning materials as providing relevant content to the students. When asked about her goals for the use of digital learning materials, Rose stated, "To make it come alive for the student, so it's not boring. Visually pleasing, interactive, and easy for students to use." Similarly, Molly stated "I am always looking for something that will keep the interest of the students." Pam also described the need for digital learning materials to be interesting for students, and specifically considered her own field, accounting, as influencing how interesting (or not) digital learning materials could potentially be. Pam described the process of locating interesting learning materials, stating, "finding materials that are not boring to me as the instructor, and I've taught this, and I know this. So, finding stuff that interests me, so it will interest my students, I think that's one of the biggest challenges." When determining which digital learning materials to utilize, online instructors understand the need for those tools to interest the students and engage them in the course material. Ron described his search for digital learning materials that would interest his students:

Hopefully they are interesting for the students. So, for example, if I'm going to make a video, is it going to be an interesting video for the students to spend five to seven minutes to watch, or is it going to bore them out of their mind? Is it going to be something that they would want to save as a resource later?

In order for these digital learning materials to be interesting to the student, participants understand that they should be visually appealing or have a visual component. When discussing how he considers digital learning materials to be useful, Phillip considered the benefits of PowerPoint materials:

> I mean PowerPoints, right? I put visuals in there, I put pictures, especially since I'm a history guy, you know, you can put a picture of something, you can put some important information. So, I think it's an easy way of using that or something else, videos, whatever they might be, to be able to get across the visuals to be able to make it a little bit more exciting…But they're great. I mean, it's great for a variety of things, catching people's visual attention, delivery of easy instructions, and so forth.

Participants acknowledged the expectations of students living in this modern technological age for shorter, more visually appealing materials that do not demand as much time to get through. Maria specifically referenced the appeal of social media when describing her current use of digital learning materials in the field of counseling:

> …you're responsible for digesting that textbook. Students really don't like that anymore. And they're kind of the ones that are driving the content of courses. So, I think, you know, in specifically to some of the other courses that I've taught too, like, breaking down harder concepts, right, like, finding, you know, I don't necessarily think that they need to see my face all the time. But finding resources where people are breaking down the concepts that they need, even in little like, two-minute videos, giving them those resources, visuals, call it like the "Twitter of online education," right, like the, they don't want to read the textbook, they want like the "quick shop," of it, so to speak. So, I feel like there's more of that.

For digital learning materials to be used to enrich learning, online instructors are focused on providing a variety of resources for their students, not only in format but also in perspectives. Additionally, online instructors are actively searching out or creating digital learning materials that are current, relevant, interesting, and visually appealing. However, in addition to these considerations, participants also emphasized course goals as a motivation for utilizing digital learning materials.

Course Goals. One sub-theme identified under learning enrichment is course goals, which refers to the ways in which participants emphasized the role of digital learning materials in aiding the achievement of the goals laid out for the course. Maria linked her goals for digital learning materials to her course goals, stating:

> I think my goals are my learning objectives…I want them to understand certain concepts or gain certain skills. And I also, you know, want to break down certain things for them. So, if there's something harder to understand, I might put in an extra resource that week, to help them you know, convey that point.

Utilizing digital learning materials to enrich learning helps students to meet course goals, especially when the student needs additional resources to help them engage the course material. For Steve, the course goals outweigh other aspects of the digital learning materials. When describing his goals for the use of digital learning materials, Steve stated:

> My goals for the use of digital learning materials have to relate to the goals of the course. So, if the material doesn't support what we're trying to have students learn, maybe it's just interesting. Or maybe it'd be even funny, but that's not going to be good enough if it doesn't support the class.

Ron also considered the learning goals for the course as a driving factor for selecting or creating

certain digital learning materials: "And so the materials need to support those learning goals so

that the students at the end can say, 'I have learned X, Y, or Z' or 'I can now do X, Y, or Z'."

Participants ultimately described useful digital learning materials as those that not only appealed

to the student by being current and interesting, but also as those that helped enrich learning in

order to meet course goals.

Print. When describing the usefulness of digital learning materials, most participants

explained that students generally had the option to print digital learning materials if a need was

determined for hard copies. However, only two participants expressed concern for students only

accessing digital learning materials digitally while the other eight participants described the

digital format as potentially more beneficial for the student than print format. For Pam, digitally

formatted materials are not her preference, and she sees a similar preference in some of her

students:

> I'm kind of old school myself so I like a paper book in front of me. And I have found that
>
> my students are probably split 50-50 on online texts versus a paper text. The text I choose
>
> I, they try to have both of them available for them.

However, Pam also acknowledged the benefits of digitally formatted learning materials, stating

"For my online students, it's easier for them to get to it, it's usually just click on the link. And

then I can make sure they're all looking at the same thing." Along with Pam, Phillip also prefers

printed text over digital texts for longer, text-heavy documents. However, Phillip also

acknowledged that students generally have the option to utilize any digital learning materials in

either print or digital format. Phillip stated, "I'm firmly against the use of E-textbooks pretty

much ever," but also emphasized some of the benefits of shorter, more visually appealing

materials as effective in digital format. Although Rose did not express a specific opinion regarding the use of printed versus digitally formatted learning materials, she did describe a specific experience working with a math digital learning tool that may have worked better in print.

Molly, Steve, Ron, Maria, Juliet, and Michael all described providing a print option for students as needed or if the student requested it but did not engage in extra efforts to encourage hard copy access of digital learning materials. Juliet described her experiences with providing students hard copy access for students as needed:

I find that because learning styles are varied from student to student, not every student needs stuff printed out. And so, for me, it becomes kind of a case-by-case basis of, you know, is this, can you engage with this better if you print it out? Do you need to print it out so that you can annotate it and take notes, you know, in the margins, type of thing? So, I don't usually kind of holistically make a decision of, everybody needs this to be printed, typically, and it's more kind of a case-by-case basis.

Michael similarly acknowledged that some students may prefer or need a hard copy of a text or material, but still personally prefers to work exclusively with e-texts. Michael stated:

I'm just wondering, you know, under, under what conditions would a student not want to access digital material? What would force them? Maybe some type of learning disability? I don't know. That might be one…But, I mean, if they want a physical copy, then it will be up to them to get one. And that's fine with me.

While most participants seemed to view working with digital learning materials as simply a part of the online learning environment, only Phillip and Pam expressed a specific preference toward printed copies of certain materials. However, one participant, Dean, described his intentional

efforts to avoid printed copies of digital learning materials for the sake of convenience, budgetary needs, and the environment. Dean described his utilization of digital learning materials in both his online courses and his face-to-face courses:

> The only time I really give my students hard copies is my face-to-face. But even then, the only hardcopy I give to them is like the syllabus. But I let them know the first one I give you. But other than that, you can print it off online. And also, all of my, even my face-to-face courses, my tests are online, because I realized that if I have 30 students, and I have four tests, and each test is like five pages, I am wrong, I'm using a lot of paper that I don't have to use, which means that that's affecting my department's budget, that's affecting the environment. And I realized why not create an exam online? That doesn't have that waste? Because if I was teaching online class my tests will be online…So, I found that with digital, you can really be creative and how you want to design your course.

Participants ultimately did not describe many instances where they actively considered print options for students, and generally operated under the assumption that their online students simply accessed the digital learning materials digitally, and if a hard copy was desired, the student would access that personally. Participants described the usefulness of digital learning materials mainly in terms of the ability to provide variety in order to enrich learning, and considered whether these materials were current, relevant, interesting, visually appealing, and aligned with course goals. Being able to provide digital learning materials in hard copy was not a significant indicator of the usefulness of digital learning materials.

Professional Community. The third primary theme identified was the participants' professional community. This professional circle of influence and connection included administration, peers, and students. Participant descriptions regarding their experiences as online

instructors often included a feeling of disconnect with students and even peers, although efforts to rectify that disconnect and build professional community influence and connection were also described.

     Administrative Influence. One sub-theme identified within the theme of professional community was administrative influence, which refers to the institution's requirements for the course and instructor, as well as the freedom (or lack thereof) for the participants to modify or include digital learning materials. Steve hinted at this administrative influence on the use of digital learning materials, stating, "the university too has to be willing to allow a professor to add digital materials to an already written course." Michael also described administrative influence, specifically in regard to textbook options, describing his preference for e-texts, stating:

> Well, with a lot of courses that I teach, that's already been decided for me; the course text is already selected. However, there are some courses that I teach that I have the latitude to pick the text. If I do, I almost always choose a text that's available via Kindle. I really have to love that book if it's not available in Kindle, and I continue to use it.

Although Michael prefers e-text and understands that the influence of the university may keep him from being able to utilize those digital learning tools, Phillip looks at the issue from the opposite side; rather than attempting to utilize e-texts exclusively, Phillip described his efforts to avoid the use of e-texts:

> Now, of course, most of the time, the courses I'm teaching, they're already created. So, if they want to use an E-textbook, then I just, you know, I'm just parroting the line that I'm given…But having said that, I mean, sometimes it's like, alright, this is what the school wants them to do, you know, that's fine.

Maria acknowledged the influence of her institution on the implementation of certain types of

digital learning tools, stating "I think that there's a lot of really cool digital technology that

doesn't apply to how my institution wants courses set up." Maria also described the process of

being contracted to teach a course and the lack of time included in that process to modify course

content and include certain digital learning materials. Maria explained that "once a course is

designed, it runs that way…and it rarely gets like an overhaul unless it's been like, a couple

years… when I'm asked to teach a course, I'm focusing on running that course, instead of like

shifting things." Finally, Ron described the administrative influence particularly in the use of

subject matter experts designing but not teaching the course and how this can create difficulty for

the instructor who may wish to design course materials differently:

> Online courses are often made by subject matter experts and the person teaching the
>
> course is not able to make many changes. The greatest limitation I have faced is when
>
> major papers are expected by the school to conform to the subject matter expert's design
>
> and the design makes no sense. Student's struggle to complete the assignment and I
>
> struggle to properly grade it.

Participants described administrative influence over their use of digital learning materials mainly

within the context of limiting their freedom to modify the course by implementing and utilizing

digital learning materials. Administration was not described as a major influence on increasing or

positively motivating participant use of digital learning materials.

  Peer Influence and Community. A second sub-theme identified regarding professional

community was the sense of community among peers as well as the influence of peers on the

participants' use of digital learning materials. For some participants, there was a feeling of

disconnect among peers, which mainly came from working in a remote setting and not

interacting with peers face-to-face, and perhaps not interacting at all. Rose described this feeling

of disconnect among peers as a challenge to teaching in an online learning environment; Rose

described "feeling kind of disjointed with everybody else in the university, it's not, I'm not really

connected anywhere and don't know where to go for any questions." When asked specifically

about how those in her professional circle of influence may have influenced her toward or

against the use of digital learning materials, Rose replied "we don't ever talk about it." Ron

described a similar experience, explaining that "the colleagues in the program are like me and

work other jobs and are all around the country. And the few times that we have talked, it's…the

total program things to do, nothing specific about learning in our courses." Similarly, Maria also

described feeling removed from her peers: "I'm adjunct. So, I'm not, and I'm not on campus…I

feel like that's really kind of where I'm at in regard to how it actually works there, is different

because I'm pretty removed. Like, I'm not in any faculty meetings…" However, Maria also

described an experience where she was sought out by those in her professional circle regarding

her use of digital learning materials:

> The only feedback I get is from like, the department head, who has sought me out
>
> specifically to design and redesign courses because of the resources I've put in
>
> historically. So, I think that there's, at least in my department, I feel like that's something
>
> I'm doing at least well, or equal to, or, you know, I feel like I'm not like at the bottom of
>
> using those resources.

Although working in an online learning environment can cause some feelings of

disconnect among peers, some participants described efforts they have taken to connect with

their peers in order to improve their use of digital learning materials. Molly described being

intentional in learning how to utilize digital learning materials as a newer online instructor with

less experience. Molly stated, "I have reached out to other professors to kind of get their, you know, thoughts on what they're doing, how they're enhancing it. So, if anything, I would say that they influenced positively the use in certain areas." Molly also acknowledged being newer to the world of online learning, stating, "especially as a professor kind of starting out, I'm always open to suggestions of others in regard to what seems, you know, to work with students." For Pam, peer influence has played a significant role in her use of digital learning materials. Because Pam is less inclined toward digitally formatted tools, peer influence gave her the opportunity to explore various digital learning tools:

> They definitely pushed me toward it…Somebody said, "Did you try this? Did you try that?". You know, things that they had used, that they found works…So, they've definitely pushed me farther than I would have personally gone…We had faculty meetings earlier this week, and later last week, and I have notes all over my page of things that people said, "Oh, try this." "Try that." "Have you thought about this?" So, maybe one of these days I'll check some of them out or during the semester, something will come up and I'll, "Wait. I wrote that down somewhere."

Pam's description of her experiences with peer influence also highlights the role that face-to-face interactions with peers in faculty meetings can play in online instructor use of digital learning materials. Although Dean did not specifically mention faculty meetings or other face-to-face interactions with peers, he did describe his interactions in other online courses as a student and the ways in which those experiences allowed him to learn from other professors on how to best utilize digital learning materials. Dean also described his peers and their competency with digital learning materials:

I will say my colleagues, my professional circle, all of them, they are proficient in digital

courses. Now, some may prefer, some may prefer online, some may prefer lecture, or

some maybe "Hey, it doesn't matter". But I can say all of them are competent. So, I'm in

a department to where it's encouraged, where you use digital learning and also it's

encouraged that you teach in a way you're comfortable, you're comfortable and also the

way I've benefited, is that while being an instructor here, I've also taken classes. So, I

may have seen some things and some classes I've taken and implemented in my own

class. So, for example, in one of the classes that I've taken, one of my professors, which

he's my, my psychology colleague, he had us do like a PowerPoint, teaching

demonstration. And so, I use that in one of my undergraduate courses. So, I think and

with that, it gives you an opportunity to actually not only learn about what your colleague

is doing, but also, I can go to the course that I've taken and look at, you know, how he

designed that assignment, then I can implement it in my own class.

As the descriptions by Dean, Molly, Rose, Maria, Ron, and Pam show, peer influence, or a lack

of a strong peer community, can play a major role in online instructor use of digital learning

materials. For those who may not lean toward the use of digitally formatted materials, having a

peer community may encourage the use of digital learning materials. For those who actively

utilize digital learning materials, a peer community provides even more options to get new ideas

for the use of digital learning materials. But for those without a sense of connection with peers,

the positive influence of those peers may be missed.

     Student Connection and Influence. A final sub-theme of professional community was

student connection and influence, which refers both to the interaction between the participants

and their students in online learning environments as well as the influence of students on

participants' use of digital learning materials. Multiple participants expressed a feeling of disconnect with students within an online learning environment. Ron described the difference between teaching online and teaching on-site, stating, "one of the reasons I went into education is I like interacting with students. And the online classroom is very difficult for me." Ron went on to explain that the online learning environment makes it more difficult to communicate with students. Similarly, Rose also compared her on-site and online teaching experiences. When describing her online teaching experience, she stated "it was different because I didn't get to see the students, didn't get to know them. It was much more academic." Molly also listed communication with students as a potential challenge to online learning:

> I think probably most of the challenges is when you have a student that isn't really participating. And even when you reach out to them, and you try to establish what might be going on. If they are not responding, then you're at a loss. So that's probably the biggest challenge for me.

Along with these three participants, Phillip, Juliet, and Pam also described difficulties communicating with students or experiencing a disconnect with students. However, Dean described his own efforts to connect with students and the opportunities that come with online learning environments to build connections with students:

> It's an opportunity for them to stay connected with the professor…So, a student can be in Germany, or Korea or Mexico, and I can be in Venezuela, or Iran somewhere. And we can communicate through Zoom, where that, students still feel like that they are connected with the professor and also with the course.

Michael also described the importance of student influence in his own work. He described a situation where students influenced him toward a more effective use of PowerPoint presentations:

> "It's embarrassing, but for the first two or three years, I used PowerPoint, it was all black and white. I never ever used color. And one day, I had a student and I said, they said, "Doc, this black and white stuff's killing me. Why don't you put it in a template?" And I said, "What's that?" And they said, "Can I show you?" I said, "Sure. Show me." They took me to school. And in in five seconds, boom, there it was.

Michael went on to describe the ways in which he had been influenced by his professional circle. He specifically emphasized the role that students can play in aiding an online instructor's teaching:

> But this is what I love about teaching young people. I really do. I work hard at building relationships with them. And I love them. And I think they love me, most of them. And they'll say, "Doc, check this out." You know, if I think it'll help me, I listen to them. So, students are the biggest influence on me. Probably my colleagues should be number two, administration number three.

It became apparent that most participants understood the need to connect with students in order to enrich the online learning experience. However, due to the challenge of establishing connections with students, as described by some participants, the extent of student influence on participant utilization of digital learning materials may have been limited. As Michael's description revealed, a strong connection with students may lead to further influence of students on online instructor use of digital learning materials.

Initiative to Expand Knowledge and Resources. The final primary theme identified was initiative to expand knowledge and resources. All participants described the facilitating conditions of their institutions as requiring personal initiative from online instructors. Additionally, participants also described the need for personal initiative when seeking out additional digital learning materials and the skills to implement them outside the institution's support system. Rose described her initiative as simply "Reading books, just going online and searching for things that are available." Rose went on to describe herself as "someone that knows someone to turn to, to ask questions to help." This theme of taking initiative to learn how to improve online courses and specifically how to implement and utilize digital learning materials was apparent throughout the majority of participant descriptions.

Experience Using Digital Learning Materials. A prominent sub-theme identified was experience using digital learning materials and how that experience led to increased proficiency and use of these tools within online learning environments. For example, as Molly has navigated the transition of her institution to the Canvas learning management system, she credits her experience through this transition as contributing to her increased use of digital learning materials. Additionally, Pam explained "I definitely have more videos now than I did. I think the only other thing I've added over the years is a template for homework just because it makes it easier for me grading. It's all in the same format." Similarly, Maria stated, "I think maybe I have more supplemental materials now than I did before. You know, and this is kind of, I think, a times of change kind of thing, right?" As online instructors gain experience with digital learning materials, they seem to know how to better utilize them to enhance the online learning experience for both themselves and their students.

Juliet specifically cites her experience as a content creator as influential in her use of digital learning materials, stating, "what I have found myself doing is drawing from that time when I was doing more content creation to supplement what is already plug and play." Juliet goes on to explain the ways in which her experience with digital learning materials continues to influence her use of them today:

> This is just, might seem obvious, but I just have a wider variety of resources, both from what I've created, but also just what's become more widely available, either through the university that I teach for, or just you know, good old Google.

Experience working with technology and digital learning materials seems to increase online instructor use of digital learning materials. Ron explained that his use of digital learning materials has increased throughout his time as an online instructor, and he specifically described his willingness to sort through various digital options:

> I'm an early adopter with technology, it comes pretty easy to me…so I just jump in to see if I can't do it as soon as it comes out. And so, I have no fear of clicking buttons and pushing here and pushing there and deleting and trying again.

Similarly, Rose explained "As both technology improves and my skills develop, enhanced classroom interaction results." Taking the initiative to explore options for creating and implementing digital learning materials sometimes looks like engaging in technology outside the classroom. The more comfortable the online instructor becomes with technology, the more they may be willing to utilize it to create and implement various digital learning materials in their online courses. Steve described his own use of technology as influential in his use of digital learning materials:

I think my skills have developed that way. And they've developed through the use of

technology myself, so I get to direct other faculty members for one university, and I

notice a variety of skill or talent in using digital materials; I guess it goes back to whether

they're really engaged with technology themselves. I feel like I try to stay current with the

use of technology. And that helps me in providing good digital learning materials for

students.

Steve also describes his own engagement with social media as another influential factor

regarding his use of digital learning materials. Referring specifically to his professional circle,

Steve described the initiative he has taken in gaining experience with digital learning resources:

I think as they've increased their use of social media or digital learning materials, then

I've also increased that and my scope of what I know about has increased a lot through,

especially the use of Twitter and seeing what others have posted, I'm able to share that

with my students because my circle of influence or circle that you mentioned, has posted

that for me.

This description by Steve not only demonstrates the value of peer influence, but also exemplifies

the personal initiative of online instructors to expand their implementation and use of digital

learning materials. Juliet explains that "there's not a lot of time to be super creative and develop

new things. But if it was going to happen, it would be on that organic kind of individual

initiative, go seek somebody out who can help you." Although this personal initiative is

evidenced through different participant descriptions, what is clear is the understanding that it is

often up to online instructors to pursue experience and knowledge regarding the use of digital

learning materials.

Navigating Numerous Options. A final sub-theme identified involving experience was navigating numerous options. Several participants described the existence of multiple (even excessive) options for utilizing digital learning materials and the ways in which they sorted through those options to seek out quality materials. When discussing the challenges of utilizing digital learning materials, Phillip stated, "there's just too many of them" and described the process of navigating through multiple options:

> Typically, if I try to go out and look for an app that will do X, Y and Z, by the end of it, you know, nine of them are terrible, and the one you finally found wasn't worth the 10 hours of research. So, you know that kind of thing I could do better at if I had kind of somebody who could reach out and tell me what to do, then I could be a little bit better at those kinds of things.

If time is an issue, it may not be feasible to wade through multiple resources and options implementing digital learning materials. Steve listed limited time as a potential challenge to online instruction, and stated, "I think a challenge…is that there are so many materials, picking the very best ones is a challenge." Pam also described her struggle with navigating through multiple options for digital learning materials:

> I'm not super comfortable with sitting there and scrolling through pages and pages and pages of an internet search to find that one piece that I'm looking for. So mostly, I'll get through about two. And now I'm done. I'm moving on to something else, I'll find another way to do it. So, the ease of use, I would say, for me personally, maybe I'm displaying my age, I don't know. But it's not that easy for me.

For Ron, this process of navigating options is less challenging. For those more comfortable with technology use, exploring different options for digital learning materials is less daunting. Ron described his experience searching out digital learning tools:

> I think the pandemic and moving all of K to 12 schooling onto Zoom or Microsoft Teams, or whatever it was, was a good insight into a lot of experimentation. And a lot of websites cropped up, a lot of apps came through. And every time I'd hear of one, I would just go see, what will this do? How will this work? What's the ease of use for the teacher? What's the ease of use for the student…a lot of experimentation is done to figure out "Hey, do this. Don't do that."

Although having multiple options can create a time-consuming process of trial and error, it can also be beneficial for online instructors looking to save time. For Juliet, having a variety of options for digital learning materials is beneficial:

> There's so much available. I think that's one of the benefits to me as an instructor. There's so much, I don't have to reinvent the wheel. You know, I can if I need to tailor it to a student, but so many universities, so many reputable online sources already exist, it's very easy to direct students to, to those. And I think that's probably, it's a time saver if I'm honest, which frees me up to give more tailored feedback, which in an English class, I think is one of the most important pieces.

Navigating multiple options for digital learning materials was something that most participants experienced, and the process seemed to be more beneficial for those more comfortable with technology or more open to utilizing digital learning materials in their courses. Additionally, time was a factor; participants with limited time were less inclined to sort through the multiple options, whereas those who described the navigation process in a positive way did not mention

time constraints as a challenge. Although certain supports are part of the institutions utilized as sites for these studies, most participants still pointed to personal initiative as necessary for gaining knowledge and help utilizing digital learning materials. While some participants utilized the supports in place at their institutions, others depended more on their own experience with technology and prior use of digital learning materials.

The themes identified through data analysis aligned with the research questions guiding this study as well as the theoretical framework for this study, UTAUT (Venkatesh et al., 2003). UTAUT seeks to explain the factors involved with user acceptance and use of technology, and for the purpose of this study, the participants, who are online instructors, are considered the potential users of technology, but also influence technology use by their students (Venkatesh et al., 2003). The following themes identified through data analysis (along with the sub-themes) help to describe the experience of online instructors with the use of technology, and specifically the use of digital learning materials: (a) ease of use; (b) learning enrichment; (c) professional community; and (d) initiative to expand knowledge and resources.

Research Question Responses

The central research question guiding this study was *what are the experiences of online instructors at Christian colleges with the implementation of digital learning materials?* There is a gap in the research concerning higher education online instructor use of digital learning materials, whose decisions regarding the use of these tools may also impact student use (Guri-Rosenblit, 2018; Moro, 2018). Because the responsibility is partly on the instructors to effectively implement and utilize digital learning materials (Cavanaugh et al., 2016; Moro, 2018; Singer Trakhman et al., 2019; Ugúr, 2020) a better understanding of online instructor experiences with these tools is needed. The four sub-questions listed and answered below help to

inform the central research question and describe online instructor experiences with digital

learning materials.

The first sub-question guiding this study asked: *How do online instructors describe ease of use as a factor in implementing digital learning materials?* This question aligns with UTAUT and specifically addresses the factor of effort expectancy in a user's intention to utilize technology, which focuses on the technology's ease of use (Venkatesh et al., 2003). All participants in this study described experiences that included the ease of use of digital learning materials, and user-friendly features that were mentioned included accessibility, simplicity, simple navigation, clear layouts, less troubleshooting, and simple instructions. For Rose, "it has to be easy to learn". Phillip understood the value of ease of use not only for himself, but also for his students: "The ease of use of whatever product is being used is really important, because some might be able to do it really quickly. But others who aren't as used to it, they would really struggle." When asked which factors were most likely to influence her use of digital learning materials, Pam stated, "How easy they are to get to." Ron concurred, stating, "ease of use is most important. If it's complicated, some people just are not going to get it done, and it'd be frustrating for everybody involved." Juliet also considered factors influencing her use, and stated, "Ease of integrating them into the course. That's the first and primary factor…Can I get it integrated? Are my students going to be able to easily access this and use it too.?"

While these participants described ease of use as a significant factor in their decision to utilize digital learning materials, other participants emphasized the ease of use of digital learning materials and why they use certain tools specifically because of their ease of use for the student. Michael described a situation where he encouraged a student toward the use of a digital learning material because of its ease of use:

Recently I had a student who was having difficulty accessing hard copies of her texts. I

directed her toward Amazon Kindle, where she could access her texts cheaper, and

instantly. She did just that and was able to move forward in a matter of minutes.

Similarly, Dean and Steve both emphasized the accessibility of digital learning materials as a

user-friendly feature. Steve stated, "I want to a resource that's going to function well on a variety

of devices. It needs to work whether a student's using their phone or their iPad or their PC."

When asked about the benefits of digital learning materials, Dean described ease of access,

stating, "So, they would have access to being abreast of current events and things of that sort.

They'll have the flexibility long as you have a laptop and internet, you can complete

assignments."

Those who expressed more comfort with technology also happened to possess the most

experience: Dean (14 years' experience), Michael (16 years), and Steve (17 years). For these

three participants, "ease of use" seemed to be less of a factor they prioritized for themselves and

more a way to describe digital learning materials. These participants still valued digital learning

materials that were easy to use, but they described experiences that indicated they had already

done the work of knowing how to limit their experiences to only working with easy-to-use

digital learning materials. However, most participants who described ease of use as a significant

factor in their utilization of digital learning materials possessed less experience teaching online

than other participants. Rose (1 year experience), Molly (3 years), and Pam (4 years) all

emphasized ease of use as a significant factor in their decision to utilize digital learning

materials. Additionally, Pam and Phillip, who also described ease of use as an important factor,

also described a preference for printed materials in various cases. Ultimately, regardless of

online teaching experience or preference for digital or print, ease of use was described as a

significant factor of online instructor implementation and use of digital learning materials. The primary theme of ease of use, and the sub-themes of simplicity, accessibility, and troubleshooting, all contribute to a better understanding of sub-question one of this study.

The second sub-question was: *How do online instructors describe usefulness as a factor in implementing digital learning materials?* This question aligns with UTAUT and addresses the factor of performance expectancy, which refers to the usefulness of a digital learning material or tool (Venkatesh et al., 2003). All participants described digital learning materials as generally useful for teaching and learning, and none indicated a desire to utilize digital learning materials that were not useful in some way. For most participants, the usefulness of digital learning materials was described as being used to enrich learning through variety. Rose explained, "The most basic digital learning material for a teacher is PowerPoint. Particularly, online, without the direct classroom interaction, it is nice to have variety." For Molly, this variety is important because the use of various digital learning materials can "enhance what it is that they're gaining from the textbook." Maria also viewed the use of digital learning materials as a way to supplement the textbook, providing variety to enrich learning:

> So, there was a lot of extra supplemental resources there to help them grasp the concepts that if they're reading a textbook, and their eyes are like bugging out, like, I still want them to walk away with an understanding of it, even if they don't grasp that textbook.

Similar to Molly and Maria, Juliet also views digital learning materials as useful resources to supplement the textbook. She stated:

> a textbook that they may be required to buy for the course, I view that more as kind of the core for our learning, and then a digital resource is going to come in more as a supplement, and as a way to enrich.

Juliet went on to explain that the use of a digital resource "broadens and enriches the learning, in a way that if you're just, if you just have a traditional textbook isn't necessarily available." In addition to these descriptions, Pam also described the usefulness of digital learning materials in terms of the variety that they bring to the student; by providing the student with different presentations of the same course content, students who are struggling may be able to finally grasp those concepts.

Many participants described digital learning materials containing pictures, graphics, animation, or other interesting features as an aspect of providing variety to the student. Phillip explained, "Anything I can do to make the class or the content a little bit more, for lack of a better word, exciting, that is non text based, not another email or another document or another article, but something to try to get away from that." Similarly, Pam acknowledged her own field of accounting and stated, "Some of these techniques are difficult to express in text so visual is very effective." Ron also considered the usefulness of digital learning materials in terms of the interest level of the student:

> Hopefully they are, they're interesting for the students. So, for example, if I'm going to make a video, is it going to be an interesting video for the students to spend five to seven minutes to watch, or is it going to be is it going to bore them out of their mind?

In addition to adding interesting visuals and other features to enhance student learning, participants also described the usefulness of digital learning materials in terms of course goals. Ron stated, "The materials needed to support those learning goals." Steve echoed this thought: "My goals for the use of digital learning materials have to relate to the goals of the course." When asked about her goals for the use of digital learning materials, Maria explained, "my goals are my learning objectives." She went on to describe digital learning materials as useful for

helping students achieve the learning objectives for the course. Participants viewed digital learning materials as useful for providing variety to the students in order to enrich learning and ultimately meet course goals. The primary theme of learning enrichment, along with the sub-theme of course goals helped to answer sub-question two and describe the factor of usefulness in online instructor use of utilizing digital learning materials.

The third sub-question guiding this study was: *How do online instructors describe social influence as a factor in implementing digital learning materials?* This question aligns with the social influence factor of UTAUT and explores the ways in which online instructors are influenced by various members of their professional circle (Venkatesh et al., 2003). While some participants described experiences where they were influenced by those in their professional circle others described a feeling of disconnect among peers or were simply removed from the institution due to their position as an adjunct or remote worker. For Rose, Maria, and Ron, professional influence in regard to the use of digital learning materials does not really come into play. Rose stated, "We don't ever talk about it," and Ron similarly explained "Students have never asked anything about it. And the…administrators have never said anything to me about it." Ron also stated that any interactions with peers generally did not include discussions regarding digital learning materials.

However, other participants, like Dean, Steve, Molly, Michael, and Pam, did describe influence of their professional circle on their use of digital learning materials. Dean described interactions with mentors and his own teachers, while Steve connected with peers over social medial to gain more insight into digital learning materials. As a newer online instructor, Molly described reaching out to other professors to gain an understanding of digital learning materials. Pam cited faculty meetings as a major scenario where peer influence came into play. Finally,

Michael described several scenarios where students, more than peers or administration, influenced him toward more effective uses of digital learning materials.

In terms of administrative influence, Ron, Maria, Steve, Phillip, and Michael all acknowledged possible limitations put in place by administration that may influence their use of digital learning materials. Steve explained: "Whether the university allows that or encourages that would be a big factor in whether I add something to a course. And so sometimes there's not the freedom to add things to courses. And sometimes the university encourages that innovation." Phillip similarly acknowledged administrative influence, stating, "What am I allowed to do within the parameters of the course that's set up, and so that, that's going to depend on the school." Steve and Michael also mentioned the role that finances, and specifically the budgetary needs of the institution, can play in influencing online instructor use of digital learning materials. All participants acknowledged the existence of a professional circle, and while some expressed a feeling of disconnect or described limited influence by these individuals, others were able to take advantage of this influence and tap into the opportunities for understanding provided by their peers, administration, and even students. For those with more limited experience teaching online, like Molly and Pam, this professional circle was of great value. Those more engaged with or inclined toward technology seemed to know how to tap into this circle of influence and utilize it to increase the effectiveness of their teaching. The theme of professional community and the sub-themes of administrative influence, peer influence and community, and student connection and influence align with the factor of social influence and help to answer the third sub-question for this study.

The final sub-question guiding this study was: *In what ways have facilitating conditions influenced online instructors' experiences with the implementation of digital learning materials?*

This question aligns with the factor of facilitating conditions, a component of UTAUT that refers to the supports in place that aid the user in implementation and use of technology (Venkatesh et al., 2003). While participants provided differing descriptions about the supports and structures in place at their institution, all emphasized personal initiative as necessary for problem-solving or increasing knowledge and experience with digital learning materials. Juliet described a specific example in her course where initiative was needed to problem-solve:

> One limitation was out of my control: the inventory was created and housed on a website outside of my university and I did not have the access or capability to fix it. The other limitation was within my control if I had been aware either through my own proactive checking of links or perhaps if a student had alerted me prior to the assignment's due date.

Similarly, Maria described an experience where she took the initiative to explore resources that would be valuable for her institution:

> I was able to find other resources in the online environment that were illustrated or creative in nature but other resources available were only available to my students with a fee or subscription to a website. I do believe that would be valuable for our school to invest in those subsection outlets for instructors and students to access creative arts resources for course design or provide a department to support the development of that content.

Juliet went on to describe her role of taking initiative to increase her own knowledge and experience: "if I want to, you know, grow in that professional development, I'm going to have to find it and seek it out." Juliet also mentioned seminars and engaging in peer reviewed journals as other forms of initiative she has taken in order to receive support for her use of digital learning

materials. Both Ron and Steve credit their own personal use of technology as helping them to better understand digital learning materials. Ron stated, "I love technology, and I love learning. And technology is becoming more and more prevalent in learning. So, it's something I'm always looking at and always researching in my own personal life."

While personal initiative is a necessary aspect of expanding knowledge and experience with digital learning materials regardless of what facilitating conditions may be in place, having sufficient supports and structures in place does create positive experiences with digital learning materials. Ron explained that his institution "has a great technology department, that if you are having problems, you can contact, and they will help you remotely. I've never had to use them. But I have heard they're very good at what they do." Similarly, Dean acknowledged the value of having effective facilitating conditions:

> We have our IT department. They have frequent trainings that we can attend. If we have any questions, they are very reactive, they're very responsive, in answering our questions. So, our school definitely supports online training, because that is where a lot of our students are coming from, which means that they comprise a lot of our revenue. They really do a good job in making sure that our online courses not only meet the standard, also, we're proficient in teaching online courses.

While effective supports and structures are noticed and valued by online instructors, a lack of these supports can also have an impact on online instructor use of digital learning materials. Rose, Maria, and Juliet all acknowledged the need for more support at their institution to aid in their understanding and use of digital learning materials. Rose explained "I'm not really connected anywhere, and I don't know where to go for any questions." Maria stated, "I wish there was like, a once-a-year platform for adjuncts to kind of get together and brainstorm" and

went on to suggest "if I had access to somebody, like maybe on our staff, they could help me improve certain things, you know, or just give feedback." Finally, Juliet suggested:

> Yeah, I really do feel like they could do more in terms and what whether that's just developing additional Canvas modules for online instructors, or if that's, you know, a once a semester meeting of online instructors who are available to collaborate and talk and discuss what's working well, I feel like there's a bit of an assumption that if you can teach, you can teach online and I'm just not real sure that's true. So, I'm thinking I could I think they could do more in that department.

Participants ultimately seemed to understand that regardless of whether or not their institution had a strong IT department or other supports and structures, they were responsible for seeking out the answers to their questions or gaining experience with digital learning materials. The ways in which participants described facilitating conditions seemed to indicate that strong supports and structures would be valued and utilized, and in some cases, participants who lacked these supports were at a disadvantage, especially if they did not have extensive experience online teaching or a high level of comfort with technology. However, the factor of facilitating conditions was less influential in participant use of digital learning materials; rather, personal initiative was necessary for growth in online instructor use of digital learning materials. The theme of initiative to expand knowledge and resources, along with the sub-themes of experience using digital learning materials and navigating numerous options all underscore this understanding of the factor of facilitating conditions and how it relates to online instructor use of digital learning materials.

These four guiding sub-questions all support and help to answer the central research question, which was: *what are the experiences of online instructors at Christian colleges with*

the implementation of digital learning materials? By exploring the factors of UTAUT represented by the sub-questions of ease of use, usefulness, social influence, and facilitating conditions, an answer to this central research question could be found. The four themes of ease of use, learning enrichment, professional community, and initiative to expand knowledge and resources, along with their sub-themes, together form a description of the experiences of online instructors with digital learning materials.

Summary

This chapter provided descriptions of the ten participants included in this study. Following these descriptions, a narrative description of the four primary themes along with their sub-themes was included. Following these descriptions, results of the study were presented and organized by the primary research question and four sub-questions. The four themes and sub-themes were linked to the research questions in order to present the results of this study.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this transcendental phenomenological study was to describe the experiences of online instructors at Christian colleges with the implementation of digital learning materials within online learning environments. This chapter begins with a section with a brief restatement of the purpose of the study. The first section includes a summary of the findings of this research study by answering the central research question and four sub-questions that guided the study. Second, findings are discussed along with their implications within the context of the relevant literature and theoretical framework. Third, methodological and practical implications are discussed. Following this discussion, delimitations and limitations for the study are outlined. Finally, recommendations are made for future research and the chapter is concluded with a summary.

Summary of Findings

The following summary of the research study findings are presented first by themes and sub-themes generated from the transcendental phenomenological analysis method of Moustakas (1994). Second, answers to the central research question and four sub-questions are summarized based on the findings presented in Chapter Four.

Themes

The first theme identified through analysis was ease of use. This term refers to the effort expectancy of technology users (a factor of UTAUT) and was described by all participants as playing a role in their decision to implement and utilize digital learning materials (Venkatesh et al., 2003). For many participants, especially those with less experience teaching online as well as those who expressed a preference for print, ease of use was the most important factor

determining their use of digital learning materials. The three sub-themes within ease of use were accessibility, simplicity, and troubleshooting. For those more comfortable with technology and more experienced in online instruction, digital learning materials as a whole were seen as having "ease of use," particularly considering their easy accessibility. For participants familiar with digital learning materials, as well as those less familiar, ease of access was emphasized as a benefit of utilizing digital learning materials.

In addition to accessibility, simplicity was also highlighted by participants as a significant indicator of ease of use. Digital learning materials that included a simplistic layout, presented ease of navigation, and came with little or no instructions were considered easier to use and influenced participant use of those tools. The third sub-theme was troubleshooting. For participants, digital learning materials that were user-friendly were those that prevented or lessened the need for troubleshooting, which participants viewed as a frustration for both online instructors and students alike. Ultimately, more experienced participants who expressed comfort and excitement regarding digital learning materials described ease of use as a benefit of digital learning materials rather than a deciding factor in their use of those tools. These participants seemed to already have experience in weeding out digital learning materials that were not user-friendly, whereas less experienced participants and those with expressed preferences for print valued ease of use as a more significant factor in their decision to utilize digital learning materials.

The second theme identified through analysis was learning enrichment. Digital learning materials were described by participants as useful for enriching the learning of their students by providing a variety of digital learning resources. Specifically, some participants described digital learning materials as useful as supplemental resources alongside the textbook to aid student

learning. Some participants considered these supplemental resources useful for students who struggled to grasp course content, students with disabilities, or students who learned better through variety. Other participants described digital learning materials as useful for learning enrichment because they allowed more opportunities for students to hear from different experts or hear different perspectives. One way these materials provided variety was through their content, by being current, relevant, interesting, and visually appealing. Participants described digital learning materials as useful when they provided current and relevant content to the student. Other participants emphasized the need for digital learning materials to be interesting for the student, which often meant these materials should contain fewer words, more pictures, or have some kind of visual appeal.

A sub-theme identified within learning enrichment was course goals, which refers to a significant motivation behind participants' use of digital learning materials. Participants viewed these tools as useful if they aligned with course goals and promoted learning of the course content. No participants indicated they would use digital learning materials if they did not support course goals, even if those tools met other criteria (ease of use, visual appeal, etc.). Ultimately, participants viewed digital learning materials as useful when they provided variety in order to enrich learning; this enrichment came through the provision of content that was current, relevant, interesting, visually appealing, providing multiple perspectives and formats, and promoted course goals.

The third theme identified through analysis was professional community, which refers to the influence of and connection with participants' professional circle, including administration, peers, and students. Three sub-themes within professional community were administrative influence, peer influence and community, and student connection and influence. Some

participants described a feeling of disconnect with peers while others described communication with students as a challenge to the online learning environment. One participant described students as having the most influence on use of digital learning materials, while others credited their peers for influencing them toward the use of various digital learning materials. Those more connected to their professional circle had more opportunities to try digital learning materials based on recommendations, but those less connected were less influenced by peers. Administrative influence played a role in participant use of digital learning materials when courses were already set up or were set to run a certain way. This influenced appeared more situational and did not seem to interfere with participants' freedom to add various resources to courses, even if those courses were already created.

The final theme identified through data analysis was initiative to expand knowledge and resources. This theme referred to the role of online instructors in utilizing support systems in place or pursuing their own knowledge and resources when the facilitating conditions of their institution were inadequate. The first sub-theme, experience using digital learning materials, describes how personal experience with technology leads to increased use of digital learning materials in online courses. Several participants explained that their own use of technology and experience with digital learning materials ultimately led to increased or continued use of digital learning materials in online learning environments. When online instructors took the initiative to explore options for digital learning materials, this initiative helped to facilitate the use of these tools. Institutions that did provide sufficient facilitating conditions by way of supports and structures generally still required personal initiative from online instructors in getting the support needed. The sub-theme of navigating numerous options describes the challenge some participants felt when exploring the numerous available options for digital learning materials.

While some participants were overwhelmed by the amount of content to sift through, participants generally relied on their professional community to help them decide which options were best or were comfortable enough with utilizing digital learning materials that they were able to navigate the options on their own.

Research Questions

The central research question guiding this study was: *what are the experiences of online instructors at Christian colleges with the implementation of digital learning materials?* To answer this question, the answers to the four sub-questions are briefly summarized. The first sub-question was *how do online instructors describe ease of use as a factor in implementing digital learning materials?* Participants described ease of use as a significant factor in their implementation and use of digital learning materials. While multiple participants viewed ease of use as a primary indicator of which digital learning materials they would utilize, other participants with more experience online teaching and a greater comfort level with technology described digital learning materials as generally easy to use. Ease of use was described as easy to access, simplicity in layout and navigation, and less need for troubleshooting.

The second sub-question guiding this research study was *how do online instructors describe usefulness as a factor in implementing digital learning materials?* Usefulness was described by participants in terms of learning enrichment and variety. In other words, participants found digital learning tools useful for enriching learning by providing students with a variety of resources, a variety of perspectives, and a variety of formats. Additionally, participants described digital learning materials as useful if they provided content that was current, relevant, interesting to students, and visually appealing. Finally, participants described

these tools as useful if they aligned with course goals and provided students with various options to help them reach those goals.

The third sub-question guiding this study was *how do online instructors describe social influence as a factor in implementing digital learning materials?* For participants who felt a connection to students and peers, this influence was evidenced. While only one participant described student influence on the utilization of digital learning materials, multiple participants described peers as having the most influence on their use of these tools. Those with a feeling of disconnect were either less influenced by peers or took a strong initiative to search out support from peers in the use of digital learning materials, as that connection was not apparent. Finally, participants who acknowledged administrative influence described a lack of freedom to update courses or implement certain digital learning materials. Although this administrative influence played a role in some participant experiences, all participants described being able to include digital learning materials as extra resources in their classes.

The final sub-question guiding this study was *in what ways have facilitating conditions influenced online instructors' experiences with the implementation of digital learning materials?* Regardless of the supports and structures in place at the institution to help facilitate online instructor use of digital learning materials, participants expressed the need for personal initiative in pursuing support for the use of these tools. For those without the necessary supports and structures, personal initiative was taken to discover various digital learning materials and how to utilize them. These participants expressed a desire for more support within the institution, particularly for troubleshooting, answering questions, and brainstorming more ideas and uses for digital learning materials. For those with strong facilitating conditions, personal initiative was

still a part of the process; participants described engaging technology on their own to become more experienced and accessing various institutional supports when necessary.

These four sub-questions guiding this research study provided insight into the central research question through the development of themes and sub-themes. By understanding how online instructors describe the factors of ease of use, usefulness, social influence, and facilitating conditions, the central research question is answered and experiences of online instructors with digital learning materials are described.

Discussion

The findings of this study become clearer when discussed within the context of the theoretical framework and empirical research guiding this study. This study, which explored the experiences of online instructors with the use of digital learning materials, focused specifically on the experiences of higher education online instructors because of the limited research on this group. The following sections discuss the results of this study, first, in light of the theoretical framework guiding the study, and second, as these results relate to the empirical literature pertaining to the phenomenon of online instructor use of digital learning materials.

Theoretical Discussion

The theoretical framework for this study is the unified theory of acceptance and use of technology, by Venkatesh et al. (2003). The theory is used to help explain acceptance and use of technology by considering four factors: effort expectancy, performance expectancy, social influence, and facilitating conditions. UTAUT has been used to explore technology use in various professional environments and has been used to study the field of education as well, but this study utilized UTAUT to look specifically at online instructor use of digital learning materials (Venkatesh et al., 2003). The first factor, effort expectancy (or ease of use), was a

significant theme identified through data analysis. Within this study, ease of use and usefulness were described by participants as significant factors in their decision to utilize digital learning materials, which aligns with UTAUT (Venkatesh et al., 2003) and supports studies by Morris and Lambe (2017), Olaniran et al. (2017), and Yoo and Roh (2019). Additionally, a study by Garone et al. (2019) revealed that ease of use was an influential factor of faculty acceptance of digital learning materials. Results of the present study support these findings, revealing the significance of ease of use in acceptance and use of digital learning materials, specifically by higher education online instructors. Although all participants described ease of use as a factor in their decision to utilize digital learning materials, those with less experience or who expressed a preference for print emphasized ease of use as the most important factor. This finding also supports UTAUT, which proposes experience and voluntariness as "significant moderating influences" of acceptance and use of technology (Venkatesh et al., 2003, p. 467).

The second factor of UTAUT, performance expectancy (usefulness), supported the theme of learning enrichment, which was identified through analysis (Venkatesh et al., 2003). Participants described digital learning materials as useful for enriching learning through the provision of a variety of resources, perspectives, and formats, and emphasized the usefulness of these tools for helping students meet course goals. No participants described the utilization of digital learning materials that they did not deem useful for learning enrichment or reaching course goals. This factor of usefulness was consistent throughout participant use of digital learning materials, which aligns with UTAUT (Venkatesh et al., 2003) and supports the findings of studies by Morris and Lambe (2017), Ouedraogo (2017), Padhi (2018), and Yoo and Roh (2019). For those with more experience teaching online as well as those who expressed a higher

comfort level with technology, usefulness seemed to be emphasized over ease of use as a deciding factor in their use of digital learning materials.

The third factor of UTAUT, social influence, was described as a factor in some participants' use of digital learning materials but was not emphasized as strongly as ease of use or usefulness (Venkatesh et al., 2003). Rather, influence of students and peers was more limited to those with a stronger feeling of connection to their professional circle, or to those with more experience teaching online. However, those with less experience still described efforts to connect with their professional circle in an attempt to gain support utilizing digital learning materials. Administrative influence was recognized less as a means of support or influence toward the use of digital learning materials and more in terms of potentially limiting participant freedom to utilize certain digital learning tools. However, all participants described the freedom to add digital learning materials to courses in the form of extra resources even if they were not permitted to change or modify the course. Therefore, the voluntariness could be considered a "significant moderating influence" contributing to some participants' use of digital learning materials (Venkatesh et al., 2003, p. 467). Additionally, this study also supports the findings of studies by Garone et al. (2019) and Radovan and Kristl (2017) which list social influence as a factor in instructor use of digital learning tools.

Finally, facilitating conditions, the fourth factor of UTAUT, emerged as a primary theme through the descriptions provided by participants of their use of digital learning materials (Venkatesh et al., 2003). However, while all participants described the current facilitating conditions at their institutions in different ways, all participants described personal initiative as necessary for attaining support with the implementation and use of digital learning materials. Therefore, within this study, facilitating conditions was emphasized as a factor for some, but was

not described as a primary factor when utilizing digital learning materials. Only one participant attributed the efficiency of his colleagues and his institution, generally, with the use of digital learning materials to the supports and structures in place at his institution. Some participants described how facilitating conditions could be improved but did not indicate that the current facilitating conditions were a major factor in their use of digital learning materials. While personal initiative was discovered to be necessary for all participants when pursuing experience and support with the use of digital learning materials, there is a possible link between the effectiveness of facilitating conditions and the initiative required by participants in obtaining support for the use of these tools. Therefore, this study further supports UTAUT and the factor of facilitating conditions as important to online instructor use of digital learning materials (Venkatesh et al., 2003).

Ultimately, this study extends UTAUT and its "explanatory power" to include technology use by online instructors within higher education online learning environments (Venkatesh et al., 2003, p. 467). Although the four factors of effort expectancy (ease of use), performance expectancy (usefulness), social influence, and facilitating conditions were all highlighted as factors involved in participants' use of digital learning materials, ease of use and usefulness were found to be the most significant factors involved in their decision-making regarding digital learning materials. Additionally, the factors of experience and voluntariness were also found to function as "significant moderating influences" (Venkatesh et al., 2003, p. 467). Experience teaching online as well as experience with technology influenced how participants described and valued ease of use as a factor in the use of digital learning materials. Voluntariness was also emphasized by some in relation to administrative influence and specifically which digital

learning tools participants were permitted to use and how much freedom they had to modify the course through the implementation of digital learning materials.

Empirical Discussion

Amidst the trend within higher education toward the use of digital learning materials in place of printed text, various studies have looked at the impact of digitally formatted learning materials on student learning and have found that the digital medium negatively impacts learning (Carr, 2011; Cavanaugh et al., 2016; Singer Trakhman et al., 2019; Singer & Alexander, 2017a). Cavanaugh et al. (2016) and Guri-Rosenblit (2018) emphasized the responsibility of the instructor to make informed decisions when it comes to implementing digital learning materials for their students. Therefore, this study sought to describe the experiences of online instructors in order to better understand the ways in which they utilize digital learning materials, given the impact of digitally formatted tools on student learning.

For higher education online instructors, the results of this study indicate that digital learning materials are utilized over printed materials. Although two participants expressed a preference for printed materials over digital materials, and even described a desire for their students to access textbooks and other materials in hard copy, all ten participants ultimately described experiences where digital learning materials were utilized instead of print. One participant indicated an understanding of the research regarding the negative impact of digitally formatted texts on student learning, and other participants expressed a willingness to allow students to access materials in hard copy if necessary. However, the results of this study indicate that online instructors are not primarily concerned with offering students printed materials; rather, online instructors are more motivated to utilize digital learning materials because of the

many benefits they provide, and simply because they are available, which supports findings by Guri-Rosenblit (2018) and Moro (2018).

Several participants described a preference for digital learning materials because of the many benefits and features offered by these tools. One participant specifically emphasized the use of e-texts and described a positive experience where an e-text was encouraged over a printed text. In this case, along with others described by participants, online instructor attitudes toward e-texts influenced students toward the use of e-texts; these results address the call by Gilbert and Fister (2015) to better understand faculty influence on student use of e-texts. Other benefits described throughout this study for both the student and the instructor include accessibility, low-cost, variety, innovation, mobility, and visual appeal, all of which align with the research regarding the benefits of digital learning tools (Bagdasarov et al., 2017; Gallagher et al., 2017; McKnight et al., 2016; Moro, 2018; O'Bannon et al., 2017; Yoo & Roh, 2019).

Online instructors are also aware of the need for ease of use, a simplistic layout, and simplistic navigation for students when utilizing digital learning materials. By implementing materials with these qualities, students need to spend less time understanding how to use a tool or where to access information and will become less overwhelmed if content is presented in a simple layout. Participants ultimately understood the need to avoid increasing the cognitive load of the student in order to enrich, rather than hinder, learning (Sweller, 2020). Although participants did not directly address the concept of cognitive load, they understood their role as distributors of content and described preferences for digital learning materials that were easy to use and useful because they would be more effective for student learning (Sweller, 2020). Ultimately, although participants did not directly discuss the negative impact that digital learning tools may have on students, they indicated a general sense of feeling responsible to provide the

student with the best possible tools for learning; this sense of responsibility reflects research by Cavanaugh et al. (2016) and Guri-Rosenblit (2018).

Online instructors tend to view their students as possessing digital literacy, assuming that because of their age and general experiences with digital technology, students would have the skills necessary to effectively utilize digital learning materials. This supports research by Ross et al. (2017) and Ugúr (2020), who also caution instructors against this assumption. While one participant also expressed an understanding that students may not possess the level of digital literacy needed to navigate digital learning materials, and some participants expressed frustration with troubleshooting errors with digital tools, the majority assumed there would be no major issues with student use of digital learning materials aside from the occasional technical issues.

The results of this study indicate that factors influencing online instructor decision-making regarding the use of digital learning materials include ease of use, accessibility, cost, simplicity, variety, interest, visual appeal, and whether the resources are current, relevant, and align with course goals. These results support various studies regarding instructor perspectives on digital learning materials (Bagdasarov et al., 2017; Moro, 2018; Ouedraogo, 2017; Ozdemir & Hendricks, 2017). Social influence and the supports and structures in place at the institution were also described as factors influencing participant use of digital learning materials, although these factors were emphasized less than usefulness and ease of use. These results support research by Doo et al. (2020), Kebritchi et al. (2017), McGee et al. (2017) Padhi (2018), and Ouedraogo (2017), who emphasize the role of institutional support for the implementation and use of digital learning materials.

Finally, the results of this study indicate that online instructors will increase their use of digital learning materials as they gain more experience teaching online and as they become more

comfortable as a technology user. Multiple participants cited their own experience with technology and willingness to engage technology for personal use as reasons for their increased use of digital learning materials in their online classrooms. These results align with research by Perry and Steck (2019) which highlights the role of increased knowledge and training in continual use of digital learning materials. Similarly, a study by Gay (2016) revealed that experience with and knowledge of technology, within personal and professional contexts is not only helpful, but necessary to prompt online instructor use of digital learning materials. This is evidenced throughout participant descriptions, which highlight the role of experience, both personal and professional, in increasing online instructor use of digital learning materials.

Because research regarding online instructor use of digital learning materials is limited, this study was done in order to extend the research specifically regarding higher education online instructors and their experiences with digital learning materials given the known negative impact of digital learning materials (Carr, 2011; Cavanaugh et al., 2016; Singer Trakhman et al., 2019; Singer & Alexander, 2017a). Ultimately, although most participants did not directly reference this negative impact, they did indicate an understanding of the need to utilize digital learning materials that would foster learning, rather than add to the cognitive load of students (Sweller, 2020). Additionally, participants also seemed to understand their responsibility to make informed decisions regarding the use of digital learning materials and demonstrated this responsibility by utilizing digital learning materials that were easy to use, easily accessible, and simplistic in layout and navigation. This study contributes to the field of research by utilizing UTAUT (Venkatesh et al., 2003) to explore how higher education online instructors use digital learning materials, as these instructors must navigate the acceptance and use of technology for both themselves and their students.

Implications

Digital learning materials are, as one participant said, "the wave of the future." It is not reasonable then, to attempt to mitigate the negative impact of digital learning materials on student learning by producing and distributing all materials exclusively in print (Carr, 2011; Cavanaugh et al., 2016; Singer Trakhman et al., 2019). This study sought to better understand the experiences of online instructors with digital learning materials in order to determine how these instructors utilize these tools for student learning and to generate potential ideas for how to minimize the negative impact of the digital medium on student learning while still utilizing digital learning materials (Cavanaugh et al., 2016; Singer Trakhman et al., 2019). The following implications provide insight into these efforts.

Theoretical Implications

The unified theory of acceptance and use of technology (UTAUT) by Venkatesh et al. (2003) proposes a framework to understand the factors involved in a user's acceptance and use of technology. UTAUT lists the factors of effort expectancy (ease of use), performance expectancy (usefulness), social influence, and facilitating conditions as influencing user acceptance and use of technology (Venkatesh et al., 2003). This study utilized UTAUT as the guiding framework and results indicate that all four factors of UTAUT do influencing online instructor acceptance and use of technology, although some factors were valued over others. Specifically, ease of use and usefulness were found to be more significant factors of influence, rather than social influence or facilitating conditions. Therefore, it seems that online education would benefit from digital learning materials that have been developed with ease of use and usefulness in mind. While social influence and facilitating conditions play a role in the use of

digital learning materials, online instructors should not rely solely on these factors for encouraging and supporting their use of digital learning materials.

Additionally, Venkatesh et al. (2003) also proposed several "significant moderating influences" for user acceptance and use of technology; this study specifically supported the influences of voluntariness and experience in certain situations (p. 467). Specifically, when describing the factor of social influence, and administrative influence in particular, participants indicated voluntariness as a moderating influence on their implementation of certain digital learning tools. Additionally, when describing the factor of ease of use, participant descriptions indicated that experience played a significant role in how much participants valued the ease of use of certain tools; while those with less experienced emphasized ease of use as most important, those with more experience online teaching highlighted the benefits of digital learning tools specifically because they were easy to use. For those just starting out as online instructors, experience will be valuable for them as they learn to implement and utilize digital learning materials. The more online instructors take the time to get comfortable using technology, both personally and professionally, the more confident they may feel when implementing and utilizing digital learning materials.

Finally, this study extends UTAUT to apply to the field of education, and specifically to higher education online instructors, who are responsible for implementing and utilizing digital learning materials not only for themselves, but for their students as well. There is limited research regarding online instructor use of digital learning materials as well as online instructor perspectives regarding digital learning materials. This study provides a look at both through the lens of UTAUT. Online instructors must realize the role they play in navigating technology use not only for themselves, but also for their students.

Empirical Implications

There is an assumption that online instructors should utilize digital learning materials because they are available and they are easy to use (Guri-Rosenblit, 2018; Moro, 2018). Whether or not they should, the results of this study indicate that online instructors do utilize digital learning materials because they are easy to use and useful, and also because those tools are a natural choice for the online learning environment. McKnight et al. (2016) state, "one potential reason for the lack of consistent findings is the lack of documentation of how teachers are using technology to improve learning" (p. 195). This present study has documented the ways in which online instructors are utilizing digital learning materials and has found that online instructors are making a conscious effort to utilize these tools effectively. Descriptions from participants indicate that the ways in which students access and utilize these tools are important to them; they want to make sure students can easily access materials, have access to multiple formats and perspectives to enrich learning, and are not overwhelmed by a complicated layout. Results of this study also indicate that instructor attitudes toward the use of digital learning materials may influence students toward the use of those tools (Gilbert & Fister, 2015). Therefore, online students should understand the role that their instructors play in facilitating their access and use of digital learning materials. Similarly, online instructors should continue to promote learning enrichment through their use of digital learning materials; just because a tool is easy to use or interesting is not reason enough for utilization; it should still also be useful for learning and achieving course goals.

Finally, the results of this study revealed that participants emphasized variety as a significant part of learning enrichment. By offering digital learning materials that were current, relevant, interesting, and visually appealing, online instructors were able to provide students with

a variety of learning resources that could supplement the textbook and enhance learning. Creators of these digital learning materials, as well as textbook creators, should understand the ways in which online instructors view these tools; approaching digital learning materials as supplemental resources meant to provide variety may promote their effective use.

Practical Implications

Because online instructors are the ones strategizing how to effectively utilize digital learning materials, it is necessary to understand what influences them most toward the use of these tools. Similarly, because these instructors are teaching within an online learning environment, it is important to understand the ways in which both their instruction and their use of various learning materials may be limited. Since going back to printed materials is not an option, online instructors must understand how best to mitigate the negative influences of the digital medium on student learning while still utilizing digital learning materials (Carr, 2011; Cavanaugh et al., 2016; Singer Trakhman et al., 2019). The following options, based on the results of this study, are potential ways to foster effective learning through the use of digital learning materials: (1) offering the student an option to print; (2) finding or creating digital learning materials that are easy to use; (3) finding or creating digital learning materials that are easy to access; (4) offering the student a variety of resources covering the same content; (5) finding or creating digital learning materials with a simple layout and simple navigation; and (6) finding or creating digital learning materials that contain graphics, visuals, and are visually appealing. These options were thoughtfully considered by the participants of this study, who indicated that these options did help to enrich student learning.

Delimitations and Limitations

In order to set up the appropriate parameters for this study, criterion and purposeful sampling were used to achieve maximum variation (Creswell & Poth, 2018; Gall et al., 2007; Yin, 2017). This sampling allowed for a wide variety of participants who still all fit the criteria for the study, which were (1) an online instructor under contract to teach at least one course for their institution annually; and (2) an online instructor responsible for creating, modifying, or utilizing digital learning materials within their online courses. Online instructors who were not responsible for implementing digital learning materials in some ways were not included in this study because they would not have been able to describe experiences with these tools. Saturation, which "occurs when continued data collection produces no new information or insights" was achieved through the selection of ten participants (Merriam & Tisdell, 2015, p. 199). Five male participants and five female participants all of various ages were chosen to potentially provide even more variety of experiences and insights. The three research sites chosen represented different sizes and consisted of differing institutional structures. This provided not only a variety of participants, but participants came to the study from different positions and differing levels of education and experience. Instructor rather than student perspectives were chosen as the focus for this study because of the limited research regarding online instructors and their perspectives on digital learning materials.

Along with the delimitations listed above, this study also includes various limitations. All three research sites are located in the Eastern United States, which creates a geographical limitation. It is unknown how the experiences of higher education online instructors may vary in other parts of the world, where access to digital learning materials and tools is potentially limited (Chavoshi & Hamidi, 2019). Additionally, as only one participant is African American and the

other nine are Caucasian, this study was limited in diversity. Finally, while all participants represented various ages, most participants were over 40; more Generation Y and Generation Z perspectives may have been useful as younger online instructors may have differing experiences with technology and teaching in online learning environments.

Recommendations for Future Research

This study sought to describe the experiences of higher education online instructors with digital learning materials. The results of this study indicate three areas where future research is needed. First, future research exploring online instructor experiences from institutions located in other regions of the United States, as well as abroad, would provide a more comprehensive understanding of the experiences of these instructors with digital learning materials. Second, future research exploring the experiences of onsite instructors with the use of digital learning materials may provide a wider variety of insight into how higher education instructors view the usefulness of digital learning materials. Additionally, a study looking at higher education onsite instructors and their utilization of digital learning materials when print is more readily available may also provide some insight into the future direction of digital learning materials and the institutions that utilize them onsite as well as online. Finally, future research exploring online education administrators and their views regarding the use of digital learning materials may provide more insight into the limitations, freedoms, structures, and supports of these institutions and their influence on instructor use of digital learning materials.

Summary

The purpose of this study was to describe the experiences of online instructors in higher education with the implementation of digital learning materials. This study followed the transcendental phenomenological research method and analysis process by Moustakas (1994) in

order to collect participant descriptions of their experiences, analyze those descriptions, highlight themes from data analysis, and answer four research questions guiding this study. The primary themes generated from analysis, which are linked to the research questions, are ease of use, learning enrichment, professional community, and initiative to expand knowledge and resources. UTAUT was the guiding theory for this study, which found that of the various factors proposed by UTAUT, ease of use and usefulness were the most significant influential factors for online instructor use of digital learning materials (Venkatesh et al., 2003). Those with less experience online teaching valued ease of use even more than those with more experience, who viewed digital learning materials as generally beneficial because they were easy to use.

Results of the study also indicated that online instructors were mindful about the ways in which their digital learning materials would be used by their students, and therefore sought out or created resources that were easy to use, easy to access, contained simplicity in navigation and layout, were visually appealing, and were interesting to the student. Online instructors also viewed digital learning materials as opportunities to enrich student learning by providing a variety of resources that were current, relevant, included multiple perspectives, and were formatted in a variety of ways. Online instructors should continue to utilize digital learning materials with these qualities, understanding that they are choosing technology not only for their own use, but also for the use of their students.

This study ultimately indicated that while online instructors may not be aware of the specific aspects of the negative impact of digital learning materials on student learning, they felt a sense of responsibility to provide digital learning materials for their students that would enrich their learning and provide an overall positive learning experience (Carr, 2011; Cavanaugh et al., 2016; Singer & Alexander, 2017a). Because going back to printed materials exclusively is not an

option moving forward, online instructors, and the institutions for which they work, must continue to find new and beneficial ways to utilize digital learning materials that are effective for teaching and learning, not just because those materials exist, but because they are genuinely useful.

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APPENDIX A: IRB APPROVAL LETTER

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

June 7, 2021

Monica Schreiber
Constance Pearson

Re: IRB Exemption - IRB-FY20-21-870 The Experiences of Higher Education Online Instructors with the Implementation of Digital Learning Materials: A Phenomenological Study

Dear Monica Schreiber, Constance Pearson:

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,
G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

APPENDIX B: INITIAL INTERVIEW QUESTIONS/GUIDE

Date & Time of Interview:

Monica Schreiber

Interviewee:

Description of interviewee:

Project purpose statement: To determine the experiences of online instructors at Christian colleges with the implementation of digital learning materials.

Questions:

Teaching Experience Questions:

1. Please introduce yourself to me, as though for the first time.

2. How long have you been teaching as an online instructor?

3. What are the circumstances that led to you becoming an online instructor?

4. Describe your experiences as an instructor in an online learning environment.

5. Describe some of the challenges you have faced as an online instructor.

Questions Related to Experiences with Digital Learning Materials:

6. What are your feelings regarding the use of digital learning materials?

7. What do you feel are the benefits of digital learning materials for online instructors?

8. What do you feel are the benefits of digital learning materials for online students?

9. Describe your current use of digital learning materials compared to your beginning use of these tools.

10. Describe your decision-making process when deciding upon digital learning materials for your courses.

Questions Related to Ease of Use:

11. Describe your skills pertaining to the implementation and use of digital learning

materials.

12. Describe some of the challenges you have faced when using digital learning materials.

13. How would you describe "user-friendly" features of digital learning materials?

14. Describe your experiences with user-friendly digital learning materials.

Questions Related to Usefulness:

15. Describe your goals for the use of digital learning materials.

16. In what ways do you consider digital learning materials to be useful for teaching and learning?

17. Under which circumstances have you found it useful to provide students with the option to access digital learning materials in printed format?

Questions Related to Social Influence:

18. In what ways have others in your professional circle (peers, administration, students, etc.) persuaded you toward or against the use of digital learning materials?

19. Describe your experiences with utilizing digital learning materials based on the recommendations of others.

20. Describe your utilization of digital learning materials as compared to your peers' utilization of these tools.

Questions Related to Facilitating Conditions:

21. Describe the supports and structures currently in place at your institution that facilitate your use of digital learning materials.

22. Describe the supports and structures currently lacking at your institution thereby hindering your use of digital learning materials.

23. Describe your experiences pursuing your own training, supports, and structures outside

the institution in order to effectively utilize digital learning materials.

Concluding Question:

24. Is there anything else you would like to add regarding your experiences with digital
learning materials and their implementation?

Conclude the interview.

APPENDIX C: OTHER DATA COLLECTION PROCEDURES

Focus Groups (Creswell & Poth, 2018).

- Template including the following standardized (but subject to change) questions

    (Merriam & Tisdell, 2015; Patton, 2015):

    o Describe how you began teaching as an online instructor.

    o Describe some of the challenges you have faced teaching in an online-only

        environment.

    o Which experiences with using digital learning materials in your online courses

        stand out the most to you?

    o How would you describe your experience with the successful or effective use of

        digital learning materials?

    o What would you say are the factors most likely to influence your use of digital

        learning materials?

Participant journaling (Creswell & Poth, 2018).

- Template including the following reflective prompts (Creswell & Poth, 2018):

    o In 1-2 paragraphs, describe an experience where implementing and utilizing

        digital learning materials for your course led to positive results for you and your

        students.

    o In 1-2 paragraphs, describe an experience where you were limited in your

        effective implementation and use of digital learning materials and what factors led

        to those limitations.

    o In 1-2 paragraphs, describe an experience where you provided your students with

        learning materials in both digital and print format and the decision-making

        process that led to that choice.

APPENDIX D: CONSENT FORM
Consent

Title of the Project: The Experiences of Higher Education Online Instructors with the Implementation of Digital Learning Materials: A Phenomenological Study
Principal Investigator: Monica Schreiber, M.A., Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. In order to participate, you must be currently teaching as an online instructor at a Christian college and be responsible for creating, modifying, or utilizing digital learning materials in your online courses. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research project.

What is the study about and why is it being done?

The purpose of this transcendental phenomenological study is to describe the experiences of online instructors at two Christian colleges with the implementation of digital learning materials within online courses. At this stage of the research, digital learning materials can be generally defined as e-texts, learning materials accessible through tablet technology, interactive textbooks, or any other course materials in digital format (Bagdasarov et al., 2017; Delgado et al., 2018; Sun et al., 2018).

What will happen if you take part in this study?

If you agree to be in this study, I would ask you to do the following things:

1. Participate in an interview via video conferencing. The interview will take approximately one hour and will be audio- and video-recorded.

2. Participate in a focus group interview via video conferencing with other instructors. The focus group will take approximately one hour and will be audio- and video-recorded.

3. Participate in a journaling exercise. Participants will be provided with three journaling prompts following the conclusion of the individual interviews. These prompts are to be completed within four weeks. The written responses will be saved. They should take about 30 minutes each.

4. Member-check your interview and focus group transcripts for accuracy. This should take approximately 10 minutes.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be kept confidential through the use of pseudonyms. Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data will be stored on a password-locked computer and may be used in future presentations. After five years, all electronic records will be deleted.
- Individual and focus group interviews will be recorded and transcribed. Recordings will be stored on a password locked computer for five years and then erased. Only the researcher will have access to these recordings.
- Confidentiality cannot be guaranteed in focus group settings. While discouraged, other members of the focus group may share what was discussed with persons outside of the group.

How will you be compensated for being part of the study?

Participants will be compensated for participating in this study. Participants will receive a $25 Visa gift card upon completion of data collection. There will be no compensation if the participant begins but does not complete the study.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University, Davis College, or Clarks Summit University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address included in the next paragraph. Should you choose to withdraw, data collected from you, apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Monica Schreiber. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her. The faculty sponsor for this study, Dr. Constance Pearson, can be reached.

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu

Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. You can print a copy of this document for your records. If you have any questions about the study later, you can contact the researcher using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ The researcher has my permission to audio- and video-record me as part of my participation in this study.

_____   _____

Printed Subject Name   Signature & Date