

HIGHER EDUCATION FACULTY MEMBERS' EXPERIENCE IMPLEMENTING
INSTRUCTIONAL TECHNOLOGY TOOLS AND CHANGING INSTRUCTIONAL
PRACTICES DURING THE COVID-19 PANDEMIC: A QUALITATIVE
TRANSCENDENTAL PHENOMENOLOGICAL STUDY

by

Susan Therese Collins

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

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APPROVED BY:

Michael Patrick, Ed.D., Committee Chair

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ABSTRACT

The purpose of this transcendental phenomenological study was to describe the lived experiences of higher education faculty with implementing instructional technology tools and changing instructional practices at a public university in the western United States during the novel coronavirus disease (COVID-19) pandemic emergency remote teaching. Guiding this study was Bandura's (1977) theory of self-efficacy pertaining to an individual's belief and confidence in their ability to perform and have control over the necessary motivation, behaviors, and social environment to produce specific outcomes. Additionally, the Technology Pedagogy Content Knowledge (TPACK) framework and andragogical principles provided the theoretical underpinnings of this study. Data were collected from 13 participants through individual interviews, collection of documents and artifacts, and focus groups and analyzed using Moustakas' (1994) transcendental phenomenological approach. Four themes emerged: (a) teaching experience, (b) student performance, (c) workload, health, and personal responsibilities, and (d) silver linings. Participants reported prior experience teaching online, or mastery experiences, as a major contributing factor in their increased self-efficacy with the transition to emergency remote teaching. Institutional support for online teaching, online teaching and learning training for all faculty and students, and increasing online course offerings were revealed as recommendations to facilitate institutional emergency readiness. The lived experiences described by participants revealed that experience, proper training, a supportive culture with appropriate systems and policies in place were crucial with implementing online instructional technology tools and changing instructional practices during emergency remote teaching. While the COVID-19 pandemic presented challenges for participants in a variety of ways such as with student performance, increased workload, teaching style preference issues,

health, and personal responsibilities, there were silver linings that emerged such as information gained addressing institutional emergency readiness factors, new skillsets attained, social justice solutions realized such as ways to serve students with disabilities more effectively, and solutions to other diversity, equity, and inclusion issues. Future research could also expand to students to gain a deeper understanding of how emergency remote learning affected them during the pandemic.

Keywords: andragogy, coronavirus pandemic, crisis teaching, disaster readiness, emergency remote teaching, mastery experiences, online instructional technology, physiological arousal, self-efficacy, verbal persuasion, vicarious experiences

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Dedication

This research project is dedicated to my husband, Michael Collins, my children Cal and Michaela, and to my mother, Violet. To my husband Michael: You lovingly supported me through my educational journey through your actions and your encouraging words. You listened and helped out immensely, taking up the slack while I was working and going to school. To my children Cal and Michaela: Thank you for your love, support, and turning out to be the amazing adults that you are today. Last, but certainly not least, to my mother Violet whose own positive attitude, perseverance, and determination throughout her life set the stage as an example for my success in this educational endeavor: Your love and encouragement throughout this process means more to me than you will ever know.

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List of Abbreviations

Grades of D, F, and Withdrawal (DFW)

Institutional Review Board (IRB)

Novel Coronavirus Disease (COVID-19)

Masters in Accounting (MSA)

Master in Information Systems (MIS)

Pedagogical Content Knowledge (PCK)

Technological Content Knowledge (TCK)

Technological Pedagogical Content Knowledge (TPACK)

Technological Pedagogical Knowledge (TPK)

World Health Organization (WHO)

CHAPTER ONE: INTRODUCTION

Overview

The COVID-19 pandemic affected the world in myriad ways (Bao, 2020; Iglesias-Pradas et al., 2021; Tartavulea et al., 2020; Van Lancker & Parolin 2020). To lessen the spread of COVID-19, the world issued severe restrictions like social distancing and lockdown measures (Dhawan, 2020; Favale et al., 2020; Iglesias-Pradas et al., 2021; Tafazoli, 2021). During Spring 2020, universities closed campuses all around the world (Burgess & Sievertsen, 2020; Iglesias-Pradas et al., 2021; Scull et al., 2020; Tafazoli, 2021; Van Lancker & Parolin 2020), creating a crisis for teaching (Cutri et al., 2020). Many faculty members were forced into emergency remote teaching at an untested, unparalleled rate and magnitude (Al-Taweel et al., 2020; Bao, 2020; Clark et al., 2020; Cutri et al., 2020; Hodges et al., 2020; Iglesias-Pradas et al., 2021; Tartavulea et al., 2020; Viner et al., 2020). Without extensive time and elaborate planning to move courses online, many institutions were caught off guard (Iglesias-Pradas et al., 2021) and faculty were left lacking online teaching experience, preparation, and support from education technology teams (Bao, 2020; Hodges et al., 2020; Iglesias-Pradas et al., 2021). On the other hand, organizational factors may have contributed to effective implementation of emergency remote teaching in some institutions (Iglesias-Pradas et al., 2021). Faculty members' self-efficacy with online teaching environments was often reported as a factor with the pandemic's forced quick acceptance of online technology tools (Bao, 2020). Some faculty members were forced to improvise with less-than-ideal solutions (Clark et al., 2020) and many were reported to have found the process stressful and ineffective (Hodges et al., 2020). Furthermore, students were affected by the COVID-19 pandemic in several ways (Iglesias-Pradas et al., 2021; Ilieva et al., 2021; Son et al., 2020).

The scale of the effects on students was immense. “Unexpectedly, a whole generation of young people has had to continue its education in a different way in an unusual situation” (Ilieva et al., 2021, p. 1). Students expressed concern about their academic performance being impacted by the pandemic and their biggest concern was about the transition to online classes (Son et al., 2020). Iglesias-Pradas et al. (2021) reported that students’ academic performance in the COVID-19 pandemic emergency remote teaching was affected in myriad ways. “In particular, participants stated their concerns about sudden changes in the syllabus, the quality of the classes, technical issues with online applications, and the difficulty of learning online” (Son et al., 2020, p. 1). Many students had no prior experience with e-learning (Ilieva et al., 2021). Some students reported that the pandemic could result in their withdrawal from their university (Ilieva et al., 2021). The quality of the internet connectivity, lack of study room, and the lack of interest by faculty to teach online were cited as major problems for students (Ilieva et al., 2021). However, Gonzalez et al. (2020) postulated in their study that student confinement actually positively affected student performance and suggested that unlike prior to the COVID-19 pandemic, confined students studied continuously.

The purpose of this transcendental phenomenological study was to describe the lived experiences of higher education faculty with implementing instructional technology tools and changing instructional practices during the COVID-19 pandemic emergency remote teaching through the theoretical lens of self-efficacy guided by the Technology Pedagogy Content Knowledge (TPACK) framework and the principles of adult learning, or andragogy, at a public university in the western United States. This chapter presents a background related to the topic of study, including the historical, social, and theoretical contexts with a synthesis of recent literature. The next section covers the situation to self and the motivation for conducting the

study. The next two sections provide the problem statement and the purpose of this study. The significance of this study section follows and includes the empirical, practical, and theoretical significance of this study. In the end, a gap in the literature is identified, presenting a viable need for the current study. The final sections of this chapter include the research questions, definitions, and a summary.

Background

The global impact of the COVID-19 pandemic was massive and far-reaching (Al-Taweel et al., 2020; Bao, 2020; Dhawan, 2020; Smith & Lim, 2020; Tartavulea et al., 2020; Van Lancker & Parolin, 2020). People's lives were significantly altered in the wake of the COVID-19 pandemic and to lessen the spread of COVID-19, the world issued severe restrictions like social distancing and lockdown measures (Besser et al., 2020; Dhawan, 2020; Favale et al., 2020; Tafazoli, 2021). Impacted by the COVID-19 pandemic during Spring 2020, universities started to close campuses all around the world (Burgess & Sievertsen, 2020; Scull et al., 2020; Tafazoli, 2021; Van Lancker & Parolin 2020) with many of them forced into emergency remote online teaching as the only viable option (Dhawan, 2020) in an untried and exceptional measure (Al-Taweel et al., 2020; Bao, 2020; Hodges et al., 2020; Tartavulea et al., 2020). In light of this and other factors, students' academic performance was affected in a variety of ways (Iglesias-Pradas et al., 2021). Even if faculty members felt unprepared for or had little interest in online teaching, they were asked, nonetheless, to create, transition, and implement online teaching in the wake of university closures (Cutri et al., 2020). Institutions and academic stakeholders, regardless of their state of preparedness, swiftly implemented online technology tools, which may continue to be utilized once the pandemic is over (Tartavulea et al., 2020). In some institutions, organizational

preparedness factors may have contributed to the effective implementation of emergency remote teaching (Iglesias-Pradas et al., 2021).

Historical Context

On or about March 11, 2020, around three months after the first case of COVID-19 was reportedly discovered in Wuhan China, the World Health Organization (WHO) declared it a pandemic (Al-Taweel et al., 2020; Dhawan, 2020; Scull et al., 2020; Viner et al., 2020). COVID-19 is not the first pandemic the world has seen (Al-Taweel et al., 2020) and there have been a few with varying degrees of effect on the world population. In 2009, there was the H1N1 pandemic, in 1968 there was the H3N2 virus pandemic, in 1957 there was the H2N2 virus pandemic, and in 1918 there was the most severe pandemic in recent history, 1918 H1N1 Spanish flu virus (Al-Taweel et al., 2020). The COVID-19 pandemic upended the world in numerous ways (Al-Taweel et al., 2020; Dhawan, 2020) and people's lives were substantially affected by the onset of COVID-19 with social distancing and self-isolation (Besser et al., 2020; Dhawan, 2020; Favale et al., 2020). By July 28, 2021, the outbreak of COVID-19 had infected more than 195 million people and caused over 4.18 million deaths globally (Johns Hopkins University, 2021).

Social Context

The COVID-19 pandemic brought mandates and lockdown measures affecting every corner of society (Favale et al., 2020; Tafazoli, 2021; Van Lancker & Parolin, 2020) and many university campuses were forced into emergency remote teaching at an untested, extraordinary rate and magnitude after closing in Spring of 2020 (Al-Taweel et al., 2020; Bao, 2020; Cutri et al., 2020; Hodges et al., 2020; Tartavulea et al., 2020, Viner et al., 2020). Emergency remote teaching has been defined as a temporary shift of instructional delivery to an alternate delivery

model due to crisis or disaster circumstances (Hodges et al., 2020; Iglesias-Pradas et al., 2021). The forced shift to emergency remote teaching during the COVID-19 pandemic caused disruptions in the educational process at universities worldwide (Bao, 2020; Dhawan, 2020; Tartavulea et al., 2020), although some institutions were impacted more than others (Tartavulea et al., 2020) with some more effectively implementing emergency remote teaching than others (Iglesias-Pradas et al., 2021). Organizations with learning management systems in place and environments supporting online course offerings may have contributed to such effective implementations (Iglesias-Pradas et al., 2021).

Universities with existing online platforms and support mechanisms in place were identified as facilitators for success in the rush to the online emergency remote teaching process in the face of the COVID-19 pandemic (Tartavulea et al., 2020). Universities that had existing resources in place that supported a flipped classroom teaching and learning modality benefitted in the delivery of course content to students (Clark et al., 2020). However, many academic institutions that were previously reluctant to change their traditional face-to-face pedagogical (or andragogical) approach had no option but to quickly transition entirely to online teaching (Dhawan, 2020). Higher education was affected tremendously by the COVID-19 pandemic. Ilieva, et al. (2021) stated, “The risk of COVID-19 in higher education affected all its degrees and forms of training” (2021, p. 1). However, Dhawan (2020) posited that the COVID-19 pandemic crisis will make the institutions, which were earlier reluctant to change, accept modern technology.

Students’ academic performance in the COVID-19 pandemic was affected in a variety of ways (Iglesias-Pradas et al., 2021). Iglesias-Pradas et al. (2021) stated, “Higher education instructors’ knowledge, skills, and attitudes toward technology; their qualification; and

institutional, organizational, and administrative factors, together with instructors' and students' equipment and digital skills – do have an effect on student outcomes" (p. 13). In some areas of the world, transitioning to online teaching was hindered by a large percentage of the population not having access to the internet (Kufi et al., 2020). Alston (2020) postulated that as a result of closures of universities around the world, an academic and social ripple effect is likely to result. This ripple effect includes academic impacts resulting from delays in education and social impacts where society is affected by delays in populations of educated workforces for job-streams as expected (Alston, 2020). Some final year university students may have been impacted even more academically than others. Revilla-Cuesta et al. (2021) posited,

Final-year university students soon to complete their education and to embark upon a career may not have acquired certain knowledge, due to the interruption of classes and the switch to online teaching, which will never be formally taught to them. (p. 2).

This potential effect on final year university students highlights the importance of not only acknowledging general population demographics, but addressing institutional factors, along with faculty members' knowledge, skills, attitudes toward technology, and their digital skills. Dorn et al. (2020) noted disparities in student achievement across income levels and underrepresented populations. Dorn et al. (2020) also suggested learning loss and increases in drop-outs at a disproportionate level resulting in a less-skilled and less-productive workforce ultimately resulting in a significant financial loss to the United States.

Universities hastily implemented online technology tools as part of the emergency remote teaching solution (Tartavulea et al., 2020) and faculty were thrown into crisis teaching mode. Iglesias-Pradas et al. (2021) reported that "In Spain, where the predominant teaching modality across universities is face-to-face learning - only 15 percent of Bachelor's Degree students are

enrolled in public or private distance education universities" (p. 1). In Madrid, over 98% of undergraduate students were reported as attending in a face-to-face instruction model rather than a distance education model and the impact of the COVID-19 pandemic was dramatic for faculty who had to make the changes necessary for the shift to distance education overnight (Iglesias-Pradas et al., 2021). Crawford et al. (2020) reported similar situations across 20 different countries. There were many inequities and inadequacies that surfaced due to the pandemic in numerous education systems across the globe. Some struggled to convert to an "online platform due to issues of internet connectivity and a lack of devices and resources for online education systems. The most critical is the misalignment between resources and the needs for teaching and learning" (Gupta et al., 2020, p. 2).

The circumstances during the Spring of 2020 had faculty worldwide transitioning to online teaching in ways contrary to normal online course development (Cutri et al., 2020). Transitions to online were rapid, with little or no preparation, under the traumatic conditions of a pandemic, and with little or no information on the anticipated duration of the transition (Cutri et al., 2020). Although research has revealed the importance of institutional support and planning in improving faculty members' online teaching experience (Zheng et al., 2018), in this case, there was little time for planning to move courses online (Bao, 2020; Cutri et al., 2020). Faculty, whether or not they had a high level of confidence in their preparedness or interest in online teaching, were asked to implement online crisis teaching due to university closures (Cutri et al., 2020; Moorhouse & Beaumont, 2020; Savard et al., 2020). Crisis teaching is defined as occurring in an unplanned manner where a transition to online emergency remote teaching is implemented due to disaster or crisis conditions such as the COVID-19 pandemic (Cutri et al., 2020) and is distinguished from research-informed, high-quality online practices (Hodges et al.,

2020). With the unplanned nature of crisis teaching, institutions and faculty were reported to confront many obstacles in accommodating and embracing online emergency remote teaching (Affouneh et al., 2020). Many faculty members were required to utilize video conferencing software such as Zoom to deliver synchronous live lessons and many felt helpless and anxious when they suddenly had to teach in a virtual learning space (Moorhouse & Beaumont, 2020; Savard et al., 2020). Further study in these areas may provide valuable information in understanding how the COVID-19 pandemic affected faculty in utilizing online instructional technologies and changing their instructional practices to inform best practices in future crises and disasters that require emergency remote teaching (Bao, 2020; Tartavulea et al., 2020).

Theoretical Context

The theory guiding this study was the theory of self-efficacy as it relates to faculty members' self-efficacy with online instructional technology tools and modified instructional practices. The theory of self-efficacy connects an individual's belief in their ability to perform the necessary behaviors to produce specific outcomes (Bandura, 1977). The theory of self-efficacy was the lens through which faculty members' beliefs were explored of their ability or inability to effectively use the necessary online instructional technology tools and modified instructional practices to remotely teach during the COVID-19 pandemic.

Additionally, the Technology Pedagogy Content Knowledge (TPACK) framework, designed by Koehler and Mishra (2008), and the principles of adult learning, or andragogy, by Malcolm Knowles (1970) provided the theoretical underpinnings of this study. The technological pedagogical content knowledge (TPACK) theory has informed technology integration in teaching (Koehler et al., 2013; Pareto & Willermark, 2019; Tafazoli, 2021) and was developed to explain the knowledge that instructors need to teach their students a subject, teach effectively,

and use technology (Koehler et al., 2013; Pareto & Willermark, 2019; Tafazoli, 2021). The TPACK theory is built on Shulman's (1986) characterization of pedagogical content knowledge and extended to the phenomenon of faculty integrating technology into their pedagogy (Koehler et al., 2013; Pareto & Willermark, 2019). TPACK's three major knowledge components are content knowledge, pedagogical knowledge, and technology knowledge (Pareto & Willermark, 2019). Shulman (1986) posited that content knowledge refers to the amount and organization of knowledge in the mind of faculty and stated that "Content knowledge is knowledge about the actual subject matter that is to be learned or taught" (p. 1026). Pedagogical content knowledge is the second kind of content knowledge and goes beyond knowledge of the subject matter to include knowledge about how to teach a particular subject (Pareto & Willermark, 2019; Shulman, 1986). Technology knowledge refers to knowledge about how technological resources can be integrated into the curriculum (Koehler et al., 2013; Pareto & Willermark, 2019). The TPACK theory emphasizes how the connections among instructors' understanding of content, pedagogy, and technology interact with one another to produce effective teaching (Koehler et al., 2013; Tafazoli, 2021).

The four components in the TPACK framework address how these three bodies of knowledge interact (Koehler et al., 2013; Pareto & Willermark, 2019). Those four components are technological content knowledge (TCK), pedagogical content knowledge (PCK), technological pedagogical knowledge (TPK), and technological pedagogical content knowledge (TPACK) (Pareto & Willermark, 2019). TCK refers to the relationship between technology and content (Pareto & Willermark, 2019). PCK refers back to Shulman's (1986) stated description as the amount and organization of knowledge in the mind of faculty (Pareto & Willermark, 2019). This same concept of integrating pedagogy content knowledge can be transferred to fit the needs

of adult learners by substituting andragogical principles of adult learners for pedagogical principles (Knowles, 1970). TCK refers to “an understanding that technology can constrain and afford specific pedagogical practices” (Koehler et al., 2013, p. 102). TPACK refers to knowledge about the “complex relations among technology, pedagogy, and content that enable professors to develop appropriate and context-specific teaching strategies” (Koehler et al., 2013, p. 102). The following Venn diagram illustrates three domains in TPACK.

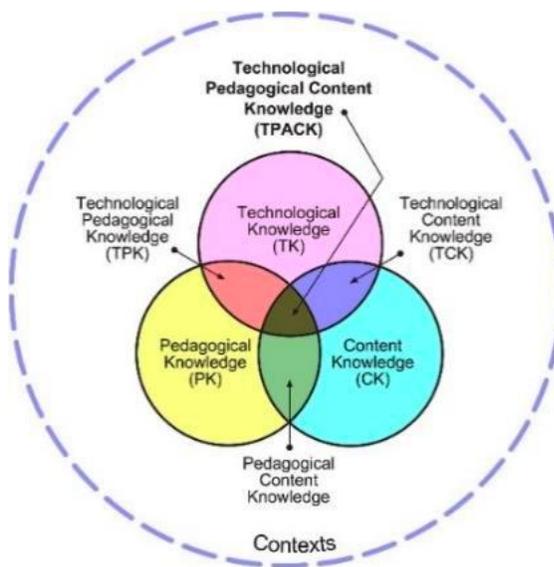


Figure 1. TPACK Model Framework (Koehler et al., 2013, p. 104)

The TPACK framework has made a large contribution in the area of teacher education (Koehler et al., 2013; Pareto & Willermark, 2019). Based on the TPACK framework, it was suggested that instructors should integrate educational technology as the basis of teaching content knowledge (Tafazoli, 2021). However, the TPACK model is more appropriate in education with a pedagogical approach to children's learning (Arifin et al., 2020). The concept of integrating pedagogy content knowledge can be transferred to fit the needs of adult learners by substituting andragogical principles of adult learners for pedagogical principles (Knowles, 1970).

The andragogy concept has had different approaches and interpretations (Loeng, 2017). As a term for adult learning, it was first used by a German teacher, Alexander Kapp (1800-1869) (Loeng, 2017). Kapp's concept of andragogy is not a theory of how adults learn or how they should be taught, but rather he used the term andragogy as a term for education in adulthood (Loeng, 2017). "With Kapp, it is about inner forming and little attention is given to practical usefulness" (Loeng, 2017, p. 631). Loeng (2017) posited that the important thing according to Kapp's concept of andragogy was to gain insight and wisdom through understanding by looking inwards. Knowing yourself and self-knowledge were suggested as the biggest demand on the human being (Loeng, 2017). Nikolai Frederik Severin Grundtvig influenced adult education worldwide focusing on the living world, similar to Kapp (Loeng, 2017). "The significance of the living world is described as the most direct, most natural and most effective means of education; you influence people by talking to them" (Loeng, 2017, p. 638). However, Kapp seems to be forgotten and did not gain recognition for his work (Loeng, 2017). Criticism from contemporary educations and lack of translation were noted as possible contributors to Kapp's work not being recognized (Loeng, 2017).

Thereafter, in 1980, Malcolm Knowles became known as the originator of the instructional paradigm in adult education known as andragogy. This practice has gained momentum in adult education over the last two decades. Knowles (1980) suggested that the purpose of adult education should be self-actualization, and while formal learning should be central to the educational process, faculty must pay particular attention to students' emotional, psychological, and intellectual development, as well. As a result of his efforts, the education of adults (andragogy) is perceived as different from the education of children (pedagogy) (Sharifi et al., 2017). Conrath (1971) suggested that "Andragogy is the art and science of helping adults

learn” (p. 81). Key concepts for adult learners link theoretical concepts to their life and their prior experiences (Santos, 2012). Adult learners have an independent desire to learn and typically make self-directed decisions to achieve their learning (Santos, 2012). Adult learners are also largely practical; they want to see that a topic is relevant and has a logical reason to be learned (Santos, 2012). Adults have a desire to reach a goal that comes from the universal human need of self-development (Knowles, 1970). Adult learners demand respect and want knowledge that can be used and applied in a practical manner (Knowles, 1970).

Faculty professional development has often been found to fail to support and develop faculty as fluent users of advanced technology (Koehler et al., 2013; Tafazoli, 2021; U.S. Department of Education, 2010). Some scholars claim that effective professional development and faculty members’ time constraints have been among the most significant obstacles to implementing technology into their instruction (Ertmer et al., 2012; Anderson, 2012). “The successful integration of technology in the classroom would be impossible without appropriate professional development. However, professional development programs are notoriously unsuccessful” (Tafazoli, 2021, p. 6). If faculty are not provided with effective professional development on new technologies, they will not be able to use them to their full potential (Johnston et al., 2017). In this study, faculty were hastily transitioned to emergency remote online teaching at exceptional speeds during the COVID-19 pandemic (Al-Taweel et al., 2020; Bao, 2020; Hodges et al., 2020; Tartavulea et al., 2020; Viner et al., 2020). With the speed and the extent to which faculty were required to implement the use of advanced technology tools, the TPACK framework, designed by Koehler and Mishra (2008), and the principles of adult learning, or andragogy, by Malcolm Knowles (1970) provide an appropriate theoretical context

in examining faculty members' descriptions of their lived experiences with transitioning to emergency online remote teaching (Tafazoli, 2021).

Situation to Self

My motivation for conducting this study stemmed from my career spanning several years leading teams supporting faculty with instructional technology tools. In this study, I strive to describe faculty members' experiences with implementing instructional technology tools and changing instructional practices during the transition to emergency online remote teaching due to the COVID-19 pandemic. My intent was to uncover themes and provide a composite description of the essence of the phenomenon that may help inform institutions how to prepare faculty for online teaching so they can effectively transition during crises and disasters that require emergency remote teaching.

Although my career experience provided motivation for conducting this study, I understand faculty members may have varied descriptions of their lived experiences with instructional technology tools. In this study, it was important that I made sure that the study results reflected the participants' lived experiences and were not reflective of my experiences or opinions. This study was conducted from a transcendental phenomenological approach where meaning was derived from the participants' descriptions of their lived experiences (Creswell & Poth, 2018). This study was guided by the epistemological assumption that evidence is subjective and based on individual views (Creswell & Poth, 2018) and a constructivist worldview where individuals describe their experiences incorporating their historical and social perspective (Moustakas, 1994). This study was designed to gather participants' unique descriptions of their subjective, shared lived experiences. It was important that as the human instrument in this study that I set aside my previous perceptions and presumptions and employed

the process of epoché (Moustakas, 1994) to ensure the descriptions of the phenomenon were reflective of the participants' experiences without my perceptions and presumptions incorporated therein.

Problem Statement

The problem is that higher education faculty members were rushed into emergency remote online teaching at unprecedented speeds and scales during the COVID-19 pandemic whether or not they or their institutions were prepared to do so, and whether or not they previously had any interest in teaching online (Affouneh et al., 2020; Clark et al., 2020; Hodges et al., 2020; Ma et al., 2021; Wang et al., 2021). The forced switch to online teaching during the COVID-19 pandemic caused disruptions in the educational process at universities around the world (Bao, 2020; Ma et al., 2021; Tartavulea et al., 2020; Wang et al., 2021). Faculty were affected by this swift transition. Peterson et al. (2020) reported "Such a sharp pivot for teachers' instructional practices was jarring and forced many to operate from a space of discomfort" (p. 466). Furthermore, students' academic performance in the COVID-19 pandemic emergency remote teaching was affected in numerous ways (Iglesias-Pradas et al., 2021).

Although research has revealed the importance of institutional support in improving faculty members' online teaching experience (Zheng et al., 2018), there was little time for planning to move courses online during the COVID-19 pandemic (Affouneh et al., 2020; Bao, 2020; Hodges et al., 2020; Ma et al., 2021; Wang et al., 2021). Faculty members, with or without online teaching experience, preparation, and/or support from education technology teams were forced to move to online teaching (Affouneh et al., 2020; Bao, 2020; Hodges et al., 2020; Ma et al., 2021; Wang et al., 2021). This transition occurred under the traumatic conditions of a pandemic and little or no information was available to inform faculty whether this transition

would be temporary or more permanent (Besser et al., 2020; Cutri et al., 2020). These factors created a crisis teaching situation with the forced switch to online emergency remote teaching, substantially different than conventional online course transitioning and teaching (Cutri et al., 2020; Hodges et al., 2020; Peterson et al., 2020).

Adding on to the COVID-19 pandemic crisis teaching circumstance, universities that adhered to the classical form of education where students were led by faculty face-to-face in classrooms were met with the additional challenge of quickly implementing online education platforms (Basilaia et al., 2020). Other problems identified in online teaching included the lack of motivation and technical training of some faculty. Some faculty did not want to change their teaching modality stereotypes. Other faculty were not technically prepared and needed training to utilize contemporary online tools (Ilieva et al., 2021). However, universities with prior implementations of online platforms with support structures in place were identified as catalysts for success in the rush to the online instruction process (Tartavulea et al., 2020).

Although the literature provided a framework with which to understand the drivers that provide positive and negative effects of faculty members' experiences with online instruction, little was known about their lived experiences through the theoretical lens of self-efficacy with online instructional technology tools guided by the TPACK framework and andragogical principles during the COVID-19 pandemic rush to emergency remote teaching (Knowles, 1970; Koehler & Mishra, 2008; Ma et al., 2021). Furthermore, few studies about higher education faculty members' experiences during the COVID-19 pandemic were found to be conducted in the United States. Therefore, there exists gaps in the literature and an opportunity to explore how faculty members describe their experiences with implementing instructional technology tools and changing instructional practices during the COVID-19 pandemic emergency remote teaching

(Ma et al., 2021). To support faculty in emergency remote teaching due to a crisis or disaster such as the COVID-19 pandemic, attention to faculty readiness is worthy of study (Cutri et al., 2020). Understanding how faculty members describe their self-efficacy with implementing online instructional technology tools and changing instructional practices is theoretically significant in that it may inform future best practices for not only online teaching, but in emergency remote online teaching situations as well, and potentially benefitting student achievement. From a Biblical perspective, teaching is God's work, and we are asked to be ready to do the work of the Lord (New International Version, 2011, Numbers 8:11).

Purpose Statement

The purpose of this transcendental phenomenological study was to describe the lived experiences of higher education faculty members with implementing online instructional technology tools and changing instructional practices at a public university in the western United States during emergency remote teaching as a result of the COVID-19 pandemic. Faculty members' experiences are generally defined as their description of their beliefs in their ability to effectively implement the necessary online instructional technology tools and changing instructional practices while transitioning to emergency remote teaching during the COVID-19 pandemic (Al-Taweel et al., 2020; Bao, 2020). The theory guiding this study was the theory of self-efficacy as it relates to faculty members' self-efficacy with online instructional technology tools. The theory of self-efficacy connects an individual's belief in their ability to perform the necessary behaviors to produce specific outcomes (Bandura, 1977). The theory of self-efficacy was the lens through which faculty members' beliefs were explored of their ability or inability to effectively implement the necessary online instructional technology tools and instructional practices to remotely teach during the COVID-19 pandemic.

Additionally, the Technology Pedagogy Content Knowledge (TPACK) framework, designed by Koehler and Mishra (2008), and the principles of adult learning, or andragogy, by Malcolm Knowles (1970) provided the theoretical underpinnings of this study. The technological pedagogical content knowledge (TPACK) theory has informed technology integration in teaching (Koehler et al., 2013; Pareto & Willermark, 2019; Tafazoli, 2021) and was developed to explain the knowledge that instructors need to teach their students a subject, teach effectively, and use technology (Koehler et al., 2013; Pareto & Willermark, 2019; Tafazoli, 2021).

The instructional paradigm in adult education known as andragogy is a practice that has gained momentum in adult education over the last two decades. Knowles (1980) suggested that the purpose of adult education should be self-actualization, and while formal learning should be central to the educational process, faculty must pay particular attention to students' emotional, psychological, and intellectual development, as well. As a result of his efforts, the education of adults (andragogy) is perceived as different from the education of children (pedagogy) (Sharifi et al., 2017). Conrath (1971) suggested that "Andragogy is the art and science of helping adults learn" (p. 81). During the COVID-19 pandemic, the speed and the extent to which faculty were required to implement the use of advanced technology tools, the TPACK framework, designed by Koehler and Mishra (2008), and the principles of adult learning, or andragogy, by Malcolm Knowles (1970) provided an additional theoretical context to examine faculty members' descriptions of their lived experiences with transitioning to emergency online remote teaching (Tafazoli, 2021).

Significance of the Study

The participants of this study described their lived experiences with implementing online instructional technology tools and changing instructional practices during emergency remote

teaching as a result of the COVID-19 pandemic. The results of this study are significant because they may inform future best practices not only for online teaching but for future crises or disasters that require emergency remote teaching. Additionally, participants' descriptions of institutional support for online teaching and institutional disaster readiness plans at their institutions may inform college administrators how those factors may help increase self-efficacy with online instructional technology tools and practices and increase preparedness for future crises or disasters that require emergency remote teaching. This preparedness may have the potential to result in positive student performance outcomes (Ilieva et al., 2021).

Theoretical Significance

The theory guiding this study was the theory of self-efficacy. The theory of self-efficacy has to do with an individual's belief in their ability to perform the necessary behaviors to produce specific outcomes (Bandura, 1977). An individual's feelings, thinking, and motivation are described as being affected by an individual's self-efficacy. Factors exist that influence faculty members' self-efficacy and perception of the effectiveness of online teaching such as institutional support, trust in the system, and university's technological readiness (Bao, 2020; Castro & Tumibay, 2019; Dhillia, 2017; Englund et al., 2017; Tartavulea et al., 2020; Zheng et al., 2018). Bandura (1977) postulated that there are four primary sources of self-efficacy information: verbal persuasion, vicarious experiences, physiological arousal, and mastery experiences. Mastery experiences are considered the most impactful of the four sources (Bandura, 1977).

Faculty members' self-efficacy with online teaching technologies involves their perceptions of and approaches to teaching (Englund et al., 2017). Technology mastery experiences are similar to cognitive mastery experiences and faculty members' ability to operate

technology serves as an outcome to evaluate success or mastery (Barton & Dexter, 2019). With mastery experiences being considered the most impactful of the four sources of self-efficacy (Bandura, 1977), faculty members' perceived ability to operate technology may be the most impactful source of their self-efficacy level with online instructional technologies (Barton & Dexter, 2019), although, verbal persuasion, vicarious experiences, physiological arousal are factors well (Bandura, 1977). To best support faculty with emergency remote teaching, it may be helpful to understand how to assess their level of self-efficacy with online instructional technology tools and instructional practices, and their ability to transition their courses online in crises and disasters such as the COVID-19 pandemic (Cutri et al., 2020). Understanding factors that affect faculty members' self-efficacy with online instructional technology tools and instructional practices is theoretically significant in that it may inform future best practices for online teaching and future crises and disasters that require emergency remote teaching and may have the potential to positively affect student performance outcomes (Ilieva et al., 2021).

Additionally, the TPACK framework, designed by Koehler and Mishra (2008), and the principles of adult learning, or andragogy, by Malcolm Knowles (1970) provided the theoretical underpinnings of this study. The TPACK theory has informed technology integration in teaching (Koehler et al., 2013; Pareto & Willermark, 2019; Tafazoli, 2021) and was developed to explain the knowledge that instructors need to teach their students a subject, teach effectively, and use technology (Koehler et al., 2013; Pareto & Willermark, 2019; Tafazoli, 2021).

The instructional paradigm in adult education known as andragogy is a practice that has gained momentum in adult education over the last two decades. Knowles (1980) suggested that the purpose of adult education should be self-actualization, and while formal learning should be central to the educational process, faculty must pay particular attention to students' emotional,

psychological, and intellectual development, as well. As a result of his efforts, the education of adults (andragogy) is perceived as different from the education of children (pedagogy) (Sharifi et al., 2017). Conrath (1971) suggested that “Andragogy is the art and science of helping adults learn” (p. 81). With the speed and the extent to which faculty were required to implement the use of advanced technology tools, the TPACK framework, designed by Koehler and Mishra (2008), and the principles of adult learning, or andragogy, by Malcolm Knowles (1970) provided an additional theoretical context in examining faculty members’ descriptions of their lived experiences with transitioning to emergency online remote teaching (Tafazoli, 2021). Examining the faculty members’ descriptions of how their instructional practices were changed by the transition to emergency remote online teaching is theoretically significant in that it may inform future best practices for future crises and disasters that require emergency remote teaching and may have the potential to positively affect student performance outcomes (Ilieva et al., 2021).

Empirical Significance

This study serves to fill a gap in the literature to address the problem of faculty members’ experiences with online instructional technology tools during the rushed transition to emergency remote teaching due to the COVID-19 pandemic through the theoretical lens of self-efficacy guided by the TPACK framework and andragogical principles. Little is known about higher education faculty members’ experiences that led to high or low self-efficacy with online instructional technology tools during the rush to remote teaching due to the COVID-19 pandemic (Ma et al., 2021). Further, much of the literature that does exist pertains to K-12 institutions and much of the research has been performed outside of the United States. This study’s descriptions and themes are empirically significant in that they provide new information to the literature and support existing literature. The results from interviewing higher education faculty who

transitioned to online emergency remote teaching during the COVID-19 pandemic may provide substantial empirical results to higher education administrators to inform practices to better prepare for not only online teaching, but future crises and disasters requiring emergency remote teaching as well. In addition, the results could help inform practices and procedures in emergency online teaching that potentially positively affect student performance outcomes (Ilieva et al., 2021).

The literature examined revealed that the COVID-19 pandemic and the rush to emergency online teaching produced varying perceptions of the experience. A lower perception of the online experience compared to face-to-face teaching was reported by Tartavulea et al. (2020) in their study. Contrastingly, Tartavulea et al. (2020) and Savard et al. (2020) both suggested that in fact, silver linings may emerge from the COVID-19 pandemic. Continued use of some online tools was cited as one of those silver linings from the pandemic (Tartavulea et al., 2020). Lessons from the pandemic involve teaching approaches, moving online, and access to resources (Savard et al., 2020). Contributors for success in the rush to the online teaching process included universities that had existing instances of online platforms and support structures in place (Tartavulea et al., 2020).

Institutional support and faculty members' trust in the tech readiness of systems and objectives play a critical role in their perception of an effective online teaching and learning system (Hodges et al., 2020; Tartavulea et al., 2020). Even in light of the obvious difficulties experienced during the rush to emergency remote online teaching during the COVID-19 pandemic, opportunities may exist for higher education institutions in that they may have an opportunity to reinvent themselves with new perspectives concerning online teaching (Tartavulea et al., 2020), and thus, stand in a better position for crises and disasters where emergency remote

teaching is required. There may be a chance now for higher education institutions to influence positive change in higher education (Savard et al., 2020; Tartavulea et al., 2020).

Practical Significance

At the time of this writing, it is estimated that online teaching will play a major role in the continuing curriculum during the remainder of the COVID-19 pandemic and beyond (Darling-Hammond, & Hylar, 2020; McMaster et al., 2020). Typically, designing and moving a course online requires elaborate planning, lesson plan design, teaching materials, and technical support teams (Savard et al., 2020; Zheng et al., 2018). Of these, the most important aspect of online teaching is the detailed planning of each session (Savard et al., 2020; Zheng et al., 2018). With the conditions that existed during the COVID-19 pandemic, time for planning was extremely limited, many institutions were ill-prepared, and many faculty members were at a deficit with online teaching experience, preparation, and/or support from education technology teams (Bao, 2020; Cutri et al., 2020). Technical requirements of online teaching are far greater than traditional face-to-face in-class teaching, and some faculty were insufficiently trained or supported to teach online (Bao, 2020; Moorhouse & Beaumont, 2020). Lack of relevant materials such as audio and video recorded content and the short amount of time to transition to online teaching were some of the additional challenges in the switch to emergency remote teaching during the COVID-19 pandemic (Bao, 2020). There may be a chance now for higher education institutions to implement changes (Savard et al., 2020; Tartavulea et al., 2020) to be better prepared for future conditions where online emergency remote teaching is required. Furthermore, there may be the potential to positively affect student performance outcomes in crises and disasters that require emergency remote teaching as well (Ilieva et al., 2021).

Research Questions

This study sought to describe the lived experiences of higher education faculty who participated in the rush to emergency online teaching during the COVID-19 pandemic. The goal of a transcendental phenomenological study is to describe and interpret the shared lived experience of the phenomenon that is the subject of study (Moustakas, 1994; Slattery et al., 2007). This qualitative transcendental phenomenological research approach relies on in-depth individual interviews, collection of documents or artifacts, and focus groups, and is described in more detail in a subsequent chapter. The central research question and sub questions this study sought to answer are as follows:

Central Research Question

What were faculty members' experiences with implementing instructional technology tools and changing instructional practices during the COVID-19 pandemic?

During the COVID-19 pandemic, the use of emergency remote teaching solutions for instruction were used for courses that would have alternatively been delivered face-to-face. This was a completely different situation compared to teaching online under normal circumstances (Affouneh et al., 2020). Faculty members' self-efficacy with technology tools in online learning environments was a factor with the pandemic's forcing of a quick acceptance of some online technology tools (Bao, 2020). Four primary sources of self-efficacy information include verbal persuasion, vicarious experiences, physiological arousal, and mastery experiences (Bandura, 1977). Many faculty members experienced a disruptive shift to move all existing courses online in a matter of days (Bao, 2020; Hodges et al., 2020). They were required to leverage online teaching technologies such as Zoom video conferencing software to deliver synchronous live lessons (Moorhouse & Beaumont, 2020). Faculty were often not provided with adequate

professional development opportunities and did not possess appropriate online teaching skills (Wang et al., 2021), and felt vulnerable and uneasy when they suddenly had to teach in a virtual learning space (Moorhouse & Beaumont, 2020; Savard et al., 2020). Online teaching may continue to play a major role during the remainder of the COVID-19 pandemic (McMaster et al., 2020). The importance of understanding faculty members' experiences with online instructional technologies tools may inform how to prepare faculty to use online instructional technology tools for the remainder of the current pandemic and for future instances that require emergency remote teaching.

Sub Questions

- 1. How do faculty members describe their level of mastery of online instructional technology tools prior to and during the pandemic?*

Faculty members' self-efficacy with technology tools in online learning environments was a factor with the pandemic's forcing of a quick acceptance of online emergency remote teaching (Bao, 2020). Faculty members' self-efficacy with online teaching technologies affects their perceptions of and approaches to teaching (Englund et al., 2017). Of the four primary sources of self-efficacy information including verbal persuasion, vicarious experiences, physiological arousal, and mastery experiences, mastery experiences are considered the most impactful of the four sources (Bandura, 1977). Mastery experiences "occur when professors personally experience competency, engaging in practice or live instruction" (Barton & Dexter, 2019, p. 92). This aligns with the assertion of "a bidirectional relationship between beliefs and technology integration, as the integration itself (mastery experiences) impacts beliefs in addition to beliefs influencing integration" (Barton & Dexter, 2019, p. 92). Technology mastery experiences are similar to cognitive mastery experiences and faculty members' ability to operate technology

serves as an outcome for which they can evaluate success (Barton & Dexter, 2019). Research supports the idea of paying more attention to faculty members' self-efficacy with online teaching technologies, so that positive online teaching experiences can be created (Awofala et al., 2017). Understanding faculty members' descriptions of their experiences with online technology tools may provide insights into how their perception of their mastery of online technology tools affected them and for best practices to be prepared for future crises and disasters that require emergency remote teaching.

2. *How do faculty members describe their pedagogical (andragogical) practices prior to and during the pandemic?*

During the COVID-19 pandemic, emergency remote teaching solutions for instruction were used for courses that would have been otherwise taught face-to-face. In many cases, these solutions were completely different compared to teaching solutions for online teaching under normal circumstances (Affounh et al., 2020). There are many more technical requirements for online teaching as opposed to traditional face-to-face in-class teaching (Bao, 2020; Moorhouse & Beaumont, 2020). Some faculty were reluctant to change their teaching modality at all (Ilieva et al., 2021). Some were technically unprepared and required training to use online tools (Ilieva et al., 2021). Universities that were previously hesitant to change their traditional face-to-face pedagogical (or andragogical) approach found themselves with no other option but to transition completely to online teaching (Dhawan, 2020). The importance of understanding faculty members' pedagogical (andragogical) practices prior to and during the pandemic may help inform how to prepare them to transition to online instruction in future conditions that require emergency remote teaching.

3. *How do faculty members describe the verbal persuasion and vicarious experiences they had with colleagues, administrators, and others regarding their use of online instructional technology tools?*

Verbal persuasion, provided by colleagues, administrators, or trainers, “is positive endorsement of a teacher’s abilities or an instructional strategy” (Barton & Dexter, 2019, p. 91). Of the four primary sources of self-efficacy information include: verbal persuasion, vicarious experiences, physiological arousal, and mastery experiences, verbal persuasion is considered to be the weakest of the four sources of self-efficacy (Bandura 1997). However, when a faculty member has little or no experience with innovative technology, verbal persuasion is particularly relevant (Barton & Dexter, 2019) and when they perceive sincerity and expertise, verbal persuasion is more effective (Bandura, 1997; Hattie & Timperley 2007). When faculty members see colleagues complete similar instructional tasks to theirs, such as observing in professional development or a live instruction, vicarious experiences occur (Barton & Dexter, 2019). Models with similar professional characteristics increase the positive impact on faculty in that they have more of an ability to relate to the teaching model they observe (Bandura, 1997).

Online teaching requires a particular set of skills, different from face-to-face instruction (Borup & Evmenova, 2019). As a form of verbal persuasion, institutional support is known to improve faculty members’ experience with online teaching (Zheng et al., 2018); however, during the COVID-19 pandemic, there was a short amount of time to move courses online and little time for planning support strategies (Bao, 2020; Cutri et al., 2020). Institutional support in the form of technical support can enhance faculty use of technology and research emphasizes the importance of the availability of technical support to those who require it as a way to boost technology adoption (Zheng et al., 2018). During the COVID-19 pandemic, many faculty

members were required to utilize video conferencing software such as Zoom to deliver synchronous live lessons (Moorhouse & Beaumont, 2020). This shift affected faculty in several ways, and many felt unprepared when they needed to suddenly shift to teaching online with new technologies (Moorhouse & Beaumont, 2020; Savard et al., 2020). It has been suggested that faculty often were at a deficit with the necessary technology teaching skills because they lacked the necessary training opportunities or vicarious experiences (Wang et al., 2021). Researchers have determined that institutional support enhances self-efficacy through psychological empowerment (Zheng et al., 2018) and institutional support in the form of training (vicarious experiences) and encouragement (verbal persuasion) has been reported to have a big impact on faculty members' self-efficacy with online teaching technologies (Darling-Hammond & Hyler, 2020; Zheng et al., 2018).

4. *How do faculty members describe their perceived emotional state during the COVID-19 pandemic emergency online remote teaching?*

Physiological arousal as a source of self-efficacy is a faculty members' perceived emotional state concerning a task, with confident anticipation positively impacting their self-efficacy and anxiety negatively impacting the self-efficacy (Barton & Dexter, 2019). Reducing physiological arousal, from the perspective of social learning theory, "improves performance by raising efficacy expectations rather than by eliminating a drive that instigates the defensive behavior" (Bandura & Adams, 1977, pp. 289-290). Faculty members might feel uncomfortable teaching remotely (Tartavulea et al., 2020). This is especially true if there are other factors that result in a lack of training (Tartavulea et al., 2020). Limited technology at home, inadequate technology equipment at school, or technical problems are other factors faced in technology-assisted teaching (Tartavulea et al., 2020).

The COVID-19 pandemic was both unique and stressful for a variety of reasons including the uncertainty that individuals may have had in estimating the danger the pandemic posed for themselves and those close to them (Besser et al., 2020). However, one of the most notable stressors concerning the COVID-19 pandemic was the tremendous disruption it caused in daily life (Besser et al., 2020). The consequences of the COVID-19 pandemic around the world, as well as the various responses to the pandemic, are unprecedented experiences for many individuals (Al-Taweel et al., 2020; Bao, 2020; Besser et al., 2020; Hodges et al., 2020; Tartavulea et al., 2020). The psychological stress associated with the COVID-19 pandemic was likely exacerbated for those individuals who were already feeling somewhat overwhelmed by the stressors in their lives (Besser et al., 2020). Feelings of isolation and loneliness from significant changes in social relationships were created for many people by the stringent social distances and lockdown measures applied from the start of the pandemic (Besser et al., 2020; Dhawan, 2020; Favale et al., 2020; Smith & Lim, 2020). These psychological stressors associated with the COVID-19 pandemic may have played a part in faculty members' physiological arousal and impacted their self-efficacy with emergency remote teaching online (Barton & Dexter, 2019).

Definitions

Following are definitions and descriptions for terms that were used throughout the study. Some of these terms are explained in more detail in subsequent chapters.

1. *Andragogy* - "Andragogy is the art and science of helping adults learn" (Conrath, 1971, p. 81).
2. *Coronavirus pandemic* – The novel coronavirus disease (COVID-19) pandemic (Al-Taweel et al., 2020).

3. *COVID-19 pandemic* – The novel coronavirus disease that affected the entire world (Al-Taweel et al., 2020). On March 11, 2020, around three months after the first case was discovered in Wuhan City, China, the World Health Organization (WHO) declared it a pandemic (Al-Taweel et al., 2020; Azarkish & Janghorban, 2020; Scull et al., 2020; Tafazoli, 2021; Viner et al., 2020).
4. *Crisis teaching* – Teaching that occurs in an unplanned manner where a transition to emergency remote teaching is implemented due to disaster or crisis conditions such as the COVID-19 pandemic (Cutri et al., 2020) and is distinguished from research-informed, high-quality teaching practices (Hodges et al., 2020). Crisis teaching in the current situation was described as those circumstances where a transition to online instruction quickly with no preparation under the traumatic conditions of the COVID-19 pandemic, with little information on the duration of the online teaching (Cutri et al., 2020).
5. *Emergency remote teaching* - A temporary shift of instructional delivery to an alternate delivery model due to crisis circumstances (Hodges et al., 2020).
6. *Mastery experiences* – as a source of self-efficacy “occur when professors personally experience competency, engaging in practice or live instruction” (Barton & Dexter, 2019, p. 92).
7. *Novel Coronavirus Disease* – A disease known as COVID-19, that affected the entire world starting in the Spring of 2020 (Al-Taweel et al., 2020).
8. *Phenomenology*- The goal of a phenomenological study is to describe and interpret the shared lived experience of the phenomenon that is the subject of study (Moustakas, 1994, Slattery et al., 2007).
9. *Physiological arousal* - as a source of self-efficacy “is a teacher’s perceived emotional state in relation to a task, with confident anticipation positively impacting teacher self-

efficacy and anxiety negatively impacting teacher self-efficacy” (Barton & Dexter, 2019, p. 92).

10. *Qualitative Research* - the most basic definition of qualitative research is that it uses words as data collected and analyzed in myriad ways. Qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them (Merriam & Tisdell, 2015).
11. *Self-efficacy* - refers to beliefs in an individual’s abilities to organize and execute the courses of action required to produce given outcomes (Bandura, 1977).
12. *Transcendental* - Transcendental science is described as the act of reading a text so that the intention and meaning behind the appearances are fully understood (Moustakas, 1994). Research is described as oriented toward lived experience and the researcher’s interpretation of the meaning of the lived experiences (Moustakas, 1994).
13. *Verbal persuasion* – as a source of self-efficacy, “is a positive endorsement of a teacher’s abilities or an instructional strategy” (Barton & Dexter, 2019, p. 91).
14. *Vicarious experiences* – as a source of self-efficacy, occur when faculty members see colleagues complete similar instructional tasks to their such as observing a live instruction (Barton & Dexter, 2019).

Summary

Investigating the problem of how higher education faculty were affected during the rush into emergency remote online teaching at exceptional speeds during the COVID-19 pandemic supports the purpose of this transcendental phenomenological study which was to describe the lived experiences of higher education faculty with implementing instructional technology tools and changing instructional practices at a public university in the western United States during emergency remote teaching as a result of the COVID-19 pandemic. Chapter One presented an

overview of this study with a synthesis of pertinent research literature and theoretical framework. Furthermore, included in Chapter One was a background including the historical context, social context, and the theoretical context for this study. Additionally, Chapter One included a situation to self, the problem and purpose statement, and the significance of the study including the theoretical, empirical, and practical significance of this study. Finally, the research questions and definitions were presented in this chapter.

The results of this study are intended to describe the lived experiences of higher education faculty with instructional technology tools and provide discovery of themes from individual experiences guided by the theory of self-efficacy and guided by the TPACK framework and andragogical principles (Bandura, 1977; Creswell & Poth, 2018; Knowles, 1970; Koehler & Mishra, 2008). This research study had a specific focus on faculty members' descriptions of their lived experiences with implementing instructional technology tools and changing instructional practices during the COVID-19 pandemic, in the context of self-efficacy guided by the TPACK framework and andragogical principles: (a) their perceived level of mastery of online instructional technology tools, (b) their pedagogical (andragogical) practices prior to and during the pandemic, (c) their verbal persuasion and vicarious experiences they had with colleagues, administrators, and others regarding their use of online instructional technology tools, and (d) their perceived emotional state during the COVID-19 pandemic emergency online remote teaching.

Studying this phenomenon, I sought to fill the gap in the research literature regarding how higher education faculty in the United States were affected during the rush into emergency remote online teaching through the theoretical lens of self-efficacy and within the TPACK framework guided by andragogical principles. Filling this research gap may inform future higher

education administrators and faculty about best practices on how to prepare for future crises or disasters which call for emergency remote teaching. This dissertation is organized into five chapters, references, and appendices. In Chapter One, the proposed study is introduced; in Chapter Two, existing literature is reviewed and synthesized; the methodology is explained in Chapter Three, and Chapter Four provides a discussion of the research findings. Finally, in Chapter Five, a summary, conclusions, implications for practice, and recommendations for future research is presented.

CHAPTER TWO: LITERATURE REVIEW

Overview

A systematic review of the literature was conducted to describe the experiences of higher education faculty with online technology tools during the rush into emergency remote teaching during the COVID-19 pandemic. Through the lens of the theory of self-efficacy (Bandura, 1977) guided by the technological pedagogical content knowledge (TPACK) framework (Koehler & Mishra, 2008), and andragogical principles (Knowles, 1970), higher education faculty members' descriptions of their lived experiences with implementing instructional technology tools and changing instructional practices during the COVID-19 pandemic emergency remote teaching was explored. This chapter presents a review of the current literature related to the topic of study.

The purpose of this literature review was to examine what research has been conducted regarding the lived experiences of higher education faculty with implementing online instructional technology tools and changing instructional practices during emergency remote teaching. In the first section, the theory of self-efficacy (Bandura, 1977), the TPACK framework (Koehler & Mishra, 2008) and andragogical principles (Knowles, 1970) as the theoretical underpinnings of this study are discussed. Also included in this section is a discussion about the four primary sources of self-efficacy information: verbal persuasion, vicarious experiences, physiological arousal, and mastery experiences (Bandura, 1977). Following the theoretical framework section is a synthesis of recent literature regarding an overview of the COVID-19 pandemic, emergency remote teaching, and crisis teaching, self-efficacy with instructional technology, faculty beliefs, and cultural issues, student performance, institutional support, and institutional disaster readiness. This Chapter addresses the factors that play into faculty members' perception of the effectiveness of online teaching as a result of the rush to remote

teaching due to the COVID-19 pandemic. The chapter concludes with a summary restating the problem, and a gap in the literature is identified, presenting a viable need for the current study.

Theoretical Framework

The works of Bandura (1977) and his self-efficacy theory provided the framework for this study. Self-efficacy theory is a subset of Bandura's (1986) social cognitive theory. The social cognitive theory is composed of four processes of goal realization: self-observation, self-evaluation, self-reaction, and self-efficacy (Bandura, 1986). Self-efficacy theory is based on a personal belief in one's ability to complete courses of action required for certain performance outcomes (Bandura, 1977). Personal self-efficacy beliefs have been reported as seeming to be the most important cause of human behavior (Zee & Koomen, 2016). "As the predictor of outcome expectancies, they help persons decide which courses of action they ought to pursue and whether to persist in the face of environmental adversities" (Zee & Koomen, 2016, p. 984).

Bandura (1977) postulated that there are four primary sources of self-efficacy information: verbal persuasion, vicarious experiences, physiological arousal, and mastery experiences. Bandura (1977) also suggested that cognitive processes facilitate change. However, the experience of mastery from performing effectively encourages and transform cognitive events (Bandura, 1977). An individual's feelings, thinking, and motivation are described as being affected by an individual's self-efficacy by Bandura (1993). The idea is that individual behavior can be motivated by the thought (or cognitive representations) of what future outcomes will be (Bandura, 1977). From this perspective, cognitive reinforcement is thought to affect behavior because of the anticipation of perceived benefits or as a way to avoid future difficulty. Self-rewarding actions from achieving certain levels of behavior create conditions for individuals to persist until they achieve their goals (Bandura, 1977). There are many factors that determine

cognitive outcomes. For this reason, even success is processed differently by individuals with regards to self-efficacy (Bandura, 1977). Since individuals have different types and amounts of efficacy-altering experiences, providing a new source of efficacy information doesn't necessarily affect all individuals the same (Bandura, 1977). Bandura (2001) postulated that an individual's self-efficacy affects their perseverance and motivation when, in particular, they experience difficulties.

Additionally, the TPACK framework (Koehler & Mishra, 2008), and andragogical principles (Knowles, 1970) provided the theoretical underpinnings of this study. The TPACK theory has informed technology integration in teaching (Koehler et al., 2013; Pareto & Willermark, 2019; Tafazoli, 2021) and was developed to explain the knowledge that instructors need to teach their students a subject, teach effectively, and use technology (Koehler et al., 2013; Pareto & Willermark, 2019; Tafazoli, 2021). The instructional paradigm in adult education known as andragogy is a practice that has gained momentum in adult education over the last two decades. Knowles (1980) suggested that the purpose of adult education should be self-actualization, and while formal learning should be central to the educational process, faculty must pay particular attention to students' emotional, psychological, and intellectual development, as well. As a result of his efforts, the education of adults (andragogy) is perceived as different from the education of children (pedagogy) (Sharifi et al., 2017). Conrath (1971) suggested that "Andragogy is the art and science of helping adults learn" (p. 81).

The COVID-19 pandemic created circumstances that affected global higher education and faculty in numerous ways (Al-Taweel et al., 2020; Bao, 2020; Crawford et al., 2020; Tartavulea et al., 2020). Understanding faculty members' descriptions of their self-efficacy with implementing online technology tools and changing instructional practices may provide insights

into how they were affected, how student performance was affected, and for best practices to be prepared for future situations that require emergency remote teaching (Bao, 2020; Tartavulea et al., 2020). Understanding faculty members' experiences could inform subjects such as teacher burnout and student achievement (Chisadza, 2021; Dorn et al., 2020; Rahiem, 2021; Zee & Koomen, 2016) and future best practices (Bao, 2020; Tartavulea et al., 2020). Faculty with high self-efficacy have been reported to suffer less from negative emotions, overall burnout, and have better teaching experiences (Zee & Koomen, 2016). Through the lens of the theory of self-efficacy and guided by the TPACK framework (Koehler & Mishra, 2008) and andragogical principles (Knowles, 1970), higher education faculty members' descriptions of their lived experiences with implementing instructional technology tools and changing instructional practices during the COVID-19 emergency remote teaching were explored (Merriam & Tisdell, 2015; Patton, 2015).

In this study, data was collected through interviews (see Appendix D), documents and artifacts, and focus groups (see Appendix E) (Moustakas, 1994; Patton, 2015). The questions for the interviews were formed to elicit participants' descriptions of their lived experiences with instructional technology tools. The four main sources of self-efficacy, verbal persuasion, vicarious experiences, physiological arousal, and mastery experiences, within the TPACK framework guided by andragogical principles steered those interview questions to understand how those aspects of their self-efficacy with implementing instructional technology tools and changing instructional practices affected them during the transition to emergency remote teaching and consequently how student performance was affected. Data analysis in this study was conducted in alignment with Moustakas' (1994) methods of analysis of data and steps therein for a transcendental phenomenological research design. Through the process of epoché,

phenomenological reduction, imaginative variation, and synthesis of composite textural and structural descriptions (Moustakas, 1994) data was analyzed and reported to share the essences of the experience of the phenomenon through the lens of the theory of self-efficacy, guided by the TPACK framework (Koehler & Mishra, 2008) and andragogical principles (Knowles, 1970) as a whole (Moustakas, 1994).

Related Literature

Following is a summary of related literature through the description of eight themes. Each theme described in the following section depicts specific components important to examining higher education faculty members' descriptions of their lived experiences with instructional technology during the COVID-19 pandemic emergency remote teaching. Themes represent factors such as the COVID-19 pandemic, self-efficacy with instructional technologies, faculty beliefs and cultural issues, student performance, emergency remote teaching, and crisis teaching, institutional support, and institutional disaster readiness. Extensive literature exists concerning the themes. However, more can be learned from researching the experiences of higher education faculty with instructional technology during the rush to emergency remote teaching during the COVID-19 pandemic.

COVID-19 Pandemic

The COVID-19 respiratory disease that affected millions worldwide, was declared a global pandemic by the World Health Organization (WHO) on or around March 12, 2020 (Azarkish & Janghorban, 2020; Dhawan, 2020; Iglesias-Pradas et al., 2021; Scull et al., 2020; Viner et al., 2020; Xiao et al., 2020). The COVID-19 pandemic upended the world in innumerable ways (Dhawan, 2020; Smith & Lim, 2020; Van Lancker & Parolin, 2020). COVID-19 has been traced back to Wuhan City, Hubei Province, in China as early as December, 2019

(Azarkish & Janghorban, 2020; Day et al., 2021; Tafazoli, 2021) and is the fifth flu pandemic since the 1918 flu pandemic (Al-Taweel et al., 2020). Since its first outbreak, the pandemic has had a massive impact on people's lives and habits (Favale et al., 2020; Smith & Lim, 2020; Van Lancker & Parolin, 2020). By July 28, 2021, the outbreak of COVID-19 had infected more than 195 million people and caused over 4.18 million deaths globally (Johns Hopkins University, 2021). To lessen the spread of the COVID-19 pandemic, the world issued severe restrictions like social distancing and lockdown measures (Besser et al., 2020; Day et al., 2021; Dhawan, 2020; Favale et al., 2020; Johnson et al., 2020; Kufi et al., 2020; Scull et al., 2020; Tafazoli, 2021) and public care strategies such as hand-washing, wearing facemasks, and avoiding mass assemblies (Kufi et al., 2020). Travel bans and mandatory quarantine rules were implemented for all incoming travelers to countries around the world (Scull et al., 2020).

To respect social distancing restrictions, a shift to online teaching and the adoption of remote working solutions were adopted worldwide (Besser et al., 2020; Cavanaugh & DeWeese, 2020; Day et al., 2021; Favale et al., 2020; Johnson et al., 2020). Impacted by the COVID-19 pandemic during Spring, 2020, universities started to close campuses all around the world, with many of them forced into emergency remote online teaching as the only viable option (Alston, 2020; Bao, 2020; Basilaia et al., 2020; Burgess & Sievertsen, 2020; Cavanaugh & DeWeese, 2020; Day et al., 2021; Dhawan, 2020; Gillis & Krull, 2020; Kufi et al., 2020; Scull et al., 2020; Viner et al., 2020) in an untested, extraordinary rate and magnitude (Al-Taweel et al., 2020; Bao, 2020; Cutri et al., 2020; Hodges et al., 2020; Tartavulea et al., 2020; Viner et al., 2020). Almost all programs that required human social interaction were locked down, restricting education and administrative work (Kufi et al., 2020). By March of 2020, it was estimated that more than 850 million individuals had transitioned to alternate forms of teaching and learning (Johnson et al.,

2020). “The innovations included the conversion of all face-to-face coursework units into online units, including synchronous and asynchronous learning opportunities” (Scull et al., 2020, p. 497). Shifting all existing courses online in a matter of days was a massive disruption (Bao, 2020; Tafazoli, 2021).

Day et al. (2021) postulated that the move to online remote teaching in universities worldwide may have resulted in the largest unplanned educational experiment ever undertaken. As part of the rush to remote teaching during the COVID-19 pandemic, faculty were asked to “transition, create, and implement online teaching due to university closures with no choice but to teach online even if they did not feel properly prepared to do so, or formerly had little interest in online teaching” (Cutri et al., 2020, p. 523). Digital technology became essential for connectivity and communication and some institutions and faculty members were unprepared to incorporate necessary instructional technology tools (Al-Taweel et al., 2020; Cavanaugh & DeWeese, 2020; Wang et al., 2021). In addition, in some areas of the world, transitioning to online teaching was hindered by a large percentage of the population not having access to the internet (Kufi et al., 2020). Alston (2020) posited that as a result of closures of universities around the world, an academic and social ripple effect is likely to result. This ripple effect includes academic impacts resulting from delays in education and social impacts where society is affected by delays in populations college graduates going to work as expected (Alston, 2020).

Emergency Remote Teaching/Crisis Teaching

The forced switch to online teaching during the current COVID-19 pandemic caused global disruptions in the educational process at universities (Bao, 2020; Basilaia et al., 2020; Greene, 2020; Cavanaugh & DeWeese, 2020; Tartavulea et al., 2020). It is estimated that in 2018, only about 15% of education was distributed through online technology environments

(Burgess & Sievertsen, 2020). The COVID-19 pandemic significantly accelerated the move to the online environment, at an extraordinary rate and scale (Bao, 2020; Burgess & Sievertsen, 2020; Clark et al., 2020; Hodges et al., 2020; Lim, 2020; Tartavulea et al., 2020; Viner et al., 2020). Courses that were designed for face-to-face instruction were required to be delivered online due to the suspension of face-to-face classes (Basilaia et al., 2020; Moorhouse, 2020). There exists a need to examine the pedagogical (and andragogical) strategies for teaching courses that were moved online and to understand what pedagogical (and andragogical) changes were made to meet learning objectives in the online environment (Belet, 2018; Gillis & Krull, 2020; Martin et al., 2019; Wyant & Bowen, 2018). During the COVID-19 pandemic, the use of emergency remote teaching solutions for instruction were used for courses that would have alternatively been delivered face-to-face. This is a completely different situation compared to teaching online under typical conditions (Affouneh et al., 2020).

For many, it was “a massive disruptive shift to move all existing courses online in a matter of days” (Bao, 2020, p. 114). Experienced or not, faculty were required to leverage online teaching technologies (Moorhouse & Beaumont, 2020). In many instances, combinations of asynchronous and synchronous modes of instruction were adopted (Moorhouse, 2020). Two main types of online tools and resources were widely adopted across all higher education institutions: learning management systems (LMS) and video conferencing platforms. Canvas and Blackboard were the most used LMS online tools in the United States (Iglesias-Pradas et al., 2021). Moodle was predominantly used in South Africa (Iglesias-Pradas et al., 2021). This suggests that many institutions and faculty chose to resort to their directly available digital platform to support educational processes in the first place (Iglesias-Pradas et al., 2021).

Many faculty were required to utilize certain software for the first time to deliver synchronous live lessons (Moorhouse & Beaumont, 2020). Zoom was the most used video conferencing tool, followed by Blackboard Collaborate, Microsoft Teams, or WebEx (Iglesias-Pradas et al., 2021). Some universities leveraged the Google Suite slate of applications, such as Google Classroom, Google Hangouts, Google Drive, Google Forms, and Gmail (Basilaia et al., 2020; Dhawan, 2020). This shift affected instruction in numerous ways and it was suggested that instructors often “lacked the adequate online teaching skills, because they were not provided with sufficient formal training opportunities, but rather informal workshops that were short and unsystematic” (Wang et al., 2021, p. 2).

Many faculty members felt helpless and anxious when they suddenly had to teach in a virtual learning space (Moorhouse & Beaumont, 2020; Savard et al., 2020). Furthermore, faculty reported students not showing up to synchronous sessions, and many times if they did attend, many students rarely contributed to the conversation (Bao, 2020; Moorhouse, 2020). Features such as Zoom breakout rooms were among solutions available to elicit student interaction (Moorhouse, 2020). Technology training for features such as Zoom breakout rooms and other technologies was recommended to prepare instructors to deliver courses online in the event of a crisis or emergency such as the COVID-19 pandemic (Moorhouse, 2020). Teaching during a global pandemic made even clearer the importance of the need to be aware of barriers that may arise (Gillis & Krull, 2020). Technology issues were particularly problematic when students could not seek out other solutions outside the house and most technology stores were closed (Gillis & Krull, 2020).

Typically, designing and moving a course online requires comprehensive planning, lesson plan design, teaching materials, and technical support teams (Iglesias-Pradas et al., 2021;

Savard et al., 2020; Zheng et al., 2018). One of the most important aspects of working in the online space is the detailed planning of each session (Iglesias-Pradas et al., 2021; Savard et al., 2020). Specific activities should be developed to align with learning objectives, depending on the type of course and learning objectives (Alston et al., 2017; Gillis & Krull, 2020; Martin et al., 2019). Technology is only one part of online teaching (Price et al., 2016). Best practices designed for classroom teaching have been applied to online teaching (Price et al., 2016).

Bain's (2004) seven best classroom teaching practices were applied in a workshop designed to prepare faculty to apply these teaching practices to their online courses (Price et al., 2016). Those seven best practices were: 1) create a natural critical learning environment, 2) get students' attention and keep it, 3) start with the student, rather than the discipline, 4) get commitment from students, 5) help students learn outside of class, 6) engage students in disciplinary thinking, and 7) create diverse learning experiences (Price et al., 2016). In addition, based on Gay's (2010) practices, best practices for designing culturally responsive teaching practices were purported to "flip the online classroom by creating an environment that acknowledges, celebrates, and builds upon the cultural capital that learners and teachers bring to the online classroom" (Woodley et al., 2017, p. 470). Best practices suggested by Gay (2010) included 1) validate students' pre-existing knowledge with relevant activities, 2) provide comprehensive and multi-dimensional learning opportunities, 3) transform student learning with synchronous online meetings, and 4) empower students through liberatory leadership opportunities (Woodley et al., 2017). However, the COVID-19 pandemic did not allow time for elaborate planning and careful design processes which are likely absent in most cases in these types of emergency shifts (Hodges et al., 2020; Iglesias-Pradas et al., 2021). Well-planned online

learning experiences differ substantially from courses offered online in response to a crisis or disaster (Hodges et al., 2020; Iglesias-Pradas et al., 2021).

Emergency remote teaching and crisis teaching are terms that emerged and have been used by scholars during this pandemic and other crises (Cutri et al., 2020; Hodges et al., 2020). Emergency remote teaching has been defined as a temporary shift of instructional delivery to an alternate delivery model due to crisis circumstances (Hodges et al., 2020; Tafazoli, 2021). In the case of the COVID-19 pandemic, Tafazoli (2021) suggested emergency remote teaching or “a ‘pandemic pedagogy’ is a temporary shift from the ‘normal’ modes of teaching due to crises like natural disasters” (p. 5). Chaka (2020) suggested that emergency remote teaching is “an ad hoc and short-term migration of instructional delivery to an alternative delivery mode in response to crisis circumstances in a rapid response to special and unavoidable crisis exigency such as the coronavirus pandemic” (p. 7). Peterson et al. (2020) suggested that the term emergency remote teaching, “helps to distinguish current crisis pedagogy from research-informed, high-quality online practices” (p. 462).

Not typically planned in advance, emergency remote teaching involves a rapid transition from traditional instruction to remote teaching in response to emergencies such as the COVID-19 pandemic (Affouneh et al., 2020; Chaka, 2020; Iglesias-Pradas et al., 2021; Tafazoli, 2021). Hodges et al. (2020) also contended that emergency remote teaching is deployed in a hurry with little time. Further, Hodges et al. (2020) suggested that emergency remote teaching is deployed with minimal resources and results in a less than optimal implementation. Emergency remote teaching involves the use of remote teaching solutions, e.g., online technology solutions, for instruction that would alternatively be delivered face-to-face (Basilaia et al., 2020; Iglesias-Pradas et al., 2021). This is a completely different situation compared to teaching online under normal circumstances (Affouneh et al., 2020; Iglesias-Pradas et al., 2021). Typically, courses are

intended to return to the face-to-face format once the crisis or emergency is over (Hodges et al., 2020). The goal was reportedly not to re-create a robust educational experience, but rather temporary access to instruction quickly and reliably during an emergency or crisis (Hodges et al., 2020).

Crisis teaching refers to the conditions with which emergency remote online teaching is implemented (Cutri et al., 2020; Peterson et al., 2020). Crisis teaching in the current situation was described as those circumstances where faculty had to transition to online instruction quickly with little or no preparation (Cutri et al., 2020). This transition to crisis teaching occurred under traumatic conditions of a pandemic with scant information on whether the transition to online teaching would be temporary or more permanent (Cutri et al., 2020; Peterson et al., 2020). With the unplanned nature of crisis teaching, institutions and faculty may have confronted many obstacles in accommodating and embracing online emergency remote teaching (Affouneh et al., 2020; Peterson et al., 2020).

The crisis of transitioning to online teaching due to the COVID-19 pandemic “forced the concept of online readiness to collapse into ‘forced readiness’” (Cutri et al., 2020, p. 533). It is estimated that online teaching will play a major role in the continuing curriculum during the remainder of the COVID-19 pandemic (McMaster et al., 2020) and in future emergencies that require remote teaching solutions. Proper educator preparation to ensure competency pedagogically (or andragogically) and technically is of paramount importance (Dhawan, 2020). Dhawan (2020) posited that “The severe explosion of Corona Virus disease can make us add one more argument in terms of online learning, that is, online learning serves as a panacea in the time of crisis” (p. 1). Quality management programs and continuous improvement are crucial for

online learning success and preparing for any crises. The importance of understanding the effects to date may inform how to prepare for future crises that require emergency remote teaching.

Self-Efficacy with Instructional Technology

The COVID-19 pandemic did not provide the luxury of extensive time and elaborate planning to move courses online (Bao, 2020; Hodges et al., 2020; Iglesias-Pradas et al., 2021). Many faculty members did not have extensive online teaching experience, preparation, and/or support from education technology teams (Bao, 2020; Hodges et al., 2020; Iglesias-Pradas et al., 2021). Some faculty members were forced to improvise with less-than-ideal solutions and found the process traumatic (Hodges et al., 2020). Faculty members' self-efficacy with technology tools in online learning environments was a factor with the pandemic's forcing of a quick acceptance of some online technology tools (Bao, 2020). Self-efficacy refers to beliefs in an individual's abilities to organize and execute the courses of action required to produce given outcomes (Alqurashi, 2016; Bandura, 1977; Wang et al., 2021; Zheng et al., 2018). Faculty members' beliefs in online teaching could be related to their self-efficacy with technology tools or their overall perception of the effectiveness of online teaching (Awofala et al., 2017; Corry & Stella, 2018). Self-efficacy beliefs affect an individual's confidence, how they feel, think, their motivation, and it influences what courses of action they may take and how much effort they put into a task to produce a given outcome (Alqurashi, 2016; Bandura, 1977). Self-efficacy determines how long a person will persevere in the face of obstacles, their stress level in dealing with a taxing environment, and the level of accomplishment they realize (Alqurashi, 2016).

Mastery Experiences

Bandura (1977) postulated that there are four primary sources of self-efficacy information: verbal persuasion, vicarious experiences, physiological arousal, and mastery

experiences. Mastery experiences relate to past performance accomplishments and are considered the most impactful of the four sources (Bandura, 1977; Morris et al., 2017; Usher & Pajares, 2008). “Thus, mastery experiences involve the achievement of goals (i.e., accomplishment/attainment) through direct, personal action (i.e., enactive)” (Morris et al., 2017, p. 797). The experience of mastery from performing effectively encourages and transforms cognitive events (Bandura, 1977). Individual’s perception of success in prior tasks exhibit more confidence in approaching similar tasks and if they perceive they have failed before they may doubt their capabilities (Bandura, 1997; Morris et al., 2017).

Mastery experiences for faculty members occur when they are engaging in practice or live instruction and personally experience competency (Angeli & Valanides, 2018). Faculty members’ self-efficacy with online teaching technologies involves their perceptions of and approaches to teaching (Englund et al., 2017). Technology mastery experiences are similar to cognitive mastery experiences and faculty members’ ability to operate technology serves as an outcome for which they can evaluate success (Barton & Dexter, 2019). The COVID-19 pandemic did not provide much time for planning to move courses online and many faculty members did not have adequate online teaching experience, preparation, and/or support from education technology teams (Bao, 2020; Hodges et al., 2020; Iglesias-Pradas et al., 2021; Wang et al., 2021). However, in a study by Kan & Murat (2020), the relationship between teachers who were life-long learners and their level of educational technology self-efficacy were examined. Kan & Murat (2020) concluded that there was a positive correlation between teachers with lifelong learning competencies and high levels of technology self-efficacy. Therefore, it can be presumed that faculty with high levels of lifelong learning competencies may correlate to higher levels in their technology mastery experiences. Faculty members’ level of self-efficacy as it

pertains to mastery of technology tools was relevant during the transition to emergency remote teaching during the COVID-19 pandemic. Success in operating the necessary technology tools for that transition would have served as an outcome for which they could have evaluated success (Barton & Dexter, 2019).

Vicarious Experiences

Vicarious experiences, as one of the four primary sources of self-efficacy, can be described as individuals watching others effectively carrying out a task (Bandura, 1977). Based on another individual's success with a task, individuals may feel more self-confident in their capability to carry out a task (Bandura, 1977). Morris et al. (2017) suggested that a vicarious experience can be derived from not only observing others, but even oneself, perform a task. Bandura (1997) suggested that when individuals perform a rather new task, the effect of a vicarious experience on the development of self-efficacy may be profound. Morris et al. (2017) stated that "vicarious experiences can also lead to referential comparisons in which one's capabilities are evaluated by comparing one's performance (i.e., enactive mastery experiences) to the observed performances of others" (p. 797).

In educational settings, vicarious experiences "occur when professors see colleagues complete similar target instructional tasks, such as observing a model lesson in professional development or a colleague's live instruction" (Barton & Dexter, 2019, p. 91-92). Online teaching requires a particular set of skills, different from face-to-face instruction (Borup & Evmenova, 2019). Those skills may include those used in synchronous teaching situations where cameras and microphones may be used by both the faculty member and students, accessing content to present, or in asynchronous teaching situations, posting content for students to access. Models with similar professional characteristics increase the positive impact on faculty in that

they have more of an ability to relate to the teaching model they observe (Bandura, 1997; Morris et al., 2017), such as a teacher observing another teacher carrying out an online teaching task (Darling-Hammond, & Hyler, 2020).

Through other's performances, individuals can develop high or low self-efficacy by observing another complete a task and then make a comparison of their competence to complete the task (Barton & Dexter, 2019; Rowan Christensen, 2017). Watching a person succeed in completing a similar task can increase a person's self-efficacy and conversely if a person watches someone fail, it can negatively affect their self-efficacy (Barton & Dexter, 2019; Rowan Christensen, 2017). In the context of faculty training, mentoring programs may increase self-efficacy where an individual is paired with someone with similar tasks to complete as a way to increase their self-efficacy beliefs (Barton & Dexter, 2019; Rowan Christensen, 2017). A long-term professional development strategy was suggested using a systems approach to technology integration, incorporating mentoring and communities of practice to sustain the continued development of technology use (Tondeur et al., 2020).

Verbal Persuasion

Verbal persuasion, as one of the four primary sources of self-efficacy, pertains to the idea that through verbal suggestion, that individuals can be guided to believe that they can become efficacious, despite prior difficulties (Rowan Christensen, 2017). Evaluative feedback can influence a person's self-efficacy beliefs (Morris et al., 2017). Verbal persuasion provided by colleagues, administrators, or professional development trainers, "is positive endorsement of a teacher's abilities or an instructional strategy" (Barton & Dexter, 2019, p. 91). Of the four primary sources of self-efficacy information that include verbal persuasion, vicarious experiences, physiological arousal, and mastery experiences, verbal persuasion is considered to

be the weakest of the four sources of self-efficacy (Bandura 1997) because it does not offer individuals hands-on experience with a particular task (Rowan Christensen, 2017). However, the effect of verbal persuasion can be influenced by the level of credibility of the person providing the verbal persuasion (Morris et al., 2017; Redmond, 2010). When individuals perceive the providers' sincerity and advanced expertise, verbal persuasion is more effective (Bandura 1997; Hattie & Timperley, 2007; Morris et al., 2017). Also, when an individual has little experience with a task, verbal persuasion from a provider is more powerful (Barton & Dexter, 2019; Morris et al., 2017).

Physiological Arousal

Physiological arousal, as one of the four primary sources of self-efficacy, pertains to feelings that individuals experience from their body such as stress, fatigue, anxiety, and mood, and how they perceive such sensations (Bandura, 1977). Stressful and trying situations can affect an individual's physiological state (Besser et al., 2020), informing their sense of competency, and resulting in an individual feeling more successful under less stressful situations (Redmond, 2010). Psychological stress can result in a variety of physiological consequences (Besser et al., 2020). Physiological arousal, as a source of self-efficacy, is an individual's perceived emotional state relating to a task with confidence positively affecting their self-efficacy and anxiety negatively affecting their self-efficacy (Barton & Dexter, 2019). One of the most notable stressors during the COVID-19 pandemic was the massive disruption caused for daily life (Besser et al., 2020).

The COVID-19 pandemic was traumatic for individuals for a variety of reasons including uncertainty concerning the danger the pandemic posed not only for themselves but for those close to them (Besser et al., 2020). Feelings of isolation and loneliness from significant changes

in social relationships were created for many people by the stringent social distances and lockdown measures applied from the start of the pandemic (Besser et al., 2020; Dhawan, 2020; Favale et al., 2020; Smith & Lim, 2020). Smith & Lim (2020) reported that emerging evidence has shown that the pandemic “had dramatic mental health impacts, bringing about increased anxiety and greater social isolation due to the physical distancing policies introduced to control the disease” (p. 1). Xiao et al. (2020) suggested that individuals who experienced or witnessed the suffering related to COVID-19 may be affected with posttraumatic stress disorder (PTSD), “a mental disorder leading to serious distress and disability among survivors, family members” (p. 1).

Faculty were not only concerned about health, financial, (Xiao et al., 2020) and safety at home issues, but also technical issues that come with online teaching (Gillis & Krull, 2020). For some faculty, the shift from a face-to-face teaching environment to a completely online environment was not easy (Scull et al., 2020). Some faculty members may have experienced an intense emotional response when feeling vulnerable with their professional identities seeming threatened in their attempt to transition to online teaching (Cutri & Mena, 2020). Additionally, millions of children worldwide were forced to stay at home (Kufi et al., 2020). The majority of the children locked at home were “in their play age time in which many of them release their psychological pressure through play and interaction particularly with their peers” (Kufi et al., 2020, p. 10). Without these interactions and a lack of a proper understanding about the pandemic, children may have faced stress, anxiety, insecurity, and other problems during staying at home” (Kufi et al., 2020, p. 10) potentially adding on to the psychological stress for faculty members teaching from home. Adverse effects of school closure, including economic harms to working parents by being forced from work to childcare, were noted by Viner et al. (2020).

Reducing physiological arousal, from the viewpoint of social learning theory, raises efficacy expectations and improves performance, rather than initiating a distressful behavior (Bandura & Adams, 1977). It is important to note that if an individual is more at ease with a task, they will feel more capable and have higher beliefs of self-efficacy (Redmond, 2010).

Teacher Efficacy

Bandura's (1977) Self-efficacy Theory provides the foundation for teacher self-efficacy. Loughland and Alonzo, (2018) posited that teacher self-efficacy was a personal determinant of teacher efficacy measured in their study and is defined as the capability to carry out desired outcomes of action in the service of valued goals (p. 4). Teacher self-efficacy relates to faculty members' beliefs in their own instructional efficacy (Tschannen-Moran et al., 1998) and influences their instructional practices and effectiveness (Bandura, 1997). "Teachers' self-efficacy beliefs (i.e., teaching self-efficacy) are the beliefs teachers hold about their capabilities to carry out their professional tasks" (Morris et al., 2017, p. 796). Teachers with a high level of self-efficacy are generally more committed, more effective in their teaching strategies, and experience less burnout (Morris et al., 2017; Zee & Kooman, 2016). Teachers with strong self-efficacy are better able to create mastery experiences and adapt to the challenging needs of students (Bandura, 1997). Teachers' low self-efficacy with instructional technology has been found to be a contributing factor to anxiety (Awofala et al., 2017). Teachers might be uncomfortable teaching online, especially with a lack of training, improper or limited technology at home or school, and or technical difficulties faced with online teaching technologies (Tartavulea et al., 2020). Fear of technology and poorly defined roles were cited as contributing factors to faculty members' discomfort with teaching with technology (Tartavulea et al., 2020).

Studies revealed faculty members' dissatisfaction with online teaching (Fauzi & Khusuma, 2020). Findings from Fauzi and Khusuma's (2020) study revealed opinions that while online learning was a system that can assist faculty in carrying out teaching during the COVID-19 pandemic, that it was not directly proportional to its effectiveness. A majority (73.9%) of faculty in their study considered that online learning was not effective due to the availability of facilities, network and internet usage, planning, and implementation (Fauzi & Khusuma, 2020). A study in a school in China revealed that out of 8,632 faculty from 100 elementary and secondary schools in 23 provinces in China, that 60.5% of the faculty perceived online teaching as somewhat difficult or extremely difficult (Song et al., 2020). A small percentage of faculty reported having taught online frequently (1.9%) and occasionally (18.2%) prior to the pandemic, suggesting limited teaching experience and preparedness (Song et al., 2020) and possibly a contributing factor to faculty members' low self-efficacy with online instructional technology tools.

Teacher's self-efficacy with technology is central for the successful implementation of teaching technologies in higher education (Englund et al., 2017). It is important to understand how faculty become proficient in using online teaching technologies which lead to high motivation (Almarashdeh, 2016). Teachers' self-efficacy with instructional technology varies from person to person and self-image, self-esteem, job motivation, and task perception play into how the faculty members' self-efficacy is affected by digitization of tools (Fransson et al., 2019). One faculty member may benefit from the digitalization of teaching tools, while others may feel pressured by such implementation of digital teaching tools (Fransson et al., 2019). Teachers' technology skills affect their task perception and the extent to which digital tools will be integrated into their teaching practices (Fransson et al., 2019).

Ma et al., (2021) suggested that teacher self-efficacy with online teaching could be developed with a variety of factors affecting it. Teacher self-efficacy was reported to increase with teachers spending more time on it (Mat et al., 2021). Ma et al. (2021) suggested that in the online environment, teachers felt less self-efficacious about interactions with students and providing feedback due to the concerns about not having opportunities to form connections with them. Overall, teachers tend to feel less self-efficacious about online teaching because of the vast differences between the physical classroom and online environments (Johnson et al., 2020). Factors such as lack of experience in online teaching, prior worries, separation of teachers with students, school administrative processes, and unsatisfactory student academic performance were identified as major factors affecting teachers' self-efficacy with online teaching (Ma et al., 2021). Research supports the idea of paying more attention to faculty members' self-efficacy with online teaching technologies, so that positive online teaching experiences can be created (Awofala et al., 2017).

Richter et al. (2017) suggested that "Identifying factors that increase faculty online teaching efficacy could guide the design of professional development programs to facilitate successful online teaching" (p. 2). A long-term professional development strategy was suggested using a systems approach to technology integration, incorporating mentoring and communities of practice to sustain the continued development of technology use (Tondeur et al., 2020). Strong educator preparation has been reported to increase teacher efficacy and is needed now more than ever (Darling-Hammond & Hyler, 2020). Richter et al. (2017) posited that "personal factors such as age, experience, rank, and tenure did not affect faculty perceptions of their online teaching efficacy" (p. 6). Rather, Richter et al. (2017) reported that "the number and type of professional development support faculty used is what made a difference in their study" (p. 6).

Loughland and Alonzo, (2018) conducted a study examining teacher adaptive practices and the links with teacher self-efficacy, perceived autonomy support, and teachers' sense of adaptability and reported a new finding from their study, that teacher self-efficacy predicts teacher adaptability. Loughland and Alonzo, (2018) posited that "teacher adaptability is an emerging construct in research on teacher effectiveness with evidence of links to improved outcomes for both teachers and students" (p. 3). Adaptability was defined as involving a person's response to change, novelty, and uncertainty (Loughland & Alonzo, 2018, p. 3). Adaptability was particularly important in the face of teaching during the COVID-19 pandemic.

Faculty Beliefs and Cultural Issues

There seems to be a close alignment between pedagogical (or in the case of this study, andragogical) beliefs and practice, Tondeur et al. (2020) posited and suggested that faculty find value in using technology when it aligns with their current pedagogical approaches. Collaborative design efforts involving faculty in developing digital resources have been suggested as an effective strategy to align resources with faculty members' pedagogical (or andragogical) beliefs (Tondeur et al., 2020). Faculty members' views of online teaching are influenced by a variety of factors. Their personal pedagogical beliefs (or in the case of this study, andragogical) play a key role in their cultural view of the use of technology integration and online teaching (Tondeur et al., 2017). Faculty members' beliefs about effective educational practices inform their cultural beliefs about online teaching (Tondeur et al., 2017).

While examining cultural issues regarding faculty readiness to teach online, Cutri and Mena (2020) employed Kelchtermans' (1996) theory of professional vulnerability. Professional vulnerability has to do with the feeling that one's "professional identity and moral integrity, as part of being a 'proper teacher' are questioned and that valued workplace conditions are thereby

threatened or lost” (Kelchtermans, 1996, p. 319). Shifting away from brick-and-mortar instruction may structurally and culturally impact faculty (Cutri & Mena, 2020). Institutional culture no doubt influences faculty cultural issues concerning readiness to teach online. Iglesias-Pradas et al. (2021) reported that "In Spain, where the predominant teaching modality across universities is face-to-face learning –only 15 percent of Bachelor’s Degree students are enrolled in public or private distance education universities" (p. 1). In Madrid, over 98 percent of undergraduate students were reported as attending in a face-to-face instruction model rather than a distance education model and the impact of the COVID-19 pandemic was dramatic for faculty who had to make the changes necessary for the shift to distance education overnight (Iglesias-Pradas et al., 2021). Crawford et al. (2020) reported similar situations across 20 different countries.

Furthermore, faculty may feel they are treated as interchangeable in an online environment compared to being specialized experts, an academia cultural norm (Cutri & Mena, 2020). Traditional academia rank and advancement are based on scholarship as opposed to teaching innovation (Cutri & Mena, 2020). A transition to online teaching is time-consuming and tenured faculty may view this time commitment as coming at the expense of other responsibilities (Bussmann et al., 2017). Many traditional tenure-track faculty new to online teaching may lack formal education in how to successfully teach online (Gülbahar & Adnan, 2020; Kyei-Blankson et al., 2019; Mohr & Shelton, 2017) and were asked to transition to online teaching during the COVID-19 pandemic. Certainly, there were many faculty who were well prepared to teach online and enjoyed it. However, Cutri and Mena (2020) posited that attention should be given to those faculty who did not feel ready or enthused about it.

Student Performance

Natural disasters and crises can cause substantial negative effects on the ability to teach, hence affecting student academic achievement (Di Pietro, 2018). Students' academic performance was affected in a variety of ways, both positively and negatively, during the COVID-19 pandemic (Iglesias-Pradas et al., 2021). Gonzalez et al. (2020) postulated in their study that student confinement actually positively affected student performance and suggested that unlike prior to the COVID-19 pandemic, confined students studied continuously. Gonzalez et al. (2020) suggested that students may have been afraid of missing an academic year, therefore worked harder to overcome any difficulty in succeeding. "They were not prepared, but many of them were able to make many adjustments and keep progressing" (Rahiem, 2021, p. 12).

In contrast, in a study at a large public university Reisdorf et al. (2020) reported that digital inequities, such as lack of internet and owning a laptop were negatively associated with overall college student performance. The effect of constant exposure by the media of the threat to the community of COVID-19 increased students' anxiety levels and affected their academic performance (Rahiem, 2021). However, a positive relationship between digital competence and student achievement was reported in a review of the literature regarding digital competence in higher education research by Zhao et al. (2020). Zhao et al. (2020) reported that most university students and teachers have a basic level of digital competence.

Furthermore, Sales et al. (2020) indicated that while some students adapted well to virtual environments during the pandemic, there was concern about the lack of critical capacity regarding the information and digital competence of the students. Students are used to using technology since it is part of their daily life, but this type of daily use is not accompanied by academic rigor and critical reflection (Sales et al., 2020). Students' ability to achieve critical

thinking as one of the key components of digital literacy was cited as a concern from faculty in that they doubted their ability to train students properly to achieve information and digital competence (Sales et al., 2020). Faculty shared concern over their ability to provide instruction to students to master information and digital competence (Sales et al., 2020).

In a study conducted in South Africa at the University of Pretoria by Chisadza et al. (2021), the factors predicting students' performance after the transition from face-to-face to emergency online learning as a result of the COVID-19 pandemic were examined. Results from their study indicated that students' academic performance was both positively and negatively affected. Good Wi-Fi access was a facilitator for positive associations in students' academic performance. Lower academic performance was noted in students who found the transition to emergency online learning difficult (Chisadza et al., 2021). Those students expressed a preference for self-study such as reading class notes and slides versus assisted study such as joining live virtual lectures through applications such as Zoom or watching recorded lectures (Chisadza et al., 2021). "The average grades between pre-lockdown and post-lockdown were about two points and three points lower for those who reported transitioning to online teaching difficult and for those who indicated a preference for self-study, respectively" (Chisadza et al., 2021, p. 115). Economic status was cited as affecting students concerning their access to the internet and devices (Chisadza et al., 2021; Rahiem, 2021).

Dorn et al. (2020) posited that the educational systems in the United States were not designed for extended shutdowns such as during the COVID-19 pandemic. Even with diligent efforts by universities, faculty, and administrators to enable teaching and learning to progress, Dorn et al. (2020) suggested that those efforts may not have been enough to provide education in equal terms to that which was previously delivered in the classroom. Dorn et al. (2020) noted

differences amongst student performance outcomes related to student income levels and underrepresented populations. The United States may experience significant effects with substantial learning loss and increases in drop-out rates, resulting in a less skilled and less productive workforce (Dorn et al., 2020).

Teaching and learning during a global pandemic made even clearer the importance of the need to be aware of barriers that may arise (Gillis & Krull, 2020). Rahiem (2021) indicated that some students and faculty were not familiar with digital platforms and programs that they needed to use on short notice. Technology problems were particularly problematic when students could not seek out other solutions outside the house and most technology stores were closed (Gillis & Krull, 2020). The quality of the internet connectivity, lack of study room, and the lack of interest by faculty to teach online were cited as major problems for students (Ilieva et al., 2021) that may have affected students' academic performance.

Iglesias-Pradas et al. (2021) posited that "Higher education instructors' knowledge, skills, and attitudes toward technology; their qualification; and institutional, organizational, and administrative factors, together with instructors' and students' equipment and digital skills– do have an effect on student outcomes" (p. 13). In some areas of the world, transitioning to online teaching was hindered by a large percentage of the population not having access to the internet (Kufi et al., 2020). Alston (2020) posited that as a result of closures of universities around the world, academic and social effects are likely to result. These effects include academic impacts resulting from delays in education and social impacts where society is affected by workforce shortages of college educated populations (Alston, 2020). "Final-year university students soon to complete their education and to embark upon a career may not have acquired certain knowledge,

due to the interruption of classes and the switch to online teaching, which will never be formally taught to them” (Revilla-Cuesta et al., 2021, p. 2).

Institutional Support for Online Teaching

Whether universities had a robust online teaching and learning program at their institutions or not, they were faced with rushing to put their courses online due to the COVID-19 pandemic. Hence, the level of institutional support for online teaching and learning likely varied from university to university. Tondeur et al. (2020) emphasized the importance of the role of the school in supporting educators’ efforts to integrate technology. A main factor in successful institutional readiness during disasters and crises was cited as having the information technology support needed to properly support the faculty (Baytiyeh, 2018). Technical teams and instructional designers are needed to assist faculty with their online instructional technology tools (Baytiyeh, 2018). A strategy was suggested in developing school policies based on a vision of a quality education incorporating a meaningful integration of technology (Tondeur et al., 2020).

Online teaching requires a particular set of skills, different from face-to-face instruction, and a quality face-to-face teacher does not necessarily make a quality online teacher (Borup & Evmenova, 2019). In the COVID-19 pandemic emergency remote teaching situation, campus support teams that usually helped faculty implement online teaching were not able to offer the same level of support to faculty in such a short amount of time and at such scale (Hodges et al., 2020). Institutional support in the form of technical support can enhance faculty members’ use of technology and research emphasizes the importance of the availability of technical support to those who require it as a way to boost technology adoption (Zheng et al., 2018). Institutional support in the form of training and encouragement was reported to have a big impact on

teacher's self-efficacy with online teaching technologies (Darling-Hammond & Hyler, 2020; Zheng et al., 2018).

The dramatic growth of online learning in the past 20 years has created a big demand for quality online teaching (Borup & Evmenova, 2019). Research revealed the importance of institutional support in improving faculty members' online teaching experience (Borup & Evmenova, 2019; Zheng et al., 2018). Providing professional development to increase faculty members' self-efficacy with online teaching was suggested as a way to motivate faculty to adopt online teaching technologies (Borup & Evmenova, 2019). The literature revealed that relevant professional development courses are ideal for informing educators' beliefs (Tafazoli, 2021). Technology-based professional development can bring about changes to individuals' teaching philosophies and motivate them to incorporate technology into instructional practices (Tafazoli, 2021).

Although there were new demands on faculty during the time of the COVID-19 pandemic, elements that make up quality teacher preparation programs were necessary (Darling-Hammond & Hyler, 2020). It was found that institutions implementing policy agendas that support teacher preparation, encouraged programs to implement it, and faculty to pursue it (Darling-Hammond & Hyler, 2020). Such training and preparation were reported to give faculty a way to master skills such as the use of instructional technology tools used in online teaching and learning environments (Darling-Hammond & Hyler, 2020; Zheng et al., 2018). Scull et al. (2020) reported three themes in their study regarding innovations to enhance the online teaching and learning experience. Those themes were access, participation, and engagement (Scull et al., 2020). Attention was given to ensure that material was accessible and responsive to students' needs (Scull et al., 2020). Scull et al. (2020) posited that the issue of technical skills was secondary in relation to the needs for "complex cognitive and social skills that underpin success

in online-learning environments” (p. 500). However, Johnson et al. (2020) reported that faculty were often not provided with sufficient formal training opportunities and were deficient in the necessary online teaching skills. Scull et al. (2020) reported from their study that one lecturer mentioned that “I think that we have to educate our students as well as ourselves about that online learning is a different type of learning, it’s not just a transfer across from face-to-face classes” (p. 500).

A lack of proper teacher training was identified as a barrier to adopting teaching with technology (Tartavulea et al., 2020). Focusing on professional development activities on early-career faculty was purported to have a more lasting effect (Englund et al., 2017). With institutional support for higher education faculty and changing their view of online teaching and learning, more effective use of educational technology may be realized remedying gaps in the adoption of educational technology use in higher education institutions, both online and in the classroom (Englund et al., 2017). Institutional support for online teaching with technology in the form of professional development opportunities was found to enhance more effective online teaching deployments (Englund et al., 2017). Institutional factors such as cost were cited as among the reasons why proper teacher training was often overlooked (Tartavulea et al., 2020). University administration support of proper resources for preparing faculty to make the transition to the online space was cited as an important factor for faculty to be comfortable with teaching online (Savard et al., 2020; Tartavulea et al., 2020). Cavanaugh and DeWeese (2020) suggested that if the future holds an increase in digital experiences, online pedagogy (or andragogy) and experience in professional development programs should be offered to benefit educators.

Institutional technology support is particularly important for online teaching. There is no doubt that the technical requirements of online teaching are greater than traditional in-class face-

to-face teaching (Bao, 2020). Events such as software or hardware malfunctions causing a class session to come to a standstill and interrupting the teaching process were examples of some of the technical barriers of online teaching (Basilaia et al., 2020). The complicated nature of the technology used in online teaching presents challenges for those less computer and tech-savvy (Basilaia et al., 2020). Teaching assistants might be a source of such support and proper institutional support of teaching assistants in the form of technology training is particularly important (Bao, 2020). In addition, with the rapid increase in the popularity of online learning, a strong need exists for effective instructional design models to enable the development and delivery of online learning (Castro & Tumibay, 2019).

The response to the COVID-19 pandemic provided little time for transitioning classes online. A major attribute in online class success, in general, can be attributed to effective course design. Course design is a factor to consider concerning institutional support for online learning. Simplicity and consistency in course design were found to be imperative for successful online offerings (Dhillia, 2016). Online learning courses should be well-planned and designed (Castro & Tumibay, 2019; Iglesias-Pradas et al., 2021). This highlights the importance of instructional design and the active role institutions should play in providing the necessary support structures for effective online course design (Castro & Tumibay, 2019). When online teaching professional development is centered around developing online courses that mirror courses that the institution supports and implements, the greatest success has been reported (Borup & Evmenova, 2019). Faculty members' perceptions of online teaching vary. Institutional support, prior negative beliefs about online teaching, and workload-related factors were all stated as contributing factors to faculty members' perceptions about online teaching (Dhillia, 2016). According to the

literature, institutional support of faculty members' mastery of online teaching technologies also may help in preparing for future crises that require emergency remote teaching (Dhilla, 2016).

The COVID-19 pandemic and the rush to remote online teaching produced negative and positive perceptions of the experience. A lower perception of the online experience compared to face-to-face teaching was reported by Tartavulea et al. (2020) in their study. Contrastingly, Savard et al. (2020) and Tartavulea et al. (2020) posited that in fact, silver linings may emerge from the COVID-19 pandemic. Scull et al. (2020) reported that faculty in their study adopted a team-teaching approach to online teaching to better facilitate asynchronous and synchronous teaching activities. This allowed staff to monitor class interactions and comments and respond to students' concerns and questions in real-time (Scull et al., 2020). The COVID-19 pandemic accelerated the transition to online teaching in some cases, even if it was only temporary (Quintana, 2020). The continued use of some online tools may be one of the silver linings (Tartavulea et al., 2020). Savard et al. (2020) stated that essential lessons from the pandemic "can be grouped into three categories: teaching approaches, moving online, and access to resources" (p. 529). Institutional support, time spent, proper online platforms and facilities, and technological readiness are facilitators to faculty members' acceptance of teaching with technology (Tartavulea et al., 2020). Furthermore, researchers have determined that institutional support enhances self-efficacy through psychological empowerment (Darling-Hammond & Hyler, 2020; Zheng et al., 2018).

Institutional Disaster Readiness

The vast body of literature regarding institutional readiness in the face of disaster was focused mainly on natural disasters such as earthquakes, hurricanes, or floods. Hazards such as these disrupt educational processes in many ways (Dhawan, 2020). Yearly, up to 100 million

students are affected by natural disasters (Dhawan, 2020). In many cases, the closure of schools and maintaining the educational delivery services were cited among the major challenges in these types of disasters (Baytiyeh, 2018; Dhawan, 2020). Natural disasters can cause substantial negative effects on the ability to teach, hence affecting student academic achievement (Di Pietro, 2018). That does not always have to be the case (Di Pietro, 2018).

Some institutions are better prepared for disasters and can handle the disruptions relatively well (Di Pietro, 2018). However, many universities were less prepared. For example, Iglesias-Pradas et al. (2021) reported that "In Spain, where the predominant teaching modality across universities is face-to-face learning –only 15 percent of Bachelor's Degree students are enrolled in public or private distance education universities" (p. 1). In Madrid, over 98 percent of undergraduate students were reported as attending in a face-to-face instruction model rather than a distance education model and the impact of the COVID-19 pandemic was dramatic for faculty who had to make the changes necessary for the shift to distance education overnight (Iglesias-Pradas et al., 2021). Crawford et al. (2020) reported similar situations across 20 different countries. One of the main factors in handling educational disruptions in the face of disasters is the ability to quickly move programs to a new location or format (Di Pietro, 2018). Technology has played a crucial role in providing access to education when gathering in traditional school settings is not possible after disasters with online teaching as a potential approach to continuing education during school closures (Baytiyeh, 2018; Dhawan, 2020).

In February 2011, an earthquake in Christchurch resulted in the collapse of the University of Canterbury (Dhawan, 2020). Information technology and online teaching enabled them to restart their teaching and learning operations (Dhawan, 2020). Likewise, after a hurricane created havoc and destruction at Southern University in New Orleans, online teaching was leveraged to

provide education to displaced students (Dhawan, 2020). Moving education online in the wake of disasters is not a new strategy (Ayebi-Arthur, 2017; Johnson et al., 2020; Swartz, Gachago, & Belford, 2018). However, unlike the COVID-19 pandemic, most events required regional responses. Few disasters required a global or even national transition to emergency online teaching (Johnson et al., 2020).

The COVID-19 brought a paradigm shift on education systems “from group learning to more individualized instruction through online teaching” (Kufi et al., 2020, p. 12). Online teaching has its strengths, weakness, opportunities, and challenges (Dhawan, 2020). It can rescue educational institutions during times of disaster with a great deal of flexibility as far as time and location (Dhawan, 2020). Online teaching relies on a “variety of innovative tools to deliver learning materials and instruction, including multimedia applications, social media tools, print materials, e-mail, the internet, computer software and audio- and video-conferencing” (Baytiyeh, 2018, p. 219). Weaknesses include hampered communication between the professor and student, technical difficulties, and improperly designed technology with pedagogical processes (Dhawan, 2020). Opportunities exist where online teaching may have not been formerly embraced by institutions (Dhawan, 2020). Challenges exist in engaging students, educator preparation, lack of standards, quality control, and costs (Dhawan, 2020).

When the COVID-19 pandemic disaster hit, some institutions were impacted more than others with the transition to emergency remote teaching (Dhawan, 2020; Tartavulea et al., 2020). Universities with prior implementations of online learning environments with support structures in place were positioned better for the quick transition (Tartavulea et al., 2020). Scull et al. (2020) reported that responses to a survey sent to students to gauge what they thought about their overall experience indicated that results show about a quarter of the students indicated their

perception was high or very high. The school had technologies in place to record lectures and faculty had implemented innovations to enhance student engagement (Scull et al., 2020). “Online learning environments provide a platform for faculty and their students to experience learning without time or geographic restrictions” (Alston et al., 2017, p. 412). Institutions with learning management systems (LMSs) in place would have had the added advantage of leveraging various instructional strategies through various existing applications and that are typically built into the LMS (Alston et al., 2017). Literature reveals the most common strategy is to embed existing courses in an LMS (Gillis & Krull, 2020). Day et al. (2021) posited that “We have observed that universities and colleges accomplished the move to online and remote learning surprisingly easily, but the sudden shift to remote and online teaching disadvantaged many students and faculty” (p. 10).

The COVID-19 pandemic was a wake-up call to many institutions concerning their readiness and capacity to provide mass online education (Chisadza et al., 2021). Many academic institutions that were previously reluctant to change their traditional face-to-face pedagogical approach had no option but quickly transition entirely to online teaching (Dhawan, 2020). With teaching processes that had been held in a face-to-face classical form in classrooms equipped with projectors and computers, institutions were met with a need to quickly transition classes to online with no prior preparation for such transition (Basilaia et al., 2020). The onset of the COVID-19 pandemic left little time for testing new platforms and the quick transition of the learning processes from face-to-face to online (Basilaia et al., 2020). “There has been rapid evolution in the range of software since the beginning of the 21st century to support learning in universities. The range of software available can be used in teaching/learning during disasters” (Ayebi-Arthur, 2017, p. 259). Extended lockdowns left many institutions that were situated with

mainly in-person teaching scrambling to source hardware such as laptops, cameras, microphones, software, and internet access (Chisadza et al., 2021). Without prior preparation for online interactive teaching, some institutions used products such as Google products that are part of the G suite for education (Basilaia et al., 2020, Baytiyeh, 2018; Dhawan, 2020), Zoom, and others to quickly transition from face-to-face to online with minimal expenditures.

During disasters and crises, the responsibility of providing instruction to students in an online environment is not the sole responsibility of the faculty member (Baytiyeh, 2018). Resilient institutions acclimate to continue teaching and research (Ayebi-Arthur, 2017). It requires collaboration between faculty and educational technologists to develop and disseminate instructional materials (Baytiyeh, 2018). A main factor in successful institutional readiness during disasters and crises was cited as having the information technology support needed to properly support the faculty (Baytiyeh, 2018). Technical teams and instructional designers are needed to assist faculty with their online instructional technology tools (Baytiyeh, 2018). During the COVID-19 pandemic the internet gained a major role in supporting not only e-teaching, online collaboration, but remote working, gaming, video streaming as well (Favale et al., 2020). All these sudden changes put unprecedented stress on networks (Favale et al., 2020). Planning for such an uptick in network traffic (Favale et al., 2020) and having processes and systems in place to support these collaborations better position institutions in the face of disaster and crises (Baytiyeh, 2018).

Institutional readiness plays a large part in resilient higher education institutions when man-made and natural disasters and crises occur in adapting to be able to continue teaching (Ayebi-Arthur, 2017). Universities with online platforms and support systems in place were identified as vehicles for success during the COVID-19 pandemic transition to emergency

remote teaching (Tartavulea et al., 2020). Online instructional technology tools were cited as being invaluable during the crises to facilitate teaching (Ayebi-Arthur, 2017). Institutional readiness was found to affect faculty members' self-efficacy with instructional technology during emergency remote teaching in a disaster or crisis (Tartavulea et al., 2020). Ultimately, faculty members' trust in the tech readiness of systems and objectives was reported as playing a critical role in their high level of self-efficacy with effective online teaching and learning systems (Tartavulea et al., 2020). Darling-Hammond and Hyler (2020) posited that "This moment of disruption has created the opportunity for rethinking and reinventing preparation, as well as schooling itself" (p. 463). Even in light of the obvious difficulties experienced during the rush to remote online teaching during the COVID-19 pandemic, opportunities may exist for higher education institutions to be better prepared for the future (Tartavulea et al., 2020).

Summary

The COVID-19 pandemic resulted in an abrupt move to online teaching in universities around the world (Al-Taweel et al., 2020; Bao, 2020; Tartavulea et al., 2020). Academic stakeholders swiftly implemented online tools, which may continue to be utilized once things return to normal (Tartavulea et al., 2020). Faculty members' self-efficacy with online teaching technologies is affected by myriad factors (Awofala et al., 2017; Englund et al., 2017). Self-efficacy theory is based on a personal belief in one's ability to complete courses of action required for certain performance outcomes (Bandura, 1977). An individual's feelings, thinking, and motivation are described as being affected by an individual's self-efficacy by Bandura (1993). Bandura (1977) postulated that there are four primary sources of self-efficacy information: verbal persuasion, vicarious experiences, physiological arousal, and mastery experiences. Mastery experiences are considered the most impactful of the four sources

(Bandura, 1977). Teacher's self-efficacy with online teaching technologies involves the faculty members' perceptions of and approaches to teaching (Awofala et al., 2017; Englund et al., 2017). Although technology mastery experiences are similar to cognitive mastery experiences, faculty members' ability to operate technology serves an outcome for them to evaluate their success. (Barton & Dexter, 2019).

The literature revealed factors that exist and influence faculty members' perception of the effectiveness of online teaching such as institutional support, trust in the system, and university's technological readiness (Bao, 2020; Castro & Tumibay, 2019; Dhilla, 2016; Englund et al., 2017; Tartavulea et al., 2020; Zheng et al., 2018). Through a review of existing literature seven themes emerged. Each theme depicted specific components important to examining higher education faculty members' descriptions of their lived experiences with instructional technology during the COVID-19 pandemic emergency remote teaching. Themes represented such factors as the COVID-19 pandemic, self-efficacy with instructional technologies, faculty beliefs and cultural issues, student performance, emergency remote crisis teaching, institutional support, and institutional disaster readiness. Extensive literature exists concerning the themes. Although the literature provides a framework to understand the drivers that provide positive and negative effects of faculty members' self-efficacy with instructional technology, little is known about these factors in a crisis such as the rush to remote teaching during the COVID-19 pandemic (Ma et al., 2021). A gap exists in the literature with few studies examining faculty members' lived experiences with implementing instructional technology during the COVID-19 pandemic emergency remote teaching through the lens of the theory of self-efficacy (Bandura, 1977) and guided by the TPACK framework (Koehler & Mishra, 2008) and andragogical principles (Knowles, 1970). An additional gap exists in that the majority of the literature examined was

found to pertain to research in K-12 environments or conducted outside of the United States. More can be learned from researching the lived experiences of higher education faculty in the United States who implemented instructional technology tools and changed instructional practices during the rush to emergency remote teaching during the COVID-19 pandemic through the lens of the theory of self-efficacy and guided by the TPACK framework (Koehler & Mishra, 2008) and andragogical principles (Knowles, 1970). There exists an opportunity to explore if and how emergency remote instruction experiences may have significantly affected some of the barriers to online teaching and how these experiences may inform future crises where emergency remote teaching is required. Further study in these areas may provide valuable information in understanding the COVID-19 pandemic effects on higher education and student performance outcomes (Bao, 2020; Burgess & Sievertsen, 2020; Chisadza et al., 2021; Greene, 2020; Ilieva, 2021; Lim, 2020; Tartavulea et al., 2020).

CHAPTER THREE: METHODS

Overview

The purpose of this transcendental phenomenological study was to describe the lived experiences of higher education faculty with implementing online instructional technology tools and changing instructional practices at a public university in the western United States during emergency remote teaching as a result of the COVID-19 pandemic. This chapter provides a description of qualitative research and is followed by an explanation of why a qualitative research method has been chosen for this study. A definition, history, and reasoning for why a transcendental phenomenological research design and type was employed in this study are thoroughly discussed within the chapter. This study's research questions are presented along with details of the setting, description of participants, and procedures. The researcher's role is included in this chapter. Information about the data sources and data collection techniques are covered along with the analysis processes that was used to analyze and interpret the data. Methods to establish trustworthiness and ethical considerations are also discussed. Finally, a summary concludes this chapter.

Design

A transcendental phenomenological research design was employed in this study. Phenomenology is a form of inquiry that seeks to understand human lived experiences, to explore phenomena and how it is perceived and experienced by individuals in the phenomenological event (Moustakas, 1994). The word phenomenon stems from the Greek word "phaenesthai, to flare up, to show itself, to appear" (Moustakas, 1994, p. 26). The term phenomenology was used back to 1765 in philosophy. Moustakas (1994) posited that it was "with Hegel that a well-defined technical meaning was constructed" (p. 26). Hegel defined

phenomenology as the science of “describing what one perceives, senses, and knows in one’s immediate awareness and experience” (Moustakas, 1994, p. 26). Moustakas (1994) posited phenomenology is an appropriate tool for exploring and describing shared experiences related to a phenomenon. The purpose of this transcendental phenomenological study was to describe the lived experiences of higher education faculty with implementing instructional technology tools and changing instructional practices during the COVID-19 pandemic emergency remote teaching at a public university in the western United States. This aligns with Moustakas’ (1994) assertion that phenomenology was an appropriate tool for exploring and describing shared experiences related to a phenomenon.

There are two approaches to a phenomenological study, hermeneutic and transcendental approaches. Recognizing the work of Edmund Husserl, Moustakas (1994) defined transcendental phenomenology as a philosophical approach to qualitative research methodology seeking to understand human lived experiences (Moustakas, 1994). Transcendental phenomenology, built on the work of Husserl, is rooted in the process of epoché or setting aside all preconceived ideas to see phenomena with fresh eyes, thereby allowing the true meaning of phenomena to naturally emerge with and within their own identity (Moustakas, 1994). Descartes influenced Husserl’s concept of epoché and Husserl, a pioneer in philosophy and science, developed a system “rooted in subject openness, a radical approach to science” (Moustakas, 1994, p. 25) at the time. (Moustakas, 1994).

Hermeneutic phenomenology is a philosophical approach to qualitative research focused on interpreting to create a sense of an individual's shared lived experiences. Hermeneutic phenomenology stems from the works of Martin Heidegger and differs from Husserl in that Heidegger (1962) posited that in the hermeneutical approach, that the researcher should engage

in self-reflection to a quite a different extent than in that of a transcendental phenomenology (Moustakas, 1994; Lavery, 2003). Rather than engaging in the process of epoché, setting aside one's preconceived ideas, and bracketing (or isolating) the phenomenon, the biases and assumptions of the researchers are embedded in the interpretive process (Lavery, 2004; Moustakas, 1994; Slattery & O'Malley, 2017). The researcher in the hermeneutical process is called on to include their thoughts on their own experiences on how they relate to the phenomenon at the center of the study (Moustakas, 1994; Lavery, 2004).

In this study, the participants are faculty members with shared lived experiences of the phenomenon at the center of this study. I am not a professor and did not share the lived experiences of the participants; therefore, I engaged in the process of epoché, setting aside preconceived ideas, and bracketing (or isolating) the phenomenon (Lavery, 2004; Moustakas, 1994; Slattery & O'Malley, 2017). This study's emphasis was on the phenomenon to be explored, and my view was set aside so as to describe the true experience of participants. Therefore, a transcendental approach was appropriate and was utilized in this phenomenological study (Lavery, 2004; Moustakas, 1994; Slattery & O'Malley, 2017). The four main steps of transcendental phenomenological processes that were employed in this study are as described by Moustakas (1994): epoché, phenomenological reduction, imaginative variation, and synthesis of composite textural and structural descriptions are discussed later in more detail.

Data collection was conducted through interviews, documents and artifacts, and focus groups. To test the validity and reliability of questions created by the researcher, a pilot test of the interview questions is suggested (Creswell & Poth, 2018). For the purposes of this study, the interview questions were pilot-tested with two of the faculty members who met the selection criteria. Transcripts were reviewed to identify and compile textural descriptions of the

participants' lived experiences. Using the processes of transcendental phenomenological reduction and imaginative variation, structural meanings of participants' lived experiences were constructed to look at the phenomenon from varied perspectives (Moustakas, 1994). Textural and structural descriptions were synthesized into themes and a composite description of faculty members' experiences with technology tools during the COVID-19 pandemic are provided (Moustakas, 1993). These steps are consistent with a transcendental phenomenological research methods design and are appropriate to discover the essence of the phenomenon that is the subject of this study (Moustakas, 1994).

Reliability and validity in a study can be verified through triangulation, bracketing, and member checking (Merriam & Tisdell, 2015; Naidu & Prose, 2018; Patton, 2015). Reliability and validity in the current study was verified through such methods. As a form of triangulation, I conducted individual interviews, collect documents and artifacts, and conduct focus group interviews (Patton, 2015). I employed the process of epoché to set aside all preconceived ideas to see phenomena with fresh eyes, ahead of the interviews and during the analysis of collected data (Moustakas, 1994). As an ethical imperative, communication with participants about data collected during and after the research process demonstrates respect for persons (Naidu & Prose, 2018). Transcripts from individual interviews and focus group interviews were sent to participants as a way of member checking to verify the data (Naidu & Prose, 2018; Patton, 2015). Epoché, transcendental reduction, imaginative variation, and synthesis of composite textural and structural descriptions were used to discover the essence of the phenomenon that is the subject of this study (Moustakas, 1994).

Research Questions

Although the literature provides a framework to understand the drivers that provide positive and negative effects of faculty members' self-efficacy with instructional technology (Awofala et al., 2017; Fransson et al., 2019), little was known about these factors in a crisis such as the rush to remote teaching during COVID-19 pandemic (Ma et al., 2021). The following central research question and sub questions guided this transcendental phenomenological study. These questions helped guide interview and focus group questions.

Central Research Question

What were faculty members' experiences with implementing instructional technology tools and changing instructional practices during the COVID-19 pandemic?

Sub Questions

1. How do faculty members describe their level of mastery of online instructional technology tools prior to and during the pandemic?
2. How do faculty members describe their pedagogical (andragogical) practices prior to and during the pandemic?
3. How do faculty describe the verbal persuasion and vicarious experiences they had with colleagues, administrators, and others regarding their use of online instructional technology tools?
4. How do faculty describe their perceived emotional state during the COVID-19 pandemic emergency online remote teaching?

Setting

The data was collected from participants residing primarily in the western United States and teaching at a western United States public higher education institution. The rationale for this

site selection lies in the fact that in the Spring of 2020, this university rushed to emergency online instruction with the onset of COVID-19 and had plans to continue with primarily online instruction until Fall of 2021. The higher education institution is geographically located in a location that makes interviews, focus groups, and follow-ups possible. A history of my career focus and existing relationships aided with access to and attainment of participants for this study.

This higher education institution was founded in 1947 and serves a population of approximately 31,000 students with a student-to-faculty ratio of 24:1. The faculty population is 1,848 with 765 full-time and 1,083 part-time faculty. It is the fourth most diverse University in its state, and 1 in 20 adults in the region is a graduate from there. The University offers 64 bachelor's degree programs with 70 concentrations and 51 master's degree programs with 26 concentrations. In addition, the University offers five doctoral studies degrees. Before COVID-19, the University offered online teaching and learning. It is a public university and as a Carnegie Community Engagement classified university, has strong roots in the surrounding community.

The University is made of up several colleges including Arts and Letters, Business Administration, Continuing Education, Education, Engineering and Computer Science, Health and Human Services, Natural Sciences and Mathematics, and Social Sciences and Interdisciplinary Studies. The President of the University leads from the Office of the President, with Academic Affairs, Administration and Business Affairs, Diversity and Inclusion, Information Resources and Technology, Public Affairs and Advocacy, Student Affairs, and University Advancement as major divisions of the University.

Participants

The sample pool of participants was drawn from a western United States public university with over 700 full-time faculty members who could contribute to this research by

describing their experiences of rushing to emergency remote online teaching during the COVID-19 pandemic. For phenomenological studies, Creswell (1998) recommends five to 25 participants. However, the required number of participants should depend on when saturation of data is reached (Creswell & Poth, 2018). Saturation occurs when the researcher recognizes that they have discovered the same themes before in multiple prior interviews (Creswell & Poth, 2018). The sample size in this study was 13 participants. The 13 participants consisted of four males and nine females. Six participants described themselves as Caucasian. One of each of the remaining seven participants described themselves as Native American, Filipina-American, Asian-Taiwanese, European, mixed-race, Argentinian-Irish-Canadian, and Latina. Three participants were in their 30s, five participants were in their 40s, four participants were in their 50s and one participant was in their 60s. Table 2 includes participant demographics. Pseudonyms were used to ensure confidentiality.

Table 1

Faculty Participants

Teacher Participant	Gender	Age	Years Taught at this University	College
Rosana	Female	65	20 1/2	College of Health & Social Services
Emily	Female	58	26	College of Arts & Letters
Linda	Female	55	6 1/2	College of Social Sciences & Interdisciplinary Studies
Christina	Female	54	25	College of Education
Grace	Female	48	3	College of Health & Social Services
Anthony	Male	37	6	College of Education
Robert	Male	44	6	College of Business
Rebecca	Female	44	10 1/2	College of Education
Sarah	Female	36	4	Library Health Sciences
Daniel	Male	46	6	College of Business
Andrew	Male	42	7	College of Arts & Letters
Olivia	Female	56	5	College of Business
Anna	Female	36	6	College of Education

The selection criteria for this study were based on geographical location, the teaching position of the individuals within higher education, and individuals having experienced the transition to emergency remote online teaching during the COVID-19 pandemic.

A combination of purposeful sampling, criterion sampling, and snowball sampling techniques was used to identify study participants. Researchers use purposeful sampling as a strategy where they intentionally sample participants that can best inform them about the research problem at the center of their study (Creswell & Poth, 2018). Therefore, in this study, participants were selected from a population of faculty members who taught at this western United States public university during the Spring of 2020 at the outset of the COVID-19 pandemic. Criterion sampling was used as another sampling technique in this study. “Criterion sampling involves selecting cases that meet some predetermined criterion of importance” (Patton, 2015, p. 238). In this study, faculty members who transitioned their face-to-face course(s) to emergency remote online teaching during the Spring of 2020 due to the COVID-19 pandemic and taught for at least one semester, were deemed as meeting the participant criteria. Additionally, a maximum variation sampling strategy in terms of participant characteristics/demographics was employed for “capturing and describing central themes that cut across a great deal of variation” (Patton, 2015, p. 283). Snowball sampling was also be used as another sampling strategy. Snowball sampling involves identifying a few study participants who meet the selection criteria defined by the researcher for the study and asking for suggestions for other people who might meet the selection criteria (Patton, 2015).

Procedures

Prior to beginning this research study, I sought approval from Liberty University’s Institutional Review Board (see Appendix A) and approval from the University’s Human Subject

Review Committee. Once approval was granted, individuals who met inclusion criteria were approached and asked to participate by email (see Appendix F). For the purpose of this study, the interview questions were pilot-tested with two of the faculty members who met the selection criteria. As a method of snowball sampling, the email invitation encouraged participants to forward the invitation to other individuals who may have qualified and been interested in participating in the study.

There is a need to be cognizant of ethical considerations and procedures when gathering participants for a study (Merriam & Tisdell, 2015). Adhering to ethical consideration procedures, participants' informed consent was secured through a signed consent form (see Appendix B). The consent form included an overview of the problem statement and the purpose of the study. The consent form advised participants what was expected of them. Participants were informed of the ability to withdraw from the study at any time and contact information was included in the event participants had any questions. The signed consent forms were stored in a secure location to avoid any unauthorized access to them.

After obtaining the informed consent forms, to test the validity and reliability of interview questions created by me, a pilot test of the interview questions is suggested (Creswell & Poth, 2018). Pilot interview questions were sent to two of the participants. All interviews were scheduled by email and conducted through Zoom. All interviews were recorded. During and after the individual interviews, the process of memoing and journaling was used to document connections and patterns between participants' responses and to document nonverbal communication that reinforced the meaning of their descriptions (Creswell & Poth, 2018). A separate recording device was used as a backup in the event that one of the other devices malfunctioned. Recordings were stored in a secure location and password protected. All

interviews were recorded and transcribed verbatim.

When scheduling interviews, participants were requested to select a personal document or artifact that represented their experience with technology tools during the transition to emergency online remote teaching to bring to the interview. Those documents and/or artifacts may have included teaching documents, essays, illustrations, journals, photographs, or personal items, and were not limited in scope. During the interview, participants were provided an opportunity to describe their document or item. At the conclusion of the interview, participants were asked to email electronic copies of documents or images if they had not done so.

Focus groups were scheduled by email and conducted through Zoom. During the focus group interviews, the process of memoing and journaling was used to document nonverbal communication that reinforced the meaning of their descriptions and responses (Creswell & Poth, 2018). The focus group sessions were recorded. A separate recording device was used as a backup in the event that one of the other devices malfunctioned. The recording was stored in a secure location and password protected. All focus group recordings were transcribed verbatim. Transcribed interviews were sent to participants for the purpose of member-checking and to clarify their responses after the completion of individual interviews and focus group interviews. Data analysis was conducted after member-checking using Moustakas' (1994) steps for data analysis.

The Researcher's Role

One of the common characteristics in qualitative research is the role of the researcher as a key instrument (Creswell & Poth, 2018). As the human instrument, qualitative research requires the researcher to play a vital role in obtaining detailed information from participants (Merriam & Tisdell, 2015). The researcher collects data through interviewing participants, observing

behavior, and examining documents (Creswell & Poth, 2018). Qualitative data in this study was obtained through in-depth individual interviews, collection of documents and/or artifacts, and focus groups. As the human instrument in this study, I prepared questions for and conducted individual and focus group interviews. I planned, implemented, analyzed, and reported the data collection methods and results. Having worked in the instructional technology field for several years, I have some experience with leading teams that supported faculty with instructional technology. However, I never worked directly with the participants in this study.

In a qualitative transcendental phenomenology, the role of the researcher is required to describe the data findings (Moustakas, 1994). In collecting data in transcendental phenomenological research, self-awareness is important to minimize bias. Moustakas (1994) introduced the four main steps of transcendental phenomenological processes as epoché, phenomenological reduction, imaginative variation, and synthesis of composite textural and structural descriptions. The first step, epoché, requires setting aside prejudgments, biases, and preconceived ideas about things, or seeing the phenomenon for the first time with new eyes (Moustakas, 1994). Setting aside biases is stressed in qualitative research as a whole, however, the study of and mastery of epoché sets the stage for how the phenomenological researcher engages in their study (Christensen et al., 2017; Moustakas, 1994). Human experiences, or phenomena, appear in the consciousness and can be examined by way of epoché, or setting aside all prejudgments, biases, personal presuppositions, values, to make human meaning (Christensen et al., 2017; Moustakas, 1994). This procedure during data collection and analysis was the main way that I set aside all prejudgments, biases, and personal presuppositions from my experiences. I used memoing during interviews and data analysis, and journaling as a way to document and

set aside my prejudgments, biases, personal presuppositions, and values (Creswell & Poth, 2018).

Data Collection

In phenomenological research, the core question is aimed at gaining the meaning, structure, and essence of individuals' shared lived experiences of a phenomenon (Moustakas, 1994; Patton, 2015). The focus is on "exploring how human beings make sense of an experience and transform the experience into consciousness, both individually and as shared meaning" (Patton, 2015, p. 115). The use of varied data sources was implemented to gain the best understanding of faculty members' lived experiences with technology tools and changing instructional practices during the emergency remote online teaching due to the COVID-19 pandemic. Triangulation was used in this study as a method to increase trustworthiness and to check the integrity of data collection methods through individual in-depth individual interviews, collection of documents artifacts, and focus groups. Individual interviews and collection of documents and artifacts were completed first to gain an initial impression of the phenomenon from the perspective of the individual. Focus groups were then conducted last as a way to verify emerging themes and identify any new themes (Patton, 2015).

To test the validity and reliability of the interview questions created by me, a pilot test of the interview questions with two participants was conducted (Creswell & Poth, 2018). Interviews were conducted virtually through Zoom. Before each interview, I engaged in the epoché process so that past associations, understandings, facts, and biases were set aside and did not color or direct the interview (Moustakas, 1994). Open-ended questions were used in interviews to gather participants' unique perspectives and detailed information of the experience of the phenomenon, and follow-up questions were allowed (Merriam & Tisdell, 2015). Focus groups were conducted

through Zoom. Data was gathered from all interviews until such time that a saturation point was reached, and no new data was being collected (Merriam & Tisdell, 2015). All interviews were recorded. Recordings were stored in a secure location and password protected. All interviews were transcribed verbatim immediately after the interviews were conducted.

Interviews

In phenomenological research, the core question is aimed at gaining the meaning, structure, and essence of the lived experience of a phenomenon for an individual or group of people (Moustakas, 2015; Patton, 2015). The focus is on “exploring how human beings make sense of an experience and transform the experience into consciousness, both individually and as shared meaning” (Patton, 2015, p. 115). Careful, exhaustive, methodological capturing of descriptions of how individuals or groups experience a phenomenon through in-depth interviews is required (Patton, 2015). Therefore, typically in a phenomenological study, the long interview is the method through which data is collected as an interactive process utilizing open-ended comments and questions (Creswell & Poth, 2018; Moustakas, 1994).

The purpose of a phenomenological interview is to describe the meaning of a phenomenon shared by several individuals (Creswell & Poth, 2018; Moustakas, 1994). Data was collected from those that had experienced the phenomenon through multiple in-depth interviews (Moustakas, 1994). The phenomenological interview focuses on capturing participants’ descriptions of their lived experiences to gain a comprehensive account of their experience of the phenomenon (Moustakas, 1994). Questions focus on what and how participants experience the phenomenon and work to gather data leading to a list of a description of their experiences and form structural descriptions of their experiences.

In this study, the primary data source was in-depth, semi-structured interviews. During the interviews, each participant was asked about their experience with emergency remote online teaching during the COVID-19 pandemic. The intentions of these interviews were to engage participants in discussions to investigate their shared lived experiences and the phenomenon of this study. Interviews were arranged through Zoom. Ahead of individual interviews, a demographic survey was sent to participants (see Appendix C). Prior to engaging all participants in interviews, to test the validity and reliability of the interview questions created by me, a pilot test of the interview questions with two participants was conducted (Creswell & Poth, 2018).

Presented below are questions that participants were asked in a demographic survey emailed as an attachment to them before their interview:

Demographic Survey

1. How would you describe your ethnicity?
2. What is your gender?
3. How long have you taught at this university?
4. What courses did you teach during the Spring, 2020 and Fall, 2020 semesters?
5. Please describe the setting from where you taught during the pandemic.

Questions one through five were designed as demographic information. It is important to include demographic information in a study to avoid assuming a stance of absolutism, which assumes that the phenomena of interest are the same regardless of participant demographics such as age, race, and ethnicity (Hammer, 2011). Additional demographic information pertaining to the setting in which the phenomena occurred is important to add to the descriptions of participants to allow readers and researchers to decide to whom research findings generalize and allows for comparisons to be made across replications of studies (Hammer, 2011).

Interview Questions Related to the Experiences with Emergency Online Remote Teaching

1. Please introduce yourself to me, describing yourself, as if we just met one another.
(CRQ)
2. Please describe the course(s) that you taught that were shifted online due to the pandemic. (SQ2)
3. How did you have to change your pedagogical/andragogical practices when your courses were shifted online? (SQ2)
4. Please describe your pedagogical/andragogical beliefs about on-line teaching. (SQ2)
5. What types of education technology were necessary for you to use to teach your classes (both software and hardware)? (CRQ and SQ1)
6. What was your prior experience with the education technology that was necessary to teach your classes? (CRQ and SQ1)
7. How would you describe your self-efficacy with the online teaching experience before and during the pandemic? (CRQ, SQ1, and SQ2)
8. Was your class integrated with your institution's learning management system (LMS) prior to the pandemic? (SQ2)
9. If your class was not integrated with the LMS prior to the pandemic, was this your first time working with the LMS at your institution? (SQ2)
10. Please describe the technology tools you used, how you determined what to use, and how these decisions about tools were informed by your instructional decisions, and vice versa? (CRQ, SQ1, and SQ2)
11. Describe your experience with using video conferencing tools prior to and during the pandemic. (CRQ and SQ1)

12. How would you describe your interaction with students in your classes? (CRQ and SQ2)

13. How would you describe your students' performance in your classes? (CRQ and SQ2)

Question one provided the participants an opportunity to introduce themselves.

Question two had to do with the course type and the course design. Depending on the type of course and the learning objectives, specific activities should be developed to align with the learning objectives (Alston et al., 2017; Gillis & Krull, 2020; Martin et al., 2019).

Questions three and four were designed to examine the pedagogical/andragogical strategies for teaching courses that were moved online and to understand what pedagogical/andragogical changes were made to meet learning objectives in the online environment (Belet, 2018; Gillis & Krull, 2020; Martin et al., 2019; Wyant & Bowen, 2018). During the COVID-19 pandemic, the use of emergency remote teaching solutions for instruction was used for courses that would have alternatively been delivered face-to-face. This was a completely different situation compared to teaching online under normal circumstances (Affouneh et al., 2020).

Questions five, six and seven were intended to understand participants' beliefs and experiences with online teaching and instructional technology tools. The theory of self-efficacy connects an individual's belief in their ability to perform the necessary behaviors to produce specific outcomes (Bandura, 1977). Participants' beliefs in online teaching could be related to their self-efficacy with technology tools or their overall perception of the effectiveness of online teaching (Awofala et al., 2017; Corry & Stella, 2018). Teachers' self-efficacy with technology tools in online learning environments was a factor with the pandemic's forcing of a quick

acceptance of some online technology tools (Bao, 2020). Four primary sources of self-efficacy information include verbal persuasion, vicarious experiences, physiological arousal, and mastery experiences (Bandura, 1977). Many faculty members experienced a disruptive shift to move all existing courses online in a matter of days (Bao, 2020; Johnson et al., 2020; Hodges et al., 2020).

Faculty were required to leverage online teaching technologies such as Zoom video conferencing software to deliver synchronous live lessons (Moorhouse & Beaumont, 2020). Faculty were often not provided with sufficient formal training opportunities and were deficient in the necessary online teaching skills (Johnson et al., 2020; Wang et al., 2021), and felt vulnerable and uneasy when they suddenly had to teach in a virtual learning space (Moorhouse & Beaumont, 2020; Savard et al., 2020). Day et al. (2021) posited that “We have observed that universities and colleges accomplished the move to online and remote learning surprisingly easily, but the sudden shift to remote and online teaching disadvantaged many students and faculty” (p. 10).

Faculty members’ pedagogical/andragogical beliefs about online teaching may coincide with their comfort level with teaching remotely. This is especially true if other factors add up such as lack of training, limited technology available at home, insufficient equipment at school, or technical problems faced in technology-assisted teaching (Tartavulea et al., 2020). As part of the rush to remote teaching during the COVID-19 pandemic, faculty were asked to “transition, create, and implement online teaching due to university closures with no choice but to teach online even if they did not feel properly prepared to do so, or formerly had little interest in online teaching” (Cutri et al., 2020, p. 523). These questions helped explore the participants’ beliefs concerning their ability to create online courses that reflected their commitment to educational excellence (Woodley et al., 2017). Participants’ perceptions of best practices for using digital

tools in online teaching and how that relates to their experience with the COVID-19 transition to online teaching were intended to be examined (Price et al., 2016). The importance of understanding faculty members' experiences with online instructional technologies tools may inform how to prepare faculty members to use online instructional technology tools for future crises that require emergency remote teaching.

Questions eight and nine were intended to explore whether the participants' courses were integrated with their institution's learning management system (LMS) and their prior experience with using an LMS system to teach classes online. With the rush to remote teaching, often with little to no training, rapid decisions were made about how to adjust courses for remote instruction. Literature reveals the most common strategy was to embed the existing course in an LMS (Almarashdeh, 2016; Alston et al., 2017; Gillis & Krull, 2020). The theory of self-efficacy connects an individual's belief in their ability to perform the necessary behaviors to produce specific outcomes (Bandura, 1977; Ma et al., 2017). These questions were designed to expose participants' self-efficacy with the institution's LMS, their experiences with it, and information about the institutional support for using the LMS (Zheng et al., 2018).

Questions 10 and 11 were aimed at exploring participants' experience and use of technology tools during the COVID-19 pandemic. The rush to emergency online learning created a debate about the relative advantages and disadvantages of a synchronous, asynchronous, or blended approach to online instruction (Gillis & Krull, 2020). "Synchronous classes require students and faculty to be online at the same time, over a virtual platform such as Zoom, which promotes interaction but restrains flexibility" (Gillis & Krull, 2020, p. 285). Since it requires faculty and students to have the necessary technology and workspace at a specific time, it may have been difficult if multiple people in a household were working remotely or if faculty or

students had other time-specific responsibilities. Positive effects of synchronous interactions via video platforms such as Zoom include social and emotional benefits for students and faculty. Small group instruction, break-out rooms, and open office hours are other instances where Zoom was an effective tool (Gillis & Krull, 2020). These questions were fashioned to expose participants' experience with technology tools such as video conferencing platforms like Zoom. After pilot testing the questions with two participants, Question 10 was eliminated as a redundant question previously covered.

Questions 12 was designed to explore whether participants' courses were designed with synchronous, asynchronous interactions with students, or some combination thereof. According to early journalistic reporting, the most common strategy was to embed the existing course in an LMS (Alston et al., 2017) while holding synchronous meetings in an attempt to maintain the same teaching strategies, activities, and outcomes from face-to-face teaching (Gillis & Krull, 2020). This question was designed to possibly reveal participants' opinions about the perceived effects of synchronous and asynchronous interactions in online teaching. Although literature exposes support for opportunities for synchronous interactions to enhance student engagement, challenges have been reported to exist, such as internet connectivity for both faculty and students, time constraints, and resource constraints that may prove to be barriers to frequent synchronous interactions (Gillis & Krull, 2020; Woodley et al., 2017). These questions were designed help to understand participants' experiences with both synchronous and asynchronous teaching.

Question 13 was designed to explore participants' descriptions of their students' performance during the emergency remote teaching due to the COVID-19 pandemic. Students' academic performance was reportedly affected in a variety of ways, both positively and

negatively, during the COVID-19 pandemic (Iglesias-Pradas et al., 2021). Faculty reported students not showing up to synchronous sessions, and many times if they did attend, many students rarely contributed to the conversation (Bao, 2020; Moorhouse, 2020). In contrast, Gonzalez et al. (2020) suggested that students may have been afraid of missing an academic year, therefore worked harder to overcome any difficulty in succeeding. “They were not prepared, but many of them were able to make many adjustments and keep progressing” (Rahiem, 2021, p. 12). However, in a study at a large public university Reisdorf et al. (2020) reported that digital inequities, such as lack of internet and owning a laptop were negatively associated with overall college student performance. Students’ ability to achieve critical thinking as one of the key components of digital literacy was cited as a concern from faculty in that they doubted their ability to train students properly to achieve information and digital competence (Sales et al., 2020). Faculty shared concern over their ability to provide instruction to students to master information and digital competence (Sales et al., 2020). Evidence of how some students’ performance was affected was reflected in a difference in grades. “The average grades between pre-lockdown and post-lockdown were about two points and three points lower for those who reported transitioning to online teaching difficult and for those who indicated a preference for self-study, respectively” (Chisadza et al., 2021, p. 115). In addition, economic status was cited as affecting students concerning their access to the internet and devices (Chisadza et al., 2021; Rahiem, 2021). Rahiem (2021) indicated that some students and faculty were not familiar with digital platforms and programs that they needed to use on short notice. Technology problems were particularly problematic when students could not seek out other solutions outside the house and most technology stores were closed (Gillis & Krull, 2020). The quality of the internet connectivity, lack of study room, and the lack of interest by faculty to teach online were cited as

major problems for students (Ilieva et al., 2021) that may have affected students' academic performance.

Questions Related to How Teachers Describe their Level of Mastery of Online Instructional Technology Tools

14. Please explain the types of online instructional technology tools have you used and what were your experiences with those tools? (CRQ and SQ1)
15. Can you please describe a time when you were using online instructional technology tools when you felt that you did not have the skills to use the technology tools to achieve the teaching and learning objectives you wish to achieve? (CRQ, SQ1 and SQ4)
16. Can you please describe a time when you felt you were effectively using online instructional technology tools? (CRQ, SQ1 and SQ4)
17. What types of experiences enforce mastery of the skills necessary to use online instructional technology tools? (CRQ, SQ1, and SQ3)

Question 14, 15, 16, and 17 related to teacher's self-efficacy with online teaching technologies and involved the faculty members' perceptions of and approaches to teaching (Englund et al., 2017; Ma et al., 2017). Of the four primary sources of self-efficacy information that include verbal persuasion, vicarious experiences, physiological arousal, and mastery experiences, mastery experiences are considered the most impactful of the four sources (Bandura, 1977). Mastery experiences "occur when professors personally experience competency, engaging in practice or live instruction. These align with the assertion of a bidirectional relationship between beliefs and technology integration, as the integration itself (mastery experiences) impacts beliefs in addition to beliefs influencing integration" (Barton &

Dexter, 2019, p. 92). Technology mastery experiences are similar to cognitive mastery experiences and faculty members' ability to operate technology serves as an outcome for which they can evaluate success (Barton & Dexter, 2019). Research supports the idea of paying more attention to teacher's self-efficacy with online teaching technologies so that positive online teaching experiences can be created (Awofala et al., 2017; Ma et al., 2017). Understanding faculty members' descriptions of their perception of their mastery of online technology tools was intended to provide insights into how their perception of their mastery of online technology tools affected them and to inform best practices to be prepared for future crises that require emergency remote teaching. After pilot testing the questions with two participants, Question 14 was eliminated as a redundant question.

Questions Related to How Teachers' Describe the Verbal Persuasion and Vicarious Experiences They had with Colleagues and Administrators Regarding Their Use of Online Instructional Technology Tools

18. Please describe a time, if any, that you had a conversation with a colleague about online teaching? (SQ3)
19. Please describe a time, if any, that the topic of conversation at a meeting with an administrator was about online teaching. (SQ3)
20. Please describe a time, if any, that online teaching was the subject of professional development. (SQ3)
21. Please describe a time, if any, that you engaged with a colleague while they were teaching online in a similar subject that you teach. (SQ3)

Questions 18, 19, 20, and 21 related to verbal persuasion and vicarious experiences of participants. Verbal persuasion provided by colleagues, administrators, or professional

development trainers, “is positive endorsement of a teacher’s abilities or an instructional strategy” (Barton & Dexter, 2019, p. 91). Of the four primary sources of self-efficacy information include: verbal persuasion, vicarious experiences, physiological arousal, and mastery experiences, verbal persuasion is considered to be the weakest of the four sources of self-efficacy (Bandura 1997). However, “verbal persuasion is particularly relevant when a teacher has little to no experience with an innovation” (Barton & Dexter, 2019; p. 91). When faculty perceive the providers’ sincerity and expertise, verbal persuasion is more effective (Hattie & Timperley, 2007; Bandura 1997). As a form of verbal persuasion, institutional support is known to improve faculty members’ experience with online teaching (Zheng et al., 2018); however, during the COVID-19 pandemic, there was an extremely limited amount of time to move courses online (Bao, 2020; Cutri et al., 2020). Institutional support in the form of technical support can enhance faculty members’ use of technology and research emphasizes the importance of the availability of technical support to those who require it as a way to boost technology adoption (Zheng et al., 2018).

Vicarious experiences “occur when professors see colleagues complete similar target instructional tasks, such as observing a model lesson in professional development or a colleague’s live instruction” (Barton & Dexter, 2019, p. 91-92). Online teaching requires a particular set of skills, different from face-to-face instruction (Borup & Evmenova, 2019). Models with similar professional characteristics increase the positive impact on faculty in that they have more of an ability to relate to the teaching model they observe (Bandura, 1997). During the COVID-19 pandemic, many faculty were required to utilize video conferencing software such as Zoom to deliver synchronous live lessons (Moorhouse & Beaumont, 2020). This shift affected faculty in several ways, and many felt unprepared when they needed to

suddenly shift to teaching online with new technologies (Moorhouse & Beaumont, 2020; Savard et al., 2020). It has been suggested that faculty were left without the necessary technology teaching skills, because they were not provided with sufficient formal training opportunities or vicarious experiences (Song et al., 2020; Van Lancker & Parolin, 2020; Wang et al., 2021). Researchers have determined that institutional support enhances self-efficacy through psychological empowerment (Zheng et al., 2018) and institutional support in the form of training (vicarious experiences) and encouragement (verbal persuasion) was reported to have a big impact on teacher's self-efficacy with online teaching technologies (Darling-Hammond & Hylar, 2020; Zheng et al., 2018).

Questions Related to How Teachers' Describe their Perceived Emotional State During the COVID-19 Pandemic Emergency Online Remote Teaching

22. The COVID-19 pandemic cause myriad disruptions in people's lives. Please describe how the pandemic affected your life. (CRQ, SQ1, SQ4)
23. Please describe how you felt about transitioning to online teaching during the COVID-19 Pandemic. (SQ1 and SQ4)
24. Please describe how you felt about the level of training that you received prior to transitioning your classes online. (SQ1, SQ3, and SQ4)
25. Please describe how you felt about the type of technology that was available to you to teach remotely. (SQ1 and SQ4)
26. Please describe any technical problems that you may have encountered, what you did, and how you felt at that time. (CRQ, SQ1, and SQ4)
27. What else do you think would be important for me to know about teaching online during the COVID-19 pandemic? (CRQ, SQ1, SQ2, SQ3, and SQ4)

Questions 23, 24, 25, and 26, related to physiological arousal, one of the four primary sources of self-efficacy (Bandura, 1977). “As a source of self-efficacy, physiological arousal is a teacher’s perceived emotional state in relation to a task, with confident anticipation positively impacting their self-efficacy and anxiety negatively impacting the self-efficacy” (Barton & Dexter, 2019, p. 92). “From the perspective of social learning theory, reducing physiological arousal improves performance by raising efficacy expectations rather than by eliminating a drive that instigates the defensive behavior” (Bandura & Adams, 1977, pp. 289-290). Myriad factors affect how faculty felt about remote online teaching. Tartavulea et al. (2020) posited that “Instructors may feel uncomfortable to teach remotely, especially if other factors add up to the lack of training, such as limited technology available at home, insufficient equipment at school, or technical problems faced in technology-assisted teaching” (p. 923). One of the most notable stressors concerning the COVID-19 pandemic was the tremendous disruption it caused in daily life (Besser et al., 2020). Individuals who were affected by other stressors in their lives likely experienced more psychological stress with the COVID-19 pandemic (Besser et al., 2020). “As a source of self-efficacy, physiological arousal is a teacher’s perceived emotional state in relation to a task, with confident anticipation positively impacting their self-efficacy and anxiety negatively impacting the self-efficacy” (Barton & Dexter, 2019, p. 92). Teachers may have felt uncomfortable teaching remotely, in conjunction with other factors stacking up such as a lack of training, limited technology available at home, insufficient equipment at school, or technical problems faced in technology-assisted teaching (Bao, 2020; Tartavulea et al., 2020). This may have affected the effectiveness of their teaching experience.

Question 27 was designed to give the participants one further opportunity to offer valuable insight. This question served as a one-shot closing question (Patton, 2015). It gave the

participants the opportunity to add to what was already said and had the potential for adding a tremendous amount of valuable information.

Documents and Artifacts

Patton (2015) suggested the collection of three types of qualitative data as a method of triangulation of data sources to increase the credibility of findings. Documents and artifacts collected were utilized as a second type of data collected in the current study, supporting the idea of triangulation. When scheduling interviews, participants were offered an opportunity to select a personal document or artifact that represented their experience with technology tools during the transition to emergency online remote teaching and to provide an image of it to me or to bring it to the interview. These documents and artifacts may have included teaching documents, essays, illustrations, journals, photographs, or personal items, and were not limited in scope. During the interview, participants were given a chance to describe their document or artifact. At the conclusion of the interview, participants were asked to email any images or documents if they have not already done so.

Focus Groups

Focus groups are a well-established research method in qualitative research (Gammie et al., 2017). Focus groups involve social interaction between a predetermined small group of individuals who focus on a particular topic in an organized discussion (Gammie et al., 2017). “Groups are typically of 6 to 10 people with similar backgrounds who participate in the interview for one to two hours” (Patton, 2015, p. 475). Focus groups date back to the 1920s to an American sociologist, Bogardus, and were refined by social scientists Lazarsfeld and Merton in the 1940s (Gammie et al., 2017). After gaining popularity in the 1950s, this method fell out of

use in academia due to a possible perception of lack of rigor until its resurgence in the 1980s in social and health sciences (Gammie et al., 2017).

Focus groups were conducted in this study as a way to verify emerging themes and identify any new themes (Patton, 2015). Conducting focus group interviews served as a way to get a variety of perspectives and increase confidence in whatever themes emerged in the individual interviews, through analysis of documents and artifacts, and new themes during the focus group sessions (Patton, 2015). Participants tend to enjoy focus groups as they draw on human tendencies in a social context where they enjoy interacting with others (Patton, 2015). These group interviewing approaches recognize that as social beings, “qualitative inquiry with groups makes data collection a social experience” (Patton, 2015, p. 475) and “are presumed to increase the meaningfulness and validity of findings since perspectives are formed and sustained in social groups” (Patton, 2015, p. 475). Focus groups allow participants to consider their own views in the context of the views of others (Patton, 2015). Interactions among participants in a group interview stand to enhance the quality of the data in that they tend to provide checks and balances on each other (Patton, 2015). Additionally, silences and topic avoidance in focus groups stand to provide fruitful insights (Patton, 2015). Analysis can unfold as the focus group interviews unfold with either consistent and shared views or great diversity of views quickly assessed (Patton, 2015).

In this study, focus groups were conducted last as a way to verify emerging themes and identify any new themes (Patton, 2015). Focus group interviews were arranged by email and held through Zoom. Focus groups gave the participants the opportunity to enjoy interacting with each other, to form perspectives in a social group, and to consider their views in the context of other

faculty who shared the lived experience of transitioning to emergency online teaching due to the COVID-19 pandemic.

Focus Group Questions

1. Please introduce yourself to the other participants and tell them what subjects and courses you taught during the pandemic. (CRQ)
2. How would you describe your and your university's cultural views of online teaching before the pandemic? (SQ3)
3. How were decisions made about what classes were going to be taught online before the pandemic? (SQ2 and SQ3)
4. How were decisions made about what classes would be taught online during the pandemic? (CRQ, SQ2, and SQ3)
5. What type of institutional communication was provided during the shift to emergency online teaching? (CRQ and SQ3)
6. How do you feel about the role that institutional readiness played in the University's shift to emergency online teaching during the pandemic? (CRQ, SQ3, and SQ4)
7. What mechanisms were put in place to support you during the shift to emergency online teaching? (CRQ and SQ3)
8. What do you feel was done well and what could use improvement with the shift to online teaching? (CRQ, SQ1, SQ2, SQ3, and SQ4)
9. Does anyone have anything else to share that is important for me to know about the shift to emergency online teaching during the COVID-19 pandemic? (CRQ, SQ1, SQ2, SQ3, and SQ4)

Question one was designed to allow participants to get to know one another and to build a rapport with the other participants and myself. Feeling comfortable with the other participants, the environment, and the researcher sets the stage for participants to provide rich descriptions of their experiences (Moustakas, 1994).

Question two dealt with cultural views of online teaching. When the COVID-19 pandemic disaster hit, some institutions were impacted more than others with the transition to emergency remote teaching (Dhawan, 2020; Tartavulea et al., 2020). Universities with prior implementations of online learning environments with support structures in place were positioned better for the quick transition (Tartavulea et al., 2020). Many academic institutions that were previously reluctant to change their traditional face-to-face pedagogical approach had no option but quickly transition entirely to online teaching (Dhawan, 2020). Iglesias-Pradas et al. (2021) reported that "In Spain, where the predominant teaching modality across universities is face-to-face learning – only 15 percent of Bachelor's Degree students are enrolled in public or private distance education universities" (p. 1). In Madrid, over 98 percent of undergraduate students were reported as attending in a face-to-face instruction model rather than a distance education model and the impact of the COVID-19 pandemic was dramatic for faculty who had to make the changes necessary for the shift to distance education overnight (Iglesias-Pradas et al., 2021). Crawford et al. (2020) reported similar situations across 20 different countries.

Faculty were asked to "transition, create, and implement online teaching due to university closures with no choice but to teach online even if they did not feel properly prepared to do so, or formerly had little interest in online teaching" (Cutri et al., 2020, p. 523). Face-to-face teaching and online teaching have been compared in numerous studies. Allotting proper time for faculty in online classes emerged as an issue since online classes require more time. Instructors' personal pedagogical/andragogical beliefs play a key role in their cultural view of the use of

technology integration and online teaching (Tondeur et al., 2017). Instructors' beliefs about what effective educational practices inform their cultural beliefs about online teaching (Tondeur et al., 2017). The responses to this question were intended to possibly add on to participants' previous individual descriptions about their self-efficacy with online instructional technology tools, perhaps specifically as they relate to their level of mastery of online instructional technology tools, previous verbal persuasion and vicarious experiences they may have had with online instructional technology tools, and their perceived emotional state during the COVID-19 pandemic emergency online remote teaching (Bandura, 1997; Bandura & Adams, 1977; Bao, 2020; Barton & Dexter, 2019; Borup & Evmenova, 2019; Cutri et al., 2020; Darling-Hammond & Hyler, 2020; Hattie & Timperley, 2007; Moorhouse & Beaumont, 2020; Patton, 2015; Tartavulea et al., 2020; Wang et al., 2021; Zheng et al., 2018)

Questions three and four had to do with how decisions were made about what courses would be taught online. At the onset of the COVID-19 pandemic, universities closed campuses all around the world and many of them were forced into emergency online teaching in a novel, unparalleled velocity and extent (Al-Taweel et al., 2020; Bao, 2020; Burgess & Sievertsen, 2020; Dhawan, 2020; Hodges et al., 2020; Scull et al., 2020). Decisions that normally would involve careful planning were made with little or no time to plan (Al-Taweel et al., 2020; Bao, 2020; Iglesias-Pradas et al., 2021). This question was designed to elicit conversation about the planning that went into the selection of courses to be taught online prior to the pandemic and the effects of the rush to remote teaching decisions made at an untried, incomparable pace and magnitude (Al-Taweel et al., 2020; Bao, 2020). The responses to this question were intended to possibly help add on to participants' previous individual descriptions about their self-efficacy with online instructional technology tools, perhaps specifically as they relate to their level of mastery of

online instructional technology tools, previous verbal persuasion and vicarious experiences they may have had with online instructional technology tools, and their perceived emotional state during the COVID-19 pandemic emergency online remote teaching (Bandura, 1997; Bandura & Adams, 1977; Bao, 2020; Barton & Dexter, 2019; Borup & Evmenova, 2019; Cutri et al., 2020; Darling-Hammond & Hyler, 2020; Hattie & Timperley, 2007; Moorhouse & Beaumont, 2020; Patton, 2015; Tartavulea et al., 2020; Wang et al., 2021; Zheng et al., 2018)

Questions five, six, and seven were designed to explore institutional readiness and support in light of the rush to remote teaching. Businesses and institutions, including higher education institutions around the world, were affected, by either being mandated to close their doors or to operate in different ways to attempt to limit the spread of COVID-19 (Al-Taweel et al., 2020; Bao, 2020; Burgess & Sievertsen, 2020; Dhawan, 2020; Hodges et al., 2020; Scull et al., 2020). Many universities were forced into emergency online teaching at an untested, unprecedented speed and scale (Al-Taweel et al., 2020; Bao, 2020; Clark et al., 2020; Cutri et al., 2020; Hodges et al., 2020; Tartavulea et al., 2020; Viner et al., 2020). Academic stakeholders swiftly implemented online tools (Tartavulea et al., 2020). Understanding how institutional readiness and support affected faculty members' experience with online teaching during the COVID-19 pandemic stands to provide valuable information for future best practices during a crisis or disaster (Ayebi-Arthur, 2017; Baytiyeh, 2018; Di Pietro, 2018). The responses to this question were intended to potentially add on to participants' previous individual descriptions about their self-efficacy with online instructional technology tools, perhaps specifically as they related to their level of mastery of online instructional technology tools, previous verbal persuasion and vicarious experiences they may have had with online instructional technology tools, and their perceived emotional state during the COVID-19 pandemic emergency online remote teaching

(Bandura, 1997; Bandura & Adams, 1977; Bao, 2020; Barton & Dexter, 2019; Borup & Evmenova, 2019; Cutri et al., 2020; Darling-Hammond & Hyler, 2020; Hattie & Timperley, 2007; Moorhouse & Beaumont, 2020; Patton, 2015; Tartavulea et al., 2020; Wang et al., 2021; Zheng et al., 2018)

Question eight was designed to give the focus group participants an opportunity to offer valuable insight on their perception of what was done well and where improvements could be made regarding the emergency remote teaching (Patton, 2015). Seeking participants' opinions was intended to possibly provide valuable insight to inform best practices with online teaching and in particular teaching during a crisis or disaster. The responses to this question were intended to possibly help add on to participants' previous individual descriptions about their self-efficacy with online instructional technology tools, perhaps specifically as they related to their level of mastery of online instructional technology tools, previous verbal persuasion and vicarious experiences they may have had with online instructional technology tools, and their perceived emotional state during the COVID-19 pandemic emergency online remote teaching (Bandura, 1997; Bandura & Adams, 1977; Bao, 2020; Barton & Dexter, 2019; Borup & Evmenova, 2019; Cutri et al., 2020; Darling-Hammond & Hyler, 2020; Hattie & Timperley, 2007; Moorhouse & Beaumont, 2020; Patton, 2015; Tartavulea et al., 2020; Wang et al., 2021; Zheng et al., 2018).

Question nine was designed to give the focus group participants one further opportunity to offer valuable insight. This question served as a one-shot closing question (Patton, 2015). It gave the participants the opportunity to add to what was already said and had the potential for adding a tremendous amount of valuable information.

Data Analysis

The data analysis of this research study was used to identify emergent themes and patterns as they related to the study's central research question and sub questions. The central research question was: What were faculty members' experiences with implementing online instructional technology tools and changing instructional practices during the COVID-19 pandemic? The sub questions were: (a) How do faculty describe their level of mastery of online instructional technology tools prior to and during the pandemic? (b) How do faculty members describe their pedagogical (andragogical) practices prior to and during the pandemic? (c) How do faculty describe the verbal persuasion and vicarious experiences they had with colleagues, administrators, and others regarding their use of online instructional technology tools? (d) How do faculty describe their perceived emotional state during the COVID-19 pandemic emergency online remote teaching?

After the individual and focus group interviews were conducted, recorded, and transcribed, and documents and artifacts collected, data was organized to triangulate and analyze the data. To assist with data analysis, Microsoft Excel was used to classify, sort, and arrange information; examine relationships in the data with linking, shaping, searching, and modeling. Verification was achieved through literature review, epoché, (setting aside past experiences) and bracketing (or isolating) the phenomenon (Christensen et al., 2017; Moustakas, 1994), and interviewing until saturation of the data was achieved (Creswell & Poth, 2018). Validation was achieved through triangulation using multiple methods of data collection (interviews, documents and artifacts, and focus groups), data analysis and coding, and audit trails (Korstjens & Moser, 2018). Member checking was also used as a way to check for trustworthiness and accuracy by

sending documents to participants for review and for any corrections that may have been necessary (Merriam & Tisdell, Naidu & Prose, 2018; Patton, 2015).

Data analysis in this study was conducted in alignment with Moustakas' (1994) methods of analysis of data and steps therein for a transcendental phenomenological research design.

Epoché, phenomenological reduction, imaginative variation, and synthesis of composite textural and structural descriptions are the four main steps as defined by Moustakas (1994).

Acknowledging the work of Husserl (1931) who developed the concept of epoché, Moustakas (1994) introduced the concept of intentionally placing aside current judgments, thoughts, and beliefs, which impart bias with the use of this Greek word epoché, "meaning to stay away from or abstain" (Moustakas, 1994, p. 85). Epoché requires setting aside prejudgments, biases and preconceived ideas about things, or seeing the phenomenon for the first time with new eyes (Christensen et al., 2017; Moustakas, 1994). Setting aside biases is stressed in qualitative research as a whole, however, the study of and mastery of epoché sets the stage for how the phenomenological researcher engages in their study (Moustakas, 1994). Human experiences or phenomena appear in the consciousness and can be examined by way of epoché, or setting aside all prejudgments, biases, personal presuppositions, values, to make human meaning (Moustakas, 1994).

The process of epoché was used in this study's analysis to set aside my own prejudgments, biases, and preconceived ideas, as an educational information technology professional, about the experiences of faculty members' experiences with online instructional technology tools. Engaging in epoché, I engaged in disciplined and systematic practices to set aside those prejudgments, biases and preconceived ideas (Moustakas, 1994). I used the practice of epoché, during individual interviews, during focus group interviews, while examining

documents and artifacts. I used memoing and journaling as a method to aid in this practice (Creswell & Poth, 2018). I also used the practice of epoché, during the examination and compiling of textural and structural descriptions and developing a description of the essence of the phenomenon at the center of this study.

The next essential process I used in this study is, transcendental phenomenological reduction as broken down and defined by Moustakas (1994) as “transcendental - uncovering the ego for which everything has meaning; phenomenological - the world is transformed into mere phenomena; reduction – in that it leads us back to our own experience of the way things are” (p. 91). This was described as a task of providing a prereflective description in textural language of what one sees or the experience of such and a reduction to what is horizontal and thematic (Moustakas, 1994). The term horizontal can be described with the analogy of a new horizon rising each time that one recedes, or the possibility for discovery being unlimited, even though a stopping point is reached (Moustakas, 1994). It involves looking, noticing, and looking again (Moustakas, 1994). Nonrepetitive, nonoverlapping constituents should then be clustered into themes (Moustakas, 1994). Then individual textural descriptions of individual interviews and composite textural descriptions of all of the individual textural descriptions into a group textural description should be created (Moustakas, 1994).

At this next stage in this study, I had the individual and focus groups interviews transcribed immediately after each interview had been completed. Using the process of horizontalization (Moustakas, 1994), I examined all of the transcripts from the individual and focus group interviews along with any documents and artifacts that I collected. All transcripts were read several times to obtain the overall meaning. As part of the process of the transcendental reduction process, each statement in the transcripts were examined for new or

existing key phrases and concepts. Significant phrases or sentences were identified that pertained directly to the lived experiences of faculty transitioned to online teaching during the COVID-19 pandemic. I looked for nonrepetitive, nonoverlapping elements in both the individual interviews and the focus group interviews, and eliminated vague, unrelated, or repetitive statements (Moustakas, 1994).

While examining transcripts, documents and artifacts, I used memoing to aid in the process of identifying key phrases and concepts (Creswell & Poth, 2018). After key phrases and concepts were identified, they were clustered and grouped into labeled themes. Codes were created to describe and identify key themes. Themes were identified and clustered across all participants' transcripts and survey responses. Triangulation was achieved by analyzing each set of data and then synthesizing findings across all three sets of data (Korstjens & Moser, 2018). I organized and stored data using Microsoft Excel. Using the codes that were created to identify the key themes, I constructed individual textural descriptions of individual interviews and composite textural descriptions of all of the individual textural descriptions into a group textural description to describe the faculty members' experience with online instructional technology during the COVID-19 pandemic (Moustakas, 1994).

The process of imaginative variation positioned as the next essential process is defined as "a structural description of the conditions that precipitate an experience and connect with it" (Moustakas, 1994, p. 35). This task involves seeking possible meanings with the use of imagination, varied frames of reference, and approaching the phenomenon from divergent perspectives (Moustakas, 1994). Individual structural descriptions are to be composed integrating structural qualities and themes and then integrating all of the individual structural descriptions into a group structural description of the experience (Moustakas, 1994). Using the process of

imaginative variation (Moustakas, 1994), I constructed individual structural descriptions in looking from different perspectives for possible interpretations. I then integrated all of the individual structural descriptions into a group structural description of faculty members' experience with online instructional technology tools during the COVID-19 pandemic (Moustakas, 1994).

The final stage in phenomenological data analysis is the creation and description of the essence of the phenomenon (Moustakas, 1994). The description of the essence and meaning of the phenomenon is the combination of the textural and structural descriptions. Synthesis of composite textural and composite structural descriptions involves the integration of the textural and structural descriptions into a composite statement of the essence of the experience of the phenomenon as a whole (Moustakas, 1994). With the concepts of intentionality, noema, and noesis amongst the most complex in transcendental phenomenology, Moustakas (1994) reflected on the general idea that meaning is at the center of perception, that intentionality directs attention towards something, and that noema "gives consciousness its direction towards a specific object" (Moustakas, 1994, p. 68) giving it meaning. Moustakas (1994) posited that "Noemias, defined as the act of perceiving, must unify with noesis, or that which is experienced" (p. 69) to extract the core meaning of a phenomenon. Combining the composite textural and composite structural descriptions of the phenomenon, I created a description of the essence of the phenomenon of the shared lived experiences with online instructional technology tools during the COVID-19 pandemic by all of the participants as a group (Moustakas, 1994).

Trustworthiness

Quality in qualitative research is dependent upon trustworthiness. Trustworthiness relays the researchers' accountability to all, including other researchers, participants, and the general

readership (Mitchell et al., 2018). The criteria for quality in qualitative research are credibility, transferability, dependability, and confirmability (Korstjens & Moser, 2018; Lincoln & Guba, 1985). Trustworthiness in the current study was addressed through the study's credibility, dependability, transferability, and confirmability.

Credibility

The definition of credibility in qualitative research stems from the confidence that can be placed in research findings. "Credibility establishes whether the research findings present plausible information drawn from the participants' original data and is a correct interpretation of the participants' original views" (Korstjens & Moser, 2018; p. 121). Strategies to ensure credibility include prolonged engagement, persistent observations, triangulation, and member checks (Korstjens & Moser, 2018; Merriam & Tisdell, 2015). In the current study prolonged engagement, triangulation, and member checks were employed. Prolonged engagement was achieved through lasting presence during observation of long interviews (Korstjens & Moser, 2018). Participants were encouraged to support their statements with examples and follow-up questions were asked (Korstjens & Moser, 2018).

Triangulation is achieved by using different data sources and methods of data collection (Korstjens & Moser, 2018; Patton, 2015). Method triangulation was achieved in the current study by using multiple methods of data collection including participant interviews, documents and artifacts, and focus groups (Korstjens & Moser, 2018; Patton, 2015). Member checks were performed in the current study to strengthen the study's credibility. Member checks provided a way for respondents to look at the data collected through a different lens (Korstjens & Moser, 2018; Merriam & Tisdell, 2015). Member checks included providing data, interpretations, and conclusions to participants for their review and feedback (Korstjens & Moser, 2018; Merriam &

Tisdell, 2015). All transcripts of interviews and focus group discussions were sent to participants for feedback. Participants were given a chance to correct the interpretations. Findings and conclusions were presented to participants to confirm the findings, theory, and phenomenon.

Dependability & Confirmability

The definition of dependability in a qualitative study centers around the stability of findings of a study over time (Korstjens & Moser, 2018). “Dependability involves participants’ evaluation of the findings, interpretation and recommendations of the study such that all are supported by the data as received from participants of the study” (Korstjens & Moser, 2018, p. 121). Dependability was reinforced in the current study by keeping records of the research path used and transparently describing the research steps taken from the beginning (Korstjens & Moser, 2018). In addition, member checking was implemented to ensure dependability through confirming authenticity (Lincoln & Guba, 1985; Naidu & Prose, 2018). In member checking, the researcher checks back with study participants to ensure that the research is accurate and in line with their views (Busetto et al., 2020; Naidu & Prose, 2018). Providing summaries of transcripts to participants after data collection acted as a way to ensure that they reflected the participants’ views and were complete (Busetto et al., 2020). Participants’ feedback was then incorporated into the data collection and analysis (Busetto et al., 2020).

Confirmability is defined as “The degree to which the findings of the research study could be confirmed by other researchers” (Korstjens & Moser, 2018, p. 121). The important aspect of confirmability in a study is establishing that data and interpretations of the findings are clearly derived from the data and not merely the viewpoints and opinions of the researcher (Korstjens & Moser, 2018). In the current study, confirmability was assured through preparations for an audit trail. Those preparations included keeping a complete set of notes on decisions made

during the research process, including notes from interviews and focus group meetings, memoing and journaling reflecting on thoughts during the process, and keeping notes on the emergence of the findings and information about the data management (Korstjens & Moser, 2018).

Transferability

Transferability refers to the degree to which the results of qualitative research can be transferred from one study and applied to another study (Creswell & Poth, 2018; Korstjens & Moser, 2018; Patton, 2015). Using thick descriptions is one way to facilitate transferability (Creswell & Poth, 2018; Korstjens & Moser, 2018). In the current study, by using thick descriptions of behavior, experiences, and the context thereof, transferability was strengthened. Details shared such as the setting, sample size, sample strategy, demographics, and interview procedures bolster transferability (Korstjens & Moser, 2018). Furthermore, maximum variation was used in the sample to increase transferability as there are fewer limitations with a diverse sample. To provide for transferability, significant efforts were put into providing detailed descriptions of the data collection process used and into presenting the findings with detailed, thick descriptions of the phenomena.

Ethical Considerations

Ethical considerations in qualitative research require attention at all stages of a study including before the study begins, while collecting data, during data analysis, reporting results, and publishing a research study (Creswell & Poth, 2018). Ethics can be described as “norms of conduct that is used as a benchmark for measuring acceptability of behavior” (Azarkish & Janghorban, 2020, p. 1551). With human beings involved in this study, there were myriad complex ethical considerations to address (Roth & von Unger, 2018). Research involving human beings should abide by well-formed ethical principles; autonomy, beneficence and justice at all

stages of the research (Weerasinghe, 2018). Giving careful attention to research, ethical considerations can promote public support for research, the researcher's accountability, essential values, and research accuracy (Azarkish & Janghorban, 2020). The role of the researcher in qualitative studies is different than quantitative studies in that the researcher acts as the key instrument for data collection and investigation of the meaning of shared lived experiences in qualitative studies (Azarkish & Janghorban, 2020; Roth & von Unger, 2018; Weerasinghe, 2018). Ethical concerns may arise from "prevention of participant vulnerability, respect to privacy, maintaining confidentiality and anonymity, obtaining informed consent, and having ethical and interactive relationship between researchers and participants" (Azarkish & Janghorban, 2020, p. 1551).

To address ethical considerations in this study, I took proper steps to ensure that the participants were not harmed in any way. I started by obtaining IRB approval from Liberty University (see Appendix A) and consent from my participants (see Appendix B). As an ethical practice in this study, communication of the research goals to make them clear to the participants was a priority. These goals were outlined in an informed consent form. Participants were assured of confidentiality and that their input would be anonymous throughout the study (Roth & von Unger, 2018; Weerasinghe, 2018). Participants were made aware of the purpose of my study and the fact that their participation was voluntary (Weerasinghe, 2018). Files and documents were protected in a locked storage file (Creswell & Poth, 2018). Pseudonyms were utilized as a method to protect participants' anonymity (Roth & von Unger, 2018). Security measures taken as part of ethical considerations of data collections included data that was stored on a personal laptop computer was password protected (Creswell & Poth, 2018). A USB drive was used to backup data and was stored in a locked drawer. Electronic recordings were password protected.

Through member checking, I confirmed authenticity (Lincoln & Guba, 1985; Naidu & Prose, 2018). Participants were offered access to transcripts and the findings of the study as ethical considerations (Lincoln & Guba, 1985).

Summary

The purpose of this transcendental phenomenological study was to describe the lived experiences of higher education faculty with implementing online instructional technology tools and changing instructional practices at a university in the western United States during emergency remote teaching as a result of the COVID-19 pandemic. This study was conducted through the theoretical lens of self-efficacy (Bandura, 1977). The theory of self-efficacy connects an individual's belief in their ability to perform the necessary behaviors to produce specific outcomes (Bandura, 1977). In addition, the underpinnings of this study were found within the TPACK framework (Koehler & Mishra, 2008), and guided by andragogical principles (Knowles, 1970). The following central research question and sub questions guided this transcendental phenomenological study. These questions helped guide interview and focus group questions. The central research question was: What were faculty members' experiences with implementing online instructional technology tools and changing instructional practices during the COVID-19 pandemic? The sub questions were: (a) How do faculty describe their level of mastery of online instructional technology tools prior to and during the pandemic? (b) How do faculty members describe their pedagogical (andragogical) practices prior to and during the pandemic? (c) How do faculty describe the verbal persuasion and vicarious experiences they had with colleagues, administrators, and others regarding their use of online instructional technology tools? (d) How do faculty describe their perceived emotional state during the COVID-19 pandemic emergency online remote teaching?

This chapter provided a description of qualitative research and was followed by an explanation of why a qualitative research method has been chosen for this study (Moustakas, 1994). A definition, history, and reasoning for why a transcendental phenomenological research design and type was employed in this study were thoroughly discussed within the chapter (Moustakas, 1994). This study's research questions were presented along with details of the setting, description of participants, and procedures. The researcher's role was included in this chapter. Information about the data sources and data collection techniques (individual in-depth interviews, documents and artifacts, and focus group interviews) were covered along with the analysis processes that was used to analyze and interpret the data (Moustakas, 1994). Methods to establish trustworthiness and ethical considerations were also discussed. Results from this study may provide valuable information in understanding the COVID-19 pandemic effects on higher education faculty and students, and inform future best practices in online teaching and conditions that require emergency remote teaching.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this transcendental phenomenological study was to describe the lived experiences of higher education faculty members with implementing online instructional technology tools and changing instructional practices at a university in the western United States, during emergency remote teaching as a result of the COVID-19 pandemic. The purpose of this chapter is to present the results of this study. The data collected was from 13 participants' through demographic surveys, individual interviews, documents and artifacts, and focus group sessions. Participants are listed in this chapter along with their demographic information. A synthesis of participants' data resulting in rich descriptions are also included in this chapter. Themes are presented that emerged from data analysis through the use of transcendental phenomenological reduction (Moustakas, 1994). Using collected data, the central research question and four sub questions were answered. Finally, a summary concludes this chapter.

Participants

Participants for this study were recruited from a university in the western United States with over 700 full-time faculty members who could contribute to this research by describing their experiences of rushing to emergency remote online teaching during the COVID-19 pandemic. Criteria for participation required that faculty had taught a face-to-face course that was transitioned to an emergency online course during the COVID-19 pandemic and had taught for at least one semester. Participants volunteered to participate in the study through an email exchanged with me. Out of approximately 700 faculty, through a combination of purposeful sampling, criterion sampling, and snowball sampling techniques, twenty-two faculty members responded who met the study criteria. Thirteen faculty members agreed to participate in the

research. Of the 13 participants, there were four males and nine females. Six participants described themselves as Caucasian. One of each of the remaining seven participants described themselves as Native American, Filipina-American, Asian-Taiwanese, European, mixed-race, Argentinian-Irish-Canadian, and Latina. Three participants were in their 30's, five participants were in their 40's, four participants were in their 50's and one participant was in their 60's. Individual interviews were conducted via Zoom with all 13 participants. The first individual interview was conducted on November 16, 2021 and the last interview was completed on January 25, 2022. Participants were invited to share an artifact that helped describe their experiences teaching during the pandemic. Four participants shared documents and/or artifacts. Three separate Focus Group sessions were conducted with a total of 11 of the participants. Two Focus Group sessions had four participants and one session had three participants. The first focus group session was held on February 17, 2022 with four participants. The second focus group session was held on February 18, 2022 with four participants. The third focus group session was held on February 21, 2022 with three participants. The following table illustrates participants' contributions by data collection methods.

Table 2

Faculty Participants' Contributions by Data Collection Methods

Teacher Participant	Interview	Focus Group Session	Artifact(s)
Rosana	x	1	
Emily	x		
Linda	x	1	
Christina	x	3	
Grace	x	3	x
Anthony	x	3	
Robert	x	1	
Rebecca	x	2	x
Sarah	x	2	x
Daniel	x	1	
Andrew	x	2	
Olivia	x	2	x
Anna	x		

Of the 13 total participants, four of the participants were males and nine were females.

Pseudonyms were used to ensure confidentiality.

Rosana

Rosana is a 65-year-old Caucasian female born and raised in Portugal. She had taught at this university in the western United States for 20 ½ years. She is a full professor in the Division of Social Work. She teaches research methods for undergraduate and graduate students primarily, plus thesis writing. Rosana also does admissions work for the Master's program in Social Work. Rosana had never taught online before the pandemic and while there was a lot for her to learn to get her classes online, she felt it was a silver lining of the pandemic, to have an opportunity to learn a different way of teaching. She loved it.

Rosana described her some of feelings about online teaching during the pandemic. She shared her opinion that it addressed diversity, equity, and inclusion issues, and added on that it

also addressed a person's comfort level socially, their work schedules, health status, and financial status. Rosana described online teaching as a means to address climate justice issues as well. She shared her feelings that not having to commute with an older car with harmful emissions was a way of helping to save the environment. Rosana described teaching online during the pandemic as an opportunity to build a relationship with the campus technology group as being really valuable as it helped them to gain a better understanding of faculty members' needs.

Rosana shared her opinion that remote working in the United States is being really behind. She stated, "Portugal has amazing work remote agreements with people and lots of people in industry are seeking those and I think it's just a shame that we're not" (Rosana, personal communication, February 17, 2022). She also shared concern over students not having the technology skills necessary to compete in the modern Social Work environments where remote meetings may be common.

Emily

Emily is a 58-year-old Native American female who has taught at this university in the western United States for 26 years. She teaches Communications Studies in Journalism classes. She also teaches at a local community college. She worked from a laptop in a dedicated home office that did not have any privacy doors. Emily described the challenges of working from home with other family members and lack of privacy and working to set boundaries to make it work. She had significant experience with Canvas and distance education both at this university in the western United States and at the other local college where she taught. She had less experience with Zoom, but found it not to be a steep climb for her to learn. Similarly, Emily did not find the transition of her face-to-face classes to an online format to be difficult. Since she had previously

been leveraging Canvas in her class, Emily described the transition for her students to be a fairly easy transition. Emily shared her thoughts about the benefits to the university if online technology and teaching skills had been and were more strongly encouraged going forward. She said that a positive outcome of the pandemic was increased availability of people by Zoom and their new comfort with being recorded. Emily emphasized the importance of the value of what we learned from the pandemic. She shared “I feel like that’s a huge key that it will be doing higher education a disservice if we just go, well okay, now let’s go back to normal” (Emily, personal communication, November 17, 2021).

Linda

Linda is a 55-year-old Caucasian female who has taught at this university in the western United States for 6 1/2 years and at another university for 15 years prior to that. She is an Associate Professor in the Gerontology Department and during the pandemic she taught a couple lecture-based classes from her home office which was in her dining room. She is also the Chair of the Gerontology Department. Her professional background is clinical social work. She was a first-generation college student. She received a Bachelor’s Degree in Social Work. She also holds a Master’s Degree and has a Ph.D. in Human and Organizational Development. Aside from teaching, she stated that her main focus is working with older adults and mental health issues and substance abuse issues. She has worked in home health and hospice which she said she absolutely loved. She grew up in a very rural area and stated that growing up in that area with limited resources she learned resilience and survival skills from her parents. She shared that from this upbringing she saw both the benefits and the downside of being disconnected in a rural community. Linda always wanted to teach but didn’t feel it was right for her with not having any

college graduates in her family. On her educational journey she overcame her negative self-affirmations and eventually gained a teaching position as a lecturer that served a large rural area.

The university served areas that were up to six or seven hours away from the university and hence, Linda stated that the university was not serving that rural region well. Linda said that is when “she really got into technology” (Linda, personal communication, January 21, 2022). She said that is when she looked at developing good pedagogy for learning online to serve students in those distant rural areas. With her experience in social work and connections in Mental Health Services, she was also hired as a mental health services regional coordinator. She eventually got her Ph.D. and came to the university in this study where she shifted from distance education to in-person teaching. Linda shared that her background at the prior university in distance ed helped her with the transition to emergency remote teaching during the pandemic. She talked about distance ed through the lens of social justice, citing internet access and distance to travel to campus as primary issues for students and faculty alike. She also added additional issues such as socio-economic status, rural versus urban status, and age. Linda said she felt that faculty workload was a big issue during the pandemic, especially with class sizes of 40 students. She shared her thoughts on requiring faculty and student technology training as a way to prepare for future event(s) that requires remote teaching.

Christina

Christina is a 54-year-old Filipina-American female who has taught at this university in the western United States for more than 20 years. She started at this university as a part-time lecturer in 1997. She is now a full-time lecturer in the College of Education Child and Adolescent Development Department. In addition to teaching courses at this university, Christina started teaching yoga on campus in 2010. She said she had taught other subjects at other schools

as well, including Adult School English as a Second Language for several years along with teaching yoga at other locations. Christina shared that at this stage of her life she decided to minimize her workload to just teaching at this university in the western United States and continuing her yoga teaching online with a group she has been practicing with for over ten years. Her parent in-laws live in an in-laws' quarters in her back yard. Her mother lives in an assisted living facility and she is very active in caring for her. Christina is teaching in a hybrid format now, but described herself as being very cautious in structuring her course so as not to be too exposed to COVID-19.

She was teaching three classes at the beginning of the pandemic. Those face-to-face classes were Observation Assessment in Child and Adolescent Development, Human Development, and Qualitative Research Methods in Child and Adolescent Development. She said she was using Canvas at that time, but just to post announcements and use the grade book. She indicated that she was initially very much against online teaching because she got into the teaching profession because she liked that in-person contact with her students. She had always taught in-person rather than online. Now having become familiar to online teaching, Christina stated she thought that there were a lot of advantages to it, including being able to connect with her students without having to be there physically.

Christina taught from her home during the pandemic and described her office as not being set up well ergonomically. Christina shared that after Spring of 2020 that she developed neck and shoulder problems. She was unable to complete the summer online training program because of this and when she tried to teach in the Fall of 2020, she ended up having to take a medical leave and came back in Spring of 2021. She felt that her home office teaching environment and teaching from a laptop contributed to the medical problems that she

experienced. She went through online teaching training in January, 2021 and with information she gained about ergonomics, set up her workspace differently. Christina shared that she incorporates workspace ergonomic information in her courses now. She indicated that she was very pleased with the help that she received from the campus technology team and it was a comfort to know that they were there whenever an immediate need arose. Christina described the benefits of using a textbook that already had the quizzes and tests already created electronically to incorporate into Canvas as opposed to creating all the content from scratch. Christina shared that when it comes to students, that mental health was becoming more of an issue, especially for those that were not close to their family members. She described the culture of the university as encouraging, but not necessarily supporting online teaching as much as it is being supported now.

Grace

Grace is a 48-year-old Caucasian female who has taught at this university in the western United States for about 2 1/2 years. She is a professor in the Social Work Department at this university. She taught Social Work and Diverse Populations, Advanced Behavior Health, New Developments in Psychodiagnosis and Field Practicum in Spring 2020 and Fall 2020. During the pandemic she taught all online from home. Prior to coming to this university, she was at an out of state university for about five years. Grace described her own identity and seeing herself primarily as a social worker first. Grace described her beliefs about online teaching. She stated,

I think that before the pandemic, I did not have any thoughts or feelings about online teaching. I did not prefer it because I prefer to be in the classroom and I still do prefer to be in the classroom. However, I do see that there is there's a place for it in that there may be times when coming to class doesn't necessarily have to happen, and so, we can

definitely do more things online. Folks can potentially stay home and do meetings online. So, I think it's an interesting tool and an interesting add-on. So, I think another thing it helped, it has helped me do, is you know, without an increased touch point, I can schedule office hours with multiple students in multiple places, and so, I think that's probably, it's helped me increase the amount of time I can spend with folks which I've tried to take advantage of. (Grace, personal communication, January 23, 2022).

Grace shared that she relies a lot more on Canvas now than in the past. She said that now everything goes up on Canvas. She did describe frustration with using the gradebook in Canvas. Grace said that before she just used Canvas for the syllabus and readings. She said that she had never taught online prior to the pandemic. She mentioned that she had used Zoom for some meetings, but never for teaching. Grace spoke about noticing an increase in student anger during the pandemic. Grace shared her blue light protection glasses as an artifact of teaching online during the pandemic. She said that she had bought several pairs and talked about the protection that they provided with the great amount of time spent in front of the computer screen.

Anthony

Anthony is a 37-year-old Asian/Taiwanese American male that had taught at this university in the western United States for six years at the time of his interview. He is a full tenure track associate professor in the Division of Social Work. He taught a Child and Adolescent Development class, Social Emotional Development, during Spring 2020. He also taught a Child and Adolescent Development Graduate Seminar with fourteen students who met synchronously in one-on-one virtual meetings each week. In Fall 2020 Anthony taught two sections of a Child and Adolescent Development class with a total of seventy-five students. This was an undergraduate major core class with laboratory, taught asynchronously online. Anthony

added that he taught two sections of a summer course with a total enrollment of 40 students. In Spring 2020 Anthony taught from a dining room table in an apartment and in Fall 2020 he taught in a new home with almost no furniture. Anthony serves in different roles and within his program he coordinates the graduate program. Anthony described himself as a mentor to students in that role both at the undergraduate and graduate levels. He mentioned that he works closely with colleagues and both provides and receives mentorship.

He shared that he had always taught in person and never taught online prior to the Spring 2020. Beginning Fall 2020 Anthony offered synchronous one-on-one meetings with students and describe that as “really nice because it offered opportunities just to have a conversation with students to further explain my intentionality, and so it was nice moments to connect” (Anthony, personal communication, December 20, 2021). He mentioned that he reduced the time of a class that was previously three hours in-person to 45 minutes online. Anthony shared that he felt consistency matters in the online space, so in his asynchronous course, the modules were very much identical and organized in the same way. He said that he believes “online teaching required the instructor to be proactive and so kind of observing student progress and reaching out as needed and I will say that beliefs don’t always match practice” (Anthony, personal communication, December 20, 2021). He talked about how the increased workload affected some of his teaching practices.

Anthony mentioned his view of online teaching as primarily being against it unless it is done very well. However, he did say that he thought online teaching is very important because it does provide so many students a means to an end, and this was actually one of the only ways for them to reach degree completion, to work flexibly and remotely. Anthony shared that for students that they found the online learning during the pandemic an opportunity for degree

completion, though he felt it was not for everyone, but it may afford a little more flexibility in how courses are scheduled to accommodate students. Having not taught online before or even taken an online course for degree purposes. After seeking professional development opportunities, Anthony said that he changed the way he used Canvas from a place to simply store materials for students to a place for student learning. He said that in the Spring of 2020 in his last in-person class that he had students download Zoom and use it in class to be sure they knew how to use it. Anthony shared that he felt the online instruction experience feels impersonal, however the opportunity to teach online during the pandemic helped him see the value in it. He stated that he did feel that it is a need and that “we do need to provide, I just don’t think I am the best one to do it, unless I can commit more fully and I’m not ready to do that yet” (Anthony, personal communication, December 20, 2021). He said that it’s worked out since he was able to connect with people more consistently that way, that scheduling is a lot easier, and “the commute is really nice” (Anthony, personal communication, December 20, 2021). Anthony described some tensions within his department and meeting online has served as a form of some relief from that.

Robert

Robert is a 44-year-old European male that had taught at this university in the western United States for six years at the time of his interview. He received his undergraduate degree from this university. He obtained an MBA and came back to this university for his Master’s and ultimately he attained a doctorate from another university in the greater region. He is a three-year appointment lecturer in the College of Business. He teaches MBA courses and also serves in another role for the State. Previously Robert held leadership positions in a small for-profit institution of higher education. Robert said that his passion is in the classroom working with adult learners. Robert stated that over the past two years he has really seen his dream job grow,

which is remote instruction. During Spring 2020 and Fall 2020 Robert taught various levels of business classes. He taught remotely from his home office in a synchronous format. He stated that he had listened to his students and gleaned that what they wanted is a lecture that looks like they are watching a podcast. Robert outfitted his home office from where he taught synchronously with a backdrop and boom mic to create a proper environment for his podcast structured classes. Robert described sharing his home office with his wife. He grew up in the 1980's with friends whose parents worked in tech which helped him with an understanding of where technology started from. With a great passion for technology and a special interest in augmented reality (AR) and virtual reality (VR) in education, he stated that he felt that the metaverse is a great way to go for people and for access.

At the beginning of the pandemic Robert described his experiences with online teaching as not having to do much shifting since he had taught through Zoom since 2017. He mentioned this was out of necessity since he and his wife had twins. He had received approval to teach remotely, so the transition for his students was seamless. He mentioned that he has volunteered to be on campus in upcoming semesters but has elected to be half in class and half online keeping the podcast structure. He mentioned that Canvas, Microsoft Teams, and Zoom were the primary programs that he used and actually felt that student communication increased during the pandemic with the use of these programs. Robert shared that he felt that online education should be a choice, that it's an equity issue for both students and faculty. Robert quoted a student who said,

I don't want to go back to class because I take classes in the evening and I've got kids, I've got a full-time job, and now I have to drive 30 minutes to class leave my job early, find daycare and my kids don't have a home cooked meal by me, and then I have to drive

30 minutes back and I miss putting my kids to bed at night. I don't want to do that anymore. You know, this works for me. (Robert, personal communication, January 11, 2022).

Another conversation was with a neighbor of his who worked in a very large technology company who also said that there's no way that you're going to see people go back because we've already adopted to this. Robert said that the research started coming out and it really solidified his viewpoints and personal perspectives about remote work. He said with regard to online education that he felt there were not enough conversations happening about online education modalities and support from leadership in this realm. For him, having moved recently, going back to in-person teaching involved what a previous 10-minute bike ride to a 30-minute car commute. He shared descriptions of conversations with faculty and administrators some of which had polarized views of online education. Robert shared his thoughts about the importance of leveraging technology in teaching and learning. He stated his opinion that it's important to look at student perceptions and how they feel about the future of their education. Finally he shared his opinion of the importance of providing technology training to students and faculty so students are prepared for the workplace tech requirements they will face when they graduate.

Rebecca

Rebecca is a 44-year-old Caucasian female who has taught at this university in the western United States for 11 years consistently. She taught one semester in Fall 2009 and has been teaching consistently since Fall 2011. She is a lecturer with a three-year contract. Rebecca teaches for Child Development in the College of Education and taught Development in Context, Language Development, and Controversial Issues in Child Development over the Spring 2020 and Fall 2020 semesters. She taught all of her courses asynchronously with optional Zoom

session from her living room. During Spring 2020 she was at a coffee table in her living room and during Fall 2020 she made a space in the corner of her living room for a desk. Rebecca shared pictures of her teaching environment during the early pandemic and later in the pandemic as her artifacts.

Rebecca is a single mom and stated that she felt her identity is first with being a mother of a 16-year-old. She received her Bachelor's and Master's degree from this university. She was encouraged by a mentor and started teaching at a community college and was subsequently offered an online teaching class at a university in another state where she has taught for 16 years. She gained experience in Canvas at the other university and had been teaching there for about 3-4 years when she was asked to teach in person at this university. She had some formal online training at the other university and when this university transitioned to Canvas she was one of the first people to use it. She said that her class sizes for her online classes for the other university were very small in the range of nine or 10 students. Rebecca described herself as having a lot of experience teaching asynchronously but had little confidence in her ability to teach synchronously at the beginning of the pandemic.

Rebecca said that while she had experience with online teaching, entering into the pandemic, it was a very different experience. All of her classes were face-to-face at this university, she had five classes and three preps. Just before the campus was shut down she went to the campus technology division to get instructions on recording lectures and the moment the campus closed, she started recording lectures. She described a heavy workload and long hours in preparing her online courses. Rebecca said that since she had previous online experience that she helped others who had none. She described a class that she taught that required students to do presentations and went again to the campus IT department to brainstorm how to best do that

virtually. She said that they showed her a program called Sway that worked well for student collaboration and presentation. While Spring 2020 was completely asynchronous, Rebecca offered some optional Zoom session in the Fall of 2020. Rebecca described her large class sizes and challenges with synchronous engagements. Other than optional Zoom sessions, Rebecca shared her opinion that asynchronous online teaching was the most effective way to teach, especially during the pandemic with large class enrollments. She mentioned previously recorded lectures, in short segments, discussion boards as being quite an effective asynchronous teaching learning modality. Rebecca also described the hybrid modality that she is now teaching in that she finds effective and allows her to teach the face-to-face portion more effectively with a smaller class size 20 in person and 40 asynchronous.

Sarah

Sarah is a 36-year-old mixed-race female with a Japanese and Eastern European background who has taught at this university in the western United States for four years. She is a 12-month tenure track faculty who teaches as a Health Sciences Librarian in various classes. She teaches information literacy with an emphasis on evidence-based practice. She also supports English 11 and English 20 classes when needed. During the pandemic she taught mostly research-focused courses. She came in at the invitation of the teaching faculty in their courses. During Spring 2020 and Fall 2020 she taught all of her courses from her home office. Previously Sarah worked at a hospital where she was a library manager running multiple hospital libraries. Prior to that she worked as a clinical medical librarian. She also worked at another university in the greater area where she ran the Pharmacy and Health Sciences Library. She grew up in the area and her mother actually obtained her undergraduate and graduate degrees from this university. She describes growing up playing on this campus. Sarah described the classes that

were shifted online during the pandemic as being a little different than traditional faculty where she is typically invited in as a guest lecturer and do what is called “single shot instruction” (Sarah, personal communication, November 9, 2021). She said that she oftentimes has follow up and may do two or three classes for a course.

Sarah said she tends to do a lot of course design with faculty members, stating that they create or co-create courses. She described her role as lecturing to reflect the skills students need to complete an assignment and then meeting with students after the lecture. In the transition to online from face-to-face teaching Sarah used breakout rooms in Zoom to mirror the small group work in-person. Sarah described teaching during the pandemic and the opportunity to improve her pedagogical approach to students with disabilities. Sarah said, “I am a big believer in meeting multiple modalities of learning, so I want to say it, I want to show it, I want to write it” (Sarah, personal communication, November 9, 2021). She said videos are great, but not everyone learns that way so she developed handouts or online instructions that students could download and read. She said she understood that some people really need that tactile paper feel. Sarah was very familiar with teaching classes online and had effectively used both WebEx and Microsoft Teams before. So, Sarah was very familiar with videoconferencing and became familiar with Zoom when she came to this university. Sarah said that creating videos was difficult but appreciated all the help that she received from her department in making them. She said they had hired some student designers to work with her to make the videos aesthetically pleasing. In response to the invitation to share an artifact, Sarah shared before and after screen shots of improvements made to the library website. She described the help that she received in making the site more aesthetically pleasing during the pandemic.

She said that she set up her Canvas asynchronous courses in modules where the student would complete each portion, checking for knowledge along the way with quizzes before moving on to the next and that approach worked very well, though it was less traditional than the single shot courses that many librarians are accustomed to, therefore many librarians don't choose to create Canvas courses. She said that a positive outcome of the pandemic was she found her productivity increased without in-person distractions such as socializing.

Daniel

Daniel is a 46-year-old Caucasian male who has taught at this university in the western United States for six years in the College of Business. He is the Chair of the Information Systems and Business Analytics Department. He said that this was his first job in higher education after finishing his Ph.D. and before that he spent almost twenty years in industry mainly as a technology executive. During Spring 2020 and Fall 2020 he taught a Business Intelligence Class for Upper Division student in a hybrid format and a Business Tools Applications class for lower division students and then graduate students. He primarily taught from his house during this time. Daniel shared that he had taught online classes for four years before the shift to online during the pandemic so he was familiar with Zoom and Canvas and other instructional technology necessary to teach online. He stated that the initial transition to online teaching in one of his Masters in Information Systems classes was not a big deal. He said he just started doing synchronous video lectures and the rest of the material remained largely the same. For another Masters in Information Systems class, he stated it was a bit more complicated since there were 8-10 sections and they needed to remain consistent between the sections. He mentioned academic integrity was a concern but that the department handled it well overall paying attention to best practices for assessment and other best practices. He shared his opinion that he did not mind

online teaching and that he thought “for certain individuals it is superior to face-to-face teaching. I would say that’s probably not the majority of people, though, or the majority of individuals, the majority will probably do better in a face-to-face environment” (Daniel, personal communication, January 24, 2022).

He shared what was hard to do in the first semester was related to the way you prepare, organize, and structure an online class is profoundly different that the way you do a face-to-face class. Daniel said in the long term we will pay more attention to that, “but in 2020 in the Spring, you kind of everybody had to jump in and sink or swim” (Daniel, personal communication, January 24, 2022). He said, “There’s people who can do either well, and there are some that are much better at one than the other” (Daniel, personal communication, January 24, 2022). Daniel described some hardware problems that students experienced and said that he noticed that student performance outcomes dropped during the pandemic. He described that as a problem in skill classes such as the ones he taught. Daniel shared a concern about the loss of continuity, community engagement and other kinds of things that coordinate with student clubs where they collaborate across colleges and do things like hackathons and other things. His concern was the loss of institutional knowledge where these clubs have been paused for a couple years now and have been “completely hollowed out not. We are basically going to be starting from scratch” (Daniel, personal communication, January 24, 2022).

Daniel described a time when he felt quite effective teaching online with an assignment where students did mock interviews and had to record themselves. He said this gave them a chance to critique themselves and help them to make necessary adjustments in the way they came across in an interview. Daniel mentioned some coming together of faculty collaborating on ways to increase academic integrity with making modifications to quizzes that was successful.

He also described his desire to see more online class offerings over the summer to limit the disruption to juniors and seniors who may have not moved to the area during the emergency remote instruction. Daniel also shared his thoughts about an increase in online teaching and said that in his department, that there would now be more offerings. He described a future scenario that would offer more flexibility for students including where students don't need to come to campus as often. He shared a holistic view of online teaching where the university leverages all of the campuses in the state to best utilize resources as a form of increasing online course offerings and as a way to bolster institutional emergency readiness for other disasters that require emergency remote teaching.

Andrew

Andrew is an Argentinian/Irish/Canadian male who has taught as an adjunct lecturer at this university in the western United States for seven years for the College of Arts and Letters in the Department of Humanities and Religious Studies and also for the Department of Philosophy. During Spring 2020 Andrew taught Philosophy in Literature, Existentialism, Classical Mythology, Food, Farming, and the Sacred. During the Fall 2020 semester Andrew taught Philosophy of Art, History of Philosophy, and two sections of World Mythology. He also taught at a local community college during both of those semesters. He taught from his home with two computers, his ordinary workstation for course management and Zoom sessions, and a studio set up for lecture production. After getting through the rapid transition to the emergency remote teaching online during Spring 2020, Andrew spent the entire summer restructuring his Fall courses for the online environment. Andrew described success in using Camtasia for recording his classroom lectures. Andrew had experience teaching online before the pandemic. He said some students thrive in the online environment and some do not. He said he noticed a downturn

in student performance outcomes. Andrew said it was disappointment to look at the statistics for how many students were watching his pre-produced lecture videos. He said that students shared that they felt the online environment was a lot more work than the in-person classes. Andrew said that he felt that the online environment held them accountable for their learning. Rather than just showing up and doing the bare minimum in the in-person environment, they actually had to do the work, by reading the material and watching the lectures to succeed. He said that “if you teach humanities and religious studies or philosophy, my areas you have very few majors in the program in particular” (Andrew, personal communication, November 22, 2021). Therefore, many of his students were enrolled in his classes to fulfill general education requirements and they chose it in many cases because it had availability and it fulfilled the requirement. Andrew shared his opinion that those students expected these classes to be easy since they were simply fulfilling a general education requirement. He shared that as a result he experienced pushback from the student population and that it increased significantly with the move to online during the pandemic.

Andrew described his elaborate studio setup and extensive video production experience. He described putting a quite a bit of effort into professional producing his lecture videos and said he would use them when he returned to in-person class as supplementary instruction or if a student missed a class. He combined asynchronous lectures with synchronous Zoom discussions. He described the difference of engaging students in-person where you can solicit their attention and promote engagement as opposed to the experience with disengaged students with their cameras off in Zoom. Andrew shared however, that some students flourished in the online environment stating that some students came out of their shells in Zoom and were more talkative than in-person and engaged in rich discussions. Andrew felt that classes would be in a hybrid for

the foreseeable future and the quality lectures and well-developed Canvas content would serve students well, especially those who wish to go further. He shared that he felt it is going to be advantageous to faculty and students across the board since some prefer online and some prefer in person teaching and learning. He mentioned that the days of printing are over, since the last two years everyone shifted to electronic documents. He did not think that we would go back to that. Regarding his self-efficacy with online teaching, Andrew shared,

That one was really soul searching because before the pandemic it was about my relationship with human beings in the classroom. So you know my job was to be prepared to talk about something that day and not just to talk at the students, but to be able to connect with them one-on-one. (Andrew, personal communication, November 22, 2021).

Andrew said that he became the kind of teacher that he wanted to be, that he would want for himself online, but he did not think that he served the majority of the students where they were at and where they wanted to be met. He shared he felt that he created a quality lecture platform that he was very proud of which was wonderful for student who really wanted to learn the material, however he shared it may have been intimidating and off-putting for the students who just wanted their general education credit. Andrew spoke about students who were not prepared to learn in the online environment. Andrew spoke of the heavy toll that preparing for and teaching online took on him. He shared he was happy to be back on the ground since it is easier to perceive understanding and adjust teaching as necessary to engage students. Andrew said that “given where students are at in their preparedness level it's going to serve the university population for us to be back on ground across the board” (Andrew, personal communication, November 22, 2021).

Olivia

Olivia is a 56-year-old female Caucasian. She has taught at this university in the western United States for almost five years. She has been teaching since 2000. She received her Ph.D. in Accounting in 2015 and stated she tries to balance teaching and research. During Spring 2020 and Fall 2020 she taught an introductory accounting course aimed at Freshmen or Sophomores, and two sections of an intermediate accounting course, for those that choose to go on to accounting major. She also taught a master's degree accounting course which she always taught online. She taught from her home office. She described as just getting through in the first three or four months during the beginning of the pandemic, giving students a certain amount of trust on exams. Olivia worked on putting her courses online, recording lectures and implementing some of what she learned in a summer teaching institute that the campus offered into her courses. She said at the beginning of the Fall when she got news that her father had to go into a nursing home out of state. So she had to go out of state to take care of him. She described it being convenient to be teaching online because she could teach from out of state.

However, Olivia described the challenges she had with the immense amount of emails she received. She described her accounting courses as being structured with online video lectures and a synchronous class engagement once a week. She said that the students "got very frustrated during the first two weeks, because they felt that they weren't being taught and they didn't sign up for this (pandemic learning) and it wasn't what made them happy" (Olivia, personal communication, January 25, 2022). She described herself as focusing more on the freshman students in the introductory accounting class at that time. Olivia said that she had put trust in them that "everybody was doing the honest thing till I found out a whole bunch of them were cheating by the end of the Semester, so that went pretty crazy at the end" (Olivia, personal

communication, January 25, 2022). Since then she said that she developed a couple of study guides and made sure her Canvas site was much more designed for students to proceed through and know where they were going next. The study guide was a 70-page document they could download for the more advanced accounting class. For the introductory accounting students, she gave them more of a checklist every week of what was expected of them to actually cover. Olivia used Camtasia and Zoom, however her older computer crashed and she lost everything.

She shared frustration with the campus technology department since she had reached out to them several times about it cutting out on Zoom. She bought a new computer ahead of going out of state that helped her limp through the next several months. She finally was given her four-year computer from the campus technology team in August of 2021 which worked well. She also used a document camera that helped with teaching accounting by showing her writing out the exercises. Olivia said that she tried to instill confidence in the students by letting them know that she had substantial experience teaching online. She mentioned that some students may have not been prepared for online learning. For herself, Olivia said

The one thing I think that's never recognized with online teaching is just the volume of emails. In accounting, when a student has a problem with a particular question, they'll email and say, 'I can't do problem 17.6' and I might have moved three or four chapters beyond since then, and so I try to get my head in the frame of mind where I go back to the textbook and open up 17.6. Then I've got to look at the question which I may or may not have looked at for months. I then process through trying to figure out what it is that they don't understand and then write a long explanation out to send them. That's where it becomes difficult with online teaching especially when you are doing these types of replies to students one-on-one. (Olivia, personal communication, January 25, 2022).

Olivia described impromptu Zoom sessions that students could log into to meet her and go over problems in real time as this was a lot easier than trying to write everything out. She felt that offering Zoom time to students could help them to better approach class problems. She described her Canvas shell as being fairly well set up, minus the lecture videos since she was lecturing in-person prior to the pandemic. She described concerns that students may be more disengaged if their cameras were not turned on. Olivia also shared her concerns about instructor vulnerability when students were learning from home with other family members present in the background watching or listening. This meant her larger (non-student) audience may take comments or jokes that she would normally feel comfortable making in-person out of context. This, she realized, left her more vulnerable to a lot more critique.

As far as technology tools, she mentioned that prior to getting the document camera, it was difficult to teach skills using Excel or PowerPoint slides when they were previously done on a whiteboard in the classroom. She said that was not easily duplicated in Microsoft Excel and the document camera made it much easier to teach by writing out the problem and simulating the previous face-to-face environment. Olivia described implementing some new or innovative practices that worked to encourage student engagement. However, Olivia believed that having introductory accounting as a requirement for first year students might add to them being overwhelmed by a lot of new university language. This is because accounting has a lot of new terms to learn and she shared her opinion that perhaps not having it as a requirement for students' first year might help them from being as overwhelmed and set them up more for success if they were to take it later on in their program. She also shared her perception that administration may have not had an adequate understanding of the amount of work involved in online teaching. She stated her opinion that there had been a negativity toward online teaching.

She shared that if the university wanted to adopt a permanent online culture that it could offer exam centers to mitigate some of the cheating that she has personally encountered with students. As an artifact, Olivia shared screen shots from the summer online teaching course. She described the training that was offered over the summer as an overwhelming amount of work. She said that it provided an incredible amount of amazing resources, however that as a course it simply was overwhelming.

Olivia shared positive aspects of teaching online for her as an introvert and having a physical problem with walking across campus. However, the difficulty in engaging students was a negative aspect of online teaching. From a family point of view, she mentioned the advantages of being able to attend to family out of state and still continue teaching online. She pointed out though, the long days and amount of work it was to teach online and managing emails as a negative. She also said that in a survey 45% of her students preferred face-to-face versus online. Olivia said she loved online teaching, however had a problem with online exams. She favored proctored exams and shared she felt that there should be an easy way to offer those.

Anna

Anna is a 36-year-old Latina female who is an associate professor and program coordinator in American Sign Language and Deaf Studies that has taught at this university in the western United States for six years. Before she joined this university, she completed her Ph.D. at another university in the United States where she focused on linguistics and had a specialty in second language acquisition. Anna grew up in New Mexico, but has lived in several places for school and is now settled in the area. In Spring 2020 she taught ASL Fingerspelling and Numbers, a one-unit class, Deaf Culture & Community, an upper division course for Deaf Studies majors and Deaf Studies minors, and Sign Language Structure & Usage, an overview

course of the linguistics of American Sign Language. In Fall 2020 she taught American Sign Language III, Sign Language Structure & Usage, and Experiences in Deaf Community. She taught from her home office that she sometimes shared with her husband since he was sometimes working from home. They had a screen separating them for privacy. She shifted her classes to a completely virtual delivery and had never taught online before. ASL Fingerspelling moved to a completely asynchronous mode of delivery. She liked using Slack in her linguistics course and not having to rely on Zoom. She described Zoom as more widely used now and students could meet with her during Zoom office hours. She described a multimedia handout that students really liked.

She shared her views of online teaching is that you need to treat face-to-face teaching and online teaching as two different things. She said that the comparison of face-to-face teaching and online teaching was a bit like “that book/movie analogy. I can sort of tweak, okay, this is a book and this is how I do it, this is a movie and here’s what goes for a movie. I can design to the type of modality that I’m working in” (Anna, personal communication, November 16, 2021). She said that she was more open minded now to online teaching. However, she said that she felt that some courses are better taught in the face-to-face or hybrid format. Students needed to record themselves for almost all of her courses and so recording software and hardware were necessary and knowledge on how to use YouTube since most of the video submissions were posted to YouTube. They eventually transitioned to using more aspects of Google Drive. She created templates for homework. She bought external cameras and after three attempts found one that continued to work. She had two screens, and one was a very large monitor along with a ring light for proper lighting. Anna was very familiar with Canvas and used to putting everything there so that students would have access to all materials they needed for a course. She used Camtasia for

recording video and showing slides. She had some previous experience with videoconferencing tools, including Zoom. She noticed a drop in student performance during the pandemic. She said that she was seeing more C's. With modifications of her teaching and modifications of her expectations of students she felt she did come up with an appropriate way to engage, especially with the end of the Semester presentations. She said that while she had some training that she became more skilled at using technology just by practicing using it.

Anna described how she felt about transitioning to online teaching during the pandemic. She described it as a heavy lift and faculty were given four days which was not enough time. Anna made the analogy of when you go to the conference on the weekend, you don't have time to recover and catch up on those personal things that you normally do on the weekend, like laundry. She said that you need time to recover from the conference. She stated that she felt that it was the same idea, that they had to go to work on the fifth day with no day to recover in between. She said she felt she needed a break after preparing for the pivot and during Spring Break she had to work rather than take a vacation, having to make videos since four days was not enough time.

Results

Results and themes emerged from in-depth analysis of demographic surveys, individual interviews, documents and artifacts collected, and three focus group discussions. All participants in this study met the criteria for participating. The criteria for participation in this study were age (over the age of 18), their position as a higher education faculty member who transitioned from face-to-face course(s) to emergency, remote, online courses during the COVID-19 pandemic and taught for at least one semester during the pandemic. A demographic survey with 5 questions was emailed out to and returned by all participants (see Appendix B). All individual interviews

were completed virtually with Zoom software. Interview questions were pilot tested with two participants and two redundant questions were eliminated. All participants were asked 25 questions (see Appendix C). Follow-up questions were asked if clarification was necessary. Five participants shared documents and/or artifacts during their interview. Once all individual interviews were completed, all participants were invited to one of three focus group sessions. All focus group sessions were conducted virtually through Zoom software and participants were asked nine questions (see Appendix D). All individual interviews and focus group discussions were recorded and transcribed by Zoom software. As a form of member checking, all participants were allowed to examine the transcripts of both the individual interviews and the focus group sessions to provide corrections and additions.

Searching for common words and themes, I examined the transcripts, documents and artifacts creating codes and eliminating data not relevant to the study. I bracketed personal biases and experiences away from the data collected in accordance with the Moustakas (1994) methodology for qualitative analysis. Using Microsoft Excel and Microsoft Word, I listed, grouped, reduced, eliminated and clustered data ultimately identifying and validating emergent themes (Moustakas, 1994) (see Appendix G). The coding process consisted of repetitive readings and examination, color coding, and notations. Commonalities emerged in the form of words, phrases and ideas. A description of faculty members' lived experiences teaching during COVID-19 developed through an organization and categorization of key concepts. By relating the findings to the central research question and four sub questions, four themes emerged by synthesizing and triangulation of the data using the process of reduction (Moustakas, 1994). The themes that emerged were: (a) teaching experience, (b) student performance, (c) workload, health, and personal responsibilities, and (d) silver linings. Sub themes emerged from the theme

of teaching experiences. Those sub themes were: (a) previous online teaching experience, (b) teaching style preferences, (c) campus culture, and (d) training, (e) technology. A sub theme of social justice emerged from the theme of silver linings (see Table 3).

Table 3

Themes from Codes Identified in Phenomenological Reduction

<i>Central Research Question (CRQ) and Sub Questions (SQ) Addressed</i>	<i>Themes</i>	<i>Codes</i>
CRQ SQ1, SQ2 SQ2 SQ2, SQ3 SQ3 SQ2, SQ3	Theme 1: Teaching Experience Sub Theme 1: Previous Online Teaching Experience Sub Theme 2: Teaching Style Preferences Sub Theme 3: Culture Sub Theme 4: Training Sub Theme 5: Technology	Previous online teaching experience Teaching style preferences (synchronous, asynchronous, face-to-face, course topic) Training (received/given, colleagues, previous training, summer camp, state-wide training) Technology (challenges, out of pocket expenses, tenured vs. non-tenured) Class size Campus culture Attitudes toward online teaching Attitudes toward synchronous vs. asynchronous online teaching Acknowledgment of increased workload Communication Tenured/Non-Tenured Going back to campus Technology training Institutional Emergency Readiness
CRQ, SQ2	Theme 2: Student Performance	Rigors of online learning Interaction with faculty Anger (rude behavior) Student engagement (cameras off, disconnected, thrived, excelled) Academic integrity (cheating) Technology (Wi-Fi, internet, hardware) Personal responsibilities (family, work) Class size Grades
CRQ, SQ1, SQ2, SQ3, SQ4	Theme 3: Workload, Health, & Personal Responsibilities	Workload (Spring 2020 rush to remote, face-to-face vs. online course development, recording lectures, course load) Personal responsibilities (family) Health (physical, mental)
CRQ, SQ1, SQ2, SQ3, SQ4 CRQ, SQ2	Theme 4: Silver Linings Sub Theme 1: Social Justice	Social justice Environmental justice Diversity, equity, inclusion Students with disabilities Home/work/school balance Institutional readiness Emergency remote teaching readiness Teacher online training Student online training

Theme 1: Teaching Experience

There were many factors described by participants of this study that created both challenges and were drivers for success for them in the transition to emergency remote teaching during the pandemic. Experiences varied from faculty member to faculty member and were largely affected by their prior experience teaching on online, their teaching style preferences, and the course topics they taught. Campus culture, the training they received or had provided, and technology issues were also factors that affected participants.

Previous Online Teaching Experience

Prior experience teaching online emerged as a subtheme with regard to faculty challenges and drivers for success with emergency remote teaching. Of the 13 participants, eight had experience teaching online before the pandemic and five participants had never taught online before. The eight participants with prior experience described it as helping with the transition to the emergency remote teaching, though most described some challenges that remained.

Eight participants, Emily, Linda, Robert, Rebecca, Sarah, Daniel, Andrew, and Olivia all described previous experience teaching online. Emily and Linda both had previously online teaching experience from another university. Emily had significant experience with Canvas and distance education both at this university and at another local college where she taught. Emily did not find the transition of her face-to-face classes to an online format to be difficult. Since she had previously been leveraging Canvas in her classes, Emily described the transition for her students to be a fairly easy transition. She said that she was one of the faculty who beta tested Canvas when this university transitioned to Canvas, so she had it set up well. Linda also described her previous online teaching experience from another university as making the transition to emergency remote teaching easier.

Robert spoke about his extensive background and experience with online teaching and about leading in remote environments. At the beginning of the pandemic Robert described his experiences with online teaching as not having to do much shifting since he had taught through Zoom since 2017. He mentioned that Canvas, Microsoft Teams, and Zoom were the primary programs that he used and actually felt that student communication increased during the pandemic with the use of these programs.

Rebecca also shared that she had taught on-line at another university. She said that she had taught there for 15 ½ years. She gained experience in Canvas at the other university and had been teaching there for about 3-4 years when she was asked to teach in person at this university. She had some formal online training at the other university and when this university transitioned to Canvas she was one of the first people to use it. Rebecca said that since she had previous online experience that she helped others who had none.

Sarah was also very familiar with teaching classes online since she had previously taught classes to clinicians across the United States. She said at her previous institution she used WebEx and Microsoft Teams with one person handling the questions and one person handling the live instruction and thought that was a great way of handling live online instruction. So, Sarah was very familiar with videoconferencing before coming to this institution, but became familiar with Zoom when she came to this university.

Daniel shared that he had taught online classes for four years before the shift to online during the pandemic so he was familiar with Zoom and Canvas and other instructional technology necessary to teach online. He stated that the initial transition to online teaching in one of his classes was not a big deal, however, in another class he stated it was a bit more complicated since there were 8-10 sections and they needed to remain consistent between the

sections. He mentioned academic integrity as a concern but that the department handled it well overall paying attention to best practices for assessment and other best practices.

Olivia stated that she had 14 years of experience teaching online. She described her Canvas shell as being fairly well set up, minus the lecture videos since she was lecturing in-person prior to the pandemic. Olivia had prior experience with Elluminate as a videoconferencing tool and some experience with Zoom, but stepped away from Elluminate finding Zoom to be a better tool.

Andrew stated had been adjunct teaching since 2014 and his first job was online for another college. He shared that he had taught fully online a few times. He said, "I'm a bit of a veteran, that, so I didn't really need a lot of hand holding. I kind of knew what to do" (Andrew, personal communication, November 22, 2021). He shared his opinion that student learning in the online environment can be exceptional and many students just thrive in the online environment. However, he said that many other students really have trouble motivating to do online learning.

Five participants, Rosana, Christina, Grace, Anna, and Anthony shared no experience teaching online. Teaching online was described as a big change for them. However, the opportunity to learn a new teaching modality, and the advantages and value of online teaching were described as being discovered by participants, even if it was not their preferred teaching modality. Rosana had never taught online before the pandemic and while there was a lot for her to learn to get her classes online, she felt it was nice to have an opportunity to learn a different way of teaching. Rosana also described teaching online during the pandemic as an opportunity to build a relationship with the campus technology group and it being really valuable as it helped them to gain a better understanding of faculty members' needs. Christina had always taught in-person rather than online. Christina shared that she now has become accustomed to the online

format and stated she thought that there were a lot of advantages. Grace said that prior to the pandemic that she did not use education technology hardware at all in the classroom and had never taught online. Grace shared that one of the things that she had to change was that prior to the pandemic her students were required to prepare a physical portfolio binder, so changing that to an electronic requirement was a big change.

Anna shifted her classes to a completely virtual delivery and had never taught online before. She shared her views of online teaching is that you need to treat face-to-face teaching and online teaching as two different things. She said the comparison of face-to-face teaching and online teaching was a bit like,

That book/movie analogy. I can sort of tweak, okay, this is a book and this is how I do it, this is a movie and here's what goes for a movie. I can design to the type of modality that I'm working in. (Anna, personal communication, November 16, 2021).

She said that she was more open minded now to online teaching. However, she said that she felt that some courses are better taught in the face-to-face or hybrid format.

Anthony shared that he had always taught in person prior to the Spring 2020. Anthony mentioned that he was very against online teaching for the longest time. He said that he still is, "unless it is done well and the standards for meeting that is really, really high and hard to achieve" (Anthony, personal communication, December 20, 2021). Having not taught online before or even taken an online course for degree purposes, Anthony described his self-efficacy with online teaching as low before the pandemic. After seeking professional development opportunities, he practiced using online education technologies with colleagues in meetings ahead of using it to teach as a way to gain self-efficacy with those tools. Anthony shared that he felt the online instruction experience feels impersonal, however the opportunity to teach online

during the pandemic helped him see the value in it. Anthony also shared that for a few years that he taught in their distance degree completion program and that was the reason why he knew how to record his lectures where he used Mediasite. He said the recorded lectures were delivered out to facilitators who met with students live and that was the extent of his previous experience in the virtual environment.

Teaching Style Preferences

Participants described their teaching style preferences. Participants' preferences with synchronous and asynchronous teaching styles emerged and varied amongst participants. Rebecca described herself with low self-efficacy when it came to technology, though she felt that she had high self-efficacy when it came to asynchronous online teaching tools, she described herself as having “zero confidence when it came to synchronous” (Rebecca, personal communication, November 20, 2021). She said that while she had experience with online teaching, entering into the pandemic, it was a very different experience. All of her classes were face-to-face at this university, she had five classes and three preps. Other than optional Zoom sessions, Rebecca shared her opinion that asynchronous online teaching was the most effective way to teach, especially during the pandemic with large class enrollments. She mentioned previously recorded lectures, in short segments, and discussion boards as being quite an effective asynchronous teaching and learning modality.

Sarah said she enjoyed an asynchronous teaching modality, however her teaching style was dependent upon the preference of the faculty member who invited her to teach in their course. During the pandemic, Sarah described getting an increase in requests to develop Canvas asynchronous courses for students to complete at their own pace. She said that she set up her Canvas asynchronous courses in modules where the student would complete each portion,

checking for knowledge along the way with quizzes before moving on to the next and that approach worked very well, though it was less traditional than the single shot courses that many librarians are accustomed to. She described updating links and handouts and the importance of keeping content up-to-date. She provided examples of her updated links as an artifact during her personal interview.

Anna shifted her classes to a completely virtual delivery and had never taught online before. ASL Fingerspelling moved to a completely asynchronous mode of delivery. She prepared video lectures based on the slide presentations she had already prepared from teaching the course previously. She started using more discussion forums to replace using Zoom in her two upper division courses. She did not make any changes to the course assessments with the change in modality. She set up a Slack channel for the linguistics course and she said that was really awesome. She said Slack felt more like a real conversation as opposed to a Canvas discussion, you can see people typing a response and reading your post. There were separate threads and several icons students could use. She liked that you could invite guests who did not have a university email account. This helped so she wasn't always using Zoom or relying on video conferencing early on. However, she said she felt we are more tolerant of the Zoom environment now. Students could meet with her during office hours. She described a multimedia handout that she used that guided students through links and activities. She said students really liked this and shared they thought it was easier to consume. She said she was more open to online teaching now.

Rosana described a preference for synchronous online teaching as opposed to asynchronous. She said she tried to set up a couple modules but shared she did not care for it. She said she found it challenging with the lack of the opportunity for students to ask questions

and not knowing what they understand. She found videos a challenge to produce. She preferred to teach synchronously through Zoom and be present for each class utilizing Canvas and PowerPoint for course materials. She described the advantage of the recorded Zoom sessions for students to refer back to if they miss a class. Rosana shared that while she had no previous online teaching experience that now this was her preferred teaching modality.

Andrew, in contrast, shared he was previously not sold on online teaching. He shared that he was looking forward to being back in the classroom to help those students who were unsuccessful in the online environment. However, he did speak about some particular success in the online environment and had previously spoke about some students thriving in the online environment. He chose a hybrid format during the format with asynchronous modules with Zoom discussions. He said that in one of his classes that the extra credit Zoom discussions that he had were beyond the best discussions he had ever had with students. He said they were by far much better than in the classroom attributing that some students may have felt more comfortable speaking from their home environment. Andrew ultimately stated that he thought that “a hybrid model is probably going to be advantageous to faculty and students across the board” (Andrew, personal communication, November 22, 2021).

Emily shared that she had a lot of experience with online teaching. She said that there are all kinds of reasons for teaching synchronously and/or asynchronously. She said that she felt there was just as much value with online teaching as in-person.

Campus Culture

Campus culture emerged as a theme amongst participants. Campus culture at this university in the western United States was described as being built on a face-to-face environment. Less support for online teaching was described as part of the university culture by

Sarah and Anthony. Sarah said she experienced a negative bias towards online education when she came to this university. Anthony said he didn't feel that the university was equipped to move a lot more online, and that it should be very limited in the options offered. He said,

The faculty delivering have to be on board with actually putting in the work to teach online. But the institution needs to back us and right now they're actually pulling resources from us to kind of push us to go back in person and so it's a weird balancing act. But, the need is there, I just don't see us sustaining this, and I can see this actually causing more harm down the line, because of the resources being diminished. (Anthony, personal communication, December 20, 2021).

Anthony also shared the process of putting a course online prior to the pandemic. He said that prior to the pandemic, and E-learning policy was in effect. He said that also for the E-learning policy, his department also had an internal process. He said that individual faculty who wanted to teach a particular course online would have to submit a proposal justifying why the course should go online and then also justify their qualifications for putting the course online. He said that then these courses would be voted upon only amongst the tenure track faculty. He shared that it is a very closed process and was not clear exactly how those decisions were made. As far as keeping the courses online, it too was dependent upon reviews and recommendations, following the review cycles.

Rebecca also shared a lack of university support for online teaching. She said, "I too, like taught online before I came to [this university in the western United States], and there is an attitude that you can't teach online well" (Rebecca, personal communication, February 18, 2022). Rebecca also described a special lack of support for teaching asynchronously and described

challenges with synchronously online teaching with 40 students, especially 40 students with their cameras off since it was not required according to campus rules.

Olivia also said that she thought that there been a negativity toward online teaching. She shared her perception that administration may have adopted an attitude that teaching online was using a little bit less of teachers' resources than if it were face-to-face, however she felt that they lacked the understanding of the amount of the work that went into emails and creating the recordings. She shared that if the university wanted to adopt a permanent online culture that it could offer exam centers to address some of the cheating that she has personally encountered with students. She shared that while she has been teaching online for about 14 years, she still has not managed to find a way in that time to make her assessments really "cheat-proof," (Olivia, personal communication, February 18, 2022) since she teaches accounting where there are a lot of problems that students have to work through. Olivia said, "I think that there are things that the university could do if it really wants to adopt an online culture, such as offering exam centers" (Olivia, personal communication, February 18, 2022). She posed a question that with several other universities in the system, how hard would it be for the exam centers to test under a proctored situation. She shared that the Masters in Accounting program has always been online and the quality of students that are coming into that program are quite good, however she had caught two cheating recently, so that was very disappointing for her.

Andrew said he felt like in his area in particular that there may be a strong bias in favor of face-to-face teaching versus online teaching. He said,

Only then do you really have students' full attention to address something that may be a little bit off the beaten track. It's not part of their major. It's not a skill they're acquiring that they're going to later apply. It is sort of a broader, you know, learning how to read

Plato or something like that which is kind of hard with how students are about reading.

(Andrew, personal communication, February 18, 2022).

He said that he did surveys with his students about reading with regard to how many love to read. He said that maybe a handful did and then half the class hates reading. He said, “So that’s the culture, the biases against online among the faculty” (Andrew, personal communication, February 18, 2022).

Emily shared that she felt that communication scholars on campus held the belief that it is impossible to teach Communication Studies online. She said that she felt that the university may have been better prepared if faculty were more strongly encouraged to adopt online technology and teaching skills. She stated,

It just became really clear to me that in January of 2020 you could get a job in Higher Ed and use the exact same skills that you used in like 1940, 1950, you know, right, I mean no one makes you or strongly, even strongly encourages you to adopt any of these things.

(Emily, personal communication, November 17, 2021).

She said she hoped that, especially in her department, that the value of online education is looked at and how it can work. She said that she felt that it will be doing higher education a disservice if we just go back to normal. She said that she hoped that we have taken some of the lessons that this can have some sort of value.

Robert shared descriptions of conversations with faculty and administrators some of which had polarized views of online education. Robert shared that he thought “it could be doing a disservice to students to not focus on how we can utilize technology in the way of virtual meetings or, you know asynchronous/synchronous communication through technology using

information communication technologies (ICT)” (Robert, personal communication, January 11, 2022).

The topic of college policies emerged and Daniel talked about college policies with regard to online teaching. He said,

You’ve got some people that are in favor of it, some aren’t, personally I’ve done a lot of online teaching before. So, I mean it's different, but I had no particular qualms with it. I would say that we have some college level policies around things like you can only do so much online. I think there's concern of well if people are all teaching online, then they're not going to be doing service, they're not going to be engaged, so we can't do that. I expect that we are certainly going to do more, online. (Daniel, personal communication, January 24, 2022).

After the pandemic Daniel said that he thought we will certainly see will see more online teaching, but it would still be the minority.

In contrast, Rosana and Christina stated that the university actually had been encouraging and pushing for more online courses. Rosana said that her department chair was very positive about online teaching, although she said she felt the administration was less positive about it. Rosana shared,

The university, you know was trying to push some of us at that time to get more online offerings which is sort of the irony, you know, today. They wanted us to do more online and we were pushing against not doing it at that time and before the pandemic hit.

(Rosana, personal communication, February 17, 2022).

Christina said that online teaching was encouraged, but it wasn't necessarily supported as much as it's being supported now. Grace also spoke about the amount of support for online

teaching. Grace said that only a few people in her division were teaching online and there was there seemed to be a lack of support unless you actively sought it out yourself, which she never did.

Linda spoke about the culture within her department with regards to online teaching. She shared that her in department there was some resistance to it. Linda said, “So when I came to [this university in the western United States] and the Gerontology program, none of it was online, it was all, and the Chair felt very strongly, that it needs to be face-to-face” (Linda, personal communication, February 17, 2022). Linda shared however, that now that some time has passed and with faculty getting experience teaching remotely, she recently got an email though from faculty describing the results of their faculty meeting where they said they wanted to put three more classes online. She said her immediate reaction was to wait until she got back from sabbatical to have a thoughtful discussion about it. She said that at that point 60 to 70% of their program would be online and didn’t know if they were ready to go there yet, based on the outcomes that they had seen.

Robert shared that he had done a lot of research about online education throughout his own educational journey and that he knew the history of it. He said that online teaching was perceived as a bad word and that we have come a long way since the early 2000’s. He said,

I know that, some of my research that I’ve done you know, looking at student perceptions, faculty perceptions, has not been very positive, I think that during the pandemic though, and that includes the department, that includes reasons as to why or how we would do online education, I think the pandemic opened a lot of people's eyes in education as to what can be done. I think that we are right to question after the pandemic, you know how we move forward. (Robert, personal communication, February 17, 2022).

Robert said that however, he had a feeling that online teaching and learning is still not fully understood. He said he thought a lot of people during the pandemic just sort of perceived online teaching and learning as something that they had to do just to get by. He shared, however, that online teaching is perceived by many as a viable option and that other universities have been very successful at it. He said, “I feel like I feel like if we don't kind of buy into it, we're going to see, get left behind that's what I personally feel” (Robert, personal communication, February 17, 2022).

Training

Training emerged as a subtheme to the teaching experience theme where faculty described both great opportunities to get them ready to teach online as well as feelings of being overwhelmed by the offerings. Rebecca said that she thought that this university provides a lot of great training. She said that she thought that the campus technology team was the best. She said, “They should win an award of some kind because there’s no place I can go on campus where you walk in and there is a feeling of we will meet you where you’re at ... and how can I support you. (Rebecca, personal communication, November 30, 2021).

She said that she personally felt like this university is doing an exceptional job of prepping and providing training. Sarah also shared an appreciation for the assistance that she received in creating videos from her department technology team.

Christina shared that she went through some on campus online teaching training after she went out on medical leave and she was able to come back strong. She said that she learned information about ergonomics and how to set up her workstation properly and that she now shares that with students in her courses. She spoke very highly of the campus technology team and had worked with a particular person there for years. She said that was a great comfort to her.

Daniel shared that he felt the summer online teaching training was very good. He said that he was very impressed with the way the training was put together. Daniel said that some of it was review for him, but he was quite pleased with it overall.

Anna said that she had applied to and was accepted for a summer online teaching training program at this university. That program was from May 2021 and it went until March 2022. This is where she said that they were looking at revamping and revising courses and she had chosen her list of courses. She said that she had been working with a mentor and having discussions with other faculty who were also really taking that inward dive and looking at how they can modify their classes, giving special attention to modality. She said that she felt like she was in a much better position now compared to earlier in the pandemic.

Robert also said that he thought that the training was great. He said he thought that this university had done just about everything possible and that it was very streamlined. He said that the communication was clear and that their websites were great. However, he shared that he thought that the only issue was a lack of support of online teaching at the department leadership level. He said that he felt that leadership had not pushed or encouraged it. He said, “We don't have enough conversations about online education, online modalities best practices. You know it's more of a, I think it's looked at as a band aid and really it's a social movement now” (Robert, personal communication, January 11, 2022). Robert also emphasized the importance of providing technology training to students and faculty so students are prepared for the workplace tech requirements they will face when they graduate.

Rosana talked about the impact that the increased technology training during the pandemic had on her in contrast to the amount of previous technology training offered. She said that previously she felt that the continuous changing of technology systems was really hard on

her and other colleagues from her generation. Rosana shared that the training that was provided by this university during the pandemic was really a positive investment on faculty and staff alike. She took three different courses, including the summer training program offered by the teaching and learning center and said these trainings really helped her. She shared her opinion that it would be a good idea to make good use of that training investment by continuing to offer by online and on-campus in-person degrees, rather than going back to primarily on-campus in-person instruction. Rosana described learning how to use Zoom and said, “it was a remarkable growth for me. I looked at it, like I said, a super positive experience to have the opportunity to learn those things” (Rosana, personal communication, January 19, 2022).

Andrew described his situation as being different with the trainings that were offered for online teaching. He said that while adjuncts were encouraged to go to summer training that they would be paid \$1,000 to attend. He shared that if he did attend, that he would have lost \$2,000 per month of summer unemployment benefits, so it was not cost effective for him to attend. Andrew self-trained and said that other adjuncts may have attended who were not informed of that problem with their summer unemployment benefits. He mentioned it would be helpful if there was a campus resource dedicated to checking in with faculty to see if they needed help with training on specific pieces of software. He said he would have liked training on PowerPoint to get to know all the advanced features.

Anthony said he was proactive in seeking help. He said that in Spring 2020 and most of summer he was simultaneously working on four different professional development opportunities at the same time, specifically focused on online teaching. He said he was someone who needs to feel like he is in control and it motivated him at the time to seek out opportunities. Although he said it kind of hurt, not in a bad way, but he participated in those opportunities prior

to them offering professional development monies for faculty to do so. So he did it without pay.

He did share that it actually came to a point where he got really frustrated. He said,

I felt so inundated with information, it was actually there was oversaturation that made me turn away from all of it. And now I'm more resistant to participating in these professional development opportunities because there were just so much being constantly thrown ... it got to be too much at one point. (Anthony, personal communication, December 20, 2021).

Olivia, Rebecca, and Sarah also all shared about an on-campus online teaching training opportunity and while they all agreed that it offered a lot of information, they also shared that they thought that it was overwhelming. Rebecca described a conversation that she had with a colleague where they were including many of the features from the campus training and they were “crashing and burning” (Rebecca, personal communication, February 18, 2022). Rebecca said she encouraged this colleague to set up her course in a more simplified way. Sarah said, “I think it was intense ... that was so much work and for those of us who are 12 month we didn't get paid for it” (Sarah, personal communication, February 18, 2022). Olivia described the training as overwhelming and having “more in the online course than they would have ever put in a face-to-face five-day course” (Olivia, personal communication, February 18, 2022). Sarah said, “I think that goes back to this concept that we have on online learning being less than, it's not as good, so we try to overcompensate and make it better” (Sarah, personal communication, February 18, 2022).

Sarah shared a different kind of training experience with a colleague where they shared their expertise with each other. Sarah shared her online course outline knowledge and her

colleague shared knowledge about some of the technologies that she had more experience with as she had just finished her graduate degree.

Technology

Issues relating to technology emerged as a subtheme. Participants described their experiences with hardware and software. Participants described positive experiences along with challenges with both. Olivia used Camtasia and Zoom, however her older computer crashed and she lost everything. She shared frustration with campus technology team since she had reached out to them several times about it cutting out on Zoom. She bought a new computer ahead of going out of state that helped her limp through the next several months. She finally was given her four-year computer from the campus technology team in August of 2021 which worked well.

Andrew described problems initially with campus software such as upload issues and computer compatibility problems that took up a lot of time resolving. Andrew and Linda both spoke about problems with Mediasite and were glad that the campus moved to a different lecture capture solution. Andrew described problems with his laptop and compatibility said he had to replace it. He said that Camtasia ultimately worked well for him. He mentioned he already had a home studio setup, so that contributed to his success with producing lecture videos. He mentioned buying not only a new laptop, but his own podcast studio microphone and associated software out of pocket in order to do a decent job.

Most participants described positive experiences for the most part with Zoom and Canvas. Grace, however, shared that she did not like Canvas. She said that she thought it was difficult to navigate as it was not very intuitive to her. She said that may be because she was accustomed to using Blackboard at her previous campus. In contrast, Rebecca shared that she was relieved that this campus implemented Canvas because she hated Blackboard and she was

one of the first people to use it when this university turned it on. Grace and Linda, however, described struggles with the Canvas grading function.

Rebecca described the Microsoft application, Sway, as a being the biggest gift technology-wise that the campus technology team offered her to solve a problem with doing group presentations on-line. She described it as working very well. She said that she had to go buy a new laptop because she couldn't use Zoom, everything was slow. She said, "I am a lecturer, so I don't get very good technology, so I've always used my own" (Rebecca, personal communication, November 30, 2021).

Anna spoke about using Camtasia, YouTube, Google Drive, Slack, and Canvas. She said that it took her a while to figure out, but she had two monitors, one of them a very large monitor. She had an external camera because she wanted to see students on the larger monitor in Zoom. She said she spent a quite a bit of money on cameras trying to figure it out. She described the big difference the ring lights made that she bought, one for home and one for her school office.

Rosana described technological challenges she had in trying to create asynchronous modules for her students. She said that creating and posting videos was really challenging for her. She said that her accent made it a challenge for her to produce videos for students to be able to understand her and to have the captions come out correctly. She described what a blessing Zoom was to her and if the pandemic had happened 10-15 years ago how difficult remote teaching would have been without Zoom. Sarah also shared about challenges with creating online videos. She shared an appreciation for the assistance that she received in creating videos from her departmental technology team.

Christina described internet connectivity as being a challenge not only on her side, but also on the students' side. Daniel also mentioned internet connectivity as a challenge for some

faculty. He said that the university offered hotspots to help those with connectivity issues.

Rosana also mentioned that she had to upgrade her home Wi-Fi because it was not powerful enough. Emily said there were a few glitches with technology, but she always had a Plan B. She said that she wished that administration would have understood what technologically faculty would need to teach online.

Anthony said that because he moved during the transition to online during the pandemic, and was worried about internet connectivity that he requested a hotspot proactively which he only ended up using once or twice. He said that he had to purchase a new laptop since he previous one was damaged. He said that he needed to have a second monitor, a headset, a ring light and access to his cell phone and a tablet as backup devices. He used Zoom, Canvas, Google Docs, Qualtrics along with other online resources such as You Tub, podcases, online articles, etc.

Robert said he felt that technology available to him was great. He shared that he enjoyed the level of support that his received. He stated that he felt, however, to remain competitive, that this university needs to have somebody out there scouting out new technology, finding out what is new and how it can be used. He said that “if we don’t do that, then we’re going to be left behind” (Robert, personal communication, January 11, 2022).

Theme 2: Student Performance

During data analysis, student performance emerged as a theme amongst participants. Participants shared concerns about student engagement, personal responsibilities, grades, rigors of online learning, interaction with faculty, and student anger.

Several participants described challenges with the campus policy of students not being required to turn their cameras on. Rosana shared,

You know, they want to turn their cameras off, and you know at [this university in the western United States], you know, again, this is where the administration doesn't help because they say you know if they want to have their cameras off, they can and it's like no, you know when you're coming in, for a job, you should have it on. I don't require it because administration poo poos that. I don't agree with it, I think that you know when a person is present, just like a job, they should have at least the camera on and, of course, there are those students who have technological difficulties when they have a camera on. They actually can't, you know, like they lose Wi-Fi, they didn't have a strong enough (signal) or whatever, but for those who could I thought, you know, it was just too bad. So you, you lose something there. I try to tell them, you know that it would be nice, if they can have it on because it's a way to relate to each other and, at least in social work. I mean they're going to go out and have to deal with clients and yet, the majority still choose not to. So I think that's maybe the hardest part but more for them than me, you know what I mean. I think it's more of their loss than mine and it's more you know, can they recognize that they need to connect and whatnot you know, and it may be a development sometime as a semester goes on. (Rosana, personal communication, January 19, 2022).

Similar to Rosana, Robert and Daniel also described the challenges teaching with student cameras being off. Robert said,

One of the things that I found that to be an issue, though, was the lack of video. I couldn't see my students, you know the majority of communication happens with nonverbal so, you know, I can gauge how they're feeling, whether or not they're interested or if they

care. I was able to do that prior to the pandemic, you know. (Robert, personal communication, January 11, 2022).

Daniel described challenges with getting a dialogue going and engaging with students with their cameras off. He said,

I come from a fairly extensive industry background so I've got lots and lots and lots of stories, and so I could work that into the teaching, which really involved a lot of dialogue and setting things up when you move to Zoom, especially because the culture, at [this university in the western United States] has been students don't have their cameras on so you don't really engage you don't know who's there you don't who's actually listening, you can't just call on somebody to try and get the conversation going. So it made my lectures much more me talking into a camera. (Daniel, personal communication, January 24, 2022).

While Rebecca shared that while she agreed with the policy of not requiring students to have their video, understanding the equity issues around that, she like Rosana, Robert, and Daniel also described challenges with student cameras being off and she also addressed the issue of large class sizes. She described challenges with synchronous online teaching with 40 students, especially 40 students with their cameras off since it was not required according to campus rules. She described doing break out rooms in Zoom and going in to find no one's talking. She also shared that when it came to controversial issues that she may have engaged in discussion face-to-face in the classroom, that she did not feel comfortable with similar topics with students' cameras off.

Similar to Rebecca's description of teaching synchronously online with large classes Christina also addressed large class sizes and discussed students' cameras being off. Christina said,

It's a lot more filtered online, and I know for sure, I mean I've always made it a mission every semester to by the end of the semester I would know every student's name. I teach five classes each semester, and our cap size is 45 so that's you know a lot of students every semester. I have to let that go once we transitioned to online, I said to myself there's just no way because some students don't turn on their camera. You know I encourage them to and I tell them, you know I would love for you to come to my virtual office hours to get to know you and so forth it would work to your advantage in many ways. But you know it's not the same as if I were seeing them in person, right. (Christina, personal communication, January 19, 2022).

Linda also described differences of engaging students in-person and online. Linda shared,

They did kind of bare minimum and some of that's because that's the way some students are and for some we're dealing with a wacky world right now, you know our students are parents or caregivers and are working full time, and so I, but I have noticed I don't know that those people skills we haven't been able to develop as much online just because it's different. You know when I'm in a class live situation and I'm doing small group work, I can hear what's happening in groups, and I can go from group to group, but I can hear oh this group is struggling or oh hey they're not really doing this, they're talking about dinner. I can go over there and kind of do a prompting question. With Zoom it's like I'm popping in and out in and out, in and out, you know and very frequently when I pop in they're like oh we're done. I will say tell me what you discussed, you know, this is a big

discussion tell me what you discussed ... silence. (Linda, personal communication, January 21, 2022).

Linda also talked about being in the classroom where she could see students where they usually sit. She said she would make her way around the room. She said that online that it was difficult to pick someone with not putting a face to that person. She shared she felt that it changed a lot of the back and forth that happens in the classroom.

Olivia also described student engagement being affected by whether students had their cameras on or not. She shared that she disliked the fact that teachers can't force students to turn on their cameras. She said it leads to disengagement. Like Olivia, Grace also spoke about student anger and how it seemed to be ratcheted up during the pandemic. She stated she felt that it might have been different for her as a woman, but she felt that sometimes in the online environment when she opened up the room for feedback, that students would say things that they might not say to her face that were a little mean. Graced stated,

Students are really angry and I think, especially the women they take it out on. I know I have not heard this from any of the men, the men get sort of you know, not yelled at and I've been yelled at. The other men don't seem to get the same feedback that I get. (Grace, personal communication, January 23, 2022).

Sarah also mentioned a change in students' attitudes. She said that one of the surprising things in her first in-person class after the pandemic was she felt that her students were incredibly rude. She said she had never had that in class. However, she mentioned that she found an uptick in skill over the past year. Sarah attributed that to them getting more exposure to new information literacy, more tools, and more videos they had developed for the online environment.

Christina shared that when it comes to students, that mental health was becoming more of an issue, especially for those that were not close to their family members. Olivia said that during the pandemic she felt students were starting to become resentful and starting to get angry, especially those who tried to work full time and take a full load of classes without realizing the rigors of online learning. Linda, Olivia, and Andrew all shared similar descriptions of students' lack of preparedness for online learning. Linda shared that the additional metrics that are put on online teaching versus face-to-face teaching is a huge equity issue as well. She also stated that she felt that during the pandemic that "we just overloaded our classes with everything and just firing everything at students" (Linda, personal communication, January 21, 2022). She said that may have set students up to fail. Olivia similarly shared that the problem with some of the students was that online learning was not what they signed up for and they were not prepared for the rigors of online learning. Andrew also shared that many students were not prepared for the rigors of online learning. He said,

Some groups were really complaining that there was more work now than there is on ground and this was a huge issue from the point of view of students in this online environment. It really looks to me like professors have to produce these high-quality online teaching platforms that resulted in making students more accountable for their learning than they had been previously on ground. (Andrew, personal communication, November 22, 2021).

Andrew also shared his opinion that he felt the educational system has failed at an unbelievable level and that really there is no common knowledge there's no common skill set. He shared that students really come from every kind of background. Andrew said that he thought that almost

50% of them were not at a university or college level. He stated that they were still intellectually at a junior high school level and sometimes you are lucky if that's the case.

Technology in the form of Wi-Fi connectivity was described by several participants as creating problems for student performance and engagement. Anna stated that internet connectivity was a problem for students and they were not able to access Zoom maybe because some couldn't afford more expensive internet plans. She said that some students were living in their car and so internet access was a challenge for them. She shared that the parking garages had stronger Wi-Fi added to them so some students could go in there and park, but that really was not conducive to paying attention in class and learning. Anna said if it was hot, they would have to keep their air conditioning going and if it was cold they would have to have the heat on. She shared that it was just not a great learning environment. As mentioned previously, Rosana also shared that challenges of Wi-Fi connectivity for students may have attributed to them not turning on their cameras and affected their ability to engage at all.

Daniel described a hardware problem that a student had where previously his statistics labs were done on campus and when classes moved online the student didn't realize that their Chromebook was not capable doing the processing that was available in the campus computer labs. He described the campus technology group as doing well in getting the hardware necessary to the student. Daniel said that it created an impact because

People didn't know what they needed and people weren't quite ready and they were trying to backfill some of the gaps. But I could certainly see the difference that greater levels of technical literacy and self-efficacy made for major students, than technical major students and for general students. (Daniel, personal communication, January 24, 2022).

Daniel shared that student performance outcomes dropped during the pandemic and he said that some of the students were just satisficing, or rather, just checking all the boxes to get through and get the piece of paper.

Andrew described the difference of engaging students in-person where you can solicit their attention and promote engagement as opposed to the experience with disengaged students with their cameras off in Zoom. Andrew, however, added a positive note stating that some students flourished in the online environment and described some students coming out of their shells in Zoom and were more talkative than in-person and engaged in rich discussions. However, he said that many other students really have trouble motivating to do online learning. He mentioned that there was a substantial increase in DFW (grades of D, F, and Withdrawal) rates. In contrast to Andrew's described experience regarding grades Robert stated, "For me, no I have not seen any changes, really grades are still fairly well. You know, within one standard deviation of the mean you know where we're doing pretty good with my courses" (Robert, personal communication, January 11, 2022).

In contrast to many of the participants on the topic of cameras, Emily shared less concern about whether or not students had their cameras on. She stated,

I don't care at all about their faces, I know that there's a bunch of different reasons why they can't have their camera on and all I care is that they're engaged, you know with me and they're there when I'm asking a question that there's some you know level they don't have an answer for every question but there's some level of engagement. What I did do, though like whatever a year and a half ago, the Fall 2020 I made a requirement that you had to put your photo, a photo of yourself of your face in your Zoom profile so then if you're you know camera's off then at least we kind of, that's a way to get to know each

other instead of just the name. You know there are students who never turned their camera on. (Emily, personal communication, November 17, 2021).

Emily also suggested that while many faculty had frustrations with teaching to the “black boxes” (Emily, personal communication, November 17, 2021), referring to the students’ cameras being off and that someone should take a look at or do a study on students’ experiences, that there may be many reasons. She shared she had success with student engagement with a process that she put into practice when it came to silences when teaching to students online. She gave them a little extra time to think, that their silences may just be them taking some time to think, and then gave them the ability to jump in and talk or put their comments in chat. She talked a bit about in Western Culture that we are uncomfortable with silence and that people feel the need to fill the silent moments rather than embracing time for people (or students) to gather their thoughts.

Olivia and Robert shared teaching modalities that worked well to enhanced student engagement. Olivia shared one of the things that she implemented in her classes that she felt was effective was asking a student to start off a problem and then using the phrase “kick it on down to someone else” (Olivia, personal communication, January 25, 2022) giving the students the opportunity to take charge of their collaboration. She said that actually ended up with having students piping up and saying it was their turn that they had not had a go yet. She said it worked well to encourage them to engage. (Olivia, personal communication, January 25, 2022).

Robert mentioned that Canvas, Microsoft Teams, and Zoom were the primary programs that he used and actually felt that student communication increased during the pandemic with the use of these programs. Robert said,

I think that Microsoft Teams, that changed the game for my students. It was very effective because, especially when they were working on projects, they were able to

collaborate there, you know they didn't have to do the email ping pong with a document.

(Robert, personal communication, January 11, 2022).

Robert described student communication increasing in Zoom office hours since this allowed for very private conversations. He also described an increased amount of student chatter on instant messaging through Teams, which students are using a lot more than before the pandemic, to the point where he needed to set parameters around the time-of-day students could contact him.

Robert strived the importance of technology training for both faculty and students. He said, "because ultimately, it's going to affect the outcomes of organization and for us, that's our students" (Robert, personal communication, January 11, 2022).

Theme 3: Workload, Health, & Personal Responsibilities

Increased workload, health, and personal responsibilities emerged as a theme amongst participants. Participants shared concerns about the amount of hours they were working in the emergency remote teaching environment. For some, physical and mental health issues emerged as related issues, along with descriptions of personal responsibilities connected to teaching remotely during the pandemic.

Workload

An increased workload was described as a challenge by participants. Rebecca shared her thoughts that online teaching is way more work to do it well. She described herself putting in 12 hours days recording and lining up her classes to provide her students a sense of security. She stated that looking back that she may have way overworked herself preparing lectures and lining up discussion boards.

When speaking about how the COVID-19 pandemic affected his life, Andrew also described a heavy workload to transition his face-to-face classes to online. He said, "I was

working 12 hours a day, seven days a week because that was the only way to not sink” (Andrew, personal communication, November 22, 2021). Andrew said that producing a course online is a lot more work than teaching in person and shared his suggestion for departments to ensure that the tremendous amount of work put into it was reusable, semester to semester. He described the disparity between full-time staff and adjuncts’ course loads and pay as adjuncts taking on more course load and getting paid less. In his case he said, “It created an almost impossible scenario, like I was set up for failure. It's only because I’m a workaholic and unbelievably driven and ambitious that I didn't completely fail, or have a nervous breakdown or quit the profession” (Andrew, personal communication, November 22, 2021). Andrew described having to roll out five different subject matter classes a semester fully online, for the first time, never taught, with comprehensive video platforms. He described videos taking 5-10 times longer than going to go into a classroom and just teach. He said this is because you have to record, you have to edit, upload and it just takes an enormous amount of time to produce the lecture video and an online course shell. He said administratively it takes longer as well. Andrew also said,

I think that, from a workload perspective every aspect of online teaching, it’s two to three, if not more times as much work per class. And in the case of producing videos in my experience it's 10. I could have just recorded myself and said it's good even with all the mistakes. I’m too much of a perfectionist to do that, so it ended up being five to 10 times as much work per class without ever, it was it was only this semester, that there was any repeat teaching of an online platform I’d already created, so it was 12 or more hours a day for almost the whole year and it's a miracle I’m alive. (Andrew, personal communication, November 22, 2021).

Olivia described her experience with an increase in workload teaching online during the pandemic. She said nothing prepared her for the onslaught of emails that she received in the first week of the Fall semester. Olivia said she had received 300-400 emails in the first week. She also described the training that was offered over the summer as an overwhelming amount of work. She said that it provided an incredible amount of amazing resources, however that as a course, it simply was overwhelming.

Anthony described how the increase in the workload online affected him. He said that what happened was very different from his usual practice due to the workload in the online space, mentioning that his response time to students increased substantially. He said,

The more negative parts of this whole pandemic it's really being over-worked on the hours that I keep are now much more inflexible. I'm working all day and then later in the evening to try to accommodate students and to kind of meet them when they can, so that has been really exhausting. The detriment is I don't schedule breaks anymore, and so we try to pack as much in as possible. (Anthony, personal communication, December 20, 2021).

Anna shared her feelings about the workload to transition to online teaching and how the workload affected her. She said,

Well, I did feel that the people who asked us to do this work to make this transition, they've been out of the classroom for a long time. Some admin were able to recognize the heavy lift and they actually used that statement, a heavy lift. Even those who were experts at this kind of technology, they knew it was hard, so those who hadn't yet mastered these technology skills, wow, it was a lot, I do feel like they gave us like four days. They were like okay here you go; classes are cancelled for four days. That's how

long we had to make the pivot from everything in the classroom to an online structure.

That was not enough time. (Anna, personal communication, November 16, 2021).

Linda shared that the additional metrics that are put on online teaching versus face-to-face teaching is a huge equity issue. She also stated that she felt that during the pandemic that “we just overloaded our classes with everything and were just firing everything at students” (Linda, personal communication, January 21, 2022). She said that may have set students up to fail. She suggested offering first year training for students on how to learn with technology and some sort of training for faculty as part of their onboarding might serve a preparations in case of another event that requires emergency remote teaching.

Health

Participants described both physical and mental health issues related to teaching remotely during the pandemic. The workload of teaching online was described as taking both physical and mental tolls on participants. Christina shared that after Spring of 2020 that she developed neck and shoulder problems. She was unable to complete the summer online training program because of this and when she tried to teach in the Fall of 2020, she ended up having to take a medical leave and came back in Spring of 2021. She felt that her home office teaching environment and teaching from a laptop contributed to the medical problems that she experienced. She went through online teaching training in January, 2021 and with information she gained about ergonomics, set up her workspace differently. Olivia mentioned that not having to walk across campus with a problem with her foot as an advantage of remote teaching.

Anna had an injury and started to have pain that didn't resolve itself when COVID-19 hit. She said she felt she needed a break after preparing for the pivot and during Spring Break she had to work rather than take a vacation, having to make videos since four days was not enough

time. She said the people who asked faculty to do this did not fully understand the physical, emotional and social toll. She said that her body was failing her and things she thought she should be able to do her body was refusing. She said “I always felt the scarcity of time. I felt like I needed to give more to my students, both in terms of instruction, because I was not seeing them and in terms of emotional support” (Anna, personal communication, November 16, 2021).

Andrew mentioned that he was ill at the beginning of the pandemic and thought that it was likely COVID-19. Andrew also described toll that teaching remotely had taken on him. He said,

It felt like a Herculean task like you know those Greek myths were like I’d laugh, you know Atlas is holding up the world and, like his back is going to break eventually. That's how it was the whole year, and I think that any adjunct who taught as many courses as I did will tell you that same thing. (Andrew, personal communication, November 22, 2021).

Andrew also shared his feelings about the entire experience of emergency remote teaching during the pandemic. He said,

It was like being bathed in hellfire, for people who like the punishment that could be a nice experience because it's a challenge to overcome and that the outcome of it is good and bad and that the future of it is we don't know, but we do know that things will never be the same again. (Andrew, personal communication, November 22, 2021).

Emily spoke about feeling by the eighth or ninth week of the Fall like she was massively hitting her wall, or had the feeling of how she used to feel at the end of the semester. She said that she wanted to add an asterisk to that in that she volunteered to provide training to other faculty during this time, so that may have added to her feeling burnt out by the eighth or ninth week. Emily said, “You know, so I had this skill, it was like being a firefighter and there was a

fire, you know it was like I'm going to help these colleagues" (Emily, personal communication, November 17, 2021).

Anthony spoke about several professional development opportunities that he jumped into doing at the beginning of the pandemic. He was very motivated at the time and took on four different opportunities simultaneously aimed at online teaching. Anthony said, however, that right now it's totally different right now it's like the burnout, and the motivation is very low.

Robert spoke about the stress caused by people not knowing how to use technology. He said, "I don't understand why we don't train everybody on how to use technology" (Robert, personal communication, January 11, 2022). He used the term "techno stress" (Robert, personal communication, January 11, 2022) as a real condition that is created by people not knowing how to use technology. He shared his opinion that everyone would be on the same playing field that way.

Rosana and Anthony spoke about online teaching in terms of safety. Rosana shared conversations that she had about online teaching with colleagues and safety concerns during the pandemic. She said, "They liked it because, there again, we're you know a bit older and so they felt safer" (Rosana, personal communication, January 19, 2022). Anthony shared that he felt there was some workplace toxicity and a lot of tension within his program and described teaching online as a really nice relief from that. He said, "Meetings online are horrible, but ultimately I have the option at any time to exit, but I've tried not to, but I do feel safer this way. So the psychological safety piece, I think is really important" (Anthony, personal communication, December 20, 2021).

Christina shared that when it comes to students, that mental health was becoming more of an issue, especially for those that were not close to their family members.

Personal Responsibilities

From a family point of view, Olivia mentioned the advantages of being able to attend to family out of state and still continue teaching online. In contrast, Rosana described difficulty in not being able to travel during the pandemic to see her family. Emily described the challenges of working from home with other family members and lack of privacy and working to set boundaries to make it work. Robert described sharing his home office with his wife who also worked from home sitting across from him at her desk facing each other. Since she works in healthcare he would plan to be out of the room during some of her calls to adhere to HIPPA compliance rules. He said he would sometimes go on walks to take a call to be outside the room. Robert shared that they have three children and while it was enjoyable to spend more time with them over the last couple years, he and his wife were happy they were back in school. Rebecca described some personal problems her son had during the pandemic. She said that in hindsight that if she had known the degree to which the severity of problems that her teenage son was having that she would have not put so much extra work into her online teaching, but have rather spent more time with him. Linda's parent in-laws live in an in-laws' quarters in her back yard. Her mother lives in an assisted living facility and she is very active in caring for her. She stated that this is a very significant point in terms of her choices in the format of teaching she chooses.

Theme 4: Silver Linings

All 13 participants shared descriptions of opportunities, or silver linings that came out of the pandemic. Opportunities for teacher online training was an opportunity that came out of the pandemic. Rosana had never taught online before the pandemic and while there was a lot for her to learn to get her classes online, she felt it was a silver lining of the pandemic, to have an opportunity to learn a different way of teaching. She loved it. Rosana stated,

You know people have talked a lot about what they've missed and what they have lost in teaching or learning and I think of it the other way, of all that we gained. It was just a different type of education, but it doesn't mean it's any better or worse or any less than what it was before. And for somebody, I mean I've been teaching 25 years, you know, and people have gone to school forever, and I'm thinking, gee, you know what an opportunity for you to learn something else ... I think that's just wonderful ... I probably would have never learned any of this stuff otherwise. (Rosana, personal communication, January 19, 2022).

Robert, Rebecca, and Emily described positive experiences with software applications that emerged during the pandemic. Robert described positive feedback from his students. He said he got emails from students thanking him for pushing them to use Zoom and Teams. He shared that one student said, "I trained my entire organization on how to use Teams because of your class and I thought that was the coolest email" (Robert, personal communication, January 11, 2022). Rebecca said, "The positives are that I leaned into learning some new thing, so like all these little technology things" (Rebecca, personal communication, November 20, 2021). Rebecca described a course that she was teaching during the pandemic where she students were to give group presentations. She learned about Microsoft Sway from the campus IT support team and she said, "That was like ground changing, like I would say that is the biggest gift technology wise" (Rebecca, personal communication, November 20, 2021). She said that she was going to continue using Microsoft Sway since her classes were going to be in hybrid format. Emily described that she felt a silver lining of the pandemic in journalism was related to the availability of people by Zoom and their new comfort with being recorded. She stated that now basically the whole world is available through Zoom. She shared that it used to be that it was awkward to let

someone know that you are going to record them. But now everyone's used to that with the advent of the use of Zoom. Emily said, "The silver linings, just kind of like you know there's some things in there" (Emily, personal communication, November 17, 2021).

Andrew described the lecture videos that he had worked hard to produce as a silver lining of the pandemic. He described his elaborate studio setup and extensive video production experience with editing his lecture videos. He put a quite a bit of effort into professionally producing them with special audio hardware and software. He even engaged in some sound production lessons. Andrew described these quality produced lectures as an asset for when he returned to the classroom where they could be used as supplementary instruction or used if a student missed a class session. He also shared that having these professional quality produced lectures online now as giving him a great gift as a scholar and educator, he said, "because I'm now one of the top four or five people in the world giving lectures on Classical Mythology" (Andrew, personal communication, November 22, 2021).

Christina and Grace were not previously big fans of online teaching, but both shared positive aspects of the online format they now saw. Christina shared that she now has become accustomed to the online format and stated she thought that there were a lot of advantages to it, including being able to connect with her students without having to be there physically. Grace said

I do see that there is there's a place for it in that there may be times when coming to class doesn't necessarily have to happen, and so, we can definitely do more things online. Folks can potentially stay home and do meetings online. So, I think it's an interesting tool and an interesting add-on. So, I think another thing it helped, it has helped me do, is you know, without an increased touch point, I can schedule office hours with multiple

students in multiple places, and so, I think that's probably, it's helped me increase the amount of time I can spend with folks which I've tried to take advantage of. (Grace, personal communication, January 23, 2022).

A silver lining to teaching remotely during the pandemic for Anna, who also was not previously a big fan of online teaching, was her now being more open minded about it. She shared this was born out of throwing out those things that were binding her to face-to-face teaching and creating and envisioning other ways to engage and draw in participation from students in an online environment, ensuring that they are hitting milestones and they are learning those goals for the course. She shared another silver lining of the pandemic in becoming more skilled at using technology. She said that while she had some training that she became more skilled at using technology just by practicing using it.

Anthony shared that for students that they found the online learning during the pandemic an opportunity for degree completion, though he felt it was not for everyone, he said it may afford a little more flexibility in how courses are scheduled to accommodate students. When asked about institutional emergency readiness during the pandemic, Anthony said, "It showed us we weren't ready. And I think that was like this mad rush to get everything online right" (Anthony, personal communication, February 21, 2022). He said that he thought there may be some more planning going on around how to make these sudden transitions. He talked about the institutional level and what was learned. He said,

It taught us the things that we need to be more ready, we didn't think we could generate those in a short amount of time, but we actually did. And so gathering the resources and like changing our paper processes to fully electronic processes, these are things that we

never thought we could do. At least not in the timeline that we had to do it in, but it became a reality. (Anthony, personal communication, February 21, 2022).

He said that while it was frustrating, “it also forced us to do really good things as an institution to move us more forward in terms of efficient processes for a lot of the paperwork that has to happen on campus” (Anthony, personal communication, February 21, 2022).

Daniel talked about an increase in online teaching and learning opportunities as silver linings of the pandemic. He talked about knowing there would be more online teaching eventually. He said that while

It was a slow burn moving in that direction, I think we’ve done a fast burn. We’ve got a lot more people that are comfortable with it now. The pendulum is going to start swinging the other way, but I would say that, certainly in my department, I mentioned these core classes that we have 10 sections of, there will always be at least one online section of those from now on. (Daniel, personal communication, January 24, 2022).

He said that he thought that we would see more flexibility in how courses were delivered and mentioned the hyflex modality that enables faculty to teach in person and students online at the same time accommodating those students that are not or cannot be in the classroom.

Similarly, Robert described the pandemic as opening a lot of people's eyes in education as to what can be done. He mentioned he thought it was right to question how we move forward after the pandemic.

While Christina had unfortunately experienced some physical problems due to probable ergonomics of her home workstation, she went through online teaching training in January, 2021 and with information she gained about ergonomics, set up her workspace differently. A silver

lining can be found in the workspace ergonomics information that Christina now incorporates into her courses.

Sarah shared that the pandemic, in the first couple months was very hard for her as an extrovert with her desire to spend time talking with people. However, she shared that a silver lining for her was that she discovered she was much more productive when not distracted by her desire to talk to people all of the time. She said, “So it affected my life first negatively, and then really positively when it came to work” (Sarah, personal communication, November 9, 2021). Sarah also mentioned that she found an uptick in students’ skills over the past year. Sarah attributed that to them getting more exposure to new information literacy, more tools, and more videos they had developed for the online environment.

Opposite of extrovert Sarah, Olivia shared that the COVID-19 pandemic remote teaching was good for her as an introvert and also in not having to commute to work. She mentioned that not having to walk across campus with a problem with her foot as an advantage of remote teaching.

Grace spoke about what was learned from the pandemic in regard to flexibility and engagements that don’t necessarily have to be face-to-face. Grace said,

It also really highlighted to me like a lot of things don't have to be in person. Like all these meetings don't have to be in person ... again I would much rather be in the classroom and my teaching be in-person, but it also sort of showed that we didn't really need to be doing a lot of this stuff in person in the same way. And before this pandemic people were not willing to be flexible about it, maybe other people who had other needs and whatnot, and I think the pandemic has taught us a lot of lessons about that. (Grace, personal communication, February 21, 2022).

Social Justice

Participants spoke about remote teaching and learning as a social justice issue and as a subtheme to the silver lining theme. Robert and Sarah spoke about students with families and jobs. Robert said, “I think that when you have faculty that want to teach synchronously online it provides students with more options” (Robert, personal communication, January 11, 2022).

Robert described students saying that they did not want to go back to class. He said they cited reasons such taking classes in the evening, having kids, a full-time job, having a 30-minute drive to class, having to leave their job, having to find daycare, their kids not getting a home-cooked meal, and not being able to put their kids to bed at night. Robert said,

I feel like there is there perhaps could be an equity issue there as well, we'll see you know I'm not in a position to make waves I just listened to what people have to say and those people are my students. (Robert, personal communication, January 11, 2022).

Robert also shared a conversation that he had with a corporate colleague who said about remote work that emerged during the beginning pandemic. He shared that he said that the genie is out of the bottle now. When Robert asked what he meant, he stated that we are not going back to traditional nine to five ever again, at least not for his organization. Robert shared that solidified his viewpoint of the positive attributes of remote teaching and learning. He said, “I think the pandemic opened a lot of people's eyes in education as to what can be done” (Robert, personal communication, February 17, 2022).

Speaking about asynchronous teaching rather than synchronous teaching like Robert, Sarah described students' comments about online teaching and learning as a silver lining of the pandemic. She said, because she teaches Health Sciences that she mostly works with more advanced students, juniors and seniors, and people who are very dedicated. She said,

You know they work their rears off to get into like the nursing program and you know a lot of these highly impact highly impacted programs. You know my students have expressed to me that being able to do it online, especially asynchronously is a lifesaver right because they have to work a full-time job go to school, provide care for family.

(Sarah, personal communication, November 9, 2021).

Sarah described having been there in her undergraduate and graduate programs. She stated that if she could have taken her classes in an asynchronous format, it would have saved her so much time and stress. She said, “I probably could afford to eat real food for like three months, out of the year, which would have been amazing” (Sarah, personal communication, November 9, 2021).

Linda also shared comments about social justice. She stated that she felt “a lot of education comes down to social justice” (Linda, personal communication, January 21, 2022). Two of social justice issues she described were in equity issues in terms of access. Internet access and distance to travel to campus, not only for students but for teachers as well were issues she described. Further, she described a way to look at education through the DEI (diversity, equity, inclusion) lens to include not only race, culture, but also socio-economic status, rural versus urban status, and age. She said that she thought “we need to keep constantly reminding people that that’s a bigger umbrella” (Linda, personal communication, February 17, 2022).

Rosana also described social justice issues as silver linings. She described some of her feelings about online teaching during the pandemic in that it addressed diversity, equity, and inclusion issues. She said in her opinion, that the online version of teaching created an environment where introverts thrived and for some it helped people with their schedules around work and made it easier for them to manage. Rosana also described the online teaching

environment during the pandemic as helping those people with health conditions who did not want to be in person. She also shared her thoughts that online teaching and learning was a way to help those that don't have the money to commute every day. Rosana talked about helping to improve the environment with lessening the amount of people commuting every day. She shared if the university could capitalize on their training investment by increasing online course offerings going forward.

Social justice for students with disabilities was described as an issue by Sarah. Sarah mentioned that the opportunity to teach online during the pandemic really gave her a chance to look at her pedagogical approach to students with disabilities and how it was brought to her attention how much easier for students with disabilities to work in the online environment. She said that it helped her understand ways that she could improve her teaching both online and in-person to be more inclusive and ensure that those students who maybe she was not aware of before were being left out, are no longer left out.

Outlier Data and Findings

There were two outlier experiences mentioned by two participants that were noteworthy and perhaps could be the subject of future research studies.

Student Clubs - Loss of Continuity and Community Engagement

One participant, Daniel, spoke about student clubs and what was lost by the inability for students to be on campus during the COVID-19 pandemic. Daniel shared a concern about the loss of continuity, community engagement and other kinds of things that coordinate with student clubs where they collaborate across colleges and do things like hackathons and other things. His concern was the loss of institutional knowledge where these clubs have been paused for a couple

years now and have been “completely hollowed out not. We are basically going to be starting from scratch” (Daniel, personal communication, January 24, 2022).

Instructor Vulnerability

One participant, Olivia, spoke about instructor vulnerability. Olivia shared concerns about instructor vulnerability when students were learning from home with other family members present in the background watching or listening. This meant her larger (non-student) audience may take comments or jokes that she would normally feel comfortable making in-person out of context. This, she realized, left her more vulnerable to a lot more critique.

Research Question Responses

This section provides discussion about the central research question and four sub questions including narrative responses to each question acquired during data collection. A description of themes associated with each research question are also described in this section along with supporting direct quotations.

Central Research Question

What were faculty members’ experiences with implementing instructional technology tools and changing instructional practices during the COVID-19 pandemic? Four main themes emerged from in-depth analysis of interviews, artifacts collected, and focus group discussions. Those four themes were: (a) teaching experience, (b) student performance, (c) workload, health, and personal responsibilities, and (d) silver linings. Participants varied in the descriptions of their experiences and acknowledged factors that enabled or inhibited their success with emergency remote teaching during the pandemic. However, all participants shared lessons learned or silver linings at some level from these experiences. Rosana who had not taught online before the pandemic stated,

You know people have talked a lot about what they've missed and what they have lost in teaching or learning and I think of it the other way, of all that we gained. It was just a different type of education, but it doesn't mean it's any better or worse or any less than what it was before. (Rosana, personal communication, January 19, 2022).

When asked about emergency readiness at the institutional level, Anthony stated,

It taught us the things that we need to be more ready, we didn't think we could generate those in a short amount of time, but we actually did. And so gathering the resources and like changing our paper processes to fully electronic processes, these are things that we never thought we could do. At least not in the timeline that we had to do it in, but it became a reality. (Anthony, personal communication, February 21, 2022).

Robert described the pandemic as opening a lot of people's eyes in education as to what can be done. Daniel talked about an increase in online teaching and learning opportunities as silver linings of the pandemic. He talked about knowing there would be more online teaching eventually. He said that while “It was a slow burn moving in that direction, I think we’ve done a fast burn. We’ve got a lot more people that are comfortable with it now” (Daniel, personal communication, January 24, 2022). Sarah mentioned that the opportunity to teach online during the pandemic really gave her a chance to look at her pedagogical approach to students with disabilities and how it was brought to her attention how much easier for students with disabilities to work in the online environment. She said that it helped her understand ways that she could improve her teaching both online and in-person to be more inclusive and ensure that those students who maybe she was not aware of before were being left out, are no longer left out.

Sub Question One

How do faculty describe their level of mastery of online instructional technology tools prior to and during the pandemic? When analyzing the data, a major theme that emerged was participants' prior teaching experience. Faculty that had taught online described an easier transition of their face-to-face classes to online during the pandemic. Eight participants, Emily, Linda, Robert, Rebecca, Sarah, Daniel, Andrew, and Olivia all described previous experience teaching online. They all described their prior experience as helping with the transition to the emergency remote teaching, although most described some challenges remained. Emily had significant experience with Canvas and distance education both at this university and at another local college where she taught. Emily did not find the transition of her face-to-face classes to an online format to be difficult. Since she had previously been leveraging Canvas in her classes, Emily described the transition for her students to be a fairly easy transition. Daniel shared that he had taught online classes for four years before the shift to online during the pandemic so he was familiar with Zoom and Canvas and other instructional technology necessary to teach online. Five participants, Rosana, Christina, Grace, Anna, and Anthony shared they had no prior experience teaching online. Teaching online was described as a big change for them. However, the opportunity to learn a new teaching modality, and the advantages and value of online teaching were described as being discovered by participants, even if it was not a preferred teaching modality for all of them.

Training and technology also emerged as a theme as well in regard to questions related to their mastery of online instructional technology tools. Some participants expressed sincere satisfaction with the training and technology provided, while others felt that the training was

overwhelming. Rebecca said that she thought that this university provides a lot of great training. She said that she thought that the campus technology team was the best. She said,

They should win an award of some kind because there's no place I can go on campus where you walk in and there is a feeling of we will meet you where you're at ... and how can I support you. (Rebecca, personal communication, November 30, 2021).

Olivia, Rebecca, and Sarah also all shared about an on-campus online teaching training opportunity and while they all agreed that it offered a lot of information, they also shared that they thought that it was overwhelming.

When asked questions related to mastery of online technology tools, some participants described having to purchase their own new technology and others described satisfaction with the campus technology teams in providing software and hardware to the campus. Some of these factors were described as being related to faculty status as full-time tenured faculty or adjunct lecturers. Robert said he felt that technology available to him was great. He shared that he enjoyed the level of support that he received. Andrew, Olivia and Rebecca said they had to go buy a new laptop. Rebecca said that she had to go buy a new laptop because she couldn't use Zoom, everything was slow. She said, "I am a lecturer, so I don't get very good technology, so I've always used my own" (Rebecca, personal communication, November 30, 2021).

Sub Question Two

How do faculty members describe their pedagogical (andragogical) practices prior to and during the pandemic? Participants described their teaching style preferences when asked questions relating to their pedagogical (andragogical) prior to and during the pandemic. Most participants shared their opinions of the benefits of face-to-face instruction. However participants varied in their description of their preferred online teaching modality. Some of these variations

were attributed to course topic and what participants felt the was the best modality. Some preferred a mostly asynchronous course set up with optional Zoom office hours and some preferred completely synchronous Zoom interactions with their students. Sarah said she enjoyed an asynchronous teaching modality, however her teaching style was dependent upon the preference of the faculty member who invited her to teach in their course. Other than optional Zoom sessions, Rebecca shared her opinion that asynchronous online teaching was the most effective way to teach, especially during the pandemic with large class enrollments. She mentioned previously recorded lectures, in short segments, and discussion boards as being quite an effective asynchronous teaching and learning modality. Rosana described a preference for synchronous online teaching as opposed to asynchronous. She said she tried to set up a couple modules but shared she did not care for it. Andrew, in contrast, shared was previously not sold on online teaching. He shared that he was looking forward to being back in the classroom to help those students who were unsuccessful in the online environment. However, he did speak about some particular success in the online environment and had previously spoke about some students thriving in the online environment. Emily shared that she had a lot of experience with online teaching. She said that there are all kinds of reasons for teaching synchronously and/or asynchronously. She said that she felt there was just as much value with online teaching as in-person.

Student performance emerged as a major theme as well with many participants describing a decrease in student engagement. Eight participants, Daniel, Andrew, Rosana, Robert, Rebecca, Olivia, Linda, and Christina, described challenges with teaching with student cameras off. Robert said,

One of the things that I found that to be an issue, though, was the lack of video. I couldn't see my students, you know the majority of communication happens with nonverbal so, you know, I can gauge how they're feeling, whether or not they're interested or if they care. I was able to do that prior to the pandemic, you know. (Robert, personal communication, January 11, 2022).

Participants all shared silver linings of the pandemic in that some of the new online teaching modalities would be beneficial to incorporate going forward altogether or in combination with face-to-face on campus teaching.

Sub Question Three

How do faculty describe the verbal persuasion and vicarious experiences they had with colleagues, administrators, and others regarding their use of online instructional technology tools? Participants described their teaching experience and sub-topics of preferred teaching styles, campus culture, and training as major themes when asked questions that related to verbal persuasion and vicarious experiences with both colleagues and administrators. When sharing about campus culture, some participants described the campus as embracing face-to-face teaching and not being as supportive of online teaching. There were descriptions shared by participants about a campus culture that was more supportive of synchronous versus asynchronous online teaching. A lack of support for online teaching was described as part of the university culture by Olivia, Rebecca, Sarah, Andrew and Anthony. Rebecca described a special lack of support for teaching asynchronously and described challenges with synchronously online teaching with 40 students, especially 40 students with their cameras off since it was not required according to campus rules. Daniel talked about college policies with regard to online teaching. He said, "You've got some people that are in favor of it, some aren't" (Daniel, personal

communication, January 11, 2022). In contrast, Rosana and Christina stated that the university actually had been encouraging and pushing for more online courses. Some participants described their experiences with helping to train other faculty. There were varied descriptions of training provided with some sharing they were overwhelmed and others sharing they thought it was great. Olivia described the training that was offered over the summer. She said that it provided an incredible amount of amazing resources, however that as a course, it was overwhelming.

Sub Question Four

How do faculty describe their perceived emotional state during the COVID-19 pandemic emergency online remote teaching? Analysis of the data revealed workload as a major theme amongst participants when asking questions relating to their emotional state during the pandemic. Linda shared that the additional metrics that are put on online teaching versus face-to-face teaching is a huge equity issue. She also stated that she felt that during the pandemic that “we just overloaded our classes with everything and were just firing everything at students” (Linda, personal communication, January 21, 2022). The workload of teaching online was described as taking both physical and mental tolls on participants. Christina shared that after Spring of 2020 that she developed neck and shoulder problems. Andrew also described a heavy toll that teaching remotely had taken on him. Robert spoke about the stress caused by people not knowing how to use technology. He used the term “techno stress” (Robert, personal communication, January 11, 2022) as a real condition that is created by people not knowing how to use technology. Some participants described personal responsibilities as adding to their perceived emotional state. Emily described the challenges of working from home with other family members with lack of privacy and working to set boundaries to make it work. Linda said

her mother lives in an assisted living facility and she is very active in caring for her. She stated that this is a very significant point in terms of her choices in the format of teaching she chooses.

Summary

The results and analysis of this study were presented in this chapter. The purpose of this transcendental phenomenological study was to describe the lived experiences of higher education faculty members with implementing online instructional technology tools and changing instructional practices at a public university in the western United States during emergency remote teaching as a result of the COVID-19 pandemic. Thirteen participants took part in this study. The data were gathered through personal interviews, focus group discussion, and documents and artifacts. Through coding interviews, focus group discussion, and documents and artifacts, four themes emerged. The four themes include: (a) teaching experience, (b) student performance, (c) workload, health, and personal responsibilities, and (d) silver linings. Sub themes emerged from the theme of teaching experiences. Those sub themes were: (a) previous online teaching experience, (b) teaching style preferences, (c) campus culture, and (d) training, (e) technology. A sub theme of social justice emerged from the theme of silver linings. Through analysis of the data collected and quotes from participants, the central research question and the four sub questions were addressed. The lived experiences described by higher education faculty members revealed that experience, proper training, a supportive culture with appropriate systems and policies in place were crucial with implementing online instructional technology tools and changing instructional practices during emergency remote teaching. While the COVID-19 pandemic presented challenges for participants in a variety of ways such as with student performance, increased workload, teaching style preference issues, health, and personal responsibilities, there were silver linings that emerged such as information gained addressing

institutional emergency readiness factors, new skillsets attained, social justice solutions realized such as ways to serve students with disabilities more effectively, and solutions to other diversity, equity, and inclusion issues.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this transcendental phenomenological study was to describe the lived experiences of higher education faculty members with implementing online instructional technology tools and changing instructional practices at a public university in the western United States during emergency remote teaching as a result of the COVID-19 pandemic. This chapter presents the overview, discussion, interpretation of findings, and summary of thematic findings. Based on the findings of the study, implications for policy, implications for practice, and theoretical and empirical implications are then discussed. Finally, limitations and delimitations, and recommendations for future research are addressed.

Discussion

Through a phenomenological study, the essence of the experiences of 13 faculty who had transitioned to emergency remote online teaching during the COVID-19 pandemic were uncovered. Of the 13 participants, there were four males and nine females. Six participants described themselves as Caucasian. One of each of the remaining seven participants described themselves as Native American, Filipina-American, Asian-Taiwanese, European, mixed-race, Argentinian-Irish-Canadian, and Latina. Three participants were in their 30's, five participants were in their 40's, four participants were in their 50's and one participant was in their 60's. To focus on participants' experiences, a transcendental research method was chosen. The findings of the lived experiences of higher education faculty members with implementing online instructional technology tools and changing instructional practices at a public university in the western United States as a result of the COVID-19 pandemic help contribute to the general knowledge base regarding emergency remote online teaching. Bandura's (1977) self-efficacy

theory guided this study. In addition, the Technology Pedagogy Content Knowledge (TPACK) framework (Koehler & Mishra, 2008) guided by andragogical principles (Knowles, 1970) served as underpinnings for this study.

Interpretation of Findings

The purpose of this transcendental phenomenological study was to describe the lived experiences of higher education faculty members with implementing online instructional technology tools and changing instructional practices at a public university in the western United States during emergency remote teaching as a result of the COVID-19 pandemic. Data were collected through individual interviews, collection of documents and artifacts, and focus group discussions. Data were analyzed through coding and four themes were identified and are interpreted and supported below including implications for policy or practice and theoretical and empirical implications.

Summary of Thematic Findings

The participants in this study were generous with their time and very open to describe their personal lived experiences with technology tools and changing instructional practices during the COVID-19 pandemic. This allowed me to collect rich, thick data regarding this phenomenon. Participants were very candid in their descriptions and seemed eager to share their experiences to help faculty and students alike going forward in the event of another situation that requires emergency remote teaching and learning, and to share lessons learned in general about online teaching to improve teaching and learning experiences overall. The four themes identified were: (a) teaching experience, (b) student performance, (c) workload, health, and personal responsibilities, and (d) silver linings. Sub themes emerged from the theme of teaching experiences. Those sub themes were: (a) previous online teaching experience, (b) teaching style

preferences, (c) campus culture, and (d) training, (e) technology. A sub theme of social justice emerged from the theme of silver linings. Interpretations derived from the data collected follows.

Previous Online Teaching Experience. Participants who had previous experience with teaching online described an easier transition of their face-to-face classes to online during the pandemic. Eight participants described their prior experience as helping with the transition to the emergency remote teaching, although most described some challenges remained. Self-efficacy with implementing online teaching tools and instructional practices were reported to be higher with most participants who had prior experience teaching online. These mastery experiences related to their past performance accomplishments with online teaching were confirmed as the most impactful of the four sources of self-efficacy (Bandura, 1977; Morris et al., 2017; Usher & Pajares, 2008). Teaching online was described by five participants as a big change for them. However, a positive aspect was described by them as opportunity to learn a new teaching modality. They described advantages and value of online teaching as being discovered, even if it was not a preferred teaching modality for all of them.

Teaching Style Preferences

Most participants shared their opinions of the benefits of face-to-face instruction. Most, but not all, were eager to get back to campus and acknowledged benefits of hybrid teaching and retaining more online presence. Participants varied in their description of their preferred online teaching modality. Some of these variations were attributed to course topic and what participants felt the was the best modality. This reflects the participants' use of the TPACK theory. The TPACK theory emphasizes how the connections among instructors' understanding of content, pedagogy, and technology interact with one another to produce effective teaching (Koehler et al., 2013; Tafazoli, 2021). Some preferred a mostly asynchronous course set up with optional Zoom

office hours and some preferred completely synchronous Zoom interactions with their students. Emily shared that she had a lot of experience with online teaching. She said that there are all kinds of reasons for teaching synchronously and/or asynchronously. She also said that she felt there was just as much value with online teaching as in-person.

Campus Culture

Typically, verbal persuasion provided by colleagues, administrators, or professional development trainers, “is positive endorsement of a teacher’s abilities or an instructional strategy” (Barton & Dexter, 2019, p. 91). When sharing about campus culture, some participants described the campus as embracing face-to-face teaching and not being as supportive of online teaching, while others reported that more online courses were encouraged by their leadership. Participants described differences in the support of online teaching at different levels of leadership with some departmental leaders not favoring it. Previous research has revealed the importance of institutional support and planning in improving faculty members’ online teaching experience (Zheng et al., 2018). Also some participants described campus culture that was more supportive of synchronous versus asynchronous online teaching. In some of these cases, verbal persuasion by administrators and colleagues provided a negative impact towards some participants’ instructional strategies. Researchers have determined that institutional support enhances self-efficacy through psychological empowerment (Darling-Hammond & Hyler, 2020; Zheng et al., 2018). Problems with synchronous online teaching were specially noted by some participants with larger class sizes. However, with regard to campus culture and online teaching, Daniel said, “You’ve got some people that are in favor of it, some aren’t” (Daniel, personal communication, January 11, 2022).

Training

Participants expressed sincere satisfaction with the training provided, while some felt that it was overwhelming. Rebecca said that she thought that this university provides a lot of great training. Previous literature exposed that institutional support in the form of training and encouragement was reported to have a big impact on teacher's self-efficacy with online teaching technologies (Darling-Hammond & Hyler, 2020; Zheng et al., 2018). Vicarious experiences through formal and informal avenues of training served to increase participants' self-efficacy with online teaching instructional tools and practices. In educational settings, vicarious experiences "occur when professors see colleagues complete similar target instructional tasks, such as observing a model lesson in professional development or a colleague's live instruction" (Barton & Dexter, 2019, pp. 91-92). A main factor in successful institutional readiness during disasters and crises was previously cited in the literature as having the information technology support needed to properly support the faculty (Baytiyeh, 2018). It has also been acknowledged in the literature that technical teams and instructional designers are needed to assist faculty with their online instructional technology tools (Baytiyeh, 2018). Three participants shared about an on-campus online teaching training opportunity and while they all agreed that it offered a lot of information, they also shared that they thought that it was overwhelming. Participants discussed the value in offering online teaching and learning training to all faculty and students.

Technology

Participants described their level of satisfaction with the campus technology teams in providing software and/or hardware to the campus. Some participants described having to buy their own technology out of pocket. Four participants described having to purchase their own new laptops and three participants described having to buy other technology hardware as well

such as microphones, cameras, and ring lights. Faculty status as full-time tenured faculty or adjunct lecturers was described as an indicator of which faculty purchased their own hardware. Connectivity issues were mentioned as problem for some faculty and students. Daniel mentioned that the university offered hotspots to help those issues. Anthony mentioned getting a hotspot from the campus technology team proactively just in case he had trouble with connectivity since he was moving and the status of his connectivity at his new place was unknown. Robert shared that he thought the technology available was great along with the level of support received. Participants described the software available to them. Participants described Zoom as working well for most of them, however, one participant described synchronous Zoom sessions as not working well for her large class sizes. Rebecca described a new application to her, Microsoft Sway as one of the biggest gifts technology-wise that the campus technology team offered her to solve a problem with doing group presentations. Andrew described Camtasia working well for him and all but one participant described liking the learning management system, Canvas, that the campus implemented. That participant was used to using Blackboard at another institution and preferred it. Two participants described challenges with the Canvas grading function. Three participants described challenges with creating and posting videos, however described the appreciation for the assistance that they received from the campus technology teams. The literature previously revealed factors that exist and influence faculty members' perception of the effectiveness of online teaching and university's technological readiness was among those factors (Bao, 2020; Castro & Tumibay, 2019; Dhillia, 2016; Englund et al., 2017; Tartavulea et al., 2020; Zheng et al., 2018).

Student Performance

Many participants described a decrease in student engagement. This was in alignment with previous literature that stated that faculty reported students not showing up to synchronous sessions, and many times if they did attend, many students rarely contributed to the conversation (Bao, 2020; Moorhouse, 2020). Eight participants described challenges with teaching with student cameras off. However, while challenging, an understanding of reasons for the policy of not requiring students to turn on their camera was echoed by participants, such as lack of appropriate internet connections, amongst other equity issues. Previous literature addressed technology issues for students that were particularly problematic when students could not seek out other solutions outside the house and most technology stores were closed (Gillis & Krull, 2020). Some students were reported by participants as flourishing in the online forum while others described a significant increase in DFW rates both in the Spring of 2020 at the beginning of the pandemic and during subsequent full semesters. Iglesias-Pradas et al. (2021) stated, “Higher education instructors’ knowledge, skills, and attitudes toward technology; their qualification; and institutional, organizational, and administrative factors, together with instructors’ and students’ equipment and digital skills – do have an effect on student outcomes” (p. 13).

Workload, Health, and Personal Responsibilities

Most participants described a substantial increase in both teacher and student workload during the pandemic. A review of previous literature exposed that workload-related factors were stated as contributing factors to faculty members’ perceptions about online teaching (Dhillal, 2016). One participant posited additional metrics that are put on online teaching versus face-to-face teaching as a huge equity issue and stated that “We just overloaded our classes with

everything and were just firing everything at students” (Linda, personal communication, January, 21, 2022). Increased workload of teaching online was described as taking both physical and mental tolls on participants. One participant needed to take a medical leave of absence after developing neck and shoulder problems due to lack of an ergonomic home workstation. One participant spoke about the emotional toll caused by teaching during the pandemic and a lack of institutional support. The literature previously exposed that institutional support enhances self-efficacy through psychological empowerment (Darling-Hammond & Hylar, 2020; Zheng et al., 2018). Robert spoke about the stress caused by people not knowing how to use technology. He used the term “techno stress” (Robert, personal communication, January 11, 2022) as a real condition that is created by people not knowing how to use technology. Some participants described personal responsibilities as adding to their perceived emotional state. Descriptions of working from home with other family members and lack of privacy and working to set boundaries to make it work and caring for parents were among personal responsibilities described.

Silver Linings

Participants all shared silver linings of the pandemic in that some of the new online teaching modalities would be beneficial to incorporate going forward altogether or in combination with face-to-face on campus teaching from a variety of perspectives. Emergency disaster readiness where remote teaching and learning is required was one aspect shared in embracing some form of online presence in courses. Also providing options for students who miss a class or who could leverage online content for review, providing flexibility for students and faculty with other jobs or family obligations, and accommodating both students and faculty with long commutes. One participant shared that the opportunity to teach online during the

pandemic really provided a chance to review the pedagogical approach to students with disabilities and a silver lining was found in that it was much easier for students with disabilities to work in the online environment. These descriptions of silver linings of the pandemic reflect similar previous opinions shared on the subject in the literature. Savard et al. (2020) and Tartavulea et al. (2020) posited that in fact, silver linings may emerge from the COVID-19 pandemic. With regard to embracing more online course offerings, Daniel said, “It was a slow burn moving in that direction, I think we’ve done a fast burn. We’ve got a lot more people that are comfortable with it now” (Daniel, personal communication, January 24, 2022). Similar to Daniels assessment, Quintana (2020) suggested that the COVID-19 pandemic has hastened faculty’s transition to online teaching and Tartavulea et al. (2020) suggested that the continued use of some online tools may be one of the silver linings.

Implications for Policy or Practice

The findings of this study exposed how faculty experienced teaching with technology tools and changing instructional practices during the COVID-19 pandemic. Following are implications for policy and practice. University administrators, instructional designers, faculty, and students may use the results of this study.

Implications for Policy

The global impact of the COVID-19 pandemic caused most universities in the United States and many around the world to close. This required a shift from face-to-face instruction to online teaching and hybrid teaching modalities. It is imperative that higher education institutions be prepared for future situations that require emergency remote teaching. Preparation should include all levels of campus leadership promoting a culture that embraces remote teaching and learning options, requiring appropriate infrastructure and teaching and learning systems be in place that facilitate transitions to the online space in a more seamless experience for both faculty and students. This is in

alignment with the existing literature that exposed that institutional readiness plays a large part in resilient higher education institutions when man-made and natural disasters and crises occur in adapting to be able to continue teaching (Ayebi-Arthur, 2017). Higher education should strive to ensure that the online teaching and learning environments promote student success equal to face-to-face classes for not only emergency remote teaching instances but to address social justice issues for both faculty and students who experience challenges with coming to campus to teach and learn.

Implications for Practice

Both students and faculty should be trained in online teaching and learning to prepare them for an event that requires emergency remote teaching. As part of onboarding and faculty skill development, completion of an online teaching module should be offered. Further, as part of students' first-year experience, a similar course teaching students the basics of online learning should be offered. Students should be made aware of the differences in modalities of online learning, such as, synchronous, asynchronous and hybrid courses and the time commitment and requirements of each modality.

Higher education administrators should be knowledgeable about online teaching and learning environments. They may help to promote mastery of teaching and learning in online environments so that if an event that requires emergency remote teaching occurs, negative effects on faculty and on student success can be mitigated. As part of an emergency readiness initiative, higher education administrators should consider promoting the implementation, at some level, of dual course offerings, both online and face-to-face, possibly leveraging local and state-wide resources. Such offerings may serve as social justice remedies for those, both faculty and students, who have challenges with participating in face-to-face environments due to disability, distance to campus, socio-economic reasons, family and work obligations, and other challenges. Further, such offerings could be used as a means for students who miss classes or as study

materials. Higher education administrators should consider implementing programs to provide faculty with the necessary technology tools, both hardware and software, to teach effectively whether they are full-time tenured faculty or part-time adjunct lecturers in both face-to-face and online teaching and learning environments.

Technical teams and instructional designers are needed to assist faculty with their online instructional technology tools (Baytiyeh, 2018). Instructional designers should be well-versed in the differences in face-to-face environments and the online environment. They should be knowledgeable about what teaching and learning modality is best for individual course topics. A main factor in successful institutional readiness during disasters and crises was cited as having the information technology support needed to properly support the faculty (Baytiyeh, 2018). Class size should be considered when designing an online course. For example, with a small class of 10 students, synchronous class meetings may be more realistic to manage than a class size of 60 students. Higher education administrators should consider acknowledging the value of a variety of teaching modalities, asynchronous, synchronous, and hybrid teaching. Asynchronous teaching and learning may be a viable teaching modality in the event of emergency remote teaching, especially where large class sizes may already be enrolled.

Theoretical Implications

The results from this study fill a gap in the literature by addressing the problem of faculty members' experiences with online instructional technology tools during the rushed transition to emergency remote teaching due to the COVID-19 pandemic through the theoretical lens of self-efficacy guided by the TPACK framework and andragogical principles. The shared lived experiences of 13 participants reinforced previous research regarding Bandura's (1977) theory of self-efficacy in conjunction with the theoretical underpinnings of this study, the TPACK

framework (Koehler & Mishra, 2008), and the principles of adult learning, or andragogy (Knowles, 1970). The theory of self-efficacy connects an individual's belief in their ability to perform the necessary behaviors to produce specific outcomes (Bandura, 1977). The theory of self-efficacy was the lens through which faculty members' beliefs were explored of their ability or inability to effectively use the necessary online instructional technology tools and modified instructional practices to remotely teach during the COVID-19 pandemic.

The Technology Pedagogy Content Knowledge (TPACK) framework, designed by Koehler and Mishra (2008), and the principles of adult learning, or andragogy, by Malcolm Knowles (1970) provided the theoretical underpinnings of this study. The technological pedagogical content knowledge (TPACK) theory has informed technology integration in teaching (Koehler et al., 2013; Pareto & Willermark, 2019; Tafazoli, 2021) and was developed to explain the knowledge that instructors need to teach their students a subject, teach effectively, and use technology (Koehler et al., 2013; Pareto & Willermark, 2019; Tafazoli, 2021). Knowles (1980) suggested that the purpose of adult education should be self-actualization, and while formal learning should be central to the educational process, faculty must pay particular attention to students' emotional, psychological, and intellectual development, as well. As a result of his efforts, the education of adults (andragogy) is perceived as different from the education of children (pedagogy) (Sharifi et al., 2017). Conrath (1971) suggested that "Andragogy is the art and science of helping adults learn" (p. 81).

Participants with previous online teaching experience reported higher self-efficacy with online instructional technology tools and described an easier transition of their face-to-face classes to online during the pandemic, however, they reported challenges were still present, such as student engagement issues. The level of their mastery of online technology tools and online

instructional practices were cited as factors aiding their success. Participants' existing understanding of how content, pedagogy (andragogy), and technology interact with one another to produce effective teaching added to their level of ease in the transition to online. (Koehler et al., 2013; Tafazoli, 2021).

Empirical Implications

Teaching online was described as a big change for participants who had not taught online before. However, the opportunity to learn a new teaching modality, and the advantages and value of online teaching were described as being discovered by those participants who had previously lacked experience, and even if it was not a preferred teaching modality for all of them.

Participants' descriptions of their self-efficacy with implementing online technology tools and changing instructional practices provided insights into how they were affected, how student performance was affected, and for best practices to be prepared for future situations that require emergency remote teaching (Bao, 2020; Tartavulea et al., 2020). Participants confirmed that there were silver linings that emerged from teaching during the COVID-19 pandemic as was suggested by Tartavulea et al. (2020) and Savard et al. (2020). Participants agreed that continued use of some online tools and practices and accessibility to resources were among those silver linings from the pandemic (Tartavulea et al., 2020).

Limitations and Delimitations

This study has limitations and delimitations by way of purposeful decisions to set boundaries of the study. The first delimitation of this study was that participants were from one research site, a western United States public university. For convenience and control of the criterion sample of participants, research was limited to this one site. Results may be different at other institutions or if multiple institutions were included in the study and may add depth and

diversity to the study. Another delimitation of this study was that participants were required to have transitioned a face-to-face course to online emergency remote teaching. More could be gained to study the experiences of faculty who continued with courses that were already online during the COVID-19 pandemic. Additionally, this study explored faculty members' experiences and more could be gained from studying student experiences during the transition to remote learning during the COVID-19 Pandemic. The findings may be altered in different locations in the country at different sized universities including private universities, community colleges, and universities located in areas with different demographics.

A limitation of this study exists in participants' preconceived ideas and opinions about the individual interview questions and the focus group questions asked. It is difficult to ascertain whether participants used the process of bracketing that I used, which in turn could alter the validity of their description of their lived experiences (Moustakas, 1994). A limitation of this study exists in that few studies on the lived experiences of higher education faculty members with implementing online instructional technology tools and changing instructional practices during emergency remote teaching as a result of the COVID-19 pandemic existed at the time of this study. The findings should be considered preliminary as this is an early study of the topic. To validate the results and to fully understand the lived experiences of higher education faculty members with implementing online instructional technology tools and changing instructional practices during emergency remote teaching as a result of the COVID-19 pandemic, additional research is recommended.

Recommendations for Future Research

This study was limited to higher education faculty members who had transitioned at least one face-to-face class to an emergency remote online class at a western United States public

university. The first recommendation for future research is to conduct a phenomenological research study of higher education faculty members' experience with implementing instructional technology tools and changing instructional practices during the COVID-19 pandemic at other public or private four-year universities across the United States. Similarly, this study could be replicated and expanded to other groups such as faculty members from non-four-year education institutions such as community colleges and trade schools. Future research could also include participants who were teaching fully online prior to and during the pandemic to understand how the COVID-19 pandemic affected them as well as their students. Future research could also include a phenomenological research study into the effects of the losses from student clubs not being able to meet during the COVID-19 pandemic. As Daniel mentioned in this study, student clubs have been paused for a couple years now. There has been a loss of continuity, community engagement, and collaboration across colleges. It would be interesting to study the obvious loss of institutional knowledge and the effects of having "to start from scratch" (Daniel, personal communication, January 24, 2022). Additionally, the topic of instructor vulnerability during the pandemic would merit study. As Olivia mentioned in this study, when students were learning from home with other family members present in the background watching or listening, this left her more vulnerable to critique. Finally, and maybe most importantly, future research could also expand to students to gain a deeper understanding of how emergency remote learning affected them during the pandemic.

Conclusion

The purpose of this transcendental phenomenological study was to describe the lived experiences of higher education faculty members with implementing online instructional technology tools and changing instructional practices at a university in the western United States

during emergency remote teaching as a result of the COVID-19 pandemic. Thirteen participants took part in this study. Four themes emerged from analysis of the data collected: (a) teaching experience, (b) student performance, (c) workload, health, and personal responsibilities, and (d) silver linings. Sub themes emerged from the theme of teaching experiences. Those sub themes were: (a) previous online teaching experience, (b) teaching style preferences, (c) campus culture, and (d) training, (e) technology. A sub theme of social justice emerged from the theme of silver linings. Through analysis of the data collected and quotes from participants, the central research question and the four sub questions were addressed. The lived experiences described by higher education faculty members revealed that experience, proper training, a supportive culture with appropriate systems and policies in place were crucial with implementing online instructional technology tools and changing instructional practices during emergency remote teaching. While the COVID-19 pandemic presented challenges for participants in a variety of ways such as with student performance, increased workload, teaching style preference issues, health, and personal responsibilities, there were silver linings that emerged such as information gained addressing institutional emergency readiness factors, new skillsets attained, social justice solutions realized such as ways to serve students with disabilities more effectively, and solutions to other diversity, equity, and inclusions issues.

The theory guiding this study was the theory of self-efficacy as it relates to faculty members' self-efficacy with online instructional technology tools and modified instructional practices. The theory of self-efficacy connects an individual's belief in their ability to perform the necessary behaviors to produce specific outcomes (Bandura, 1977). Additionally, the Technology Pedagogy Content Knowledge (TPACK) framework, designed by Koehler and

Mishra (2008), and the principles of adult learning, or andragogy, by Malcolm Knowles (1970) provided the theoretical underpinnings of this study.

Considering the entire world was caught off guard due to the COVID-19 pandemic, this western United States university, under these most unprecedented circumstances, rallied together to establish a functional virtual university at an impressive speed. Their resilient response was the result of impressive collaboration across the university. Of course, hindsight provides lessons learned. It is imperative that higher education institutions be prepared for future situations that require emergency remote teaching. Institutional readiness plays a large part in resilient higher education institutions when man-made and natural disasters and crises occur in adapting to be able to continue teaching (Ayebi-Arthur, 2017). Preparation should include promotion of a culture that embraces remote teaching and learning options from top administration to departmental leadership, and to faculty and students as well. Having systems in place that are ready to go, both hardware and software, including learning management systems, video production software, collaboration software, cameras, microphones, documents cameras, or laptops facilitating transitions to the online space in a seamless experience for both faculty and students. Higher education should strive to ensure that the online teaching and learning environments promote student success equal to face-to-face classes for not only emergency remote teaching instances but to address social justice issues for both faculty and students who experience challenges with coming to campus to teach and learn. As a method to increase self-efficacy through mastery of online teaching and learning tools and practices, both students and faculty should be trained in online teaching and learning modalities to prepare them for an event that requires emergency remote teaching. As part of onboarding and faculty skill development, completion of online teaching training should be offered. Further, as part of students' first-year

experience, a similar course teaching students the basics of online learning should be offered. Students should be made aware of the differences in modalities of online learning, such as, synchronous, asynchronous and hybrid courses and the time commitment and requirements of each modality.

Similarly, higher education leaders at all levels should be knowledgeable about online teaching and learning environments. They should understand the differences in modalities such as, synchronous, asynchronous and hybrid courses. The idiosyncrasies of each modality should be understood to facilitate the most appropriate and effective modality considering course topic, workload, faculty expertise, time commitment, and class size. They should help to promote a culture of embracing and mastery of teaching and learning in online environments so that if another event that requires emergency remote teaching emerges, negative effects on faculty and on student success can be mitigated. Higher education administrators should consider promoting the implementation, at some level, of dual course offerings, both online and face-to-face, leveraging possibly local and state-wide resources to be prepared for emergency remote teaching events. Such offerings may serve as social justice remedies for those, both faculty and students, who have challenges with participating in face-to-face environments due to disability, distance to campus, socio-economic reasons, family and work obligations, and other challenges. Silver linings emerged from the pandemic. Continued use of some online tools, and practices and accessibility to resources were among those silver linings from the pandemic (Tartavulea et al., 2020). Making use of previously recorded content and the valuable time that was put into it as part of future teaching and learning modalities going forward can serve both faculty and students in positive ways. With regard to an increase in adoption of online teaching and learning, as Daniel mentioned, “It was a slow burn moving in that direction, I think we’ve done a fast burn.

We've got a lot more people that are comfortable with it now" (Daniel, personal communication, January 24, 2022). As Robert mentioned, the pandemic may have opened a lot of people's eyes in education as to what can be done. The genie is out of the bottle now.

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APPENDIX A: IRB APPROVAL FORM

APPLICATION FOR THE USE OF HUMAN RESEARCH PARTICIPANTS

Date: 10-8-2021

IRB #: IRB-FY21-22-156

Title: HIGHER EDUCATION FACULTY MEMBERS' EXPERIENCE WITH IMPLEMENTING INSTRUCTIONAL TECHNOLOGY TOOLS AND CHANGING INSTRUCTIONAL PRACTICES DURING THE COVID-19 PANDEMIC: A QUALITATIVE TRANSCENDENTAL PHENOMENOLOGICAL STUDY

Creation Date: 8-24-2021

End Date:

Status: Approved

Principal Investigator: Susan Collins

Review Board: Research Ethics Office

Sponsor:

Study History

Submission Type Initial	Review Type Limited	Decision Exempt - Limited IRB
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Key Study Contacts

Member Michael Patrick	Role Co-Principal Investigator	Contact mpatrick2@liberty.edu
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Member Susan Collins	Role Principal Investigator	Contact scollins48@liberty.edu
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Member Susan Collins	Role Primary Contact	Contact scollins48@liberty.edu
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APPENDIX B: CONSENT FORM

Higher Education Faculty Members' Experience with Implementing

:

[Redacted]

[Redacted]

[Redacted]

[Redacted]

best practices for the University to meet faculty members' needs for

members' needs for

Liberty University
IRB-FY21-22-156
Approved on 10-7-2021

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tact the researcher's faculty sponsor

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Liberty University
IRB-FY21-22-156
Approved on 10-7-2021



Liberty University
IRB-FY21-22-156
Approved on 10-7-2021

APPENDIX C: DEMOGRAPHIC SURVEY QUESTIONS

1. How would you describe your ethnicity?
2. What is your gender?
3. How long have you taught at this university?
4. What courses did you teach during the Spring, 2020 and Fall, 2020 semesters?
5. Please describe the setting from where you taught during the pandemic.

APPENDIX D: INDIVIDUAL INTERVIEW QUESTION GUIDE

1. Please introduce yourself to me, describing yourself, as if we just met one another.
2. Please describe the courses you taught that were shifted online due to the pandemic.
3. How did you have to change your pedagogical/andragogical practices when your courses were shifted online?
4. Please describe your pedagogical/andragogical beliefs about online teaching.
5. What types of education technology were necessary for you to use to teach your classes (both software and hardware)?
6. What was your prior experience with the education technology that was necessary to teach your classes?
7. How would you describe your self-efficacy with the online teaching experience before and during the pandemic?
8. Was your class integrated with your institution's learning management system (LMS) prior to the pandemic?
9. If your class was not integrated with the LMS prior to the pandemic, was this your first time working with the LMS at your institution?
10. Describe your experience with using video conferencing tools prior to and during the pandemic.
11. How would you describe your interaction with students in your classes prior to and/or during the pandemic?
12. How would you describe your students' performance in your classes?
13. Can you please describe a time, if any, when you were using online instructional technology tools during which you felt that you did not have the skills to use the

- technology tools to achieve the teaching and learning objectives you wished to achieve?
14. Can you please describe a time, if any, when you felt you were effectively using online instructional technology tools?
 15. What types of experiences have you had that helped you master using online instructional technology tools?
 16. Please describe a time, if any, that you had a conversation with a colleague about online teaching.
 17. Please describe a time, that the topic of conversation at a meeting with an administrator, was online teaching.
 18. Please describe a time, if any, that online teaching was the subject of a professional development.
 19. Please describe a time, if any, that you engaged with a colleague while they were teaching online in a similar subject that you teach.
 20. The COVID-19 pandemic caused myriad disruptions in people's lives. Please describe how the pandemic affected your life.
 21. Please describe your feelings at the time that you were asked to transition to online teaching during the COVID-19 Pandemic.
 22. Please describe how you felt about the level of training that you received prior to transitioning your classes online.
 23. Please describe how you felt about the type of technology that was available to you in order for you to teach remotely.
 24. Please describe any technical problems, if any, that you may have encountered, what you did, and how you felt at that time.

25. What else do you think would be important for me to know about teaching online during the COVID-19 pandemic?

APPENDIX E: FOCUS GROUP INTERVIEW QUESTION GUIDE

1. Please introduce yourself to the other participants and tell them what subjects and courses you taught during the pandemic.
2. How would you describe your and your university's cultural views of online teaching before the pandemic?
3. How were decisions made about what classes were going to be taught online before the pandemic?
4. How were decisions made about what classes would be taught online during the pandemic?
5. What type of institutional communication was provided during the shift to emergency online teaching?
6. How do you feel about the role that institutional readiness played in the University's shift to emergency online teaching during the pandemic?
7. What mechanisms were put in place to support you during the shift to emergency online teaching?
8. What do you feel was done well and what could use improvement with the shift to online teaching?
9. Does anyone have anything else to share that is important for me to know about the shift to emergency online teaching during the COVID-19 pandemic?

APPENDIX F: RECRUITMENT EMAIL

Dear Professor:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a Doctor of Philosophy (Ph.D.) degree. The purpose of my research study is to describe the lived experiences of higher education faculty with online instructional technology tools and changing instructional practices during the COVID-19 pandemic's emergency remote teaching. I am writing to invite you to participate in my study.

If you are 18 years of age or older, a higher education faculty member who transitioned from face-to-face course(s) to emergency, remote, online courses during the COVID-19 pandemic, and taught for at least one semester during the pandemic, you meet the selection criteria for this study.

If you are willing to participate, you will be asked to complete a survey, participate in an individual interview, participate in a focus group, provide an artifact or document that represents your experience during emergency, remote teaching online during the COVID-19 pandemic, if available, to be described at the interview, and review and provide feedback to the transcript and study's findings to ensure the accuracy of the information. The individual interviews, the focus group, and providing feedback will be scheduled at a later time and should take approximately one hour to complete each. The survey should take approximately 10 minutes to complete and will be conducted through email. Your name and/or other identifying information will be requested as part of your participation, but the information will remain confidential.

To participate, please respond to this email and a consent form will be sent to you via email. The consent form contains additional information about this research study. You will be asked to electronically sign the form and email it back to me. Once I receive the signed consent form, I will email a survey to you and schedule the interview and focus group meetings.

I am grateful for your consideration to participate in this study. I look forward to working with you and learning about your experience. Please feel free to forward this invitation to any faculty members you know who qualify and might be interested in participating in the study. If you have any questions before choosing to participate in the study, you may contact me at scollins48@liberty.edu.

Sincerely,

Susan T. Collins
Doctoral Candidate

APPENDIX G: REDUCTION OF CODES AND THEMES

Notes from Review of Individual Interview Transcripts, Documents and Artifacts, and Focus Group Transcripts

<i>Teaching Experiences</i>	<i>Workload</i>	<i>Institutional Readiness for Emergency Remote Teaching</i>	<i>Silver Linings</i>	<i>Outliers</i>
Physical set up teaching from home; experiences	Additional metrics that we put on online versus face-to-face - we need to do both	Lack of Modern Online Skills	Takeaways from Teaching During the Pandemic	Open to more critique - family watching, it's being recorded, out of context jokes
Out of Pocket Costs for Online Instruction Tools Purchased by Faculty themselves	In-person/Online - Different workloads	Professional Development Needs	Takeaways from Pandemic (value for students)	Student clubs, loss of institutional knowledge
Challenges with Technology	The workload in the summer training camp was overwhelming for some	Culture of Embracing or lack of Embracing Online Teaching	Shift in Thinking about Online Teaching after Emergency Remote Teaching During the Pandemic	
Administration's view of Faculty needs	Feelings about Training Provided	Prior Experience Teaching Online/Opportunities or Lack thereof to Teach Online	Genie is out of the bottle, we may never go back to 100% face-to-face	<i>Other</i>
Administration's view of student needs	Perceived Differences in Experiences for Tenured Faculty/Lecturers/Adjuncts		Accessibility	Home situation
Perceived Differences in Experiences for Tenured Faculty/Lecturers/Adjuncts	Overloading our classes online effects on faculty workload	<i>Student Engagement</i>	Argument for keeping some online classes or providing more than before	Teaching Style
Self-efficacy with Online Teaching Tools	Volume of email	Online Learning is Way More Work for Student	New online teaching skills	Culture
Campus Technology Team	Class size	Student Performand.Outcomes in the Online Environment		Feelings about going back in person
A time when faculty didn't feel like they had the skills to use technology to achieve their learning outcomes (Subtheme to	Online Teaching During the Pandemic Was an Incredible amount of Work for Faculty	Web cameras off for students	<i>Social Justice</i>	Tech tools used
Time when Faculty felt effective with technology tools.	Differences in face to face to online teaching	Interaction with Students	Social Justice issue, equity for students who don't live near the institution	Communication
Self-efficacy with Online Teaching Tools	Mental health/burnout	Student's frustration/anger/rudeness	Internet connectivity	Going back to campus
Campus Technology Team	Physical health	Faculty missed in person interaction with students	Students with disabilities - opportunities in the online format	There's a difference between using tech and learning through tech - maybe a first year course aimed at teaching students to learn through tech (a similar requirement for onboarding faculty?)
A time when faculty didn't feel like they had the skills to use technology to achieve their learning outcomes	Course load	Not supporting students as much as we could		
Struggle with Grading in Canvas		Cheating/Acacademic integrity		
Feelings about Technology Available		Overloading our classes online and effects on students		
Previous online teaching experience				
Teaching Style - Course topic				
Teaching Style - Asynchronous/Synchronous				

Reduction of Themes and Code Words

Theme 1 - Teaching Experience	Theme 2 - Student Performance	Theme 3 - Workload, Health, & Personal Responsibilities	Theme 4 - Silver Linings
Previous online teaching experience	Rigors of online learning	Workload	Social justice
Teaching style preferences	Interaction with faculty	Spring 2020 rush to remote	Environmental justice
synchronous	Anger	face-to-face vs. online course development	Diversity, equity, inclusion
asynchronous	rude behavior	recording lectures	Students with disabilities
face-to-face	Student engagement	course load	Home/work/school balance
course topic	cameras off	Personal responsibilities	Institutional readiness
Training	disconnected	family	Emergency remote teaching readiness
received/given	thrived	Health	Teacher online training
colleagues	excelled	physical	Student online training
previous training	Academic integrity	mental	
summer camp	cheating		
state-wide training	Technology (Wi-Fi, internet, hardware)		
Technology	Wi-Fi		
challenges	internet		
out of pocket expenses	hardware		
tenured vs. non-tenured	Personal responsibilities		
Class size	family		
Campus culture	work		
Attitudes toward online teaching	Class size		
Attitudes toward synchronous vs. asynchronous online teaching	Grades		
Acknowledgment of increased workload			
Communication			
Tenured/Non-Tenured			
Going back to campus			
Technology training			
Institutional Emergency Readiness			