2020

Online Instructors' Experiences and Adaptations to Transitions Within a Learning Management System

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Walden University
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Abstract

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BA, University of Texas at Arlington, 1996

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Walden University

August 2020

Abstract

Changes in a Learning Management System (LMS) require instructors to learn and adjust, but not much is known about these learning experiences. Framed by Kolb's experiential learning theory, the purpose of this this qualitative case study was to explore and understand how instructors learned and adjusted within the LMS. The research questions addressed how the instructors learned and adjusted when experiencing new functions, updates, or expectations within the LMS and what internal and external factors supported them. Eight instructors were selected through purposeful sampling and then interviewed by phone. The purposeful sampling method ensured that selected participants met the following criteria: (a) must be an online undergraduate instructor and may come from different disciplinary educational backgrounds, (b) who teach or taught online at this specific college for at least 3 years, and (c) who have learned and adjusted within the LMS. The data retrieved from the interviews was analyzed using the thematic analysis approach. The themes included common approaches is support, self-learning, communication, and preparation that aligned well with Kolb's experiential learning theory. Conclusions were based on the analysis of the themes and the results were interpreted. These results could provide organizations and administrators with guidance on how instructors learn and adjust within the LMS. The results could promote social change for the organization and the institution when they invest in creating more online supportive measures, self-learning opportunities, continued communication among the organization, and adopt preparation steps for learning and adjusting within the LMS.

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Dedication

*I can do all this through him who gives me strength (*Philippians 4:13).

This study is dedicated to my Lord and Savior Jesus Christ who gave me the strength to succeed through my challenges and victories.

Acknowledgments

I would like to thank my husband Milton Johns, who prayed for me, supported me throughout this educational journey, and insisted that I finish the race. I am thankful for my daughter, Laurel, who secretly encouraged mommy to study and accomplish her learning goals. I am grateful to Dr. David Falvo who helped set the foundation for this study. I am extremely thankful for the wisdom and support of my committee chair, Dr. Laura Lynn, who always took time out of her busy schedule to “catch up” by phone, text, or email and encouraged me to move forward. I am also thankful to Dr. Katherine Garlough for her support and patience. I thank all of you for having a part in my educational journey.

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Chapter 1: Introduction

Introduction to the Study

An instructor teaches online courses in various disciplinary areas, and may or may not have many levels of teaching experience in a college or university (Richardson, Lewandowski, Fiock & Gentry, 2016; Schmidt, Tschida & Hodge, 2016; Wurdinger & Allison, 2017). Instructors often have to learn and adjust when learning a learning management system (LMS) and not much is known about these learning experiences. The purpose of this qualitative case study was to explore and understand how online instructors learned and adjusted within the LMS. Kolb's (1984) experiential learning theory provided the conceptual framework for this case study. I used purposeful sampling to enlist eight volunteers and collected data from them via phone interviews. The transcription was analyzed and I assigned codes that generated themes (Merriam & Tisdell, 2016; Yin, 2016). I interpreted the results and drew conclusions based on the themes (Miles, Huberman & Saldana, 2014). As technology becomes increasingly essential in the online classroom (Mbuva, 2014; Straumsheim, Jaschik & Lederman, 2015) and LMSs are becoming an integral part in higher learning organizations (Dahlstrom, Brooks, Bichsel, 2014; Walker, Lindner, Murphrey, & Dooley, 2016), understanding how the instructor learns and adjusts within the LMS becomes paramount.

Chapter 1 provides an overview of this qualitative case study. The context and rationale are made clear through the discussion of the background. The need for increased understanding, based on the lack of literature justified the problem statement. The

purpose of this dissertation was to explore and understand how instructors learned and adjusted within the LMS. Providing the necessary research questions helped build the structure for this study. The conceptual framework was based on Kolb's (1984) experiential learning theory. The overview also includes the assumptions, scope and delimitations, limitations, significance, and summary.

Background

Currently, LMSs are nearly universal in today's learning organizations; in fact, 99% of 151 higher learning institutions surveyed, reported having the LMS and having had the LMS in place for the last 10 years (Dahlstrom et al., 2014). Over 17,000 faculty members surveyed, 85% used the LMS, and 56 % say they used it daily (Dahlstrom et al., 2014). Walker et al., (2016) discovered that the LMS could benefit or hinder the quality of teaching depending on the instructor. Although there is a growing demand for the adoption of LMSs, Mouakket and Bettayeb (2015) found there was limited research conducted on the instructors' usage. Hamblin (2015) examined learning experiences that helped instructors learn to teach, while also considering the value of those experiences. All universities using online platforms face challenges in supporting instructor adaptation and optimal utilization of technology within the learning environment (Mbuva, 2014, 2015; Walker et al., 2016). Consequently, this qualitative case study was needed in order to understand how online instructors learned and adjusted within the LMS.

Problem Statement

Instructors often have to learn and adjust when learning the LMS and not much is known about these learning experiences. The manner in which some instructors use the LMS varies; for instance, some instructors use the many features and functions for accessing and posting course content, managing assignments, or course interaction (Dahlstrom et al., 2014). In education, the instructors learning experiences are an integral part of the educational process. When an instructor learns the LMS, he or she uses these learning experiences to transform this process into knowledge. Knowledge is gained when a combination of grasping experiences and the transformation of those experiences of learning become the building blocks of higher levels of knowing (Kolb, 1984). Unlike their traditional academic counterparts, online instructors are challenged with delivering varied academic instructional methods with a dynamic method of delivery (Merriam & Bierema, 2014). Researchers have not explored the learning and adjusting experiences when the instructors learn the LMS. The current study may provide a better understanding how instructors interpret their own learning experiences and make meaning of those learning experiences.

Purpose of the Study

The purpose of this qualitative case study was to explore and understand how instructors learned and adjusted within the LMS. I used Kolb's (1984) experiential learning theory to help understand, interpret, and describe the instructors' experiences.

Data was obtained via a phone interview with eight instructors who teach or taught online courses for a college in a university in the Midwestern United States.

Research Questions

1. How do online instructors adjust when experiencing new functions, updates or expectations within the LMS?
2. What internal and external factors support their adjustment to new functions, updates and expectations in the LMS?

Conceptual Framework

I used Kolb's (1984) experiential learning theory to frame this qualitative case study and to help me understand, interpret, and describe the instructors learning and adjusting experiences in the LMS. According to this theory, new knowledge is generated by the transforming of experiences through a four-stage learning cycle: (a) concrete experiences, (b) reflective observation, (c) abstract conceptualization, and (d) active experimentation (Kolb, 1984).

In the first stage, concrete experiences, the learners are exposed to new learning experiences, the structural foundation of the learning process of experiential learning (Kolb, 1984). For example, the instructors experience learning a new LMS provided by their institution.

In the second stage, reflective observation, the learners reflect on their learning experiences (Kolb, 1984). For instance, the instructors reflected on prior learning

experiences when learning to use the LMS, then connected these prior learning experiences to present learning experiences and continual learning occurred.

In the third stage, abstract conceptualization, the learners learn from their learning experiences (Kolb, 1984). For example, throughout the learning experience, the instructor adjusts to learning the LMS and learning this process becomes a skill.

The fourth stage, active experimentation, the learners plan their experiences and apply what they learned (Kolb, 1984). For instance, the instructor learns to plan his or her learning and adjusting experiences when using the LMS and apply what they learned by maintaining continual learning. Active learning occurs when all four stages of the experiential learning model are achieved (Kolb, 1984). The theory is further explained in Chapter 2.

Nature of the Study

For this dissertation, I used the qualitative case study, as described by Merriam and Tisdell (2016). I chose this approach because it is consistent with studying participants' learning and adjusting experiences (Merriam & Tisdell, 2016; Yin, 2014, 2016). Kolb's experiential learning theory (1984) provided the foundation for analyzing and interpreting the experiences of instructors. Participants included eight online instructors with different disciplinary educational backgrounds, who teach or taught at an online college for at least 3 years, and who learned and adjusted within the LMS. The phone interviews included semi structured questions. The data retrieved from the interviews was analyzed through the creation of themes as described by Miles,

Huberman, and Saldana (2014). The results were interpreted and drew conclusions based on the analysis of the themes.

Assumptions

This study was based on four assumptions. (a) I assumed the participants would accurately identify themselves as online instructors who learned and adjusted within the LMS for at least 3 years. (b) The participants interviewed would respond genuinely regarding their learning and adjusting experiences when using the LMS. (c) The participants would withhold biases when questioned. (d) The participants would have adequate experience with technology, so that they would not be impeded in using, learning, and adjusting within their LMS.

Scope and Delimitations

The scope of this study included online undergraduate instructors' whose primary focus was teaching online. The study focused exclusively on online undergraduate instructors who practiced learning and adjusting within the LMS. This study was delimited to 8 online undergraduate instructors who experienced learning and adjusting within the LMS at this particular online college and university and excluded those who did not teach at this online college and university.

Limitations

The findings of this study were limited to the amount of available volunteer participants recruited for the interviews. It was challenging to find an institution willing to assist and support data collection for this study. This may be due to the topic and a

preference for discretion when discussing their faculty development practices. Another limitation was not being able to observe the participants in the phone interview process. While I could not observe them visually for body language, I was able to hear for verbal cues. The last limitation was the potential for interview bias. To help me with interview bias, I kept a journal of written field notes. The journaling helped me focus on my learning process when I collected the data and helped me increase my impartiality for this study. I also addressed interview bias by asking the participants whether my interpretation of the data I collected was representative of their beliefs.

Significance of the Study

Best practices for support and training are needed for the instructor (Schmidt et al., 2016). Since there is a notable increase in online education (Straumsheim et al., 2015), schools struggle to keep up with learning platforms (Mbuva, 2015) and with appropriate training to support instructors (Schmidt et al., 2016). The success of instructors is influenced by the amount of proper training and support given by the institutions (Schmidt et al., 2016).

The results of this qualitative case study may contribute to the field of online education. It may also help professional practice in online higher learning institutions (Schmidt et al. 2016) and may strengthen instruction for instructors (Walker et al., 2016). To promote social change, online higher learning institutions could address the inequalities of learners, the instructors could address the diversity of students' learning styles, and the students could address their own varied cultural backgrounds (Merrian &

Bierema, 2014). Instructors teaching online (Straumheim et al., 2015) are frequently granted the LMS to deliver online instruction. In fact, very few studies have examined how instructors learn and adjust in the LMS (Rucker & Downey, 2016). By approaching this learning gap in an online environment, this study could create awareness (Lewis & Wang, 2015), it could increase training for instructors (Mouakket & Bettayeb, 2015) and provide an opportunity for social change.

Summary

When an instructor learns the LMS, he or she uses these learning experiences to transform this process into knowledge. This study was designed to gain an understanding of the learning and adjusting experiences among online instructors when they use the LMS. Interview data was analyzed using experiential learning. Chapter 2 includes a discussion of the conceptual framework and the literature review of the topics included in the study. Chapter 3 provides details of the research design, participant selection process, procedures, and how data was collected and analyzed. Chapter 4 provides research results and emerging themes. Chapter 5 includes a discussion of the results, recommendations, and the conclusion.

Chapter 2: Literature Review

Introduction

Instructors learn and adjust within the LMS, but not much is known about these learning experiences. Instructors likely face challenges due to the nature of their curriculum and learning needs. Therefore, the purpose of this dissertation research was to

explore and understand how instructors learned and adjusted within the LMS. I used Kolb's (1984) experiential learning theory to frame this qualitative case study. Chapter 2 includes the conceptual framework of the study, key statements and definitions in the framework, the application in previous research; the instructor's online learning experiences, the instructor's experiential learning experiences, and the instructors learning the LMS experience.

Synopsis of Current Literature

Little has been published in the research literature on instructors learning and adjusting within the LMS. Mouakket and Bettayeb (2015) examined the factors that influence instructors in the continual use of the LMS. Walker et al. (2016) studied online faculty perceptions when adopting the LMS. When determining the effectiveness of the LMS Emelyanova and Veronina (2014) concluded that the emphasis should be on the human factor. Some researchers studied the relationship between the instructors' attitude and behavior towards the LMS (Alghamdi & Bayaga, 2016; Cigdem & Topcu, 2015; Zanjani, Edwards, Nykvyst & Gevas, 2016; 2017). Almarashdeh (2016) and Straumsheim et al., (2015) considered instructors' user satisfaction in the LMS and Lock and Johnson (2017) considered moving from one LMS to another. However, none of these studies examined how instructors learned and adjusted within the LMS.

Some researchers have investigated the challenges that instructors faced when integrating experiential learning in their classrooms (Richardson et al., 2016; Rawlins & Kehrwald, 2014). Other researchers have focused on the learning experiences instructors

used to help them teach (Hamblin, 2015; Smith, Hill & Downing, 2016) and emphasized the instructors' views about experiential learning across several U.S. institutions (Wurdinger & Allison, 2017). In fact, some researchers (Hoekstra, Kuntz & Newton, 2017) focused on the instructors' learning as it happened from day to day, while others (Calkins & Harris, 2017; Smith, Dyment, Hill & Downing, 2016) considered one aspect of the experiential learning theory (Kolb, 1984). But none examined the instructors learning gap when they learned and adjusted within the LMS.

Finally, current literature also suggested the need to examine the unique challenges as it related to instructors learning in an online environment (Mbuva 2014; 2015). Instructors are critical figures in online learning that some researchers sought to gain understanding by examining the effectiveness and challenges of online education (Horvitz, Beach, Anderson, and Xia, 2015) while also using technological tools (Mbuva, 2015) in an educational environment. On the contrary, Schmidt et al. (2016) and Meyer & Murrell (2014b) also studied best practices and training for instructors teaching and learning in an online environment. Due to the increased interest in online learning, Lewis and Wang (2015) developed a program to assist instructors in gaining specific competencies in facilitating online courses, whereas Mbuva (2014) examined the gains of online education and the challenges ahead. Conversely, Windes & Lesht (2014) compared instructors' attitudes, and Hood (2016) studied the instructors' conceptualized perceptions when learning and teaching online. However, none of these studies examined the unique challenges as it relates to instructors learning and adjusting within the LMS.

Literature Search Strategy

The selected peer-reviewed journal articles were published within the last 5 years. The following databases were used: Google Scholar, Academic Search Complete, Computers and Applied Science Complete, Computing Database, Education Source, ERIC, Learn Tech Lib, Sage Journals, Science Direct, Taylor & Francis Online, Teacher Reference Center, and ProQuest Central. The following keywords were used: *distance education, e-learning, online learning, higher learning, distance learning, Kolb, experiential learning theory, experiential, concrete experiences, reflective observation, abstract conceptualization, active experimentation, instructors, online instructors, college faculty, online faculty, teachers, online teachers, migration, transition, LMS, LMS Usage,* and *learning management systems.*

Since the literature was lacking, I sought to gain a better understanding of the instructors' learning gap by examining the online instructors' learning experiences and the online instructors' LMS experiences. Therefore, I was led to examine the online instructors' learning using both of these experiences. The following conceptual framework will guide this qualitative case study.

Conceptual Framework

The experiential learning theory (Kolb, 1984) served as the conceptual framework and assisted me in understanding the instructor s' learning and adjusting experiences within the LMS. Experiential learning was characterized by Kolb (1984) as a process that can be

adapted to the world, involves a connection between a person and the environment, and creates knowledge through learning experiences.

Experiential Learning Theory

Kolb (1984) identified and defined the learning process as knowledge generated by the transformation of experiences as the experiential learning theory. Experiential learning occurs in a four-stage cycle involving four adaptive leaning modes: concrete experiences, reflective observation, abstract conceptualization, and active experimentation (Kolb, 1984). The four-stage cycle of the experiential theory (Kolb, 1984) provided a base in framing this qualitative case study and helped me interpret and understand how the instructor learned and adjusted within the LMS.

Synthesis of Key Theorists

In the creation of the experiential learning theory, Kolb (1984) combined a holistic and integrated method of learning by linking the learner's experiences, perceptions, behaviors, and cognition. Kolb (1984) expanded on the experiential learning theory from prominent twentieth-century scholars such as Kurt Lewin (1951), John Dewey (1938), and Jean Piaget (1971). These scholars used experience in their theories of human learning and development and shared common characteristics in their learning models (Kolb, 1984). Kurt Lewin's (1951) four-stage learning cycle focused on: (a) concrete experiences (b) observations/reflections (c) formation of abstract concepts/ generalizations and (d) testing implications of concepts in new situations. Similar to Lewin's (1951) learning model, Dewey's (1938) model was focused on the

transformation of learning in the concrete experience stage and converting it into action. Likewise, Kolb (1984) mentioned that Piaget's model of learning and cognitive development focused on the individual and the environment and the connection between them. All three models share some common characteristics that define the nature of Kolb's (1984) experiential learning theory.

Key Statements and Definitions in Framework

As defined and explained by Kolb (1984), learning takes place in a four-stage learning cycle involving four adaptive learning modes: concrete experiences, reflective observation, abstract conceptualization, and active experimentation. In the course of the concrete experience stage, the learners were exposed to new experiences. In the second stage, reflective observation, the learners reviewed and reflected on their experiences. In the third stage, abstract conceptualization, the learners learned from their experiences. In the last stage, active experimentation, the learners planned and applied the skills they learned. Active learning occurred when the learners executed all four learning stages of the experiential learning theory model.

Application in Previous Research

Kolb's experiential learning theory (1984) was the foundation for this study because it helped me explore and understand how instructors learned and adjusted within the LMS. In previous research, Wurdinger & Allison (2017) surveyed instructors on their use and views of experiential learning. Calkins & Harris (2017) examined instructors' reflective experiences when learning and teaching for the classroom. Smith et al. (2017)

reported on two instructors' online experiential learning experiences when teaching outdoors. Rawlins and Kehrwald (2014) examined teachers' experiential learning when using educational technologies. Richardson et al. (2016) examined the integration of experiential learning for a graduate level program. Lastly, Hamblin (2015) examined college teachers learning experiences.

Analyzing the process of learning and adjusting through the lens of the experiential learning theory (Kolb, 1984) provided a better understanding of the instructor s' learning processes when they learned and adjusted within the LMS. Secondly, it helped me understand the instructors learning experiences when they reflected on prior experiences. Third, it assisted me in understanding how the instructor connects technological information for instruction and makes technological learning connections. Lastly, the conceptual framework helped me understand how the instructor planned his experiences by continually learning and adjusting to test new ideas within the LMS. Using Kolb's (1984) experiential learning theory as the conceptual framework benefited this qualitative case study because it helped me understand the complexity of the learning process when the instructors navigated within the LMS platform. In the next section, the Literature Review includes research related to the instructors' online learning experiences, the instructors' experiential learning experiences (Kolb, 1984), and the instructors learning the LMS experience.

Literature Review

Instructors Online Learning Experiences

In light of the recent growth of higher online learning (Allen & Seaman, 2016) online institutions must discover ways to enhance online education and orientate and develop faculty to improve quality online learning processes (Lewis & Wang, 2015). Enhancing online education requires constant progress to assimilate instructors in learning methods (Mbuva, 2014) and also needs the instructors' experiences and personal resources to develop techniques to teach better (Hamblin, 2015). With the use of virtual classrooms, instructors can enhance their learning experiences by taking advantage of technological tools for learning and instruction and embrace online technology as an effective tool (Mbuva, 2015). When adopting a technological tool, instructors often must meet the institutions' needs, administrative requirements, while also learning new e-learning platforms. Often, the educational institution will design differentiated support structures and integrate various resources to meet the learning needs and preferences of the instructor (Lock & Johnson, 2017). Institutions must seek a better understanding of the challenges instructors face to accomplish the required learning process such as support and training structures (Horvitz et al., 2015). With the use of internet technology, there are more significant foreseeable challenges (Mbuva, 2015) that educational organizations must consider to move forward in this technological age. Discovering the significant relationship between online institutions and the instructors learning experiences can enhance the learning process, which may influence institutional change

(Windes & Lesht). With this in mind, the instructors learning and adjusting skills should be considered when helping them to learn to teach (Hamblin, 2015). The following section of this literature review will focus on the training methods and what supportive learning structures are in place to support the instructor within the online educational institution.

Training and Supportive Learning Structures

In 2015, 70.8% of administrators conveyed that online learning was critical to their university's goals (Allen & Seaman, 2015). In their thirteenth and last annual survey report, Allen and Seaman (2016) also reported a growth rate of individual's taking one distance learning class from 2013 to 2014, an ever-increasing rate of 3.9 %, up from 3.7% the previous year. Distance education continues to grow (Allen & Seaman, 2016) and colleges and universities are embracing plans for maintaining professional training to help instructors learn to teach online (Meyer & Murrell, 2014b; Schmidt et al., 2016). Understanding what prompts instructors to learn in an online college should be researched further, which could provide further insights into the instructors' professional education and support structure. The need to develop and improve the quality of online learning experiences for instructors should be focused on placing orientation programs (Lewis & Wong, 2015) to help instructors learn the process of learning and facilitating the online environment. Most importantly, promoting a faculty development program to help the instructors in their early careers would benefit the instructor and the educational organization. Educational administrators need to know that instructors require specific

skills to learn the online environment, such as training and activities (Meyer & Murrell, 2014b) and professional development for instructors (Schmidt et al., 2016). Learning this process should be a long-term strategy for academic leaders (Allen & Seaman, 2016; Schmidt et al., 2016). Implementing professional development models (Baran & Correia, 2014) should be consistent with higher student enrollment (Allen & Seaman, 2016) with an emphasis on new technological advances (Mbuva, 2015) for instructors learning to teach online.

The institution must produce innovative ways to engage the instructor s' learning through technological advancements that are relevant and effective (Feltenberger et al., 2016; Johnson & Sinkinson, 2016; Meyer & Murrell, 2014b). For example, Feltenberger et al. (2016) surveyed 62 instructors and found that the instructors preferred formal professional development training over informal professional development training or a community of practice. Many studies focused on the significance of training, but few studies focused on the particulars of this training (Schmidt et al., 2016). Specifically, Schmidt et al. (2016) focused on the institutions improving the efficacy of technology by using it as a pedagogical tool for professional development training. The researchers found four specific themes emerged: the inclusion of professional development topics, additional condensed training, informal learning, and enhanced opportunities for self-directed learning were needed to improve the efficacy of the technology for professional development training (Schmidt et al., 2016). In their study, Meyer and Murrell (2014b) found when conducting a national survey that over 90% of the institutions surveyed,

frequently offered training content and activities for faculty development. More importantly, 100% of the 44 institutions surveyed, ranked professional development workshops as a top priority for educational institutions, whereas 43% of the institutions surveyed ranked one-on-one training with short sessions as second (Meyer & Murrell, 2014b). In the era of greater accountability among higher learning organizations, administrators must develop professional development learning programs that improve the instructors' learning. Schmidt et al. (2016) recommended multiple options for professional development including, opportunities to focus on technology, self-directed learning, and the development of learning communities. Other researchers have also suggested learning activities, as it happens on a daily basis (Hoekstra et al., 2017). An opportunity for professional development (Booth & Kellogg, 2015) is critical in helping instructors wanting to learn and teach in an online environment.

Online social communities of practice extend the traditional form of professional development learning as a supportive structure for the instructor (Booth & Kellogg, 2015). A social community in a higher learning organization allows the instructor to share information and materials about learning and teaching (Lewis & Wong, 2015). The online platform enables instructors to participate in a social community, where they engage in sharing knowledge sources, learning opportunities, and personal experiences, which is a good practice (Booth & Kellogg, 2015; Feltenberger et al., 2016). While this may be true, Terosky and Heasley (2015) examined the sense of community among practicing instructors and found it was lacking. The researchers found that the instructors

felt that the communities for online teaching were more focused on technical support, even though they desired greater community for philosophical and psychological concerns (Terosky & Heasley, 2015). In contrast, in their qualitative study, Booth and Kellogg (2016) found that the instructor was a crucial figure in creating a social community for a supportive structure through a collective process. Findings from Booth and Kellogg's (2016) study suggested that the instructor values his or her potential for learning and also values creation through the lens of individual experiences within online communities. Similarly, Meyer and Murrell (2014a) found that 69% of instructors used self-directed learning and 64% used the experiential learning model as their professional development for online teaching. In particular, self-directed learning is being used more often among instructors, since instructors are finding usefulness in their need for learning through the internet (Meyer & Murrell, 2014a). In contrast, Feltenberger's et al. (2016) survey found that the instructors revealed a sense of isolation among the community of learners. The instructors expressed the need for a community of practice in supporting the staff in sharing knowledge sources for online and technology training (Feltenberger et al., 2016). Despite the research on the positive and negative uses of social communities for professional development learning, the instructors' learning experiences should be researched further.

As online professional development programs are developed, the instructors' primary and secondary learning experiences should be taken into account, whether they learn in a social community (Baran & Correia, 2014) or independently (Hood, 2017). In

an experiential learning community, the instructor learns primarily by engaging directly and secondary through reflection and or/feedback (Richardson et al., 2016). Experiential learners “learn by doing” by linking academic learning and applying a practical skill set to their learning (Richardson et al., 2016). In a similar case study, Hood (2016) found that the instructors’ engagement was motivated by their knowledge and practiced based needs, where learning is primarily individualized by the instructor. The findings were organized into three sections: engagement, connection, and learning with online sharing platforms (Hood, 2016). Instructors engaged in online sharing platforms gained knowledge through resources rather than people (Hood, 2016). The instructors remained disconnected rather than having a desire to cultivate connections for learning experiences, and the instructors used the online sharing platform as a learning tool, which helped those complete specific tasks more efficiently (Hood, 2016). Whether the instructor learns in a social community (Baran & Correia, 2014) or is an independent learner (Hood, 2016), each setting provides a unique background for sharing knowledge among practicing instructors learning to teach online. The use of online learning platforms allows the instructor to develop a personal, supportive structure (Hood, 2017) that can be engaging and effective for professional learning. The following section of this literature review will focus on the instructors informal and formal learning experiences within the educational institution.

Informal and Formal Learning Experiences

Educational organizations at times offer instructors multiple options to learn within the organization, through traditional and online formats. With these unique options, instructors often attempt to learn informally or formally. In light of the recent growth of higher online learning (Allen & Seaman, 2016) online institutions must discover ways to meet relevant learning pedagogies through informal or formal methods. Informal learning can consist of supportive learning networks among instructors, such as (Schmidt et al., 2016):

- small group learning
- one-on-one tutoring
- mentoring from experienced instructors
- informal conversations in focus groups

Informal learning is distinguished by short-term activities, everyday learning, and is continual learning for instructors who practice through an online or traditional platform. An informal learning experience gives the instructors options in learning and encourages accountability through active and interactive experiences. In their study, Schmidt et al. (2016) found instructors preferred informal learning with smaller and more focused training over large groups. While Meyer and Murrell's (2014b) national survey study of 39 higher learning institutions, found 100 % of the instructor's preferred workshops, 97.7% preferred one-on-one training, and 95.5% preferred hands-on-training among other types of exercise to learn activities. The process of learning informally

creates a community of learners that customize their learning through the use of traditional or online learning platforms.

In informal learning, online communities of practice are different than social networks, because the instructors share expertise in a skill or topic (Merriam & Bierema, 2014). Given a variety of informal learning models, informal learning can also be a challenge for some instructors, who usually learn individually or independently (Hood, 2016). Studies suggest that the most effective professional learning involves learning through specialists, mentoring, and through a cooperative process, so understanding how instructors learn and adjust to conceptualize their learning without sharing a community of practice (Hood, 2016) should be further investigated. Informal activities have the potential to be applied individually or through a community of learners. The learning experiences instructors create within their learning community frequently generates instructors that value teaching (Booth & Kellogg, 2015) and learning pedagogies whether they practice informally or formally in their educational setting.

In their research, Baran and Correia (2014) found there was a need for staff development for online instructors. The researchers suggested supporting the instructors through a community of practice because online teaching can be an academically and socially isolated experience (Baran & Correia, 2014).To cultivate a shared objective among the instructors who teach online, collaborative groups, mentoring, and community building must be incorporated into the organization's informal learning methods (Baran & Correia, 2014). When engaging in an online community of learning, instructors create

shared meaning, plan teaching strategies, and discourse around the same topic of interest (Merriam & Bierema, 2014). In her research, Hamblin (2015) surveyed 83 instructors in 11 community colleges to determine what methods the instructors used to learn to teach and found 100% of instructors learned through mentors, networking, and faculty development activities, whereas 99% found discussions with colleagues more helpful. Likewise, in their national survey, Meyer and Murrell (2014b) confirmed that 91.1% of institutions preferred creating a community of learners, whereas 73.3% preferred experiential learning as part of their training process. Community learning in an online platform engages instructors to collaborate and create activities around a shared interest (Merriam & Beriam, 2014) where the potential for learning is valuable.

Educational organizations should value their instructors in finding new forms in applying knowledge that is meaningful, effective, and where learning is valuable for the instructor as well as for the organization (Booth & Kellogg, 2015). In spite of the value placed on informal learning (Booth & Kellogg, 2015). Feltenberger et al. (2016) found 46% of their survey respondents ranked informal learning as moderate and lacking in effectiveness. Informal learning is being used more frequently in many learning organizations (Schmidt et al., 2016) and many factors contribute to that success. Whether informal learning is effective or ineffective for some online instructors, providing options for these instructors to learn through their individual preferences (Hood, 2017) is critical to helping instructors learn. Another option to help the instructors learn is through formal learning through traditional and online formats.

The development of formal learning networks among instructors in higher learning institutions is highly used today, as it has been for many years. Formal learning engages the online instructor with expert instructors, supportive staff, instructional designers, and technical advisors (Feltenberger et al., 2016) and helps the instructor pursue formal training external to the classroom (Hamblin, 2015). Meyer and Murrell (2014b) and Hamblin (2015) gave some examples of formal learning, which included:

- attending teaching conferences
- consortia educational meetings
- professional development training
- networking with other colleagues
- taking formal courses in education
- reading academic journals
- taking classes for curriculum development.

Providing multiple options for instructors to learn within the organization creates a supportive learning network among instructors. Since instructors often felt a sense of isolation and expressed a desire for a more supportive online community, (Feltenberger et al., 2016) where instructors could share knowledge among colleagues. When learning is valued, the online instructors' co-construct new forms of meaning and understanding and apply that knowledge to their educational practice (Booth & Kellogg, 2015). Not surprisingly, the primary goal of the instructor is to value the process of learning, whether it is done individually or with a community of learners in a learning community.

Supporting the instructors as they share knowledge through other methods of online learning and the use of social platforms is especially important for instructors.

Creating an online professional development framework for instructors (Baran & Correia, 2014), whether the instructors learn informally or formally depends on the commitment instructors place on their online learning and the supportive structures placed by the learning institution. For this purpose, the role of the learning organization is to develop practical learning opportunities for instructors to learn through self-exploration (Hood, 2017) or a group learning system (Baran & Correia, 2014) that includes a supportive structure so that instructors can apply and learn these learning experiences. When instructors learn through different channels, they develop and accumulate life experiences. These life experiences link learning and development, through the process of engagement in the roles of life (Merriam & Bierema, 2014). The following section thoroughly examines and explains how instructors approach the learning process through Kolb's (1984) four-stage experiential learning used in the online educational organization.

Instructors Experiential Learning Experiences

Kolb's (1984) experiential learning theory identified four learning stages that learners go through in the learning process. The instructors learned and adjusted within the LMS and Kolb's (1984) experiential learning theory helped me understand, interpret and describe the instructors learning experiences.

Concrete Experiences

In the course of the concrete experience stage, the instructor was a learner exposed to new experiences (Kolb, 1984). The instructor focused on learning and adjusting to the technical process by using his or her senses of smell, touch, taste, sight, or sound within the LMS. The instructor was engaged in the process without bias and was fully and openly involved in the learning and adjusting experience within the LMS. At the concrete experience stage, the instructor also encountered learning challenges that may have hindered his or her technological learning process. The instructor's learning style may have differed from the organizations' method of teaching the technology. This learning style is known as diverging learning style and draws on two types of learning abilities (Kolb, 1984; Merriam & Bierema, 2014). For instance, the instructor relied on concrete experiences and reflective observation abilities in that they interpreted concrete situations from many perspectives and these learning instructors performed better by having a "brainstorming" session when learning (Kolb, 1984; Merriam & Bierema, 2014). Another example included the instructor drawing from abstract experimentation and concrete experience abilities, where the instructor learned from hands-on activities and tended to act on "gut" rather than logical analysis (Kolb, 1984; Merriam & Bierema, 2014). The concrete experience stage helped me understand how the instructor is exposed to new experiences and led to learning and adjusting within the LMS. As the instructor is immersed in the professional experience, they created their own knowledge by being engaged and being self-directed to generate learning.

Discovering how the instructor learned and adjusted within the LMS, may have contributed to understanding how they are engaged (Seaton & Schwier 2014) and self-directed (Schmidt et al., 2016) in their learning experiences. Being engaged in the technical experience required the instructor to be involved and be willing to participate in the experience. In the following case study, Seaton and Schwier (2014) acknowledged some features linked to the online instructors' engagement within the classroom. The researchers found instructors rarely had issues with not being confident enough to use the technology, but most technical problems were related to the design or usability of the software and with the LMS (Seaton & Schwier, 2014). In contrast, Hood (2016) found instructors engagement was largely motivated by their knowledge, where learning occurred individually in their learning platform. Whether barriers to the technology occurred (Seaton & Schwier, 2014) or the instructors learned individually (Hood, 2016) the instructors engaged and embraced the new learning experience by demonstrating their commitment in learning the institution's LMS.

Learning and adjusting within the LMS required the instructor to be intrinsically motivated to self-direct their learning to acquire a unique technical skill. Similarly, a study by Schmidt et al. (2016) revealed instructors preferred learning prospects centered on their knowledge and technical capabilities. The instructors learning opportunities moved from formal to informal learning in their professional development and led to more self-exploration among the instructors (Schmidt et al., 2016). Learning and adjusting within the LMS means instructors needed to be able to master self-directedness

in generating tasks, refining concepts, and improving techniques to learn new technical experiences. Similarly, Merriam and Bierema (2014) mentioned practicing self-directedness required the learner to:

- seek learning
- plan learning
- take responsibility for their own learning
- controlling their learning
- and evaluating the outcomes of their learning.

By practicing these two dimensions of learning-engagement and self-directedness principles, instructors were more likely to maximize their institution's goals. They were more likely to persist through the most challenging learning tasks or experiences. Ultimately, this may help in closing the learning gap, when the instructor has to learn and adjust within the LMS.

As technology becomes fundamental at colleges and universities (Mbuva, 2014) investigating how the instructor learns and adjusts within the LMS is imperative for the instructor as well as for the institution. In the following study, Dahlstrom et al. (2014) surveyed 17,451 faculty members at 151 institutions on higher education technology experiences and expectations and found 85% of instructors used their LMSs and 56% used it daily. Since instructors used the LMS daily (Dahlstrom et al., 2014) it has the potential to enhance the instructors learning and engagement, which would benefit the administration and the institution. Along with constant technological changes, challenges

occur since the LMS market is considered volatile and the instructors and administrators are experiencing migration fatigue due to time and impact (Varnell, 2016). In the subsequent phenomenological study, Varnell (2016) found there were numerous impacts due to workload and instructional practices among the instructors and recommended providing adequate support for instructors using the LMS. Some recommendations the researcher suggested were: professional development, additional support staff, compensation, and mentoring among others (Varnell, 2016). Similar recommendations were also suggested by Walker et al. (2016) when they explored online instructors' perceptions when the instructors adopted the LMS. The researchers suggested additional time for instructional training and other programs to enhance the quality of the instruction (Walker et al., 2016). As technology changes (Mbuva, 2015), further studies are needed to understand the learning gap instructors face when having to learn and adjust within the LMS. In addition, understanding the instructors' needs and the institutions' expectations is necessary, since one in five institutions is preparing to change their LMSs in the following three years (Dahlstrom et al. (2014). Understanding how the instructor is led to learn in the concrete experience stage helped me understand their learning and adjusting experiences within the LMS.

Reflective Observation

In the second stage, reflective observation, the instructor was a learner and reviewed and reflected on his or her learning (Kolb, 1984) and adjusting experiences within the LMS. The instructor linked materials to prior experiences, relating the past to

the present, ensuring continuity in his or her learning experiences and adjusting within the LMS. Effective instructors reflected on their own personal experiences from many viewpoints (Kolb, 1984). In fact, literature from these reflective learning experiences have been studied or dismissed by scholars and philosophers. Harvey, Coulson and McMaugh (2016) studied the lack of theoretical development on the role of reflection when learning through experiences. Schon (1983) wrote on the reflective practitioner. Light, Cox and Calkins (2009) wrote on the reflective professional in higher learning. In the same way, reflective learning has also been used in professional development programs at higher learning institutions to improve learning and teaching among instructional staff. For instance, in their case study Calkins et al. (2017) studied the impact of critical reflection on teaching and learning among 27 instructors in a professional development program. The researchers found if instructors were given additional space, added time, and a range of opportunities they would reflect on their teaching and learning more frequently, even after they left the professional development program (Calkins et al., 2017). Participating in reflective learning practices can come from multiple points for an instructor such as:

- workshops
- student feedback
- teaching observations
- scholarly literature
- peer/ mentor/ facilitator feedback (Calkins et al., 2017).

In a similar manner, a study by Hamblin (2015) showed instructors used informal learning requiring the instructor to introspect, some activities included:

- reflecting on the teaching process
- guidance from mentors
- receiving informal feedback from students/teachers
- observing other instructors.

The instructor reflected on these learning and adjusting experiences and integrated these reflective practices into the instructional approach.

This stage of reflection observation may also contribute to the conceptual understanding of how instructors use the process of reflection in active learning (Hamblin, 2015; Lewis & Wong, 2015) particularly in an online learning environment (Smith et al., 2016). In spite of the current evidence of reflection being used as a learning stage in the experiential learning theory (Kolb, 1984) Harvey et al. (2016) reviewed the evidence on the role of reflection for learning and found there was little evidence on the theoretical development in this area. In their action research study, the researchers used empirical evidence to develop and support eleven substantiating assumptions on the theory of reflection in experiential learning (Harvey et al., 2016). On the other hand, Kolb (1984) developed and emphasized the theoretical development of experiential learning by closely tying it to the perspectives of theorists such as Dewey's (1938) pragmatism approach, Lewin's (1951) Gestalt psychology, and Piaget's (1971) cognitive development processes. Reviewing and reflecting on the learning (Kolb, 1984) and

adjusting experiences within the LMS created knowledge at this stage and the emphasis was adapting and learning through the process. Since the instructors' knowledge is created and re-created through the process of experiences, learning is objective and subjective (Kolb, 1984). Reflective observation is a continual process where the instructor learned and relearned from many perspectives. In the following stage, abstract conceptualization (Kolb, 1984), the instructors make connections or master the learning process and it becomes a skill through learning and adjusting experiences within the LMS.

Abstract Conceptualization

In the third stage, abstract conceptualization (Kolb, 1984); the learner's as instructors mastered learning and adjusting within the LMS and it developed into a skill. The instructors prepared to teach by being self-directed learners. The framework for being a self-directed learner was defined by Knowles (1975) as:

- an individual that acts upon their own learning, without assistance from others, when identifying their own learning needs
- creates learning goals
- finds resources for knowledge
- selects, plans, and adopts suitable learning strategies
- and measures personal learning outcomes.

By being a self-directed learner, the instructor manipulated the technology tools to learn and adjust within the LMS, thus learning and making connections between these

experiences. Learning at this stage is also a holistic process involving the instructor's physical body and emotional responses (Merriam & Bierema, 2014) towards learning the skill. The instructor connected technological information for instruction within the LMS. Understanding what daily practices the instructors used to make them successful in their working environment, may provide insights into how they learned.

In their mixed-method research, Hoekstra et al. (2017) studied 116 learning episodes from 27 instructors and focused on their daily practices. The researchers asked, what encouraged instructors to learn, what were they learning, and what were their levels of reflection when they learned. The researchers found the instructors learning was prompted externally, or was not self-guided, and included action-based reflection. The researchers' recommended professional learning activities that were embedded in the place of work and offered the instructors learning opportunities that were engaging as it happened on a daily basis. Understanding how the instructor masters learning and develops it into a learned skill within the LMS, may add insight into how the instructor maintains continual learning in the following active experimentation stage.

Active Experimentation

Lastly, the active experimentation stage, the learners planned their experiences and applied them (Kolb, 1984). Active experimentation transpired when the learners as instructors implemented the four stages of the experiential learning model (Kolb, 1984). The instructor learned to plan and apply learning and adjusting experiences within the LMS. The instructor maintained continual learning by testing new ideas, while having the

ability to apply newly acquired skills. With an increase in online or distance learning (Allen & Seaman, 2016) institutions and administrators are facing pressure to develop more online courses. Consequently, instructors are obligated to respond to professional development for continual learning, since this educational approach is critical in helping the instructor adapt to online practices (Baran & Correia, 2014).

Baran and Correia (2014) proposed a learning agenda for instructors within an organization. The researchers found the way instructors adjusted to teaching determined their success within the online platform. The scope of their framework considered the organization, community, and teaching factors that interplayed in the success of the online instructor. The organization distinguished and rewarded the instructors and created a supportive organizational culture towards online education. The organization had academic learning groups, peer support programs to help the instructors with peer-observation and peer-evaluation, and included mentoring programs for the success of the instructor. Lastly, the organization included professional development workshops, training platforms, and one-on-one support for the success of the instructor. In a similar study, Feltenberger et al. (2016) identified the professional development needs of instructors teaching online. The participants were asked questions about their skills, knowledge gaps, learning choices, and supportive measures to assist them in their professional development. The researchers found training, technology needs, platform choices, and community involvement provided direction towards meeting the instructors' professional development learning needs. Professional development among institutions

requires time, determination, and financial support (Terosky & Heasley, 2015). Institutions that invested in professional development may invest in cohort learning models to assist instructors, orientation and mentoring programs for new instructors, while also including sharing sites for instructors (Terosky & Heasly, 2015). Kolb (1984) mentioned learning is the process where development occurs. The instructor achieved these developmental learning stages by responding to the circumstances through the integration of professional development experiences.

Despite findings describing professional development programs (Feltenberger et al., 2016; Hoekstra et al., 2017) that assist instructors in their continual learning process, some instructors remained dissatisfied with their professional growth. In their qualitative case study, Terosky & Heasley (2015) examined seven instructors' perceptions on the sense of community and collegiality. The researchers found that instructors' sense of community and collegiality lacked in online education. The researchers recommended institutions invest in professional development that promotes community/collegiality, centered on the instructors' needs, which may benefit the institutions. This stage may contribute to understanding the complexity of the learning process by focusing on the instructors planning their experiences and applying them within the LMS. The next section of this literature review will focus on understanding the instructors learning experiences towards the LMS, instructors' perceptions of the LMS, instructors' attitudes towards the LMS, instructors' adjusting to the LMS, and concludes with training and supportive measures for the instructors.

Instructors Learning the LMS Experience

The (LMS) is an online application that provides students and instructors tools for course interaction (Lock & Johnson, 2017). Many higher learning institutions still use the LMS as a learning tool for instructors and students (Dahlstom et al., 2014). Currently, 99% of learning organizations have the LMS, 85% of faculties use the LMS, and 56% of instructors use it every day (Dahlstom et al., 2014). In 2013, nearly 800 institutions participated in a survey, sharing their technology information practices and in 2014 more than 17,000 instructors from 151 institutions were surveyed in the context of technology experiences and expectations (Dahlstrom et al. (2014). The finding in this report suggested that instructors were participating in the institutional learning process while using the LMS (Dahlstrom et al., 2014). The perception of instructors using the LMS has become the mainstream in higher learning institutions and it is being utilized daily to support instructors in the process of learning and teaching initiatives (Walker et al. 2016). In essence, the instructors take these experiences, develop perceptions of these experiences, and convert that information into knowledge (Kolb, 1984). The following section includes the instructors' perceptions when learning and adjusting within the LMS.

Instructors Perceptions of the LMS

Due to the fast development of technological systems, higher learning institutions are investing in the usage of the LMS, since one in five learning organizations are getting ready to change LMSs within the next three years (Dahlstrom et al., 2014). The researchers reported that 92% of the instructors were satisfied with their LMS, and nearly

60% out of 17,000 instructors surveyed stated the LMS was critical to their teaching (Dahlstrom et al., 2014). Understanding how the instructor is satisfied with using the LMS as a learning tool may help with closing the learning gap. Also, it may help in building a productive learning environment for the institution and instructors willing to use the LMS. In their questionnaire study, researchers Emelyanova and Veronina (2014) examined instructors' and students' qualifications and readiness to use the LMS. The researchers asked the following two questions: What were the learners' perceptions of the LMS and what was the connection between attitudes and usage? Overall, the researchers surveyed 76 out of 213 instructors and found various aspects must be considered when implementing the LMS. As for teachers, 79% recognized the LMS as easy to use, convenience was average, usefulness was two times higher than students, and 68% of teachers thought the LMS was useful. Understanding how the instructor perceived the quality of teaching when using the LMS and the challenges they faced when adjusting to the LMS may also help in closing the learning gap for institutions that may soon be adopting a new LMS.

How the instructor utilizes and understands the LMS as an educational learning tool may impact how they learn the LMS. Since more universities are investing in adopting the LMS and more instructors are utilizing the LMS (Dalhstrom et al., 2014) the quality of instruction plays a significant role when considering using the LMS (Salajan, Welch, Ray & Peterson, 2015). In their mixed methods research study, Salajan et al. (2015) investigated the impact quality of teaching had on instruction within the

Technology Acceptance Model (TAC). The TAC model used usefulness and ease of use as determinant factors on the technology acceptance of the user. Through their questionnaire, the researchers extended the TAC model by introducing quality of teaching as an external variable. The researchers found the quality of education played a meaningful role in the instructor's intent to use the LMS, therefore predicting the usefulness in the quality of teaching.

Understanding how the instructor perceived the LMS as a learning tool, may also impact how they learned the LMS. In their qualitative research, Walker et al. (2016) studied instructors' perceptions of a newly adopted LMS. The researchers asked 19 instructors who were teaching an online course and had been using a new LMS, the following two questions: What LMS features help or impede online teaching and learning and how does the use of the LMS influence the value of teaching and approval of the LMS? The researchers found when the instructors understood how to operate the interface it did not impede in their classroom teaching and learning process. Furthermore, the instructors who tended to have more positive attitudes towards online learning tended to be more positive in the quality of instruction when using the LMS. Instructors who tended to have more negative attitudes towards online learning tended to be more negative towards the usage of the LMS. The researchers recommended: instructor training, additional time to complete training, and programs to improve the quality of the subject matter. The relationship between the instructor's quality of teaching and how instructors perceived a new LMS interface may help in closing the instructors

learning gap. Understanding how the instructors' attitude towards learning and adjusting within the LMS may influence how they learned the LMS and it may help in closing the learning gap. The following section will cover the instructors' attitudes towards using the LMS.

Instructors Attitudes Towards Learning the LMS

Identifying factors that affected the instructor s' attitude towards learning the LMS may have helped in closing the learning gap. Researchers Fathema, Shannon and Ross (2015) investigated factors that affected the instructors' behavior through the TAC model. Their quantitative study consisted of 560 instructors in higher learning institutions. The researchers found three external factors that affected these instructors' use of the LMS; these were system quality, self-efficacy, and facilitation conditions. LMSs have been implemented at universities and instructors have been advised by their institutions to operate them for enhancing teaching and learning practices (Alghamdi & Bayaga, 2015). Establishing the relationship between the ease of use and usefulness when the instructor uses the LMS may be significant in closing the learning gap when the instructor learns and adjusts within the LMS. When instructors learn and adjust within the LMS, they experience some challenging factors, technological issues, extra workload, among other factors (Mouakket & Bettayeb, 2015; Lock & Johnson, 2017; Varnell, 2016; Rucker & Downey, 2016). The following section will focus on understanding how the instructor learns and adjusts within the LMS.

Instructors Adjusting to the LMS

Limited research has been conducted on the different factors affecting the adoption and acceptance process of the LMS in higher learning institutions (Mouakket & Bettayeb, 2015). To understand this gap, Mouakket and Bettayeb (2015) researched these factors by using the expectation-confirmation model (ECM) as the framework for their analysis. The researchers measured usefulness and satisfaction of the instructors' frequent usage of the LMS. Overall, 158 out of 200 instructors responded to the questionnaire where the researchers measured other variables such as training, technical support, user interface design, and computer self-efficacy. The researchers found usefulness and satisfaction influenced the instructors continued use of the LMS, the user interface influenced both usefulness and satisfaction among other findings. On the contrary, Cigdem and Topcu (2015) explored the instructors' behavioral intention in using the LMS. In their quantitative research study, the researchers were able to collect data, through questionnaires, from 115 instructors who were using the LMS. The researchers discovered effectiveness, ease of use; complex technology, subjective norm, and self-efficacy application were positively linked with the instructor's intention to adjust and adopt the LMS. The most important factor that affected the instructors learning and adjusting within the LMS was usefulness.

Adopting and accepting the technology has increased in higher learning (Almarashdeh, 2016) and understanding how the instructor learns and adjusts to the learning tools within the LMS may help in closing the learning gap. Almarashdeh (2016) proposed a framework to measure the instructors' satisfaction in using the LMS. Through

his questionnaire survey of 110 distance education instructors, he was able to find out that usefulness and service quality was affecting the instructors' usage of the LMS. The researcher recommended that the LMS should be designed with the instructor and student in mind, if not it can affect the benefits and outcomes of using the LMS. On the contrary, Wichadee's (2015) quantitative survey study aimed to discover the instructors' attitude and adoption towards learning the LMS. The researcher used a questionnaire to collect data from 62 instructors and found that ease of use and usefulness did not have a positive connection with the instructors' attitude towards the adoption of a. Understanding what factors influenced the instructors to engage within the LMS may help in understanding how they are learning and adjusting within the LMS.

As instructors engage within the LMS, they are often times met with adopting and accepting the functionalities or e-tools within the LMS (Zanjani et al., 2016). These e-learning tools within the LMS may provide knowledge sharing and community building opportunities (Zanjani et al., 2016) for the instructors. In addition, the e-learning tools within the LMS may help support both critical thinking and higher order learning skills through conversation and collaboration (Zanjani et al., 2016). Providing the instructor the effective technological e-learning tools within the LMS may have the potential to enhance the instructors learning and adjusting experiences within the LMS. Although, having the functionalities or e-learning tools within the LMS, does not guarantee that the instructors will adopt and accept the LMS (Zanajani et al., 2016). The following section

will focus on understanding how the instructor is engaged in the learning process, trains, and utilizes the educational institutions' support structures.

Recommendations for Training and Supportive Measures

The design and structure of the LMS may engage the instructor in the e-learning process and may influence the instructor to use the LMS more frequently. In the following qualitative research, Zanjani et al. (2017) investigated the design of the LMS and the impact it had on 74 participants engaged with the LMS tools. Through interviews, the researchers found the participants had problems with the structure and it influenced their engagement with the LMSs tools. Some problems included: the structure was not user-friendly, privacy was needed when posting, there was a need for more student custom tools, and numerous links and tools made it problematic and affected user-engagement.

Other factors may also influence the instructors' engagement, such as the institutions' affordability for the LMS and the instructors' ease of use towards the LMS (Rucker & Downey, 2016). Rucker and Downey (2016) recommended a better interface usability, motivating the instructor to adopt the technology and enhance the instructional practice within the LMS. The researchers also recommended better support and training for instructors and better planning in allocating the appropriate funds for the effective use of the LMS. In a similar manner, Varnell (2016) expressed a need for additional support through the following: one less course for the instructor, more payment for the instructor, and professional development with mentoring was also needed. The researchers

recommended increasing the alignment between the organization, administration, and faculty to improve job approval. Contrary to the previous study, Mouakket and Bettayeb (2015) found usefulness and satisfaction influenced the instructors continued use of the LMS, and the user interface influenced both usefulness and satisfaction among other findings. The researchers recommended making the interface more user-friendly to encourage instructors to use the LMS more frequently. The web developers needed to consider using user-friendly systems, so that instructors felt more at ease when using the LMS (Mouakket & Bettayeb, 2015). Having a better user-interface would allow the instructors the benefits of the system to encourage the instructors to use the LMS more frequently.

Mouakket and Bettayeb (2015) mentioned universities using LMSs should encourage voluntary training sessions, so that instructors can be acquainted with the benefits of the LMS. The universities can provide instructors with tailored training sessions, for their own specific needs. The universities can offer instructors online chatting, direct telephone number, or email when the instructor needs assistance in using the LMS. Researchers Rucker and Frass (2017) recommended administrators should think of the LMS as a significant component for teaching and learning. Administrators need to support hiring extra instructional designers and staff to support the LMS and have individualized assistance for instructors to help with course design and instruction. The researchers also recommended the instructors spend more time learning the LMS and the e-learning tools, by joining professional development training workshops, so that

instructors continue being active and operational in the classroom. The instructors should be willing to test new tools and the e-learning faculty must be offered the needed training and supportive measures for teaching in an e-learning environment. Training sessions/workshops should be provided at various times and hours for the instructors to attend and webinars and on-demand tutorials should be available to the instructors. The development of training and supportive structures from the institution (Meyer & Murrell, 2014b) is a continual process requiring experimentation from the institution, administration, and the instructional staff. By focusing on how the instructor learns institutions and administrators may consider developing LMSs that have the potential to assist the instructor with an innovative and effective LMS design. Providing instructors with ongoing professional development, participation opportunities, and supportive structures may have the potential to engage the instructor in learning and adjusting within the LMS. The following section includes the summary and conclusion.

Summary and Conclusion

While higher learning institutions are considering ways to enhance online learning for students and instructors, administrators should also consider training and supportive measures to help instructors learn online. For instance, professional development may provide learning and training opportunities for instructors through social community practices or independent learning practices. The learning institution may also provide options for instructors to learn formally or informally. Instructors learn differently and

they develop and accumulate life experiences differently. These life experiences link learning and development, through the process of engagement in the roles of life.

How the instructor utilizes and perceives the LMS as an educational learning tool may impact how they learn the LMS. Useful e-learning tools may have the potential to enhance the instructors learning experiences when they learn and adjust within the LMS. Since instructors are urged to utilize the LMS for learning and teaching practices, the instructors' attitude towards learning and adjusting within the LMS should be considered. More importantly, an educational plan must be implemented that includes supportive structures that are receptive to the needs of the learners and continued communication among the organization. The development of training and supportive structures from the institution is a continual process requiring experimentation from the institution, administration, and the instructional staff. By focusing on how the instructor learns, institutions and administrators may consider developing the LMS that has the potential to assist the instructor with an innovative and effective LMS design.

Information gathered from this review suggests there are a literature gaps and a lack of knowledge when the instructor learns and adjusts within the LMS. The results of this research indicated educational institutions need to design supportive structures. Include various resources to support the learning needs and preferences of the instructor. Since instructors use the LMS daily understanding these learning experiences would benefit the educational institution, administration, and the instructor. Understanding how the instructor learns and adjusts within the LMS is essential, since not much is known

about these experiences. Greater knowledge in this area will help inform LMS design and professional development. Therefore, the purpose of this dissertation research was to explore and understand how the instructor learned and adjusted within the LMS. In the following chapter, the research design and rationale will be discussed, the role of the researcher, the methodology within the study, issues of trustworthiness, and the summary.

Chapter 3: Research Method

Introduction

The purpose of this qualitative case study was to explore and understand how instructors learned and adjusted within the LMS. I used the qualitative research design and one interview with eight instructors who had experienced learning and adjusting within the LMS. An in depth understanding was needed about how instructors learned and adjusted when experiencing new functions, updates or expectations in the LMS at an online college at a university located in the Midwestern U.S. More specifically, what internal and external factors were needed to support them? Such understanding could encourage other educational institutions to adopt new functions, updates, and expectations for the online instructors. In this chapter, I cover the following topics: the research design and rationale, role of the researcher, methodology, issues of trustworthiness, and the summary.

Research Design and Rationale

Two research questions guided this qualitative case study: How do instructors learn and adjust when experiencing new functions, updates or expectations in the LMS? What internal and external factors support their adjustment to new functions, updates, and expectations in the LMS?

A qualitative approach was appropriate for gathering first-hand data. Qualitative research was useful for understanding how people interpret their own experiences; make meaning of those experiences and understanding those experiences (Merrian & Tisdell, 2016). Qualitative research is based on the belief that people construct knowledge as they engage in and make meaning of their experiences (Merriam & Tisdell, 2016). I chose the qualitative approach because it is consistent with gathering in-depth insights into the participants' firsthand learning and adjusting experiences within the LMS. I chose a case study design because it allowed for exploration, in-depth description, and analysis of a bounded system (Merriam & Tisdell, 2016; Yin, 2014). A case study bound to a specific college and eight volunteers was used within this environment and lays the groundwork for future study.

In determining the specific approach for this study, I first reviewed and rejected other alternatives. I rejected the ethnographic approach because researchers embed themselves in the culture and become part of the culture for true meaning and understanding (Merriam & Tisdell, 2016). An ethnography study required prolonged engagement and presented limitations on objectivity or boundaries (Merriam & Tisdell,

2016) and sought to promote the centrality of culture as the analytic concept in this type of study (Yin, 2016). Embedding myself within this context would not lead to additional learning and could impact the way respondents would share information. Consequently, I decided to reject the ethnography approach. This study should be an in-depth examination of reported experiences of instructors at this setting. Systematic data collection and examination of responses as related to the specific context. Embedding myself within this context would not enrich and might confuse information gathered from the participants.

I also rejected the phenomenological approach, because in this approach, the researcher focuses on the nature of an experience and specific meaning/understanding of a phenomenon (Merriam & Tisdell, 2016). Therefore, I decided to reject the phenomenological approach because I was looking to understand learning within a specific bounded setting. I did this by gathering specific information on learning approaches and experiences from each participant.

Role of the Researcher

As the researcher for this qualitative case study, I collected data off-campus by conducting one telephone audio-recorded interview from eight online instructors. Interviewing, transcription and data analysis were done concurrently as suggested by Miles et al. (2014). The data retrieved from the interviews was analyzed using the thematic analysis approach (Merriam & Tisdell, 2016; Yin, 2016). I drew conclusions based on the analysis of the themes and the results were interpreted. I ensured member

checking (Merriam & Tisdell, 2016) by asking the participants to review the original transcript to ensure I properly recorded their personal experiences, so as not to misinterpret the participant's perspectives or meanings from their interview responses. After the case study was complete, I shared an executive summary of the findings along with recommendations with the appointed representative for this specific online college at this university.

For this qualitative case study, I had no personal or professional relationship with the participants. I had no supervisory position or instructor relationship with the participants. One way I addressed research bias was by asking the participants whether my interpretation of the data I collected, was representative of their beliefs. The following section will focus on the methodology of the study.

Methodology

The participant sample size included eight online undergraduate instructors selected through purposeful sampling. The instrumentation was comprised of one telephone interview per participant. An email invitation letter was sent for recruitment purposes and the selected participants also signed, and returned the participation consent form through email. I used an audio voice recorder to record the participants' telephone interview responses. The data retrieved from the interview transcript was analyzed through a thematic analysis approach (Merriam & Tisdell, 2016; Yin, 2016) interpreting the results and drawing conclusions based on the analysis of the summarized themes described by Miles et al. (2014). To ensure the research method was ethically sound, I

maintained credibility and trustworthiness by gathering adequate and accurate responses from the participants when collecting data through the interview process.

Participant Selection Logic

I selected a sample of eight voluntary online undergraduate instructors with different disciplinary educational backgrounds, at a specific online college at a university located in the Great Plains region of the Midwestern U.S., who responded to my invitation to volunteer and participate in this case study. This case study included the purposeful sampling strategy, which is usually used in a qualitative case study approach (Merriam & Tisdell, 2016). The purposeful sampling method ensured I selected participants with the following criteria: (a) must be an online undergraduate instructor and may come from different disciplinary educational backgrounds, (b) who teach or taught online at this specific college for at least 3 years, and (c) who have learned and adjusted within the LMS. Establishing this criteria method helped me seek and ensure that each participant understood the online culture of the university and helped me seek to ensure that each selected participant understood the LMS at this particular online college. The participant sample size of eight online undergraduate instructors allowed me to achieve data to describe the instructors learning and adjusting experiences within the LMS. The participants were sent an invitation letter via email. The invitation letter included the purpose of the study and the criteria for participating in the study. The eight selected participants were contacted via email and recruited by meeting the criteria. The researcher followed up with all volunteers to let them know whether or not they were

selected for the study. If selected for the study, the researcher sent the participants a consent form via email, with specific instructions to sign and return the participation consent form within a week. This provided the participants adequate time to review the study and ask questions before giving consent along with permission to audio record the interview. Few participants responded to the study, so I received permission from Walden University's IRB (Approval No. #02-18-19-0078020) to mention that a $25.00 Visa gift card would be available in the invitation letter. Afterwards, my contact person at the university where the study took place received permission from the Dean of the college and sent out my invitation letter twice. Saturation occurred when the participants had the same experiences around similar themes and patterns (Patton, 2015) and as a researcher I began to get redundant information. The sample size was achievable and manageable for analysis of rich and detailed responses.

Instrumentation

Data was collected using a researcher-created interview protocol (Appendix) allowing me to collect sufficient data. The semi-structured interview questions were designed to get information from the selected participants' personal experiences when they learned and adjusted within the LMS. The telephone audio-recorded interview lasted approximately 25-30 minutes and included eight open-ended questions. I took field notes when interviewing the selected participants. I also audio-recorded the interviews and made verbatim transcriptions. I designed open-ended questions for the interviews to capture the participants personal experiences (Patton, 2015) when learning and adjusting

within the LMS. As suggested by Patton (2015), the first two interview questions included background questions; to gain descriptive information about the participants' present life experiences (internal factors), since it could have impacted the learning and adjustment process. Knowing the experience level of the participants was essential for making meaning of the data within the case study. The data retrieved from the interview transcript was analyzed through a thematic analysis approach (Merriam & Tisdell, 2016; Yin, 2016) interpreting the results and drawing conclusions based on the summarized themes described by Miles et al. (2014). The following section will focus on recruitment, participation, and data collection.

Recruitment, Participation, and Data Collection

After I received Walden University's IRB approval, I sent out the completed IRB forms to the dean of the college located at a university in the Great Plains region of the U.S. The instrumentation was comprised of one telephone audio-recorded interview per participant, lasting approximately 25-30 minutes.

After I received approval from the dean of the college, she referred me to my contact person for the remainder of the study. Once my contact person received permission from the dean of the college, he sent the invitation letter via email to the instructors, and recruited individuals on my behalf. The invitation letter included the purpose of the study and the criteria for participating in the study. The eight selected participants were recruited by meeting the criteria. When participants decided to participate, I sent them the consent form via email, with specific instructions to sign and

return the participation consent form within a week, along with permission to audio record the interview. The consent form conveyed that the participants had the right to decline or discontinue participation at any time and include written assurance that declining from participation would not negatively impact the participants or the participant's access to services. The consent form also mentioned there were no reasonable foreseeable risks to the participants, included the anticipated benefits to society, and compensation to the participants. To maintain privacy, the consent form described how the researcher did not include the participant's names, but used pseudonyms in the coding system and research report. The participant's names, contact information, and the collected data were not used for any other purpose other than research; the data will be secured and eventually destroyed. Data will be kept secured using the following (a) password protection on all electronic files (b) confidential information such as interview notes and signed informed consent letters will be kept in a locked file (c) the storage of names will be kept separate from the data (d) and after five years this sensitive information will be destroyed by shredding. Since the researcher did not see any foreseeable conflicts of interests, the researcher disclosed this in the consent form. The researcher did not ask the participants to waive any legal rights. The consent form explained how the participants could contact the researcher and the university's research participant advocate office. Lastly, the consent form included a statement that the participant should/keep print a copy of the consent form for reference.

Before I began the interview, I described the study, the purpose of the study, the right of participants to remove themselves from the study, discussed privacy for the study, and the transcription review process. I used an audio voice recorder to record the participants' interviewing responses. When I ended the interview, I informed the participants the expected date to receive the transcript copies for review. When I sent back the interview transcripts via email, I gave the participants an opportunity to add or change responses, to increase the validity of the study and reduce research bias. The following section will focus on the data analysis plan.

Data Analysis Plan

After doing the audio recorded interview, I used a software speaking program to help me transcribe the participant's responses into text. Once the process of transcription was complete, the transcripts were analyzed and categorized without the assistance of coding software, as suggested by Miles et al. (2014). Data analysis consisted of first cycle coding, where I assigned codes to data chunks by assigning short phrases or a word to capture the participant's language (Miles et al., 2014). The codes helped me capture the details of the participants' personal experiences when they learned and adjusted within the LMS. Interviewing, transcription, and data analysis were done concurrently as suggested by Miles et al. (2014). The second cycle of coding consisted of assigning pattern codes to the participants' responses (Miles et al, 2014). Pattern coding helped me group data into categories or themes and helped me identify an emergent theme (Miles et al., 2014). The data collected assisted me in answering the research questions. The

verbatim transcription process helped me ensure discrepant cases within this small sample and was noted in the summary results. Using Kolb's (1984) experiential learning theory as the conceptual framework for this study, I synthesized the instructor s' responses. The following section will focus on issues of trustworthiness.

Issues of Trustworthiness

As the sole researcher of this qualitative case study, I was responsible for establishing and ensuring trustworthiness into the study. Miles et al. (2014) mentioned collecting large amounts of data through the interviewing process enhances trustworthiness and credibility in a study. When gathering data through interviews, the data or emerging findings should be varied and feel saturated (Merriam & Tisdell, 2016). One way I maintained credibility and trustworthiness was by gathering adequate and accurate responses from the participants. Secondly, I ensured credibility and trustworthiness through member checking (Merriam & Tisdell, 2016); this strategy ensured I solicited feedback from the participants. One way I ensured member checking (Merriam & Tisdell, 2016) was by asking the participants to review the original transcript to ensure I properly recorded their personal experiences, so as not to misinterpret the participant's perspectives or meanings from their interview responses.

Transferability or external validity is defined by Merriam and Tisdell (2016) as the ability to transfer the findings to other situations. I ensured transferability by employing rich, thick descriptions (Merriam & Tisdell, 2016) to the study's context and findings of the participants learning and adjusting within the LMS. Additionally, I

enhanced transferability by varying the participation selection process and selecting instructors with different disciplinary backgrounds.

In qualitative research, dependability occurs when the results are consistent with the data collected (Merriam & Tisdell, 2016). I ensured reliability was trustworthy by maintaining an audit trail. By journaling, I kept track of the data collected, how categories were derived, details of the study, and how decisions were made in the inquiry process (Merriam & Tisdell, 2016). The journal had specific information such as the running record of the data collected, my reflections on the study, and questions I had were noted to ensure dependability for the study.

Ensuring conformability or objectivity in a study refers to how the study's findings may be influenced by the researchers' bias or participants' responses (Merriam & Tisdell, 2016). To ensure conformability for this study, I kept a journal with notes to maintain objectivity. The journal included my learning process, throughout the data collection and analysis. For this qualitative case study, I had no association with the instructors, this particular online college, or the university where the study took place.

Ethical Procedures

After I received IRB approval from Walden, to conduct the study, I followed procedures carefully and ensured that the study was undertaken with accuracy. Through an invitation letter via email, my contact person at the location of the study, recruited participants on my behalf. The invitation letter included the purpose of the study, participation criteria, terms for ensuring confidentiality, and the request for potential

participation by responding to the letter. The individuals, who first responded to the email invitation, represented volunteers who fit the following criteria: (a) must be an online instructor and may come from different disciplinary educational backgrounds (b) teach or taught online at this specific college for at least three years (c) who have learned and adjusted within the LMS. The selected participants were asked to sign the consent form via email that included the methodology, the security steps of sensitive information used for the study, to ensure confidentiality. The selected participants were contacted via email to arrange a date and time for audio recorded telephone interviews. To protect the selected participants and to ensure confidentiality, I assigned pseudonyms to represent the selected participants' actual names. The selected participants' pseudonyms were used for the study and for publishing the results. As the sole researcher for this study, I had access to confidential information used from the interview data. Regarding withdrawing from the study, the selected participants could request to be removed from the study (by telephone or via email) and the data collected destroyed and not be included in the final results. Data storage included password protection on all electronic files. Confidential information such as interview notes and signed informed consent letters will be in a locked file, and after five years, this sensitive information will be destroyed by shredding. The following section will summarize the main points of this chapter.

Summary

This chapter described the methodology details used for this qualitative case study. The selected voluntary participants for this study included eight online instructors

who met the following criteria: (a) must be an online undergraduate instructor and may come from different disciplinary educational backgrounds (b) teach or taught online at this specific college for at least three years (c) who have learned and adjusted within the LMS. The selected participants were interviewed by telephone using a semi-structured interview protocol designed by the researcher. Transcripts were sent to the selected participants via email, to give the selected participants an opportunity to add or change responses, to increase the validity of the study, and reduce research bias. Trustworthiness was established with the member checking approach. For this qualitative case study, I included ethical procedures to ensure: permission from the institutions, participant recruitment, data collection, data confidentiality, and secured data storage. Chapter 4 includes the results of the study.

Chapter 4: Results

Introduction

The purpose of this qualitative study was to explore and understand how instructors learned and adjusted within the LMS. I wanted to describe and interpret how these instructors learned and adjusted when experiencing new functions, updates or expectations and what internal and external factors supported their adjustment. The research questions for this study were as follows: How do instructors adjust when experiencing new functions, updates or expectations within the LMS? What internal and external factors support their adjustment to new functions, updates, and expectations in the LMS? Chapter 4 presents the setting, demographics, data collection, data analysis,

evidence of trustworthiness, results for this study, and the summary. The following section describes the setting for this study.

Setting

As mentioned in chapter 3, each of the participants was interviewed over the telephone. Each participant was employed as an online instructor in higher education. For this study, I selected eight online instructors who responded to my invitation. Participants were online instructors in higher education and were selected using the following criteria: (a) must be an online undergraduate instructor and may come from different disciplinary educational backgrounds, (b) who teach or taught online at this specific college for at least three years, and (c) who have learned and adjusted within the LMS. While establishing a sample size of eight participants, I was able to seek and ensure that each participant understood the LMS and the online culture of the university at this particular online college. This method helped me achieve data to describe the instructors learning and adjusting experiences within the LMS. This study took place at a 4-year private non-profit university located in the Midwestern U.S. The study took place at a college with approximately 130 adjunct faculty members. The faculty's full or part-time status was unknown. As of 2020, undergraduate enrollment had approximately 7,000 students. All participants within this case study had different disciplinary educational backgrounds, one participant had a PhD degree, one had a DBA degree, four participants had Master's degrees, and two of the participant's degree status was unknown. Table 1 presented the types of LMSs used previously and currently by the participants.

Table 1

LMSs Used by Participants

Participants (Pseudonyms used)	Black-board	Desire to Learn	Canvas	Moodle	Angel	Proprietary for small colleges	University Created
Amanda	*		*	*			
Bill	*		*	*	*	*	*
Carla	*		*	*			
Cosette	*	*	*				
Darla	*						
Holly	*						
Penny	*						
Peter	*						

Demographics

As described in Chapter 3, all eight participants were interviewed over the telephone. At the time of data collection, each participant was employed as an instructor at this particular higher learning institution. One participant, Cosette, was previously employed as an instructor at another institution for approximately three years before working at this institution for one year. Cosette also used the same LMS that this institution uses at her previous employment. Another participant, Penny, was previously employed as an online instructor for high school students taking college online courses for approximately three years before working at this institution for one year. Penny also

used the same LMS that this institution uses at her previous employment. None of the participants reported organizational conflicting challenges or personal circumstances that influenced the results of the study. Table 2 presents the participants' demographics and pseudonyms.

Table 2

Demographics of the Participants

Pseudonyms	Gender	Years of experience as online undergraduate instructors
Amanda	Female	9
Bill	Male	11
Carla	Female	5
Cosette	Female	1+
Darla	Female	5
Holly	Female	10
Penny	Female	1+
Peter	Male	7

Data Collection

When Walden University's IRB Approval was obtained, the agreed upon number of participants used for the study was 10–12. Once approved, I then emailed my approval letter to the dean of the college, where the study was to take place. The dean of the college met with the university's IRB committee, and I obtained approval (No. #2019.07)

to begin my study at this particular college. The dean of the college referred me to my contact person for recruitment and further communications. I emailed my invitation letter to my contact person, where he recruited individuals on my behalf. After two recruitment attempts with no participants, I made changes to my invitation letter and submitted these changes to Walden University's IRB committee. In September, 2019 I received permission from Walden University's IRB committee to include a $25.00 Visa gift card in my invitation letter to the participants. I then emailed my contact person and notified him that I received Walden University's IRB permission and explained the changes to my invitation letter. In October, 2019 my contact person received approval from the dean of the college to send out my invitation letter for a third time. The first four individuals expressed interest and met the criteria were selected to participate. I then emailed my contact person again in November, 2019. My contact person received approval from the dean of the college to send out my invitation letter for the fourth and last time. The last four individuals who expressed interest and met the criteria were also selected to participate. My dissertation committee agreed due to challenges in the recruitment process, eight participants was an adequate number to collect rich data for a basic qualitative study.

Once the first four participants read, signed, and sent back the consent form through email, I sent the participants dates and times to set up the telephone recorded interviews. After I interviewed each participant, I used a software speaking program to help me transcribe their responses into text, once completed I returned the transcriptions

through email. Once the transcriptions were reviewed, agreed, and postal addresses confirmed through email, I mailed the $25.00 Visa gift card as a form of "thank you" for their time and to convey my appreciation. The same process was repeated for the last four participants. Interviewing and data analysis were done concurrently as suggested by Miles et al. (2014). No more than 2 weeks transpired between the first set of telephone recorded interviews and the second set of telephone recorded interviews between October and November, 2019. The following section describes the data analysis process for this study.

Data Analysis

The data analysis plan for this study consisted of first and second cycle coding without the assistance of coding software, as suggested by Miles et al. (2014). In the first cycle coding, I copy and pasted data chunks from the transcripts to an index card template using a word processing program. I then printed the index cards on cardstock and cut them for easier reference. I then assigned codes to internal and external factors that reflected how the instructors adjusted to experiences, new functions, updates, or expectations within the LMS. Using Miles et al. (2014) coding method, I color-coded the themes and subthemes to highlight similar patterns for each index card and placed them in a chart according to the relationship to the research questions. The experiential learning theory (Kolb, 1984) served as the conceptual framework for this study and helped me in labeling the four major themes when I found similar patterns. Experiential learning was characterized by Kolb (1984) as a process that can be adapted to the world,

involves a connection between a person and the environment, and creates knowledge through learning experiences. Analyzing the process of learning and adjusting through the lens of the experiential learning theory (Kolb, 1984) provided a better understanding of the participants learning and adjusting process. In the process of labeling and defining the nine subthemes I found commonalities among the participants' experiences or responses. Table 3 presents the themes and subthemes.

Table 3

Themes and Subthemes

Themes				
	Support: participants accepted the institutions supportive measures	*Self-learning*: participants embraced being self-learners	*Communication:* participants incorporated a means of communication to connect	*Preparation:* participants adopted preparation steps to learn and adjust within the LMS
Subthemes				
	Application: participants applied the supportive measures given to them by the institution	*Self-directed:* participants were self-directed in creating their own knowledge to generate learning	*Engagement:* participants were engaged in exchanging information with colleagues or outside the institution	*Hands-on:* participants learning with a real world experience approach
	Resourceful: participants accepted supportive resources given to them by the institution or acquired supportive resources outside the institution		*Making connections:* participants made connections with colleagues or outside the institution	*Planning:* participants planning to learn the complexity of the learning and adjusting process
	Reflection: participants practiced reflection when they reflected on prior supportive experiences		*Experience planning:* participants planned their information technology experiences	

Patton (2015) argues that researchers should look for patterns and conclusions that fit the data and support alternative explanations; this is known as discrepant case analysis. The analysis for this study revealed a pattern of participants reporting a supportive learning environment was essential and the practice of self-learning assisted them in their learning and adjusting experiences. After the verbatim transcription process within this small sample, I analyzed the data, identified the patterns, and my data revealed there were no discrepant cases for this study. The lack of discrepant cases demonstrated a strong alignment to Kolb's (1984) experiential learning theory. The following section describes the evidence of trustworthiness.

Evidence of Trustworthiness

As the sole researcher of this qualitative case study, I was responsible for establishing trustworthiness by addressing credibility, transferability, dependability, and conformability. I maintained credibility by gathering adequate and accurate responses from the participants. Miles et al. (2014) mentioned collecting large amounts of data through the interviewing process enhances credibility in a study. Secondly, I ensured member checking (Merriam & Tisdell, 2016) by asking the participants to review the original transcript to ensure I properly recorded their personal experiences, so as not to misinterpret the participant's perspectives or meanings from their interviewing responses. Member checking ensures credibility because the researcher solicits feedback from the participants (Merriam & Tisdell, 2016). When gathering data through the interviews, the data or emerging findings should be varied and feel saturated (Merriam & Tisdell, 2016),

this process of collecting adequate and accurate amounts of data to reach saturation increased credibility in my study.

Transferability or external validity is defined by Merriam & Tisdell (2016) as the ability to transfer the findings to other situations. I ensured transferability by employing rich, thick descriptions (Merriam & Tisdell, 2016) to the study's context and findings of the participants learning and adjusting experiences within the LMS. Additionally, I enhanced transferability by varying the participation selection process and selecting instructors with different disciplinary backgrounds. In qualitative research, dependability occurs when the results are consistent with the data collected (Merriam & Tisdell, 2016). I ensured dependability by maintaining an audit trail (Merriam & Tisdell, 2016). In my journal, I kept track of the data collected, took detailed notes of dates and decisions made of my inquiry process, and categorized the results and placed them in a chart. The journal had specific information such as the running record of the data collected and questions I noted to ensure dependability for the study.

Confirmability or objectivity in a study refers to how the study's findings may be influenced by the researchers' bias or participants' responses (Merriam & Tisdell, 2016). To ensure conformability for this study, I kept a journal with notes to maintain objectivity. The journal included my learning process, throughout the data collection and analysis process. For this qualitative case study, I have no association with the instructors or this particular online college, located at a university in the Midwestern U.S. where the study took place. The following section describes the results for this study.

Results

The research questions for this basic qualitative study were as follows: How do instructors adjust when experiencing new functions, updates or expectations within the LMS? What internal and external factors support their adjustment to new functions, updates, and expectations in the LMS? Two male and six females participated in the study and all were online undergraduate instructors at this particular college. Nine subthemes emerged that were associated with four of the main themes. Table 4 presents the sub-theme frequency for each participant and pseudonyms.

Table 4

Subtheme Frequency

Subtheme frequency	Pseudonyms							
	Bill	Holly	Penny	Darla	Amanda	Cosette	Peter	Carla
Application	9	17	9	26	25	14	10	15
Engagement	4	5	5	9	4	3	6	3
Resourceful	7	12	9	24	30	13	11	14
Hands-on	5	10	7	18	24	14	9	13
Making connections	5	5	5	12	11	5	6	6
Planning	5	12	8	23	34	14	13	14
Experience planning	5	11	7	24	36	15	13	12
Reflection	4	5	2	12	21	5	8	14
Self-directed	5	10	8	22	30	14	12	15

Support

Support was defined as the participants accepting the institutions supportive measures. The theme emerged from the research question regarding instructors adjusting externally to new functions, updates, and expectations. The subthemes application, resourceful and reflection were identified in the support theme. All eight participants expressed supportive measures to help them adjust externally to new functions, updates, and expectations within the LMS.

Bill, a full-time instructor with this college, applied supportive measures to his learning process by requesting a development shell from the school. He stated "I will copy my previous production shell of a class in to the development style and then play with it, to see new updates and see what might be done differently and things like that." Kolb (1984) mentioned learners plan their experiences and apply them. Holly applied supportive measures to her learning process by planning and applying her learning and adjusting experiences through professional development provided by her university:

> I always take professional development, whenever it's offered. I always take it just because it's there and it's helpful, but what I really try to do, I try to experiment where I try to learn within the learning management system.

In his study, Hamlin (2015) showed instructors used informal learning requiring the instructor to introspect. For instance, Penny was resourceful in furthering her knowledge by focusing on her learning needs and finding a mentor to assist her in her learning process, she mentioned "I also ask my supervisors questions on this and that, and

they help me. I am one that thrives on self-learning, but you know you can't always depend on yourself, because you always have questions." Darla was also resourceful in furthering her knowledge by applying her training to her teaching process, she stated:

> We had training over the new features that were introduced within our LMS that allowed for videoconferencing. It was beneficial training to me because it introduced new features that allowed me to kind of understand how I could record my content, and make it available to the students, to help them within the online session.

Darla also applied supported training measures to help her learn metrics and statistics. She was able to review and reflect on her learning and adjusting experiences, creating knowledge where the emphasis was adapting and learning through the process, she mentioned:

> I could tell which students may be following behind within the class, how often they login, and when they last logged in, it worked for usage metrics, to be able to be predictive around students that may be successful in the course or not be successful in the intervention.

In Kolb's theory (1984) he mentioned learners plan their experiences and apply them. For example, Amanda applied supportive measures by planning her learning experiences to an updated synchronized learning platform given to her by her university, she mentioned, "My university just updated their system and it provides you with synchronized learning, so that you can go in and work your way through different

exercises to learn how to use the system, because it's completely new." Calkins et al. (2017) found if instructors were given a range of opportunities they would reflect on their teaching and learning more frequently, even after attending professional development programs. For instance, Amanda reflected on the teaching process every time there were any updates to the system because she had to be recertified to verify to the university she actually learned the changes and updates, through practice, she mentioned, "So they give you different exercises for example, go and grade the student's discussion posts or create a group assignment or things like that, so that you can understand to maneuver the different areas in the system."

Other participants applied supportive measures to help them adjust externally to new functions, updates and expectations within the LMS. Cosette was resourceful in continuing her knowledge by applying her own personal learning method, while reflecting on her teaching process, she mentioned:

> I like to get into it about a week ahead of time, just to poke around to see what modules are available and to see if there is anything new that I may want to integrate into my class. If there is, usually at this time, I play around with it, I also Google it a little bit, to see how people use it, or to see how people use it for their class.

Peter also mentioned the benefit of new instructor training that helped him apply supportive measures as he reflected on his teaching process. He stated:

> We worked on assignments, we submitted assignments, we did the readings, and we participated in the discussion board. I was just like a regular student, the benefit is that we were learning how to manipulate and maneuver within the online learning environment.

Carla mentioned applying supportive measures through training, while reflecting on her teaching process, she commented:

> We had a lot of training that we had to attend. If you could attend online, then you would logon on a conference call, then you would go through a webinar, or they would record the webinars to view it later on.

In addition, Carla reflected on her application and teaching process by completing different modules and activities and receiving a grade for her training, she mentioned:

> So you had to get a certain grade to pass, I hated it, because you are still teaching other classes and you have to do this. It took up a lot of time, but they wanted to make sure that we had a full understanding of what we needed to do, once the software went live and updated. If you did not pass a module, you were given an opportunity to retake it. They got a lot of complaints, it was very intense.

All the participants applied supportive measures, found valuable resources to continue their knowledge, and reflected on their teaching process to adjust externally to new functions, updates, and expectations within the LMS. Through their own learning experiences, all the participants expressed the need to apply supportive learning measures to prepare them to use and learn the new updates or upgrades within the LMS. All the

participants found important resources to continue their knowledge through the integration of professional development in their learning process. Most of the participants reflected on their teaching process through mentoring, guidance, or by evaluating their own personal learning goals to successfully maneuver and learn the LMS. The next section will describe how the participants were self-learners.

Self-Learning

Self-learning was defined as the participants embracing being self-learners. The self-learning theme emerged from the research question regarding, instructors adjusting internally to new functions, updates, and expectations. The subtheme self-directed was identified in the self-learning theme. All eight participants expressed self-learning measures to help them internally in their learning process. Merriam & Bierema (2014) mentioned practicing self-directedness requires the learner to seek learning. Bill shared how some of the smaller schools expect you to know how to use the LMS, before working in that environment. He was able to seek learning by applying self-directed measures to learn the LMS, he mentioned:

> There will be a faculty forum or some sort of internet site where you can go and access job aides. Those job aides typically include screenshots with step-by-step instructions on how to perform the functions that you need to be successful in the classroom, but to be honest with you some of the smaller schools, they kind of expect you to know it, when you get there, so you're constantly using it.

Bill also mentioned being self-directed by being a bit hands-on with the institutions orientation training process, he commented:

> Some schools when you get hired on, part of the orientation is an orientation process where they train you on the LMS and you go through and they show you how to post your discussions and how to grade things and all that type of stuff.

Holly also sought learning and practiced self-directedness by following up on new changes that were made to the LMS and was able to adjust her learning and teaching process, she commented:

> There's one school where I work, they provide little videos, and only because they don't do all the functions all the time. So let's say you have to do a student's grade change and you don't do those all the time. So the location where you want to do the grade change, there's a little video and it shows you screen by screen, with a screen caption, maybe just a minute and a half go here, do this, press this, hit that, and go. If you have a problem if it doesn't work, call this person. Those are the kinds of things that really work well.

One way to practice self-directedness is by taking responsibility for your own learning (Merriam & Bierema, 2014). Holly expressed being self-directed in her learning style by applying her organization's method of teaching the technology that led her to learn internally and adjust within the LMS:

> Another thing that works well, in one of the places where I work, they always send us these PDF's; you can print them, keep them aside, and follow the PDFs.

> I'm thinking for the end of the term grades and uploading to a separate system, those are the kinds of things you don't do every day, so it's really easy when it's time to do that function, to pull out the PDF's and follow the screenshots and do it.

Penny stated she immersed herself in her learning by being self-directed and applying the supportive system her organization provided for instructors. Merriam and Bierema (2014) stated self-directed learners identify their own learning needs and create learning goals to succeed in their own learning experiences. Penny practiced her institutions technology learning goals by applying what she thought was challenging by doing the following, she mentioned:

> They laid out a support system, by using a platform called, One Note. In the One Note platform, there was guided instructions on what to do, but I always tell people you have to be hands-on with it and not just reading it, but to actually go through it and practice it. So in One Note, they had the videos for Blackboard, giving you instructions on what to do when something happens and to help you maneuver through Blackboard.

In addition, Penny mentioned she was hands on and intrinsically motivated to self-direct her learning by, "Logging on to Blackboard twice a week; to make sure she understood all the processes of Blackboard."

The experiential learning theorist, Kolb (1984) mentioned learning is the process where development occurs. Darla was able to achieve these developmental learning

stages by responding to the circumstances and being self-directed through the integration of professional development experiences, she mentioned:

> I attended training on the features of the LMS that support more of the online environment. So what I did after that training, I went into my online courses that I'm teaching, and I did some investigation around the login habits of the current students that I have in my class. I logged in and I was able to reproduce some of the metrics that I learned about in the training and I was able to identify one student, who I didn't even realize, that this person was not keeping up and participating. I was able to send the person an email and intervene with that person.

Merriam & Bierema (2014) mentioned self-directed learners select, plan, and adopt suitable learning strategies to learn. Darla was able to be self-directed by learning to select what she wanted to learn, plan her training, and then adopt her new technological skill to her teaching process. She did the following:

> So the focus of this year's training was the LMS and tools that would help with online or remote training. I think there were four different tracks that were offered, and so I selected one on metrics provided in the LMS. That one what was called, I believe, a tools course that went over metrics and usage and being able to research and predict student success, based on the students login trends it was an analytics track. I signed up for it and attended. The training was one of the main resources that I've used to adapt to the new LMS that we updated.

Learning and adjusting internally within the LMS required the instructor to be intrinsically motivated to self-direct their learning to acquire unique technological skills. Amanda mentioned, “If the course changes, if they are course updates then I have to adjust by conducting research and making sure that the support material that I chose for students is up-to-date and that is aligned with the course objectives.” Learning and adjusting within the LMS meant instructors needed to be able to master self-directedness in generating tasks, refining concepts, and improving techniques to learn new technical experiences. For instance, Amanda was able to look for work and perform interviews to see what the technical industry was providing, she did the following:

> One of the things that I do is practice, oddly enough for my students, is that I apply for work. I go on interviews; when I’m not looking for work, just too kind of see what’s happening in the industry. For example, what are they looking for, what they are not looking for, what changes have come, what they are looking for in resumes, and things like that. So I am always doing research and making sure that I can provide up to date resources for learners, so that the information that I’m providing isn’t outdated.

The instructor prepares to teach by being a self-directed learner. Knowles (1975) defined a self-directed learner as an individual that can act upon their learning, without assistance from others, when identifying their learning needs. For example, Cosette mentioned that her organization did a very good job training the instructors and made a point to have it accessible for them, by stating:

> The University does a very good job in training their adjuncts, and I will say that when I first started, I went through a Blackboard module, to learn how to use it. It was also posted online, so if I wanted to go back and look at it, they made it accessible to people.

Peter also mentioned he was a self-directed learner by participating in upgrading an entire online program within his university to make it more accessible to students, he mentioned:

> I participated and we updated an entire online program, all 10 courses. I participated in upgrading two of those programs; essentially we went through and cleaned it up a little bit. We reduced the amount of instructions and verbiage; also the look and feel of the application online changed, and created a more graphical online kind of a point-and-click type environment.

Through this learning experience, Peter was able to measure his personal learning outcomes by being self-directed. As participant and instructor he mastered learning and developed a learned technological skill within the LMS and maintained continual learning through this process as he mentioned further, he commented:

> I am actually teaching one right now, it's a lot more graphical, a lot more point-and-click. You are not presented with information to read, although some of it is optional, and much of it is instructional, rather than content.

A self-directed learner takes responsibility for their own learning by seeking and controlling their learning (Merriam & Bierema, 2014). Carla mentioned she was able to

seek learning and prepare for her teaching process by being self-directed in learning her organization's LMS, she commented the following:

> For me, it's more hands-on and I like to go to different areas. We had a sandbox, where we could pretty much do what we wanted, so it didn't affect the systems or anything like that. You could go to the sandbox and create different presentations and do discussion threads and stuff like that. So you could get an understanding of how the system worked.

All participants were self-directed in creating learning goals whether individually or created by their own learning institution. The instructor learned and made connections between their learning experiences when they connected technological information for instruction and applying the new information to their daily practice in their teaching process. The next section describes how the participants use communication measures to learn to adjust to new functions, updates, and expectations.

Communication

Communication was defined as the participants incorporating a means of communication to connect. Communication emerged from the research question regarding instructors adjusting to new functions, updates, and expectations. The subthemes engagement, making connections, and experience planning were identified in the communication theme. All eight participants expressed communication measures were needed to help them adjust to the learning process. In their study, Lock & Johnson (2017) recommended having an educational plan with supportive structures receptive to

the needs of the learners and continued communication among the organization. By focusing on how the instructor learns, institutions and administrators may consider developing an LMS that has the potential to assist the instructor with an innovative and effective LMS design. Bill learned to be more receptive when communicating with his vendors by being more engaged in his learning as he mentioned the following:

> Well, what I've learned, when the vendors tell you they were updating, read those emails. You might think, it's not going to be a big update, and most of them are not, but one time you miss something, you are going to be lost for a little bit, so you know. One thing is to have good relationships with them and listen to the communications that they are sending out about any changes that might be coming and things like that.

Kolb (1984) mentioned learners plan their experiences and apply the skills they learn and make adjustments. The instructor learns to plan his or her teaching process by maintaining continual learning, adjusting, and testing new ideas. Holly mentioned a time where her organization upgraded the LMS and she had to plan and adjust her learning:

> There's been times where I'm thinking of one particular school where I teach, where they change the entire exam format, put some rubrics in, that were embedded into the learning management system, they never said a word, and we had three days to grade exams, so it was a pretty much a learning by doing experience.

Penny also learned to make connections by receiving guidance provided through her organization. Through these connections, she was able to shadow another instructor and planned her learning experiences as she mentioned, “Before I started the course, I was able to shadow another teacher, so that also helped as well. When I shadowed the teacher, I was able to ask questions and things of that nature.” When engaged in an online community of learning, instructors created shared meaning, planned teaching strategies, and discourse around the same topic of interest (Merriam & Bierema, 2014). While Amanda also learned to engage and make connections by joining a seasoned group of instructors to help her learn she commented:

> Joining a group with seasoned instructors or finding a mentor is always helpful because that person can answer quick questions for you or provide you with tools that can assist you on things that may not be provided in training, or just doing from years of teaching online.

Making connections while planning their learning experiences helped Penny and Amanda build a community of learning with a shared objective. The instructor learned to plan and applied learning and adjusting experiences within the LMS. Darla maintained continual learning by testing new ideas, while having the ability to apply newly acquired skills. Darla mentioned she made a connection by reaching out to the support desk for help and became engaged in the experience planning process, as she mentioned the following:

> I know if there are questions or issues that I can call our service desk or helpdesk to answer questions for me. If I have technical issues and not necessarily how to

> type questions or navigation type questions, because those have been some of the main issues that I've had with the navigation because certain functions have changed. So I have had to kind of work to some of that myself, but if I have a technical issue I will call the helpdesk and may provide support.

The development of training and supportive structures (Lock & Johnson, 2017) from the institution is a continual process requiring experimentation from the institution, administration, and the instructional staff (Lock & Johnson, 2017; Rucker & Frass, 2017). The instructor may be receptive to the development training and supportive structures by being engaged and planning their experiences, Cosette was able to do both by doing the following:

> It was adjunct faculty training day, this year it was a whole day, instead of having online modules, they tried to gather people together, and we are all remote. I was able to attend online. That was particularly helpful. What's really nice is that you can actually access that, at any point, because they recorded it and had it posted. I thought that was really helpful. Rather than use my email to ask questions, call somebody, or ask someone a question I can refer back to that.

Peter was also engaged and planned his learning experiences through his organization's development training and supportive structures (Lock & Johnson, 2017) he mentioned:

> I'm an adjunct. Every quarter, the school has an adjunct meeting on campus, where we get together to discuss their learning objectives and things that they want to emphasize. You know, the industry is changing, where a lot of online

> audio visual stuff seems to be more and more popular. They have training programs where they talk about the ability to do video and so forth with your students. This is something I would like to pursue; I haven't really done that, since this is not a requirement, but more of a recommendation.

Carla was also engaged and made a connection by reaching out to the LMS vendor for technical assistance, while planning her learning experiences, for example she commented the following:

> At one point, I reached out to the software manufacturer or the vendor for some specific training because of the course I was teaching. I needed specific training from them, in order to adequately teach the course. The professor's view and the students view were different. I reached out to the vendor, to ask if I would go through the same training that the students saw. They were very accommodating and loaded a file and they went through the steps. I wanted to get an understanding of what my students were seeing when they performed a task or when they talked to me, I knew what they were talking about. Yes, I had to do that for one of my classes.

The instructors used and applied communication measures to adjust their learning when using the LMS. Understanding how they engaged, how they made connections, and planned these learning experiences may increase alignment between the organization, administration, and faculty. Researchers Rucker & Frass (2017) recommended administrators should think of the LMS as a significant component for teaching and

learning. This is a continual process requiring experimentation from the organization, administration, and faculty. The organization and administrators may consider developing LMSs that have the potential to assist the instructor with an innovative and effective LMS design to help them adjust and learn these experiences. The instructors learn and adjust differently through their own life experiences. These life experiences link learning and development, through the process of engagement in the roles of life (Merriam & Bierema, 2014). The next section describes how the participants use preparation measures to learn and adjust to new functions, updates, and expectations.

Preparation

Preparation was defined as the participants adopting preparation steps to learn and adjust within the LMS. Preparation emerged from the research question regarding the instructors adjusting to new functions, updates, and expectations. The subthemes hands-on and planning were identified in the preparation theme. All eight participants expressed preparation for learning measures were needed to help them adjust to the learning process. All the instructors manipulated the technology, improved their technological skills, and continued their learning by adjusting within the LMS.

Bill prepared for his learning by planning and presenting at his institution's professional development day, he goes on to mention:

> I just did a presentation, I presented on why and how faculty should teach and do hybrid classes in the LMS. I've also taught one on how to teach online classes in

> the LMS. Even faculty, are encouraged to do well and present professional development opportunities for other colleagues.

By teaching others to improve their technological skills within the LMS, Bill was hands-on when planning his learning and was able to take advantage of the professional development his organization provided and in turn found his passion for teaching others. Holly had a different experience when preparing to learn and adjust to the LMS. She preferred being hands-on when learning and adjusting to the LMS. Holly commented the following:

> There have been other experiences, which were the opposite in a different school, they changed the entire learning management system to a different platform and then they had months and months and months of training and required training and then follow up training and it really didn't help much when you came face-to-face with the actual learning management system because you really needed to have your hands on it and be able to use it, rather than just read about it.

By being hands-on, Holly mentioned she planned her learning differently when learning and adjusting to the LMS, she mentioned:

> What doesn't work for me, and is just my style, if you make me take training today and it's in November, by February if I actually have to do this thing, I definitely have to go back and look at all the screens and do it all over again. Every school is different, even though they have the same software; iteration of the learning management system is slightly different.

How the instructor utilized and perceived the LMS as an educational learning tool may impact how they learn and adjust within the LMS. Since instructors are urged to utilize the LMS for learning and teaching practices the instructors planned and prepared their learning differently, for example Penny took advantage of her organizations weekend professional development and applied those skills to her teaching by planning her learning and being hands-on with her training. She mentioned the following:

> The school had done something for all the adjuncts, it was on a Saturday, whether you're local or not, you could log into Zoom, in order to be part of the process, but it was a training session. It was done on the weekend, you had to dedicate some time. If you were unable to attend, they would send you the recording from those sessions, but it was basically making sure that all adjunct professors really understood the various amount of assistance that was provided.

Darla also utilized her organizations weekend professional development by being hands-on and planning her learning for teaching initiatives, she mentioned, "There was an adjunct day, its weekend training and they usually do adjunct days once a year. So the focus of this year's training was the LMS and tools that would help with online or remote training". Understanding the complexity of the learning process and focusing on the instructors planning measures to adjust to the LMS as a learning tool, may improve their teaching initiatives. Amanda reflected on how she planned to learn by taking training that might be helpful in her teaching practice, she commented:

> These are always trainings that I try to attend, so that I don't get lost in the monotony of the role. There is always new ways to improve upon how you're doing those things. So after the training they offer refresher courses, and a lot of times the refresher courses focus on specific areas of knowledge.

Understanding how the instructor is satisfied with using and adjusting to the LMS as a learning tool may help in building a productive learning environment for the institution and instructors willing to use and adjust to the LMS. Cosette planned her learning by doing the following:

> I don't typically use training modules for any of these. I just kind of dive in and poke around to see what's happening. In Blackboard, I used it as a student, so I am very familiar with it from both sides, which it made it more intuitive as an instructor.

Peter planned and adjusted his learning by having a meaningful role in participating in upgrading the entire online program at his institution, he commented:

> I touch the system almost every day, I'll skip a weekend once in a while, but basically I'm interfacing with the application almost every day, even with the changes that were made, since I participated in making those changes. I guess I have been doing it for so long, so I kind of go with the flow here.

Carla planned her learning and adjusting by using the tools provided by her institution to learn the LMS interface. She mentioned, "Everything is available within the sandbox. There is a specific time that we have to finish the work in order to get an understanding.

We did not travel anywhere; we just logged on and use that box." Carla prepared her learning and developed her teaching skills by maintaining continual learning within the sandbox.

For this study, the themes support and self-learning emerged and helped me answer the research question: What internal and external factors support their adjustment to new functions, updates, and expectations in the LMS? The themes communication and preparation emerged and helped me answer the research question: How do instructors adjust when experiencing new functions, updates or expectations within the LMS? After the verbatim transcription process within this small sample, I analyzed the data, identified the patterns, and my data revealed there were no discrepant cases for this study. The lack of discrepant cases demonstrated a strong alignment to Kolb's (1984) experiential learning theory. The following section summarizes chapter 4.

Summary

I addressed the research questions using the data collected by the participants. The results were based on the responses from the eight participants who learned and adjusted when experiencing new functions, updates or expectations within the LMS. Support was one particular theme observed in the data. One participant was resourceful in furthering her knowledge by focusing on her learning needs and finding a mentor to assist her in her learning process. All the participants found important resources to continue their knowledge through the integration of professional development in their learning process. Another theme that emerged in the data was self-learning. All the participants were self-

directed in creating learning goals whether individually or created by their own learning institution. One particular participant was able to look for work and perform interviews to see what the technical industry was providing. This participant was self-directed in her non-traditional method of learning and collected data to bring back to her students. The third theme noted was communication. All eight participants expressed communication measures were needed to help them adjust to the learning process. The participants planned their teaching process by maintaining continual learning, adjusting, and testing new ideas. Two participants were able to make connections and planned their learning experiences and build a community of learning with a shared objective. The final theme found in the data was preparation. All eight participants expressed a need for preparation for learning measures were needed to help them adjust to the learning process. All the participants manipulated the technology, improved their technological skills, and continued their learning by adjusting within the LMS. Chapter 5 includes an interpretation of the findings, future recommendations, and the conclusion.

Chapter 5: Interpretation of the Findings, Recommendations, and Conclusion

Introduction

The purpose of this qualitative case study was to explore and understand how eight online undergraduate instructors described their online learning and adjusting experiences within the LMS. The eight instructors (a) had different disciplinary educational backgrounds, (b) teach or taught at this online college for at least 3 years, and (c) learned and adjusted within the LMS. I used Kolb's (1984) experiential learning

theory to help me analyze and describe the instructor's online learning and adjusting experiences. The following paragraphs describe the key findings.

The first key finding was the need for a supportive restructuring of the LMS. This would integrate the LMS into the curriculum for online learning experiences and would benefit the organization, administrators, instructors, and students. One participant suggested the institution could provide important information or artifacts that could be housed within the LMS, so that students could also immerse themselves in the e-learning tools. In this study, the participants planned and learned from these online experiences and adapted to the functionalities or e-tools. The participants used the LMS as an online pedagogical tool for online professional development training and to plan and prepare for their learning. Adopting and implementing an online supportive restructuring of the LMS, could help participants with an innovative and effective LMS design.

The second key finding was the need for the participants to have additional enhanced self-directed online learning opportunities within the LMS. These additional opportunities would permit the participants to learn online through different channels and to have practical online learning experiences through their own self-directed methods. When participants learned online, they were able to master self-directedness in generating online tasks, refining online technological concepts, while also improving online techniques. One participant prepared her teaching lessons ahead of time by reviewing the training modules and going online to see how other instructors applied the training to their teaching. Merriam and Bierema (2014) noted that in practicing self-directedness,

people seek learning, plan learning, take responsibility for their own learning, control their learning, and evaluate their own outcomes. By taking advantage of these additional enhanced self-directed online learning opportunities within the online college, the participants were more likely to maximize the efficiency of the institution's LMS and would be more willing to persist through the most challenging online learning tasks or experiences.

The third key finding was to allocate adequate time for the participants to plan and prepare their online learning and adjusting experiences within LMS. This finding aligned with the experiential learning theory's last stage, active experimentation (Kolb, 1984). The participants demonstrated that they had experienced this phase by planning and maintaining continual online learning, testing new online ideas, and adjusting to their online learning experiences. Data indicated the participants had the ability to plan and adopt suitable online learning strategies. For instance, two participants planned and took advantage of the institution's online sandbox to make online learning connections, whereas all the participants planned and participated in their institution's required online professional development to learn the LMS. Allocating adequate time for the participants to effectively learn the constant online technological changes within LMS is necessary for the participants to enhance the quality of their online instructional training within the LMS.

Interpretation of the Findings

In response to the two research questions, I analyzed the data through the conceptual lens of experiential learning (Kolb, 1984). My analysis of the data revealed that all eight participants transferred new knowledge and adjusted to this new knowledge through Kolb's (1984) four stage experiential learning cycle: concrete experiences, reflective observation, abstract conceptualization, and active experimentation. All eight participants learned and adjusted internally by being self-learners while adjusting externally to the supportive structures provided by their institution.

Online Learning Interpretations

All the participants were instructors who learned, practiced, and taught in an online undergraduate classroom. All the participants were engaged in applying their personal online learning methods. All the participants wanted to enhance their online learning experiences when adjusting and learning within the LMS. Some participants felt the LMS along with the online technological tools should be included in the curriculum and the course delivery to enhance the online learning experience. This confirmed that the institution needed to better understand how the participants trained and learned online. Online training could include virtual e-learning classrooms with various online training resources within the LMS to support the participant's online learning and adjusting experiences.

Educational administrators need to know that instructors require preparation and supportive measures to learn the online environment, such as online training and online

activities (Meyer & Murrell, 2014b). With an emphasis on technological advances that are relevant and effective (Feltenberger et al., 2016; Johnson & Sinkinson, 2016; Meyer & Murrell, 2014b) the institution may focus on the online application and the significance of the online training. For instance, the institution may apply online self-paced modules, instructor-led online modules, and online webinars as part of the instructor's online professional development training within the LMS. The participants may focus on online learning to create an online social community with other online colleagues to learn and adjust to the LMS. This method of social learning allows the participants to share information and materials about learning and teaching (Lewis & Wong, 2015). The online platform enables the participants to participate in a social community, where they engage in sharing knowledge resources, learning opportunities, and personal experiences, which is a good practice (Booth & Kellogg, 2015; Feltenberger et al., 2016). All the participants for this study were receptive and participated in some form of online social community and made online connections with colleagues or outside connections to learn the LMS. For instance, some participants made connections by reaching out to the institution or were resourceful in finding online resources outside of the online social community to learn the LMS. This confirms that the participants were self-directed (Meyer & Murrell, 2014a) in making connections. The participants were also resourceful in using the LMS as a pedagogical tool to learn online or were independent learners in a social community of practice. Whether the instructor was self-directed and learned in a social community (Baran & Correia, 2014) or is a self-directed independent learner

(Hood, 2016), each setting provided a unique background for sharing knowledge among practicing instructors learning to teach online.

Online institutions must discover ways to meet relevant online learning pedagogies through informal or formal methods. Informal online learning consists of small group learning, mentoring from experienced instructors, and other informal methods of learning (Schmidt et al., 2016). Informal learning is continual learning whether the participant practices teaching in an online or traditional platform. The instructor is hands-on and plans these informal learning experiences and converts these planned experiences into knowledge. Thus the process of learning the LMS informally creates a hands-on community of learners that plan and customize their learning through active and interactive experiences. To cultivate a shared objective among the instructors who teach online, collaborative groups, mentoring, and community building must be incorporated into the organization's informal learning methods (Baran & Correia, 2014). Two of the participants in this study planned by being hands-on and learned informally through mentoring and all the participants planned collaborative group learning methods through online colleagues or online specialists. This confirmed that the participants were hands-on and cultivated an online community of learning by planning informal learning methods when learning and adjusting within the LMS.

Another online learning option for the instructor was to learn through formal learning methods using the traditional or online platform. Formal learning consists of professional development training, attending teaching conferences, and other forms of

formal learning. Formal learning provided the participants with multiple online supportive options to plan their information technology experiences to learn the LMS. Some participants participated in an online formal supportive community by attending online teaching conferences, attending online consortia educational meetings, or attending online professional development training. Some participants cultivated these information technology learning experiences and shared with the online community to create an online supportive structure. This confirms that the participants practiced online formal learning through different channels. The role of the learning organization is to develop practical learning opportunities for instructors to learn through self-exploration (Hood, 2017) or a group learning system (Baran & Correia, 2014) that includes an online supportive structure for the participants. This method of formal learning enhanced the information technology experiences of the participants and assimilated their online learning and adjusting methods to embrace the LMS as an effective online pedagogical tool. With this in mind, the institution and administrative requirements are met and the participants accomplished the required online learning process with a supportive online structure placed by the institution. The following section examines and explains how the participants approach the learning process through Kolb's (1984) four-stage experiential learning within the educational organization.

Experiential Learning Interpretations

Experiential learning is defined as learning based on a real world "hands-on" experience approach (Kolb, 1984). The experiential learning theory identifies four

learning stages that learners go through in the learning process these are: concrete experiences, reflective observation, abstract conceptualization, and active experimentation (Kolb, 1984). The participants demonstrated that they had experienced the concrete experience stage, when they were exposed to new experiences (Kolb, 1984). This stage helped me understand how the participants were exposed to new experiences that led to learning and adjusting within the LMS. All the participants were immersed in the online learning experience. This confirms that the participants were engaged in exchanging information with colleagues or were resourceful in finding resources outside of the institution to support their online learning experiences. In addition, all eight participants were receptive and self-directed in generating online learning measures to help them internally in their online learning experiences. Learning and adjusting within the LMS required the participants to be intrinsically motivated to self-direct their online learning to acquire a unique technical skill. Learning and adjusting within the LMS meant that the participants were able to master self-directedness in generating online tasks, refining online concepts, and improving online techniques to learn new online technical experiences. By practicing these three dimensions of resourcefulness, engagement, and self-directed principles, the participants were more likely to maximize their institution's goals and were more likely to persist through the most challenging learning tasks or experiences. Since the participants used the LMS daily (Dahlstrom et al., 2014) they had the potential to enhance their own resourcefulness in finding resources for their online

learning, they were self-directed in prompting internal learning, and were engaged when maintaining continual learning, which may benefit the institution and administration.

In the second stage, reflective observation, the participants reviewed and reflected on their learning (Kolb, 1984) and adjusting experiences within the LMS. The participants exhibited aspects of this stage by linking learning materials to prior experiences, relating the past to the present, to ensure continuity in his or her learning and adjusting within the LMS. All the participants reflected on their personal and professional online learning experiences from different perspectives. For instance, the participants practiced reflective learning when they participated in online professional development training provided by their learning institution to improve online learning and teaching among instructional staff. Some participant's practiced being reflective practitioners by participating in online teaching observations and guidance from mentors. All the participants reflected on the teaching process. This confirms that the participants practiced reflective observation by being reflective practitioners when learning online from multiple perspectives. Reviewing and reflecting (Kolb, 1984) on these learning and adjusting experiences when using the LMS created knowledge at this stage and the emphasis was adapting and learning through this process. In the following stage, abstract conceptualization (Kolb, 1984), the participants make connections or master their learning process and it becomes a skill through their learning and adjusting experiences within the LMS.

Most participants conveyed that they prepared for learning by being self-directed learners; thus aligning with Kolb's (1984) abstract conceptualization stage. Knowles (1975) defined a self-directed learner as a learner who acts upon their learning without assistance from others, creates their own learning goals, is resourceful in finding knowledge, selects, plans, and adopts suitable learning strategies, and measures personal learning outcomes. The data demonstrated that all the participants were self-directed learners. The participants were self-directed and manipulated the technology tools to learn online and adjust within the LMS. The participants were self-directed towards their own online learning goals by making connections to learn the technological information given to them by the institution. The participants were self-directed when they reached out to the institution or outside the institution for assistance towards learning a technological skill for instruction. This confirms that all the participants were self-directed when learning the technological information for instruction and made connections between these technological learning experiences. The participants mastered learning and developed it into a learned skill within the LMS. In the following stage, active experimentation, the participants plan their learning experiences and apply them (Kolb, 1984).

The participants implemented all four stages of the experiential learning model (Kolb, 1984), which aligned with Kolb's (1984) active experimentation stage. The participants maintained continual online learning by being hands-on and testing new ideas while having the ability to apply newly acquired skills. This process helped the

participants adapt to online practices when planning and applying their information technology online learning experiences. Kolb (1984) mentioned learning is the process where development occurs. The participants achieved developmental learning stages by responding to the circumstances through the integration of online professional development training. As demonstrated in the data, all the participants responded to online professional development training for continual learning confirming that the participants adapted to online learning practices implemented by their institution. This stage may contribute to understanding the complexity of the learning process. The next section will focus on understanding the participants learning experiences towards the LMS.

Learning the LMS Interpretations

Understanding how the instructor perceived the LMS as a learning tool may also impact how they learned the LMS. All the participants were self-directed and utilized the educational learning tools provided by the institution. Even though, one participant found the online training to be non-supportive to her learning style and another participant found the grading methods ineffective. Thus confirming that the participants perceived the LMS as a learning tool and it impacted how they learned the LMS. When the instructors had positive attitudes towards learning the LMS, Walker et al. (2016) found they had a more positive attitude towards online learning and they tended to be more positive in the quality of instruction. Instructors who tended to have more negative attitudes towards online learning tended to be more negative towards the usage of the

LMS (Walker et al., 2016). The relationship between the quality of tools provided by the institution for the participants to learn the LMS and how the participants perceived the LMS may have impacted how they learned the LMS interface. The following section will cover the participant's attitudes towards learning the LMS.

Identifying factors that affected the participant's attitude towards learning the LMS was useful in identifying their satisfaction in using the LMS. LMSs have been implemented at universities and instructors have been advised by their institutions to operate them for enhancing teaching and learning practices (Alghamdi & Bayaga, 2015). When the participants learned and adjusted within the LMS the internal attitudes the participants displayed towards the LMS may have affected their behavior when they engaged in the learning process and planned their learning outcomes. When instructors learned the LMS they experienced some challenging factors, technological issues, extra workload, among other factors (Mouakket & Bettayeb, 2015; Lock & Johnson, 2017; Varnell, 2016; Rucker & Downey, 2016). Most of the participants were satisfied with the LMS that the institution provided and found it to be helpful, even though some participants felt some application features were not effective for the online learning or teaching process. For instance, one participant felt the online training the institution provided was not supportive of the time the participants invested in learning and adjusting within the LMS. Another participant felt the institution needed to provide tools and resources within the LMS instead of providing separate important information or artifacts for personal use. In fact, all the participants were engaged towards the online

learning and adjusting process and most were satisfied in using the LMS that the institution provided. This confirmed that two participants displayed some form of internal attitude towards the usefulness of the LMS, but most were satisfied in using the LMS for their online learning and adjusting technological experiences. The following section will focus on understanding how the participants adopt and adjust within the LMS.

Limited research has been conducted on the different factors affecting the adoption and acceptance process of the LMS in higher learning institutions (Mouakket & Bettayeb, 2015). All the participants adopted and accepted the online technology given to them by their institution. As more higher learning institutions are adopting and accepting the technology, the LMS should be designed with the instructor and student in mind, if not it can affect the benefits and outcomes of using the LMS (Almarashdeh, 2016). All the participants were engaged and often times were met with adopting and accepting the online learning tools within the LMS. All the participants adopted the LMS by planning their online information technology experiences and accepted the online technology tools provided by their institution to assist them in their learning and teaching process. The adopted online technology tools within the LMS provided them with online community building opportunities that had the potential to enhance the participant's online learning and adjusting experiences. The participants accepted the operational functionalities of the online technology tools within the LMS, confirming that they adopted and accepted the LMS. The following section will focus on the limitations for this study.

Limitations of the Study

One limitation associated with this study was the limited amount of available volunteer participants recruited for the interviews. I conducted a search for instructors who learned and adjusted within the LMS in order to understand their experiences. The scope of this study included instructors who teach or taught at this particular online college for at least three years. Additionally, it was challenging to find an institution willing to assist and support data collection for this study. This may be due to the topic and a preference for discretion when discussing their faculty development practices. The lack of discrepant findings may have been related to having a smaller sample of participants than originally planned. Due to a limited and challenging recruitment process, my dissertation committee agreed eight participants was an adequate number to interview and collect rich data for a basic qualitative study.

Another limitation was not being able to observe the participants in the phone interview process. While I could not observe them visually for body language, I was able to hear for verbal cues. Some verbal cues included: long thinking pauses to describe their responses, passion about the subject matter, or hear the frustration in their tone of language. For instance, one participant described his passion for mentoring others who expressed the same passion as his, while two participants expressed their frustration with their learning styles in learning the LMS.

The last limitation was the potential for interview bias. To help me with interview bias, I kept a journal of written field notes. Since I did not have any association with the

instructors or the institution where the study took place, the journaling helped me focus on my learning process when I collected the data and helped me increase my impartiality for this study. In addition, I addressed interview bias by asking the participants whether my interpretation of the data I collected was representative of their beliefs. The next section focuses on the recommendations for future research.

Recommendations for Future Research

One recommendations for future research included additional qualitative studies that explore instructor s' online learning opportunities to adjust within the LMS, since not much is known about these learning experiences. While this was a qualitative case study, it conveyed the perspectives of eight instructors within one institution who adjusted to the LMS. Additional researchers could research multiple institutions within the context of practical issues facing instructors today. Research indicated in the literature review that all universities using online platforms face challenges (Mbuva, 2014; 2015) in supporting instructor adaptation and optimal utilization within the learning environment (Walker et al., 2016). Instructors likely face additional challenges due to the nature of their curriculum and learning needs. Some researchers have examined the factors influencing instructors in the continual use of the LMS (Mouakket & Bettayeb, 2015), while other researchers focused on the learning experiences instructors used to help them teach (Hamblin, 2015; Smith, Hill & Downing, 2016). For instance, one recommendation for further research may focus on a qualitative study that examines the challenges instructors face when learning and adjusting to different types of LMSs at the same time, since many

instructors teach at different institutions at one time. The focus for an additional qualitative study may pinpoint the learning challenges the online instructor faces from day to day and provide supportive measures to strengthen the LMSs for their learning needs. This recommendation for future research may help online institutions develop LMSs that are effective in transferring new knowledge within the LMS.

Another recommendation for future research included a qualitative study that explores instructor's experiential learning (Kolb, 1984) opportunities within the online platform to learn and adjust within the LMS. Experiential learning was characterized by Kolb (1984) as a process that can be adapted to the world, involves a connection between a person and the environment, and creates knowledge through the learning experiences. Research indicated in the literature review that instructors preferred learning prospects centered on their knowledge and technical capabilities (Schmidt et al., 2016) and since the instructors knowledge is created and re-created through the process of experiences, learning is objective and subjective (Kolb, 1984). For instance, one recommendation for further research may focus on a qualitative study that examines professional experiential learning (Kolb, 1984) for instructors learning an adjusting within the LMS for an online institution. The focus for this qualitative study may be to understand experiential learning (Kolb, 1984) among the instructors who are using the LMS and learning online. This recommendation for future research may provide findings that recommend professional experiential learning (Kolb, 1984) opportunities that are engaging and embedded in each institution's LMS. By practicing experiential learning (1984) the instructors master and

maintain continual learning by testing new ideas, while having the ability to apply and acquire skills when learning to adjust within the LMS. The following section includes the implications for the study.

Implications

The results of this study have the potential of informing both the institution and administrators of the benefits of learning and adjusting within the LMS. Data collected from the instructors in this study revealed when they were engaged in the learning and adjusting experience, the instructors developed online technical knowledge and were dedicated to online learning and teaching. While learning and adjusting within the LMS, the instructors gained confidence in the learning process through self-directedness and by participating in online professional development opportunities provided by the institution and administration. Knowledge gained from this study could provide solutions for institutions and administrator's to design the LMS with the instructors in mind. Positive social change can be achieved through disseminating new research on the effectiveness of learning and adjusting within the LMS. For instance, the research would allow the institution and administrators to understand how the instructors transitioned effectively within the LMS and adjusted to online learning. Thus helping the institution and the administration see the learning benefits and the design of practice that impact instructors.

This study also has the potential of informing both the institution and administrators of the benefits of adopting and accepting an effectively designed LMS with the instructors learning in mind. Data collected from the instructors in this study

revealed they adopted and accepted the LMS, regardless of their learning style in an effort to help improve online education within the institution. Since adoption and acceptance of technology has increased in higher education (Almarashdeh, 2016) understanding how the instructor learns and adjusts to the learning tools within the LMS is imperative for the institution and administration. Knowledge gained from this study may provide better solutions for the institution and administration on the benefits and outcomes of using the LMS. Positive social change can be achieved by adopting and accepting an effective LMS specifically designed for the purpose of learning that would benefit the instructors. For instance, understanding what factors influence the instructor to learn the LMS and what technological e-tools used within the LMS may have the potential to enhance the learning and adjusting experiences for the instructors. This would help the institution and the administration with implementing online learning training processes and online supportive structures with the instructor in mind.

The theoretical implications for this study indicated all eight instructors learned by transferring new knowledge and adjusting to this new knowledge through Kolb's (1984) four stage experiential learning theory. The instructors reported they were exposed to new experiences, reviewed and reflected on their experiences, prepared and planned to learn by being self-directed learners, and they all implemented the four stages of the experiential learning model. Moreover, all eight participants reported they learned and adjusted internally by being self-directed learners while adjusting externally to the supportive structures provided by their institution. The experiential learning theory (Kolb,

1984) served as the conceptual framework and assisted me in understanding the instructors learning and adjusting experiences within the LMS.

One recommendation for practice may be achieved through additional online professional development training opportunities for the instructors. Findings in this study indicated the instructors in this study adopted the online technology and enhanced their online instructional practices by attending online professional development training. The online professional development training may have been mandated by the institution, but the instructors were self-directed learners in applying what they learned to their online teaching practice. Instructors teaching online (Straumheim et al., 2015) are frequently given the LMS to deliver online instruction. The instructors adopted the online technology and often times enhanced the online instructional practices. Positive social change can be achieved by creating additional supportive online professional development training opportunities, so the instructors could spend more time learning the LMS and the e-learning tools, and thus making them more active and operational in the online classroom. For instance, training may be provided at various times and hours, so they can attend webinars and on-demand tutorials when needed (Rucker & Frass, 2017). The additional online professional development training is a continual process requiring experimentation from the institution, administration, and the instructional staff. By focusing on how the instructors learn online, institutions and administrators may consider developing LMSs that have the potential to assist the instructors with an innovative and

effective LMS design, therefore creating positive social change within the institution, administration, and among the instructors.

A second recommendation for practice may be achieved through additional supportive online mentorship opportunities for the instructors. Findings in this study indicated that the instructors lacked mentorship relationships with other colleagues. In fact, two instructors in this study had mentors and found them essential throughout their learning. Positive social change can be achieved by disseminating research on the effectiveness of online mentorship opportunities for instructors. Studies suggested the most effective professional learning involves learning through specialists, mentoring, and through a cooperative process (Hood, 2016). To conceptualize the instructors learning and to cultivate a shared objective among the instructors who teach online (Baran & Correia, 2014) mentoring must be incorporated into the organization's supportive measures. Mentorship opportunities may provide a shared meaning, planning teaching strategies, and discourse around the same topic of interest (Merriam & Bierema, 2014). In her study, Hamblin (2015) surveyed 83 instructors in 11 community colleges to determine what methods the instructors used to learn to teach and found that 100% of the instructors learned through mentors, networking, and faculty development activities, whereas 99% found discussions with colleagues more helpful. Positive social change could be achieved if the institution invests in creating more online supportive mentoring opportunities to assist in the success of the instructors learning process. With the growth

of online learning (Straumsheim et al., 2015) the institution and administrators must provide these online mentoring opportunities for social change to occur.

The third recommendation for practice includes the restructuring of the LMS. Restructuring the LMS with a synchronized e-learning platform would encourage the instructors to learn effectively and adjust accordingly without time restrictions or mandated institutionalized certifications. In addition, the synchronized e-learning classroom within the LMS would encourage the instructors to engage in planning and preparing their online learning experiences, reflect on their own online learning development, and apply what they learned online into their teaching process. The design and new structure could engage the instructors in the e-learning process and could influence the instructors to use the LMS more frequently. Zanjani et al. (2017) investigated the design of the LMS and the impact it had on 74 participants' engaged within the LMS tools. The researchers found when the participants had problems with the structure of the LMS it influenced their engagement with the LMSs tools. Since the instructors are encouraged to use the LMS by their institution, developing and designing the LMS with the instructors in mind would benefit the institution. Positive social change could be achieved if the institution develops the necessary supportive useful tools for use within the LMS and would benefit the institution, administration, instructors, and students. The supportive measure of designing and developing a restructured LMS could improve the instructors learning experiences and could help in closing the learning gap.

The fourth recommendation for practice was the need for the instructors to have additional enhanced self-directed online learning opportunities when adjusting internally to new functions, updates, and expectations within the LMS. These self-directed online learning opportunities are needed to improve the efficacy of the online technology, provide enhanced online professional development training, and to have adequate time to learn and adjust within the LMS. Given that most of the instructors were teaching online in more than one institution, positive social change can be achieved if the instructors are given the option for additional enhanced self-directed online learning opportunities, which would benefit the instructors. Considering that all of the instructors were engaged online and self-directed in the technical online experience, the instructors would become more involved and be more willing to participate in the enhanced online learning opportunities.

The last recommendation for practice was to allocate adequate time for the instructors to prepare and plan their learning and adjusting experiences within the LMS. The instructors prepared by maintaining continual learning through online professional development opportunities. The instructors also planned their learning experiences and applied the skills they learned and made adjustments. Seeing that distance education continues to grow (Allen & Seaman, 2016) the institution should embrace giving the instructors more time to prepare and plan to learn the LMS. Positive social change can be achieved if the instructors are given adequate time to prepare and plan their learning and adjusting experiences, thus the instructors would also be more likely to maximize the

institution's goals, and to persist through the most challenging learning tasks or experiences. As technology becomes fundamental at the institution (Mbuva, 2014) it is imperative that the instructors be given adequate time to prepare and plan for their learning experiences. The following section includes the conclusion for the study.

Conclusion

As I reflected on the instructors learning and adjusting experiences, it was inspiring to me as an educator to hear how they were willing to learn the LMS. I was eager to hear how they implemented their own personal learning styles when learning the LMS, but most importantly I was excited to analyze their responses using Kolb's (1984) experiential learning theory. In the analysis process the experiential learning theory (Kolb, 1984) provided me with a better understanding of the instructors learning and adjusting methods. For instance, this study revealed how all eight instructors learned by transferring new knowledge and adjusting to this new knowledge through Kolb's (1984) four adaptive learning cycles. In the first cycle concrete experiences, the instructors reported they were exposed to new learning experiences. In the second cycle reflective observation, the instructors reviewed and reflected on their learning experiences. The instructors demonstrated the third cycle through abstract conceptualization, where they prepared and planned to learn by being self-directed learners. Lastly, all the instructors demonstrated active experimentation, where they implemented all the four stages of the experiential learning model. Moreover, all eight instructors reported they learned and adjusted internally by being self-directed learners while adjusting externally to the

supportive structures provided by their institution. In addition, I was struck to hear that most of the instructors had two to five online teaching positions where they had to learn a specific LMS provided by each institution. In our conversations, the instructors shared their learning successes and challenges. The instructors spoke passionately about their teaching experiences and the importance of designing the LMS that meets their learning and preference needs. The instructors embraced the new learning experiences by demonstrating their commitment in learning the institution's LMS.

The information these instructors shared provided clear insight into the learning process and their learning needs. The responses the instructors shared could help specific online learning approaches and provide supportive measures implemented by the institution, which may ease the instructor's acceptance and adoption of a newly designed LMS. Higher learning administrators and professional academic leaders should consider the responses shared by the instructors. Understanding how the instructor learns and adjusts within the LMS may influence how they are engaged with the LMS. Additional research and evaluation studies should focus on investigating these trends and test the impact of designing the LMS with effective e-learning tools for institutions that may soon be adopting a new LMS. Additional research should focus on the instructors learning process, the benefits of online training, and the institutions online supportive structures. This could ultimately result in true improvement in an area where many institutions and faculty struggle.

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Appendix: Interview Questions

1. How long have you been an instructor?
2. How much experience do you have teaching online?
3. Tell me about your experience of learning and adjusting to new functions and updates placed within the LMS? Describe a specific experience.
4. What learning strategies have you taken to learn and adjust to new functions and update within the LMS?
5. What university tools or resources have you used to support your learning and adjusting process to the new functions and updates within the LMS? Describe any tools or job aides or resources provided?
6. What specific professional development opportunities have been offered at your college to help you learn and adjust to the LMS?
7. Based on your learning and adjusting experiences, share two examples of advice you would offer a new online instructor who is considering using the LMS?
8. Are there any additional learning and adjusting experiences you would like to share that would benefit this study?