

**Exploring Faculty Perceptions of a Professional Development Program for Online
Teaching and Learning in an Intentional Community of Practice: A Phenomenological
Study**

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Authorization to Submit Dissertation

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Abstract

The purpose of this phenomenological study was to explore faculty experiences with a professional development program designed to prepare them for improved online teaching and learning. The research question was: how do faculty perceive their experiences in a professional development program designed to prepare them for better online teaching and learning in an intentional community of practice? The review of literature for this study focused on the following topics: (1) issues in teaching online in higher education, (2) faculty professional development, (3) effects of team-based professional development interventions in higher education, (4) conditions for successful professional development activities in teams, (5) communities of practice, and (6) related frameworks.

A qualitative phenomenological approach was applied in this study. Participants were selected through a purposeful sampling method. In-depth, semi-structured interviews were used to collect narrative data from eight identified participants. An analysis of collected data revealed four emergent themes: (1) obtaining new knowledge, (2) confirmation of appropriate tools and strategies, (3) mixed learning experience, and (4) community bond. Although the participants' academic backgrounds varied, most of them obtained new technological and pedagogical knowledge by participating in the professional development program. Some participants reaffirmed their previous knowledge; for those faculty members, the professional development program was a reinforcement of appropriate tools and strategies. Additionally, participants had mixed feelings about their learning experience. Some participants perceived the program as beneficial, while others felt the program repetitive. Furthermore, participants perceived a community bond. The investigation concluded with recommendations for future research.

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I would also like to thank the participants — the eight faculty members whom I interviewed. I would like to express my sincere gratitude for your time and effort. Thank you for agreeing to be the participants of this study and sharing your valuable professional program experiences. I enjoyed our conversations throughout the study, and I have learned so much from each of you.

I extend my gratitude to my good friends. Thank you for offering kind words of encouragement along the way. My dear family, thank you for your never-ending encouragement, support, and love. I love you more than words can express.

Dedication

This dissertation is dedicated to my grandparents, who inspired me and instilled in me a love of learning.

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Chapter 1: Introduction

The purpose of this study was to explore university faculty experiences with a customized professional development program designed to enhance online teaching and learning within a community of practice setting in the inland Pacific Northwest of the United States. This chapter provides the background, theoretical frameworks, statement of the problem, the purpose and significance of the study, and the research question. It also includes definitions of key terms, researcher positionality, and a summary.

Background

Online education is growing rapidly, and the demand for quality online instruction is increasing. However, faculty members are at widely varying levels of expertise with online teaching. Some faculty have fully embraced online education, whereas other faculty members are newly learning how to integrate instructional technology into their online teaching (Allen & Seaman, 2007). Some faculty members may have limited experience with online teaching because they have spent the majority of their careers in a traditional face-to-face classroom (Brookfield, 2015). Faculty tend to replicate within their own classrooms the way they were taught (Carr-Chellman & Dyer, 2000). Thus, the teaching and learning environment has not changed significantly over time or has been very slow to change. Faculty members are content experts in their fields, and they are responsible for course delivery (Conrad, 2004). However, they may not be prepared for online education. There are a variety of issues in teaching online courses in higher education, such as those related to online learners, content development, and instructors (Kebritchi, Lipschuetz, & Santiago, 2017).

To improve the quality of online teaching, many institutions are providing structured professional development opportunities for their employees. Nonetheless, each professional development program is a complex process that should require not only participants' engagement and critical reflection but also a commitment to the community of practice (Golden, 2016). The Professional Learning Association (2014) also posited that professional development programs should provide faculty with technologies, tools, and pedagogy to increase student achievement and promote faculty professional growth. Faculty professional development programs are necessary for instructors to improve knowledge of online teaching and learning, to increase acceptance of online teaching and learning quality, and to stay current with new and changing pedagogies and technologies for teaching online (Koepke & O'Brien, 2012; Vaill & Testori, 2012). Professional development opportunities can facilitate faculty to successfully transit to online instruction (Austin & Sorcinelli, 2013). Furthermore, organized professional development programs for online faculty are essential to a successful online program (Hahn & Lester, 2012; Orozco, Fowlkes, Jerzak, & Musgrove, 2012; Vaill & Testori, 2012).

Professional development programs in higher education generally focus on individual experiences rather than group experiences (Gast, Schildkamp, & van der Veen, 2017). However, professional development programs focusing on groups or teams are needed. According to West (2012), team members can bring a variety of experiences to the table, which is beneficial for the effectiveness of the team. In addition, participating in a team can create a commitment to the organization and reduce resistance to organizational change (West, 2012). Vail and Testori (2012) discussed how important training is for faculty who teach online courses. Koepke and O'Brien (2012) found that faculty's perceptions of online

learning are changed as a result of their experiences in professional development activities for online teaching and learning. To improve the quality of online education, it is crucial to provide faculty professional development programs for online teaching and learning so that faculty can obtain knowledge and skills pertaining to teaching online.

Theoretical Frameworks

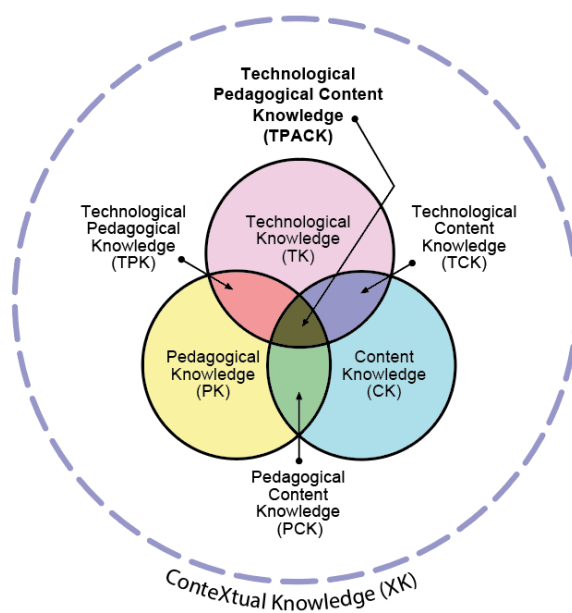
The theoretical frameworks that guided this study include the technological, pedagogical, and content knowledge (TPACK) framework and social learning theory. The TPACK framework was utilized because the participants of this study taught both face-to-face and online courses and had struggled to adjust pedagogical skills for online teaching using technology (Abdo Qasem & Viswanathappa, 2016). Social learning theory was applied because the term *community of practice* actually stems from theories that social participation is a process of learning (Wenger, 1998). This type of learning is applicable for faculty who participate in professional development programs within the context of communities of practice. In the program of this study, faculty were building knowledge through engagement (Sabzian, Gilakjani, & Sodouri, 2013); therefore, the TPACK framework and social learning theory shared a common bond during the implementation of the professional development program.

TPACK framework. The TPACK framework is regarded as an appropriate tool to evaluate the outcome of a professional development program because pedagogy and technology are combined and viewed as effective professional development practices (Anderson, Barham, & Northcote, 2013; Butcher, Leary, Foster, & Devaul, 2014; Koehler, Mishra, & Cain, 2013). Additionally, the TPACK framework has been named one of the most remarkable ideas in the educational technology field in recent history, and it has an

enormous impact on both research and practice in not only teacher education but also teacher professional development activities around the world (Mishra, 2018). By applying the TPACK framework, trainers can be reminded to address pedagogy and the subject-area content knowledge during professional development activities rather than focusing merely on technology (Jimoyiannis, Tsiotakis, Roussinos, & Siorenta, 2013). Although there are several adaptations of the TPACK framework used for professional development activities, each has been adapted to meet the unique needs of various organizations (Jaipal-Jamani & Figg, 2015; Jimoyiannis et al., 2013; Koehler et al., 2013). The upgraded TPACK framework aligns with this study. During the data collection and data analysis phases, I applied the TPACK framework to explore the faculty's perceptions of technological knowledge, pedagogical knowledge, content knowledge, and contextual knowledge. The revised version of the TPACK image is shown in Figure 1.

Figure 1

Revised Version of the TPACK Image. © Punya Mishra, 2018. Reproduced with Permission



Social learning theory. Social learning theory relates closely to the concept of community of practice. The term *community of practice* actually originates from theories that social participation is a process of learning (Wenger, 1998). Initially theorized by Albert Bandura in the late 1970s, social learning theory explained the importance of observation, imitation, and modeling. Bandura (1977) posited that “most human behavior is learned observationally through modeling: from observing others, one forms an idea of how new behaviors are performed, and on later occasions, this coded information serves as a guide for action” (p. 22). This theory has often been viewed as a bridge between behaviorist and cognitive learning theories, as it encompasses three essential elements: attention, memory, and motivation (Couros, 2003). The program in this study was conducted within the context of a community of practice, and this theory was applied. Wenger (1998) argued that “within the context of social learning theory, learning becomes, fundamentally, a social phenomenon and is placed in the context of our lived experience and participation in the world” (p. 3). In my study, the participants experienced the professional development program for online teaching and learning, and learning occurred.

Statement of the Problem

A variety of problems exist among professional development programs. Although a number of higher education institutions provided professional development activities for faculty (Allen & Seaman, 2014), MacDonald (2017) found disparities between what educators expect from the program and what administrators expect educators to do with the program. Without clearer administrative direction and faculty input regarding outcomes, educators and administrators may have different perceptions about the purposes and benefits of professional development programs. Richardson-Burnette (2016) found that, when a

professional development program was aligned with educators' professional goals and needs, educators took the course more seriously and transferred learning into practice. There are also problems with motivations. For example, Herman (2013) found that although up to 70% of institutions with established teaching and learning development units offer incentives, the support is not universal and varies by incentive type and purpose. Not all incentives work. Wynants and Dennis (2018) described several challenges encountered by faculty in completing professional development programs online, including a lack of intrinsic motivation, social interaction, and accountability. In summary, professional development activities are offered in a number of higher education institutions. Still, concerns over motivation and perceived worth often exist. To continuously improve online instruction, further professional development activities are needed.

To improve online teaching and learning, professional development activities designed to address online components are critical (Quiroz, Ritter, Li, Newton, & Palkar, 2016). Meanwhile, to provide successful professional development programs, various factors need to be considered. In accordance with Wells (2014), addressing effective professional development strategies and defining instructors' role in the online learning setting support the delivery of sustainable and continuous professional development interventions. Additionally, an increase in research is needed in the area of professional development activities for educators who have transitioned from teaching in a face-to-face setting to teaching in an online setting (Dikkers, 2015); thereby, further problems can be identified, and corresponding strategies can be implemented in future professional development interventions. Further faculty professional development activities centering on strategies for

effective online education are necessary to improve faculty skills for teaching in the online environment as well as the overall quality of distance education (Kennedy, 2015).

Purpose of the Study

The purpose of this phenomenological study was to explore university faculty experiences with a customized professional development program designed to enhance online teaching and learning within a community of practice setting in the inland Pacific Northwest of the United States. The study was guided by the following research question: how do faculty perceive their experiences in a professional development program designed to prepare them for better online teaching and learning in an intentional community of practice?

The Professional Development Program

As requested by a university in the inland Pacific Northwest, the professional development program was provided by a large Midwestern top 10 research land grant university. The provider was asked to recommend, customize, and execute a program covering both design and facilitation for online teaching and learning. The purpose of the partnership was to support a college at the university as it explored transitioning more face-to-face classes to an online format and to improve the efficacy of faculty who are already teaching online but who perceive they had a need to improve their skills. The college provided an outline of topics that they would like to be addressed. Two essential areas included integrating technology in the online environment to enhance student-to-content, student-to-instructor, student-to-student interaction, and forming a community of practice to support faculty during the professional development program. In addition, the provider university delivered evidence-based best practices and materials to the participants at the host university to improve the quality of online courses and learner experience. The program

consisted of eight modules and was delivered asynchronously through the Canvas learning management system.

The community of practice ran for the entire duration of the professional development program. It allowed the faculty members to interact with each other, have conversations, share wins or challenges, and share solutions to instructional problems. An optional community of practice section was also provided after the end of the program to allow the participants to continue their conversations.

The program's schedule was as follows:

- Course Overview
- Module 1: The Online Teaching and Learning Environment
- Module 2: Course Planning
- Module 3: Assessment
- Module 4: Instructional Materials
- Module 5: Course Activities & Interactions
- Module 6: Universal Design, Intellectual Property, and Accessibility
- Module 7: Managing Your Course
- Module 8: Wrap Up, Lessons Learned & The Future of Online Learning

Each module was open for two weeks on average. The program ran from September 2019 to January 2020, and it ended before the COVID-19 pandemic impacted the United States.

There was a total of twenty participants for the professional development program. All participants were from the same institution; seventeen were from the College of Education, Health and Human Sciences in the disciplines of Curriculum & Instruction, Leadership & Counseling, and Movement Sciences, and three were from other units outside of the college

in the disciplines of Geology, Landscape Architecture, and Mechanical Engineering. Among all the participants, nine were assistant professors, seven were associate professors, one was professor, and three were instructor faculty.

Significance of the Study

Professional development interventions for online teaching have been identified as an essential component of improving the quality of online education (Ali, Khan, Ghazi, Shahzad, & Khan, 2010; Brown, Benson, & Uhde, 2004; Hahn & Lester, 2012). To better understand faculty participation in professional development activities and the factors that influence faculty satisfaction with online teaching, more research on faculty development programs for online teaching and learning and online teaching satisfaction is needed (Bolliger & Wasilik, 2009; Hoekstra, 2014; Moore, 2013). Eventually, the goal is to continuously improve the quality of online teaching and learning in higher education.

Much of the existing literature focuses on improving professional development activities by providing faculty specific technology skills workshops, ongoing just-in-time learning, online courses about online teaching, mentoring programs, and the like (Brooks, 2010; Czaja & Sharit, 2013; Hahn & Lester, 2012). In addition, a variety of studies have examined the need for institutional support for faculty, such as enhanced communication of expectations for online teaching and learning, organizational support in the form of release time to teach online, offering incentives, and increased compensation (Barksdale et al., 2011; Cook, Ley, Crawford, & Warner, 2009; Tabata & Johnsrud, 2008). This study will contribute to the growing body of research on the topic of professional development activity as it pertains to online teaching and learning. Additionally, research on faculty lived experience of a professional development program for online teaching and learning in an

intentional community of practice context will enrich the areas of faculty professional development, online teaching and learning, and community of practice.

Researcher Positionality

The research topics in this study are closely related to my professional experiences in higher education. Having previously worked as an instructional designer in higher education, I provided professional development activities to faculty members and have experience in online teaching and learning. My previous experience led me to believe that the professional development program researched in this study would be beneficial to both faculty and students. While I was aware of my own positionality, I did not impose my perspectives and bias on the participants. Instead, my goal was to allow participants' perspectives and beliefs to emerge from the data (Anfara & Mertz, 2015).

Definition of Key Terms

Professional development. For the purposes of this study, professional development specifically refers to activities designed to assist participants in the integration of online learning technology using appropriate pedagogical practices related to content (Bustamante & Moeller, 2013).

Online teaching and learning. Online teaching and learning is a web-based form of instruction accessed by students to complete instructional activities at any time of the day or night (Price, 2018).

Community of practice. Community of practice is defined as “a group of professionals informally bound to one another through exposure to a common class of problems, common pursuit of solutions, and thereby themselves embodying a store of knowledge” (Hildreth & Kimble, 2000, p. 3).

TPACK framework. The TPACK framework can be defined as knowledge based on educators' area of expertise in the content area where the appropriate pedagogical skills are applied in using a variety of technologies to demonstrate the understanding of the content area (Chai, Koh, & Tsai, 2013; Voogt, Fisser, Roblin, Tondeur, & van Braak, 2013).

Social learning theory. Wenger (1998) stated that “within the context of social learning theory, learning becomes, fundamentally, a social phenomenon and is placed in the context of our lived experience and participation in the world” (p. 3).

Summary

With the rapid growth of online education, faculty professional development programs for online teaching have the potential to play an essential role in improving the quality of online teaching and learning. However, a variety of problems exist among professional development programs. More research is needed in the area of professional development activities for educators who have transitioned from teaching in a face-to-face setting to teaching in an online environment (Dickers, 2015) so that further problems can be identified and corresponding strategies can be implemented in future professional development interventions. Faculty professional development activities centering on strategies for effective online education are necessary in order to improve faculty skills for teaching in the online environment as well as the overall quality of distance education (Kennedy, 2015). The program involved in this study intended to meet that need. This phenomenological study explored faculty lived experience of a professional development program for online teaching and learning within a community of practice, contributing to the growing body of literature enriching knowledge in the areas of faculty professional development, online teaching and learning, and community of practice. Further, the results of

the study may inform others considering similar professional development programming in their own context if the outcomes are transferable (Lincoln & Guba, 1985).

Chapter 2: Literature Review

This chapter summarizes the literature related to issues in teaching online in higher education, faculty professional development, effects of team-based professional development interventions in higher education, conditions for successful professional development activities in teams, communities of practice, and related frameworks. This chapter concludes with a synthesis of findings from the literature.

Issues in Teaching Online in Higher Education

A variety of issues arise along with the advancement of online teaching and learning in higher education. Kebritchi et al. (2017) synthesized prior studies, providing an overview of the issues and challenges of teaching successful online courses in higher education. Three primary categories were identified: issues related to online learners, issues related to content development, and issues related to instructors (Kebritchi et al., 2017). These are outlined here to clarify the issues that were highlighted by the participants in the study. These specific issues were raised by our participants as they described their experiences.

Learner-related issues. Kebritchi et al. (2017) found four major issues related to learners in teaching online courses in higher education, including learners' expectations, learners' readiness, learners' identity, and learners' participation. The details are described below.

Learners' expectations. Online learners' unrealistic expectations can be an issue and affect online teaching (Li & Irby, 2008; Luyt, 2013). For example, some learners may expect immediate feedback on their online comments and assignments. Some may have questions on the grades they received. Other learners may not take assignment deadlines seriously (Li & Irby, 2008; Lyons, 2004). To address such issues, instructors are advised to clearly state

their course rules and policies to the learners at the beginning of the course (Kebritchi et al., 2017).

Learners' readiness. According to the literature, learners' readiness to participate in online courses includes several aspects, such as learners' technical skills in using computers and the Internet (Peng, Tsai, & Wu, 2006), learners' attitudes toward and perceptions of the Internet (Tsai & Lin, 2004), some learners' cultural and non-English backgrounds (Luyt, 2013), and learners' time management skills (Hill, 2002; Roper, 2007).

Learners' identity. In online courses, learners may have feelings of isolation and disconnection from others (McInnery & Roberts, 2004). It is important for instructors to guide learners to develop a shared sense of belonging, purpose, and norms when teaching online courses (Koole, 2014; Lapadat, 2007). Learners' strong sense of identity as valued members of their learning community is important for them to build effective knowledge (Goodyear & Zenios, 2007).

Learners' participation. Learners' participation in online courses can take place in different formats, such as interaction with peers and instructors by writing (Romiszowski & Mason, 2004; Vonderwell & Zachariah, 2005), observing peers' interaction, and reading course materials (Hrastinski, 2008, 2009; Wise, Speer, Marbouti, & Hsiao, 2013). It is an oversimplification for instructors to consider students' participation only by the quantity or length of their online postings. Instead, online instructors need to recognize and support different ways learners prefer to participate in online contexts (Kebritchi et al., 2017).

Content-related issues. The major content-related issues in online education include the role of instructors in content development, integration of multimedia in course content,

the role of instructional strategies in content development, and consideration of content development (Kebritchi et al., 2017). The details are described below.

Content development and instructors. When instructors prepare materials for online courses, it can be challenging for them to generate new materials or adjust the materials from face-to-face classes to an online environment (Li & Irby, 2008). Usually, instructors lack proper training and support when transitioning their course content from face-to-face settings to online environments (Kyei-Blankson & Keengwe, 2011). It is insufficient to simply copy face-to-face course content to an online course (Kebritchi et al., 2017). Instructors are encouraged to consider content, pedagogy, and technology when designing online courses (Koehler, Mishra, Hershey, & Peruski, 2004).

Content and multimedia. Multimedia can be integrated into course content to enhance students' learning experience (Almala, 2005). Multimedia options allow students to have multiple attempts to master course content, and instructors do not need to repeat the same material (Miller, 2014). In addition, student engagement can be enhanced with the use of multimedia (Kebritchi et al., 2017). Hathaway (2013) also encourages instructors to provide multiple types of learning tools to engage students in online class settings.

Content and instructional strategies. Following principles of andragogy (adult education methods), online course content should be learner centered (Chametzky, 2014; Luyt, 2013). According to Niess and Gillow-Wiles (2013), when instructors develop content for online courses, it is best to combine these components: collaborative activities, reflective activities, clear assessment criteria, and integration of technology. Training on how to use technology must be provided to students at the beginning of an online course (Niess &

Gillow-Wiles, 2013). Furthermore, as online courses are usually asynchronous, faculty members should also be mindful of incorporating synchronous activities in the course.

Considerations for content development. The trajectory of an online course must be made clear for students, and content must be presented in a consistent manner (Allen, Kiser, & Owens, 2013). It is important to provide students clear assignment instructions to improve student understanding (Allen et al., 2013; Miller, 2014). As in a face-to-face course, both formative assessment and summative assessment are of importance in an online course (Miller, 2014). Although formative assessment has been less emphasized in online settings, it not only supports student learning but also engages students in the online environment (Gikandi, Morrow, & Davis, 2011).

Instructor-related issues. The major issues related to instructors in teaching online in higher education include changes in faculty roles, transitioning from face-to-face teaching to online teaching, time management, and instructors' teaching styles (Kebritchi et al., 2017). The details are described below.

Changes in faculty roles. One of the main challenges when teaching an online course is the change in the role of the faculty member (Berge & Collins, 1996; Coppola, Hiltz, & Rotter, 2002; Syverson & Slatin, 2010). There are four different roles that online instructors can take, including pedagogical, social, managerial, and technical roles (Berge, 1998). In teaching online courses, a faculty member's role changes from a knowledge transmission agent to a specialist who guides students' learning (Juan, Steegman, Huertas, Martinez, & Simosa, 2011). In addition, some novice instructors find teaching online courses involves several issues such as a heavy workload, technology, and student-instructor interaction (Choi & Park, 2006). Furthermore, instructors experience challenges at three phases in the process

of teaching online courses: design, delivery, and follow-up (Fein & Logan, 2003). Instructors may feel a disconnect between the course design and the actual delivery of the course (Neely & Tucker, 2010).

Transitioning from face-to-face to online. It is a challenge for instructors to transit from face-to-face teaching to online teaching (Kebritchi et al., 2017). Instructors found a disconnect between the way they were taught and the way they teach (Anderson, Imdieke, & Standerford, 2011). In addition, it is challenging to find specific institutional expectations for teachers, students, courses, and staff in online courses (Anderson et al., 2011). Many instructors found it challenging to deliver their course content online and engage their students due to the lack of visual and face-to-face connection between the two parties (Crawley, Fewell, & Sugar, 2009).

Time management. Another issue faculty members face is the time required to design, develop and deliver an online course (Capra, 2011; Fein & Logan, 2003; Humphries, 2010). It may take instructors twice as long to prepare and teach an online class as a face-to-face class (Cavanaugh, 2005). Providing faculty support is one solution to improve instructors' online teaching experience (Kyei-Blankson & Keengwe, 2011).

Teaching styles. Each instructor has their own teaching style. To improve online teaching effectiveness, instructors can use a variety of e-learning methods and strategies, such as conceptual discussions, effective communication, timely feedback, knowledge development, dynamic presentations, simulations, laboratory tutorials, and collaboration with students to support their activity (Juan et al., 2011). In addition, it is beneficial for novice instructors to have specific training in online pedagogical delivery so that they understand how students learn online and how to engage students in the online environment (Choi &

Park, 2006). Moreover, to improve online teaching and learning, instructors should have training in the use of technology, as ineffective use of technology can negatively impact students' learning (Fein & Logan, 2003).

The issues described above lead to the conclusion that higher education institutions need to provide professional development activities for their instructors, trainings for learners, and adequate technical support for content development to improve the quality of online teaching and learning (Kebritchi et al., 2017). The program in this study focused on providing professional development activities for faculty members and intended to improve the quality of online teaching and learning.

Faculty Professional Development

Faculty professional development is any activity that is designed to improve faculty performance in their professional academic endeavors (Saroyan & Trigwell, 2015). In this study, the professional development program was designed to improve faculty performance in their online teaching and learning. In addition, a variety of terminologies are used in the literature to describe faculty professional development, such as academic development, instructional development, professional competence, professional learning, and professional development (Saroyan & Trigwell, 2015). In this study, we used the term “professional development.”

There are multiple types of professional development activities in higher education, such as the use of portfolios (e.g., Baume & Yorke, 2002; Fitzpatrick & Moore, 2013), courses or programs (e.g., Roberts & Weston, 2013; Skelton, 2013; Stenfors-Hayes, Weurlander, Dahlgren, & Hult, 2010), mentoring (e.g., Bryant-Shanklin & Brumage, 2011; Donnelly & McSweeney, 2011), or peer observations (e.g., Amrein-Beardsley & Osborn

Popp, 2012; Chamberlain, D'Artrey, & Rowe, 2011). Each professional development program is a complex process that should require not only participants' engagement and critical reflection but also a commitment to the community of practice (Golden, 2016). The Professional Learning Association (2014) also posited that professional development programs should provide faculty with technologies, tools, and pedagogy to increase student achievement and promote faculty professional growth. Professional development program instructors need to consider all the factors before offering the program. These factors were also explored when interviewing the participants of this study.

Faculty professional development programs are necessary for instructors to improve knowledge of online teaching and learning, to increase acceptance of online teaching and learning quality, and to stay current with new and changing pedagogies and technologies for teaching online (Koepke & O'Brien, 2012; Vaill & Testori, 2012). Professional development opportunities can facilitate faculty to successfully transit to online instruction (Austin & Sorcinelli, 2013). Furthermore, organized professional development programs for online faculty are essential to a successful online program (Hahn & Lester, 2012; Orozco et al., 2012; Vaill & Testori, 2012). As this study focused on professional development as an intervention, it is important to understand how the literature on professional development helps illuminate our inquiry.

Effects of Team-Based Professional Development Interventions in Higher Education

Professional development programs in higher education generally focus on individual experiences rather than group experiences (Gast et al., 2017). However, professional development programs focusing on groups or teams are needed. According to West (2012), team members can bring a variety of experiences to the table, which is beneficial for the

effectiveness of the team. In addition, participating in a team can create a commitment to the organization and reduce resistance to organizational change (West, 2012). There are various kinds of teams that engage in professional development activities together, such as communities of practice, teacher inquiry communities, faculty inquiry groups, and teacher design teams (Gast et al., 2017). The focus of this study was a community of practice team.

Garet, Porter, Desimone, Birman, and Yoon (2001) argued that professional development programs where instructors must collaborate with each other have several advantages, which include: members can share common materials; working together provides opportunities for members to discuss questions, skills, or concepts; instructors sharing the same students can discuss students' needs across classes or grade levels; and working in teams or groups can create a shared professional culture, and thereby help sustain changes over time (for example, should some instructors leave and new instructors join the team). Successful professional development programs must have an impact not only on instructors' knowledge and skills but also on instructors' attitudes (Ajzen, 1991; Guskey, 2000). Ajzen (1991) defines attitude as "the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (p. 188). In this study, the behavior in question is an innovative practice in online teaching and learning. Guskey (2000) described teacher learning as "new knowledge and skills gained with regard to design and implementation of curriculum innovations and/or teaching practice" (p. 121). Within this study, faculty learned new knowledge and skills pertaining to online teaching and learning.

Gast et al. (2017) synthesized various studies and provided an overview of the effects of team-based professional development interventions in higher education. The effects of professional development interventions on instructor learning include collegiality, critical

reflection, teaching approach, pedagogical knowledge, and teacher identity (Gast et al., 2017). Details are described below, and these factors were addressed by participants of the study when they shared their perceptions about the program.

Collegiality. Through participating in a team-based professional development intervention, colleagues have a chance to learn more about each other (Gast et al., 2017). Poyas and Smith (2007) found that participants became more aware of similarities and common interests between their own work and their colleagues' work due to their participation in a team-based professional development activity.

Critical reflection. Schon's "reflective practitioner" concept has been quite influential in education (Schon, 1983). Schon (1983) noted that reflective thinking plays an essential role in enhancing learning performance. By participating in a team-based professional development intervention, instructors in higher education can learn to critically reflect on their own teaching practices (Gast et al., 2017). For instance, Roblin and Margalef (2013) reported that the inquiry community they studied "enabled critical reflection that challenged teachers to make their educational beliefs explicit and to critically analyze the outcome of diverse activities" (p. 28).

Teaching approach. Another effect of participating in a team-based professional development intervention is a change in an instructor's teaching approach (Gast et al., 2017). For example, in a study conducted by Deni and Malakolunthu (2013), the results showed that, because of the participation in an instructor inquiry community, instructors were readjusting their teaching style to be more student-centered or democratic, demonstrating explicit empathy for students. In addition, by participating in professional development activities, instructors can also gain hands-on examples of how to implement new teaching

strategies and methods into their own classroom (Gast et al., 2017). Deni and Malakolunthu (2013) found that instructors can better understand their students and thereby provide better learning support for them. They also indicated that participating in a community of practice facilitated experimenting with innovative practices.

Pedagogical knowledge. Instructors can gain new pedagogical knowledge by participating in team-based professional development interventions (Gast et al., 2017). For example, in a study conducted by Poyas and Smith (2007), participants indicated that through team-based professional development activities, they not only learned new concepts but also improved their understanding of the concepts they had already known.

Teacher identity. Participation in a team-based professional development intervention affected participants' perceptions of themselves as well as their role as an instructor (Gast et al., 2017). For example, in a study conducted by Deni and Malakolunthu (2013), instructors stated that they obtained a better understanding of themselves as an instructor and their role in the classroom when they viewed their own professional commitments from peers' points of view. Gast et al. (2017) also reported that by being part of a community of practice, instructors had a better understanding of the role they played in their students' development and how they influence that development. In addition, instructors felt more confident and became more innovative in that regard.

The above are the effects of team-based professional development interventions on instructor learning in higher education. To have successful professional development activities in teams, certain conditions need to be met. These conditions are discussed in the following section.

Conditions for Successful Professional Development Activities in Teams

Gast et al. (2017) identified three classes of conditions for successful professional development activities in teams: conditions at the individual instructor level, conditions at the team level, and conditions at the organizational level. These conditions were addressed by participants of the study when they shared their perceptions about the program. The details of the conditions are described in the following sections.

Conditions at the individual instructor level. Six conditions are included at the individual level: attitudes, motivation, commitment, self-efficacy, professional identity, and availability (Gast et al., 2017).

Attitudes. Although changing instructors' attitudes can be an outcome of professional development interventions, instructors' positive attitudes prior to the start of a team-based professional development intervention can also stimulate success for these interventions (Gast et al., 2017). As Bakah, Voogt, and Pieters (2012) stated, instructors' positive attitudes towards design teams were an important factor for the sustainability of the teams. Moreover, Margalef García's (2011) qualitative study found that instructors' previous participation in formal professional learning activities was positive for the progress of the instructor team. Margalef García (2011) argued that formal trainings or seminars "made it possible [for instructors] to develop positive attitudes towards reflective practice, a greater willingness to continue learning, and enquiring into the teaching practice, and a certain sensitivity required in order to accept constructive criticism" (p. 146).

Motivation. Participants' motivation can be another condition for successful professional development interventions in teams. According to Bakah et al. (2012), a survey of both instructors who participate in design teams and instructors who did not participate in

design teams agreed that the former should be motivated to attend professional development interventions. However, most instructors in design teams indicated that, in order to increase motivation, they should not be rewarded financially (external motivation) because that could encourage instructors to participate in design teams only for monetary gain. Additionally, instructors should not be concerned that participation in professional development teams would jeopardize their tenure (Bryant, Niewolny, Clark, & Watson, 2014). According to Bakah et al. (2012), providing instructors the freedom to design and implement their own professional development programs within the design teams would not only motivate the instructors but also support the development of needed innovations.

Commitment. Along with motivation, instructors' commitment to their team could be another condition for successful professional development programs (Gast et al., 2017). However, Bryant et al. (2014) argued that the level of team members' commitment depends on the level of collaboration within the team. Bryant et al. (2014) differentiated among three types of teams, each with a different level of collaboration: in traditional small teams, members collaboratively design a course; in leader-based teams, one instructor oversees the team and creates connections between the team instructors; in modular teams, courses are divided into small parts, and each instructor only covers his or her own part. Bryant et al. (2014) posited that traditional and leader-based teams need a medium to high level of member commitment, whereas modular teams require less member commitment as less interaction is needed between team members.

Self-efficacy. To successfully implement new strategies and practices, instructors need to have a high level of self-efficacy (Gast et al., 2017). In this study, a high level of self-efficacy means instructors have confidence in their own ability to adopt and implement new

teaching strategies or skills. According to Margalef García (2011), Margalef García and Roblin (2008), and Schuck, Aubusson, Kearney, and Burden (2013), some instructors felt uncertainty in the process of innovation. As Margalef García and Roblin (2008) described, for some instructors, “deep unbalances and questioning about [the] ways of perceiving teaching and learning were generated when [instructors] faced a methodological approach based on principles, beliefs and values which demanded a reconstruction of their knowledge and practice” (p. 114). According to Roblin and Margalef (2013), only instructors who embraced the uncertainty and explored its potential were able to witness the impact of new strategies on students’ learning and the results gained by their colleagues. Therefore, instructors’ self-efficacy plays an important role in a successful professional development activity.

Professional identity. Instructor’s professional identity in higher education can also be a factor that influences the success of a professional development intervention. According to Gast et al. (2017), participants who had a research-focused professional identity may need an identity shift when they participate in a team-based professional development intervention (a community of practice, for example). Blanton and Stylianou (2009) noted that participants who professionally identified as content experts must undergo an identity shift and become teaching scholars, which could be a big challenge when building a community of practice in the context of higher education. Additionally, Margalef García and Roblin (2008) criticized the ideology of individualism that pervades teaching in higher education. They posited that, to make team innovations successful, a professional identity shift from being an isolated researcher/instructor to becoming a more team-oriented instructor is needed. Participants of professional development activities need to be aware of this factor.

Availability. An individual team member's availability could also influence the success of team-based professional development. For example, in a mixed-methods study by Bakah et al. (2012), instructors noted how their participation in the teams was affected by team members' sabbatical leave or long-term study leave. Furthermore, Dickerson, Jarvis, and Levy (2014) stated that instructors experienced constraints as a result of team members' being away.

Conditions at the team level. Gast et al. (2017) identified five conditions for successful professional development interventions in teams at the team level, including team interaction, goals and objectives, team composition, team leadership, and small group work.

Team interaction. The interaction between team members is an important factor for the success of team-based professional development interventions (Gast et al., 2017). There are three main points to be made. First, Gast et al. (2017) pointed out that trust within the team is of great importance for the success of a team, and face-to-face interactions between team members play an important role in building trust. According to Houghton, Ruutz, Green, and Hibbins (2015) and Keevers et al. (2014), teams that are partially or fully online often experience trust issues. In a mixed-methods study, Keevers et al. (2014) also noted the need for more face-to-face communication to strengthen interactions between team members.

Second, team cohesion is closely related to trust and can be an essential aspect for a successful team-based professional development intervention (Margalef García, 2011). However, Norton, Russell, Wisner, and Uriarte (2011) noted that developing a connection between new teams is critical but difficult to achieve. Likewise, in the qualitative study by Schuck et al. (2013), it was found that instructors were not able to build a cohesive

professional learning community because the team was too large and too diverse, making it challenging to operate cohesively.

Finally, information sharing among team members, both inside and outside of formal meetings, plays an important role in team interaction and can also influence the success of a team-based professional development intervention (Dickerson et al., 2014). During the focus group interviews, Bryant et al. (2014) noticed that teams were more successful when open communication existed between team members. Harwood and Clarke (2006) also stated communication and sharing information among participants support team development.

Goals and objectives. The clarity of a team's goals and objectives is crucial for the success of team-based professional development interventions (Margalef García, 2011; Roblin & Margalef, 2013; Schuck et al., 2013). Roblin and Margalef (2013) found that instructors in teams faced the dilemma of either pursuing their personal goals and objectives or balancing their personal goals and the goals of the team. Moreover, Schuck et al. (2013) noted several team members even quit a professional learning community due to the lack of shared goals and practice, among other things.

Team composition. Involving colleagues from outside the team (i.e., an external facilitator of group or learning processes) can change the composition of a team and can be beneficial for team-based professional development interventions as well (Gast et al., 2017). According to Margalef García (2011), an external expert, who can make participants aware of new practices and help them to adjust, is helpful for the team. He further indicated it is favorable to involve a facilitator in a team who can foster team members' understanding of problems or their alternatives. Furthermore, Blanton and Stylianou (2009) argued that more experienced faculty – a “more knowing other” (p. 88) – should be the organizer and leader

for team-based professional development interventions because it is impractical for team members to seek help or support from their busy peers.

Team leadership. Team leadership is of great importance for the success of a team-based professional development intervention (Gast et al., 2017). Although Dickerson et al. (2014) did not define excellent leadership in their qualitative study, they did note that excellent leadership was an effective practice for team-based professional development. In addition, Harwood and Clarke (2006) stated in their mixed-methods study that a team leader could facilitate communication within the team and help break down possible barriers and implement changes.

Small group work. Small group work is another factor for the success of team-based professional development interventions; that is, teams are temporarily divided into several small groups to work on specific tasks, and then members bring back their results to the whole team afterward (Gast et al., 2017). Likewise, in a qualitative study conducted by Dickerson et al. (2014), the participants also shared that small group work is a good practice. Furthermore, Poyas and Smith (2007) argued for the importance of discussions within small groups and noted small-group settings provide participants a safer environment in which to exchange their experiences.

To have successful professional development interventions in teams, conditions not only at the individual instructor level and at the team level but also at the organizational level play an important role. Therefore, these conditions were also considered in the data analysis.

Conditions at the organizational level. Gast et al. (2017) identified four conditions for successful professional development interventions in teams at the organizational level,

including organizational support, rewards, research focus, and finances and resources. The details are described in the following section.

Organizational support. According to Gast et al. (2017), organizational support plays an important role in the success of team-based professional development interventions, as the organization, where the intervention takes place, provides participants necessary resources to attend the intervention. Organizational support can be provided in different forms. For example, organizations can allocate explicit time for participation and recognize team efforts and achievements (Gast et al., 2017). Time is a crucial factor for members who participate in team-based professional development interventions (Margalef García, 2011; Margalef García & Roblin, 2008). As Deni and Malakolunthu (2013) noted, instructors need time to master and implement new operational methodologies and tools. Furthermore, team members often find it challenging to find time to meet or complete a training (Dickerson et al., 2014; Houghton et al., 2015; Rienties, Brouwer, & Lygo-Baker, 2013). In supporting successful team-based professional development interventions, time and space are essential for instructors (Harwood & Clarke, 2006). Additionally, multiple studies show that instructors desire recognition and encouragement of their team activities and accomplishments by the management (Harwood & Clarke, 2006; Keevers et al., 2014; Kosnik et al., 2015).

Rewards. Both Dickerson et al. (2014) and Keevers et al. (2014) indicated that rewards also influence instructors' participation in team-based professional development interventions because members want their participation to not only be recognized but also rewarded by their organization. Based on focus group interviews, Bryant et al. (2014) posited that organizations need to provide incentives and recognition for members who participate in team-based professional development. However, financial rewards for participants were

refused as instructors believed that monetary rewards could hinder upscaling and sustainability of team-based professional development programs, and some members might only participate in interventions for financial incentives (Bakah et al., 2012). Alternatively, Bakah et al. (2012) suggested that team activities and achievements can be taken into account during the promotion process.

Research focus. The university's research focus also influences the success of team-based professional development interventions (Gast et al., 2017). According to Bryant et al. (2014), a university's emphasis on research might discourage instructors from attending professional development programs on teaching and learning because instructors at universities are normally rewarded for their research product rather than teaching excellence. However, a quantitative study conducted by Rienties et al. (2013) found that their team-based online professional development programs attracted more instructors from research-intensive universities as the participants intended to learn how to effectively integrate technology into their teaching.

Finances and resources. According to Kosnik et al. (2015), available finances and resources also play a role in the success of team-based professional development interventions. In focus group interviews performed by Bryant et al. (2014), participants noted that a university's many decisions on teaching missions are based on the availability of funding instead of pedagogical needs, and thereby innovative teaching methods require sufficient resources.

In addition to the above conditions, context plays a critical role in successful professional development interventions. For this study, the context of the professional

development program was a community of practice, which is introduced in the following section.

Communities of Practice

Definition of a community of practice. A community of practice may be defined in a number of ways, but two of them are closely related to this research. First, Hildreth and Kimble (2000) described a community of practice as “a group of professionals informally bound to one another through exposure to a common class of problems, common pursuit of solutions, and thereby themselves embodying a store of knowledge” (p. 3). Second, Wenger, McDermott, and Snyder (2002) described communities of practice as “groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (p. 7). Both definitions use the terms “group,” “common concerns,” and “common pursuit of solutions.” While the Hildreth and Kimble (2000) definition foregrounded professionals, who themselves embody knowledge (p. 3), the Wenger et al. (2002) definition emphasized the concept of “interaction” (p. 7). In my study, a group of faculty professionals had common concerns, problems, and a passion for online teaching and learning. They not only embody a store of knowledge by themselves but also deepen their knowledge and expertise by continuously interacting with each other.

Cultivating communities of practice. Wenger et al. (2002) illustrated how to encourage community structure. They indicated, “Communities, unlike teams and other structures, need to invite the interaction to make them alive. For example, a park is more appealing to use if its location provides a shortcut between destinations. It invites people to sit for lunch or chat if it has benches set slightly off the main path, visible, but just out of

earshot, next to something interesting like a flower bed or a patch of sunlight” (p. 7). While the park example may seem simplistic, it suggests that building a community is different from building a complex organization that usually includes a series of structures, systems, and roles to achieve specific organizational goals.

Moreover, Wenger et al. (2002) set up seven principles for cultivating communities of practice and helping the communities gain what they call “aliveness.” The seven principles are as follows:

- (1) **Design for evolution:** As communities of practice are dynamic, the design should reflect adaptability or scalability. The key to this point is to include design elements that can help to promote community development. “Physical structures – such as roads and parks – can precipitate the development of a town. Similarly, social and organizational structures, such as a community coordinator or problem-solving meetings, can precipitate the evolution of a community.”
- (2) **Open a dialogue between inside and outside perspectives:** They posited that good community design requires the perspective of an insider who is familiar with the types of activities within. Meanwhile, the perspective of an outsider may help members see the possibilities within their own mechanisms or adopt other tools or procedures.
- (3) **Invite different levels of participation:** In any community, different levels of involvement exist. While members on the periphery may not participate in the community in the same ways as core members, they can still gain insights and knowledge through this type of participation. Therefore, all members, regardless of their participation levels, should be valued.
- (4) **Develop both public and private community spaces:** Members within communities interact with each other in both public and private functions. The public and private dimensions of a community are interrelated. “The key to design community spaces is to orchestrate activities in both public and private spaces that use the strength of the individual relationships to enrich events and use events to strengthen individual relationships.”
- (5) **Focus on value:** As communities are voluntary, value is essential. For members and prospective members, communities must offer value. Otherwise, there may not be an incentive for members to participate. While value may not always be explicitly apparent, it should grow over time as the community evolves.
- (6) **Combine familiarity and excitement:** Like the comforts of a hometown, familiarity is essential for a community. Meanwhile, excitement is also as important. As communities become mature, they settle into familiar ways of meeting and conduct. Nonetheless, communities also need challenge and spontaneity to provide a break from familiar daily occurrences.

- (7) Create a rhythm for the community:** As individuals' lives have a rhythm, "vibrant" communities also need a rhythm. "At the heart of a community is a web of enduring relationships among members, but the tempo of their interactions is greatly influenced by the rhythm of community events." While a living community has a particular rhythm or tempo, it is crucial to create a "right rhythm" at each stage of a community's development.

The seven principles are not only essential but also challenging for the cultivation of active communities of practice. These principles were reflected in participants' responses about the program during interviews.

Stages of community development. Community development can be separated into multiple stages. Wenger et al. (2002) identified three life phases for community development, which include five stages that represent the life cycle of a community. With paraphrased descriptions, the specific phases and stages are described as follows. The community development in this study experienced the five stages as well.

- (1) Formation (potential and coalescing):** At this phase, initial networks are discovered. Common ground and relationships are formed. The initial call (informally) is usually based on the generation of community value.
- (2) Integration (maturing and stewardship):** At this phase, one focus is on particular topics and the admission of new members. Meanwhile, tools and methods are developed for the community. New ideas are continually presented as the community evolves.
- (3) Transformation (transforming):** At this phase, the community transforms. It may fade away or officially close. The community may become redundant, or it may bring up the start of a new community. At this stage, the community may also merge with other communities or become institutionalized as a formal unit.

In summary, there is progress for communities of practice. To cultivate communities of practice, seven principles can be followed. Then, a community has a life cycle that includes five stages during community development.

Communities of practice in the online environment. With the development of the Internet, communities exist not only in the real world but also online. Most recent literature refers to online communities of practice as virtual communities or virtual learning

communities. There are two crucial concepts related to virtual communities: 1) virtual learning communities and 2) distributed communities of practice. Daniel, McCalla, and Schwier (2002) defined a virtual learning community as “a group of people who gather in cyberspace with the intention of pursuing learning goals” (p. 126). A distributed community of practice, on the other hand, is defined as “a group of geographically distributed individuals who are informally bound together by shared expertise and shared interests or work” (Daniel et al., 2002).

In addition, building upon Lave and Wenger’s (1991) original framework, Daniel et al. (2002) developed vital features of communities of practice and described shared characteristics that could apply to the online environments. Key features of distributed communities of practice include shared interests, common identity, shared information and knowledge, voluntary participation, autonomy in setting goals, awareness of social protocols and goals, awareness in membership, and effective means of communication (Daniel et al., 2002). To help identify the key characteristics of virtual learning communities and distributed communities of practice, as well as distinguish the two concepts, Daniel et al. (2002) created the following table:

Table 1*Key Features of Virtual Learning Community and Distributed Community of Practice**(Daniel, McCalla, & Schwier, 2002)*

| Virtual Learning Communities | Distributed Communities of Practice |
|---|--|
| - Less stable membership | - Reasonably stable membership |
| - Low degree of individual awareness | - A high degree of individual awareness |
| - More formalized and more focused learning goals | - Informal learning goals |
| - More diverse language | - Common language |
| - Low shared understanding | - High shared understanding |
| - Strong sense of identity | - Loose sense of identity |
| - Strict distribution of responsibilities | - No formal distribution of responsibilities |
| - Easily disbanded | - Less easily disbanded |
| - Low level of trust | - A reasonable level of trust |
| - Life span determined by the extent to which goals or requirements are satisfied | - Life span determined by the value the community provides to its members |
| - Pre-planned enterprise and fixed goals | - A joint enterprise is understood and continually renegotiated by its members |
| - Domain-specific/interests | - Shared practice/profession |

As can be seen through the key features in the table, this study encompassed the characteristics of both communities. On one hand, the community in the study was more formalized and more focused on learning goals, which matches the features of virtual learning communities. On the other hand, the faculty members in the community had a common language, a great shared understanding of online teaching and learning, and the shared practice of online education, which is congruent with features of distributed communities of practice.

Related Frameworks

TPACK framework. The TPACK framework can be defined as knowledge based on educators' area of expertise in the content area where the appropriate pedagogical skills are applied in using a variety of technologies to demonstrate the understanding of the content area (Chai et al., 2013; Voogt et al., 2013). TPACK extended Lee Shulman's (1986)

pedagogical content knowledge theory (Koehler et al., 2013). Shulman's theory of pedagogical content knowledge explained how educators use their content area knowledge to design instructional lessons and meet students' learning needs (Otto & Everett, 2013).

The TPACK framework recognizes educators' need to use technology to support curriculum with appropriate pedagogical skills (Koehler & Mishra, 2015; Koehler et al., 2013). Technical knowledge, pedagogical knowledge, and content knowledge are crucial components for integrating a content area with technology (Jaipal-Jamani & Figg, 2015). There are seven domains involved in the TPACK framework, including content knowledge, pedagogical knowledge, pedagogical content knowledge, technological knowledge, technological content knowledge, technological pedagogical knowledge, and technological pedagogical content knowledge (Koehler et al., 2013). For the three key areas of knowledge, technological knowledge addresses how educators select appropriate technologies to support curriculum; pedagogical knowledge refers to instructional strategies educators implement in their classes to meet students' learning needs; and content knowledge holds that educators are experts, possessing expertise in the content area for instruction (Koehler & Mishra, 2015; Koehler et al., 2013). The three areas of knowledge for successful integration in the TPACK framework should be considered as separate entities to show the strength of each domain (Koehler & Mishra, 2015; Voogt et al., 2013).

Furthermore, Mishra (2018) revised the TPACK framework to elevate contextual knowledge (XK) as a component. Contextual knowledge could involve a variety of messages, for example, an instructor's awareness of the types of technologies available to them and their students; instructors' understanding of the institution; and policies that they have to work within (Mishra, 2018). The addition of XK to the framework adds another key

knowledge domain that educators need to possess for effective teaching (Mishra, 2018). In fact, XK is critically crucial, and its absence would significantly affect the outcome of any TPACK development program or an individual instructor's attempt at technology integration (Mishra, 2018). The addition of XK to the framework also highlights the situational and organizational constraints within which educators function (Mishra, 2018). Often educators' success depends less on the knowledge in other domains than on the knowledge of the specific context (Mishra, 2018). The revised version of the TPACK image is shown in Figure 1 in Chapter 1.

Social learning theory. Wenger (1998) argued that “within the context of social learning theory, learning becomes, fundamentally, a social phenomenon and is placed in the context of our lived experience and participation in the world” (p. 3). In my study, the participants experienced the professional development program for online teaching and learning, and learning occurred. To further explain the ideas of social learning theory, Wenger (1998) listed four main premises:

1. We are social beings. Far from being trivially true, this fact is a central aspect of learning.
2. Knowledge is a matter of competence for valued enterprises – such as singing in tune, discovering scientific facts, fixing machines, writing poetry, being convivial, growing up as a boy or a girl, and so forth.
3. Knowing is a matter of participating in the pursuit of such enterprises, that is, of active engagement in the world.
4. Meaning – our ability to experience the world and our commitment with it as meaningful – is ultimately what learning is to produce. (p. 4)

Based on these premises, Wenger believes that learning is part of a more encompassing process that prompts individuals to participate actively and engage in the practices of social communities.

Wenger (1998, p. 5) also established four essential components to characterize social participation as a process of learning. These components were featured in our participants' descriptions of their experiences.

1. Meaning: a way of talking about our (changing) ability – individually and collectively – to experience our life and the world as meaningful.
2. Practice: a way of talking about the shared historical and social resources, frameworks, and perspectives that can sustain mutual engagement in action.
3. Community: a way of talking about the social configurations in which our enterprises are defined as worth pursuing, and our participation is recognizable as competence.
4. Identity: a way of talking about how learning changes who we are and creates personal histories of becoming in the context of our communities.

The four components are closely interconnected and mutually defined. To better understand the relationships among the elements, Wenger (1998) summarized them as below and indicated that the four elements (meaning, practice, community, identity) are equally important for learning. Each component is essential in the process of learning.

- Community - learning as belonging
- Identity - learning as becoming
- Meaning - learning as experience
- Practice - learning as doing

Social learning theory guided this study during the data collection and data analysis phases. By applying social learning theory in this professional development study, I explored the faculty's perceptions of their learning process, including meaning, practice, community, and identity.

Summary

A variety of issues arise along with the advancement of online teaching and learning in higher education. Faculty professional development programs are necessary to improve the

quality of online teaching and learning. According to the literature, there are multiple types of professional development activities in higher education, such as the use of portfolios, courses or programs, mentoring, and peer observations. Professional development programs in higher education generally focus on individual experiences rather than group experiences; however, professional development programs focusing on groups or teams are needed. This study focused on a community of practice team. Various effects of professional development interventions on instructor learning were identified, including collegiality, critical reflection, teaching approach, pedagogical knowledge, and teacher identity. In addition, the conditions for successful professional development interventions in teams can be organized into three groups: conditions at the individual instructor level, conditions at the team level, and conditions at the organizational level. Six conditions were included at the individual level: attitudes, motivation, commitment, self-efficacy, professional identity, and availability. Five conditions were included at the team level: team interaction, goals and objectives, team composition, team leadership, and small group work. Four conditions were included at the organizational level: organizational support, rewards, research focus, and finances and resources. The professional development program in this study was conducted within the context of a community of practice. The literature directly informed the data collection and data analysis of the study. The theoretical frameworks guiding the research included the TPACK framework and social learning theory.

Chapter 3: Methodology

This chapter presents the research design, population and sample, data collection, and data analysis. It also addresses trustworthiness and ethical considerations.

The purpose of this study was to explore faculty members' experiences in a professional development program designed to prepare them for better online teaching and learning. The study addressed the following research question: how do faculty perceive their experiences in a professional development program designed to prepare them for better online teaching and learning in an intentional community of practice?

This research utilized a qualitative approach as I was interested in the experiences of people, how they interpret those experiences, and the meaning they attribute to their experiences in the world around them (Merriam & Tisdell, 2016). Multiple definitions of qualitative research exist. Denzin and Lincoln (2011) define qualitative research as follows:

Qualitative research is a situated activity that locates the observer in the world. Qualitative research consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. (p. 3)

According to Creswell (2013), Denzin and Lincoln's (2011) definition strongly orients toward the impact of qualitative research and its ability to transform the world, although some of the traditional approaches to qualitative research are evident in the definition, such as the "interpretive, naturalistic approach" and "meanings."

This qualitative design aligned with these notions of naturalistic research and interpretive research. I interviewed eight faculty members to explore their lived experiences

with a professional development program designed to prepare them for better online teaching and learning, as well as to make their experience visible.

Creswell (2013) provided another definition of qualitative research, which incorporated many of Denzin and Lincoln's (2011) elements but provided a greater emphasis on the design of the study and the use of distinct approaches to inquiry (e.g., ethnography and narrative). Creswell's (2013) definition is as follows:

Qualitative research begins with assumptions and the use of interpretive/theoretical frameworks that inform the study of research problems addressing the meaning individuals or groups ascribe to a social or human problem. To study this problem, qualitative researchers use an emerging qualitative approach to inquiry, the collection of data in a natural setting sensitive to the people and places under study, and data analysis that is both inductive and deductive and establishes patterns or themes. The final written report or presentation includes the voices of participants, the reflexivity of the researcher, a complex description and interpretation of the problem, and its contribution to the literature or a call for change. (p. 44)

This study incorporated both Denzin and Lincoln's (2011) and Creswell's (2013) definitions. First, the research problem was identified. In studying this problem, I used a qualitative approach to inquiry and collected data in a natural setting, which was a university in the inland Pacific Northwest. Then, I reviewed data for emergent themes and presented the voices of participants, an elaborate description and interpretation of the problem, and its contribution to the disciplines of professional development, communities of practice, and online teaching/learning.

Creswell (1998) holds that qualitative research is appropriate when the purpose of a study is to explore a topic, and he further indicates that this approach is helpful when variables cannot be "easily identified . . . (or) theories are not available to explain the behavior of participants" (p. 17). Since the experiences of faculty participants in a professional development program cannot be easily quantified or encapsulated, and theories are also not readily available to describe faculty experiences, a qualitative approach seems

appropriate. The presentation of the collected data and interpretations of experiences were viewed from the standpoints of the participants as much as possible, congruent with Creswell's (1998) sentiment that the intent is "... to emphasize the researcher's role as an active learner who can tell the story from the participants' view rather than as an 'expert' who passes judgment on participants" (p. 18).

This project fit in the Institutional Review Board (IRB) exemption category 2: Research involving the use of educational tests, survey procedures, interview procedures, or observation of public behavior, as this research involved interview procedures, and it was conducted in an educational setting. The information obtained through interviews was recorded. However, no human subjects may be identified, directly or indirectly, through identifiers linked to the subjects. Pseudonyms were used to protect confidentiality. The subjects' responses were not disclosed outside the research. Therefore, there was no chance of placing the subjects at risk of criminal or civil liability or damaging the subjects' financial standing, employability, or reputation, which was unlikely anyway given the specific topic under investigation. This study received IRB approval (see Appendix A).

Research Design

To explore faculty perceptions of a professional development program for online teaching and learning in a community of practice, detailed, in-depth, and open-ended answers to the research questions are necessary for interviewers to identify perceptions, experiences, and viewpoints of participants (Lewis, 2019). Therefore, this research was phenomenological in nature, for it "... involves both rich description of the lifeworld or lived experience, and where the researcher has adopted a special, open phenomenological attitude which, at least initially, refrains from importing external frameworks and sets aside judgements about the

realness of the phenomenon” (Finlay, 2009a, p. 8), in that it allowed me to explore faculty experiences with a professional development program for online teaching and learning in an open way. While my own experiences and preconceptions of this phenomenon had an impact on the study, I wanted to prioritize the voices of the respondents.

Phenomenology was first developed as philosophy by Husserl and then expanded by Heidegger, Sartre, and Merleau-Ponty (Kvale, 1996). Husserl introduced the phenomenological concept of the “lifeworld” to describe the world as it is experienced, and Merleau-Ponty developed phenomenology as a methodological tool through which the complex lifeworld is revealed and understood (Dahlberg & Drew, 1997), both complement each other. Creswell and Poth (2018) highlighted two types of phenomenology: hermeneutic phenomenology (van Manen, 1990, 2016) and empirical, transcendental, or psychological phenomenology (Moustakas, 1994). Hermeneutic phenomenological approaches, such as Interpretative Phenomenological Analysis (Smith, Flowers, & Larkin, 2009), The Lifeworld Approach (Dahlberg, Drew, & Nystrom, 2001), and the lived experience approach (van Manen, 2007), focus on researchers’ interpretation of participants’ explication of the lived experience (Finlay, 2009b). Differing from descriptive phenomenology, for hermeneutic phenomenology, instead of bracketing assumptions, the researcher becomes reflexively mindful throughout the research process, frequently returning to the assumptions and being critically aware of her own experiences with the phenomenon (Schiffelbein, 2019). Hermeneutic (interpretive) phenomenology is suitable for this study as phenomenology is not only a description but also a process of interpretation in which the researcher will interpret the meaning of the lived experiences (Creswell & Poth, 2018). In this study, I interpreted the meaning of participants’ lived experiences with a professional development program

designed to prepare them for better online teaching and learning within a community of practice.

Along with hermeneutic phenomenology, reflective lifeworld phenomenology emphasizes how participants experience a phenomenon within the context of their world (Dahlberg et al., 2001). According to Schiffelbein (2019), lifeworld phenomenology follows five core concepts: openness, immediacy, intersubjectivity, meaning, and uniqueness. Openness is central to these concepts (Schiffelbein, 2019). Dahlberg et al. (2001) emphasized that a researcher must approach the phenomenon with a clean slate, devoid of theoretical frameworks or personal perspectives. They posited, “openness is the mark of a true willingness to listen, see, and understand. It involves respect and certain humility toward the phenomenon, as well as sensitivity and flexibility” (Dahlberg et al., 2001, p. 97). Dahlberg et al. (2008) emphasized the importance of reflecting on our assumptions and biases. They modified the reflexive process of bracketing assumptions and offered an alternative term and approach referred to as *bridling* (Vagle, 2016). Bracketing means researchers access prior assumptions and experiences of the phenomenon and set them aside so that they will not influence the analysis and interpretation (Schiffelbein, 2019). Bridling, on the other hand, means researchers acknowledge previous experiences of the phenomenon and use those experiences to steady the balance between empathizing with participants and approaching participants’ experiences from a distance (Finlay, 2014).

Regardless of the approach, the essence of phenomenology “is to understand the lived experience of the phenomenon over the participants’ individual experiences” (Finlay, 2014, p. 129). Vagle (2016) posited, “...one is not studying individual participants or the objects of their experience. Rather, one is studying participants’ intentional relationship with the

phenomenon under investigation” (p. 129). A researcher must remain critically aware of their own biases by acknowledging perspectives, feelings, experiences, and observations of the phenomenon before collecting data (Finlay, 2014). During data collection, researchers “need to hold a tension between their past and present experiences to determine differences” (Finlay, 2014, p. 124). The researcher must stay critically self-aware and reflexively mindful both before and during a research study (Schiffelbein, 2019). For this study, I remained aware of my assumptions and perspectives before collecting data and strived to amplify participants’ stories of their experiences. Meanwhile, I used the “bridling” approach (Dahlberg, Dahlberg, & Nystrom, 2008), acknowledging my previous experiences of the phenomenon, but stayed critically self-aware and reflexively mindful both before and during the study.

Population and Sample

A purposeful critical sampling method was used to select faculty at an inland Pacific Northwest university who took part in a professional development program designed to prepare them for better online teaching and learning in an intentional community of practice. All the participants of the program were from the same institution. A total of 17 were from the College of Education, Health and Human Sciences, and a total of three were from other units outside of the College. A standard recruitment email was sent to faculty members who were participating in the program, asking their willingness to participate in this research. All faculty enrolled in the program were eligible to participate. Faculty who were not part of the program would not have sufficient information to share or provide. Eight faculty members agreed to participate in the study, and they were all interviewed. Among the eight

participants, seven were from the College of Education, Health and Human Sciences, and one was from a unit outside of the College.

Data Collection

Data sources. Following a phenomenological, qualitative research approach, I collected data using semi-structured interviews and document analysis. As cited by Prindle (2005), the purpose of interviewing is to “learn to see the world from the eyes of the person being interviewed” (Ely, Anzul, Friedman, Gamer & Steinmetz, 1991, p. 58). “A major advantage of the interview is that it permits the respondent to move back and forth in time—to reconstruct the past, interpret the present, and predict the future” (Lincoln & Guba, 1985, p. 273). Interviewing allowed me to learn from the participants about the meanings and the organization that guided their behavior. These findings enriched my understanding of the lived experience of the participants.

As an investigator, my choice of method and design was mainly determined by the intent and purpose of the study. Since the goal of this study was to explore faculty experiences with a professional development program designed to prepare them for better online teaching and learning in an intentional community of practice, the individuals selected as study participants were primary sources for this information. As cited by Prindle (2005), “It is important to choose interviewees who are knowledgeable about the research problem...Qualitative interviews permit us to see that which is not ordinarily on view and examine that which is often looked at but seldom seen” (Rubin & Rubin, 2005, p. vii). By interviewing the study participants, their experiences and reconstructions of events in which the researcher or reader has not encountered can be told, and meaning may then emerge (Prindle, 2005). Prindle (2005, p. 75) further indicated, Glesne (1999), in her discussion of

where to conduct an interview, emphasized the need for “convenient, available, appropriate locations” and further suggested the selection of “quiet, physically comfortable, and private locations when you can; they are generally most appropriate.”

Two rounds of open-ended face-to-face interviews of eight faculty members were conducted. Each interview was held individually and was audio recorded at either the faculty member’s office or a conference room. Due to faculty members’ availability, one participant’s second interview and the other participant’s two rounds of interviews were conducted via video conference software (Zoom). As suggested by Rudestam and Newton (2015), an open-ended interview, when properly recorded, has high fidelity. Rudestam and Newton (2015) recommended the use of audio recorders to record interviews, placing little reliance on the use of field notes (i.e., low fidelity and low structure). I also journaled to record each interviewee’s impressions, reactions, and other significant events that occurred during the interview, for as Rudestam and Newton further went on to point out, journaling can be a useful source of supplementary information. Additionally, triangulation is a vital strategy to apply in qualitative research. Triangulation was described as “soliciting data from multiple and different sources as a means of cross-checking and corroborating evidence and illuminating a theme or a theory” (Rudestam & Newton, 2015, p. 134). For this study, triangulation was accomplished through multiple means, including interviewing program participants, interviewing the course instructors about the program, and collecting faculty survey results from the course instructors obtained at the end of the program. Data collection was completed before the COVID-19 pandemic impacted the local area.

Interview procedures. One-on-one interviews were conducted, as interviews provide more details than a survey, and general open-ended questions asked during interviews allow

a participant to create options for responding and to voice their experiences and perspectives (Creswell, 2008).

Creswell (2008) recommended the following interview procedures:

- Identify the interviewees.
- Determine the type of interview you will use (e.g., focus group, one-on-one).
- Obtain consent from the interviewee to participate in the study.
- Locate a quiet, suitable place for conducting the interview.
- During the interview, audiotape the questions and responses.
- During the interview, have an interview plan using your interview protocol, but be flexible.
- Use probes to follow up on areas of interest.
- Include possible probes in your interview protocol.
- During the interview, design probes as you listen to what the participant is talking about.
- Be courteous and professional when the interview is over.

This study followed Creswell's recommended interview procedures. The specific procedures of this research were as follows:

(1) In the interest of equality and fairness, I sent a standard recruitment email to purposefully selected faculty members asking their willingness to participate in this study, stating the purpose of this research, the procedure of participation, and sample interview questions. The recruitment email also informed subjects that all information obtained during the investigation would be kept confidential. After obtaining participants' consent, pseudonyms were used to protect confidentiality.

(2) I contacted each participant to schedule a time and an appropriate location for the face-to-face interviews. Face-to-face interviews also afforded me an opportunity to read body language. Creswell (2008) recommended qualitative researchers use video cameras or audio recorders for in-depth interviews. For this study, video cameras were not necessary, but the interviews were audio-recorded and transcribed verbatim. During the interview, I developed probing questions while listening to interviewee responses.

(3) After interviewing all the participants, I used pseudonyms to mark each interview. All conversations were transcribed. Interview transcripts were sent to participants to check for accuracy. Once this step was completed, all the original audio recordings were kept secure in case they were needed later in the study. Following IRB policy, research data will be stored for three years.

Seidman interview model. This study followed a modified version of Seidman's (2006) in-depth, phenomenologically based interviewing model. Seidman's (2006) model involves conducting three separate interviews with each participant. Due to faculty members' availability, I combined the second and third rounds of interviews into a one-time, two-part interview to accommodate their busy schedules. That is, I had two rounds of interviews with each participant. The following section introduces Seidman's (2006) interviewing model and describes how this study followed that.

Interview one: focused life history. In the first interview, the task is to contextualize participants' experiences by asking them to provide as much information as possible about themselves in relation to the topic of the study up to the current time (Seidman, 2006). Seidman's example study of student-teacher and mentor experiences in a professional development school demonstrates how researchers ask participants to reconstruct their early experiences in the context of their life history. In the first interview, rather than asking "why," the interviewer asked the participants, "How did you become a student-teacher or mentor?" In the first interview of this study, I asked the participants, "Please tell me a little about your prior experiences with online teaching and learning."

Interview two: the details of experience. In the second interview, the focus is on participants' concrete details of the current experience relating to the research topic area,

wherein they are asked to reconstruct their experiences (Seidman, 2006). In Seidman's example of student teachers and mentors in a clinical site, participants were asked the details of their experience—what they actually did—rather than their opinions about the job. Participants were also asked about their relationships with other personnel such as colleagues, students, administrators, and the wider community (Seidman, 2006). The first part of the second interview of this study likewise invited participants to reconstruct their experiences, wherein I asked participants, “What did you learn in the program?”

Interview three: reflection on the meaning. The third interview focuses on participants' reflection on the meaning of their experience. The “meaning” is not about how satisfied participants are with the experience. Instead, it is about how participants make intellectual and emotional connections between their work and life (Seidman, 2006). The aim of this interview is to find out how participants make sense of the experiences and how that relates to other aspects of their work and lives. The third interview is built upon the other two. It can only succeed when the two foundations are well established (Seidman, 2006). By knowing about participants' life histories and relevant daily experiences in the first two interviews, the interviewer can ask participants detailed, in-depth questions regarding the meaning of the experience (Seidman, 2006). In part two of the second interview, participants were invited to explore their experience with the community of practice by answering the question, “What did the fact that this was done within a community of practice mean to you?”

Seidman (2006) suggests that while there is no finite time for interview length, researchers may adjust the length based on their particular situation—each interview typically lasts up to 90 minutes. He also posits that interviews spaced from three to seven

days apart allow participants to reflect on what they said in previous interview sessions to provide more thoughtful answers in the third interview (Seidman, 2006). For this study, all the interviews were conducted at the end of the program. The first round of interviews ran around 15 minutes, while the second one ran around 30 minutes. The two rounds of interviews were spaced from three to seven days apart on average. The guiding questions for the interviews are presented in Appendix C. As mentioned earlier, to triangulate the data, I also interviewed the program instructors, which lasted 60 minutes. Due to the long distance, the interview was conducted via video conference software. The guiding questions for that interview are presented in Appendix D.

Data Analysis

The purpose of data analysis is to sort, reduce, and characterize the data collected into meaningful units in relation to the research focus (Prindle, 2005). These units fuel the interpretation of the data and link to theory to clarify the understanding reached through the gathering of the data (Prindle, 2005). Data analysis is an integral part of the “entwined process that powers data collection” (Ely et al., 1991, p. 86) and should not be seen as the last step of the research process but as congruent with data collection. “The process emerges from the data and the purposes of the study” (Ely, Vinz, Downing & Anzul, 1997, p. 163). The insights obtained from the continual analysis may further drive ongoing research and may inform the process by either broadening or narrowing perspectives. Qualitative research is most productive when a study is continuing and concurrent with data analysis (Prindle, 2005). When the period of data collection has ceased, the final phase of analysis brings “final order to previously developed ideas” (Lofland & Lofland as cited in Ely et al., 1997, p. 164).

I reviewed the transcripts and other data many times. I then color-coded and identified categories and themes through an analysis of the data collected (Moustakas, 1994). To increase inter-rater reliability (Armstrong, Gosling, Weinman, & Marteau, 1997), I invited an experienced coder to code and identify themes for the same data. Although there were differences, the analysis results were close. I also used a journaling approach to record the participants' impressions, reactions, underlying thoughts, and other significant events that occurred during the interview, for as Rudestam and Newton (2015) pointed out, journaling can be a useful source of supplementary information. The framework for data analysis of this study took a holistic-content format. As stated by Lieblich, Tuval-Mashiach, and Zilber (1998), "the holistic-content mode of reading uses the complete life story of an individual and focuses on the content presented by it" (p. 13). Each interview for this study was examined in its entirety for themes.

Coding. Saldana (2016) posited, "the reverberative nature of coding – comparing data to data, data to code, code to code, code to category, category to category, category back to data, etc. – suggests that the qualitative analytic process is cyclical rather than linear" (p. 68). In this study, I conducted two cycles of coding (Saldana, 2016). In the first cycle, I performed the initial coding of data, applying structural coding, process coding, and in Vivo coding methods (Saldana, 2016). During the process, I color-coded the data (e.g., structural codes were colored in red; the first level of sub-codes were colored in blue; the second level of sub-codes were colored in green). Each code was put in a separate box with numbers to match the marked data. All codes were manually assigned and organized into hierarchical landscapes for further content analysis and pattern identification (McCammon, Saldana, Hines, & Omasta, 2012; Krippendorff & Bock, 2009).

Second cycle coding was then performed. The primary goal of second cycle coding was to develop categories and themes from the first cycle codes (Saldana, 2016). In the second cycle coding, I employed the pattern coding method (Saldana, 2016). During the process, the first cycle codes and their associated data were rearranged and reconfigured (Saldana, 2016). Ultimately, a smaller and more representative list of broader codes and categories was developed (Saldana, 2016). Table 2 presents the analysis of codes and categories. Specific themes are introduced in Chapter 4. All in all, data analysis was a comprehensive process, and it was not the end of the research.

Table 2*Analysis of Codes and Categories*

| Priori Codes | Codes | Categories |
|-----------------|--|---|
| TPACK | Relevance of content <i>Learning technologies</i> | Learning technological knowledge |
| | Communication strategies Modeling the structure of the course Instructional pedagogies | Learning pedagogical knowledge |
| | Reaffirming prior knowledge <i>Staying on right track</i> | Knowledge reinforcement |
| Effects | Progress of the program Experiencing student role Overall experience with the program <i>Repetitive</i> <i>Disappointing</i> | Different impressions on the effects of the program |
| | Translation of knowledge Trying new technologies | Program impact on participants' teaching |
| Social learning | Experiencing a community <i>Getting interesting ideas</i> Knowing the people in the class Lack of community involvement | Involvement in the community |
| | Positive relationships <i>Help each other stay on track</i> Limited interaction with others Unsatisfied with instructors' responses | Relationships with instructors and colleagues |

Trustworthiness

Trustworthiness is an essential characteristic of any qualitative research so that the results can be deemed worthy of consideration (Lincoln & Guba, 1985). To establish trustworthiness in a qualitative study, researchers can apply four evaluative criteria, including credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). In this phenomenological study, I used multiple strategies to promote the four criteria.

Credibility. Credibility refers to how confidently a reader can believe, trust, and rely on the researcher's findings, and it speaks to the truth and validity of the phenomena under investigation (Lincoln & Guba, 1985). I addressed the credibility of the study through both member checking and "bridling" (Dahlberg et al., 2008) approaches. Member checking is "the single most important way of ruling out the possibility of misinterpreting the meaning of what participants say and do and the perspective they have on what is going on, as well as being an important way of identifying your own biases and misunderstanding of what you observed" (Maxwell, 2005, p. 111). For this study, each interview was audio-recorded and transcribed. I presented a copy of the interview transcript to each participant for their review to verify the accuracy of the information. Upon review of transcripts, participants were also encouraged to add comments and interpretations they felt needed to add to their "story." As Brown and Gilligan (1992) explained,

Working with audio-tapes and transcriptions enables us to sound and re-sound, trace and retrace voice(s) through the interview process. At the same time, we note the myriad shifts that occur in moving from the present moment of the relational drama to the audio-tape of the conversation, to the written record or transcription. (p. 26)

Additionally, in this study, I remained aware of my assumptions and perspectives before collecting data and strived to amplify participants' stories of their experiences. I used the "bridling" (Dahlberg et al., 2008) approach; I acknowledged my previous experiences of the phenomenon but stayed critically self-aware and reflexively mindful both before and during the study. The member checking and bridling approaches promoted the credibility of the study.

Transferability. Transferability refers to whether the results of specific research can be applied to other contexts that have similar situations (Lincoln & Guba, 1985). I addressed transferability by providing adequate descriptions of the context of the phenomenon so that another interested party could read and consider whether it is like their own and thereby anticipate similar findings (Shenton, 2004). The details provided in this study offered “sufficient information about the context in which an inquiry [was] carried out so that anyone else interested in transferability has a base of information” (Lincoln & Guba, 1985, pp. 124-125). Credibility and transferability will assist others who read this study to determine whether the professional development program for online teaching and learning in an intentional community of practice is suitable in other institutions.

Dependability. Dependability refers to the reliability of the data quality such that stable results would be produced if a study were repeated (Lincoln & Guba, 1985). The dependability of this study was established by ensuring the responses of all participants were transcribed and translated verbatim. Reliability and dependability are achieved when other researchers are able to replicate a study (Yin, 2011). I used data triangulation to maintain the dependability of the study. The participants and the program instructors were the primary data sources for this study. Additionally, the use of the modified version of Seidman’s (2006) in-depth, phenomenologically based interviewing protocol and my journal promoted the understanding of the phenomenon in a replicable way and thereby enhanced the validity and dependability within the present study.

Confirmability. Confirmability refers to whether the research findings are the accurate representation of the collected data rather than a researcher’s motivation, interest, or bias (Lincoln & Guba, 1985). In this phenomenological study, confirmability was established

by providing an accurate picture of the experiences as they were presented to me by the program participants (Creswell, 1998). As previously mentioned, I bridled my own bias and feelings about the subject to ensure the findings of the study were from the collected data (Creswell, 1998). I reported the findings to ensure they were not mixed with my bias (Shenton, 2004). I also developed the codes along with the work of an experienced coder to increase inter-rater reliability (Armstrong et al., 1997). These strategies enhanced the confirmability of the study.

Ethical Considerations

In a research study, ethical issues relating to the protection of participants must be addressed (Lune & Berg, 2016; Merriam, 1998). Before conducting this study, I had the research plan reviewed by the Institutional Review Board (IRB) at the University of Idaho. A variety of issues had been addressed, such as confidentiality, potential risks, and others related to voluntary participation in the study. I had received formal University of Idaho IRB approval before collecting any data to assure adherence to all ethical guidelines. An informed consent form was sent to each participant during the recruiting process, which stated the purpose of the research study, the eligibility and activities pertaining to the study, the minimal risks in the study, participants' rights to exit the research at any time without any condition, confidentiality, and the protection of research data (see Appendix B).

Summary

The purpose of this qualitative phenomenological study was to explore faculty experiences with a professional development program designed to prepare them for better online teaching and learning. I had received formal University of Idaho Institutional Review Board (IRB) approval before collecting any data to assure adherence to all ethical guidelines.

A purposeful sampling method was used to recruit participants. An informed consent letter stating the purpose of the research study, eligibility, and activities pertaining to the study, was sent to each participant during the recruitment process. This study followed a modified version of Seidman's (2006) in-depth, phenomenologically based interviewing model, which involved conducting two separate interviews with each participant. Interview one focused on participants' life histories. Interview two focused on the details of participants' experiences and participants' reflections on the meaning of their experiences. One limitation of this phenomenological study was that it was conducted at a university in the inland Pacific Northwest of the United States. Therefore, the results may only apply to this or a similar institution rather than being generalizable to all levels of institutions. The data obtained through this study may likely illuminate future similar efforts to build online professional development programs within communities of practice among faculty.

Chapter 4: Findings

This chapter presents the study findings. First, I will introduce the participants in general. Second, I will describe each participant's academic background in detail. Third, I will discuss the four major themes that emerged from the study (Miles & Huberman, 1994; Hammersley, 2012).

Overview of Participants

I used a purposeful critical sampling method to ensure the variety of participants (Creswell, 1998; Finlay, 1999; Glendinning, 2008). The participants of this study were from several departments, including Curriculum and Instruction, Leadership and Counseling, Movement Sciences, and Geological Sciences. The goal was to select participants from the institution, both men and women, who participated in a professional development program designed to prepare them for better online teaching and learning. Faculty members who did not experience the professional development program were not included in this study.

Eight faculty members were interviewed. The participants' previous experience with online teaching and learning ranged from no experience to over ten years of experience. One participant never taught online courses before and planned to teach an online course in Fall 2020 or Spring 2021. Two participants started teaching online in the Fall semester of 2019. Two participants reported over ten years of online teaching experience. The other three participants' experiences were three, four, and nine years. Each participant completed the professional development program and reported experiencing professional growth with colleagues. Participants' academic backgrounds are introduced in the next section.

Participant Background

While all the participants were from the same institution, they comprised a diverse group of individuals. Participants' ages ranged from 35 to 55, with four between the ages of 35 and 45 and four between the ages of 45 and 55. Participants' academic rank ranged from assistant professor to associate professor, with one participant being at the rank of instructor. Seven of the participants were from three departments in the College of Education, Health and Human Sciences, and one participant was from the Department of Geological Sciences. Seven of the participants identified their race as White, and one of the participants identified his race as African American. Six of the participants were female, and two of the participants were male. The demographic summary of the study participants is shown in Table 3.

Table 3

Demographic Summary of Study Participants

| Participant (Pseudonym) | University (Pseudonym) | Sex | Ethnicity | Academic Rank | Year Started Teaching Online | Discipline |
|-------------------------|------------------------|--------|------------------|---------------------|------------------------------|--------------------------|
| 1 Susan | Blue Sky | Female | White | Associate Professor | 2016 | Curriculum & Instruction |
| 2 Sophia | Blue Sky | Female | White | Assistant Professor | 2003 | Leadership & Counseling |
| 3 Tom | Blue Sky | Male | African American | Associate Professor | 2011 | Curriculum & Instruction |
| 4 Helen | Blue Sky | Female | White | Associate Professor | 2006 | Curriculum & Instruction |
| 5 Melissa | Blue Sky | Female | White | Assistant Professor | 2017 | Movement Sciences |
| 6 Elaine | Blue Sky | Female | White | Instructor | 2019 | Movement Sciences |
| 7 George | Blue Sky | Male | White | Assistant Professor | 2019 | Movement Sciences |
| 8 Donna | Blue Sky | Female | White | Associate Professor | Fall 2020/ Spring 2021 | Geology |

This section reflects participants' self-reported academic backgrounds as well as information captured from participants' vitae.

Susan. Susan is an associate professor at Blue Sky University. It is her twenty-fifth-year teaching and her sixth year at Blue Sky University. Susan began her career teaching high-school English and coaching gymnastics, cross country, and track in rural North State for 13 years before moving west to pursue her doctorate in literacy and language education. Susan's areas of study are sociocultural issues in children's and young adult literature, secondary literacy, English as a second language education, and teacher preparation. Her current research includes traveling the world to investigate how teachers experience secondary trauma when their students have experienced various types of trauma.

Susan was interested in the professional development opportunity involved in this study since she teaches classes both synchronously and asynchronously. She is also exploring options for providing professional development activities for teachers in crisis contexts. For example, some teachers in Venezuela have asked Susan to conduct teacher training, but the current policy prohibits travel there. Online professional development would allow Susan to reach a broader audience.

Sophia. Sophia is an assistant professor in an Educational Leadership program at Blue Sky University. Her work has shaped her research agenda as an international educator in the capacity of a high school teacher, department chair, K-12 principal, and curriculum director. Sophia's research interests include mindfulness school improvement, social-emotional learning, school climate, principal preparation programs, professional development, and qualitative research. Sophia has authored articles in several journals such as the *Journal of Educational Administration*, *Educational Management Administration and*

Leadership, International Journal of Leadership in Education, Mindfulness, and College Student Affairs Journal.

Sophia was interested in this professional development opportunity because it pertains to online teaching. She attended a professional development program in 2016 hosted by a different institution, but she realized that some of the tools were already obsolete. Sophia has been teaching online for a while and felt this might be a good opportunity for her to improve her skills and discover more new tools.

Tom. Tom is an associate professor at Blue Sky University. Tom has been teaching for over 25 years with a background in vocational and technical education. With his foundation, Tom decided to train teachers to teach engineering and technology. After completing his master's degree in industrial technology, Tom taught for three years at a technology university. Then he obtained his doctorate. Tom has experience in teaching at the high school level and the post-secondary level. He has experience as a manager, department supervisor, and technical coordinator, where he has been an administrator at a training academy for many years. Tom joined his current university as an assistant professor. His research interests are in design cognition, workforce development, STEM integration, and expertise in the standard of development. He continually looks for opportunities to improve his practice, and when this professional development activity came up, he decided to participate.

Helen. Helen is an associate professor in curriculum and instruction and the director of a learning center. Helen focuses mainly on technology integration through supporting teachers in K-12 as well as higher education faculty on campuses. Helen spent the last seven years supporting technology integration and delivering professional development activities to

K-12 teachers and administrators throughout the state. Before this, Helen taught in K-12 for 15 years as an English teacher, a library media specialist, an instructional coach, and a technology coach, with much of her work involving technology integration.

Helen currently teaches a course dedicated to integrating technology into K-12 classrooms. Helen's research areas focus on technology integration in K-12 and higher education classrooms with an emphasis on technologies to support students with special needs. Helen was interested in this professional development program because she likes to keep up to date on what is happening, especially when it is related to developing online courses. Helen indicated her interest in collaborating with others who utilize current technologies.

Melissa. Melissa is an assistant professor in Movement Sciences and has been at her current university for three years. She also serves as a lab director in her department. Melissa primarily works with physical education and health education teachers. Melissa's research interests include public health-aligned physical education, comprehensive school physical activity programming, and the Whole School, Whole Community, and Whole Child approaches to increasing physical activity and reducing sedentary time in youth populations. Melissa is originally from the South, but after moving here fell in love with the state and even met her husband here.

Melissa was interested in this professional development program because she believes academics are moving increasingly toward online learning, particularly in her college and department. As Melissa is already teaching online, she took the much-needed opportunity to improve her skills to serve her students better.

Elaine. Elaine is an instructor in Movement Sciences. Elaine has been teaching for twenty-five years, having been with the current university since 1996. Elaine received her doctorate in sport pedagogy from her current institution of employment. Her dissertation was on physical education through a multicultural education program approach. Therefore, Elaine developed a multicultural education program and taught various upper-division courses for the physical education program. Elaine also served as the coordinator for an introductory instruction program for six years before handing it off to another faculty. Elaine attended the professional development program for several reasons. She wanted to reach more physical education teachers and train them with a strong educational philosophy, and she also saw the benefits of working with internationally known researchers.

George. George is an assistant professor in Movement Sciences. He has worked in the outdoor recreation industry since 2001 in both administration and education contexts. He has directed multiple outdoor programs in higher education. George's focus areas include promoting critical thinking skills for outdoor leaders, making effective education delivery in constantly changing outdoor environments, and understanding student motivation in stressful learning environments. One of the reasons George was interested in this professional development program is that his program is now offering many online courses. Having neither taught nor learned online, George saw this as an opportunity for improved online competency.

Donna. Donna is a geologist and an associate professor at Blue Sky University. Donna also serves as department chair. Donna received her doctorate in 1996, and while she did not immediately begin teaching, she has now been teaching off and on for over 20 years. Before moving to her current institution, Donna was a faculty member for a couple of years

at a very small teaching college. Donna said it was interesting to have experience in two vastly different environments. Donna's primary interests include environmental geochemistry of mining-contaminated wetlands, basalt weathering and clay formation on Earth and Mars, and synthesis, structure, and properties of aluminosilicate nanoparticles.

Donna was interested in this professional development program because this opportunity was about online teaching and learning. Donna said although she regularly used the BbLearn learning management system to supplement her in-person classes, she never taught an online or a hybrid course before. Donna said it is evident that online teaching and learning is growing quickly, and she recognized that it is vitally important to learn more about it. Donna indicated that her department has not traditionally offered courses at a distance, and it is crucial to begin offering more in an online format. While she was eager to learn about online teaching and learning, Donna knows that traditionally many have concerns about the quality of online courses as opposed to those taught in-person. Therefore, Donna was particularly interested in learning ways to maintain current department standards while transitioning to online instruction.

Themes

While many of their experiences were similar, each participant's learning experience was unique with common elements. By analyzing the codes, a total of seven categories were identified. These categories yielded four overarching themes: *obtaining new knowledge*, *confirmation of appropriate tools and strategies*, *mixed learning experience*, and *community bond*. These themes are essential for understanding faculty experiences and perceptions of a professional development program for online teaching and learning. More than defining and discussing the themes and codes in the following sections, I will provide evidence through

the use of direct quotations. This evidence is crucial to allow the voices of program participants to capture the essence of their experiences and perceptions rather than projecting my biases and perceptions onto their own.

Theme 1: obtaining new knowledge. Every faculty member had their own learning experience. Analyzing all the transcripts, two common elements stood out as the dominant reasons faculty participate in the professional development program for online teaching and learning: acquiring technological knowledge and pedagogical knowledge.

Technological knowledge. By participating in the study's professional development program for online teaching and learning, faculty members obtained new technological knowledge. Melissa learned about a variety of new technologies through the program, including Google Docs, Padlet, and Flipgrid. She liked the Canvas learning management system and said that was probably her favorite, even though she did not use that one here. Melissa shared that even by looking at how they structured things in Canvas, she saw ways to translate some of that to Blackboard, using folders, for example. Melissa also expanded on learning about Google Docs, saying,

For the Google Docs the instructors shared, it was a question-answer page. Everyone could see it. And in my online class, I typically teach it asynchronously. I am thinking to embed a document into all my modules where students can ask questions, and then I will make sure to write the answers to those questions. That way, everyone gets the benefit of the questions versus just getting a ton of emails.

Melissa recognized the benefit of Google Docs and planned to apply that to her courses.

What Melissa shared was congruent with the examples the program instructors provided,

One faculty member never used Padlet, which is like an electronic wall. And he was so enthusiastic about it, he goes, "Oh, I'm going to use this all the time to get my students' reactions." So, it's like a light bulb went on. And from the day we introduced it, he was like, "Oh, I love this." Another one was Flipgrid. And we had another faculty member. She said, "Oh, this is great. I'm going to use this in my introductory module."

Elaine provided an example of the technology she learned. She said she liked the different conversations the instructors had about Padlet, as well as how the information was presented in the professional development program. Elaine shared she liked the videos shown in the program because *"sometimes, instructors use the online teaching as storage."* Elaine was impressed by the way the online course was presented and planned to apply that to the courses she teaches. She noted that the changes she is going to make to her recent online courses will make them more *"fluid"* rather than *"open up this file, close, then open up another one."*

Susan admitted there were a couple of technologies that were new for her, such as *"Flipgrid and Padlet,"* and she would like to try. Susan shared she had not used voice dictation on Google through Google Docs, which will be helpful for her work in the future. Susan also liked the Canvas learning management system and was looking forward to exploring it further.

Donna indicated she learned a lot about applications and sites that are online and that she can use for teaching, which she did not know about before. Donna listed several examples, such as Padlet, Snagit, and *"a couple of video recording software."* She reported

acquiring new technological knowledge through the program and expressed a willingness to keep up with ongoing technological changes.

Tom described the technological knowledge he obtained through the professional development program, sharing that he learned about how instructors can use different technologies to enhance interactivity and teamwork, among other things, in an online environment. He explained that he learned “*technology that allows students to comment and reflect on the concept that instructors are teaching. And then there are other types of technology that promotes collaboration.*” Tom further explained, “*There's the video technology that allows students to videotape themselves while they're making a response to a question.*” He also expressed interest in “*concept mapping technology*” and how students can use it to map out a concept. Apparently, Tom gained diverse technological knowledge through the program.

Participants seemed to find a variety of technologies presented in the professional development program that they indicated as new and helpful for their teaching. Participants even indicated that some technologies might also be applied in face-to-face courses. Additionally, faculty members learned not only technological knowledge in the program but also pedagogical knowledge.

Pedagogical knowledge. A wealth of pedagogical knowledge was presented in the professional development program. Participants indicated gaining pedagogical knowledge that is new and will likely be beneficial. Donna stated she learned a great deal from the program. She shared that, as a scientist, she did not have a lot of formal pedagogical training in how to teach. The professional development program expanded Donna’s pedagogical

knowledge. She indicated reading some of the posted articles about specific instructional approaches was useful for her. Donna further explained,

In many cases, what we were doing was putting things into practice by actually creating assignments, modules, or documents for an online class. That kind of hands-on learning and finding out what was most effective in the online environment and then actually making it was beneficial. A great deal of it was specific to the online experience and designing the course in mindful ways to get learners to engage with the material that I think will also be useful in my face-to-face classroom. Things that we sometimes take for granted, but the design can really help to draw students in.

Donna also indicated that she liked the assessment methods, formative versus summative evaluations, and what they can be used for. Donna seemed to find the pedagogical knowledge she learned in the program very helpful.

George also shared his experience with acquiring pedagogical knowledge from the program. He stated that learning how to structure distance learning experiences was of great benefit to him. George said the most significant thing he learned in the program was finding out what things have already been used in programs that work well, identifying a structure and a flow to the educational experience that worked for him, and employing that in the courses he was teaching. George noted one thing that surprised him was the experiential nature of some of the online learning: *“it's very problem-solving based, and it's not just taking tests online.”* He explained that this *“melded”* with his teaching philosophy pretty well and seeing how things were structured in other programs helped him translate his teaching philosophy into the online environment. George learned other pedagogical

knowledge in the program as well, but he pointed out the most important ones for him during the interview.

Like George, Helen shared the pedagogical knowledge that helped her most. She said most of what helped her in the professional development program were ideas on how instructors do certain things within an online format. Helen shared there were excellent ideas discussed in the program concerning grading when students have an online discussion. She discovered ways to make grading a little easier on the instructor and have better control over it.

Melissa likewise learned pedagogical knowledge to complement her academic background in physical education. She mentioned really liking some of the communication strategies she learned. She shared the pedagogical knowledge provided in the program took a general educational perspective, but most of the pedagogies in the readings she did were from the physical education side. She admitted it was slightly different, but it was good to review feedback, backward mapping, assessments, and rubrics, and then to read with a slightly different lens of a more traditional classroom education versus physical education where she was based. She saw the benefits of having a differing background. Melissa provided an example of pedagogical knowledge she liked in the program, noting,

I liked that the assignments were always due at certain times. So, the class was predictable, and everything was due on Monday. And I was able to train myself that way. For me, a lot of what I got out of the program was the way the instructors structured their course, which was maybe overwhelming to me as a learner because that was the first online class I've ever taken. I had taught them before, but I had never taken one.

Since Melissa had not previously taken an online course as a learner, this program helped her to understand students' roles and thereby informed the design of her own courses. Elaine noted that she learned to keep course content insightful and meaningful regarding pedagogical knowledge learned from the professional development program. She also learned to provide a "*thoughtful and clear*" rubric to learners. What Elaine addressed is very important for students' learning.

Susan shared her sentiments on pedagogical knowledge gained from the program. One of the big takeaways for her was that the instructors modeled quality online teaching and their video responses. She found this quite powerful, linking that to her own teaching. She admitted that in her asynchronous classes, she had not previously videotaped because she did not personally enjoy seeing herself on film. However, Susan found it was very engaging to see the instructors and shared that when the program instructors provided audio feedback sometimes, it produced more of a sense of "*community*" than a more traditional asynchronous course since students could both see the instructors' faces and hear their feedback.

Tom shared the pedagogical knowledge he gained from the program, emphasizing what he learned about universal design. He realized that while he designed his courses with consideration for students, they might not be universally accessible to all because of different disabilities or limitations that students may have. Tom stated his concern in teaching large classes and indicated how the group strategy he learned in the program could be helpful admitting,

I was mainly concerned about how to teach a large class online and don't necessarily increase your workload. And one of the things I learned was that if you do more

group assessments and allow students to work in groups, that will take off a lot of effort on your part. Especially when the class is large, you have to grade maybe 80 to 90 papers. But if they're in groups, the groups can read each other's papers, and then you assign grades for the groups. That takes off a lot of the weight of work that is on you.

Tom also shared that he gained “*quite a lot*” of pedagogical knowledge that he found helpful for his teaching, such as active learning, constructivism, and how to engage students in learning. As the program instructors stated, “*pedagogical knowledge is both being transferred and demonstrated.*” The following section reports how faculty members perceived appropriate tools and strategies.

Theme 2: confirmation of appropriate tools and strategies. While some participants obtained new knowledge through the professional development program for online teaching and learning in which they participated, some other participants confirmed their previous knowledge. The professional development program was a reinforcement of appropriate tools and strategies for those faculty members.

Helen’s technological knowledge was already quite advanced. She was already using or had used almost every tool or technology taught in the program. Helen admitted, “*there wasn't anything new there for me.*” She did acknowledge that there was a lot of beneficial information for other people, though. Helen perceived the professional development program as more of an opportunity to take away some ideas related to online teaching regarding instructional strategies, viewing the content in the professional development program as “*reinforcement of those ideas*” she already used.

Sophia had plenty of experience with online teaching and learning. She took some online courses when she was a graduate student. As an instructor, Sophia was also teaching all her courses online, using a variety of tools. With Sophia's background, she felt there wasn't anything new in the learning process as she had hoped. She said, "*I did take one online class in 2016, so nothing much new going on when it comes to new tools.*" Regarding pedagogy, Sophia also admitted she did not learn anything new, explaining, "*as educators, we learned from our previous certification classes that we had.*" She felt this class was "*very elementary,*" "*not suitable for us who are educators, who have already learned all these in our classrooms, and even teach them.*" Sophia felt she did not learn anything that was really "*insightful.*" The course affirmed what she is doing is right, and she reported that she is on the right track, but the course did not really bring forth new knowledge that she could integrate or implement into the courses that she teaches.

Theme 3: mixed learning experience. Each faculty member reflected upon their own experiences and perceptions about the professional development program for online teaching and learning in which they participated. Interviewing all the participants and analyzing all collected data revealed that participants had mixed feelings about their learning experiences. Some participants perceived the program as beneficial. They felt the program outcomes included better course organization and more effective teaching. Other participants perceived the program as repetitive.

Impression. Participants had different impressions on the effects of the professional development program they attended. While most of the participants had positive impressions, some participants felt negative.

Melissa was happy with being provided an opportunity to participate in the program and had positive impressions. She shared that being able to take an online course was really beneficial since she had never taken one. The program provided Melissa an opportunity to experience learning from the learner perspective, connecting program delivery to her teaching relating,

As a teacher, establishing communication strategies to engage people throughout the week versus everything is due on Monday; let me know if you have questions; that's pretty powerful because I disengaged at times and got caught up with my work life. Then, they [the program instructors] would send an email and say reminder. And I'd be like, "Oh, my gosh, I have to do the class." That was me. As a teacher, I haven't done those reminders as strongly as they [the program instructors] did. So, I'll need to do that.

Melissa also learned through observations in the professional development program. She indicated there were a lot of activities where participants provided feedback, including their perceptions and feelings about technologies. Melissa admitted it was “*amazing*” to see how someone could pick up something that she couldn't pick up or just have a whole new perspective on something. Essentially, Melissa shared that she had a positive experience with the program and learned different tools.

George also indicated a positive experience with the program. He said it went “*pretty well*” and that he learned a lot, considering he didn't know anything about online education prior to the experience. George readily gained the basic knowledge presented in the program. He waited to explore some of the more complex knowledge and planned to go back through it again when he has more time. George perceived the program as “*positive*” for him. He said

it was good to see how at least one example of online education works. He felt the program had given him at least a foundation from which to proceed. He shared that he kept all the materials from the course in a folder so he would have those as references, which he was really excited about as he moves forward. George also appreciated the opportunity to take part in the program.

Tom had a good perception of the professional development program. He noted, *“overall, the professional development program was good. I think the faculty participated a lot, greatly.”* Tom provided some examples with the following,

In the activities, learning how to develop a course using another learning management system, I got a good feel of the pros and cons of utilizing another learning management system, how I can build interactivity, students participating in grading, providing feedback for other students' work, how to incorporate technology so that students can use it in presenting their assignments, offering their reflections and so forth.

Elaine also indicated that she liked the program. She suggested that it offered good reminders about testing, assessing, conveying information in different ways, and designing a course not to be so *“bland”* or the same throughout. Elaine was impressed by the videos presented in the program, saying she appreciated that they were not lengthy and perceived them as beneficial. Elaine explained the videos encouraged her and inspired her to consider how she can insert videos into her online courses. Elaine felt the program instructors kept good professional communication, commenting that expectations were clear, modeling the kind of *“temperament”* that we were all supposed to maintain – *“professionalism.”* Susan also felt good about the program, indicating the program was well organized and manageable

with flexible instructors. Through the professional development program, Susan also learned ways to improve her teaching and to be interactive in different ways.

Donna was happy that she had the opportunity to participate in the program. She stated she was delighted that she invested the time to do it, and she was grateful to have been given the opportunity. Donna would even recommend the program to her faculty members based on what she learned and would tell them it would be a good investment of their time. Donna provided a few examples of what she learned from the program. She described the instructors were modeling the teaching behavior that they use and provided good examples of asking questions to guide students towards thinking something through. Donna shared that not only the program instructors did this, but the experienced online faculty members in the class did it as well. Donna spoke highly of the instructors and the peers. She said that by paying attention to the class, she could tell that there were some really skilled people in the group, and it was worthwhile to pay close attention to what they were doing and how they were doing it. Donna seemed to learn a lot from the professional development program and indicated that she liked the learning experience.

Unlike other participants, Helen and Sophia had negative impressions of the professional development program for online teaching and learning. Helen had a lot of experience with online teaching and learning. She wanted to get new ideas related to online learning from this program. Although Helen felt the program was easy to follow and well-organized, and she had no trouble completing everything, she found the content was “*repetitive*” for her. Sophia felt quite disappointed overall. Before the start of the program, Sophia was very excited about the opportunity she had and expected that she would be able to have more materials to add to her toolbox that she would be able to utilize in her

classroom when she needs to. She thought someone would look at the work that she had already done and tell her how she could advance and go beyond, or if she had some challenges, someone could address the challenges specifically. According to Sophia, “*none of that happened*” in terms of productive and constructive conversations. She felt it was very “*disappointing*.” She said it was just one more certificate to add to her CV but did not really do much toward improving her teaching skills and did not really increase her competence in anything. Specifically, Sophia had concerns about the course syllabus and content. She had hoped the program would be more tailored to individuals and have advanced course content. She wished the program instructors, at the very beginning of the course, would have been able to see where the participants were and what the participants had done before and tailor the course based on that. She also wished the program instructors would have listened more and understood the participants’ needs from this program, knowing that some participants have capabilities and have plenty of experience in the process. Sophia also had concerns about the teaching approach used in the professional development program. She shared that the program instructors demonstrated certain things, but they did not reflect that in their own teaching with the strategies they showed.

Overall, faculty members had different impressions on the effects of the professional development program. Some perceived it as positive, and some perceived it as negative, which was congruent with the faculty survey results that the program instructors received at the end of the program. Likewise, faculty members held different perceptions about the professional development program's impacts on their work.

Impact on work. After completing the professional development program for online teaching and learning, faculty members shared different perceptions on the impacts the

professional development program had on their work. Some participants felt the learning experience had positive impacts on how they will teach online. They will translate obtained knowledge to their courses, try new technologies, and become more effective instructors. However, some other participants did not perceive any impact on their work and even felt disappointed.

George expressed the professional development program had given him the knowledge to design better courses and do it more efficiently. He explained designing online courses was time-consuming and challenging. But the professional development program helped him improve the efficiency and quality of course design. George felt way less stressed about teaching online courses than the semester before. He sensed that he was more confident in the content he was delivering and how he was delivering it. George said that ultimately made his life easier, and he felt good about it. George provided examples and details about what changes he had made or will make to his online teaching. He described it as follows,

I think I reorganized [the changes]. From last semester to this semester, I reorganize [the changes to] my courses from how I have due dates structured to the days when things are due. I don't have things due on Fridays anymore. For instance, I kind of go on a Tuesday to Monday school week, so students have all weekend and Monday to work on things. I've created some more visual aids on the flow of the course. I think other things are making it better. I've changed the way I do discussion boards. And I've made some learning activities a little more interactive.

According to George, the two main changes he made to his class were organization and interaction.

Melissa recognized that the professional development program is going to impact her teaching. She shared the program was going to impact her classes, make her more of an effective instructor for students, and hopefully impact students' learning as well. Melissa used to feel overwhelmed about online class grading. But this professional development program provided grading solutions and made the class easier for her to manage. Melissa liked the rubrics the program instructors presented, the ideas related to rubrics, and other projects that provided ways to handle grading. Melissa stated she would also apply other technologies, such as Google Docs, Flipgrid, and Padlet, that she learned from the program in her next online courses. Melissa provided more details about the program's impact on her future online teaching, explaining,

I think my online class will definitely be more organized and more structured. I would have told you that it was organized before taking that class, but I realized that it could be better now, and having consistent communication times can be helpful and not too overwhelming to the learner. I think my class would be more structured. I'll definitely try some of the new technologies. We have something called VoiceStream in BbLearn that I've used in the past, but I think I'm going to try Flipgrid this time because I've had students really struggle with VoiceStream, and I have, too. So, I can see improvements there.

Based on Melissa's description, quite a few changes will be applied to her future online teaching, including organization, structure, communication strategies, and new technologies.

Elaine believed the professional development program provided her with more opportunities and improved her teaching. She perceived it was helpful to know how to develop and administer an online class. Elaine explained the professional development

program opened up avenues for any virtual or online course she might create. She felt the program helped to enhance her teaching. Elaine also appreciated advice on “*keeping organized and being thorough with instructions*” for her future teaching. She indicated she wanted to give thorough instructions without taking away from students’ innovation and wanted to be specific so that students understand the instructions of what she is asking for.

Susan shared the professional development program would make changes to her teaching and research. She already tried something new as a result of the professional development program. Susan provided some examples as follows,

I've done the voice-to-text dictation with interview research. Then, I've started the final project creating OERs using OER Commons. I have created a curriculum for teachers in rural Nicaraguan schools, and we put that on an app. We're having some trouble with the upkeep of the app. So, knowing about OER Commons and how it might be easier for everyone to navigate around the world, we've decided that we'll try to move everything there and add more. I recently had an email from a professor who had found the app and was interested in expanding it to meet the needs of teachers in rural Thailand. I told him about how I wanted to use OER Commons instead. We're trying to work on that so we can expand.

Susan noted it was not just teachers in Nicaragua but also teachers in Thailand and hopefully elsewhere. She said that was all new, and she wouldn't have even known about it without the course. Susan also liked the idea of video introduction and planned to apply that to her courses. She stated she would teach an online course asynchronously in the fall. Susan usually provides a written introduction of herself with a picture. But next time, she will do a video introduction. Susan would encourage her students to do video feedback and try out

some of the technologies that she learned to give students options. Susan provided examples of how she was applying what she learned from the program into her research. She shared she had been doing some interviews for research and started with having Google Docs open and using voice activation while interviewing. Susan commented that while not perfect, it still helped her, and *“it's nice to have a draft of transcription, especially when you have an hour-long interview.”* This suggests Susan had already started implementing the new strategies and technologies obtained from the program in her teaching and research.

Tom acknowledged the impact of this professional development program on his work. He admitted the program made him a better course designer. Tom explained he has a good understanding and can develop any online course that he desires. The program did increase his competency in designing online courses, as he already embedded the universal design for learning. Tom shared that as a result of the program, he had tried many new things when he was developing his major module assignment. Tom also planned to apply what he learned through this program to his future online teaching. He said the program presented wonderful templates as to how instructors can design a course. Tom provided the *“buck card design template”* as an example and discussed relevant considerations as follows,

As you go through each module, you'll consider the students. What activities will enable the student-student interaction, content interaction, and instructor interaction? You need to sit down and plan out things before you start to put the course together. Or what are you going to do to assess students? What are the technologies that are required when you are teaching, when you are enabling student-student interaction? Those are things that need to be taken into consideration when you're planning your course.

Clearly, many factors need to be considered when instructors plan and design their courses.

Donna indicated this professional development program had significant impacts on her work. She shared the program has made her feel a lot more confident in developing online courses and offering quality instruction to students. Donna had concerns about putting courses online before attending this program. She noted even though she had decided to go ahead and do so, she was concerned about having it be something that would never be as good as the in-person class. This program alleviated Donna's concerns. She felt she had gotten the tools to make the online course as good or perhaps even better in specific ways. Donna explained she cares about students and intends to provide them the best possible instruction. For example, Donna would like to have group discussions in her online courses akin to those she had in her face-to-face courses by using the tools she learned from the program. Therefore, she plans to apply the effective methods of online interaction from this program to her online courses.

Helen and Sophia had a lot of experience with online teaching and learning. They did not perceive any impact the professional development program had on their work. Helen felt the course content was repetitive for her. She already knew the knowledge and skills presented in the course from other sources. Sophia shared that the learning experience was "*disappointing.*" The program did not meet her expectations. Being a student herself in this course, Sophia felt she needed to understand her students' needs more. She would ask students more questions at the very beginning and reflect on where they are, their needs, and what they want from the course that she is teaching. Sophia already applied that to one of her courses. She would also include more of the students' feedback and tailor her courses to meet the needs of particular students. Sophia indicated she would keep changing her course

content based on the context or the type of students she has. Understanding more about students' needs was the primary focus Sophia would adopt in future online teaching.

Overall, while a couple of participating faculty members did not perceive any program impact on their work, the other faculty member participants did acknowledge the impacts the program had on their teaching, including course organization, course interaction, and application of new strategies and technologies. These faculty also felt it helped them be more competent instructors as well as better course designers. By participating in the professional development program, some faculty members also experienced a sense of community.

Theme 4: community bond. The fourth theme that emerged, community bond, included two subthemes – *community involvement* and *relationships*.

Community involvement. The professional development program for online teaching and learning was conducted within a community of practice setting. Interviewing participants and analyzing the collected data revealed that some faculty members were already involved in the community from the very beginning and throughout the program. Some other faculty members, however, felt too busy to get involved in the community.

Helen shared that by interacting with other colleagues in the professional development program, she learned ideas of how other people deal with things in context. When colleagues had a chat on a particular topic within the modules, people shared advice on how they dealt with things. Helen said she read through those posts to see how other people related to that same topic even though it wasn't required.

Melissa perceived the class as unique since all the participants were in different fields, which she found exciting. Melissa provided an example saying one person brought up

the universal design for learning and started talking about that, which was something that she really would have never thought of on an online platform. She was excited that it got brought up organically through discussions because that was not an area with which she was very familiar. Melissa noted that one thing she found most beneficial in the professional development program was that all the participants were interested in the same thing — online learning, even though they all have different specialties. She regarded these differences among faculty members as beneficial. Melissa indicated participants' projects and ideas were different. In some ways, she learned more about what colleagues do and their programs by seeing the rubrics they created in their classes, which made her a better instructor. Melissa felt it helpful to know that she was going through it with a group of people and was able to ask colleagues questions when needed. Melissa remembered the areas of expertise of other participants and knew who to ask when she had questions (e.g., accessibility, formatting). She appreciated that colleagues were available to answer questions, and they were right there in the community.

Being in the community, Elaine found faculty members had common issues with online teaching such as student communications, instructions, and assessment. She had a good perception of the community of practice. She felt it helpful to share different teaching practices and ideas with other faculty members. Elaine shared the benefit of participants who weren't all in the same field — that it was interesting to hear a different perspective of how they do assessments and lectures.

Susan indicated the community of practice let her experience the student role again. She said she hadn't been a student in an online environment for several years and felt good about gaining a student perspective so that she could relate more to her students. Susan

acknowledged that the community of practice in this program helped with her practice in other communities. She stated,

I've been reluctant with online. I've taught online. But I also do a lot of professional development for teachers in low resource or no resource communities. This was an excellent opportunity for me to try different things and see what actually could work in a low-resource community and what things maybe don't. So, it's good.

Being involved in the community in the professional development program, Susan also learned more about her colleagues. She felt faculty members are super “*isolated*” as academics and don't necessarily know what other colleagues are teaching or researching. By being in the community, she learned a little bit more about what other colleagues do. Susan also mentioned that one of the big takeaways for her was the instructors modeled quality online teaching. She thought the video responses were powerful. Susan admitted that in her asynchronous classes, she had not previously videotaped because she did not personally enjoy seeing herself on film. However, she found it was very engaging to see the instructors. Susan was also impressed by the instructors’ audio feedback. She said she liked hearing the instructors’ voices, seeing the instructors' faces, and hearing their feedback, making it feel more like a “*community*” than a more traditional asynchronous course. According to Susan, instructors’ video responses and audio feedback created her perception of a community.

Donna indicated the community of practice in the program meant a lot to her practice and teaching. She shared, in the beginning, she wasn't quite sure how it was going to work out because she was a bit of an “*outlier*” as far as what people were teaching, compared to most of the group. However, it turned out to be fine. By being involved in the community, she learned several different instructional approaches, which made her think about effective

ways of teaching besides what's traditionally practiced in the sciences. Donna explained there was a great deal of interaction, and she found it particularly helpful to be in the class with so many people who taught very different things than she did. With other participants' various backgrounds, Donna noted there were things that she did not typically see in science classes *"where most people were writing equations on the board and students copied them down, and that was about it."* Other participants' practice made Donna reflect on her own. She said that it expanded her views of what the whole educational enterprise can be about and made her think of ways to keep her students more engaged. Donna shared that quite a number of people in the group are far more experienced at online teaching than she was and had a lot of excellent practical advice on how to do certain things. Donna liked that and provided examples of what she liked saying,

A number of specific things, like when we talked about some of those online tools and people would chime in and say, "oh, I've used Padlet for this particular type of course assignment, and the students liked it," or sometimes they would say, "I tried to use that, but it was too much for the students to learn it."

Donna felt that with that range of people who had experience using those tools, there were a lot of useful, practical insights into how it played out in the classroom. She found that was really helpful and brought it into the realm of real teaching.

Tom indicated although the optional community of practice section started near the end of the professional development program, he believed the community of practice existed from the beginning of the program. He explained that when the program started, participants were placed in groups and could communicate with each other, talk about the challenges they face, ask for assistance, and so forth. Tom shared, by being involved in the community, he

learned some interesting things about technology and the advantages and disadvantages of some of the technologies that were covered in the class. He said that widened his understanding of specific technologies. Tom further explained the community of practice through the following,

I think presently, we have a community of practice without related instruction, but we had guidance and support from the start of the course. There was a community of practice. Maybe it wasn't as formal as the instructors made it out to be at the end of the program, but I do think there was a community of practice because the instructors talked about what they were doing, they collaborated, they shared ideas, and so forth.

Within the community, Tom learned about issues that some of the faculty were having in their online class, and he provided feedback on how those issues can be dealt with. He shared his concern was about how to improve interactivity. Some faculty were concerned about allowing students to get more hands-on experience in an online environment. Some other faculty were worried about grading and how to manage feedback. There was a wide area of interest that faculty have. Tom indicated faculty members can always turn to the community for support. He stated,

If you need something, if you need a quick answer to a question that you have or need somebody to give you some support, you know that you can go into the community and ask for assistance. Colleagues are willing to share what they're doing, the best practices that they're doing to make their program work.

Tom also believed the interaction with the instructors is helpful for opening areas and dialogues for faculty to do research. Tom believed the feedback and the results they get from those researches could help faculty members improve teaching in an online environment. In

sum, Tom felt involved in the community from the beginning of the program and recognized its benefit.

Sophia felt the program was quite “*disappointing*” and did not involve herself in the community, choosing to opt-out of that part of the program. George had been very busy and was not involved in the community, either. He shared he did not have much interaction with other participants throughout the program, nor did he look at the community of practice section. George said he struggled with this course. Having been too busy with other things, he did not have much time for this professional development program.

While a few did not have time to participate, most of the faculty members experienced the community throughout the professional development program. By being involved in the community, participants knew more about their colleagues, learned more about common issues other faculty members have with online teaching, learned good practices from each other, and even improved their research. Moreover, faculty members developed relationships with members of the community.

Relationships. By participating in the professional development program for online teaching and learning, faculty members developed relationships with other colleagues and instructors in the community. Some relationships were positive, while others were negative.

Helen shared that she knew most of the participants in the professional development program. The instructors were pretty good at giving feedback. Regarding the relationship, she felt everything was fine. Melissa stated she knew the participants that are in the same department as her, and they had a good relationship. Melissa shared that a few of them in the same department would converse about the class and help each other stay on track. That was congruent with what the program instructors observed, “*they [faculty members] were helping*

each other to have a preferred outcome.” Elaine perceived good relationships with colleagues and instructors. She said they maintained open communication with the leaders of the online course. She knew some of the other colleagues who were taking the course and communicated with them well. Susan also felt good about the colleagues and instructors. She said she learned some new things about colleagues that she didn't necessarily know before. She perceived the instructors were friendly. She appreciated how they modeled good teaching through the course. Everyone was supportive and positive.

Sophia said the program instructors were very receptive, and they answered emails or concerns quickly. The instructors tried to navigate the system to make it easy for participants to explore different things. Sophia said she got to meet some new people in the program with whom she did not have a previous connection. The conversations within the program allowed her to meet new colleagues and learn about what they're doing in their courses. Knowing new colleagues also opened potential collaboration opportunities for Sophia. She said they might share materials, given that they teach similar courses. Sophia learned certain things from other faculty members' experiences, for example, how to grade more effectively and how to manage time. Sophia noted the participants had insightful discussions and conversations about specific tools that have been useful in online classrooms. She also learned how others integrate their missions, visions, or teaching philosophy into online teaching. Sophia believed she could always turn to other colleagues for help. She knew some faculty members were more into technology, and they utilized many different tools. She could reach out to them when she needed to.

Donna indicated that she felt good about colleagues. She said the class had a very supportive atmosphere. She felt people were engaged, tried to give lots of positive feedback,

and were helpful to colleagues. Donna also had great impressions of the instructors. She shared that the instructors were excellent and did an outstanding job modeling how to make people feel personal connections even through the online instructional portal. One of Donna's concerns with online teaching before was "*losing the in-person interaction,*" as she felt it was key to keep students engaged in class. But Donna was pleased with the program instructors' performance and admitted the instructors did an outstanding job of demonstrating how instructors can keep students engaged. Donna even had a chance to meet with the program instructors during a trip to their location, meeting two of the instructors for coffee and breakfast one morning, which was edifying for her. Overall, Donna perceived the relationships as entirely positive.

Tom had good relationships with both colleagues and instructors. He perceived the instructors were engaging and facilitating. The colleagues were also very helpful. Tom shared, at one point, one of his colleagues even showed him how to use the technology since he started the course late, and the instructors were accommodating. He stated he had a few weeks to catch up, and the instructors facilitated that. He was pleased that instructors provided a sandbox for him to work on in Canvas. According to Tom, he had good perceptions about relationships with both colleagues and instructors.

George admitted that he had been swamped and did not interact with other colleagues in the course as much as he thought he would. He also shared that he was unsatisfied with instructors' feedback and said the feedback was often "*pretty light.*" Melissa shared that she communicated with colleagues quite often and had great relationships with them. However, Melissa was dissatisfied with the instructors' responses. She said she emailed the instructors a couple of times and wasn't thrilled with their response time or their feedback. Melissa also

did not feel the instructors were “*approachable*,” saying the two times she asked them questions, she felt like she annoyed the instructors by asking them.

Overall, two participants shared negative perceptions about the course instructors. Other participants had positive relationships with both colleagues and instructors in the program. Faculty members got to know more about their colleagues and got to know new people. They supported each other. The new relationships even opened future collaboration opportunities.

Summary

The purpose of this phenomenological study was to explore faculty members’ experiences of a professional development program designed to prepare them for better online teaching and learning. The group of participants for this study was composed of diverse individuals. Each participant had a unique academic background. They were in different age ranges, held different academic ranks, and came from various disciplines. All the participants completed the professional development program. They were interviewed and shared their perceptions about the professional development program they experienced. According to the interviews and other collected data, four themes emerged from the study, including obtaining new knowledge, confirmation of appropriate tools and strategies, mixed learning experience, and community bond. Although the participants’ academic backgrounds varied, most of them obtained new technological and pedagogical knowledge by participating in the professional development program. Some participants reaffirmed their previous knowledge; for those faculty members, the professional development program was a reinforcement of appropriate tools and strategies. Additionally, participants had mixed feelings about their learning experience. Some participants perceived the program as

beneficial, while others felt the program repetitive. Furthermore, participants perceived a community bond. Chapter 5 includes a summary of the study, discussion of findings, implications, and recommendations.

Chapter 5: Discussion and Conclusion

This chapter begins with a summary of the study, followed by a discussion of the key findings as they relate to the themes identified, relevant literature, and the two guiding theoretical frameworks. Implications for practice and theory are then presented, and the chapter concludes with recommendations for future research.

Summary of Study

The purpose of this phenomenological study was to explore faculty experiences with a professional development program designed to prepare them for better online teaching and learning. The research question was: how do faculty perceive their experiences in a professional development program designed to prepare them for better online teaching and learning in an intentional community of practice? The review of literature for this study was based upon the following relevant areas: (1) issues in teaching online in higher education, (2) faculty professional development, (3) effects of team-based professional development interventions in higher education, (4) conditions for successful professional development activities in teams, (5) communities of practice, and (6) related frameworks.

A qualitative phenomenological approach was applied in this study. A modified version of Seidman's (2006) in-depth, phenomenologically based interviewing protocol was used to collect narrative data from the eight identified participants. Interview questions were developed based on the review of the literature and evolved following participants' responses. A purposeful sampling method was used to select the participants in this study. Participants were asked a series of questions pertaining to their perceptions of the professional development program designed to prepare them for better online teaching and learning. After a comprehensive analysis of the data gathered, four major themes emerged.

These four themes reflected the lived experiences of the faculty members with the professional development program designed to prepare them for better online teaching and learning in an intentional community of practice.

Discussion of Findings

Faculty members are at varying levels of expertise in teaching online. Some faculty have fully embraced online education, whereas other faculty members are newly learning how to integrate instructional technology into their online teaching (Allen & Seaman, 2007). Some faculty members may have limited experience with online teaching because they have spent the majority of their careers in a traditional face-to-face classroom (Brookfield, 2015). Faculty tend to replicate within their own classrooms the way they were taught (Carr-Chellman & Dyer, 2000). In this study, the faculty members' previous experience with online teaching and learning ranged from none to over ten years of experience.

Among the eight faculty members who were interviewed, one participant had never taught online courses before and planned to teach an online course in Fall 2020 or Spring 2021. Two participants started teaching online in the Fall semester of 2019. Two participants reported over ten years of online teaching experience. The other three participants' experiences were three, four, and nine years. Each participant completed the professional development program and reported experiencing professional growth with colleagues. The following section presents a discussion of the key findings.

Obtaining new knowledge. Professional development activities designed to address online components are critical for preparing faculty for teaching in online environments (Quiroz et al., 2016). More research is needed in the area of professional development activities for educators who have transitioned from teaching in a face-to-face setting to

teaching in an online setting (Dikkers, 2015). Further faculty professional development activities centering on strategies for effective online education are necessary to improve faculty skills for teaching in the online environment as well as the overall quality of distance education (Kennedy, 2015). The findings of this study are consistent with the literature.

The professional development program in this study was designed to prepare faculty members for better online teaching and learning. While each participant had their own learning experience, by interviewing the participants and analyzing collected data, common elements were found for faculty members' acquisition of new knowledge within the professional development program, which included technological knowledge and pedagogical knowledge. This finding aligned with the TPACK framework. Participants seemed to find a variety of technologies presented in the professional development program that they indicated as new to them and helpful for their teachings, such as Google Docs, Padlet, and Flipgrid. They also found that some technologies may be applied in face-to-face courses. Additionally, most participants of this study shared that they learned new pedagogical knowledge through the professional development program, such as communication strategies, active learning, and universal design.

Confirmation of appropriate tools and strategies. While some participants obtained new knowledge through the professional development program for online teaching and learning in which they participated, other participants reaffirmed their previous knowledge. The professional development program was a reinforcement of appropriate tools and strategies for those faculty members. This resonates with the findings of Poyas and Smith (2007), which indicated that through team-based professional development activities, participants not only learned new concepts but also improved their understanding of the concepts they had already

known. Contrary to the literature and the majority of participants in this study, one participant felt disappointed about the content presented in the program. She felt she did not learn anything that was really “*insightful.*” The course affirmed what she has been doing, and she reported that she is on the right track, but she felt the course did not really bring forth new knowledge that she could integrate into the courses that she teaches. This participant’s knowledge of online teaching and learning was already quite advanced. The situation may be changed if there had been better communication about the objectives and outcomes of the professional development to faculty members before the program started.

While reaffirming most faculty members’ prior knowledge, participation in a team-based professional development intervention affected participants’ perceptions of themselves as well as their role as instructors (Gast et al., 2017). By participating in the professional development program, faculty members experienced the student role again. According to the participants, they felt good about gaining a student perspective so that they could relate more to their students. Through the professional development program, participants better understood the role of the instructor in light of the needs of their students. This is consistent with the findings of the literature. For example, in a study conducted by Deni and Malakolunthu (2013), instructors stated that they obtained a better understanding of themselves as an instructor and their role in the classroom when they viewed their own professional commitments from peers’ points of view. Gast et al. (2017) also reported that by being part of a community of practice, instructors had a better understanding of the role they played in their students’ development and how they influence that development. In addition, instructors felt more confident and became more innovative in that regard.

Mixed learning experience. By participating in a team-based professional development intervention, instructors in higher education can learn to critically reflect on their own teaching practices (Gast et al., 2017). In this study, participants reflected on their experience with the professional development program they completed as well as on their own teaching practices. Interviewing all participants and analyzing all collected data revealed that participants had mixed feelings about their learning experiences. Some participants perceived the program as beneficial; they felt the program outcomes included better course organization and more effective teaching. These faculty members also felt the program helped them be more competent instructors as well as better course designers.

A few participants perceived the program as repetitive. They felt they did not obtain much new knowledge or skills through the program. Those faculty members' knowledge was already quite advanced. The program instructors could have given them more advanced readings for the various topics covered; allow them to share important points from these readings with the team, and demonstrate best practices relating to student-to-student, student-to-instructor, and student-to-content interaction to the team. They could also take on leadership roles in the community of practice by asking questions, facilitating responses, and resolving issues encountered in instruction.

Community bond. By participating in the professional development program, some faculty members also experienced a sense of community. In any community, different levels of participation exist. While members on the periphery may not participate in the community in the same ways as core members, they can still gain insights and knowledge through this type of participation (Wenger et al., 2002). Through participating in a team-based professional development intervention, colleagues have a chance to learn more about each

other (Gast et al., 2017). That is exactly what the participants in this study experienced. Interviewing participants and analyzing the collected data revealed that, while a few did not have time to participate, most of the faculty members experienced the community throughout the professional development program. By being involved in the community, participants knew more about their colleagues, learned more about common issues other faculty members have with online teaching, learned good practices from each other, and even improved their research.

An optional community of practice section was also provided at the end of the program to allow the participants to continue their conversations. However, according to the program instructors, there was little participation. Two factors may have contributed to such limited participation in the community of practice. First, participation in the community of practice at the end of the professional development program was optional; it was unlikely participants would be willing to devote much time to the community of practice when it was no longer connected to the professional development program. Second, the professional development program was conducted at a research university where most of the participants were busy researchers. In such an environment, the likelihood for the continuation of the community of practice seemed to decrease. The situation may change if the professional development program was conducted at a university where the faculty's primary responsibility was teaching.

By participating in the professional development program, faculty members also developed relationships with other colleagues and instructors in the community. While two participants shared negative perceptions about the course instructors, other participants had positive relationships with both colleagues and instructors in the program. Faculty members

got to know more about their colleagues and became acquainted with new people. They supported each other throughout the program. The new relationships even opened future collaboration opportunities. As Wenger (1998) indicated in the book *Communities of Practice: Learning, Meaning, and Identity*, “within the context of social learning theory, learning becomes, fundamentally, a social phenomenon and is placed in the context of our lived experience and participation in the world” (p. 3). The findings above aligned with social learning theory appropriately.

Implications

The following sections address how the findings of this phenomenological study have implications for practice and theory for future professional development initiatives.

Implications for practice. According to the findings, most of the participants obtained new knowledge and skills through the professional development program. They shared their perceived experience with the program and acknowledged the impacts the program had on their work. However, several participants and the program instructors shared a concern about the program delivery time. The program paused for about one month during the Christmas holiday season to allow some participants to catch up. But some participants wished to move on with the modules and complete the program faster. Participants also indicated they had trouble re-engaging with the program after the long break.

The program instructors shared a similar concern indicating they would have tried to make the program a bit shorter because it was hard to get people back after the holidays. Meanwhile, the instructors wanted to cover all the planned content. It would also be helpful to still provide flexibility for participants and respond to the needs of the participants. Taking all the concerns into consideration, it would be advantageous to conduct the program within

one semester rather than across multiple semesters, particularly for faculty members who work in an institution that is on a traditional semester pace. Therefore, administrators and professional development program instructors should consider all the factors before a program starts and make the right balance between covering the course content and running the program. Feedback suggests it would be better to let the program run continuously without any break in the middle. Faculty could also present their requests and needs to the administrators and program instructors before participating in the program and let their voices be heard.

Implications for theory. The TPACK framework addressed educators' lack of awareness of using technology to support curriculum with appropriate pedagogical skills (Koehler & Mishra, 2015; Koehler et al., 2013). Technical knowledge, pedagogical knowledge, and content knowledge are crucial elements for integrating a content area with technology (Jaipal-Jamani & Figg, 2015). I used TPACK as the theoretical framework to guide this study. TPACK includes four areas of knowledge: technological knowledge, pedagogical knowledge, content knowledge, and contextual knowledge. Technological knowledge addresses how educators select appropriate technologies to support curriculum; pedagogical knowledge refers to instructional strategies educators implement in their classes to meet students' learning needs; and content knowledge holds that educators are experts, possessing expertise in the content area for instruction (Koehler & Mishra, 2015; Koehler et al., 2013). Contextual knowledge could involve a variety of messages, for example, an instructor's awareness of the types of technologies available to them and their students (Mishra, 2018).

By analyzing the data from the participant interviews, it was clear that all areas of knowledge were covered in the professional development program. However, according to the participants, content knowledge was not as strong as the other three areas of knowledge, which was understandable given that participants of the study held different academic backgrounds. They represented several departments of the institution across various disciplines. An increase in content knowledge could be a necessity for future professional development initiatives.

Limitations

This study is limited to exploring faculty members' experiences of a professional development program designed to prepare them for better online teaching and learning at a research university in the inland Pacific Northwest of the United States. The limited sample size of eight participants does not allow for generalizability of the findings to other situations (Osborne & Costello, 2004). However, according to Steinhauser and Barroso (2009), although the small sample size in a qualitative study limits generalizability, it does allow a deep understanding of the phenomena explored. While the research results were not theorized, they provided valuable insights, as people can learn about similar programs from participants' individual experiences.

Due to faculty members' availability, one participant's second interview and the other participant's two rounds of interviews were conducted via video conference software (Zoom), which may impact the findings as I could not read all of the participants' body language as I could for face-to-face interviews. Additionally, as a former instructional designer in higher education, my experience and perspectives on professional development, online teaching and learning, and communities of practice may influence the overall research

design, analysis, and interpretation of the findings. Yet, my goal was to allow participants' perspectives and beliefs to emerge from the data (Anfara & Mertz, 2015). I remained aware of my assumptions and perspectives before collecting data and used the "bridling" approach (Dahlberg et al., 2008) to strive to amplify the voices of participants. Participants' self-reporting experiences pose another limitation. Using a phenomenological methodology, I interpreted the experiences that the participants themselves reported as they responded to interview questions (Seidman, 2006). Moreover, my limited experience in implementing a phenomenological approach may also influence the study.

Recommendations for Future Research

In this study, the participants' previous experience with online teaching and learning ranged from zero to more than ten years. Each participant completed the professional development program and reported experiencing professional growth with colleagues. However, according to the findings, the two participants with over ten years of online teaching experience obtained less new knowledge and fewer skills than other participants did. Additional research could be conducted to involve participants with similar, more uniform experiences in online teaching. Other opportunities for research could also assess the long-term effectiveness of a professional development program in terms of student outcomes based on course redesign and implementation of learned pedagogical practices. More research could be conducted on designing a community of practice as a part of a professional development program in higher education and investigating the sustaining of the community of practice after the program ends.

This study explored faculty perceptions of a professional development program for online teaching and learning in an intentional community of practice. Further opportunities

for research could assess the effectiveness of a professional development program. It would be beneficial to explore all the success factors as well as possible lessons. Since the content of the program in this study focused on online teaching and learning, researchers could also explore faculty perceptions of a professional development program that focuses on other subject areas.

According to the findings, several participants and the program instructors shared a concern about the running of the program. The program paused for nearly one month during the Christmas holiday season to allow some participants to catch up, but some participants wished to move on with the modules and complete the program faster. Participants shared they had trouble following up with the program because of the long break. The program instructors shared a similar concern and indicated it was hard to get people back after the holidays. Additional research could analyze how a program runs when it is conducted continuously without any break in the middle. The participants of this study were mainly from the College of Education, Health and Human Sciences. A research study including a wider population could be conducted. Furthermore, this phenomenological study was conducted at a research university in the inland Pacific Northwest of the United States. Additional types of institutions and geographic locations could be explored.

References

- Abdo Qasem, A. A., & Viswanathappa, G. (2016). Blended learning approach to develop the teachers' TPACK. *Contemporary Educational Technology, 7*, 264-276.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*, 179–211. doi:10.1016/0749-5978(91)90020-T
- Ali, R., Khan, M. S., Ghazi, S. R., Shahzad, S., & Khan, I. (2010). Teachers' training-A grey area in higher education. *Asian Social Science, 6*(7), 43-48.
- Allen, I. E., & Seaman, J. (2007). *Online nation: Five years of growth in online learning*. Needham, MA: Sloan-C.
- Allen, I. E., & Seaman, J. (2014). *Grade change: Tracking online education in the United States*. Newburyport, MA: Sloan Consortium.
- Allen, L., Kiser, B., & Owens, M. (2013). Developing and refining the online course: Moving from ordinary to exemplary. In R. McBride & M. Searson (Eds.), *Proceedings of society for information technology & teacher education international conference 2013* (pp. 2528–2533). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).
- Almala, A. H. (2005). A constructivist conceptual framework for a quality e-learning environment. *Distance Learning, 2*, 9–12.
- Amrein-Beardsley, A., & Osborn Popp, S. E. (2012). Peer observations among faculty in a college of education: Investigating the summative and formative uses of the reformed teaching observation protocol (RTOP). *Educational Assessment, Evaluation and Accountability, 24*, 5–24. doi:10.1007/s11092-011-9135-1

- Anderson, A., Barham, N., & Northcote, M. (2013). Using the TPACK framework to unite disciplines in online learning. *Australasian Journal of Educational Technology*, 29(4), 549-565.
- Anderson, D., Imdieke, S., & Standerford, N. S. (2011). Feedback please: Studying self in the online classroom. *International Journal of Instruction*, 4, 3–15.
- Anfara, V., & Mertz, N. (2015). *Theoretical frameworks in qualitative research*. Thousand Oaks, Calif.: SAGE Publications.
- Armstrong, D., Gosling, A., Weinman, J., & Marteau, T. (1997). The place of inter-rater reliability in qualitative research: An empirical study. *Sociology*, 31(3), 597-606.
- Austin, A. E., & Sorcinelli, M. D. (2013). The future of faculty development: Where are we going? *New Directions for Teaching and Learning*, 2013(133), 85-97.
- Bakah, M. A. B., Voogt, J. M., & Pieters, J. M. (2012). Advancing perspectives of sustainability and large-scale implementation of design teams in Ghana's polytechnics: Issues and opportunities. *International Journal of Educational Development*, 32, 787–796. doi:10.1016/j.ijedudev.2011.11.002
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, N.J.: Prentice Hall.
- Barksdale, D. J., Woodley, L., Page, J., Bernhardt, J., Kowlowitz, V., & Oermann, M. (2011). Faculty development: Doing more with less. *The Journal of Continuing Education in Nursing*, 42(12), 537-544.
- Baume, D., & Yorke, M. (2002). The reliability of assessment by portfolio on a course to develop and accredit teachers in higher education. *Studies in Higher Education*, 27(1), 7–25.

- Berge, Z. L. (1998, Summer). Barriers to online teaching in post-secondary institutions: Can policy changes fix it? *Online Journal of Distance Learning Administration, 1*, 1–12.
- Berge, Z. L., & Collins, M. (1996). *Facilitating interaction in computer mediated online courses*. Background paper presented at the FSU/AECT Distance education conference, Tallahassee, FL.
- Blanton, M. L., & Stylianou, D. A. (2009). Interpreting a community of practice perspective in discipline-specific professional development in higher education. *Innovative Higher Education, 34*(2), 79–92.
- Bolliger, D. U., & Wasilik, O. (2009). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Distance Education, 30*(1), 103-116.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher, 33*, 3–15. doi:10.3102/0013189X033008003
- Brookfield, S. (2015). *The skillful teacher: On technique, trust, and responsiveness in the classroom* (Third ed., Jossey-Bass higher and adult education series). San Francisco, CA: Jossey-Bass.
- Brooks, C. F. (2010). Toward "hybridised" faculty development for the twenty-first century: Blending online communities of practice and face-to-face meetings in instructional and professional support programmes. *Innovations in Education and Teaching International, 47*(3), 261-270.
- Brown, A. H., Benson, B., & Uhde, A. P. (2004). You're doing what with technology? An expose on "jane doe" college professor. *College Teaching, 52*(3), 100-104.
- Brown, L. M., & Gilligan, C. (1992). *Meeting at the crossroads: Women's psychology and girls' development*. Harvard University Press.

- Bryant, L. H., Niewolny, K., Clark, S., & Watson, E. (2014). Complicated spaces: Negotiating collaborative teaching and interdisciplinarity in higher education. *Journal of Effective Teaching, 14*, 83–101.
- Bryant-Shanklin, M., & Brumage, N. W. (2011). Collaborative responsive education mentoring: Mentoring for professional development in higher education. *Florida Journal of Educational Administration & Policy, 5*, 42–53.
- Bustamante, C., & Moeller, A. J. (2013). The convergence of content, pedagogy, and technology in online professional development for teachers of German: An intrinsic case study. *Calico Journal, 30*(1), 82-104.
- Butcher, K., Leary, H., Foster, J., & Devaul, H. (2014). Adopting an online curriculum planning tool: Facilitation for teachers' thinking about student-centered pedagogy and technology integration. *Journal of Technology and Teacher Education, 22*(4), 423-447.
- Capra, T. (2011). Online education: Promise and problems. *Merlot Journal of Online Learning and Teaching, 7*, 288–293.
- Carr-Chellman, A. A., & Dyer, D. (2000). The pain and ecstasy: Pre-service teacher perceptions on changing teacher roles and technology. *Journal of Educational Technology & Society, 3*(2), 96–105.
- Cavanaugh, D. (2005). Teaching online – A time comparison. *Online Journal of Distance Learning Administration, 8*, 1–9.
- Chai, C.-S., Koh, J. H.-L., & Tsai, C.-C. (2013). A review of technology pedagogical content knowledge. *Education Technology & Society, 16*(2), 31-51.

- Chamberlain, J. M., D'Artrey, M., & Rowe, D. A. (2011). Peer observation of teaching: A decoupled process. *Active Learning in Higher Education, 12*, 189–201.
doi:10.1177/1469787411415083
- Chametzky, B. (2014). Andragogy and engagement in online learning: Tenets and solutions. *Creative Education, 5*, 813–821A.
- Choi, H. J., & Park, J. (2006). Difficulties that a novice online instructor faced: A case study. *The Quarterly Review of Distance Education, 7*, 317–322.
- Conrad, D. (2004). University instructors' reflections on their first online teaching experiences. *Journal of Asynchronous Learning Networks, 8*(2), 31-44.
- Cook, R., Ley, K., Crawford, C., & Warner, A. (2009). Motivators and inhibitors for university faculty in distance and e-Learning. *British Journal of Educational Technology, 40*(1), 149-163.
- Coppola, N. W., Hiltz, S. R., & Rotter, N. G. (2002). Becoming a virtual professor: Pedagogical roles and asynchronous learning networks. *Journal of Management Information Systems, 18*(4), 169-189.
- Couros, A. (2003). Communities of practice: A literature review. Retrieved from http://www.tcd.ie/CAPSL/_academic_practice/pdfdocs/Couros_2003.pdf
- Crawley, F. E., Fewell, M. D., & Sugar, W. A. (2009). Researcher and researched: The phenomenology of change from face-to-face to online instruction. *The Quarterly Review of Distance Education, 10*, 165–176.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.

- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Pearson Education.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Creswell, J., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (Fourth ed.). Thousand Oaks, California: SAGE.
- Czaja, S. J., & Sharit, J. (2013). *Designing training and instructional programs for older adults*. New York: CRC Press.
- Dahlberg, K., Dahlberg, H., & Nystrom, M. (2008). *Reflective lifeworld research* (2nd ed.). Lund, Sweden: Student litteratur.
- Dahlberg, K., & Drew, N. (1997). A Lifeworld Paradigm for Nursing Research. *Journal of Holistic Nursing*, 15(3), 303-317.
- Dahlberg, K., Drew, N., & Nystrom, M. (2001). *Reflective lifeworld research*. Sweden: Student litteratur.
- Daniel, B., McCalla, G., & Schwier, R. A. (2002). *A process model for building social capital in virtual learning communities*. Paper presented at the International Conference on Computers in Education (ICCE), Auckland, New Zealand.
- Deni, A. R. M., & Malakolunthu, S. (2013). Teacher collaborative inquiry as a professional development intervention: Benefits and challenges. *Asia Pacific Education Review*, 14(4), 559–568.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research*. Sage.

- Dickerson, C., Jarvis, J., & Levy, R. (2014). Learning through projects: Identifying opportunities for individual professional learning and development. *Professional Development in Education, 40*(1), 17–35.
- Dikkers, A. G. (2015). The intersection of online and face-to-face teaching: Implications for virtual school teacher practice and professional development. *Journal of Research on Technology in Education, 47*(3), 139-156.
- Donnelly, R., & McSweeney, F. (2011). From humble beginnings: Evolving mentoring within professional development for academic staff. *Professional Development in Education, 37*(2), 259–274.
- Ely, M., Anzul, M., Friedman, T., Garner, D., & Steinmetz, A. M. (1991). *Doing qualitative research: Circles within circles*. Philadelphia: Falmer Press.
- Ely, M., Vinz, R., Downing, M., & Anzul, M. (1997). *On writing qualitative research: Living by words*. Philadelphia: Falmer Press.
- Fein, A. D., & Logan, M. C. (2003). Preparing instructors for online instruction. *New Directions for Adult and Continuing Education, 100*, 45–55.
- Finlay, L. (1999). Applying phenomenology in research: Problems, principles and practice. *British Journal of Occupational Therapy, 62*(7), 299–306.
- Finlay, L. (2009a). Debating phenomenological research methods. *Phenomenology & Practice, 3*(1), 6–25.
- Finlay, L. (2009b). Exploring lived experience: Principles and practice of phenomenological research. *International Journal of Therapy & Rehabilitation, 16*(9), 474–481.
<https://doi.org/10.12968/ijtr.2009.16.9.43765>

- Finlay, L. (2014). Engaging phenomenological analysis. *Qualitative Research in Psychology*, *11*(2), 121–141. <https://doi.org/10.1080/14780887.2013.807899>
- Fitzpatrick, M., & Moore, S. (2013). Exploring both positive and negative experiences associated with engaging in teaching awards in a higher education context. *Innovations in Education and Teaching International*, *52*, 621–631.
doi:10.1080/14703297.2013.866050
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, *38*, 915–945.
doi:10.3102/00028312038004915
- Gast, I., Schildkamp, K., & van der Veen, J. (2017). Team-based professional development interventions in higher education: A systematic review. *Review of Educational Research*, *87*(4), 736-767.
- Gikandi, J. W., Morrow, D., & Davis, N. E. (2011). Online formative assessment in higher education: A review of the literature. *Computers & Education*, *57*, 2333–2351.
- Glendinning, S. (2008). What is phenomenology? *Philosophy Compass*, *3*(1), 30–50.
<https://doi.org/10.1111/j.1747-9991.2007.00113.x>
- Glesne, C. (1999). *Becoming qualitative researchers: An introduction*. New York: Longman.
- Golden, J. E. (2016). Supporting online faculty through communities of practice: Finding the faculty voice. *Innovations in Education and Teaching International*, *53*(1), 84–93.
- Goodyear, P., & Zenios, M. (2007). Discussion, collaborative knowledge work and epistemic fluency. *British Journal of Educational Studies*, *55*(4), 351-368.

- Guskey, T. R. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin Press.
- Hahn, T. B., & Lester, J. (2012). Faculty needs and preferences for professional development. *Journal of Education for Library and Information Science*, 53(2), 82-97.
- Hammersley, M. (2012). *What is Qualitative Research?* Soho, London: A&C Black.
- Harwood, T., & Clarke, J. (2006). Grounding continuous professional development (CPD) in teaching practice. *Innovations in Education and Teaching International*, 43, 29–39. doi:10.1080/14703290500467400
- Hathaway, K. L. (2013). An application of the seven principles of good practice to online courses. *Research in Higher Education Journal*, 22, 1–13.
- Herman, J. H. (2013). Faculty incentives for online course design, delivery, and professional development. *Innovative Higher Education*, 38(5), 397-410.
- Hildreth, P., & Kimble, C. (2000). Communities of practice in the distributed international environment. *Journal of Knowledge Management* (4), 17.
- Hill, J. R. (2002). Overcoming obstacles and creating connections: Community building in web-based learning environments. *Journal of Computing in Higher Education*, 14, 67–86.
- Hoekstra, B. (2014). Relating training to job satisfaction: A survey of online faculty members. *Journal of Adult Education*, 43(1), 1-10.
- Houghton, L., Ruutz, A., Green, W., & Hibbins, R. (2015). I just do not have time for new ideas: Resistance, resonance and micro-mobilisation in a teaching community of

- practice. *Higher Education Research & Development*, 34, 527–540.
doi:10.1080/07294360.2014.973834
- Hrastinski, S. (2008). What is online learner participation? *Computers & Education*, 51, 1755–1765.
- Hrastinski, S. (2009). A theory of online learning as online participation. *Computers & Education*, 52, 78–82.
- Humphries, S. (2010). Five challenges for new online teachers. *Journal of Technology Integration*, 2, 15–24.
- Jaipal-Jamani, K., & Figg, C. (2015). A case study of a TPACK-based approach to teacher professional development: Teaching science with blogs. *Contemporary Issues in Technology & Teacher Education*, 15(2), 161-200.
- Jimoyiannis, A., Tsiotakis, P., Roussinos, D., & Siorenta, A. (2013). Preparing teachers to integrate Web 2.0 in school practice: Toward a framework for Pedagogy 2.0. *Australasian Journal of Educational Technology*, 29, 248-267.
- Juan, A. A., Steegman, C., Huertas, A., Martinez, M. J., & Simosa, J. (2011). Teaching mathematics online in the European area of higher education: An instructor's point of view. *International Journal of Mathematical Education in Science and Technology*, 42, 141–153.
- Kebritchi, M., Lipschuetz, A., & Santiago, L. (2017). Issues and challenges for teaching successful online courses in higher education: A literature review. *Journal of Educational Technology Systems*, 46(1), 4-29.
- Keevers, L., Lefoe, G., Leask, B., Dawoon Sultan, F. K. P., Ganesharatnam, S., Loh, V., & Lim, J. S. Y. (2014). "I like the people I work with. Maybe I'll meet them in person

- one day”: Teaching and learning practice development with transnational teaching teams. *Journal of Education for Teaching*, 40, 232–250.
- doi:10.1080/02607476.2014.903024
- Kennedy, A. (2015). *Faculty perceptions of the usefulness of and participation in professional development for online teaching: An analysis of faculty development and online teaching satisfaction*. ProQuest Dissertations and Theses.
- Koehler, M. J., & Mishra, P. (2015). “TPACK (Technological Pedagogical Content Knowledge).” In J. M. Spector. (Ed.), *The SAGE Encyclopedia of Educational Technology TPACK (Technological Pedagogical Content Knowledge)* (pp. 783-786). <http://dx.doi.org/10.4135/9781483346397.n318>
- Koehler, M. J., Mishra, P., & Cain, W. (2013). What is technological pedagogical content knowledge (TPACK)? *Journal of Education*, 193(3), 13-19.
- Koehler, M. J., Mishra, P., Hershey, K., & Peruski, L. (2004). With a little help from your students: A new model for faculty development and online course design. *Journal of Technology and Teacher Education*, 12, 25–55.
- Koepke, K., & O'Brien, A. (2012). Advancing pedagogy: Evidence for the role of online instructor training in improved pedagogical practices. *Journal of Asynchronous Learning Networks*, 16(2), 73.
- Koole, M. (2014). Identity and the itinerant online learner. *The International Review of Research in Open and Distance learning*, 15, 52–70.
- Kosnik, C., Menna, L., Dharamshi, P., Miyata, C., Cleovoulou, Y., & Beck, C. (2015). Four spheres of knowledge required: An international study of the professional

- development of literacy/English teacher educators. *Journal of Education for Teaching*, 41, 52–77. doi:10.1080/02607476.2014.992634
- Krippendorff, K., & Bock, M. A. (2009). *The content analysis reader*. Thousand Oaks, CA: Sage.
- Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. Thousand Oaks, Calif.: Sage Publications.
- Kyei-Blankson, L., & Keengwe, J. (2011). Faculty-faculty interactions in online learning environments. *International Journal of Information and Communication Technology Education*, 7, 25–33.
- Lapadat, J. C. (2007). Discourse devices used to establish community, increase coherence, and negotiate agreement in an online university course. *Journal of Distance Education*, 21(3), 59-92.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Lewis, L. (2019). *Exploring professional development needs and barriers of community college online adjuncts: A case study*. ProQuest Dissertations and Theses.
- Li, C., & Irby, B. (2008). An overview of online education: Attractiveness, benefits, challenges, concerns, and recommendations. *College Student Journal, Part A*, 42,449–458.
- Lieblich, A., Tuval-Mashiach, R., & Zilber, T. (1998). *Narrative research: Reading, analysis, and interpretation*. Thousand Oaks: Sage.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

- Lune, H., & Berg, B. L. (2016). *Qualitative research methods for the social sciences*. Pearson Higher Ed.
- Luyt, I. (2013). Bridging spaces: Cross-cultural perspectives on promoting positive online learning experiences. *Journal of Educational Technology Systems, 42*, 3–20.
- Lyons, J. F. (2004). Teaching U.S. history online: Problems and prospects. *The History Teacher, 37*, 447–456.
- MacDonald, T. (2017). *A case study exploring educator perceptions of mobile learning technologies in professional development*. ProQuest Dissertations and Theses.
- Margalef García, L. (2011). Encouraging teachers' and students' innovation with the support of teacher learning communities. *Center for Educational Policy Studies Journal, 1*, 133–152.
- Margalef García, L., & Roblin, N. P. (2008). Innovation, research and professional development in higher education: Learning from our own experience. *Teaching and Teacher Education, 24*, 104–116. doi:10.1016/j.tate.2007.03.007
- Maxwell, J. A. (2005). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage.
- McCammon, L. A., Saldaña, J., Hines, A., & Omasta, M. (2012). Lifelong impact: Adult perceptions of their high school speech and/or theatre participation. *Youth Theatre Journal, 26*(1), 2-25.
- McInnery, J. M., & Roberts, T. S. (2004). Online learning: Social interaction and the creation of a sense of community. *Educational Technology & Society, 7*, 73–81.

- Merriam, S. B. (1998). *Qualitative research and case study applications in education. Revised and expanded from " Case Study Research in Education."* San Francisco, CA: Jossey-Bass.
- Merriam, S., & Tisdell, E. (2016). *Qualitative research: A guide to design and implementation.* San Francisco, CA: Jossey-Bass.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook.* Sage.
- Miller, M. D. (2014). *Minds online: Teaching effectively with technology.* Cambridge, MA: Harvard University Press.
- Mishra, P. (2018). Revised version of TPACK image. Retrieved from <https://punyamishra.com/2018/09/10/the-tpack-diagram-gets-an-upgrade/>
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A new framework for teacher knowledge. *Teachers College Record, 108*(6), 1017-1054.
- Moore, M. G. (2013). *Handbook of distance education* (3rd ed.). Routledge.
- Moustakas, C. (1994). *Phenomenological research methods.* Thousand Oaks.: Sage Publications.
- Neely, P. W., & Tucker, J. P. (2010). Unbundling faculty roles in online distance education programs. *International Review of Research in Open and Distance Learning, 11*(2), 20–32.
- Niess, M., & Gillow-Wiles, H. (2013). Developing asynchronous online courses: Key instructional strategies in a social metacognitive constructivist learning trajectory. *Journal of Distance Education, 27.*

- Norton, C. L., Russell, A., Wisner, B., & Uriarte, J. (2011). Reflective teaching in social work education: Findings from a participatory action research study. *Social Work Education, 30*, 392–407. doi:10.1080/02615479.2010.500658
- Orozco, M., Fowlkes, J., Jerzak, P., & Musgrove, A. (2012). Zero to sixty plus in 108 days: Launching a central eLearning unit and its first faculty development program. *Journal of Asynchronous Learning Network, 16*(2), 177–192.
- Osborne, J. W., & Costello, A. B., (2004). Sample size and subject to item ratio in principal components analysis. *Practical Assessments, Research & Evaluation, 9*(11), 8.
- Otto, C. A., & Everett, S. A. (2013). An instructional strategy to introduce pedagogical content knowledge using Venn diagrams. *Journal of Science Teacher Education, 24*, 391-403.
- Peng, H., Tsai, C. C., & Wu, Y. T. (2006). University students' self-efficacy and their attitudes toward the Internet: The role of students' perceptions of the Internet. *Educational Studies, 32*, 73–86.
- Poyas, Y., & Smith, K. (2007). Becoming a community of practice: The blurred identity of clinical faculty teacher educators. *Teacher Development, 11*, 313–334.
doi:10.1080/13664530701644607
- Price, E. (2018). *Exploring teachers' perception of professional development for a blended learning environment: A qualitative case study*. ProQuest Dissertations and Theses.
- Prindle, R. M. (2005). *A narrative inquiry of licensed practical nurse (LPN) returning students: Implications for transformative pedagogy and curriculum*. ProQuest Dissertations and Theses.

- Quiroz, R.E., Ritter, N.L., Li, Y., Newton, R.C., & Palkar, T. (2016). Standards based design: Teaching K-12 educators to build quality online courses. *Journal of Online Learning Research, 2*(2), 123-144.
- Richardson-Burnette, Y. (2016). *An examination of the impact of online professional development on teacher practice*. ProQuest Dissertations and Theses.
- Rienties, B., Brouwer, N., & Lygo-Baker, S. (2013). The effects of online professional development on higher education teachers' beliefs and intentions towards learning facilitation and technology. *Teaching and Teacher Education, 29*, 122–131.
doi:10.1016/j.tate.2012.09.002
- Roberts, A., & Weston, K. (2013). Releasing the hidden academic? Learning from teacher-educators' responses to a writing support programme. *Professional Development in Education, 40*, 698–716. doi:10.1080/19415257.2013.835277
- Roblin, N. P., & Margalef, L. (2013). Learning from dilemmas: Teacher professional development through collaborative action and reflection. *Teachers and Teaching: Theory and Practice, 19*, 18–32. doi:10.1080/13540602.2013.744196
- Romiszowski, A., & Mason, R. (2004). Computer-mediated communication. In D.H. Jonassen (Ed.), *Handbook of research for educational communications and technology* (pp. 397–431). New Jersey, NJ: Lawrence Erlbaum.
- Roper, A. R. (2007). How students develop online learning skills. *Educause Quarterly, 30*, 62–64.
- Rubin, H. J., & Rubin, I. S. (2005). *Qualitative interviewing: The art of hearing data* (2nd ed.). Thousand Oaks, CA: Sage.

- Rudestam, K. E., & Newton, R. R. (2015). *Surviving your dissertation: A comprehensive guide to content and process* (4th ed.). Thousand Oaks, CA: Sage.
- Sabzian, F., Gilakjani, A. P., & Sodouri, S. (2013). Use of technology in classroom for professional development. *Journal of Language Teaching & Research*, 4, 684-692.
- Saldaña, J. (2016). *The coding manual for qualitative researchers*. SAGE Publications Limited.
- Saroyan, A., & Trigwell, K. (2015). Higher education teachers' professional learning: Process and outcome. *Studies in Educational Evaluation*, 46, 92-101.
- Schiffelbein, K. (2019). *Silenced female voices: How institutionalized avoidance condones a culture of workplace aggression and shame in higher education*. ProQuest Dissertations and Theses.
- Schon, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schuck, S., Aubusson, P., Kearney, M., & Burden, K. (2013). Mobilising teacher education: A study of a professional learning community. *Teacher Development*, 17, 1-18. doi:10.1080/13664530.2012.752671
- Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York: Teachers College Press.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63-75.
- Skelton, A. (2013). Positively transformational or poisoned chalice? The impact of a course on higher education teaching at a research-intensive institution. *Teaching in Higher Education*, 18, 908-919. doi:10.1080/13562517.2013.827640

- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. SAGE Publications.
- Steinhauser, K., & Barroso, J. (2009). Using qualitative methods to explore key questions in palliative care. *Journal of Palliative Medicine, 12*(8), 725-730.
- Stenfors-Hayes, T., Weurlander, M., Dahlgren, L. O., & Hult, H. (2010). Medical teachers' professional development: Perceived barriers and opportunities. *Teaching in Higher Education, 15*, 399-408. doi:10.1080/13562517.2010.493352
- Syverson, M. A., & Slatin, J. (2010). *Evaluating learning in virtual environments*. Retrieved from <http://www.learningrecord.org/caeti.html>
- Tabata, L. N., & Johnsrud, L. K. (2008). The impact of faculty attitudes toward technology, distance education, and innovation. *Research in Higher Education, 49*(7), 625-646.
- Tsai, C.-C., & Lin, C.-C. (2004). Taiwanese adolescents' perceptions and attitudes regarding the Internet: Exploring gender differences. *Adolescence, 39*, 725-734.
- Vagle, M. D. (2016). *Crafting phenomenological research*. New York, NY: Routledge.
- Vaill, A. L., & Testori, P. A. (2012). Orientation, mentoring and ongoing support: A three-tiered approach to online faculty development. *Journal of Asynchronous Learning Networks, 16*(2), 111-119.
- van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany: State University of New York Press.
- van Manen, M. (2007). Phenomenology of practice. *Phenomenology & Practice, 1*(1), 11-30.

- van Manen, M. (2016). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing* (Developing qualitative inquiry). Taylor and Francis.
- Vonderwell, S., & Zachariah, S. (2005). Factors that influence participation in online learning. *Journal of Research on Technology in Education, 38*, 213–230.
- Voogt, J., Fisser, P., Roblin, N., Tondeur, J., & van Braak, J. (2013). Technological pedagogical content knowledge-a review of the literature. *Journal of Computer Assisted Learning, 29*(2), 109-121.
- Wells, M. (2014). Elements of effective and sustainable professional learning. *Professional Development in Education, 40*, 488-504.
<https://doi.org/10.1080/19415257.2013.838691>
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge University Press.
- Wenger, E., McDermott, R. A., & Snyder, W. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston: Harvard Business School Press.
- West, M. A. (2012). *Effective teamwork: Practical lessons from organizational research*. John Wiley & Sons.
- Wise, A. F., Speer, J., Marbouti, F., & Hsiao, Y. (2013). Broadening the notion of participation in online discussions: Examining patterns in learners' online listening behaviors. *Instructional Science, 41*, 323–343.
- Wynants, S., & Dennis, J. (2018). Professional development in an online context: Opportunities and challenges from the voices of college faculty. *Journal of Educators Online, 15*(1), 13.

Yin, R. K. (2011). *Applications of case study research*. Sage.

Appendix A: IRB Approval



Institutional Review Board
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Phone: 208-885-6162
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To: Ali Carr-Chellman

Cc: Zhao, Ling

From: University of Idaho Institutional Review Board

Approval Date: September 03, 2019

Title: Exploring Faculty Perceptions of a Professional Development Program for Online Teaching and Learning in an Intentional Community of Practice: A Phenomenological Study

Project: 19-177

Certified: Certified as exempt under category 2 at 45 CFR 46.104(d)(2).

On behalf of the Institutional Review Board at the University of Idaho, I am pleased to inform you that the protocol for this research project has been certified as exempt under the category listed above.

This certification is valid only for the study protocol as it was submitted. Studies certified as Exempt are not subject to continuing review and this certification does not expire. However, if changes are made to the study protocol, you must submit the changes through [VERAS](#) for review before implementing the changes. Amendments may include but are not limited to, changes in study population, study personnel, study instruments, consent documents, recruitment materials, sites of research, etc.

As Principal Investigator, you are responsible for ensuring compliance with all applicable FERPA regulations, University of Idaho policies, state and federal regulations. Every effort should be made to ensure that the project is conducted in a manner consistent with the three fundamental principles identified in the Belmont Report: respect for persons; beneficence; and justice. The Principal Investigator is responsible for ensuring that all study personnel have completed the online human subjects training requirement. Please complete the *Study Status Check and Closure Form* in VERAS when the project is completed.

You are required to timely notify the IRB if any unanticipated or adverse events occur during the study, if you experience and increased risk to the participants, or if you have participants withdraw or register complaints about the study.

Appendix B: Consent Form

Exploring Faculty Perceptions of a Professional Development Program for Online Teaching and Learning in an Intentional Community of Practice: A Phenomenological Study

Informed Consent for Interviews

I, Ling Zhao, am a doctoral student in the Department of Curriculum and Instruction in the College of Education, Health and Human Sciences at the University of Idaho. The purpose of the research study is to identify faculty lived experience of a professional development program for online teaching and learning in an intentional community of practice. You are being asked to participate in this study because you are involved in the professional development program.

Your participation will involve three rounds of one-on-one, face-to-face interviews. Each interview will be audio recorded and take about 30-45 minutes to complete. The interview includes questions such as tell me why you were interested in this professional development opportunity; what are you experiencing in the community of practice? Your involvement in the study is voluntary, and you may choose not to participate. You can refuse to answer any of the questions at any time. There are no names or identifying information associated with your responses. There are no known risks in this study, but some individuals may experience discomfort or loss of privacy when answering questions. Data will be kept in a safe place, password protected devices and/or lock and key file cabinets, in case needed during the study process but will be destroyed once the study is completed. **(Please initial your acknowledgement_____)**

The findings from this project will provide information on faculty perceptions of a professional development program for online teaching and learning in an intentional community of practice, which will be helpful for the planning of future faculty professional development activities. If published, results will be presented in summary form only.

If you have questions regarding your rights as a research subject, or about what you should do in case of any harm to you, or if you want to obtain information or offer input, you may call the Office of Research Assurances at (208) 885-6340 or irb@uidaho.edu.

By signing below, you certify that you are at least 18 years of age and agree to participate in the above described research study.

Name of Adult Participant

Signature of Adult Participant

Date

Name of Research Team Member

Signature of Research Team Member

Date

Appendix C: Participants Interview Protocol

Interview #1

Interviewee Pseudonym _____

Date _____

Time _____

Location _____

1. Please tell me a little bit about yourself.
2. Tell me why you were interested in this professional development opportunity.
3. Did you ever attend any other professional development activities? What are they?
Are they formal or nonformal? Are they helpful?
4. What is your overall experience with prior professional development activities?
5. Please tell me a little about your prior experiences with online teaching and learning.
6. When did you start teaching online?
7. Please tell me a little about your online students.
8. Please tell me a little about your experience in using technology to teach.
9. What is your teaching philosophy?
10. Is there anything else you would like to address?

Interview #2

Interviewee Pseudonym _____

Date _____

Time _____

Location _____

1. Please tell me about how things were going in the program for you.
2. What did you learn in the program? Can you point to something you learned that's new for you? Why would that be important? Do you think you'll be able to use that?
3. Did you learn any technological knowledge through this program? What did you learn?
4. Did you learn any pedagogical knowledge through this program? What did you learn?
5. How can what you learned in the professional development program be applied in your own practice? Work and life?
6. What did you experience in the community of practice?
7. How was your relationship with other colleagues in the program? With instructors? With administrators?
8. Is there anything you wish you could change in the experience so far?

Interview #3

Interviewee Pseudonym _____

Date _____

Time _____

Location _____

1. What did you learn through interacting with other colleagues in the professional development program?
2. What did you learn through observation in the professional development program?
3. Please tell me a little about your overall experience with the professional development program.
4. Have you tried anything new as a result of the professional development program?
5. Do you plan to apply what you learned through this program in your future online teaching? How would you do that?
6. What did the community of practice in the program mean to you? To your practice/teaching?
7. How would this professional development program impact your work and life?
8. Is there anything else you would like to address?

Appendix D: Program Instructors Interview Protocol

Interviewee Pseudonym _____

Date _____

Time _____

Location _____

1. Please tell me a little bit about yourself.
2. How is the professional development program running overall?
3. What main elements are included in the professional development program? Is technological and pedagogical knowledge provided for the participants? Could you please provide a few examples?
4. Please tell me a little about the community of practice in the program.
5. How did you keep the program participants engaged and motivated?
6. Are there any interactive activities among members in the professional development program? What are they?
7. What is the biggest success of the professional development program?
8. What would you do differently for the professional development program?
9. Is there anything else you would like to address?