

Enhancing Online Faculty Development Programs During COVID-19 and Beyond: A Multiple
Case Study of Faculty Members Teaching Online

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Abstract

This study explored how the development needs of faculty members teaching online can inform professional development (PD) programs in higher education (HE), especially after a year and a half of transition to fully online courses due to the pandemic. The research was conducted in a midsize university in Ontario and utilized a multiple case study approach that examined the cases of four faculty members through an emergent process of in-depth interviews. The main criterion used to select participants was an experience with online teaching of at least 1 year. Data were collected from interview responses as well as from documents representing research studies the faculty members wrote about their teaching experience. Multiple cases were constructed using an inductive coding analysis process, and a cross-case analysis was conducted to identify themes common across the cases. Inductive coding was used to analyze the data. Findings revealed that faculty PD programs should be diversified when it comes to program format, duration, regularity, and topics. Programs differentiated in these ways are essential to accommodate diverse PD needs as well as the different stages of online faculty members' development of expertise. One-time PD events may not offer the best opportunity to develop faculty members. Informal learning opportunities such as learning communities, research publishing, and mentoring are the most preferred and should be prioritized. HE institutions play an important role in enhancing PD programs either directly through improving program design or indirectly through modifying institutional policies and budgets.

Keywords: Online faculty development, faculty development needs, development programs for faculty in Higher Education, multiple case studies of faculty development, online faculty as adult learners.

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Glossary of Terms

Professional development programs	Events and activities that faculty engage in to learn new approaches or technologies with the aim of applying the new learning to the classroom (Condon et al., 2016).
Formal development programs	PD initiatives that include workshops, events, and professional conferences (Condon et al., 2016).
Intentional self-directed efforts	Independent actions faculty take to improve their teaching such as reading books or engaging in reflective practice (Condon et al., 2016).
Routine events	Events that do not offer targeted learning but can provide incidental learning opportunities. They include the learning that happens during annual reviews, feedback sessions, hiring opportunities, or setting departmental objectives (Condon et al., 2016).
Synchronous courses	Courses where students and their instructors meet online live at the same time (Shahabadi & Uplane, 2015).
Asynchronous courses	Courses that are location independent whereby students can learn the same material at different times and locations (Shahabadi & Uplane, 2015).
Sessional instructors	Contracted instructors that do not belong to the faculty body and are not on the tenure track. They are alternatively referred to as adjunct faculty (Eagan et al., 2014).
Upskilling	The act of learning new skills or upgrading existing ones, usually with the aim of achieving at a higher level (Cukier, 2020).
Reskilling	The act of learning a new set of skills usually with the aim of performing new tasks or transferring to a new job (Cukier, 2020).
Change management	A methodology that uses a set of structured processes and tools to lead the people involved in a change initiative toward achieving a desired outcome (Prosci, n.d.)

List of Abbreviations

CDLRA	Canadian Digital Learning Research Association
CTL	Centre for Teaching and Learning
HE	Higher Education
LMS	Learning Management System
PD	Professional Development
TPACK	Technological, Pedagogical Content Knowledge
SoTL	Scholarship of Teaching and Learning

CHAPTER ONE: INTRODUCTION

This research study retrospectively examines the needs of faculty members who participated in a professional development (PD) program for online teaching. The purpose is to identify ways in which faculty PD programs can be improved to meet the needs of faculty members and hence enhance their online teaching practice. The study focuses on the experience of faculty members as adult learners, not as professors. This chapter includes a background of the research problem, a purpose statement, the guiding research questions, the study's rationale, and an overview of the research methodology.

Personal Statement

My first experience with adult learning was in 2011 when I was appointed as a facilitator of a career coaching program for adults. I was fascinated by the prior experience adults bring into their classrooms. I was also impressed by how easily adults can disengage if the curriculum is irrelevant or the facilitator is not considerate of their background. What I enjoyed most about my role as an adult facilitator was the diversity of exposure. There was never a workshop that was similar to the other. In every workshop I facilitated, I met new adult students from all walks of life. Even when the topic was the same, the adult students usually brought different ideas and experiences, which re-shaped the dialogue in each class. My passion for adult learning and my experience in the field landed me several jobs in the training and development departments of corporates.

During my 7 years period of working in corporates, I noticed significant changes happening in the professional development of employees. Traditional courses were becoming expensive and were not achieving their desired outcomes. I observed a budget re-allocation away from traditional courses to more informal ways of learning such as mentoring programs and

communities of practices. I have seen the responsibility of learning in companies shifting from the training & development department to every employee in the company. Over the years, organizations started to incorporate e-learning first to reach a wider segment of employees working across various branches, and ultimately to accommodate the increasing number of employees choosing the hybrid work model. I have seen the concept of life-long learning growing in importance from a nice-to-have to a must-have. The field was evolving fast, and so was my interest in it.

Up until this point, all my knowledge about adult education came solely from my experience. I never had the chance to study formally the theories of adult education. This was one of the main reasons that inspired me to start a master's degree in education with a focus on adult learning. When I began my master's degree program, it was natural for me to think of exploring the intersection between adult learners and technology in the context of higher education (HE). I started by exploring the experiences of adult students in online courses and wrote a couple of short papers on the topic. As I progressed to my thesis and read further, my research led me to the topic of faculty members teaching online. They are also adults negotiating a steep learning curve that is worth exploring. In the wake of the COVID-19 pandemic and the pivot to fully online courses, I settled on exploring the development needs of faculty members given the new circumstances. I saw the topic as an extension of my existing knowledge of adult learners in corporate settings.

Problem Statement

The pandemic forced HE faculty to transfer their teaching practices from the face-to-face classroom into an online learning environment. With a diverse range of experience, not all faculty have experience teaching in this environment. This resulted in a mix of successful and

unsuccessful experiences—for students and faculty members alike. This study examines the new knowledge that faculty members now have about their PD needs to inform better initiatives that would support them in teaching online.

Background of the Problem

Online education in HE is steadily growing. According to the Canadian Digital Learning Research Association (CDLRA), over three-quarters of all Canadian postsecondary institutions offer online courses (Bates, 2018). As of 2019, in Ontario, every postsecondary institution was reported to offer at least one online credit course. From 2017 to 2018, enrollment in online courses increased by 10% nationally and 14% in Ontario (Bates, 2018). Furthermore, the majority of institutions surveyed expected growth in their online and blended courses being offered in the coming years (Bates, 2018). The survey conducted by the CDLRA also revealed a decrease in the percentage of institutions reporting negative perceptions about online learning (Bates, 2018), which indicates a wider acceptance of online education.

McQuiggan's (2011) doctoral research found that faculty adopt their initial model of teaching from their teachers. In other words, faculty teach as they were taught. Many faculty members have learned in a face-to-face environment and very few have prior experience with teaching or learning online. Experienced faculty were found to rely on practices they perfected in their face-to-face courses (Natriello, 2005). Yet, research shows that faculty members who engage in critical reflection of their practice realize that their traditional methods of teaching will not always serve them in the virtual learning environment in the same way (McQuiggan, 2011).

While there are similarities between online and face-to-face environments, not all online teaching practices can be borrowed from the traditional environment. This is especially the case since Major (2010) found that the roles of a teacher change in an online environment. Contrary

to the traditional learning environments, an online teacher often plays the role of a facilitator, rather than being the centre of class interaction and the source of all information. As such, online learning has the potential to flatten the hierarchy of learning by shifting the responsibility of learning to the learner. Research has revealed that online teachers also play the role of a manager (Major 2010)). Online teachers are frequently expected to manage students' technology problems during the course.

Lichoro (2015) suggests that teaching online involves more than a simple transfer of the content to a learning management system (LMS). It involves familiarizing oneself with online course design tools, digital applications used to run learning activities, managing forum discussions, creating an online community, and using assessment tools (Lichoro, 2015). This process can be exhausting and time-consuming. As such, faculty members believe teaching online takes a lot of preparation and setup (Lichoro, 2015). To further complicate the process of teaching online, answering students' emails throughout the week was often considered a constant interruption to the faculty schedule. Some faculty members scheduled answering students' emails once or twice per day to avoid frequent interruptions. Others felt compelled to answer the questions as they were received in an attempt to create a sense of presence with the students. Either way, the amount of email and communication from students is often much higher when teaching online courses, particularly those that are asynchronous. Another commonly stated hurdle was the challenge of not seeing students' faces (Lichoro, 2015). Without seeing facial expressions and body language, the connection between the instructor and the students could be compromised. New technologies such as interactive multimedia and synchronous classrooms were developed to compensate for the inability to see students' faces. Still, due to a variety of factors, students may not always turn on their cameras during synchronous online teaching (even

if required) or there may not be opportunities for digital “face-to-face” interaction in asynchronous courses with interactive multimedia. Furthermore, some instructors found it difficult to decide on the workload assigned to students online. To display their online courses as rigorous as face-to-face courses, some instructors end up overloading students with work (Dykman & Davis, 2008).

The overall sentiment in HE tends to project face-to-face teaching as superior to online teaching, and place persistent comparison between both (Allen & Seaman, 2011). Instead of being considered a unique learning experience, online learning has typically been designed with reference to face-to-face learning. It is not uncommon to find online educators who aspire to replicate the traditional learning environment as much as possible, implying its legitimacy (Baran et al., 2013). Pennington (2005) contended that a comparison between online and face-to-face learning is impossible because of the difference in context between both environments. Pennington (2005) argued against holding the traditional classroom environment as the standard against which the online environment should match up. McQuiggan (2011) echoed the same view highlighting that success online is a process of transformation, not translation.

Impact of COVID-19

In the wake of the COVID-19 pandemic, Higher Education (HE) institutions realized the urgent need to move to the online environment and pay serious attention to creating and enhancing online faculty development opportunities. The COVID-19 pandemic uncovered a lot of challenges in preparing faculty to teach online and in institutions’ capabilities to support faculty needs. The following paragraphs will discuss the response of both faculty members and HE institutions to COVID-19.

In terms of faculty reaction, faculty members experienced major changes as a result of the abrupt need to transition to fully online courses. The majority of faculty changed their teaching methods and many completely revisited the learning objectives of their courses. Johnson et al., (2020) found some faculty reported concerns that, in the online environment, they felt compelled to reduce the number of assignments to ensure sufficient time for learners to complete coursework resulting in the concern that they were lowering their performance expectations of the students. To these faculty members, the performance expectations of the students needed to change in the online environment, as compared to face-to-face, although they were not sure what this change should look like (Johnson et al., 2020).

Faculty who never taught online were more likely to report difficulty in changing their instructional practice (O'Keefe et al., 2020), which stresses the importance of prior faculty preparation. Furthermore, adjunct faculty were found to face unique challenges in adapting instructional methods to the online space. This may be attributed to one of two factors: adjunct faculty tend to teach introductory high-enrollment courses and/or they work in institutions where support may not be adequate (O'Keefe et al., 2020).

In terms of institutions' response, the first reaction of many institutions was to develop a faculty resource repository to support faculty's transition to online courses. The repository would typically include resources that covered online instructional design methodology, student engagement online, and technology troubleshooting, among other topics (Buckley, 2020). Other institutions tried synchronous online faculty development sessions that brought together geographically dispersed faculty members to learn from each other (Buckley, 2020). Not surprisingly, many instructors found these synchronous faculty sessions more useful than a static repository, both in terms of the quality of interaction and discussion. During faculty development

sessions, a groupthink mentality, commonly noticed in a physical setting, was not observed. Faculty appeared to be open to different and potentially competing opinions (Buckley, 2020).

Many institutions were found to be heavily reliant on their Centres for Teaching and Learning (CTLs) to prepare faculty members for the shift to online instruction. This resulted in these centres facing increased challenges during the COVID-19 pandemic. Most notably, the CTLs often had to deal with unrealistic expectations of their capacity and frequent demands by university leadership to prepare for all possible scenarios (Naffi et al., 2020). Another challenge was the resistance, displayed by some faculty members, to heed their recommendations. While many faculty members cooperated with the CTLs and followed their recommendations, some were overwhelmed by their suggestions. This was frequently due to faculty fatigue resulting from having to work long, extended hours in transitioning the content of their courses online (Naffi et al., 2020). Furthermore, CTLs often had to deal with institutional bureaucracy requiring them to follow regular channels of approving costs or hiring staff regardless of the increased time these processes took (Naffi et al., 2020). One unwelcomed move of some institutions in response to COVID-19 was cutting the budget for faculty PD; this coming at a time when these funds were needed for upskilling and re-skilling of faculty members was not looked upon positively (Baker, 2020).

There were some positive findings during COVID-19 worth noting. An initial prevailing perception was that the disruptive transition to remote learning during the pandemic would inevitably result in a faculty backlash against online learning. However, when surveyed, the majority of HE faculty reported an improved perception of digital learning post-COVID-19 compared to pre-COVID-19 (O'Keefe et al., 2020). More importantly, faculty who reported a more favourable perception of online learning were the ones whose institutions have a centralized CTL, instructional design staff, and peer-to-peer collaboration resources (O'Keefe et

al., 2020). This suggests the important role these three elements play in creating favourable faculty perceptions towards online learning; this may, in turn, inform HE institutions' support of online programs and courses.

Inadequacy of Faculty PD Programs

The inherent differences in the nature of online learning from face-to-face learning necessitated the development of a different genre of online faculty development programs. Despite the widespread use of online courses in HE, approximately 79% of postsecondary institutions reported inadequate faculty training promoting pedagogical knowledge to teach online (Bates, 2018). Although more than half of the institutions provide faculty training and development opportunities, most of these opportunities are voluntary; faculty are often not required to engage in any form of PD as a prerequisite to teaching online (Bates, 2018).

There are several factors that can lead to the inadequacy of online faculty development programs. These factors can manifest at different levels in HE institutions, occurring at the course, faculty, or institutional level. One factor contributing to this inadequacy at the course level is the fact that the type of PD training made available focuses solely on the Learning Management System (LMS) used and on the technology itself (Johnson & Berge, 2012). Johnson and Berge (2012) noted that PD programs should incorporate both technological and pedagogical training since both are essential components of effective online teaching. This is consistent with the Technological pedagogical content knowledge (TPACK) framework (Mishra & Koehler, 2006), which posits effective teaching with technology requires the intersection of three knowledge domains: technological, pedagogical, and content knowledge (Cherner & Smith, 2017; Mishra & Koehler, 2006). Additionally, many PD programs are often limited to one-time events; faculty members teaching online often need ongoing support (Vaill and Testori, 2012).

At the faculty level, Barrett (2010) argued that some faculty members resisted the techniques and content offered in the PD programs. Those faculty members were found to be reluctant to incorporate best practices in online teaching as they were convinced they could teach online in much the same way they do face-to-face (Hale, 2012). Other faculty members found it uncomfortable to unlearn old strategies, feeling vulnerable making mistakes while learning new strategies. In this situation, they viewed the learning process as a threat to their already established status. (Kim, & Cleeton, 2012). Mathews (2017) echoed a similar view highlighting that some faculty members hesitated to adopt innovative ways of teaching online for fear that their mistakes would negatively impact their students' evaluations—or worse, embarrass them in front of the class. The aforementioned barriers could result in minimal changes in online teaching practices vis-a-vis their face-to-face equivalents.

At an institutional level, it seems that consistent standards of training faculty members to teach in online environments during the pandemic have neither been fully developed nor widely accepted (Mohr & Shelton, 2017). Similarly, despite the abundance of technology tools and resources, keeping up with the best practices of these tools and how fast they change is difficult (Mohr & Shelton, 2017). Liberman (2018) highlighted that budget constraints may also limit the type of resources that are extended to faculty members while Major (2010) pinpointed the lack of institutional incentives for faculty to teach online.

Purpose of the Study

The purpose of this research study is to explore the experiences of faculty members teaching at a medium-sized university who recently engaged in a form of PD aimed at enhancing skills and practices in online teaching. Through analyzing faculty experiences with attending PD opportunities, the study aims to identify faculty development needs deemed necessary to effectively and successfully transform teaching practice online. Based on the identified needs,

the study presents some recommendations for improving faculty development programs.

My exploration was guided by the adult learning theories and the TPACK framework, and underpinned the following primary research question: How can the perceived development needs of faculty members teaching online inform the design of PD programs in HE institutions?

The study also sought to address the following research sub-questions:

1. What are the perceived development needs of faculty members teaching online?
2. Which faculty development experience/aspect did faculty find most meaningful in transforming their online teaching practices?
3. How can HE institutions support faculty development for teaching online?

Rationale

The COVID-19 pandemic created an urgent need for changing the models of employee development across industries (Baker, 2020). While the pandemic introduced challenges, for example meeting in person and traveling to conferences, it opened alternative opportunities to work, learn, and collaborate online (Zuo & Miller Juvé, 2020). In HE, whilst the pandemic placed a strain on faculty members, it also gave them an opportunity to re-envision their courses and teach them in a new environment. As such, many HE faculty had to navigate through a host of teaching strategies, learning those that were new and unfamiliar while also unlearning others (Baker, 2020). As a result of this experience, the knowledge that many faculty members gained regarding their development needs, strengths, and limitations has the potential to inform and transform currently existing PD programs. Motivated by the pandemic, this study is an attempt to revisit faculty developmental needs and explore which PD experience may be perceived as impactful in online teaching. Although some development programs were borne out of the COVID-19 crisis, there remains a need to develop sustainable programs that can support faculty members now and beyond the pandemic (Zuo & Miller Juvé, 2020). This study will explore

recommendations on how these sustainable programs could be designed and implemented through the lens of HE faculty.

Cook and Steinert (2013) analyzed 20 studies on faculty development programs. Some of the major findings were that participation rates of faculty in the development programs were low and topics were generally perceived to be unimportant. A few studies suggested that faculty tend to invest time and effort only if the PD programs offered met their perceived need (Cook & Steinert, 2013). This study is a small step toward progressing the knowledge of PD programs in that direction, one that fulfills faculty members' needs. As such, this study aims to improve the quality of development programs, which has the potential to boost faculty participation rates.

Significance of the Study

The significance of this study relates to its potential benefits to HE institutions, in terms of both online and face-to-face teaching. The value of faculty development programs can be debated by HE institutions, particularly those with an inability to justify the budget required to provide PD to develop faculty skills or possible redundancy in teaching an audience how to teach when they should already be considered experts in teaching (Condon et al., 2016). Research suggested that faculty members who receive professional development are better equipped to teach, have higher confidence, and are more likely to feel satisfied with their students' outcomes (Condon et al., 2016). This study is a step toward raising the quality of PD programs. By identifying the development needs of faculty, HE institutions will likely be in a better position to develop relevant opportunities that fulfill those needs.

Additionally, the perspective that HE faculty members care less about teaching than they do about research has no factual basis (Condon et al., 2016). Some surveys show that faculty spend a quarter of their time preparing for teaching classes and another quarter delivering the

classes (Eagan et al., 2014). Evidence also suggests that the majority of faculty actively seek opportunities for the advancement of their online teaching practice (Beyer et al., 2013). Perhaps, faculty members' endeavours to evolve their teaching practices are not as noticeable because they are not as overt as their efforts in other areas (Beyer et al., 2013). Due to the unprecedented pressure imposed by the COVID-19 pandemic, faculty may be keener than ever to develop their teaching practices. Also important is the demand to investigate faculty members' learning needs to tailor corresponding support programs that address such needs (Kachra & Ma, 2020). This study attempts to fill this gap in knowledge by contributing to understanding faculty needs in development programs. This newly constructed knowledge has the potential to raise faculty awareness of their professional needs and reframe their expectations of online teaching.

Interestingly, Andrews-Graham (2018) found that online faculty development can result in improved not only the outcomes for online courses but also those in face-to-face classes. In this research, many faculty members reported that teaching online changed their attitude and perspective when they returned to their face-to-face classes (Andrews-Graham, 2018). These faculty members noticed an increased awareness of their students' needs and also strategies used for engagement (Andrews-Graham, 2018). As such, supporting faculty teaching online is likely to have a spillover impact on face-to-face courses. While the context of this study is online learning through the support of online faculty development programs, results can aid in the re-invention of faculty teaching methods in both online and face-to-face contexts.

This study contributes to the body of literature regarding best practices in faculty PD programs. Additionally, it can provide some insight and perspective for instructional designers and centres for teaching and learning in designing meaningful professional development

programs. The study will also be of help to other researchers who are interested in the enhancement of adult PD programs.

Theoretical Framework

This study focuses on faculty members as adult learners rather than online instructors, with four key adult learning theories (andragogy, self-directed learning, experiential learning, and transformative learning) informing this research. Also informing this study is the Technological Pedagogical Content Knowledge (TPACK) framework. The TPACK model presents the intersection of knowledge domains recommended for effective teaching using technology. TPACK can inform the areas of knowledge where PD opportunities are needed. Details of the theoretical framework are discussed further in Chapter Two.

Outline of the Remainder of the Document

Chapter Two presents a review of the literature related to what faculty members teaching online need in a development program. Specifically, the chapter addresses learners' characteristics, learning content, learning logistics, best practices, the context of institutional support, and some institutional support strategies. Building from this literature base, Chapter Three then outlines the research design and methods. It includes a full description the research approach, including the setting of the study, population and sample, recruitment, data collection, data analysis, research trustworthiness, and ethical issues. Chapter Four presents the outcomes of the research study. Specifically, the chapter presents the study findings and articulates the key themes that arose from the interviews. Lastly, Chapter Five concludes by presenting a summary of the project, addressing the research questions, and describing future opportunities for research. This chapter also draws a series of implications for practice and identifies explicit

recommendations for HE institutions that have the potential to improve PD programs for online faculty.

CHAPTER TWO: LITERATURE REVIEW

This chapter presents a review of the literature corresponding to online faculty development programs. The chapter is divided into five subsections covering the theoretical framework, faculty needs, best practices, the context of institutional support and institutional support strategies.

Theoretical Framework

Over the past century, numerous adult learning theories emerged and while no single theory explains how adults learn best, each one of them offers valuable insights into what motivates adults to learn. This section will review four key adult learning theories that were used to inform the exploration and interviews conducted in this study, namely andragogy, self-directed learning, experiential learning, and transformative learning. The section will end with a review of the TPACK framework which will also guide the study.

Andragogy

In 1968, Malcolm Knowles suggested a new theory of learning to distinguish adult learners from school learners. He defined andragogy as the art and science of helping adults learn as opposed to pedagogy which is the art and science of helping children learn (Knowles, 1980). Andragogy stipulated five assumptions about adult learners that differentiate them from younger learners. According to Knowles (1980), adult learners are independent and capable of directing their own learning. They accumulated plenty of life experience that should be used and built upon. Adult learners are also motivated by internal factors such as passion and growth rather than external factors such as money and rank. They are action-oriented and learn best when they apply the learning to the environment. Adults have learning needs related to their social roles and

can identify their needs. The above assumptions have been widely used by instructional designers in practice to design an environment conducive to learning.

Andragogy was criticized by several scholars. Hartree (1984) argued that andragogy is not a theory and is more of a framework of best practices to understand adult learners. Perhaps due to this criticism, Knowles (1989) later revised his work and redefined andragogy as a mode of assumptions that provides the groundwork for an emergent theory. Merriam et al. (2007) suggested that the aforementioned assumptions are not necessarily specific to adult learners. For example, there are adults who are still dependent on their teachers and children who are self-directed. Some critics highlighted that the life experience of adults can be a barrier to learning as some adults tend to be reluctant to adopt new concepts (Merriam et al., 1996). Hanson (1996) even claimed that children, in some circumstances, can accumulate far richer experiences than adults. In 1984, Knowles once again responded to criticism and revised his work. He developed a continuum from student-directed to teacher-directed. He acknowledged that, depending on the situation, adults or children can be found at any point across the continuum.

Knowles's five assumptions about adult learners inform the learning characteristics of faculty members teaching online. Faculty members are independent, self-directed, intrinsically motivated, action-oriented, and learn best through the application of knowledge.

Self-Directed Learning

Self-directed learning is another model that attempted to understand adult learners initiated and described by Tough (1971). Knowles also contributed to the theory of self-directed learning through one of his assumptions about adult learners as self-directed learners. Knowles identified principles that must be available for adults to assume control over their learning such as (a) a comfortable climate, (b) a scope to carry out their learning plan, and (c) an opportunity to

evaluate their own learning (Zepke & Leach, 2002). In terms of how the process of self-directed learning happens, Tough (1971) proposed a linear process—the steps of which consist of identifying needs, finding resources, implementing a plan, and evaluating outcomes. Other writers in the 1980s and 1990s suggested different models for the process of self-directed learning that were iterative and more interactive. The new models did not heavily depend on the learner and instead took into consideration the learning context (Merriam et al., 2007).

Like andragogy, the theory of self-directed learning abounded with criticism. The premise that adults are self-directed learners was criticized by many scholars who disagreed that adults are self-directed (Zepke & Leach, 2002). Many adults are unable to learn by themselves, prefer to take cues from their teachers, and follow a predetermined curriculum (Zepke & Leach, 2002). The theory of self-directed learning was also criticized for its overemphasis on the individual, which minimizes the importance of collective learning that results from the interaction with others (Tennant, 1988).

The principles suggested by the theory of self-directed learning in terms of the climate, scope, and opportunity for evaluation can inform the instruction design of PD programs for online faculty.

Experiential Learning

Experiential learning is central to adult learning. It was developed by David Kolb in 1970, building on the work of John Dewey and Kurt Lewin. Kolb (1984) defined experiential learning as a “process whereby knowledge is created through the transformation of experience” (p. 38). Experiential learning is closely indicative of adult learning because (a) adults accumulate rich experiences that form the basis for learning, (b) each adult assigns a different meaning to the

same experience, (c) experiences typically involve active engagement, and (d) experiential learning involves group interaction (Caffarella & Barnett, 1994).

Experiential learning was critiqued on the basis that experience is personal and cannot be generalized (Zepke & Leach, 2002). Critics added that for experience to be a source of learning, it must be critically analyzed rather than taken at a face value (Zepke & Leach, 2002). Another criticism highlights that every time adults recount an experience, the story they tell varies, either because of memory issues or because of political issues that induce adults to withhold some details (Zepke & Leach, 2002). Furthermore, Brookfield (1998) argued that just because an adult worked for more than 10 years does not mean that they accumulated 10 years' worth of experience. The reality is that many have accumulated 1 year of experience 10 times over.

The theory of experiential learning explains how online faculty members learn about online or offline teaching through experience. It suggests the inclusion of experiential components in faculty PD programs.

Transformative Learning Theory

Transformative learning theory was developed by Jack Mezirow in 1978. The theory postulates that learners use their assumptions and beliefs to give meaning to the world around them. Transformational learning helps learners transform their existing frame of reference through problem-solving and self-reflection (Illeris, 2018) When learners are faced with a disorienting dilemma that challenges their existing beliefs and assumptions, learning transformations occur as learners start to construct new meanings based on the new experience (Illeris, 2018). It is considered one of the most lasting forms of learning because it can shift learners' perspectives from the inside out.

According to Mezirow, the process of transformative learning involves self-reflecting on assumptions, determining something is true by using empirical research, arriving at more

justified beliefs, acting on one's transformed perspective, and acquiring a disposition (as cited in Illeris, 2018). With respect to faculty development, Baran et al. (2011) argued that faculty members should revisit their pedagogical assumptions during the transition from the face-to-face environment to the online environment. An effective faculty development program would create opportunities for faculty to challenge their assumptions and construct a new perspective on teaching in a new media.

Mezirow's theory was critiqued because it lacked a socio-political dimension. Collard and Law (1989) pointed out the difficulty of fostering an ideal learning environment in an educational system where inequity is entrenched. Furthermore, some authors argued that Mezirow's theory overemphasizes rationality while learning is a process that involves rational as well as emotional transformation (Taylor, 1998). Other authors believed that Mezirow's theory, despite its evolution over the years, still leaves critical questions unanswered such as "what are the catalytic experiences that fuel transformation" (Parkes, 2001, p. 182).

The theory of transformative learning highlights how each faculty member assigns different meanings to their teaching experiences online. It explains how faculty engagement in problem-solving and reflective practices can result in transformative learning. This, in turn, can inform the instructional design of faculty PD programs.

TPACK

Apart from the adult learning theories, one framework that informs this study is the Technological pedagogical content knowledge (TPACK) model (Mishra & Koehler, 2006). TPACK is a framework that describes instructors' knowledge needed to integrate technology with pedagogy and content knowledge in the classroom (Koehler, 2012). The TPACK model in its current form was introduced by Mishra and Koehler in 2006. Koehler and Mishra (2006) built

on the pedagogical content framework introduced by Schulman in the 1980s. Since then, TPACK has been widely accepted in the area of online education.

Despite being widely adopted, some scholars questioned the boundaries between the knowledge domains identified in TPACK (Saubern et al., 2019). Others debated the validity of TPACK measurement and critiqued the relationship between its constructs and their utility in practice (Angeli et al., 2016). Cherner and Smith (2017) agreed with the basic components of TPACK but, with the advent of technology, suggested revisiting TPACK and reconceptualizing it to meet students' needs in the 21st century.

Mouza et al. (2014) suggested that knowledge transfer would be easier when instructors understood how to assimilate technology with pedagogy and content knowledge in the everyday use of class activities. Using TPACK as a framework, faculty members can identify key knowledge to enhance their practice. Further, the framework can be used by CTLs to as a basis for their faculty development curriculum.

Faculty Needs

Effective faculty development programs start by identifying the needs of faculty members rather than implementing what the developers determine faculty should know (Walters et al., 2017). To examine the needs of online faculty, this section will investigate the learners' characteristics, the learning content, and the learning logistics.

Learners' Characteristics

Austin and Sorcinelli (2013) described how HE faculty needs in the literature were very diverse, owing to the disparate composition of faculty members. Just like the student body has experienced changes over the past few decades, the characteristics of faculty members have experienced shifts in work preferences and employment patterns. It was found that many new faculty members tend to place more emphasis on their work–life balance compared to their

senior counterparts (Austin & Sorcinelli, 2013). They often appreciated, sought out, and were motivated by flexibility at work that enabled them to attend to their family commitments.

Furthermore, there was a steady increase in the number of non-tenure and part-time faculty, especially among HE institutions that implemented cost-cutting strategies (Austin & Sorcinelli, 2013). Understanding the need of this new genre of faculty and integrating them into the institutional culture is essential for developing successful faculty development programs.

Among the heterogeneous pool of faculty, faculty members also differ in experience, specialization, and motivations. One of the reported dysfunctions of PD programs is treating all faculty members as one-size-fits-all, thus violating many adult learning principles (Walters et al., 2017). It was found that experienced faculty have a higher level of confidence and more satisfaction with online teaching than less experienced faculty (Walters et al., 2017). Similarly, less experienced faculty members often tend to view the new online pedagogy as more daunting compared to their experienced counterparts (Walters et al., 2017). This suggests it might be useful to develop programs specifically targeted to less experienced faculty members to address any learning gap that may be present. Since faculty members teach different subjects, McQuiggan (2011) suggested that content taught in faculty programs should take this into consideration. A math instructor may be unlikely to use the same activities and interaction strategies that a philosophy instructor would find relevant; therefore, effective program design should cater to their respective needs.

Faculty members exhibit different motivations. Motivations are important to understand because it has been identified as one of the key factors influencing the transfer of learning from faculty development programs to online teaching practices (De Rijdt et al., 2013). A considerable percentage of faculty mentioned the flexibility of teaching schedules as a key motivation to teach

online (Shea, 2007). Some faculty members reported motivation with the intellectual challenge, and the opportunity of learning new pedagogical strategies, teaching delivery modes, and engagement tactics (Roby et al., 2013). Others highlighted the personal satisfaction gained from interaction with students and found supporting students' performance as most motivating (Conceição, 2006).

It is worth noting that faculty motivation was found to change with the level of experience. Senior faculty members were motivated primarily by intrinsic factors such as intellectual challenge and personal satisfaction while junior faculty members responded better to extrinsic motivational factors such as the pay level and promotion (Rockwell et al., 2000). Furthermore, HE administrators tended to believe that “the top motivating factors for faculty were money, credit toward tenure, and release time” (Meyer, 2012, p. 39). Meyer (2012) suggests the over-emphasis by administrators on extrinsic factors tends to favour novice faculty members rather than the intrinsic motivational factors that appeal to their senior counterparts.

Just as there are factors motivating faculty members to teach online, there are also inhibitors that may diminish faculty incentive to teach online. The lack of acceptance of online education, in general, has been cited as one of the key factors discouraging faculty members from teaching online (Dhillal, 2017). Although faculty acceptance has improved over the years, some faculty members still view online education as inferior to face-to-face teaching and therefore refrain from participating in “the cheapening of students' academic experiences” (Dhillal, 2017, p. 147).

Faculty vulnerability has been a pervasive theme in the literature. It seems to be fueled by the shift in identity and authority experienced by faculty members online. For example, novice instructors tended to question what role they are supposed to play in the online environment if

the LMS provides all the content (Dhillia, 2017). This indicated an unnerving threat to their identity as the course content provider. Similarly, faculty members reported the need to experiment with various strategies of interaction and engagement with students. The act of experimentation is perceived to comprise the instructor's status and expose their vulnerability (Dhillia, 2017). For many faculty members, this is an unwelcomed occurrence in online teaching in which faculty are reluctant to engage.

Since much of the faculty time is spent between research and teaching (with each specific HE institution dividing this workload differently), there is a debate in the literature about whether the research productivity of faculty members is correlated with their teaching effectiveness. Some feel that faculty members bring their active research results to the classroom to enrich their teaching (Felder, 2010). To them, there is synergy between the two fields and, consequently, supporters believe good researchers can make good teachers. Others argue that the purpose of research is different from teaching (Prince et al., 2007). While the former aims to advance knowledge, the latter aims to build abilities. Many posit that it is hard to link both research and teaching because they compete over faculty schedules in such a way that the time spent in one activity is inevitably time taken from the other (Prince et al., 2007).

This long-standing debate was given renewed attention when the field of the scholarship of teaching and learning (SoTL) was founded by the American scholar Boyer as the new field stirred the discussion about the link between faculty research and teaching (Tight, 2018). For Boyer, HE institutions should break free from the old debate of research versus teaching and start redefining what it means to be a scholar in innovative ways (Tight, 2018). Boyer identified four forms of scholarships that he deems essential to faculty life. The four forms are (a) the scholarship of discovery, (b) the scholarship of integration, (c) the scholarship of application, and

(d) the scholarship of teaching which he defined as pedagogical learning and research that improve students 'outcome. (Boyer, 1990).

SoTL was praised in the literature on the ground that it has the potential to transform not only the individual but the whole society (Cranton, 2011). Some proponents of SoTL went as far as considering it a virtue-based practice that promotes the development of moral virtues in scholars (Kreber, 2015). On the other hand, SoTL was critiqued because most research in the field remains small scale with short-term local orientation, which limits its impact (Felder, 2010). Other critics argued that the SoTL should be regarded as just an idea or a movement rather than a separate discipline because it is difficult to differentiate its contribution from that of the field of pedagogical research (Tight, 2018).

Learning Content

The content of faculty development programs is one of the key determinants of faculty engagement in the program (Elliott et al., 2015). Faculty members report that they tend to spend less time preparing their courses when they are familiar with the technology and the online pedagogy (Mandernach & Holbeck, 2016). Online instructors assume several roles related to pedagogy, technology, instructional design, community, facilitation, and management (Baran et al., 2011). It is suggested that these various roles guide the content of development programs of faculty (Baran et al., 2011). Due to budget constraints, institutions tend to focus on selected topics that are perceived to be most in need and likely to result in the greatest of outcomes (Elliott et al., 2015). The two most common topic areas covered in development programs seem to be online pedagogy and technology, with a relatively greater focus on technology. A few development programs also cover some institutional content, such as policies, procedures, and expectations that instructors should be aware of (Elliott et al., 2015). The following paragraphs

will explore the two most common content areas covered in PD programs: technology and online pedagogy.

As far as technology is concerned, faculty members deal with a population of students who are accustomed to rapid internet browsing and social media. Faculty members find they must upgrade their technology skills to keep up (Culp-Roche et al., 2020). Faculty members cannot take advantage of technological opportunities without the proper knowledge of the technology (Austin & Socrcinelli, 2013). Concerning technology perception, faculty members reported a high level of satisfaction with the accessibility of technological tools in general (Bolliger et al., 2014). Some faculty members were motivated by the inclusive prospects the technology has afforded a wide base of students (Walters et al., 2017). Others noted the remarkable ability of asynchronous learning to enhance students' participation across the board instead of face-to-face class discussions, which are usually dominated by a few (Walters et al., 2017).

Technology also poses several challenges to faculty members. While faculty members appear to be satisfied by the accessibility of the technology, they reported less satisfaction with the communication tools and the overall reliability of the technology (Bolliger et al., 2014). Another challenge is the 24/7 nature of work that technology has invited. The pace of work and the level of connectedness that technology can afford faculty members led to increased work demands and blurred the line between personal and professional lives (Austin & Sorcinelli, 2013). Online courses also were found to cause a feeling of isolation in faculty members, especially those accustomed to face-to-face teaching (Cook & Steinert, 2013).

As far as online pedagogy is concerned, researchers identified that faculty need support with discussion boards, setting course expectations, and using online assessment tools (Batts et

al., 2010). Another survey aimed to identify areas of training importance in online pedagogy. The most frequently mentioned area among faculty was converting a face-to-face course to an online one, followed by how to become a facilitator and how to create online assessments (Regino, 2009). According to Lewis et al. (2012), the pedagogical topics of most relevance in a PD program are student engagement, instructor presence, course design, and online community management.

Teaching online pedagogical strategies should approach faculty as adult learners. Mezirow's transformative learning theory holds that adults come to the learning scene with prior knowledge, experiences, and assumptions; overlooking their previous experiences is a sure way to lose them. As such, developers of professional programs should incorporate the prior experience of faculty in the learning curriculum and build on it. As adult learners, Pankowski (2004) noted that faculty members could experiment with online tools and figure out what would serve them best. This, however, is a time-consuming process, and faculty members would appreciate being trained on the best online pedagogical practices to avoid re-inventing the wheel.

Learning Logistics

The logistics of learning refers to the easiness of accessing the knowledge by faculty members and the mode of administering the learning. It is one of the most important dimensions to consider during a needs analysis since it was found that faculty decisions to attend a development program highly depend on the interest in the program's content and the program's appropriate scheduling (Elliott et al., 2015). Thomas et al. (2012) echoed a similar view, indicating that logistical issues can deter faculty participation even greater than content can.

There seems to be little research to guide the appropriate format of faculty development programs. Most of the studies available focus on programs that target on-campus faculty. Therefore, it is not surprising that their findings show overwhelming preferences for face-to-face

interventions (Felder & Brent, 2010). Some studies found that online faculty PD programs can enrich subsequent teaching since the instructors get a chance to experience students' perspectives (Cook & Steinert, 2013). This is particularly important since many online instructors repeatedly asserted that they never studied online at any stage of their academic life (Schaberg, 2020).

The format of PD programs can be synchronous or asynchronous, formal or informal, mandatory or optional. Research shows that faculty members prefer synchronous programs for enhanced interaction but opt for asynchronous programs for their flexibility (Dailey-Hebert et al., 2014). Formal programs are the most popular form of PD programs, yet they were found to be the most disruptive to the workday of the faculty. Research shows that programs that pull faculty away from their work tend to be the least effective in translating the learning to actual teaching practices (O'Sullivan & Irby, 2011). Informal PD programs tend to be more applicable to real-life situations despite being less structured (Scarpina et al., 2019). Mandatory PD programs post high faculty attendance but violate adult learning principles that emphasize the learners' freedom to choose their learning (Baran & Correia, 2014). On the other hand, optional programs give freedom to faculty members to choose what they need but could hamper the development trajectory of faculty members if skipped consistently (Scarpina et al., 2019). As such, and because the budget is a key constraint in HE, it would be prudent to develop a variety of PD programs in multiple formats to recognize the diverse needs of this heterogeneous population of faculty members (Elliott, 2015).

Best Practices

In order to design effective online faculty development programs, it is worth examining the best practices noted in the literature. Some of the best practices emerged from models created to prepare instructors for online facilitation. For example, Salmon (2011) suggested a five-stage model to prepare online instructors that consist of: (a) access and motivation, (b) development,

(c) online socialization, (d) information exchange, and (e) knowledge construction. Berge (2008) suggested the Instructor's Role Model which focuses on preparing instructors for their changing roles. The model divides the roles of online instructors into pedagogical, social, managerial, and technological, highlighting the importance of preparing instructors in each of them. This section will present some of the best practices in online faculty development programs. It is worth noting that for the most part, the best practices in the literature adhere to the widely accepted adult learning principles.

Setting Expectations

One of the key best practices found in successful faculty development programs is to set expectations at the beginning and clarify time commitment (Cook & Steinert, 2013). This appears to be a major consideration for faculty who, as adult learners, juggle multiple responsibilities and therefore appreciate initiatives that respect their hectic schedule. This consideration has been tackled successfully by offering onboarding sessions at the beginning of a development program. Faculty who taught at institutions that required the attendance of some form of onboarding reported feeling more prepared to teach (Frass et al., 2017).

Personalization

Effective faculty development programs treat faculty members individually and offer a level of personalization. Effective practices recognize the heterogeneous nature of faculty members and adapt their approach to developing different segments of the faculty pool. For example, it was found that the best programs do not target experienced faculty members with basic LMS training and fundamentals of course design, such as objective setting (Walters et al., 2017). The high confidence level of experienced faculty necessitates that development programs go beyond the basics to engage this segment of faculty. This can involve creating opportunities for experienced faculty to learn from one another through faculty learning communities. These

communities typically focus on higher-order learning and reflective activities, which can add value to an already advanced segment of learners (Walters et al., 2017). On the other hand, novice faculty who may be overwhelmed by the technology may benefit from one-on-one support with designers (Walters et al., 2017). As such, the best faculty PD programs are rarely undifferentiated, which aligns with key adult learning principles.

Social Interaction

One of the most common best practices mentioned in the literature was social interaction. Online faculty members tend to be geographically dispersed, hence the need to connect them to the faculty community (Mohr & Shelton, 2017). Furthermore, for some faculty members, teaching online has the perceived disadvantage of increased isolation (Cook & Steinert, 2013). These faculty members appreciate initiatives that connect them socially with others. Whether faculty members select synchronous or asynchronous programs, among the best were found to be those that offer multiple opportunities for interaction (Cook & Steinert 2013). Collaborative work and interaction with others can reduce isolation, build engagement, and help adult learners to sharpen existing skills as they test their assumptions and develop new meanings to old knowledge patterns (Davis, 2013).

Mentoring

Apart from the traditional practices mentioned above, mentoring was found to be a key contributor to effective faculty development. Mentoring is generally lacking as a method for supporting online instructors (Herman, 2012). Informal mentoring, despite being useful, was found to suffer from low participation rates and inconsistent communication. Formalizing the mentoring relationship intentionally through developing a structured program was more effective (Hundey et al., 2020). Formal mentoring programs have the potential to raise the self-confidence and career satisfaction of faculty. They provide faculty members with the opportunity to reflect

on their practices while expanding their professional network (Hundey et al., 2020). A mentoring relationship can be looked upon as a relationship between two adult learners who have significant experience, are self-directed, and are generally intrinsically motivated. In the context of adult learning, attention should be paid to the difference between these two adults in characteristics or generation values and attitudes. Understanding these differences can enhance trust among the mentor and mentee (Cordie et al., 2020).

Critical Reflection

Another key best practice found in the literature is the critical reflection of faculty on their teaching experience. Faculty more engaged regularly in reflective practice were found to be more aware of the differences between online and face-to-face pedagogies and were more likely to evolve their online teaching (Dhillia, 2016). One of the shortcomings of PD programs is that faculty members could walk away from the program with enough informational awareness but little desire to apply (Baran & Correia, 2014). This challenge can be mitigated by the creation of informal learning communities that permit reflection on one's practice (Scarpina et al., 2019). McQuiggan (2007) noted that most faculty development initiatives lack this reflective component. Such critical reflective practice is at the heart of Mezirow's learning transformation process. It is therefore advisable that faculty development programs prompt reflective thinking to encourage faculty members to question their prior beliefs and rethink their educational philosophies (Dhillia, 2017).

Informal Learning

A recent surge in research in workplace learning supports a shift from formal to informal learning. Formal learning programs include traditional learning events and workshops, which long dominated the faculty development field. Informal learning can be independent or intentional. Independent informal learning is any form of learning that faculty choose to engage

in outside what is planned by the CTLs in their institutions, such as self-directed reading or networking (Gottfredson & Mosher, 2011). Intentional informal learning includes the intentional practices that institutions set up to facilitate informal learning such as structured mentoring programs. It is estimated that 80% of learning in the workplace among adult learners happens informally rather than in a classroom, hence the need to shift focus on designing intentional informal learning opportunities (Cacciattolo, 2015). O'Sullivan and Irby (2011) explored how faculty development endeavours can benefit from successful best practices borrowed from workplace research in other fields.

From a design perspective, formal learning is more accessible to schedule and structure. However, traditional learning events that typically pull participants from their work can rarely translate the knowledge into workplace practices (O'Sullivan & Irby, 2011). At the same time, professors tend to prefer experiential learning and skill-focused learning, which are best experienced on the job rather than in a classroom (Steinert et al., 2016). Faculty members also tend to prefer informal learning due to its flexibility compared to formal learning events, which place undue pressure on their schedules (Luo et al., 2020). The ideal learning format for PD appears to be a blend of both formal and informal learning while current development programs are, by and large, tilted toward formal learning (Scarpina et al., 2019).

Effective Administration Practices

Best practices do not appear to be confined to the development programs and faculty but also include effective administration practices and policies to support such programs. For example, the most effective programs were found to have a quality assurance process that ensures the continued relevance and evolution of the program (Mohr & Shelton, 2017). Furthermore, the role of development centres seems to impact the quality of development

programs. Austin and Sorcinelli (2013) argued that if we are to enhance faculty development programs, it may be necessary to elevate the status of course developers and expand the responsibilities of development centres to include change management. Change management is a systemic strategy of dealing with change in an organization to ensure less resistance from the involved stakeholders and sustained transformation over the long haul. The addition of change management can reposition the development centres as strategic partners and widen their involvement in institution-wide decisions (Haras et al., 2017). Better yet, the participation of faculty members in their teaching development, if appropriately applied, has the potential to create a campus culture of teaching excellence (Haras et al., 2017). This idea complies with the adult learning theory, which stipulates that adults need to be involved in the planning and evaluation of their instruction if they are to maximize the learning transformation.

The Context of Institutional Support

The critical role HE institutions play in the success of faculty development is well documented in the literature (Baran & Correia, 2014; Feixas & Zellweger, 2010; Kearns, 2016; Steinert et al., 2016). Faculty development is intertwined with the organization system, yet the link between both remains under-explored (Steinert et al., 2016). The organization factors can facilitate or hinder faculty development and therefore are worth studying (Feixas & Zellweger, 2010).

The complex nature of faculty development programs makes institutional support indispensable. Development programs impact and are impacted by the organizational context and have the potential to transform an organization (Steinert et al., 2016). It would be limiting to view faculty development endeavours as just skill-learning programs. Several models were developed that emphasized the role of institutional support. Holton et al. (2000) developed a model to explain factors that impact the transfer of learning from a faculty development program

to the work environment. The model holds that the ability of participants to use the content, the motivations of participants, and the work environment support are all essential to help faculty apply what they learn in a development program. Baran and Correia (2014) developed a more recent framework postulating that effective online teaching hinges upon three kinds of support: teaching, community, and organizational support. Both models highlight the complex nature of development programs and the need for collaborative efforts from various stakeholders in the organization to ensure their success.

Institutional support is also necessary because it positively impacts faculty satisfaction and motivations. Research confirms that faculty are more motivated to teach online when institutional support for online teaching is prioritized (Kearns, 2016). Participation in faculty development initiatives enhanced faculty confidence and cohesiveness (Haviland et al., 2010). It appears that faculty appreciate the institutional buy-in into online teaching. On the other hand, when the institution does not value or respect online education, faculty are less likely to engage in teaching or learning online (Baran & Correia, 2014). Faculty development is best understood when contextualized within the challenges facing HE institutions. The following section will discuss some of the external and internal challenges.

External Challenges

External challenges refer to socio-economic changes that impact HE institutions. They include: (a) changes in the student body, (b) changes in the faculty body, and (c) fiscal constraints.

Changes in the Student Body

Over the past decade, the student body enrolled in HE institutions has become noticeably more diverse. According to a survey administered by the Canadian University Survey Consortium (CUSC) in 2019, 44% of first-year students in 34 universities were a visible

minority, 24% reported having a disability, 34% were employed, and 1% were 25 years or older. This represents an increase over the corresponding figures published in the CUSC survey in 2016.

Furthermore, according to Statistics Canada (2020), the percentage of international students enrolled in HE institutions climbed from 6.4% in 2008/2009 to 16.2% in 2018/2019. At a time when the diversity of students is increasing at unprecedented rates, faculty members reported feeling unprepared to deal with diversity in the classroom (Dowd & Bensimon, 2015). As such, HE institutions can address this need by designing faculty development programs focusing on teaching for diversity (Dowd & Bensimon, 2015).

Changes in Faculty Body

Just like the change in the student body, faculty members have also experienced changes, whether in their roles, work preferences, or faculty composition. Specifically, online faculty members face expansion because online faculty roles commonly include pedagogical, social, managerial, and technological aspects over and beyond what face-to-face instructors experience (Baran et al., 2011).

The expansion of faculty roles for online instructors has also been related to an increased need to balance work and personal commitments (Sorcinelli, 2007). As concerns about work-life balance rise among faculty members, it becomes essential for development programs to incorporate skills such as time management and stress management and the focus on traditional skills such as teaching and learning (Sorcinelli, 2007). Furthermore, Sorcinelli (2007) highlighted that many faculty members are retiring in the coming few years in the U.S., which places further pressure on HE institutions to find a replacement. The newly hired faculty will need orientation to the institution and the tenure track and a professional network, among other

features. A well-served professional program targeting new faculty may be necessary to address those unique needs.

Fiscal Constraints

For the past two decades, one of the pressing concerns in the HE sector has been the decline in public funding to colleges and universities. As a result, many students were financially burdened or even excluded from postsecondary education by the high tuition costs (Mitchell et al., 2019). On the other hand, institutions had to rely on other sources of finance, such as the revenues from their internal facilities (i.e., the gym, the cafeteria, etc.) and the highly volatile international student sector. During the COVID-19 pandemic, the HE sector continued to provide educational programs, research, and experts that inform the health sector's response to the pandemic. As a result, the pandemic placed excessive stress on the already overstretched resources of HE institutions. As Brennan et al. (2021) stated, "the pandemic has not created cracks in the post-secondary education sector. It has highlighted and even worsened cracks that were already there" (p. 872). In particular, faculty development programs have often gone underfunded (Taylor et al., 2017). During the COVID-19 pandemic, some institutions channelled their budgets away from faculty development to other needs, which the institutions perceived as more pressing (Baker, 2020). An increase in core funding to universities and colleges is recommended if they are expected to effectively assume their role in supporting Canada's economic and social policy objectives through and beyond COVID-19.

Internal Challenges

Internal challenges relate to HE institutions' internal strategies and processes that could impede faculty development programs. They include (a) inequity of PD programs, (b) disconnect between online and face-to-face, and (c) the limited role of CTLs.

Inequity of PD Programs

Adjunct faculty members represent a substantial percentage of almost every campus nowadays (Eagan et al., 2014), and this percentage is expected to grow (Taylor et al., 2017). Furthermore, fully online institutions were found to hire adjunct faculty at a much higher rate than traditional HE institutions (Al Salman, 2013). Adjunct faculty members are defined in the literature as contingent or sessional instructors who are non-tenure-track members (Eagan et al., 2014). It is reported in the literature that development opportunities are not equitably accessible for all faculty (Haras et al., 2017). PD opportunities are generally available for full-time faculty but not adjunct faculty (Vanleeuwn, 2020). Adjunct faculty members play an integral role in students' education as they typically teach high enrollment foundational undergraduate courses. HE institutions need to pay more attention to this underserved segment of faculty.

A Disconnect Between Online and Face-to-Face

One of the internal challenges institutions deal with is a general disconnect between online and face-to-face courses and instructors. The disconnect can present itself in the form of misunderstanding and alienation between the faculty members of both communities (Dhillal, 2017). Under these circumstances, online faculty members were reported to feel insecure about their place in the department. Some even question, "do my colleagues still see me as a serious academic?" (Dhillal, 2017, p. 151). There is generally little exchange of information, resources, or dialogue between the online and face-to-face faculty members. This lack of shared culture is believed to be the culprit behind why online faculty members feel stripped of their academic identity (Dhillal, 2017). VanLeeuwen et al. (2020) echoed the same concerns of online faculty members, highlighting their stronger sense of fear of losing their jobs compared to their face-to-face counterparts. Furthermore, a lack of a shared institutional vision about how the overall

educational offerings would look contributed to the disconnect between the two faculty camps online and face-to-face. Perhaps a unified institutional learning strategy could be communicated to all faculty by the leadership as part of a faculty development program to create a sense of integration.

Limited Role of CTLs

CTLs in many institutions are primarily responsible for faculty development programming. While CTLs played a critical role in developing faculty members, especially during the disruptive period of COVID-19, CTLs remain by and large at the margins of academic affairs (Taylor et al., 2017). Some institutions have low expectations of their CTLs. Others do not allocate considerable funds for their operations (Taylor et al., 2017). As a result, CTLs are generally underutilized and have been leading from the middle with a limited capacity to effect institutional change. Haras et al. (2017) suggested that CTLs should establish a professional framework that guides the competencies faculty members need to flourish for success in online teaching. CTLs should also evaluate faculty development programs for their institutional impact. However, such efforts typically require dedicated funding and commitment from the institutions and are unlikely to be carried out by CTLs alone.

Institutional Support Strategies

The literature recommends several strategies for HE institutions to overcome the above-listed challenges and support the development of online faculty. Such institutional strategies have the potential to support PD programs through enhancing the institutional processes and culture. The following section presents the most cited strategies.

Ensure Equitable PD Programs

HE institutions should ensure all faculty is included in professional development programs (VanLeeuwen, 2020). VanLeeuwen further suggested if contract online instructors

represent a considerable percentage of faculty, immediate action steps should be taken to prepare them for digital teaching through proper orientation and onboarding (VanLeeuwen et al., 2020). Continuous opportunities for development should be created and delivered in ways that mitigate the work insecurity of the underrepresented faculty. For example, collaborative learning has been shown effective for diverse segments of faculty such as adjunct faculty, women, and faculty of colour (Zambrana et al., 2015). Collaborative learning can take the form of mentoring communities (Hundey et al., 2020). In one study, female faculty members reported great benefits from participating in these learning networks (Kezar & Gehrke 2015). In another study, it was found that the majority of those who attended learning communities was not the full-time tenure track professors but rather the underrepresented faculty, suggesting an eagerness to develop (Yun et al., 2016).

Redesign the Reward System

Many studies have found that teaching an online course takes more time and effort than teaching the same course in a face-to-face environment (Green et al., 2009; Lao & Gonzales, 2005). Online instructors often assume additional roles above and beyond those assumed by their campus-based counterparts. For example, online instructors independently deal with the technology, design online activities, assist students with their technological needs, and ensure students' engagement despite the surrounding distractions (Major, 2010). Yet, many HE institutions fail to fairly compensate their online faculty. In fact, it is not uncommon to find online faculty members significantly underpaid compared to their campus-based peers. HE institutions need to re-invent the way they reward online faculty (Cilliers & Tekian, 2016). Release time can be an effective reward that complements financial compensation. Release time particularly helps with recognizing the additional time needed in the prior design and preparation of an online course (Martin et al., 2019). More latitude in the design and facilitation of online

courses can be given to advanced online faculty (Dhilla, 2017). External accolades can also be an effective reward. Online faculty achievement can be recognized with innovative awards and their outstanding projects showcased in education innovation days (Cilliers & Tekian, 2016). “Faculty embrace what they are rewarded for” (Taylor et al., 2017, p. 71). As such, HE institutions should link the implementation of lessons learned in professional development programs to the career progression of faculty (Cilliers & Tekian, 2016).

Engagement of Support Staff

Support staff includes course designers, developers, and IT staff. They can be engaged in practically every step of the learning cycle and can provide timely one-on-one support to faculty members where needed (Martin et al., 2019). Support staff can also assist with compiling and analyzing data for course evaluation which is useful in enabling online faculty to review and advance their practice which in turn fosters continuous improvement (Reid et al., 2015). To make the best use of support staff, one suggestion is to consider relocating the IT department near or adjacent to the organization’s CTL (Haras et al., 2017). This proximity of the two supports for teaching excellence in online environments could create a one-stop-shop for supporting faculty in teaching online. Another suggestion is to train other support staff such as the student affairs personnel in online course design and development (Haras et al., 2017). This could be a viable step since support staff is typically capable but tend to be under-utilized (Haras et al., 2017).

Establish Online Teaching Communities

It is well documented that adult learners learn best when they are in groups that cooperate to enhance their scholarship and teaching instruction (Kezar et al., 2016). Cooperative learning creates an environment in which adults can extend their understanding, receive feedback, and be

held accountable by their peers. Yet, learning communities remain an unmet need on many campuses and most faculty spent most of their working hours alone (Kezar et al., 2016). Dhilla (2017) argued that the creation of intra- and inter-institutional learning communities are beneficial for the professional as well as the emotional support of online faculty as they navigate their new work reality. It has the potential to reduce faculty members' sense of isolation and foster a sense of belonging. Intra-institutional communities can be in the form of regular monthly meetings, online discussions, or mutual mentoring networks (Steinert et al., 2016). Inter-institutional communities, on the other hand, can take the form of sharing PD opportunities across colleges and universities, especially non-institutional-specific content. For example, Maple League universities share faculty development among its four members institutions: Acadia University, Bishop's University, Mount Allison University, and St. Francis Xavier University (VanLeeuwen et al., 2020). Intra-institutional communities can also take the form of ongoing partnerships such as the open textbook digital library built by BC Campus and eCampus Ontario (VanLeeuwen et al., 2020).

Expand the Role of CTLs

One of the key ways in which HE institutions can support faculty development is through supporting and expanding the influence of CTLs on campus (Haras et al., 2017). First, it is important to recognize that the capacities of CTLs differ significantly among institutions. One centre could have a dozen employees while another could comprise just one part-time developer. The capacity of the centre is a major determinant in the magnitude of work the centre can deliver and therefore should be taken into consideration in the plan of expanding the role of the centre. This may sound like common sense, but it is noteworthy because many CTLs were tasked with unrealistic mandates compared to their capacities especially during the COVID-19 pandemic

(Naffi et al., 2020). HE institutions need to fund CTLs in proportion with their mission and the strategic direction (Taylor et al., 2017).

CTLs can be positioned as a campus collaborator and involved in various institutional-wide activities. For example, CTLs can be positioned as the first point of contact for faculty whenever a teaching need arises. CTLs can be more engaged in matters of student learning and called upon regularly to collaborate in campus-wide change assessment efforts, as is the case with the office of institutional research (Haras et al., 2017). Schroeder et al. (2011) argued that perhaps the best way to raise the role of CTLs is by involving them in organizational development. Educational developers should not stay in the comfort zone of instructional development but rather expand their repertoire of skills to include leading institutional change initiatives (Schroeder et al., 2011). That involves not only changing instructional design and material but changing values and paradigms required to support a new culture shift in HE institutions. To that end, Schroeder et al. (2011) stressed that organizational development should be an essential part of the professional curriculum taught to educational developers.

Commit to a Change in Organization Culture

For the success of online education initiatives, there needs to be a multi-level change in institutional culture, which begins by the buy-in of the senior leaders (VanLeeuwen et al., 2020). Faculty shape and are shaped by the institutional culture (Clampitt, 2013). Culture change is most needed in institutions where faculty equate advancement only with research, not with teaching (Haras et al., 2017). A top-down change necessitates that HE institutions build online learning in the strategic plan along with articulating the significance of online education in the institutional mission (VanLeeuwen et al., 2020). Subsequently, a revision of the policies of hiring, tenure, and promotion needs to follow (Haras et al. 2017). This can send a strong message to faculty that the institution places online education as an integral and important component of

its mandate which has the potential to improve faculty commitment to online teaching and its associated professional development programs (Hoene et al., 2017). Another idea to effect culture change suggests an early start at the level of doctoral students. National teaching corps could be created by doctorate-granting institutions whereby doctoral students would be required to participate in online professional teaching programs. This practice has the potential to prepare faculty early on for their online teaching career while reinforcing the status of online teaching (Bowen & McPherson, 2016).

One suggested methodology to effect change at an institutional level is organizational development (OD). The OD methodology is grounded in action research. Action research involves an iterative cycle of problem identification, analysis and data collection, and action planning (Lewin, 1951). In this process, change happens as new data are collected which inform new action. Lewin (1951) additionally described this method for enabling change as building upon changes desired by those most involved in and impacted by the change. Thus, the strength of this method does not permit sidelining of any stakeholder.

OD is widely adopted by corporate companies in change initiatives. However, OD has not gained much traction in HE institutions. OD change agents often find themselves working at a transactional level with systems and practices instead of at a transformational level with culture, leadership, and strategy (Torraco & Hoover, 2005). Since the nature and culture of HE institutions are different from corporate companies, the OD methodology needs adaptation when applied to the higher education context if it is to achieve desired results (Torraco & Hoover, 2005). As such, the OD methodology is beyond the scope of this study.

Summary of Literature Review

The above literature review presented five main subsections that covered the theoretical framework, faculty needs, best practices, the context of institutional support, and the institutional support strategies.

This study focuses on online faculty members as adult learners. Therefore, the theoretical framework of the study hinges on four adult learning theories: andragogy, self-directed learning, experiential learning, and transformational learning theory. The TPACK framework also guides the exploration in this study as it explains the key knowledge areas involved in effective teaching with technology and designing online teaching environments, which in turn can inform the development of PD programs.

Faculty needs are determined by their characteristics, which were found to be diverse (Austin & Sorcinelli, 2013). Faculty members differ in experience, specialization, and motivation. Therefore, PD programs developed to be one-size-fits-all are found to be unsatisfactory. The learning content developed in PD programs were found to cover technological or pedagogical topics with a greater focus on technology. In terms of learning logistics, research shows that faculty members prefer synchronous programs for the enhanced interaction but opt for asynchronous programs for their flexibility (Dailey-Hebert et al., 2014). Formal programs tend to be disruptive to the workday of the faculty while informal programs are more applicable to real-life situations (Scarpina et al., 2019).

Several best practices in the design of PD programs were found in the literature. Practices such as setting expectations at the beginning of the programs, personalization of content, introducing elements of social interaction, mentoring, informal learning, and critical reflection were found to enhance faculty members' PD experience. Best practices also extend to include

effective administration practices such as quality assurance processes and creating a campus culture of teaching excellence (Haras et al., 2017).

Institutional support for PD programs is best understood when contextualized within the challenges facing HE institutions, including external challenges such as changes in the student body, changes in the faculty body, as well as fiscal constraints. HE institutions also face internal challenges such as the inequity of PD programs, a disconnect between online and face-to-face courses, and the limited role played by CTLs. These challenges have an impact on the institutional ability to respond to faculty needs and provide high-quality support.

Finally, the literature review addressed several support strategies that could be implemented to enhance faculty PD programs. Such strategies have the potential to enhance institutional processes and culture, hence promoting PD programs. HE institutions ought to ensure equitable access of PD programs to all faculty through running onboarding trainings for adjunct and new faculty and introducing collaborative learning among them (Zambrana et al., 2015). HE institutions should also redesign the reward system to ensure fair compensation for online faculty. Apart from monetary compensation, reward system can include release time, more latitude in the design and facilitation of courses, as well as external accolades. HE institutions could also establish online teaching communities that connect faculty inside the institution as well as across multiples institutions. There needs to be a commitment to a multi-level change in the learning culture which starts with building online learning in the strategic plan and follows up with revamping the policies of hiring, tenure, and promotion. The change can also engage support staff in the PD development process as well as expand the role of the CTLs to include organization development rather than only course development.

CHAPTER THREE: RESEARCH METHODS

Faculty development programs vary significantly among HE institutions from non-existent to fully developed and tailored to faculty needs. According to Cook and Steinert (2013), the best programs were found to cater to the unique needs of faculty and have a differentiated approach. The purpose of this study is to identify some of the faculty members' professional learning needs in PD programs with the aim of enhancing the quality of programs. Faculty needs and preferences were captured through in-depth and emergent interviews that enabled the researcher to identify patterns and themes from the data. This chapter presents the research questions, the research design, the research setting, participants, recruitment, data collection, data analysis, research trustworthiness, and ethical considerations

Research Questions

The study sought to address the following primary research question: How can the perceived development needs of faculty members teaching online inform the design of PD programs in HE institutions? The study also was underpinned by the following research sub-questions:

1. What are the perceived development needs of faculty members teaching online?
2. Which faculty development experience/aspect did faculty find most meaningful in transforming their online teaching practices?
3. How can HE institutions support faculty development for teaching online?

Research Design

The research questions in this study were most suited to a qualitative research methodology, which according to Creswell (2013) explores a phenomenon or investigates the experiences, understandings, and perceptions of people regarding a certain event. A qualitative

method was chosen because it supports the notion of constructivism that there is no absolute reality. Reality is constructed by the participants as they give meaning to their everyday encounters. This notion aligns with the faculty members studied in this research, each of whom had their own interpretations regarding the most useful PD experience that would support their online success.

The research utilized a multiple case study method. The case study method is one of the most used methods in qualitative research (Yazan, 2015). It is most suited when the focus is on a contemporary real-life phenomenon and when the researcher has little control over events (Yin, 1994). Stake (1995) described three types of cases studies: (a) intrinsic, when the researcher has vested interest in the case study; (b) instrumental, when the case study is used to explain a phenomenon beyond what is obvious to the layperson; and (c) collective, when multiple case studies are explored together for the same phenomenon. This study used multiple case studies of four faculty members teaching online to gain a holistic understanding of faculty development preferences in PD programs. Compared to the single case study method, the collective case study method adds rigour by exploring the phenomenon under study from various lenses (Baxter & Jack, 2008).

By its very nature, the collective case study method involves a multi-perspective analysis, which gives voice to underprivileged participants. It is also known as a triangulated research strategy since its design inherently relies on triangulating the research informants (Tellis, 1997). One drawback of the case study method found in the literature is the results derived from the cases do not lend themselves to generalization (Lincoln & Guba, 1985). However, Yin (2003) refuted this claim by differentiating between statistical generalization and analytical

generalization. According to Yin (2003), while the results are not generalizable to the population that has been sampled, the results contribute to a general theory of the phenomenon of interest.

Research Setting

The study was done in a midsize university in Ontario. The institution provides a wide range of undergraduate and graduate programs across various disciplines and posts a considerable number of fully online and blended courses in its course catalog. It also has a variety of faculty members with diverse backgrounds. During the COVID-19 pandemic, the institution had to transfer all its course offerings online. The institution has a Centre for Teaching and Learning that serves the PD needs of faculty and teaching assistants. The centre offers multiple resources and organizes regular workshops and certificate-based programs.

Participant Characteristics

The target population includes online faculty members. This encompasses faculty members who had experience teaching online whether in synchronous or asynchronous courses. Most of the population has taught face-to-face courses in addition to online courses. For this study, the term “online faculty” refers to both tenure-track members and sessional instructors who teach online.

This research comprised four online faculty members recruited from the target population. A purposive sampling process was used to select a diverse set of participants to draw experiences that represent a diversity of backgrounds and perceptions in the discovery process (Patton, 2002). The main criterion used to select participants was an experience with online teaching of at least 1 year. The technique used to select the purposeful sample was the maximum variation technique (Palinkas et al., 2015). In this technique, the researcher ensured that the selected participants’ representation was as diverse as possible to obtain broad insights into the

various development requirements of the faculty members under study. The four online faculty members selected have diverse profiles covering different years of online teaching experience across various career levels.

Table 1 shows the key characteristics of the participants. The participants have been assigned pseudonyms to preserve their privacy. The participants are listed in the order the interviews occurred. Overall, the interviewees were excited to participate in the research and were forthcoming in sharing their experiences with online teaching.

The participants vary in career status and include two associate professors, one assistant professor, and one sessional instructor. All study participants were experienced in face-to-face teaching with the least experienced posting 10 years of face-to-face teaching. In online teaching, however, their experiences vary widely with the most experienced showing 8 years of online teaching while the least experienced had only 2 years. The mode of course instruction was either synchronous or asynchronous or both. The number of online courses taught seems to be limited among most participants, except for Julia who taught eight online courses.

The participants' experience in online teaching was classified based on Benner's (1982) novice to expert model. The novice to expert model characterizes the proficiency levels of individuals when acquiring new skills. The novice to expert model is a situational model, not a trait model (Thomas & Kellgren, 2017). This means that faculty members may be experts in their field of work but face a new learning situation in which they find themselves novices.

Table 1*Participant Characteristics*

Pseudonym	Career rank	No. of years teaching face-to-face or blended	No. of years teaching fully online	No. of online courses taught	Benner's classification	Mode of course instruction
Julia	Assistant professor	11	6	8	Competent	Synchronous / asynchronous
Greg	Associate professor	25	8	2	Proficient	Asynchronous
Kira	Sessional instructor	10	2	3	Advanced beginner	Synchronous / asynchronous
Scott	Associate professor	10	5	2–4	Competent	Asynchronous

The five levels in the novice to expert model are: (a) novice, (b) advanced beginner, (c) competent, (d) proficient, and (e) expert. The novice instructor would be a beginner whose performance is limited because of a lack of online practical experience. The advanced beginner is an instructor who uses experience, rules, checklists, and intuition to perform in newly faced online situations. A competent instructor is better able to judge and prioritize relevant action. The competent instructor tends to think analytically without relying on the use of rules and checklists when online. A proficient instructor spends less time and energy planning because the instructor at this level knows what to expect and what needs to be done. Expert instructors perform at a masterful level of performance whereby they merge theory and practice of online teaching without conscious thought (Benner et al., 2009).

All participants were between the advanced beginner and the proficient levels. Among the participants, there was one proficient, two competent, and one advanced beginner. No participants were found to be a novice or an expert.

Recruitment

The participants were recruited to participate in emergent interviewing based on fulfilling the criterion of having at least one year of experience teaching in an online environment. The participants were approached by email and sent an initial invitation letter to gauge their interest and availability to participate. The faculty members contacted were sourced through referrals from the network of the researcher. The researcher worked with two of them in previous years in the capacity of a research assistant one time and a teaching assistant another time. The contact emails of the other three faculty members were located from the online directory of the university. The faculty members who expressed interest to participate in the study were then sent a consent form to sign. Out of nine faculty members contacted, four expressed an interest to participate in the study.

The interviews happened during July and August 2021. Summer vacations during these months caused some challenges with the scheduling of interviews. However, there appeared to be a general interest among online faculty in the topic of the study as most faculty members approached expressed interest to contribute to the enhancement of development programs even if they were not available to participate in an interview.

Data Generation

The data were generated from three sources: (a) interviews with four faculty members, (b) records and learning documents consisting of research studies the faculty members wrote about their teaching experience, and a course website fully designed by one of the online professors, and (c) reflective journal of the researcher

Interviews

According to Donalek (2005), interviews are by far amongst the most common qualitative data collection method. In this study, the data were collected through individual semi-structured interviews. In semi-structured interviews, the researcher plans a list of open-ended questions in advance, but the questions are loosely structured, and the researcher may probe with new questions based on interviewees' answers. The structured part of a semi-structured interview provided the researcher reliable comparable data while the unstructured emergent nature encouraged participants to share their elaborate perspectives on complex issues and put them at ease (Creswell, 1998). The interview guide is presented in Appendix A.

The interviews were conducted and recorded virtually through MS Teams. The use of technology to conduct interviews is not new but during the COVID-19 pandemic, it tended to become the norm rather than the exception. Each interview lasted between 45 to 60 minutes. The interviews were automatically transcribed verbatim by MS Teams. The researcher then verified the automatically generated transcription against the recording and edited any discrepancies. The revised transcriptions were sent to the participants to check for accuracy prior to data analysis.

During the interviews, the researcher made sure to follow interviewing best practices. For example, the researcher made sure to establish rapport with the faculty member at the beginning of the interview, maintain eye contact during the interview, and note the participants' facial expressions for cues of discomfort or disapproval (Donalek, 2005). The researcher avoided interruption during the interview. The interviews were not ended abruptly as that may lead the interviewee to feel used (Corbin & Morse, 2013). As such, the researcher made sure to ease the participant into the end of the interview by asking "is there anything else you would like to add?" The researcher then ended the interview by thanking the participant for their contribution.

Document Review

Document review is a data collection tool used in qualitative research to support and complement other data collection methods (Bowen, 2009). Document review is used to explain or validate participants' claims (Glaser & Strauss, 1999). Document review can also serve in generating a rich description of the phenomenon under study (Merriam, 2002). The review is particularly useful in qualitative case studies since it can potentially supplement the cases with empirical data about the context of the study participants (Stake, 1995; Yin, 1994). Document analysis is considered a time- and cost-efficient method since analyzing readily available documents take less time than collecting field data (Bowen, 2009). According to Bowen (2009), documents are a static source of data collection which means they can be reviewed several times without being changed by the researcher or the research process. A disadvantage of using document analysis is that documents may not be easily accessible and may not provide all the necessary information that the researcher hopes to obtain to answer the research questions (Bowen, 2009).

While the main source of data in this study was the interviews, the researcher also used document analysis to supplement the data and substantiate the findings. The researcher collected and reviewed some learning materials that the faculty members shared. Most of the faculty members mentioned that one of the best ways to learn about their teaching practices was through research publishing. Two of them shared copies of papers they published about teaching. Another participant shared the website of an undergraduate online course that they designed from scratch. The published papers served as evidence of what the faculty learned about their teaching while the course website provided a sample of faculty learning output.

Reflective Journal

A reflective journal is a written record kept by the researcher throughout the research process. The journal typically includes the researcher's thoughts, impressions, ideas, feelings, or discoveries (Russel & Kelly, 2002). The journal catalyzes reflexivity as it enables the researcher to examine personal assumptions and clarify belief systems (Russel & Kelly, 2002). The fact that the journal is written in the first person's point of view fosters self-awareness and encourages self-dialogue (Jasper 2005).

In this study, the researcher recorded thoughts and observations that emerged from the external as well as the internal dialogue. The act of reflective writing encouraged critical thinking as it forced the researcher to rationalize and develop ideas which invited the researcher to acquire new knowledge related to the research topic (Jasper 2005).

Data Analysis

In qualitative studies where massive data are gathered, software like NVivo may be used for the analysis of data. In this study, the use of external software was unwarranted, so the data were analyzed manually in the following stages: (a) identifying the type of coding, (b) initial coding, (c) line-by-line or unitization coding, (d) categorization, (e) determining themes, (f) confirming the findings, and (g) construction of mini case reports

In the first stage, the researcher identified the type of coding. There are two methods of coding: deductive and inductive coding. Deductive coding follows a top-down approach whereby the researcher starts with a predetermined codebook which the researcher then assigns to the data collected (Boyatzis, 1998). Inductive coding, on the other hand, follows a bottom-up approach whereby the researcher starts from scratch and creates codes as dictated by the data collected (Boyatzis, 1998). In this study, inductive coding was used since it was most suited to the

exploratory nature of the study whereby the researcher had little knowledge about the subjects and the HE context.

The second stage involved initial coding. During this stage, the researcher read the transcripts and the documents collected for the first time. The first reading was to familiarize the researcher with the data, start noticing patterns and write side notes. The first reading also served in identifying any striking or significant pieces of data (Sommer et al., 2011). This stage of first-time reading happened concurrently while interviewing the rest of the participants.

The third stage involved line-by-line coding or a process of separating the text from qualitative data into independent thoughts, or units, about the research focus, which were then labeled with codes. Allen (2017) further states that “in unitizing, researchers determine how to segment the text such that the derived units are conceptually meaningful and empirically identifiable” (p. 150). For this study, the line-by-line unitization process took place when all the interviews were complete. In this stage, the researcher read the transcripts and the documents a second time to assign annotated codes to the data collected. Codes were assigned to as much of the data as possible even with the knowledge that some codes will probably be discarded at the end.

The fourth and fifth stages involved categorization and theme determination. In the fourth stage, the researcher reorganized similar codes identified in stage three into major categories to create structure out of the data. In the fifth stage, the labels grouped under each category were sorted out into related themes. When the emerging themes seemed redundant or insignificant, the researcher discarded them. At the end of this stage, a final list of organized themes was created. An example of the process of categorization and determination of themes is shared in the Audit Trail in Appendix B.

The sixth stage of analysis involved confirming the findings. During this phase, the researcher read the transcripts for the third time. The reading this time had the purpose of comparing and contrasting the answers of participants and weighing the evidence (Miles & Huberman, 1984). In preparation for reporting the findings, the reading this time also aimed to identify quotations that would support the chosen themes and substantiate the interpretation. The use of quotations helps give voice to the participants in the study as well as establish the trustworthiness and authenticity of the study findings (Sommer et al., 2011). At this time, repetitive words of speech such as “like,” “you know,” and false starts such as “I mean” were removed from the quotations used in case reports because they do not add meaningful content and they only tell the reader that the speaker needed some time to think before articulating an answer (Corden & Sainsbury, 2006).

The seventh and final step was the construction of a case report for each participant so that the experiences of each participant can be studied in relation to the other cases through cross-case analysis. Case reports are used by the qualitative researcher as a tool to record and engage with the interpretation of the research (Lincoln & Guba, 1985). The case report format provides the researcher with a method for painting a thick description of the phenomena through the voice of the participant, allowing the reader to judge the information held within the case report and make decisions whether or not the themes that emerge can be transferred to their own situations. Therefore, the case reports are meant to depict the perceptions and beliefs that participants held at the time of the research regarding the online environment events that they have experienced and the professional development experiences they deem valuable to their professional learning needs.

Table 2*Research Steps*

Date	Action Step
June- July 2021	The participants were invited by the researcher and were sent consent forms.
July – August 2021	Semi-structured interviews were scheduled, conducted, recorded, and transcribed online via MS Teams
July – August 2021	Automatic transcriptions generated by Teams were checked for accuracy by the researcher
September – October 2021	The transcriptions were sent to the participants for review.
September–October 2021	Transcriptions were revised based on participants’ feedback.
September 2021	Participants were asked to share learning materials or documents that were indicative of their teaching development.
September – October 2021	Initial coding
November- December 2021	Categorization and themes determination
January 2022	Construction of mini-case report

Efforts to Establish Trustworthiness

To enhance the trustworthiness of the research findings, Creswell (2013) recommends using at least two strategies for qualitative research studies. Lincoln and Guba (1985) developed four tenets of trustworthiness in qualitative research, namely credibility, transferability, dependability, and confirmability. To establish the four tenets of trustworthiness in this study, the following strategies were used: (a) triangulation, (b) purposeful sampling, and (c) reflective commentary. The following paragraphs will explain these strategies and how they contributed to establishing research trustworthiness.

Triangulation

Triangulation is the process of ensuring the validation of data to enhance the credibility of research findings (Noble & Heale, 2019). This study ensured credibility by using three methods for data generation: (a) semi-structured interviews, (b) document review, and (c) reflective journal. Of the abovementioned four tenets of trustworthiness, the triangulation process helped to ensure credibility as well as confirmability of the findings by taking into consideration various perspectives hence minimizing the researcher bias.

Purposeful Sampling

Purposeful sampling is a method that selects participants based on their knowledge of and experience with a particular topic under study to create information-rich cases (Creswell & Plano Clark, 2018). The technique used to implement purposeful sampling in this study was the maximum variation technique, which allows shared patterns across the varied range of participants to be identified. The shared patterns derive their credibility from emerging out of heterogeneity (Palinkas et al., 2015).

In this study, the participants included a mix of faculty and sessional instructors at different career stages and with a wide range of online teaching experiences. The study used purposeful sampling in order to provide a thick description of the phenomenon under investigation and ensure the voices of participants were clearly evident in the construction of case reports for each participant. The constructed case reports are presented in Chapter 4. The sampling method used in this study was meant to achieve an in-depth understanding of the online faculty preferences in PD programs while maximizing the credibility of the data.

Reflective Commentaries

Reflective commentaries are the researcher's notes and initial impressions recorded after each interview. Engaging in reflective commentaries helps in recognizing patterns in the data and strengthens the credibility of the analysis (Shenton, 2004). It also serves as a reflexive journal whereby the researcher records and reflects on her thoughts, preconceptions, bias, and any idea that might impact the objectivity of the research (Shenton, 2004). By keeping a reflective journal as discussed in the following section, the researcher established confirmability of the findings through explicitly spelling out factors that may impact the objectivity of the research. Furthermore, the study also provided a detailed account of the steps of the research taken as outlined in this chapter. Through outlining explicit details of the research methods, research site, population, sampling, methods of data collection, the technique of data analysis, and study limitations, the researcher made it easy for future researchers to replicate the study in similar contexts (Shenton, 2004). This helps establish the transferability and dependability of the findings.

Researcher as Instrument

In qualitative research, the credibility of the researcher is of paramount importance since the researcher is considered the main instrument of data collection and analysis (Patton, 1990). It is recommended that the researcher disclose any personal and professional information related to the topic under study as well as any funding received in the process (Patton, 1990). Regular reflection is also recommended to raise the researcher's awareness of their own bias and what might inhibit them from noting any observations (Russell & Kelly, 2002). The following paragraph will address the researcher's background concerning the topic under study.

The researcher completed a Bachelor of Arts in business administration and a Master of Arts in economics. Professionally, the researcher worked 7 years as an adult educator in private corporations before starting a master's in education. As the technological advancement changed the ways adults learn, the researcher became interested in exploring the intersection between adult education and technology which led her to researching the topic of this study. The researcher's experience as a practitioner in the facilitation and design of PD programs for adults may have introduced bias to the process or outcome of the study. One bias might be the assumption that the needs and preferences of online faculty members in HE would be the same as the needs of adult professionals in corporate companies. Another bias might be the belief that the organizational support provided at private corporations can be readily transferred to HE institutions. Throughout her education, the researcher was schooled in a face-to-face classroom environment. While the researcher always appreciated the live interaction with teachers and peers in the face-to-face environment, as a mother of two elementary school children, the researcher now values more the flexibility and convenience of the modern wired world. The researcher's personal preference for learning online might have been a source of bias as well.

The researcher was aware of these biases and made sure to keep an updated journal with notes that helped regular reflection on the study process and outcome.

Limitations

Confidentiality and privacy of participants were important components in conducting this study to promote the sharing of experiences openly and honestly during the in-depth, emergent interviews and sharing of documents. However, this is an assumption that poses limitations for this study. Likewise, it is also assumed that faculty members are positive about PD opportunities and are open to the possibility of enhancing them.

The limitations of this study were those inherent in qualitative research. One limitation of qualitative research is the inability to generalize the findings. The goal of qualitative research is to understand the phenomenon; the perspectives and experiences of the participants rather than generalize findings (Creswell, 2013). As such, the findings of this study are not to be applied to all faculty members across the board. The findings are confined to the university under study and are to be used to create a new understanding of the topic explored.

The limitation of the in-depth emerging interview technique used in the study is the accuracy of the information gathered. The extent to which the interviewees' answers reflect the reality of the phenomenon under study requires constant reflection (Morris, 2015). One way to mitigate this limitation is to endeavour to make the interviewees comfortable with the interviewer to encourage them to share the closest portrayal to the reality (Rubin & Rubin, 2012). While the researcher attempted to do that by following interviewing best practices outlined earlier, there remains a possibility that some of the participants' answers were not an accurate representation of their reality.

Ethical Considerations

Prior to the interviews, participants were sent a brief description of the study and its

purpose and a consent form to sign. The informed consent was approved by the research ethics board of the university under study. The informed consent advised the participants that their participation is voluntary, and they may withdraw at any time without any penalty. The researcher reminded participants of their right to withdraw at the beginning of every interview. The consent form also notified participants that the interviews will be recorded and transcribed and that there are no anticipated risks associated with participating in the study.

In terms of confidentiality, participants were notified that their names would not appear in any report that results from this study, although some quotations from the interviews might be used with their permission. Other specific data such as the courses they teach and the name of the university were not identified to maintain the confidentiality of all participants.

Chapter Summary

The qualitative approach selected for this study utilized emergent in-depth interviewing as the primary method of data generation concerning the professional learning needs and preferences of online faculty members for improving their practice through PD programs. The setting of the study was a midsized university in Ontario. Case studies of four participants were investigated. To select participants, purposeful sampling was applied which utilized the maximum variation technique. The interviews happened virtually through MS Teams. The data analysis followed an inductive coding technique which led to structuring the data into categories and themes.

The researcher made efforts to establish the trustworthiness of the study, utilizing strategies such as triangulation, transcription checking, and reflective commentary among others. The chapter ended with an outline of the study limitations and some ethical considerations.

CHAPTER FOUR: FINDINGS

The purpose of this research study was to explore the experiences of faculty members teaching at a medium-sized university who recently engaged in a form of PD, aimed at enhancing skills and practices in online teaching. Through analyzing faculty experiences with attending PD opportunities, the study aims to identify faculty development needs that are deemed necessary to transform teaching practice online. Based on the identified needs, the study presents some recommendations for improving faculty development programs.

My exploration was guided by the adult learning theories and the TPACK framework, and underpinned the following primary research question: How can the perceived development needs of faculty members teaching online inform the design of PD programs in HE institutions? The study also sought to address the following research sub-questions:

1. What are the perceived development needs of faculty members teaching online?
2. Which faculty development experience/aspect did faculty find most meaningful in transforming their online teaching practices?
3. How can HE institutions support faculty development for teaching online?

This chapter presents themes that emerged from the analysis of the data generated. The emergent interviews allowed participants to answer the questions in substantive ways and seek clarification where needed. The review of documents provided further insight into the practices and experiences of participants. The reflective journal enabled the researcher to identify connections between ideas and clarify beliefs and preconceptions.

Table 3 shows the list of categories and themes identified from the data. The remainder of the chapter will discuss the identified themes in detail, framed by the research questions where applicable.

Table 3*Description of Themes and Categories*

Themes	Categories
1. Needs: Faculty perceived PD was most effective and supportive of their learning needs when the learning experiences addressed pedagogical topics, were delivered in a variety of program formats using a consistent schedule and offered autonomous routes of learning plus one-on-one technological support.	<ul style="list-style-type: none"> – Topics for PD – Program format – Program regularity – Reassurance – Autonomy
2. Motivation & barriers: Faculty perceived their motivations to attend PD programs to include an opportunity for lifelong learning, gaining confidence in using technology, and problem-solving but also explained that schedule conflicts, program irrelevance, and the long duration of such PD programs were perceived as barriers.	<ul style="list-style-type: none"> – Motivation for teaching the first online course – Motivation to attend PD programs – Barriers to attending PD programs
3. Faculty persona: Faculty perceived that their self-concept, thoughts, behaviours, and emotions influence their development needs and can inform PD program design.	<ul style="list-style-type: none"> – Self-concept – Thoughts & beliefs – Actions & behaviours – Feelings & emotions
4. Best PD experiences: Faculty perceived the best PD experience to be reflective practice and professional learning communities, followed by research publishing and finally mentoring.	<ul style="list-style-type: none"> – Reflective practice – PLC – Research publishing – Mentoring
5. Institutional support: Faculty perceived the CTL support during the COVID 19 pandemic was adequate but support for sessional instructors could be enhanced.	<ul style="list-style-type: none"> – Role of centre for teaching and learning – Support for sessional instructors – Culture – Other suggestions

The following mini case reports were constructed as a result of data analysis. These mini-case reports provide a small snapshot of the research participants, including their position within the HE institution, the number of courses taught, details about their approach to teaching and learning, and their identified PD needs.

Mini Case Reports

Case 1: Julia

Julia is an assistant professor who has been teaching face-to-face for 11 years. She taught eight online courses both synchronously and asynchronously. She noted a considerable development between the online teaching strategies she used in the first course she taught online and her strategies today. The most striking difference Julia noted was in her improved ability to create a student community. She has always been eager to attend PD opportunities and considers herself a lifelong learner. She benefited from attending group PD workshops as well as mentoring. She prefers PD programs that offer flexibility because they enable her to manage her work responsibilities with her family commitments.

Case 2: Greg

Greg is a consummate associate professor with 25 years of experience teaching face-to-face. He taught online for 8 years, mostly asynchronously. Greg sees himself as an online course developer rather than a course instructor. He takes pride in the courses he develops and considers them “a work of art.” Reflection practice plays an important role in his development. His best PD opportunity was publishing research about teaching one of his online courses. He has an interest to explore specific PD topics such as dealing with students’ integrity online and online peer editing. He felt supported by the positive culture in his department.

Case 3: Kira

Kira is a sessional instructor with 10 years of experience teaching face-to-face courses and 2 years of experience teaching online. The fear of new technology has been a challenge for her, especially during the sudden shift to online courses which happened during the pandemic. She considers herself an informal learner. She learns best in professional learning communities where she can share and test new ideas. She prefers attending PD opportunities in the summer when she has enough time. She thinks HE institutions can support sessional instructors by providing an onboarding program and covering the costs of some PD opportunities.

Case 4: Scott

Scott is an associate professor with 10 years of experience teaching face-to-face and 5 years of experience teaching asynchronously online. He is most motivated by PD opportunities that help solve a current challenge he is dealing with in class. For him, long 3-day PD programs are difficult to fit into his schedule. Teaching online can feel stressful for him because it means “you are always on call.” He is not afraid to try new strategies online. He published research to test some features of his online course, which was a rewarding learning experience. He appreciates the older faculty in his department as they were adaptable and ready to teach with challenging new modes of pedagogy, which served as a good role model for him.

Theme 1: Faculty perceived PD was most effective and supportive of their learning needs when the learning experiences addressed pedagogical topics, were delivered in a variety of program formats using a consistent schedule and offered autonomous routes of learning plus one-on-one technological support.

The first theme that emerged from the data pertains to faculty professional learning needs. This theme is important because it helps address the first research sub-question. The data revealed what faculty members need in a PD program in terms of the topics discussed, program format,

and program regularity. The data also reflected a need for reassurance and autonomy. The paragraphs below will explain each category in more detail.

PD Topics

Participants indicated that the PD program topic is important because it may determine whether they will attend the program. Several topics interested the participants, most notably: (a) student engagement and motivation online, (b) best practices in online teaching, (c) building interactive activities, (d) dealing with students' integrity online, (e) helping students build strong academic relations online, (f) online peer editing, and (g) integrating open education resources into online teaching.

Topics that emerged from participants' answers were organized into three categories: pedagogical, managerial, or technological. Table 4 summarizes the topics found in each category. The categories of topics were based on the common roles assumed by online instructors, which can inform their professional development (Baran et al., 2011). Most of the topics mentioned were pedagogical topics followed by managerial and technological topics. Julia would like to learn how to navigate through the various online teaching tools: "I would love to learn what matters and what doesn't matter. There is so much to think about online: keeping them engaged, Padlets, breakout rooms, Q&A." Scott, on the other hand, mentioned that he would love to integrate open education resources into classes he teaches online: "There is a whole bunch of topics to learn on that like copyright and accessibility." Scott also mentioned that he would be interested to learn more about simplifying students' experiences when they log into classes: "We need to reduce the number of tools we require students to use that require unique logins. We need to work on our design so that it is not just accessible but easily accessible."

Table 4*PD Topics by category*

Pedagogical	Managerial	Technological
Student engagement online	Dealing with students' integrity online	Reducing the number of unique log-ins students need to access tools.
Best practices in online teaching	Integrating open education resources into online teaching	
Building interactive activities	Helping students build strong academic relations online	
Online peer editing	Finding the best time to open online forums for students' contributions.	
How to build an online sense of community		
Teaching innovation		
Linking learning theory to practice		

A couple of pedagogical topics emerged from the research published by the participants. For example, Greg published research about linking the experiential learning theory to the online course he designed. Julia published research about teaching innovation in her field of practice. One managerial topic emerged from the research conducted by Scott whereby he learned about the best time of the week to open online forums for students' contributions in his asynchronous course.

Program Format

With regards to program format, several dimensions came out in the results. The most commonly recognized dimension of a program format is online versus face to face. However, when designing PD programs, designers typically assess the learners' needs in terms of other dimensions such as the social context, the learning strategy, and the mode of communication (Shepherd, 2015). The following paragraph will explain these dimensions in preparation to clarify the study results found in each one.

The delivery channel can be online, face-to-face, or unmediated. Unmediated programs or components of a program can include projects and assignments that involve learning through experience and are not confined to the context of a delivery channel. The mode of communication can be synchronous (same time) or asynchronous (own time). In terms of the social context, the PD programs can be designed to involve individual learning, one-on-one, group, or community learning. Individual learning happens when the learners are totally on their own. One-to-one learning happens when the learner is accompanied by a mentor. Group learning happens in teams while community learning happens among networks or communities of practice. With regards to the learning strategy, it can be designed to include exposition, instruction, guided discovery, or exploration (Clark & Wittrock, 2000). Exposition refers to a one-way delivery of information while instruction refers to a more structured way of building knowledge and skills. Guided discovery puts the learner into situations whereby insights can be generated such as in the case of coaching, while exploration gives complete autonomy to the learners to decide what resources they want to access for learning. Table 5 summarizes these four dimensions of a PD program format.

The findings of this study revealed that faculty have a wide array of preferences when it comes to the delivery channel or the mode of communication. For example, Julia noted that she prefers synchronous programs over recorded webinars. In her opinion, recorded sessions get “de-prioritized” until she forgets about them. Greg did not have a preference for a particular format. He believed that the best program would be one that models the best practices while teaching them. Scott, on the other hand, prefers online programs; as he explained: “I would say online because if it's going to be a workshop about teaching with technology, I would just bring my laptop anyway so that I could experiment with it.”

With regards to social context, the findings of this study show that faculty members prefer learning in groups or communities. All the study participants were part of a learning community that was informally formed among peers to help them navigate the online teaching arena. Julia and Kira emphasized the necessity of including an interactive component with peers in a PD program, while Greg stated that he benefited from lots of conversations with peers. Julia expressed that both group and one-on-one learning contexts have advantages for her. While the group programs allow her to interact and learn from others, a one-on-one coach will help her ask personalized questions and get down to the “nitty-gritty.” Kira, on the other hand, preferred a group program on pedagogical topics that allows her to network with colleagues but leaned toward one-on-one support to resolve her IT challenges.

The most preferred learning strategies among faculty members were found to be guided discovery and exploration. Faculty were found to appreciate the autonomy that comes with both strategies. Kira indicated that she prefers informal learning ways to formal ones: “I am not interested in some dry online modules. I’d like that opportunity to meet up with people to problem solve and share.” Scott indicated that he benefits from a little bit of guidance but would

prefer to be given the freedom to choose the area of learning. Kira mentioned that it would be a good idea to have options of formats to pick what suits them. A research paper published by Greg showed the connection between an undergraduate course he designed and the experiential learning theory. The research highlighted how each step of the theory was applied in the course design in practice. The research served as an instructional scaffolding supporting Greg's deeper understanding of the course design process and the rationale behind it.

Table 5

Dimensions of Program Format

Dimension	Example
Delivery channel	Online/ face to face/ unmediated
Mode of communication	Synchronous/ Asynchronous
Social context	Individual/ one-on-one/ group/ community
Learning strategy	Exposition/ instruction/ guided discovery/ exploration

Program Regularity

In terms of the regularity of PD programs, all participants in the study need programs to be regular versus one-time-off. A summary of the preferred program regularity shared by the faculty members interviewed is presented in Table 6.

The findings indicate a universal need for professional development opportunities to be concentrated in the summer. For the study participants, summer seems to be a preferred season for PD. Most participants suggested adding other opportunities for PD in addition to the summer, apart from Kira. She suggested that summer may be the best time to offer training for sessional

instructors to ensure their ability to attend as they have more free time than during the school year.

Table 6

Preferred Regularity of PD Programs

Participant	Regularity preference
Julia	Twice a year (once in summer and once more in January)
Greg	An intensive program in August, followed by a get-together in November and a final get-together in April.
Kira	Multiple times stacked around summer
Scott	Monthly or by-monthly for short programs, and once every semester for long programs.

Reassurance

The vulnerability of online instructors was a recurring idea that emerged from the analysis of the interview transcripts as well as the reflective commentary. Kira highlighted that the overarching shift to online learning that happened during the COVID-19 pandemic was accompanied by fear of the unknown. Kira indicated that fear of new technology has been a big challenge for her and her peers. On the other hand, Julia described her experience of attending a group program saying, “I am shy in those spaces. I am not really a high asking questions kind of person. I might feel like can this question waste other people’s time?” Scott expressed a need for reassurance when he exclaimed “sometimes what faculty members need is someone to hold their hands to know that you are not alone with your computer.” Scott also emphasized the particular vulnerability of sessional instructors by saying, “when you are in a precarious position, you don’t

want to rock the boat. People encounter difficulties that they could talk about, but they don't want to be seen as incompetent or inept.”

Autonomy

Autonomy was a theme that emerged from the transcription of most interviews as well as from the reflective notes following each interview. For example, Kira suggested creating “a menu of online topics from which the instructors can choose to explore further.” Based on the selected topic, the instructors can then choose whether they would like to “complete an online module or reach out to a mentor to bounce off ideas with.” The idea of building layers of choices suggested by Kira indicates how autonomous faculty members are in choosing how to learn. Similarly, Scott suggested creating a list of experts in the different areas concerned with online education and making it available to faculty. This way, the faculty can decide whom they want to contact and when. Greg, on the other hand, highlighted that he received advice from colleagues and the centre of teaching and learning; however, he chose to take some advice but not all because he believes he does things very differently from others: “I value the conversation but I don't necessarily pick everything. I am conscious of my own pathway and that seems to work.” Julia's sense of autonomy appeared in her published paper about teaching her subject area during the COVID 19 pandemic. Julia's research reviewed new and innovative methods of teaching and encouraged researchers in her subject area to understand the new education realities in the field and reimagine their research tools and techniques.

Theme 2: Faculty perceived their motivations to attend PD programs to include an opportunity for lifelong learning, gaining confidence in using technology, and problem-

solving but also explained that schedule conflicts, program irrelevance, and the long duration of such PD programs were perceived as barriers.

The second theme that emerged from the data was about motivations and barriers. Under this theme, the following paragraphs explore the key categories which are motivations for teaching the first online course, motivations for attending PD programs, and barriers to attending PD programs.

Motivations for Teaching the First Online Course

When participants were asked about the motivations that spurred teaching their first online courses, the following answers emerged. Julia said, “I was brand new in my career. It was just something through word of mouth and conversations with the Dean and chair of the department and then I said yes, so I ended up teaching that.” Greg, on the other hand, made a conscious decision to teach his first online course: “I wanted as many students as possible to be able to take it regardless of the program they were in because it relates to any discipline. So, I knew it had to be offered online to fit into everyone’s schedule.” For Kira, the decision to teach online was mainly induced by the pandemic and for Scott, the course was already online, and changing it “was not an option.” Overall, online teaching did not seem to be a conscious choice for most of the participants. Most of the cases studied came to online teaching by chance or by necessity.

Motivation for Attending PD Programs

The participants were asked about what motivates them to attend one PD program but not the other. A summary of their motivations is listed in Table 7. While Julia was motivated by the concept of life-long learning, Kira was motivated by a sense of confidence around technology.

Table 7*Motivations to Attend PD Programs*

Participant	Motivations	Validating quotations
Julia	Striving for excellence and life-long learning	“PD is a way for me to learn and help master my practice. I am a life-long learner, and my biggest motivation is to strive for excellence”
Greg	Shortening the learning curve by avoiding others’ mistakes	“I always find that very helpful to me not to make the same mistakes.”
Kira	Gaining confidence in dealing with technology	“I have to look for strategies that are going to meet my students’ needs and knowing that we were pivoting to Teams, I had to find a way to adjust the syllabus. It was important to me to feel comfortable in working through this”
Scott	Solving current challenges faced in class	“I will not look for something broad. I will look for something that meets a pedagogical goal; something that is really tied to my reflection on how my current classes went”

Two participants (Greg and Scott) were found to be motivated by problem-solving. Notably, technological knowledge appears to be a learning motivation for the sessional instructor who particularly sought to feel confident with the use of technology during class. Growth and life-long learning came up as a concept that motivates some faculty members.

Barriers to Attending PD programs

Just like there were motivating factors for faculty to attend PD programs, analysis of the interviews and reflective journal data sources revealed that there were also some barriers that discouraged faculty members from attending PD programs. A summary of barriers is shown in Table 8. Not surprisingly, the sessional instructor contributed the largest number of barriers to attending PD programs. For sessional instructors, there was a lack of targeted programs. Even when those programs are available, they come at a cost or require the sessional instructor to take time off work to attend them. This requirement does not seem to be ideal for sessional instructors for whom a PD opportunity might mean a pay cut. Apart from sessional instructors, one faculty member highlighted monetary expenses as a potential barrier. However, in the case of that professor, it was mainly the unreasonable price of external programs offered outside the university that he tends to question. For faculty members, the key barriers found were the conflict of schedule as well as the relevancy of the program. Conflict of schedule seems to be a major barrier particularly for faculty members who have children.

Table 8*Barriers to Attend PD Programs*

Participant	Barriers	Validating quotations
Julia	<ul style="list-style-type: none"> - Conflict of schedule especially with family commitment - No recording available 	<p>“My kids were at home, so it was challenging. I found that I had to organize a lot of my work and my life around their schedule.”</p> <p>“I would register anyways, even if the timing wasn’t correct in the hopes that it would be pre-recorded and then sent to all the registrants.”</p>
Greg	<ul style="list-style-type: none"> - Irrelevancy of programs 	<p>“I probably want to see if a program is structured in a way that benefits me; if it was too general or too unrelated to liberal arts, humanities, or education”</p>
Kira	<ul style="list-style-type: none"> - Unavailability of tailored programs - Inability to take time off to attend programs (especially long ones) - Cost of some programs 	<p>“Staff development opportunities were very generic”</p> <p>“Sessional instructors have to rethink whether they can take time off work to do that, especially for a longer event.”</p> <p>“The opportunities are available to sessional instructors but at paid fees.”</p>
Scott	<ul style="list-style-type: none"> - Long programs difficult to fit into the schedule - Prohibitive cost for external PD programs 	<p>“I have to be quite frank. I don’t have time for a 3-day thing unless it’s really up my alley.”</p> <p>“If I think something has an exorbitant cost, and especially if it’s run by a large corporation, I’m not going to give Microsoft, for example, \$600 to learn about XYZ.”</p>

Theme 3: Faculty perceived that their self-concept, thoughts, behaviours, and emotions influence their development needs and can inform PD program design.

Another theme that emerged during the interview describes the faculty persona. This pertains to how the faculty viewed themselves, their thoughts and beliefs, their actions and behaviours, and their feelings and emotions. Perhaps the best way to illustrate the findings under that section is through an empathy map. Empathy maps can be used in qualitative analysis to arrange and make sense of the data collected. Their purpose is not to record every behaviour and emotion of the target but rather to identify with the research subjects through identifying behaviours and emotions that relate to the topic under study (Gibbons, 2018). Figure 1 presents an empathy map illustrating the faculty persona. The map shows the most notable quotations that summarize how the faculty members see themselves, think, behave, or feel.

The map shows four main quadrants: (a) self-concept, (b) thoughts and beliefs, (c) actions and behaviours, and (d) feelings and emotions. The self-concept quadrant shows how faculty see themselves. Many of the participants do not see themselves as experts in online teaching even when they have been teaching online for years. One participant saw himself as an online course developer versus an online facilitator. The thoughts and beliefs quadrant captures some of the ways faculty think about their online teaching profession. One of them described the requirement for teaching online as being “always on call.” Another highlighted the need to pay attention to the business side of online teaching. On reviewing an undergraduate website designed by one of the online faculty members, the website seemed well organized with a sleek finishing, several graphics and icons, and plenty of white space. It is clear a lot of thought has gone into the presentation of the website as well as the content, which explains why the instructor describes his work as “a piece of art.”

Figure 1*Empathy Map of Faculty Persona*

<p style="text-align: center;">Self Concept</p> <ul style="list-style-type: none"> - <i>"I am not an expert. I am just someone who did it before."</i> - <i>"I see myself as a course developer rather than a teacher."</i> - <i>"I am an informal learner."</i> - <i>"I am not the most experienced online teacher."</i> - <i>"I am self-taught."</i> 	<p style="text-align: center;">Thoughts & Beliefs</p> <ul style="list-style-type: none"> - <i>"Teaching online means you are always on call."</i> - <i>"The courses I design are like crafting a piece of art."</i> - <i>"In my first online course, I was left to my own devices to learn"</i> - <i>"Building a sense of community among students is more challenging online than face-to-face."</i> - <i>"Online teaching is not only about pedagogy. There is a business behind it, and it is important not to forget to pay attention to that"</i>
<p style="text-align: center;">Actions & Behaviours</p> <ul style="list-style-type: none"> - <i>"I immersed myself in the literature and formed a learning community with my colleagues."</i> - <i>"I receive advice from others, but I don't necessarily follow all of them."</i> - <i>"I take students' feedback very seriously."</i> - <i>"Reflective practice is very important to me."</i> - <i>"I sponsored a sessional instructor who was a gifted instructor to take a program"</i> 	<p style="text-align: center;">Feelings & Emotions</p> <ul style="list-style-type: none"> - <i>"I am surprised by my new role."</i> - <i>"I am proud of my creations."</i> - <i>"I am not afraid to try new things."</i> - <i>"I felt a lot of trepidation and nervousness about online teaching."</i> - <i>"I had no hesitation to teach online."</i> - <i>"I am shy in group trainings and tend not to ask questions."</i>

The action and behaviour quadrant in Figure 1 highlights what faculty members spend their time doing. The quadrant shows several activities such as researching, reflective thinking, establishing communities, receiving advice, and analyzing students' feedback, among others. One evidence that faculty members take students feedback seriously was shown in an undergraduate course website designed by Greg. Greg designed a weekly poll of students' opinions on the weekly material posted in the LMS. The ongoing feedback process he embedded into the weekly material of the online course ensures the course is always updated in line with students' preferences. The last quadrant presents how the faculty members feel. The feelings reported ranged from the positive feelings of courage and pride to the negative ones of fear and nervousness.

Theme 4: Faculty perceived the best PD experience to be reflective practice and professional learning communities, followed by research publishing and finally mentoring.

The participants were asked to describe a PD experience that was most transformative to their online teaching practices. The participants mentioned a few experiences, which are presented Table 9. There seems to be a unanimous agreement among the study participants regarding their most useful PD experience. The two most cited experiences were reflective practice and community, followed by research publishing.

All participants indicated their regular engagement in reflective practice and how they consider it one of the most fulfilling experiences in developing themselves. However, each of the participants seems to engage in different forms of reflective practice. For example, Julia indicated that she meets weekly with a group of colleagues to reflect on their practice: “It was a very reflective time to be really conscious of what happened, what we’re doing, and how we’re going to move forward.” Julia also mentioned that she recently started meditation, adding that “Being in a meditative state helps me think about my purpose and what I want my students to really get from their time with me.” Greg reflects constantly on the structure of the course. He checks students’ posts on the forum weekly “to see how students are conceptualizing new material.” Greg also reflects on the course evaluation: “You want to get a sense of how it is going with the students, and you want to report back to them on how you are going to improve on those things that weren’t going well.” For Kira, self-reflection is an “ongoing process” that she engages in after every session. Kira further added, “the self-reflection piece was critical and is something that I model for my students. I would say to them after every session what worked well, what didn’t work well, and what do I need to adjust for next time.”

Table 9*Most Transformative PD Experiences*

Participant	PD experiences
Julia	Reflective practice, research publishing, mentoring, and community
Greg	Reflective practice, research publishing, and community
Kira	Reflective practice, mentoring, and community
Scott	Reflective practice, research publishing, and community

Scott follows a similar reflection model with his classes: “I always try and have feedback from my students. I look for a little bit of a pattern. You do not want to be too late and have three classes go by without responding to something.”

Except for the sessional instructor, all participants highlighted research publishing as a transforming learning experience. Julia published joint research about teaching during COVID-19 in the university’s journal; she noted: “The research components, the writing meetings, and our collective ideas were all opportunities for me to be very introspective about my own experience.” Greg published research specifically about the online course he is teaching, saying:

I wrote a peer-reviewed paper that includes the theoretical components and the backing of the experiential learning theory. It kind of really formalized and brought to the fore what I was doing and I shared it with others as part of my scholarship.

As for Scott, he researched student engagement in the LMS during different times of the day.

According to Scott, the research informed him that “single people liked to work on class Monday

mornings while people with duties of care liked to work Saturday and Sunday mornings.” As a result, Scott adjusted the opening hour of his asynchronous course based on his research findings to accommodate adult students who prefer to work on the weekend. The results were satisfying to Scott; he explained: “What happened is that we had a good amount of engagement in those classes early on, which is key.”

Learning communities came as one of the top PD experiences cited by faculty. Kira stated, “I was part of a PLC with three other instructors. We met out regularly to figure out how to deliver our courses in effective ways.” It seems that a learning community helped the faculty to navigate their way to online teaching. Kira added, “We would say go away and try this for next week, and come back and show us. Then, we would interact figuring out the best way to make it work.” Kira described her PLC as “invaluable.” Julia’s experience was similar; she said: “Our team was very close. We met weekly and that was a very important reflective time for us to discuss our practice.” Greg on the other hand remarked that his best PD experience besides research publishing was “lots of informal conversations with colleagues about what works and what doesn’t.” Similarly, Scott explained that a senior online faculty facilitated an online teaching group which he was part of: “We started to have that discussion about when are you opening your class? What are you saying to your students around expectations?” He further emphasized the importance of a community by saying, “there needs to be that semblance of a community and it could be just a duo of people bouncing ideas back and forth together in terms of teaching online.”

Some faculty members experienced mentoring and reported positive experiences with it. Julia, for example, mentioned that she was mentored by a senior faculty member: “I got to ask him targeted questions. We met in person three times and then afterward it was just email.” For

Kira, mentoring happened as part of her meetings with her professional learning community. For Scott, mentoring other online instructors was a valuable experience; he stated: “We do work together quite well, kind of a community of practice.” Greg on the other hand had no experience with mentoring; he noted: “I don’t think I have been mentored for online education, but I provided advice to other people who took over my course that I developed online. I wouldn’t call it mentorship, but advice-giving.”

Theme 5: Faculty perceived the CTL support during the COVID 19 pandemic was adequate but support for sessional instructors could be enhanced

The participants were asked about how their institution can support their online teaching. The participants suggested a number of institutional interventions that involved the CTL’s role, the culture, support to sessional instructors, and other miscellaneous suggestions. The paragraphs below discuss the institutional interventions suggested in detail.

The Role of the CTL

A majority of the participants agreed that the CTL handled the COVID-19 crisis effectively. Kira said, “They worked quickly and gave really specific information about not being on Zoom. Everyone had to pivot to Teams. So, on a scale from 1 to 10, I would give them 7.” Greg echoed the same opinion when he stated,

From my perspective as an end-user, I think the university handled everything through 2020 very well and I was very happy. Communication was regular and clear. I did not sense panic though there might have been panic behind the scene.

Greg also mentioned that the centre is short in staff, so their reaction to the COVID-19 crisis was satisfactory given that challenge. Scott expressed a positive stance on the centre in general: “They had some really nice roundtables. They also have some technical workshops which I did early on in my career, and then some are pedagogical on the strategy.”

However, apart from the COVID-19 crisis, most of the participants seem to agree that the role of the CTL tends to be reactive rather than proactive. Greg stated, “They provide some support but they are behind the scenes.” Kira reiterated a similar viewpoint when she said, “I know they provide support, but they are just not front and centre. We’re sort of learning on our own.” Kira added that, “last summer, when I was getting ready for the total online teaching, I asked if they could look at my course site on the LMS and give me feedback, but I never heard back from them.” Kira stressed that she would like to see them more responsive to requests. Scott disagreed with Kira’s view, saying “I think they do a great job reaching out whether they are heard or not.”

Culture

The culture of the institution and how it impacts the success of PD opportunities was viewed differently by the participants. On a positive note, Julia focused on culture as exhibited in her relationship with her peers in the department, saying “The culture has helped 100% because of the sense of community; because people are willing to strive to do well for their students.” Julia added: “I do sense there is a level of flexibility among faculty. No one said I can’t do it. Everyone was like let’s figure out how to do it because it is happening and that was awesome.” Scott appreciated that the older faculty in his department were very adaptable, saying, “they had an interest in teaching in challenging different modes of pedagogy. Their readiness to explore and challenge themselves served as a good role model for younger faculty.” Greg emphasized the positive aspect of a sense of camaraderie by saying, “I felt very supported by the people I worked with. I never felt I was on my own.” Kira thought she felt supported by her colleagues as well especially the IT department.

On a different note, Greg drew attention to a sense of skepticism about online teaching in general that he felt in his department, but he thought was diminishing. Scott agreed with Greg that some people do not value online education, saying:

It's a traditional way of thinking I guess, that online is skeptical. I remember when I was in graduate school that people warned me that online journals are not as rigorous as print journals, so there is a holdover from that time.

Greg also highlighted that the overuse of virtual interaction can negatively impact the culture:

“We take a lot of our cues from one another in terms of our bodily interchanges, facial expression, and being in the same room, and that is absent online and can result in a loss of the cultural connection.”

Support for Sessional Instructors

Most of the participants had suggestions for ways to support sessional instructors. Greg, for example, highlighted the need to have a program on how to develop online courses, especially for new faculty and sessional instructors. This program will be developed once and consumed several times. Greg expressed awareness of the lack of accessibility of PD programs to sessional instructors and their need to carefully think about the time they take off from work to attend a PD program; he explained: “As a faculty, I may be as busy as they are, but I am not worried about my next paycheck.” Greg suggested a grant system to subsidize the cost of programs for sessional instructors: “It will benefit the University. In the end, it will contribute to the betterment of their teaching.” Kira, who is a sessional instructor, shared a similar view to Greg's, highlighting that the university should cover the costs of PD programs as well as the cost of technological devices used in teaching, saying that “When you teach online from home, the default is your technology device because the University does not provide it the way school

boards, for example, provide Chromebooks.” Kira also thinks there should be an onboarding program for new faculty and sessional instructors. Scott agrees with her, highlighting the importance of orientation for new faculty and instructors:

We teach the way we've been taught, and so I did. I never took an online class as a student, and so it was only until I saw what an asynchronous class was that I realized, hey, I can do that.

According to Scott, the orientation could include success stories of other faculty members that new faculty and instructors can learn from; for example, he noted that “one faculty member published his lesson plans in a Pressbook that are open and accessible for others instead of having lecture notes that are locked down somewhere.”

More specifically, Kira thinks there needs to be a dedicated site for sessional instructors: “For the last 10 years, I have been asking for a sessional instructors’ site. As a new instructor, where can you go to find out information?” Kira happily reported that “finally the University approved the idea of having a public site on the LMS dedicated for new instructors” and that’s being developed this year. Kira also mentioned that sessional instructors are not given access to the LMS or a university email until 2 weeks before the course starts: “You need time to plan your course and set up your site. That is something that the department has tried very hard to change, but the university will not change.” Kira attributes this resistance to a “lack of systems and communication.”

Other Suggestions

The faculty members had some other general suggestions for their institution that they believe are important to consider for enhancing the PD of online faculty. Julia, for example, suggests that the university encourage scholarship in online teaching:

I think there should be more scholarship on online teaching presented to faculty so that they can have evidence-based research on how these modes of learning are valuable and equitable. That might be the most helpful way to incentivize faculty members.

She also thinks there should be more reward for excellence in online teaching as she believes online teaching can involve as much work, “if not more than, the work involved in other modes of teaching.” Kira advocated for a need assessment of faculty members and online instructors at the university level.

Greg drew attention to the need to upgrade the current LMS: “I know the University is doing this right now. They are going through a review of the LMS and making decisions about whether to purchase a new LMS or upgrade the current one to the latest version. I think that’s really important.” Greg believes that the University has not invested as much as it should in promoting online education and bolstering it to the next level; he noted:

I have a sense that everything will return to face to face even though it might have worked as well or even better online. It is too early to tell but I guess I haven’t seen that incentive from the University to say if it really worked well during this year, we had to be online and continue doing it online.

Greg thought there was an opportunity to leverage what has already been done in a stressful year to transition to more balanced offerings between face-to-face and online. According to him, this kind of “strategic thinking” was missing. Kira echoed his same point of view when she stated, “In moving forward, we have gone through one full year of online and I don’t really have a sense of them asking now that you’ve done it, how can we support you better?” She summarized the situation by saying, “I guess the University provided some steps in supporting professional learning, but they didn’t actually have a plan for professional learning.”

According to Scott, “the message to our sessional instructors is not supportive enough, not just the programming, but letting people know that if you're working online, we are going to support you in a community of practice.” Scott also highlighted his concerns about the technological capacity of the LMS saying, “at normal times at the end of semester the LMS would often freeze for everybody.” He also advocates for streamlining the technological tools used across the University since at the moment people across the department are using three different video-conferencing tools when only one of them would have sufficed.

Chapter Summary

The purpose of this chapter was to present the findings that came up during the interviews and cluster them into themes. The first theme was about faculty professional learning needs. Faculty professional learning needs in a PD program were found to vary widely in terms of program format, regularity, and the topics discussed. The findings also revealed the motivations to attend PD programs, which included personal growth, problem-solving, shortening the learning curve, and feeling confident with technology. The results showed that factors that might inhibit faculty from attending PD programs are conflict of schedule, cost, or irrelevancy of programs.

The findings of the study indicated some characteristics of the faculty persona which included their self-concept, thinking, feeling, and behaviour. The findings also revealed the best PD experience for faculty members, which came out to be professional communities, reflective practice, and research publishing. The study discovered some institutional strategies that can support the PD of online faculty, The top institutional strategies that were revealed in the study include expanding the role of the CTL, designing an onboarding program for new faculty and sessional instructors, and streamlining the use of technological tools.

CHAPTER FIVE: CONCLUSIONS

The purpose of this study was to explore the professional development (PD) needs of faculty members teaching online. The aim is to enhance the quality of PD programs and thereby enhance the quality of online teaching practices. A multiple case study method was applied using in-depth emergent interviews with four online faculty to address the research questions. This chapter presents a discussion of the research findings as they relate to each research question. The remainder of the chapter presents implications and recommendations for practice, along with future research, the limitations of the study, and a conclusion.

Perceived Development Needs of Faculty Teaching Online

The study's first research sub-question was: *What are the perceived development needs of faculty members teaching online?* The findings revealed that when it comes to PD programs, online faculty members have some preferences about PD topics, program format, and program regularity. The following paragraphs discuss these preferences and interpret what they mean.

In terms of PD topics, the findings show that the study participants need support mostly with pedagogical topics followed by managerial and technological topics. The findings are consistent with the literature whereby it was found that faculty members are less experienced in pedagogical topics than any other category of topics (Ching et al., 2015). This signifies that a focus on developing programs on pedagogical strategies is needed and will probably be widely received by faculty members who teach online. Some examples of pedagogical topics that emerged from the study include student engagement online, best practices in online teaching, and how to build an online sense of community.

With regards to program format, the findings revealed that participants did not have a particular preference when it comes to the delivery channel whether online, face-to-face, or

unmediated. One faculty member mentioned that although she prefers to teach synchronously, her schedule typically precludes this format. This is in line with other research findings in the literature whereby many faculty members were found to prefer synchronous but ended up opting for asynchronous programs (Dailey-Hebert et al., 2014). The fact that faculty members did not generally express a particular way of learning delivery as the most preferred gives flexibility to program designers to offer a variety of delivery formats from which faculty may choose.

The findings of this study also revealed that by and large, faculty members prefer learning in groups or communities and to be in control of the learning strategy. It was found that when there is a lack of an opportunity to learn in a group, the faculty members took the initiative to create their own learning communities. While their responses to the interviews revealed that they benefit from a little bit of guidance especially when it comes to working with technology, faculty for the most part prefer to be given the freedom to choose their strategy for personal learning. This was reflected directly in their responses as well as indirectly through their choice of research as a method to learn about their teaching practice.

In terms of the regularity of PD programs, all participants in the study need regular versus on-off programs. One of the participants expressed that he was not able to recall the workshops he attended because they were short and scant. This is consistent with the findings of Vail and Testori (2012), whereby PD programs for online faculty were found to be occasional and sporadic, despite the regular faculty needs for support. Participants in this study suggested that summer was the best time for a condensed start of a PD program because of the busy schedule during the academic year and because August is the time faculty members usually revisit their career goals. Summer learning was of particular importance to sessional instructors because they cannot afford to cut time off their work to attend a PD program. Based on this finding, it is

highly recommended that PD programs be developed with this time frame in mind if they are to maximize faculty attendance and to address inequity in providing all faculty (even sessional instructors) with access to professional learning.

In terms of participants' motivations to attend PD programs, two participants (Greg and Scott) were found to be motivated by problem-solving. This suggests that the best way to fulfill their needs is to design PD programs that are closely tied to the immediate challenges with which they are currently dealing. This is consistent with the characteristics of adult learners who learn primarily to solve specific problems (Knowles, 1989). For one participant, raising her confidence level with using technology during her teaching of classes was her key motivation to attend PD programs. For another participant, it was the concept of lifelong learning that drives her to attend PD programs. What is noteworthy from the findings is that the motivations of all participants were intrinsic rather than extrinsic. This is in line with previous findings that faculty members are typically intrinsically motivated despite the administration teams' attempts to motivate them extrinsically (Meyer, 2012)

One of the needs identified is the need for autonomy. The emphasis on having options of PD topics, multiple program formats, and various experts to consult indicates the preference of faculty members in this study for having autonomy in directing their learning. This is also in line with the self-directed learning theory of adults which stipulates that adults like to maintain control of their learning. Knowledge workers, in general, tend to be autonomous in their work since they own their means of production which is their knowledge in the case of HE faculty (Davenport, 2005). In the case of faculty members, it appears that they carry forward their work autonomy to their learning endeavors. One faculty member highlighted that he does not necessarily follow all the recommendations of the CTL since he has a different vision of

implementing online strategies. This could be interpreted as either a clear sign of autonomy or a sign of faculty resistance to change which is well documented in the literature (Hale, 2012; Mathews, 2017).

In terms of barriers to attending PD programs, the key barriers found were the conflict of schedule as well as the relevancy of the program to their own professional needs. These barriers can be interpreted as faculty needs for a suitable PD schedule and relevance. These findings are consistent with the theory of adult learning which characterizes adults as busy learners who juggle multiple roles and therefore think carefully before committing to attending a learning opportunity (Merriam, 2017). Based on this finding, designers should consider adding more asynchronous components to a PD program. If synchronous components must be included, then making the recording available to the faculty members afterward would be a good idea. Furthermore, designers should be wary of long programs that are difficult to fit in the faculty work schedule or can disrupt faculty workflow for a long time, as these types of programs were not welcomed among the participants.

One faculty member did not seem particularly selective about the relevance of the programs she chooses. She highlighted that she signs up for any program available because “there is not enough of them” Compared to the rest of the faculty members interviewed, this anomaly could be attributed to : (a) the scarcity of programs as the faculty member perceived it, or (b) the enthusiasm of this particular faculty member to learn, especially that she is at an early stage of her career, or (c) a combination of both (a) and (b).

It is worth noting how the faculty professional learning needs seem to change with the seniority of faculty. While the advanced beginner highlighted the need for onboarding, the competent online faculty members focused on the need for growth and continuous expansion of

knowledge, and the proficient faculty emphasized the need to learn very specific topics of interest. This indicates that the development domains (as described by Benner, 2009) could be fully addressed by providing professional development opportunities that start broad to cover foundational knowledge, expand at the mid-level stage to encompass a wider base of applications, then narrow down at a later stage as the faculty level of proficiency increases. This may be taken into consideration when adopting a differentiated model to developing PD programs.

Meaningful Faculty Development Experiences

The second sub research question explored: *Which faculty development experience/aspect did faculty members find most meaningful in transforming their online teaching practices?* For most of the participants, research publishing was reported as a favourite way to improve teaching practices. Some participants published research about the theoretical framework backing up their course design, while others published research to survey the preferences of their students on different course design features. In both cases, for the faculty members, research publishing seems to be a worthwhile development instrument that reinforces their teaching practices while adding to their scholarship. It is considered of tangible benefit that builds their careers. This suggests that perhaps an effective PD program would include a component whereby the learners are given the opportunity to publish a paper, whether individually or collectively, that conceptualizes their key learnings at the end of the program. This closely mirrors consensus from the participatory action researchers (Stake, 1995; Stringer, 2007) who suggest that the final step of the participatory action research project – sharing, either through presentations, reports, or other publications – is an important part of acting on reflection and findings of the research. Gabay and Voyles (2020) further suggest that providing opportunities to publish those findings

and contribute to learning in the field supports engagement in the PD process to change and improve teaching practice for HE faculty.

Learning communities were one of the best PD experiences cited by faculty. None of the learning communities were organized by the university. These were rather informal gatherings initiated by the faculty members and their peers. It seems that every faculty member defined community differently. Some defined it as a network among peers teaching the same course. Others defined it widely as a network among peers of the same department or the university at large. For one faculty member, the number of participants in a community did not matter. For him, a network could be initiated by just two members who regularly bounce ideas off each other. For another faculty member, the ease and flexibility of meeting online can afford online instructors a viable way to form a community that extends across North America. The preference for connecting with others through learning communities is in line with the findings of other studies found in the literature (Davis, 2013; Mohr & Shelton, 2017).

Mentoring was mentioned by only one faculty member as one of the most meaningful PD experiences. The participant mentioned that mentoring allowed her to ask questions specific to her situations which were not always possible in group programs. The rest of the participants either experienced a group form of mentoring through attending workshops facilitated by senior online faculty or did not experience mentoring for online teaching at all. Although this finding is not commonly found in literature as a best practice, Hundey et al. (2020) suggest that formalizing the mentoring relations through structured mentoring programs supports professional learning. This will help avoid the challenges associated with unstructured mentoring which include inconsistent communication between the mentor and mentee and low participation rates

(Hundey et al., 2020). Perhaps in this study, structured mentoring was an underdeveloped PD strategy that needs to be considered by the HE institution.

A closer look at the top PD experiences mentioned by faculty members reveals that none of them were formal workshops. The three top experiences—namely reflective practice, research publishing, and communities—are informal ways of learning that place much of the learning in the hand of the learner. In each of these learning experiences, the learners pursued a tailored approach that focused on their particular inquiries and seeks feedback in the process. As one faculty member stated, “I prefer informal learning to formal because it allows me to engage with others and think about my own challenges.” The findings suggest that she is not the only one among the study participants who preferred informal learning. This aligns with the best practices of PD programs found in the literature in which there is a shift happening from the traditional event-based workshops to informal ways of learning with and through others (Luo et al., 2020; Steinert et al., 2016).

Higher Education Institution Faculty Support for Teaching Online

The study’s third sub research question attempted to explain: *How can HE institutions support faculty development for teaching online?* The participants were asked about ways in which HE institutions can support their online teaching development. A closer look at the participants’ answers reveals that the nature of interventions suggested was either organizational, developmental, financial, technological, or social. To interpret these results in light of the above research question, the findings were synthesized and summarized in Table 10, which shows that most interventions suggested by the study participants fall under the organizational, developmental, and financial categories respectively. The following paragraphs will interpret the findings in these three main categories.

With regard to organizational interventions, the most notable suggestion relates to the CTL. While all participants agreed that the CTL did a good job managing the transfer to online learning during the COVID-19 crisis, most of the participants agreed that the role of the centre can be extended beyond workshop design to leading the end-to-end process of PD at all levels. The participants, however, predicted that this is not going to happen without the buy-in of the administrators and the recruitment of new staff for the centre. This is aligned with the findings from the literature whereby the role of the CTLs was found to be contingent on leadership and administrative support (Haras et al., 2017). A couple of participants highlighted that the centre is doing more than what others are aware of, which perhaps suggests the need for a proactive approach to promoting the centre's initiatives to the university community.

Another organizational intervention has to do with thinking strategically about online education. Although online education has been part of the institutional strategy, the participants sensed a lack of interest at the institutional level to leverage the knowledge gained during the COVID-19 lockdown and use it to inform the future mix of course offerings between online and face-to-face. There is a feeling among participants that everything will return to the pre-COVID period, without paying enough attention to the lessons learned from a whole year of running fully online courses across the university. To some of the participants, this is a missed opportunity that has the potential to propel the university's course offerings into new innovative levels. The participants also remarked that encouraging scholarship in online teaching should be part of the university's strategy. To many participants, this is one of the best ways to motivate faculty members.

Table 10*Institutional Interventions*

Category	Intervention
Organizational	<ul style="list-style-type: none"> – Expand the role of the centre for teaching and learning – Think strategically about the future of online education – Encourage scholarship in online teaching
Technological	<ul style="list-style-type: none"> – Update the LMS – Streamline the technological tools used across the University
Financial	<ul style="list-style-type: none"> – Cover the cost of technological devices used in teaching – Offer grants to sessional instructors – Increase investment in online learning – Allocate more budget to training online instructors
Developmental	<ul style="list-style-type: none"> – Carry out a need assessment at the university level – Enhance programs at the pedagogy level – Develop orientation for new faculty and sessional instructors – Create an award for excellence in online teaching
Social	<ul style="list-style-type: none"> – Develop a community of practice for online teaching – Create a dedicated website for all sessional instructors

With regard to the developmental interventions, the study participants identified an initiative at different stages of implementing faculty PD programs. For example, at the analysis phase, the participants identified a need for a systematic assessment of faculty needs carried out at the university level. Without such a centralized assessment, the efforts exerted to develop online faculty may continue to be broad and untargeted. At the content development phase, the

participants agreed that the focus should be on developing resources that support the pedagogical training of online instructors, rather than the technological one. This is consistent with the TPACK framework which highlights the importance of pedagogical knowledge along with technological and content knowledge for effective online instruction. At the implementation stage, the study participants advocated for implementing an onboarding program for new faculty members which can orient them in their new roles and set the right expectations. At the evaluation stage, the participants suggested the creation of an award for excellence in online teaching to raise faculty motivation and reward exceptional contributions.

A sizeable part of the initiatives suggested were financial interventions. The participants suggested some tactical interventions such as offering grants to sessional instructors to cover their PD costs. One participant suggested that the university provide sessional instructors with laptops instead of using their own devices. Other financial interventions were more strategic such as allocating a bigger share of the budget to training online instructors, a suggestion which might not be easy to implement given the current budget restrictions with which HE institutions deal. The struggle with budgeting enough for faculty development programs is in line with the literature and became tougher after the COVID-19 pandemic (Baker, 2020). Another strategic financial intervention was to increase the university's investment in online education as a whole and expand its reach to international students. This recommendation emphasized growing the business of online education which in turn would promote the status of online instructors hence the resources available for them.

Informing Professional Development through Faculty Need

The study's primary research question asked: How can the needs of faculty members teaching online inform professional development programs in higher education? Table 11

presents how the professional learning needs of faculty members identified in the study can translate into some program design implications.

One of the needs identified in this study was the need for autonomy. In order to fulfill this need, instructional designers of PD programs ought to provide learning choices in terms of topics, program format, or resources available. To preserve autonomy, an exploration learning strategy may be the right choice to use in faculty development programs to allow faculty full control over their learning. For example, if faculty are in need to learn a new technical tool to facilitate a session, an exploration strategy may allow faculty plenty of chance to run, test, and debug the tool several times before they can apply it to their classes. This can be contrasted to an instructional strategy characterized by show-and-tell whereby the learner's autonomy is missing.

As adult learners, faculty members are typically busy with professional and personal commitments and therefore would seek learning opportunities that align with their hectic schedules. According to the results of this study, it is recommended that instructional designers design an intensive component of a PD program to be delivered in the summer when most faculty members are ready to absorb and engage with new learning. The program can then have other supplementary components to be delivered in subsequent semesters. According to the faculty interviewed in this study, apart from the intensive summer component, the supplementary segments should not be "long." A long segment is one that was defined by the study participants to exceed half a day in duration. Furthermore, program components are best if they are not disruptive to the workflow but rather integrated with it.

Table 11*Translating Faculty Needs Into Program Design*

Faculty needs	Design implications
Autonomy	<ul style="list-style-type: none"> – Provide learning choices – Adopt a learning strategy of exploration
Suitable schedule	<ul style="list-style-type: none"> – Deliver key components in summer, with follow-up sessions in subsequent semesters. – Ensure duration is not long or disruptive to work-flow
Relevance	<ul style="list-style-type: none"> – Ensure program content solve real-life problems for the participants
Pedagogical knowledge	<ul style="list-style-type: none"> – Focus on pedagogical strategies (e.g. how to deliver engaging sessions with Teams versus how to use Teams)
Learning with others	<ul style="list-style-type: none"> – Create communities of practice and opportunities to network
Scholarship advancement	<ul style="list-style-type: none"> – Integrate research publishing as an activity in PD programs
Reassurance	<ul style="list-style-type: none"> – Involve faculty in online education strategy and program design

For example, instead of scheduling traditional learning events such as workshops and seminars, a program component can be an online platform featuring a community of peers and experts in the various domains of online teaching. The platform can be available at the fingertip of faculty members any time they want to post an inquiry or find an answer. This can save time, minimize schedule interruption, and provide faculty members with targeted answers to their queries.

One of the needs that came up in this study is the need to learn with and among others. The faculty members were found to form their own networks and learning communities when no alternative exists. That is a cue for instructional designers to incorporate social learning such as communities of practices as an integral component in PD programs. Similarly, the faculty members' answers consistently revealed their need to advance their scholarship. Learning designers could take this opportunity and integrate it into the design of PD programs. For example, a PD program could culminate with a task that requires participants to write a paper, individually or jointly, about one of the topics discussed during the program.

The need for reassurance appeared during the interviews when faculty members expressed fear or vulnerability. The fear became vivid especially during the COVID-19 pandemic and could be regarded as a fear of change fueled by the uncertainty of outcomes. One way to mitigate this fear is to involve faculty members in the creation of the university strategy for online education. The more faculty members are involved in the institutional strategy, the less likely they are to fear and resist its implementation. Better yet is to empower faculty members by involving them in the design and implementation of faculty development programs. This could happen by capturing the perspectives of faculty in the design process through tools such as empathy maps and stakeholder analysis. It could also happen through the active involvement of faculty in content creation or the recruitment of senior faculty members to act as guides and mentors in one or more components of a PD program.

Implications

The study findings have implications for program designers as well as HE institutions. As far as designers are concerned, the previous section addressing the main research question highlighted a number of design implications derived from the study findings. These

considerations are important for designers because they reflect the needs and preferences of the learners and can therefore assist in designing targeted programs. More importantly, the study findings provided an empathy map that digs further into the faculty persona highlighting their self-concept, thinking and beliefs, feelings, emotions, and habits. Sound program design hinges upon a deep understanding of the learners. The empathy map created in this study can catalyze this understanding, which then can be used to make inferences about how to best serve the faculty members. For example, in creating an online module, designers can use input from the empathy map to create an online persona that resembles the faculty's persona. This can strengthen the learner's identification with the created character, hence the learning content. Furthermore, if through the empathy map designers discovered, for example, that the learners are not afraid to try new things, this might be a valuable cue for designers to be more liberal with incorporating experimental activities in the program curriculum. The opposite would be true with an empathy map that indicates to designers that learners are highly cautious or risk-averse.

It is worth noting that it might be challenging for designers to act on some of the design implications outlined in this study. For example, one of the design implications is to focus on pedagogical rather than technological topics. This might not be readily achievable at the university level since pedagogical objectives vary widely among faculty and would require a tailored approach that might not be handy for designers to address. Different factors contribute to the variation in pedagogical objectives such as the field of study. The pedagogical objectives of teaching an online history course, for instance, would be different from those of teaching mathematical and scientific disciplines. As such, while an overall focus on pedagogical content is recommended, caution should be taken that implementing this among one department may prove less challenging than attempting it at the university level.

The study findings have some implications for HE institutions. The study produced a number of institutional interventions that faculty members believe are necessary to support PD programs. These interventions are important because they: (a) reiterate the role of institutions in the enhancement of PD programs found in the literature (Steinert et al., 2016); (b) substantiate the claim that PD programs are complex, and their success depends on more than just sound program design (Feixas & Zellweger, 2010); and (c) are generated by faculty members themselves rather than by the administration team. Among the multiple interventions suggested in this study, it is expected that the organizational interventions would be the most challenging to implement. This is because they involve an overarching change in culture, which takes time, effort, and an aptitude for change management.

Perhaps the most notable institutional intervention is the creation of learning communities among online instructors. In this study, learning communities came out as one of the most preferable ways faculty learn. In the wake of the COVID-19 pandemic, global connections happened in ways that were not previously conceivable to us. As such, HE institutions ought to build upon these opportunities and encourage the creation of professional networks not only among faculty members in one department but among online instructors globally.

One of the observations pointed that faculty members who teach the same online course over many years, tend to gain proficiency quicker than if they were assigned to teach many courses. In the case of the faculty members in this study, this happened because they had a chance to experiment with different course components, receive feedback and improve on both course design and delivery techniques. This ongoing enhancement helped finetune faculty members' craft and raised their confidence in their practice. It might be useful for HE institutions

to adopt a strategy of assigning the same courses to an instructor, especially novice instructors in their early years of online teaching, to create opportunities for them to evolve their courses and expedite their learning.

Recommendations

Based on the findings of this study, HE institutions should engage in a universal approach to PD that promotes online teaching expertise in faculty and strategically addresses faculty professional learning needs and their diversity. While both formal and informal learnings are important for faculty development, informal learning such as communities of practice and mentoring, are preferred methods of learning by many faculty members and should be given more attention. Developing structured mentoring programs especially should be prioritized since it is a strategy that seems to have been under-utilized in the past. Formal programs that cover foundational knowledge would be most suited for novice and beginners, while informal learning programs would be recommended for competent faculty members and beyond.

Apart from the level of competency, the role a faculty member plays and with which they most identify is expected to impact PD program differentiation. In this study, some faculty members reported seeing themselves as course developers rather than course facilitators. As the role of the designer versus the facilitator is distinctively different in the online environment, it is expected that more of the online faculty members will align themselves with one role versus the other. Perhaps professors who are more introverts will acclimate themselves to the role of the designer while their extrovert counterparts will grow more attuned to facilitation. The different strengths and personal inclinations of faculty members can ultimately draw them closer to one role than the other. As one faculty member stated: “facilitating a seminar is like performing on stage. If you have to do it weekly for 12 weeks, it becomes stressful.” As such, it is

recommended that newly developed PD programs speak to these two different niches of online professors and nourish their inclinations and chosen focus. It might even be useful to categorize online faculty into two distinct specializations: online course developers and online facilitators. This can capitalize on the strengths of each camp, ensure online faculty members are placed where they belong, and improve the overall quality of online courses.

Another key recommendation is apart from developing PD programs, the CTL should consider making a greater effort to promote these programs. Program developers can be doing a good job developing learning solutions but lack the means of promoting their work. The truth is without intentional marketing efforts, the work of the centre can be overshadowed, and its role can be underestimated. This study indicated that some instructors may not be aware of all initiatives carried out by the CTL. A well-crafted marketing plan is recommended to raise awareness of the role of the centre and is likely to improve engagement. Similarly, marketing strategies should also be utilized to promote individual PD programs to faculty members. For example, as one faculty member stated, “I read the title first. I would attend a program because the title interests me.” This suggests that choosing an attractive title for a program has the potential to attract faculty attention. A compelling message also needs to be communicated to appeal to faculty and arouse their interest in a program. One faculty member remarked, “I would attend a program if it is the only time that it’s offered, so I’d better be there.” This suggests that a marketing message of scarcity can inject an element of urgency to take action and raise faculty attendance of PD programs.

Future Areas of Research

First, in order to identify the requirements of faculty members in PD programs, this study utilized a cross-sectional approach of online instructors in a medium-size university to

understand their diversified PD needs. There was evidence in the findings that the developmental needs of the faculty members change over time. Some participants indicated a substantial difference between how they taught their first course online and how they teach now, suggesting different development needs between now and then. According to one participant, the main difference for her was the improvement in her ability to create an online community among students. It would be useful for future research to utilize a longitudinal approach to capture in what ways the development needs evolve over time as faculty members become more proficient in the digital environment.

Second, one of the findings of this study was that informal professional communities were one of the preferred ways of learning among the interviewed faculty members. However, each faculty member seemed to have their definition of a professional community. For some faculty members, a professional community consists of a group of peers teaching the same course with whom they meet regularly. For others, a professional community includes colleagues in the same department with whom they can have habitual professional conversations. Although there is a consensus on the effectiveness of networks in PD, professional communities seem to be ill-defined; little is known about how people learn and interact in these networks and how they maintain their relationships (de Lat & Schreurs, 2013). As such, it would be valuable for future research to explore the nature of informal professional communities among faculty members and whether one form leads to better learning outcomes than another.

Third, one of the findings of this study indicates that faculty prefer informal ways of learning such as experiential learning and social learning compared to formal learning through courses and workshops. One widely accepted framework of development in the workplace, known as the 70-20-10 model, holds that the highest percentage of learning in organizations

occurs through experiential on-the-job learning (McCauly et al., 2013). The model suggests that out of all planned development programs, 70% should be on the job, 20% should be learning socially with others, and 10% should be formal learning through traditional workshops and seminars (McCauly et al., 2013). While all three paths of learning were observed among faculty members, exploring the optimal ratio between them was beyond the scope of this study. It would be useful for future research to study the optimum mix of faculty development avenues in relation to the 70-20-10 model. This can maximize the effectiveness of PD programs and contribute to a better balance of resources and efforts among the different routes of faculty development. Future research can perhaps lead to newly revised percentages other than 70-20-10 that better reflect the reality of the optimal learning mix among faculty.

Fourth, one of the notable observations in this study is that regardless of the number of years they spent teaching online, none of the online faculty members reported viewing themselves as experts in online teaching. This could have several explanations: (a) either technology changes faster than faculty can catch up with or (b) PD programs are not developed at a pace matching the pace of technology change or (c) simply the faculty members who do not study technological fields tend to view themselves less masterful in online teaching compared to their peers who are immersed in studying technology. If the years of experience do not seem to be a precursor for expertise in online teaching, it would be valuable if future research can unpack explanations for this phenomenon. Particularly, what factors shift the self-perception of an online instructor from merely experienced to an expert? What does it take to achieve expert status in online teaching? and how positioned current HE faculty are to achieve that status?

Study Limitations

Apart from the limitations mentioned in Chapter 3 that are inherent to qualitative research, the following are some specific limitations that pertain to this study. Due to the nature of a master's thesis, one person coded the data and identified themes. While that provided consistency in the method throughout the stages of research, it did not provide multiple perspectives from researchers with different backgrounds. If the methodology is to be used for conducting a different study, it is recommended that more than one researcher be involved in the data analysis. This will allow the results to be discussed among multiple researchers in the field, which can enrich the findings.

The findings of this study and other studies highlighted the significance of institutional involvement in improving faculty PD programs. While the voice of administrative leaders is present in this study through the literature review, it would have been valuable if it was part of the case studies as well. An emergent, in-depth interview with one of the administrative leaders would have added to the understanding of institutional strategies and the challenges faced to implement them at the institutional level. It would have reconciled faculty members' views on what they need from the institution with the institutional view on the extent to which it can fulfill faculty needs.

Conclusion

This study attempted to discover the professional learning needs and requirements of faculty members in PD programs, especially after a year and a half of transition to fully online courses due to the pandemic. According to the findings, faculty needs are varied and should be treated as such. PD opportunities cannot be reduced to one-time events. Learning is a journey that happens over time and requires ongoing experimentation, and reflection among other facets.

Program differentiation is essential to accommodate the different needs, stages of development, and roles played by online faculty. Deep understanding of the faculty persona should inform PD program design. Informal learning opportunities, such as learning communities, research publishing, and mentoring that do not disrupt faculty schedules, are the most preferred and should be prioritized in designing PD programs. HE institutions have a significant role in impacting the quality of PD programs mainly through developmental strategies that directly target the design of PD programs or organization-wide strategies that focus on a change of policies and procedures at the institutional level, or through financial strategies that focus on optimizing the budget.

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Appendix A

Interview Guide

I. Demographic Questions

How many years have you been teaching in the face-to-face environment at the postsecondary level?

How many years have you been teaching in the online environment at the postsecondary level? (synchronous or asynchronous)

How many total courses have you taught that are 100% online to date in the postsecondary level?

II. Warm-up Questions

What was the reason for teaching your first online course?

Were there any factors that made you hesitate to teach online or discouraged you

How was the experience in general?

Describe what you perceive to be the difference between teaching face-to-face and online. Which one do you prefer and why?

How does online teaching fit in your career goals?

III. Exploratory Questions

Experience with PD programs

Have you had the chance to participate in any professional development program for online teaching?

Describe the type of professional development program for online teaching you recently participated in.

What is your greatest motivation for participating in faculty development initiatives?

What barriers would prevent your participation in development programs

How often are you engaged in reflective practice? If yes, in what way has it benefited you in the past?

Needs:

Which faculty teaching topic would you be interested to attend a development program on?

Which program format would you prefer? (online versus offline)

If online is preferred, which delivery mode do you prefer? Synchronous or Asynchronous ? or it does not matter?

Which social orientation would you prefer (group vs self-directed)

With what level of regularity would you participate in faculty development opportunities at your institution (assuming that you are interested in the topic)?

Which learning mix do you prefer formal or informal learning? Why?

Best Practices

Which aspect of professional development was most important to you or has benefited you the most?

What would you say is missing from professional development programs?

What would you like to see added to or improved in future?

How do you perceive mentoring by senior faculty members as a development strategy?

How do you perceive communities of practice as a development strategy?

The Role of Higher Education Institutions

How can post-secondary institutions best support online faculty?

What obstacles could stand in the face of that happening?

How has the culture of your post-secondary institution helped or hindered faculty development programs?

How would you evaluate the way post-secondary institutions handled online learning during COVID-19?

What do you think of the incentive system for online faculty?

How accessible were the faculty development programs to you? Are they accessible to all?

IV. Concluding Questions

Please share any suggestions/requests you have for that may help us to create faculty development programming and initiatives that better serve your needs.

In light of what we discussed; how do you see the future of online faculty development programs?

Is there anything else you would like to add?

Appendix B

Audit Trail

Working theme	Categories	Unitized Data Coded to this Category
Needs	Topics for PD	<p>Julia: “I would love to learn what matters and what doesn’t matter. There is so much to think about online: keeping them engaged, Padlets, breakout rooms, Q&A.” “I want to learn more on how to build a sense of community online.”</p> <p>Greg: “It would be great if there is a program on facilitating online peer editing and on how to deal with students’ integrity online.”</p> <p>Kira: “I would love to dig deep into the best practices of online teaching.”</p> <p>Scott: “We need to reduce the number of tools we require students to use that require unique logins. We need to work on our design so that it is not just accessible but easily accessible.” “I would love to learn more about how to integrate open education resources into online teaching.”</p>

Working	Categories	Unitized Data Coded to this Category
theme		
Needs	Program format	<p>Julia: “I am part of a learning community with my peers.”</p> <p>“I learned most from my mentor. We had the chance to get to the nitty gritty.” “I have no particular preference for online or offline. Both have their own advantages and disadvantages.”</p> <p>Greg: “My best learning experience was the research I published about teaching this online course. I combined the theory with practice which helped cement the concepts in my mind like no other way.” “For me, it does not matter if the program is online or offline. What matters is the program has to model best practices while teaching them.”</p> <p>Kira: “I am an informal learner. It would be ideal if there are options of formats to pick one from.” “I am not interested in dry online modules. I want the opportunity to talk with others.” “For me one-on-one support is better when solving IT issues.”</p> <p>Scott: “I would say online because if it's going to be a workshop about teaching with technology, I would just bring my laptop anyway so that I could experiment with it.”</p>

Working	Categories	Unitized Data Coded to this Category
Theme		
Needs	Program regularity	<p>Julia: “I would prefer a program that meets twice a year, once in summer and once more in January”</p> <p>Greg: “an intensive program in August, followed by a get-together in November and a final get-together in April.”</p> <p>Kira: “I would prefer a program meeting multiple times stacked around the summer.”</p> <p>Scott: “the regularity that suits me would be monthly or by-monthly for short programs, and once every semester for long programs.”</p>

Working	Categories	Unitized Data Coded to this Category
Theme		
Needs	Reassurance	<p>Julia: “I am shy in those spaces. I am not really a high asking questions kind of person. I might feel like can this question waste other people’s time?”</p> <p>Kira: “There was fear and trepidation in the beginning. That is why I started a learning community with my peers.”</p> <p>Scott: “sometimes what faculty members need is someone to hold their hands to know that you are not alone with your computer.” “when you are in a precarious position, you don’t want to rock the boat. Sessional instructors encounter difficulties that they could talk about, but they don’t want to be seen as incompetent or inept.”</p>

Working	Categories	Unitized Data Coded to this Category
Theme		
Needs	Autonomy	<p>Greg: “I receive some recommendations from the CTL but I don’t necessarily follow them. I value the conversation but I don’t necessarily pick everything. I am conscious of my own pathway and that seems to work.”</p> <p>Kira: “I suggest a menu of online topics from which the instructors can choose to explore further.” “Based on the selected topic the instructor can then choose to complete an online module or reach out to a mentor to bounce off ideas with.”</p> <p>Scott: “ I would like to see a compiled list of experts in online education that I can reach out to whenever I need.”</p>