Impact of Teaching Presence on Learning Outcomes:

A Qualitative Study of Perceptions through the Lens of Online Teachers

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A dissertation submitted to the faculty of Robert Morris University
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ROBERT MORRIS UNIVERSITY

2020

In partial fulfillment of the requirements for the degree of Ph.D.

In

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Dedication

This dissertation is dedicated to the inspiration and memory of those beloved people, who are no more with us in this world, but if it were not for their lifetime dedication and motivation, I would have never pursued higher studies to qualify fot this terminal degree. These people were the closest to me during their lifetime, and I am sure they must be watching from the heavens, smiling and patting themselves on their backs saying, "WE DID IT."

Thanks to you all for doing this for me:

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Qureshi Mahmood Ahmad Hashmi and Amina Begum (My in laws)

Capt. Masood Ahmad Qureshi Hashmi (My wife's brother and my best friend)

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Abstract

The purpose of this research was to study how teachers perceive teaching presence, what strategies they employ to create it, and the challenges they face in doing so. This was a qualitative research study with purposeful snowball sampling and semi-structured interviewing technique for data collection. The data were thematically analyzed and triangulated for validity. The four sections of the interview questionnaire produced 14 themes indicating the understanding of teachers' perception of teaching presence, and also that of its three elements of instructional design and organization, facilitated discourse, and direct instructions. The teachers indicated the criticality of humanization of learning and extensive, meaningful interaction for teaching presence. They also indicated that (a) ease of navigating the shell; (b) interaction with teacher's digital presence; (c) technology-friendly shell; (d) well designed, constructive, integrative feedback; and (e) attainable, appropriate goals were critical for course design. Facilitation of discourse to them requires (a) monitoring of learning progression towards objectives, (b) development of deep learning, and (c) beneficially creating a community of learners. The direct instruction referred to the teachers' current role, i.e., creating a balance between being an SME and a facilitator. A large number of challenges were identified, and the study produced a thematic table and 'good practices' as deliverables, provided some suggestions to help teachers to create teaching presence in their courses, and identified new opportunities for research.

Keywords: Teaching presence, teachers' perceptions of teaching presence,

Community of Inquiry, course design, teaching presence challenges, online pedagogy.

CHAPTER 1: INTRODUCTION

Overview

In any online higher education environment, effective learning should focus on the interaction between e-learning technologies and educational practices (Trespalacios & Rand, 2015). One such, critical, online higher education practice is the establishment of teaching presence.

Researchers, through their various theoretical and conceptual frameworks, have described teaching presence in different ways. Afolabi (2016) and Arbaugh & Hwang (2006) define teaching presence as the mechanism that bridges the transactional distance between instructor and student in a virtual classroom where direct instruction and facilitation of discourse is achieved through various forms of interaction. Anderson, Rourke, Garrison, and Archer (2001) provided a seminal definition of teaching presence based on the Community of Inquiry (CoI) model. They state that "teaching presence is the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (p. 5). Garrison, Anderson, and Archer (2000) define it as "a binding element in creating a community of inquiry" (p. 96). Shea et al. (2010) define it as "an online instructional orchestration" (p. 17), making it a multi-dimensional synthesis approach.

In spite of all the barriers that impact interaction in online pedagogy, such as advanced technology, lack of community, a feeling of isolation, limited support, etc., instructors can still establish teaching presence (TP) in online courses through the use of a variety of instructional and communications strategies, starting as early as the course

design stage; in fact, the design stage is where it is most effectively established (Kuyath, Mickelson, Cem, & Winter, 2013; Stoerger & Kreiger, 2016).

However, teaching presence is still an emerging area of inquiry; thus, recommendations remain inconclusive despite substantial progress that has been made in conceptualizing and investigating the importance of establishing teaching presence in online learning (Baker, 2010).

Richardson, Besser, Koehler, Lim, and Strait (2016) suggests that barriers to online learning and the impact of teachers' roles in online pedagogy have always been of concern, with researchers trying to find the right balance between all elements in order to increase the effectiveness of online instructions. Ekmekci (2013) elaborates by stating that student engagement in online learning is largely incumbent on instructors' ability to: create frequent opportunities for social interaction between teachers and students, provide clear and unambiguous instructions, design attainable yet challenging assignments, assemble rich course content, and provide timely feedback.

The ability to put into practice what Ekmekci (2013) suggests becomes even more critical as, according to the Western Interstate Commission for Higher Education Cooperative for Educational Technologies, online education is no longer an institutional accessory, it is now considered an integrated component of the institutional culture (Poulin & Straut, 2016). Seaman, Allen, and Seaman (2018) state that distance education enrollment increased for the 14th straight year, growing faster every year. More than six million college students (6,359,121 to be exact) were enrolled in at least one online course in the fall of 2015; this is an increase of 5.6 % from fall 2015 to fall 2016 and is

higher than either of the previous two years. Overall, there is an accumulated 7% increase of online enrollments in higher education from 2012 through 2015.

It is important to note that from these 6.36 million students, 3 million students took their entire courses online, and 3.36 million students took, at least some courses online (Seaman, Allen, & Seaman, 2018). Surprising as it maybe, even though technology can facilitate and strengthen interactions between students and the instructor through multi-dimensional delivery platforms like audio, video, and text channels (Miller, 2011), less than 25% of instructors use audio or video-based media on a regular basis in their online courses (Smith & Caruso, 2010). This ratio may be considered low since research has validated the fact that audio feedback in an asynchronous learning environment is associated with the perception of strong interaction and the feeling that such instructors care more about the students than those who do not use it (Ice, Curtis, Phillips, & Wells, 2007).

Vygotsky (1978) explained that knowledge is generated through social interaction, so effective learning is nurtured by meaningful interaction between students and teachers as well as amongst students; thus, effective interaction is the very basis of knowledge construction. Effective interaction or educational communication consists of three key interactions: student–student, student–content, and student–teacher (Moore, 1989). However, Hillman, Willis, and Gunawardena (1994) added a fourth interaction, learner–interface interaction, to the three established by Moore. The evolution of technologies, specifically online educational platforms, has allowed dynamic interaction among instructors and students with a resultant shift from individual learning to suitable forms of collaborative learning. This shift, driven by technology, has vastly increased the

effectiveness and visibility of the role of teaching presence and its influence on the learning process (Arbaugh, 2013; Garrison & Akyol, 2013; Prineas & Cini, 2011).

Supporting this effectiveness of teaching presence, Reupert, Maybery, Patrick, and Chittleborough (2009) quote a student whose comment is indicative of an issue that lies at the very core of the emerging era of online education, i.e., the role of the instructor in the virtual classroom. The student said that it was important for him, as a human being, to interact, not with just a computer, or a book, but with others who knew more about this subject than he did, and were there to bring it to life through their human side. This sentiment about the importance of the "human side", or the humanization of content is also supported by Sheridan, Kelly, and Bentz (2013). They state that the online learners want to know who their teachers are and want to be connected with them in some way. At the other end of the virtual classroom, they want to feel the real human behind the veil: kind, patient, understanding, empathetic, supportive, and creative.

This finding is further corroborated by a meta-analysis of students' evaluations conducted by Kim, Jörg, and Klassen (2019). They found that teaching effectiveness is primarily a function of the instructors' personality rather than of the course that is being taught. They further list over 250 factors that impact students' academic achievement and categorize them into seven sources of impact: teaching (teaching/instruction strategies, student learning strategies, and implementation methods), teacher, student, school, home, curricula, and classroom.

However, instructors can only function effectively if they overcome the dilemma of teaching in the virtual world. There are instructors and teachers who wonder what it means to be an instructor in the virtual world of online teaching and learning. To be

"here" when there actually is no "here" but only a broadly scattered "there" makes them wonder (Feeler, 2012). That truly explains the essence of teaching presence and the importance of creating, sustaining, and maximizing it (Feeler, 2012). It is the art of being virtually, not physically there, through one's effective teaching presence strategies, made possible by creating an academic climate through a series of planned interventions that engage the students to achieve the desired learning outcomes (Bowden, 2012; Ekmekci, 2013). This is also supported by a theory developed by Moore (1993), which says that if learning outcomes are to be maximized, transactional distance must be minimized.

Transactional distance, according to Moore and Kearsley (2005), refers to a pedagogical phenomenon, indicative of the non-geographic separation between instructors and students in online learning, constituting three key components: dialog, structure, and autonomy. This requires consistent, planned intervention over a period of time.

One such planned intervention, as researched by Bondi, Daher, Holland, Smith, and Dam (2016) is the use of cogenerative dialogues, primarily, in synchronous settings using a social network tool like Adobe Connect; However, in asynchronous setting it uses a discussion board. Cogenerative dialogue is a process used by educators and researchers to conduct research and improve teaching and learning in which the students and instructors meet over the term of the course to discuss what occurs in the classroom and come to a consensus on what they will change about the course (Stith & Roth, 2010). The goal is to optimize teaching and learning for everyone in the course. This interaction not only helps the learners take ownership but also becomes a conduit for creating, sustaining, and maximizing teaching presence over the entire course with the teacher acting as a facilitator (Bondi et al., 2016).

This point is further supported by Boggs (1996) who states that establishing teaching presence through the role of teacher, more as a facilitator rather than an instructor, has resulted in a paradigm shift from a teaching environment to a learning environment. Boggs further described this new paradigm as the "correction of a mistake which took the means or method, called instruction or teaching, and made it into the college's end or purpose. The new faculty member is now envisioned as a coach interacting with a team" (p. 14).

Ko and Rossen (2017), in agreeing with Boggs (1996), state that teaching presence begins even before the course commences. The teacher, acting as a coach and an instructional designer, plans and prepares the course of studies to create teaching presence, and it continues during the course as the instructor facilitates the discourse and provides direct instructions, as necessary (Sun & Chen, 2016). Garrison et al. (2000) state that teaching presence strongly influences the social and cognitive processes that occur in online learning environments. Researchers claim that teaching presence is the "binding element" that connects an online learning community together and makes possible the cognitive and social activities required for effective online learning (Garrison, Anderson, & Archer, 1999).

Teaching presence is essentially an intentional activity, evidenced by the level of intervention and degree of visible involvement demonstrated by the instructor. However, this is directly dependent upon the pedagogical choices and personal preferences of the instructor (Bowden, 2012; Costley, 2015; Ravenna, 2012). The intentions behind the pedagogical choices are critical to ensure that the learning process occurs based on a

recognition of the role the instructor, while interacting with students in an authentic way (Cranton & Carusetta, 2004).

The three actions that primarily support the fulfillment of these intentions are identified as (a) forming authentic relationships by the person inside the teacher with students, (b) building rapport, and (c) setting/reinforcing expectations (Cranton, 2006). Intentions of the teachers reflect the interpretation they have of teaching presence; by being responsive to student needs and being available to support and guide them, instructors establish their role as a facilitator of learning (Afolabi, 2016). Furthermore, by setting and reinforcing expectations for performance and participation, instructors establish an academic tone, within an intellectual climate, of expected engagement, thereby supporting their intention of creating engagement and interaction that supports learning (Afolabi, 2016; Arbaugh & Hwang, 2006).

It is important to understand that teaching presence is not just authenticity in relationships or appropriate timely interventions, but it is also a mindset for extending activity between student, instructor, and content beyond just 'being there' (Arbaugh & Hwang, 2006). The teaching presence mindset also includes a strategic workflow of effective practices that lead to co-construction of the intellectual climate shared by the instructor and students in the online course (Afolabi, 2016; Arbaugh & Hwang, 2006).

Reinforcing the above, Jaggars, Edgecombe, and Stacey (2013) found that students reported a higher level of engagement when teachers incorporated live audio and video chats or video-captured lectures using web conferencing software applications. Students also perceived a caring teacher when the instructors posted frequently in chat rooms, invited student questions and responded quickly to those questions, provided

detailed feedback on student assignments, and asked for and responded to student feedback about the course (Jaggars et al., 2013). Successful teachers know the flow and plan their courses to perfection. Shea et al. (2006) reported that students were "significantly more likely to report higher levels of learning and community when they perceived higher teaching presence behaviors" (p. 185).

To further strengthen the argument, Rovai (2003) states that teaching presence has been found to be positively correlated with students' feelings of 'fitting in' and of belonging to a learning community. This can account for significant improvement in persistence, defined as the length of time the student attends classes. Notably, research has also indicated that, in online learning, teaching presence, through instructor-student interaction, seems to have a much more positive effect on learner satisfaction and learning compared to interactions with peers (Swan, 2001). This finding has been attributed to the observation that a strong teaching presence, as evidenced by a robust course structure and active instructor leadership, is crucial for achieving deep and meaningful learning outcomes (Garrison & Cleveland-Innes, 2005). Conversely, online courses dominated by student interactions can easily devolve into exchanges of poorly reasoned personal experiences and extended serial monologues (Angeli, Valanides, & Bonk, 2003).

Researchers have established significant, positive relationships between teaching presence and both, student success in improved learning outcomes and satisfaction in online courses (Garrison & Cleveland-Innes, 2005; Shea & Bidjerano, 2010; Shea et al., 2006). While teaching presence appears to be an important aspect to consider when designing and facilitating an online course (Richardson et al., 2015), little research

focuses on teachers' perceptions of their presence and the specific actions taken to project presence in the online courses they teach (Stone & Chapman, 2006). Complicating the construct of teaching presence is the reality that in many instances, online instructors are teaching courses that were designed by someone else and they have no idea about the thought process that went onto designing that course (Richardson et al., 2015). The importance of online teaching presence and the examination of teaching presence from the viewpoint of the instructor needs more research (Preisman, 2014).

Problem Statement

The concept of teaching presence has historically been viewed through the eyes of the student learner and/or community of learners with a specific focus on strategies that create and improve presence in an online setting (Oztok & Brett, 2011). However, according to the review of the available research, the aspect of teaching presence that is often overlooked is the nature of perceptive cognition of teaching presence from the teacher's point of view and its implications on establishing an intellectual climate in the online classroom (Cox-Davenport, 2010; Duncan & Barnett, 2010). Similarly, research is scarce about how teachers perceive the benefits, if any, of the time and energy they invest in attempting to create teaching presence in their online courses (Preisman, 2014). Thus, there is a need to understand how online teachers perceive and establish teaching presence within the asynchronous courses they design and teach, as this can positively inform pedagogical decisions regarding instructor behavior, course organization, facilitated discourse, and direct instruction. Without this understanding, it is not possible to establish a current benchmark, identify the deficiencies, create training and

developmental plans to augment teachers' capabilities, and provide skill sets for sustainable improved learning outcomes.

Purpose of the Study

The purpose of this research was to conduct a descriptive, exploratory, interview-based, qualitative study of how online teachers perceive the role of teaching presence in the courses they design and teach, primarily asynchronous courses. The study also examined the strategies employed by the teachers in the three overlapping phases of instructional design and organization, facilitation of discourse, and direct instructional activities, in establishing, sustaining, and maximizing teaching presence. Additionally, this study sought to qualitatively assimilate and analyze the processes utilized by instructors when establishing teaching presence in order to provide insight into its influence on the creation of an intellectual climate within the online classroom to affect learning outcomes (Cox-Davenport, 2010; Duncan & Barnett, 2010).

Research Questions

- **RQ 1**: How do online instructors perceive teaching presence and its impact on learning outcomes?
- **RQ 2**: How do online instructors incorporate teaching presence in designing their course content and delivery?
- **RQ 3**: What strategies do online instructors employ during the course to overcome challenges and to establish, sustain, and maximize teaching presence?

Significance of the Study

Researchers have established significant positive relationships between teaching

presence and both, student success and satisfaction in online courses (Garrison & Cleveland-Innes, 2005; Shea & Bidjerano, 2010; Shea et al., 2006). However, the understanding of teaching presence, from the point of view of the teachers, in this study has positively informed the pedagogical decisions regarding instructor behavior, course design and organization, facilitated discourse, and direct instruction. This will help in creating an institutional awareness about the benefits of teaching presence and its effects on student satisfaction in the online learning environment.

This study will also positively impact faculty development efforts as educational administrators can channel resources towards specialized training, enhance faculty knowledge regarding instructor behavior, course design and development, delivery, and direct instruction. This study will also extend the body of literature, from a teacher's perspective, on the relationship between teaching presence, student satisfaction, and improved learning outcomes in online learning.

Theoretical Underpinning

This research deals with the perception of teachers about their teaching presence, primarily based on the Community of Inquiry (CoI) model. Garrison et al. (2000) created this theoretical model to describe how collaborative learning communities can best function in an online environment. The Community of Inquiry (CoI) model is comprised of three intersecting elements: social presence, cognitive presence, and teaching presence. These three elements provide a structure that can support and encourage higher levels of inquiry and meaningful collaboration within the context of online learning (Lambert & Fisher, 2013). An effective teaching presence in an online environment, as one of the three intersecting elements, in a fully functioning CoI facilitates interaction, creates a

supportive social presence, and encourages a challenging cognitive environment (Shea et al., 2006).

As a conceptual framework, CoI model defines the existence of teaching presence starting from course design, and then through the interaction that occurs between students and instructors, primarily during the functions of direct instruction and facilitation of discourse. As investigations into teaching presence have evolved, the understanding of the collaborative nature of the online environment has increased and provided insight into the shared agency of the learning process (Bawa, 2016; Shea & Bidjerano, 2010).

Garrison et al. (2000) further posit that effective online learning/teaching is best understood in terms of the interrelationship of three types of presence: cognitive presence, i.e., the ability of learners to construct meaning and build understanding; social presence, i.e., the capacity of learners to present themselves as 'real people' with individual characteristics; and teaching presence, i.e., the design, facilitation, and direction of student cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes.

Teaching presence, in itself, has three elements/indicators: Instructional design and organization, facilitation of discourse, and direct instruction. Studies investigating the influence of teaching presence in online learning consistently report a significant positive relationship between the three CoI teaching presence indicators and student perceptions of learning, motivation, and satisfaction (Garrison & Cleveland-Innes, 2005).

The three elements of teaching presence have been explained by researchers as follows: (a) Instructional design is to establish, a well-organized and structured, curriculum content, learning activities, course timelines, administering instruction, and

offering student evaluation. This activity takes place much in advance, even before the teacher and the students know each other, and the teacher can embed the concepts and activities of teaching presence in the design itself. (b) Facilitation of discourse is to monitor and manage purposeful collaboration and reflection. The teacher must facilitate the dialogue, encourage reflection, and sustain the discourse over the entire course. The teacher becomes the co-creator of a social environment where the instructor identifies areas of student agreement and disagreement, seeks to reach consensus and understanding amongst students, acknowledges and reinforces student contributions, thus setting the climate for learning, drawing in students, and prompting discussion. (c) Direct instruction is defined as diagnosing learner needs and providing timely directions so that the intended learning outcomes are achieved. It also involves the instructor presenting content and questions, focusing the discussion on specific issues, summarizing discussion, confirming understanding, diagnosing misperceptions, injecting knowledge from diverse sources, and responding to technical concerns (Reupert et al., 2009).

However, in order to fully appreciate the conceptual framework that guides this research on teaching presence, it is important to clarify a misunderstanding that often shows up in the literature; that of interchangeably using "instructor presence" and "teaching presence," as identical constructs. These two labels should not be used interchangeably as they refer to two different constructs. According to Sheridan and Kelly (2010) the labels "instructor presence" and "teaching presence" have been used almost synonymously in the literature. The term "instructor presence" does appear in the literature but commonly refers to teaching presence behaviors (Richardson, Besser, Koehler, Lim, & Strait, 2016). However, Kassinger (2004) has defined instructor

presence as the instructor's interaction and communication style, the frequency of the instructor's input into the class discussions, and communications. Similarly, Pallof and Pratt (2003) pointed out that an instructor's presence entails "posting regularly to the discussion board, responding in a timely manner to e-mail and assignments, and generally modeling good online communication and interactions" (p. 118).

However, there are distinct differences between these two constructs: instructor presence relates to how an instructor is physically positioned, socially and pedagogically, in an online community (Lear, Isernhagen, LaCost, & King, 2009). Instructor's presence is based more on observable instructional behaviors and actions and is defined as:

The specific actions and behaviors taken by the instructor that projects him/herself as a real person and is more likely to be manifested in the "live" part of courses—as they are being implemented—as opposed to during the course design process (Richardson, Koehler, Besser, Caskurlu, Lim, & Mueller, 2015, p. 259).

While instructor presence depends on physical proximity, teaching presence, which forms the basis of this research, can and should always be initiated much before the teacher actually comes in contact with the students, i.e., at the planning and precourse design stage. The three precepts of teaching presence, course design, facilitating discourse and direct instruction should preferably be occurring in sequence (Ko & Rossen, 2017).

Methodology

Design

In order to gain a rich thick description of the perceptive process, this research is a qualitative study utilizing a descriptive, exploratory design, using in-depth semi-structured interviews, to study and explore the perceptions of teaching presence through the lens of the teachers. This approach allowed the participants to express their inner feelings, talk about their perceptions and experiences in some detail, and explain the rationale behind their thinking and strategies.

Participants

Purposeful, snowball sampling was used to select a sample of higher education online instructors who were interviewed to learn about their perceptions related to the creation, sustenance, and maximization of teaching presence. Purposeful sampling allowed the researcher to interview only those people who could best inform the researcher about the research problem under study (Creswell, 2013). The final sample size of 12 online instructors was based on the recommendations by Schreier (2018) who refers to Francis et al. (2010) and states that for interview studies, a sample size of 10-13 units is a reasonable starting point. Schreier further states that the advance specification of sample size can be adjusted during the research process until thematic saturation is reached.

However, based on the snowball referrals, as part of the participation request process, 22 participants were identified and 18 were found eligible based on the inclusionary criterion that required the instructor (a) have a minimum of 3 years' experience of teaching higher education courses online, (b) strongly believe that teaching

presence has a role in learning outcomes, (c) be rated highly in their contribution to learning by peers/superiors/administrators, and (d) rate themselves highly in facilitating learning activities (discussion boards, formative assessments, effective timely feedback, overall teacher participation). Before even receiving the interview questionnaire, three potential participants dropped out for unknown reasons. After seeing the interview questionnaire, three more dropped out indicating "not feeling comfortable to respond to the questions." The remaining 12 agreed to go through with the interviews.

Achieving homogeneity was an objective of the participant selection process for this study, as the intent of the study was to draw from the experiences and insights of the instructors. The shared experience of working within similar structured academic settings, in a specific region, provided the first level of homogeneity in the sample. Further, homogeneity in the sample, for the purposes of this study, was strengthened by the inclusionary criteria. However, quest for homogeneity did limit the advantages of breadth and diversity.

Instrumentation

A semi-structured interview protocol was used to interview the participants and the responses used as the primary source of data. There were four face-to-face interviews, three phone audio interviews, and five Zoom video interviews. The in-depth interview protocol was designed for 45-60-minute slot, with provision for another 30 minutes, in case the participant was willing to provide more in-depth insights. The interview protocol, comprising of structured and open-ended questions, was provided to the participants a week before the interview; however, supplementary questions generated by the responses also became part of the interview protocol. The whole interview process

was audio taped with permission. The protocol was created and presented to the committee and IRB for approval, verification, and trustworthiness before use.

Method of Analysis

As the first data point set, an interview response thematic analysis was conducted to identify common themes. The transcripts were sent for member checking to validate the content and intent of the interviewee's responses. This was the second data point set. Another source of validation, being the third data point for triangulation, was the teaching presence scale, validated and authenticated for almost two decades, created by Shea et al. (2003) and used with permission from the author (Appendix E).

Limitations and Delimitations

A limitation of this qualitative study is that its findings are not generalizable by the researcher, however, they are largely transferable. The generalizability, in qualitative research, is left to the reader to be extrapolated and applied in their situations. A naturalistic approach to generalizability allows the reader to reflect upon how the findings from one situation might speak to another similar situation (Merriam 1998; Sandelowski, 1997). Though qualitative research offers "limited generalizability of findings" (Creswell, 1994, p. 158), however, it has the flexibility for the creation of thick, rich description of processes and the outcomes that evolve continually.

The non-designer instructors (those who teach courses designed by others) have been excluded from this research as they are a distinct group, which strategizes differently to overcome their challenges in creating teaching presence. Another delimitation is that literature on instructor presence, though this term has been used

interchangeably with teaching presence, has not been included, as this concept primarily has a different construct from that of teaching presence and was not a focus of this study.

Key Terms and Definitions

Co-generative dialogues – A process used by educators and researchers to conduct research and improve teaching and learning where the students and instructors meet over the term of the course to discuss what occurs in the classroom and come to consensus on what they will change about the course (Bondi et al., 2016)

Community of Inquiry model – The Community of Inquiry model is a conceptual framework consisting of three intersecting elements: cognitive presence, social presence, and teaching presence. The theory posits that the interaction of these three elements creates a quality educational experience for a community of learners (Garrison et al., 2000; Garrison & Arbaugh, 2007).

Facilitated Discourse – Facilitated discourse refers to the ways an instructor can engage students in focused and sustained deliberation, discussion, and interaction to build on instructional material (Garrison et al., 2001; Overbaugh & Nickel, 2011).

Instructor's Presence – "The specific actions and behaviors taken by the instructor that projects him/herself as a real person and is more likely to be manifested in the 'live' part of courses—as they are being implemented—as opposed to during the course design process" (Richardson et al., 2015, p. 259).

Instructional Design and Organization – Instructional design and organization refer to the course structure with clearly communicated expectations, and explicit course rubrics. These are critical components of a quality, online course design (Gedik et al., 2013; Lee, 2014; Swan, Day, Bogle, & Matthews, 2014; Teräs & Herrington, 2014).

Teaching Presence – The design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes (Anderson, Rourke, Garrison and Archer, 2001, p. 5).

Chapter Summary

Online learning has evolved into a diversified and stimulating educational environment. A successful online instructor is not only a teacher but also a guide who must facilitate learning in a more pronounced way (Baghdadi, 2011). This facilitated learning requires clearly defined parameters and focus, both integral facets of the CoI teaching presence (Anderson et al., 2001; Baghdadi, 2011; Beqiri, Chase, & Bishka, 2010). The enhanced interaction facilitated by the three distinct components of teaching presence prevents an online course from becoming an unstructured social setting or a forum for one-way instruction (Anderson et al., 2001).

Instructional design and organization, facilitated discourse, and direct instruction are specific teaching presence behaviors that enhance learner-instructor satisfaction and general satisfaction in online courses (Anderson et al., 2001; Lambert & Fisher, 2013; Sheridan & Kelly, 2010). Multiple studies have examined factors that can contribute to student satisfaction in online learning (Ladyshewsky, 2013; Shea et al., 2003). Few studies, however, have addressed the specific issue of teachers' perceptions of teaching presence, their strategies to create, sustain, and maximize teaching presence, as well as their perception of the challenges faced along the way. What is the teacher's perception about teaching presence's point of initiation, going through discourse and delivery? This question undergirds this research.

However, the lack of research from the teacher's perceptive angle is troubling in that the faculty, with limited time and resources, have little direction in how they can best contribute to student satisfaction in online learning through the use of specific teaching presence behaviors (Van de Vord & Pogue, 2012). The intent of this study was to investigate the perception of the teachers about teaching presence and how they plan to create, sustain, and maximize it, starting from the course design phase. One deliverable is a good practices checklist of things to do, identifying the point of initiation, and the attributes that students look for that helps in creating, sustaining, and maximizing teaching presence. The other deliverable is a thematic table that identifies applicable themes for each element of teaching presence. Thus, chapter I introduced the purpose of the study, produced deliverables, and established the need for additional research.

CHAPTER II: REVIEW OF LITERATURE

Introduction

Based on the current literature on teaching presence, this review is structured to provide a clear understanding of the teaching presence concepts, its impact on learning, the theories that govern it, the elements that help create it, and the critical areas that are deficient in research for reasons yet unknown. The review first presents the issues of online pedagogy, specifically created by the exponential growth, which have magnified the challenges already faced by the instructors in their normal course of teaching. Next it focuses on issues concerned with the quality of the content, its delivery conducive to generate interaction and collaborative learning, and its efficient use of technology to do so. Subsequently, the review transitions to explaining the learning frameworks and theories. The theoretical underpinning is the Community of Inquiry (CoI) model with its three intersecting presences (Anderson, Rourke, Garrison, & Archer, 2001), the theoretical context is based on the Transactional Distance (TD) theory (Moore, 1973), and Social Constructivist Learning theories.

The chapter then discusses in detail the broad concept of Teaching Presence (TP), its definitions, and its three elements (Andersen et al., 2001). Having explained the concept of TP, the review moves on to the critical role in the learning process and the educational outcomes that TP is able to achieve. It also clears up the common misunderstanding that TP and Instructors' Presence (IP) are the same concepts that can be, and are often erroneously, used interchangeably. The chapter also focuses on the opposing arguments as stated by Sheridan and Kelly (2010): that while there was a focus

on instructor communication and responsiveness, students did not find importance in synchronous communication or being able to see or hear their instructors.

Finally, the review discusses the strategies and tools employed by TP to fulfill its primary goal of "achieving personally meaningful and educationally worthwhile learning outcomes," summarizing the students' perceptions about those actions of the teacher that they think benefits them, based on the research over the last two decades that supports these actions.

However, according to the review of the available literature, the aspect of teaching presence that often gets overlooked is the nature TP from the teacher's point of view and its implications on establishing an intellectual climate in the online classroom (Cox-Davenport, 2010; Duncan & Barnett, 2010). Similarly, there is very limited research about how teachers perceive the benefits, if any, of the time and energy they invest in attempting to create teaching presence in their online courses (Preisman, 2014). As recommended by Cox-Davenport (2010), Duncan and Barnett (2010), and Preisman (2014), this study is an effort to reduce the research gap on teachers' perceptions of TP in terms of achieving personally meaningful and educationally worthwhile learning outcomes.

Paradigm Shift

Everything has changed, and nothing has changed. "Although 21st century frameworks are thought to advocate new types of knowledge, little has actually changed in the new century with respect to the overall goals of education" (Kereluik, Mishra, Fahnoe, & Terry, 2013, p. 127). Having said that, the academics know that the core ideas

of foundational knowledge (knowing) and meta knowledge (acting upon knowledge) have not changed.

However, a paradigm shift has occurred in the ways students learn, value knowledge, and use tools and technologies. This shift requires new ways to satisfy these changed modalities (Kereluik et al., 2013). Roehl, Reddy, and Shannon (2013) suggest that today's students, having grown up using technology and digital media, are driving the changes in learning environments.

Today, the student body prefers an interactive learning environment that encourages multitasking, gravitates towards cooperative and collaborative learning, and appreciates the social aspects of learning (Ritchhart, Church, & Morrison, 2011). The goals of teaching these students, thus, must shift from surface learning to deep learning through strongly interactive and socially constructive processes (Ritchhart, Church, & Morrison, 2011). "There is a limit to what students can learn through formal schooling. Therefore, educating them for the 21st century requires teaching them how to learn on their own" (Saavedra & Opfer, 2012, p. 10).

Technology has impacted the skills of communication and collaboration in this digital information age. Furthermore, the ease of access, increasing globalization and the rapid growth of technological tools have made communication, intense interaction, and collaborative learning invaluable and essential (Lambert & Cuper, 2008). With these demands for meaningful learning in classrooms, "teacher preparation becomes both increasingly important and increasingly challenging as teacher educators seek new ways to integrate the latest skills, nonlinear thinking skills, and digital-age reflections into coursework" (Lambert & Cuper, 2008, p. 265).

The above discussions suggest that in any online higher education environment, effective learning should focus on the interaction between e-learning technologies and relevant educational practices (Trespalacios & Rand, 2015). One such critical higher education practice is the establishment of teaching presence. Researchers, through their various theoretical and conceptual frameworks, have described teaching presence in different ways. Afolabi (2016) and Arbaugh and Hwang (2006) define teaching presence as the mechanism that bridges the transactional distance between instructor and student in a virtual classroom where direct instruction and facilitation of discourse is achieved through various forms of interaction. Anderson, Rourke, Garrison, and Archer (2001) provided a seminal definition of teaching presence based on the Community of Inquiry framework. They state that "Teaching Presence is the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (p. 5). Garrison, Anderson, and Archer (2000) define it as "a binding element in creating a community of inquiry" (p. 96). Shea et al. (2010) define it as "an online instructional orchestration" (p. 17) which indicates the role of a teacher as a conductor who synthesizes all the diverse instruments to create a beautiful symphony.

Online Pedagogy: Current Status and Future Growth

Seaman, Allen, and Seaman (2018) reported that distance education enrollment increased for the 14th straight year, and it has grown faster every year. More than six million college students (6,359,121 to be exact) were enrolled in at least one online course in the fall of 2015; this is an increase of 5.6 % from fall 2015 to fall 2016 and is higher than seen in either of the previous two years. However, overall, there is an

accumulated 7% increase of online enrollments in higher education from 2012 through 2015. From these 6.36 million students, 3 million students took the entirety of their courses at a distance, and 3.36 million students took some courses at a distance (Seaman, Allen, & Seaman, 2018).

Even though technology can facilitate and strengthen interactions between students and the instructor, e.g., by offering audio, video, and text channels through which instructors can offer a multi-dimensional delivery platform (Miller, 2011), less than 25% of instructors use audio or video-based media on a regular basis in their online courses (Smith & Caruso, 2010). This ratio may be considered low, especially since research suggests that audio feedback in an asynchronous learning environment is associated with the perception of strong interaction and the feeling that such instructors care more about the students (Ice, Curtis, Phillips, & Wells, 2007).

Online learning uses network communication systems as its delivery medium and enables colleges and universities to offer learning opportunities to students who otherwise could not attend classes due to family, health, or work issues (Singh & Hurley, 2017). However, as the incidence and complexity of online education programs continue to grow, educators increasingly need practical and coherent frameworks for understanding the technological, pedagogical, and organizational implications of online education in higher education environments (Sangra, Vlachopoulos, & Cabrera, 2012).

The growth of online learning has created its own peculiar challenges. As the online teaching environment has advanced, instructors are not always able to keep pace with it, either relying too heavily on technology to form connections with their students or reverting to conventional practices that are more suitable for physical classrooms

(Baran, Correia, & Thompson, 2013; Cho & Kim, 2013; March & Lee, 2016). According to research, these challenges are somewhat grounded in the very nature of online education, which – compared to face-to-face instruction – may be more dependent on instructor behavior and meaningful interactions between students and their instructor (Nishikant, 2009). In particular, students enrolled in asynchronous online programs often have to expend greater energy to manage their time effectively and sustain their motivation in the absence of a live instructor (Brophy, 2010). To address this challenge, many institutions are turning to technology to enhance the learning environment without jeopardizing academic rigor and quality (Instructional Technology Council, 2010).

Issues of Online Pedagogy

To overcome barriers that impact interaction in online pedagogy such as advanced technology, lack of community, online boredom, inadequate support, etc., instructors should try to establish teaching presence (TP) in online courses through the use of a variety of instructional and communications strategies, preferably starting from the course design stage (Kuyath, Mickelson, Cem, & Winter, 2013; Stoerger & Kreiger, 2016). However, as TP is still an emerging area of inquiry, recommendations remain inconclusive despite substantial progress made in conceptualizing and investigating the importance of establishing teaching presence in online learning (Baker, 2010).

Richardson, Besser, Koehler, Lim, and Strait (2016) suggest that barriers to online learning and the impact of teachers' roles in online pedagogy have always been of concern, with researchers trying to find the right balance among all elements that determine the effectiveness of online instruction. Ekmekci (2013) further explains, that student engagement in online learning is largely incumbent on instructors ability to:

create frequent opportunities for social interaction between teachers and students, provide clear and unambiguous instructions, design attainable yet challenging assignments, assemble rich course content, and provide timely feedback. The ability to put into practice what Ekmekci suggests becomes even more critical as, according to the Western Interstate Commission for Higher Education, online education is no longer an institutional accessory, it is now considered an integrated component of the institutional culture (Poulin & Straut, 2016).

The concerns voiced by Richardson et al. (2016) and Ekmekci (2013) are already being addressed as several educational associations have drawn from the literature to create rubrics assessing the quality of online programs or courses. However, each of these rubrics focus on slightly different sets of quality characteristics. The Institute for Higher Education Policy designed 24 quality benchmarks clustered along seven categories to measure the quality of distance education courses (Merisotis & Phipps, 2000). The Council of Regional Accrediting Commissions developed guidelines for online degree and certificate programs which they divided into five quality components (Middle States Commission on Higher Education, 2002). The Sloan Consortium also created a framework of five broad categories—the "Five Pillars"—for assessing the quality of online learning (Moore & Kearsley, 2005). Perhaps the most widely adopted rubric in terms of online course quality is Quality Matters (Quality Matters Program, 2011). The Quality Matters rubric, 6th edition, includes eight general standards and 41 specific benchmarks, which were designed by faculty with the goal of evaluating online courses and improving student learning in online pedagogy.

Viewed in broad strokes, most sources seemed to agree on four general areas of course quality: (a) the extent to which the course interface is well organized and easy to navigate, (b) the clarity of learning objectives and performance standards, (c) the strength and diversity of interpersonal interaction, and (d) the extent to which technology is effectively used. These are critical quality elements; thus, it is important to understand and assess the theoretical, empirical, and quality-framework literature that exists within each of these four areas.

Course Quality: Organization and Presentation

Across the set of quality rubrics, Quality Matters most strongly emphasizes the importance of course organization and presentation. For example, the Quality Matters standards specify that students should be "introduced to the structure and purpose of the course," and that course instructions should specify "how to get started with the course and where to find various course components" (Quality Matters Program, 2011). In the practitioner literature, Grandzol and Grandzol (2006) also suggest that a consistent and clear structure, including navigational documents and instructions that explicitly instruct students in terms of where to go and what to do next, is vital to student success.

Several surveys have also emphasized the importance of a well-organized course structure with intuitive navigation. In a study of two online criminal justice courses, Fabianic (2002) indicates that students regard ease of navigation as a key quality criterion. In an institutional survey, Young (2006) found that students appreciated instructors who made a strong effort to create a thoughtful course that was well organized and carefully structured. In larger-scale survey work, Smissen and Sims (2002) found that ease of use (an intuitive, user-friendly interface, and navigation) was one of the three

most important quality criteria identified by students, faculty, and staff; similarly, when Ralston-Berg (2010) asked students to rate the most important factors that contribute to their success in online courses, these factors included clear instructions regarding how to get started, how to find various course components, and how to access resources online. Beyond survey work, however, little empirical research has been conducted in this area.

Learning Objectives and Assessments

Most online course quality rubrics highlight the importance of: clearly stated and well-aligned learning objectives, a close relationship between course objectives and assessments, and specific, transparent grading criteria. For example, the Institute for Higher Education Policy specifies that students should be provided with supplemental course information outlining course objectives, concepts, and ideas (Merisotis & Phipps, 2000). Quality Matters also includes a long list of specific standards in this area that specifies that learning objectives should be measurable, clearly communicated, and consistent across learning modules; that assessments should be in line with the stated learning objectives and the level of the course; and that students should have clear instructions in terms of how they are to be evaluated (Quality Matters Program, 2011).

In the theoretical literature, Naidu (2013) argued that while carefully designed learning goals are important in all educational settings, they may be particularly critical in distance education, given that students are often "studying independently and without a great deal of opportunity to interact with their peers and tutors" (p. 269). Moore (1994) discussed learning objectives in the context of an online program's responsiveness to the needs of the individual learner. He noted that while some autonomous learners need little

help from the teacher, others need assistance formulating and measuring their learning objectives.

Surveys and qualitative work lend some supporting evidence to the notion that clearly stated and sequenced learning objectives, relevant assessments, and a transparent grading policy are important. When Ralston-Berg (2011) asked students to rate the importance of 68 online course benchmark items, four of the students' top 10 selections were related to course objectives and their measurement. Respondents also specified that a high-quality online course should have "information presented in a logical progression, broken down into lessons that are spaced apart properly, and that the course content should be straightforward. In a qualitative study, Hara and Kling (1999) provided an example of how unclear course objectives can negatively affect student performance. In an attempt to provide students with flexibility, the instructor profiled by Hara and Kling (1999) did not specify course objectives or expectations for the assignments. However, many students did not consider this an advantage; rather, several were frustrated by their uncertainty regarding the instructor's expectations.

Interpersonal Interaction

Nearly every published online quality framework has emphasized the importance of interpersonal communication and collaboration. For example, The Middle States Commission on Higher Education (2002) explicitly states that courses and programs should be designed to promote "appropriate interaction" between the instructor and students, as well as among students. Most frameworks also detail specific best practices under the general heading of interpersonal interaction. The Quality Matters guidelines include four items under the general standard of "learner interaction and engagement," as

well as two other items regarding self-introductions by the instructor and students (Quality Matters Program, 2011).

Online learning theories have also strongly emphasized the critical role of interpersonal interaction (Anderson, 2003; Moore & Kearsley, 1996; Scardamalia & Bereiter, 2006), which is thought to have two key impacts on student learning. Firstly, theorists and practitioners believe that collaborative work can help build a learning community that encourages critical thinking, problem solving, analysis, integration, and synthesis; provides cognitive supports to learners; and ultimately promotes a deeper understanding of the material (Friesen & Kuskis, 2013; Picciano, 2001; Salmon, 2002, 2004; Scardamalia & Bereiter, 2006).

Second, interpersonal interaction may help strengthen students' psychological connection to the course by enhancing "social presence"—the degree to which a person is perceived as a "real person" in mediated communication (Shearer, 2013; Young, 2006). Survey research has bolstered the notion that effective student—instructor and student—student interactions are critical to effective online learning (Baker, 2003; Ralston-Berg, 2010, 2011). Perhaps more importantly, empirical studies have also focused on interpersonal interaction, including both student-instructor interaction (Arbaugh, 2001; Moore, 1989; Young, 2006) and student-student interaction (Balaji & Chakrabarti, 2010; Matthew, Felvegi, & Callaway, 2009; Moore, 1989).

Bernard et al. (2009) conducted a meta-analysis of 74 studies of interaction in online learning and concluded that increased interpersonal interaction within the framework of the course, either with the instructor or with student peers, positively affects student learning. More recently, theorists and researchers have begun to move

beyond examining the extent of such interaction to investigating its quality. This line of questioning suggests that the mere existence of communication and collaboration is not sufficient to improve student learning. Rather, communication and collaboration must have a clear purpose and facilitate content delivery (Baran & Correia, 2009; Naidu, 2013). In support of this notion, in one qualitative study, Ho and Swan (2007) found that the quality of participation in online discussions (defined in terms of whether the posting was a new contribution, was reflective of the student's opinions, and was supported by sufficient evidence where necessary) predicted students' own grades in the course.

Another study (Balaji & Chakrabarti, 2010) asked students to rate their course's online discussion forum in terms of the perceived quality, interactivity, and participative nature of the discussion. Perceived quality of discussion was positively related to students' participation and interaction, as well as to self-perceived learning.

Technology Usage

Most online learning quality rubrics incorporate standards to assess the availability of technology and its ease of use. For example, the Quality Matters rubric specifies that course technologies should be current and that students should have ready access to required technologies (Quality Matters Program, 2011). Survey studies support this general notion; two of the students' top 10 selections in the Ralston-Berg (2011) study were related to easily accessible and downloadable technology. Grandzol and Grandzol's (2006) review of best practices also indicates that students prefer to interact with course content via current technologies (such as PowerPoints with voiceover narration) rather than by reading textual explanations.

Emerging literature has focused not only on the availability of technology but also on how it is employed. As Fulton (2001) noted, "dazzling technology has no value unless it supports content that meets the needs of learners" (p. 22). Indeed, a recent review of the effectiveness of specific technology tools that are frequently incorporated into online courses, such as discussion boards, online quizzes, and embedded video, found that the mere presence of such tools did not seem to affect student learning. Rather, technology tools that did promote student learning were those that provided students with more control over their interactions with media (Balaji & Chakrabarti, 2010) and those that encouraged learner reflection (Roschelle et al., 2010). These results suggest that simply incorporating current technology into a course is not sufficient to improve student success; rather, the technology must also be thoughtfully leveraged to support student learning in the service of defined learning objectives (Roschelle et al.). The above narrative aptly supports the fact that all the rubrics from different entities intend to foster effective interaction, which is the very basis of knowledge construction.

Vygotsky (1978) reported that knowledge is generated and constructed through social interaction, so effective learning is nurtured by meaningful interaction between students and teachers and amongst students. Educational communication is made up of three key interaction elements: student–student, student-content, and student-teacher (Moore, 1989).

Instructional Strategies

The evolution of technologies supporting online educational platforms has allowed dynamic interaction among instructors and students with a resultant shift from individual learning to suitable forms of cooperative and collaborative learning. This shift,

driven by technology, has vastly increased the effectiveness and visibility of the role of teaching presence and its influence on the learning process (Arbaugh, 2013; Garrison & Akyol, 2013; Prineas & Cini, 2011).

However, in order to take full advantage of cooperative and collaborative learning, erroneously used interchangeably, it is important to understand the difference between the two and the various elements that need to be in place for these learning theories to become effective tools. Learning processes can be individual, collaborative, or cooperative, and online education technology can support these modes. In a white paper from Epic Group on personalization and e-learning (Clark, 2004, p. 26), the author concludes that "technology may support both individual learning and access to social networks."

In the article "Collaborative versus Cooperative Learning," Panitz (2003) points out that there is a certain amount of overlap or inter-concept usage between cooperative and collaborative learning, and that it is an elusive goal to find a distinction between their definitions. "There is considerable ambiguity about the meaning of collaborative learning. The two terms, cooperative learning and collaborative learning, are therefore, typically used as interchangeable and synonymous" (Johnson & Johnson, 2004, p. 788). However, a distinction between the two concepts is available with the use of the terms within the fields of Computer Supported Collaborative Learning (CSCL) and Computer Supported Cooperative Work (CSCW) (Dillenbourg, Baker, Blaye, & O'Malley, 1996; Roschelle & Teasley, 1995).

Roschelle and Teasley (1995) offer the following insight:

We make a distinction between collaborative versus cooperative problem solving. Cooperative work is accomplished by the division of labor among participants, as an activity where each person is responsible for a portion of the problem solving. We focus on collaboration as the mutual engagement of participants in a coordinated effort to solve the problem together. (p. 70)

In the theory of cooperative freedom, the three terms are clearly distinguished and related to the distinction above. They are described as follows:

Individual learning provides superior individual flexibility but very limited affinity to a learning community. It has a strong position in online education delivered by institutions with a tradition in distance education. Individual learning environments can be more or less rigid or flexible, for example, with regard to time, place, and pace.

Collaborative learning requires participation in a learning community but limits individual flexibility. One may say that collaborative learning requires that students sink or swim together (Dalsgaard & Paulsen, 2009). Collaborative learning is common in online education offered by traditional face-to-face institutions.

Cooperative learning focuses on opportunities to encourage both individual flexibility and affinity to a learning community. Cooperative learning seeks to foster some benefits from individual freedom and other benefits from cooperation in online learning communities. It thrives in virtual learning environments that emphasize individual freedom within online learning communities (Dalsgaard & Paulsen, 2009).

Another way to distinguish between the three terms is to claim that individual learning is conducted alone, collaborative learning depends on groups, and cooperative learning takes place in networks. One may also add that the ties between people are much

environments build on a number of means that support individual flexibility and other means that facilitate affinity to a learning community. The theory of cooperative freedom is based on three pillars: voluntary but active participation, means promoting individual flexibility, and means promoting affinity to learning community (Dalsgaard & Paulsen, 2009).

One of the most useful explanations of collaborative learning comes from Smith and MacGregor (1992), who posit that activities may differ considerably but focus on students' exploration or application of the course material, not simply the teacher's presentation or explication of it. Cooperative work is often described as a good way to improve productivity by delegating tasks. However, this gives rise to what is referred to as the "divide and conquer" mentality, students complete only a portion of the workload and then share answers with their group. However, a major difference between cooperative and collaborative learning is accountability. Activities are used to teach the competencies of the course, and students assume responsibility for their learning, and they earn their own grades based on their performances on an assessment of the competencies. The key is to structure the activities collaboratively so that learners are mutually dependent on each other yet are held individually accountable. This eliminates the free loader students who try to coast based on the group's performance (Scheuermann, 2018).

The above discussions logically suggest that in any higher education online education environment, effective learning should focus on creating intellectually stimulating, ongoing, interaction that eliminates the pedagogical distance between the

teacher and the student as well encourages collaborative and cooperative learning. Thus, higher education practice lays the foundation for the establishment of TP.

Learning Styles and Humanization of Content

In support of this role of teaching presence, Reupert, Maybery, Patrick, and Chittleborough (2009) quote a student whose comment is indicative of an issue that lies at the very core of the emerging era of online education, i.e., the role of the instructor in the virtual classroom. The student stated that it was important for him, as a human being, to interact, not with a computer, or a book, but with others who knew more about this subject than he did and were there to bring it to life through their human side. This sentiment of the importance of the 'human side' is also supported by Sheridan, Kelly, and Bentz (2013) in stating that online learners want to know who their teachers are and want to be connected with them in some way. They want to feel a real person behind the veil: understanding, kind, empathetic, patient, and creative human being at the other end of the virtual classroom.

This is further corroborated by a meta-analysis of students' evaluations conducted by Kim, Jörg, and Klassen (2019). They found that teaching effectiveness is primarily a function of the personality of the instructor who teaches a course rather than of the course that is being taught. They further list over 250 factors that impact students' academic achievement and categorize them into seven sources of impact: teaching (teaching/instruction strategies, student learning strategies, and implementation methods), teacher, student, school, home, curricula, and classroom.

However, instructors can only function effectively if they overcome the dilemma of the virtual teaching world. There are instructors and teachers who wonder what it

means to be an instructor in the virtual world of online learning (Feeler, 2012). How can they be "here" when there actually is no "here" but only a broadly scattered "there." That, truly is the issue that generally explains the essence of teaching presence and the importance of creating, sustaining, and maximizing it (Feeler, 2012). It is the art of being virtually there, where one is physically not, through one's effective teaching presence, which is made possible by setting an academic climate through a series of planned interventions that engages the students to achieve the desired learning outcomes (Bowden, 2012; Ekmekci, 2013).

This is also supported by a theory developed by Moore (1993), which says that if learning outcomes are to be maximized, transactional distance must be minimized. Transactional distance refers to a pedagogical phenomenon indicative of the non-geographic separation between instructors and students in online learning, constituting three key components: dialog, structure, and autonomy (Moore & Kearsley, 2005). This requires planned intervention, on a consistent basis, over a period of time, to avoid the issues that creep into this pedagogy.

Major issues identified by the researchers include isolation, self-directed learning discipline, disconnect, no sense of community, and low self-efficacy. Moore and Kearsley (2005) state that the challenge of being disconnected shows lack of interaction, which is inherent in the very nature of online learning. They suggest the four constructs that could help overcome this challenge: learner-content interaction, learner-learner interaction, learner-technology interaction, and learner-instructor satisfaction.

Learner-content interaction is defined as the non-human interaction that occurs in the online environment, specifically interaction with course content, assignments,

websites, and associated learning activities (Strachota, 2006). Learner-learner interaction refers to the human interaction that occurs between other students enrolled in the same course. This type of interaction typically occurs through discussion boards, synchronous meetings, blogs, and email (Strachota, 2006). Learner-technology interaction refers to non-human interaction between students and the technology used to facilitate the online learning environment (Strachota, 2006). Learner-instructor satisfaction is defined as human interaction that consists of two-way communication between the learner and the instructor (Moore & Kearsley, 1996). Of these four constructs, learner-instructor satisfaction is most directly controlled by faculty and most closely associated with the teaching presence component found in the Community of Inquiry model. This is where the faculty, in the online learning environment, often act as facilitator, content expert, and "E-moderator" (Gregory & Salmon, 2013; McElrath & McDowell, 2008; Salmon, 2011).

Research indicates, instructors who are ill-prepared to teach web-based courses or to use technology in meaningful, innovative ways leave the students feeling disengaged, self-taught, and dissatisfied (Donavant, 2009; Gregory & Salmon, 2013), whilst, learner-instructor interaction is known to be a contributing factor to student satisfaction in online learning (Paechter, Maier, & Macher, 2010). It is important that instructors must now transcend the limited role of faculty established in the early years of distance education (Richardson et al., 2015), and ensure that course set-up, content, and delivery are purposeful, meaningful, and appropriate for the online learning environment (Baghdadi, 2011; Seok, DaCosta, Kinsell, & Tung, 2010).

Researchers have been able to show a relationship between levels of interpersonal interaction, as part of teaching presence, and student performance. Xu and Jaggars (2013)

researched this aspect and found that students with minimum interpersonal interaction scored a letter grade D whilst students with high interpersonal interaction scored a letter grade A-. The difference was sufficiently large and consistent among the groups to suggest strong validity. Xu and Jaggars further posit that the reasons for the above observed improvement in grades, in courses with high interpersonal interaction ratings, was the result of certain actions taken by the teachers. They tended to post frequently, invite student questions through a variety of modalities, respond to student queries quickly, and solicit and incorporate student feedback.

In view of the importance of this factor, these elements are discussed in more detail by Xu and Jaggars (2015), based on observations in an experiment. First, the authors found that high-interaction instructors posted announcements on a regular basis to remind students about requirements for assignments, coming deadlines, newly posted documents, examinations, and other logistic issues. In courses where the instructor made limited announcements, students were more likely to express dissatisfaction with the course.

Second, students in high-interaction courses reported that their instructors responded to questions in a timely manner, typically, within 24 hours. These instructors also tended to provide multiple ways for students to communicate with the instructor, including email, telephone, discussion board postings, synchronous chatting, and inperson office hours. High-interaction instructors were also more likely to ask for student feedback and seem responsive to that input. The strategies above seemed to help students to feel that the instructor cared about the course and students' performance in the course,

which in turn helped students personalize the instructor, feel connected to the course, and strengthen their motivation to learn and succeed.

Effective teacher interaction and the sense that the teacher actually "cares" seemed to carry a lot of weight in students' assessments. It seemed that students could easily distinguish between instructors who cared and those who did not; several students made explicit the link between teacher interaction and caring. A student in a humanities course appreciated the helpfulness that came through in the narrative videos her instructor had created. Another student was able to sense the instructor's passion through live chat and the discussion board. In a similar vein, high-interaction instructors often brought up in their interviews that online students may feel lonely, frustrated, isolated, or less motivated than students in traditional face-to-face classes. As a result, these instructors felt that it was particularly important to make their students feel that they cared and were actively engaged in the course (Xu & Jaggars, 2015).

Furthermore, teaching presence has been shown to have a significant effect on learning persistence, and that is highly related to the level of learning that occurs within an online course (Joo, Joung, & Kim, 2013). To overcome the possible negative impacts of online learning, Ko and Rossen (2017) proposed that faculty members establish presence and rapport online early enough in the course because when the course is in session, students need to see evidence of teacher engagement such as announcements, discussion board posts, and uploads of photos or videos on the part of the instructor. It is not enough to log in and monitor a course as the instructors need to show that they are equally active, or even proactive, in the course (Kelly, 2014).

Multiuser Virtual Environment (MUVE) Theory

Berge (1995) provides supports to the above concept while explaining his Multiuser Virtual Environment (MUVE) theory. He mentions four distinct functions of online instructors: pedagogical, social, managerial, and technical. The fourth function, technical, was later conceded by the Community of Inquiry researchers as a crucial interactive component of teaching presence that supports CoI (Anderson et al., 2001). These four roles comprise most of the activities that are carried out during a course by the teacher/instructor, which lends support to the concept of teaching presence. In any online course, a critical component of teaching presence is active interaction. This is not a causal relationship by default but requires skillful intervention by an instructor to promote a level of cognition/social interaction that can project the notion of a caring teacher interested in building an authentic relationship, by being in it together, with the students (Cranton, 2006). A result of this interaction is the sense of 'being there' or 'being together', even though it is experienced in different ways by different students, it helps in collaborative construction of knowledge due to the responsive involvement of the instructor (Cho & Kim, 2013; Lehman & Conceição, 2010; Xin, 2012).

Theoretical Context

The overarching philosophy of the theories of learning provide guidance to how best to understand the learning process, the prerequisites of sound learning, and the impediments that hinder learning. This study has been guided by the philosophical approach to learning contained in the following two theories:

Socio Constructivist Theory of Learning

An examination of quality teaching and learning requires a set of assumptions about how learning occurs, which in turn informs one's perspective on the quality of the teaching and learning environment. At the most basic level are two contrasting theories. The traditional objectivist epistemology assumes the existence of an objective reality and envisions education as a process by which that reality is assimilated into personal knowledge (Akyol, et al., 2009). According to this view of teaching and learning, students are empty vessels to be filled and teachers are the experts who fill them. However, developments in the cognitive and neurosciences have challenged the objectivist paradigm, suggesting instead that humans construct new knowledge based on their existing knowledge and interpret the world according to their personal reality (Ally, 2004).

The constructivist theory of knowing assumes that individuals bring to the learning process their "prior knowledge, skills, beliefs, and concepts. These significantly influence what they notice about the environment and how they organize and interpret it" (Bransford, Brown, & Cocking, 2000, p. 10). As such, learners play an active role in the sense-making process, which has significant implications for the design of effective, quality learning environments.

This remarkably Deweyan approach gives rise to several principles relevant to the teaching and learning process, as described below. Much of this discussion depends on the work of Bransford, Brown, and Cocking (2000), based on their meta-analysis of research on the science of learning conducted on behalf of the National Research Council.

Prior knowledge as a starting point for learning. A key tenet of the constructivist epistemology is that individuals bring to the learning process their pre-existing knowledge, including skills, beliefs, values and conceptual understandings. These are both individually and culturally derived, as well as through conscious and unconscious experiences. Constructivism is rooted in Piaget's work on assimilation and accommodation (Bransford, Brown, & Cocking, 2000). According to constructivist theory, Ally (2004) states:

Learners interpret the information and the world according to their personal reality...learn by observation, processing and interpretation, and then personalize the information into personal knowledge..., thus, learners learn best when they can contextualize what they learn for immediate application and personal meaning. (p. 19)

Because personal knowledge influences how individuals interpret and organize information, prior knowledge must be the starting point for new learning. The idea of prior knowledge is also a central feature of adult learning theory (Speck, 1996), as adults bring to the classroom not just their skills, beliefs, and values but also significant professional expertise and life experience. It is not uncommon for an adult learner to possess greater expertise than the instructor in at least some aspects of the subject under study. In such a context, teachers are not suppliers of knowledge but rather facilitators and guides in a process of discovery.

The active role of learners. If learners generate new knowledge in relation to what they already know, then from a cognitive perspective they clearly play an active role in the learning process, whether they do so consciously or unconsciously. Through

processes of perception, motivation, interpretation, and synthesis, learners are the builders and creators of knowledge. This view of the learner has significant implications for teaching and learning, and hence also for the evaluation of a quality learning environment. To the extent that learning environments promote and support these active processes of knowledge construction, through instructional strategies that invite self-reflection, they may be viewed as more or less effective.

There are two widely accepted constructivist learning theories: critical constructivism and social constructivism. The former assumes that knowledge is constructed as an integration of internal contradictions resulting from environmental interactions. Young (1997) (as cited in Kanuka & Andersen, 1998) posits, "Contradictions drive us to construct knowledge by conceiving of phenomenon that lead toward greater understanding of unspecifiable complexities of organization and abstraction to aspire and understand the objective universe" (p. 58). The latter, i.e., social constructivist theory, believes in the social nature of knowledge and states that knowledge is actively constructed through social intercourse, and through this interaction we gradually accumulate advances in our level of knowing. It is the belief that this active construction of knowledge, being the result of social interaction and language usage, is a shared, rather than an individual, experience.

Active construction of knowledge moves through five phases: Sharing/comparing information; discovery and exploration of dissonance; negotiation of meaning and/or co-construction of knowledge; testing and modification of proposed co-construction; and phrasing of agreement, statements, and application of this new knowledge. It should be noted that socially constructed knowledge may not move linearly through each

successive phase but will follow the generally observed constructivist path for knowledge creation (Kanuka & Andersen, 1998). Meanings emerge from the patterns of our social experiences that always occur within a socio-cultural context, resulting in knowledge that is bound to a specific time and place (Prawat & Floden, 1994; Vygotsky, 1978).

Metacognition as central to higher order learning. Closely linked to constructivism, particularly in a higher learning context, is the notion of metacognition (Aykol & Garrison, 2011). First introduced by Flavell (1976), metacognition, which translates as "knowing about knowing", refers to the ability of learners to monitor and control their own learning processes. Taylor (1999) defines metacognition as:

An appreciation of what one already knows, together with a correct apprehension of the learning task and what knowledge and skills it requires, combined with the agility to make correct inferences about how to apply one's strategic knowledge to a particular situation, and to do so efficiently and reliably. (p. 34)

When learners have the tools to monitor their learning process, they are better able to regulate their attention, test their preconceptions, and determine where they are in the inquiry process (Bransford, et al., 2000). Instructional strategies play a supporting role in this process by making learning visible, providing opportunities for feedback and revision, and promoting a cycle of reflective inquiry. To the extent they do so, learning environments may be more or less effective in promoting learners' metacognitive skills and their capacity for inquiry-based critical thinking (Aykol & Garrison, 2011).

Metacognition has also been linked with adaptive expertise, i.e., the ability to apply knowledge toward solving new and novel problems (Bransford, Brown, &

Cocking, 2000). The development of adaptive expertise is particularly relevant to university-based continuing education, where the objective of most programs is to promote higher-order thinking and problem-solving that improves one's capacity to perform in a complex professional context characterized by rapid change and uncertainty. Thus, courses serving working professionals may be viewed as more or less effective to the extent they promote the application or transfer of knowledge to meet the demands of everyday practice. Collectively, these principles are consistent with a cognitive constructivist epistemological paradigm, which focuses on the mental processes by which individuals construct knowledge; in other words, what is going on inside the learner's head.

Nevertheless, the social learning theorists suggest that the constructivist theory, in its original form, does not answer all the questions. They believe that elements of social learning theory be incorporated with the constructivist theory and call it socio-constructivism. This model states that individuals learn from one another and their environment through processes of observation, identification, imitation, and reinforcement (Bandura, 1962). As such, one's capacity for constructing knowledge is partly determined by the available supports in the social environment. Vygotsky (1962, 1978) calls this the Zone of Proximal Development (ZPD) i.e., the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through instructor guidance and peer collaboration.

Like cognitive constructivism, the social nature of learning also has important implications for effective learning design. First, learning is best embedded in activity,

context, and culture where learners are both producers and products of their social systems (Bandura, 2001; Garrison, 2011). Second, learning is enhanced through processes such as guided participation and scaffolding that support learners in a continuous interaction between their cognition, behavior and social environment.

Lave and Wenger (1991) characterize the socio-constructive learning environment as a community of practice. Although communities of practice may exist outside the classroom, Lave and Wenger suggest formal learning environments can be constructed to cultivate community by promoting density of engagement and shared enterprise; or, what Wenger refers to as participation and reification (Webster-Wright, 2009). Both elements are critical. As Webster-Wright (2009) explains:

A community of practice...needs practices which solidify community purpose and membership through processes of reification...it cannot be sustained if its members just hang out with each other, talking about, say, building bridges; it has to build the bridge or at least provide drawings. (p. 62)

An effective online learning environment consistent with this orientation toward learning might use pedagogical practices such as problem- or project-based learning as well as the use of collaborative teaching strategies such as shared assessment assignments or the generation of learning resources (Webster-Wright, 2009).

Implications for the design of effective learning environments. Bransford, Brown, & Cocking (2000) capture socio-constructivist principles of learning in a framework for the design of effective learning environments. Specifically, the framework postulates four facets of learning design that make a learning environment effective, i.e.,

learner-centered, knowledge-centered, assessment-centered and community-centered design.

Learner-centered environments pay careful attention to prior knowledge and are characterized by opportunities to inquire into students' thinking, leverage prior experiences, confront potential misconceptions, and support each individual learner's progression. Knowledge-centered environments promote learning with understanding and learning transfer by exposing students to well-organized bodies of knowledge built around important ideas or concepts. They also emphasize relationships and patterns among concepts and contextualize learning through problem-based learning activities in which students apply what they learn to situational contexts as might occur naturally in the field.

Assessment-centered environments promote the formative use of assessment as a tool for teaching and learning, such that students' thinking is made visible and they receive critical feedback and have opportunities to revise their work (Bransford, Brown, & Cocking, 2000). Finally, community centeredness arises from classroom norms that value the search for understanding, support risk-taking, and encourage peer learning. Additionally, community-centered classrooms also seek to connect the classroom and the external community in which learning is situated to promote relevance for the learner as well as knowledge transfer (Bransford, Brown, & Cocking, 2000).

Implications. By illuminating the underlying processes by which learning occurs, the socio-constructivist paradigm as described above, provides the theoretical context that undergirds this study and illuminates the critical dimensions of an effective, quality, learning environment. Yet, this general theoretical tradition does not provide an adequate

road map for conceptualizing a quality online learning environment. It does not explain, for example, how the social construction of knowledge might occur in an asynchronous learning environment where students do not enjoy shared time and space. To that end, Garrison, Anderson and Archer (1999) developed the Community of Inquiry (CoI) model to describe the mechanisms by which a learning community is formed in the online learning environment. For purposes of this study it provides a comprehensive theoretical underpinning to represent the convergence of pedagogy and technology in a socioconstructivist online learning context.

Theory of Transactional Distance (TD)

The theory of Transactional Distance (TD) focuses on three specific types of interactions that help facilitate learning within online courses (Moore, 1989). These interactions are learner-content, learner-learner, and learner-instructor. Online educators can reduce psychological distance by developing courses that employ interactive communication (Witt & Wheeless, 1999). The three key components that shorten transactional distance and facilitate meaningful learning are dialog, structure, and autonomy (Moore & Kearsley, 2005). Dialogue specifically refers to interactions between the instructor and the student (Moore, 1973, 1989, 1993; Moore & Kearsley, 2005). Structure relates to elements of course design including objectives, teaching methods, and evaluation strategies (Moore, 1989, 1993). Autonomy is the extent to which, in the teaching/learning relationship, the learner determines the goals and the learning experiences (Moore, 1989, 1993). It is, however, critical that as the level of interaction between teacher and learner decreases, learner autonomy must increase (Benson & Samarawickrema, 2009; Stein, Wanstreet, Calvin, Overtoom, & Wheaton, 2010).

The organization of online course material becomes particularly important depending on which method or methods of learning are most appropriate for the specific subject of study, as well as for the specific needs of online learners (Benson & Samarawickrema, 2009; Moore, 1989). This theory provides a valuable basis for maximizing the effectiveness of online learning (Stein et al., 2010).

TD is another theoretical framework that explains the importance of interaction, which is the key element in creating teaching presence, more so in distance education. The theory states that the quality of teaching and interactions among students and the instructor relates less to geographical separation and more to the structure of a course and the interactions that take place within it (Garrison & Cleveland-Innes, 2005; Moore & Kearsley, 1996). Moore (1973) saw distance education as a transaction and asserted that the physical separation in distance education leads to a psychological space of potential misunderstandings and a communication gap, i.e., transactional distance, between the instructor and the learner. According to this theory, increased dialogue between the instructor and student results in a lesser degree of transactional distance, and advances in communications technology have made synchronous and asynchronous interaction more readily available, thus increasing dialogue and decreasing transactional distance.

Transactional distance theory is conceptually important because it provides an explanation for why the use of electronic communication tools may bridge the distance between learners and the instructor in an online environment. The electronic communication tools found in most course management systems, e.g., discussion, e-mail, chat, and messaging etc., increase the level of interaction, thus allowing learners and instructors to reduce the psychological and physical distance between them and achieve

levels of social interaction similar to those in face-to-face classrooms (Lemak, Shin, Reed, & Montgomery, 2005).

Moore (1989) believes that continuous engagement among the students reduces feelings of being distant. McBrien, Jones, and Cheng (2009) suggest instructors need to not only evaluate opportunities for dialogue but also analyze the quality of the dialogue occurring among students. The theory of transactional distance also postulates that the medium of online education requires special teaching-learning strategies and techniques to bridge the physical and psychological gap between teachers and students (Moore, 1973, 1989; Moore & Kearsley, 2005).

The space in online teaching environments is less of a geographical separation and more of a pedagogical obstacle (Benson & Samarawickrema, 2009; Moore, 1993). The field of online education has changed significantly since the theory's inception. Sophisticated technology now enables learners and instructors to increase their interaction and reduce perceived psychological distance (Dennen et al., 2007; Garrison & Cleveland-Innes, 2005; Russo & Campbell, 2004). The result can be levels of social interaction similar to, or even more than those found in face-to-face classes (Lemak et al., 2005).

Theoretical Underpinning

This section will highlight the theoretical underpinning of this study; the Community of Inquiry model (CoI) that informs the basis of this research and provides content and context to it in an attempt to understand, through the lens of the teachers, the role of teaching presence and how this impacts learning outcomes.

Community of Inquiry model (CoI)

Garrison et al. (2000) developed a theory in the late 1990s to address online pedagogy and the emergence of text-based discussion forums as the central form of communication in online learning environments. The Community of Inquiry Theory provides a foundation for this research and posits that an ideal educational experience occurs at the intersection of three elements: social presence, cognitive presence, and teaching presence (Garrison, Anderson, & Archer, 2003). These three roles comprise most activities carried out during a course by the teacher. Garrison et al. (2000) created this theoretical model to describe how collaborative learning communities can best function in an online environment. These three overlapping elements provide a structure that can support and encourage higher levels of inquiry and meaningful collaboration within the context of online learning (Lambert & Fisher, 2013).

Community of Inquiry Framework

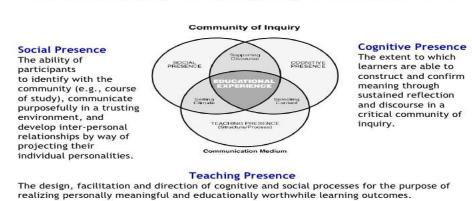


Figure 1. Garrison et al.'s (2000) Community of Inquiry framework. Note: Email permission has been granted by Dr. Garrison to use this CoI model in this study (Appendix G).

Garrison et al. (2000) further posits that effective online learning/teaching is best understood in terms of the interrelationship of three types of presence: cognitive, social,

and teaching. Cognitive presence refers to the ability of participants, both faculty and students, to communicate with one another to construct meaning and build an understanding (Garrison, Anderson, & Archer, 2001). This involves an exchange of information and the development of new ideas. Social presence is defined as "the ability of participants in the community of inquiry to project their personal characteristics into the community, thereby presenting themselves to the other participants as real people with individual characteristics (Garrison et al., 2003, p. 89). Teaching presence is the "design, facilitation, and direction of student cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (Garrison et al., 2003, p. 89). This is achieved through the implementation of three CoI teaching presence elements: Instructional design and organization, facilitation of discourse, and direct instruction, which enhance students' perceptions of learning, motivation, and satisfaction (Garrison & Cleveland-Innes, 2005). However, Berge (1995) suggested a fourth teaching presence element, technical, which was conceded by the Community of Inquiry researchers as a factor that has become relevant due to rapidly advancing technology being used in online pedagogy, more so in the computer conferencing context (Anderson et al., 2001).

Teaching presence is the culmination of the teacher setting the climate, selecting the course content, and structuring the environment to facilitate student learning (Poston, 2014). An effective teaching presence results in the creation of an educational experience that facilitates communication among participants. In an online environment, as one of the three overlapping elements in a fully functioning CoI, TP facilitates interaction;

interaction creates a supportive social presence and encourages a challenging cognitive environment (Shea, Li, & Pickett, 2006).

Studies investigating the influence of teaching presence in online learning consistently report a significant positive relationship between the three CoI teaching presence indicators: instructional design and organization, facilitation of discourse, direct instruction; and students perceptions of learning, motivation, and satisfaction (Garrison & Cleveland-Innes, 2005).

Researchers have explained these three aspects as follows:

Instructional design is critical to establish a well-organized and structured: curriculum content, learning activities, course timelines, administering instruction, and offering student evaluation. This activity takes place much in advance, even before the teacher and the students know each other, and the teacher can embed the concepts and activities of teaching presence in the design itself.

Facilitating discourse is when the instructor monitors and manages purposeful collaboration and reflection. The teacher must facilitate the dialogue, encourage reflection, and sustain the discourse over the entire course. The teacher becomes the cocreator of a social environment by identifying areas of student agreement and disagreement, seeking to reach consensus and understanding amongst students, and acknowledging and reinforcing student contributions, thus setting the climate for learning, drawing in students, and prompting discussion.

Direct instruction is provided to diagnose learner needs and provide timely directions so that the intended learning outcomes are achieved. It also involves the instructor presenting content and questions, focusing the discussion on specific issues,

summarizing discussion, confirming understanding, diagnosing misperceptions, injecting knowledge from diverse sources, and responding to technical concerns (Reupert et al., 2009).

The premise of this framework is that higher-order learning is best supported in a community of learners engaged in critical reflection and discourse. The philosophical foundation of the CoI framework is collaborative constructivism and, theoretically, it is grounded in the research on deep and meaningful approaches to learning (Garrison, Andersen, & Archer, 2000). Anderson et al. (2001) provided a seminal definition of teaching presence based on the Community of Inquiry framework. They posit that:

Teaching presence is the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes. Teaching presence begins even before the course commences as the teacher, acting as the instructional designer, plans and prepares the course of studies, and it continues during the course, as the instructor facilitates the discourse and provides direct instruction when required. (p. 5)

Community of Inquiry research during the past decade has demonstrated the significance of teaching presence (Dennen, Darabi, & Smith, 2007). Some researchers claim that teaching presence is the one CoI factor most directly related to student learning (Akyol & Garrison, 2008; LaPointe & Reisetter, 2008; Paechter et al., 2010). However, in the last decade researchers have suggested that CoI is not all encompassing and falls short in explaining certain elements whose interactions helps learning and teaching in online pedagogy. Shea & Bidjerano (2012) talk about 'learning presence' as a moderator in the CoI model, based on the online learner self-regulation concept. They state that

teaching presence and social presence have a differential effect on students' cognitive presence depending on the student's self-regulatory cognitions and behaviors. In the absence of sufficient teaching and social presence, a compensatory moderating role is played by enhanced learning presence to maintain cognitive presence. Shea and Bidjerano (2010), and Shea et al. (2012) also suggest a revised CoI model that shows learning presence as the fourth component of CoI, having bidirectional interaction with teaching and social presence, and unidirectional relationship with cognitive presence.

Another element, to broaden and revise the scope of CoI, suggested by Cleveland-Innes and Campbell (2012) is 'emotional presence'. Their study presents "evidence of emotions present in online environments, and empirical data which suggests emotional presence may exist as a fundamental element in an online community of inquiry" (p. 269). In fact, this is a validation of their earlier opinion where they showed research results from multiple studies that indicated that emotions are an integral part of the learning environment and influence students' learning experiences (Cleveland-Innes & Campbell, 2006).

However, some researchers while partially agreeing with Cleveland-Innes and Campbell (2012) and also using their research have taken a slightly different approach. Majeski, Sover, and Valais (2018) believe that emotional presence is basically a part of teaching presence, as that is where it shows maximum relevancy and impact. It is interesting to see that Majeski, Sover, and Valais also refer to Garrison et al. (2010) and state that "emotional facilitation and emotional regulation relate to teaching presence, specifically establishing the course content, schedule, and assignments; monitoring and

managing interaction and reflection; determining learner needs, and providing appropriate guidance and information." (pp. 57-58).

Lam (2015) suggested adding autonomy presence as the fourth element of CoI based on the research that individual intrinsic drive has shown to overcome the absence of teaching presence, or compensate for it, through self-directed learning and shared idea in discourse with other students even though teaching instructions and facilitation were absent.

Anderson (2016) has discussed all the variations suggested by researchers in the last decade and also referred to a revised CoI framework showing emotional presence as the fourth circle, instead of their original three, though he did not necessarily fully agree with this concept. Anderson, (2016) talked about Shea and Bidjerano's (2010) 'learner presence', Cleveland-Innes & Campbell's (2012) 'emotional presence', and Lam's (2015) 'autonomy presence', and said, "so my own suggestion in the search for the 'missing' element(s) in the COI model is to add 'agency presence' to the COI trinity. This term is simpler than autonomous, builds on the seminal work of Bandura (1989) and captures the components mentioned by both Shea and Lam" (p. 2).

Teaching Presence: Definitions and Correlations

Schlosser and Simonson (2006) define online educations as "institution-based, formal education where the learning group is separated, and where interactive telecommunications systems are used to connect learners, resources, and instructors" (p. 1). To inject TP into online education, Ko and Rossen (2017) in agreeing with Boggs (1996) state that teaching presence begins even before the course commences. The teacher, acting as a coach and as instructional designer, plans and prepares the course of

studies to create teaching presence, and it continues during the course, as the instructor facilitates the discourse and provides direct instruction, as and when required (Sun & Chen, 2016). Garrison et al. (2000) states that teaching presence strongly influences the social and cognitive processes that occur in online learning environments. Researchers claim that teaching presence is the "binding element" that connects an online learning community and makes possible the cognitive and social activities required for effective online learning (Garrison, Anderson, & Archer, 1999).

It is evident that the level of intervention and degree of visible involvement demonstrated by the instructor is dependent upon the pedagogical choices and personal preferences of the instructor (Bowden, 2012; Costley, 2015; Ravenna, 2012). The intentions behind the pedagogical choices are critical to ensure that the learning process occurs based on a recognition of the role the instructor, while interacting with students in an authentic way (Cranton & Carusetta, 2004). The actions that primarily supported the fulfillment of these intentions were identified to be forming authentic relationships by the person inside the teacher with students, building rapport, and setting/reinforcing expectations (Cranton, 2006). The intentions of teachers reflect their interpretation of teaching presence; by being responsive to student needs and being available to support and guide them, they establish the role of the instructor as a facilitator of learning (Afolabi, 2016). Furthermore, by setting and reinforcing expectations for performance and participation, instructors establish an academic tone of expected engagement, thereby supporting their intention of creating engagement and interaction that supports learning. (Afolabi, 2016; Arbaugh & Hwang, 2006).

It is important to understand that teaching presence is not just authenticity in relationships or appropriate timely interventions, but it is also a mindset for extending activity between student, instructor and content beyond just being there (Arbaugh & Hwang, 2006). The teaching presence mindset includes a strategic workflow of effective practices that lead to co-construction of the intellectual climate shared by the instructor and students in the online course (Afolabi, 2016; Arbaugh & Hwang, 2006).

Reinforcing the above, Jaggars, Edgecombe, and Stacey (2013) reported that students reported a higher level of engagement when teachers incorporated live audio and video chats or video-captured lectures using web conferencing software such as Adobe Connect. Students also got a sense of teacher caring when the instructors posted frequently in chat rooms, invited student questions and responded quickly to those questions, provided detailed feedback on student assignments, and asked for and responded to student feedback about the course (Jaggars et al., 2013). Successful teachers know the flow and plan their courses to perfection. Shea et al. (2006) reported that students were "significantly more likely to report higher levels of learning and community when they perceived higher teaching presence behaviors" (p. 185).

To further strengthen the argument, Rovai (2003) states that teaching presence has been found to be positively correlated with students' feelings of 'fitting in' and of belonging to a learning community. This can account for significant improvement in persistence, defined as the length of time the student attends classes. Notably, research has also indicated that, in online learning, teaching presence, through interaction with instructors, seems to have a much more positive effect on learner satisfaction and learning, compared to interactions with peers (Swan, 2001). This finding has been

attributed to the observation that a strong teaching presence, as evidenced by a robust course structure and active instructor leadership, is crucial for achieving deep and meaningful learning outcomes (Garrison & Cleveland-Innes, 2005). Conversely, online courses dominated by student interactions can easily devolve into exchanges of poorly reasoned personal experiences and extended serial monologues (Angeli, Valanides, & Bonk, 2003).

Researchers have established significant, positive relationships between teaching presence and student success in both improved learning outcomes and satisfaction in online courses (Garrison & Cleveland-Innes, 2005; Shea & Bidjerano, 2010; Shea et al., 2006). However, most of those who are new to online environments are challenged with even finding suitable approaches to teaching in virtual classrooms because they did not learn that way themselves; thus, creating teaching presence poses a huge challenge (Niess & Gillow-Wiles, 2013). Teachers describe discomfort engaging in discussions in online courses with people they do not know. As noted in the literature, distance education students feel less supported in areas of communication, interactions with the instructor, and interactions with other participants in the courses (Shea, Li, Swan, & Pickett, 2005). The solution to these challenges requires that they think outside their traditional views of how content is learned and communicated. As a result, more and more teachers are searching for professional development programs that can be structured around their work lives (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009).

Without understanding the concepts behind teaching presence, Speer (2017) posits that student and instructors alike fear the online faceless education; but teaching presence, if established effectively, becomes the face of this supposedly faceless online

education. It is the art of being virtually there, where one is physically not, through one's effective teaching presence, which is made possible by setting an academic climate through a series of planned interventions that engages the students to achieve the desired learning outcomes (Speer, 2017).

The intentions of teachers reflect their interpretation of teaching presence; by being responsive to student needs and being available to support and guide them, they establish the role of the instructor as a facilitator of learning (Afolabi, 2016).

Furthermore, by setting and reinforcing expectations for performance and participation, instructors establish an academic tone of expected engagement, thereby supporting their intention of creating engagement and interaction that supports learning. (Afolabi, 2016; Arbaugh & Hwang, 2006).

Overall, it is important that the teacher understand the content, context, and timings of the interventions that they can initiate/implement in each of the three aspects of teaching presence. Specifically, research indicates that how an instructor establishes his or her presence in an online environment can have important implications on the students' overall learning experience (Richardson et al., 2016; Stone & Chapman, 2006).

The Three Elements of TP

Garrison et al. (2000) contend that while interactions between participants are necessary in virtual learning environments, interactions themselves are not sufficient to ensure effective online learning. These types of interactions need to have clearly defined parameters and be focused toward a specific direction, hence the need for teaching presence. Anderson et al. (2001) originally conceptualized teaching presence as having three components: instructional design and organization, facilitation of discourse,

originally called building understanding, and direct instruction. While empirical research may generate a debate regarding whether teaching presence has two elements, directed facilitation and instructional design and organization (Shea, 2006; Shea, Li, & Pickett, 2006) or three components, instructional design and organization, facilitation of discourse, and direct instruction (Arbaugh & Hwang, 2006), the general conceptualization of teaching presence with three elements has been supported by other research (LaPointe & Gunawardena, 2004; Stein et al., 2010).

Instructional Design and Organization

Instructors in online courses must work toward explicit and transparent design and organization as visual cues and immediacy behaviors typically found in face-to-face classes are non-existent (Coppola, Hiltz, & Rotter, 2002). Instructors can enhance online community by purposefully designing courses to minimize student isolation (McInnerney & Roberts, 2004; Yang & Liu, 2008). "Qualities of ideal, online professors include being highly accessible, personable, creating comfortable learning environments, offering variety in the course curriculum, and receiving as well as incorporating student feedback in course design and planning" (Komarraju, 2013, p. 104).

Teaching presence within the CoI framework represents behaviors exhibited by an instructor that encourages or facilitates closeness and immediacy towards students.

Several recent studies indicate that clear course structure, clearly communicated expectations, and explicit course rubrics are critical components of quality online course design (Gedik, Kiraz, & Ozden, 2013; Grant & Thornton, 2007; Lee, 2014; Swan, Day, Bogle, & Matthews, 2014; Teräs & Herrington, 2014). Research indicates students consider clear assignment rubrics and guidelines to be important contributors to online

course satisfaction (Lee, 2014). Anderson et al. (2001) defined instructional design and organization as a structured interaction component of the course. The authors considered the design of online course materials as well as clearly defined guidelines and expectations to be more time-consuming than face-to-face course planning.

Facilitated Discourse

Facilitated discourse refers to the ways an instructor can engage students in focused and sustained deliberation, discussion, and interaction to build on instructional material (Garrison et al., 2001; Overbaugh & Nickel, 2011). The facilitated discourse component of teaching presence is necessary to maintain learner engagement in a Community of Inquiry (Overbaugh & Nickel, 2011). Commenting on student posts, asking questions, making observations, and directing conversation when appropriate are ways an instructor can facilitate discourse (Anderson et al., 2001; Garrison et al., 2001; Coppola et al., 2002). Structured and facilitated discourse in an asynchronous online learning environment is crucial in order to engage students (Eom, Wen, & Ashill, 2006; Mandernach, Gonzales, & Garrett, 2006; Morris, 2009). Instructors can also facilitate productive discourse by identifying areas of agreement and disagreement, finding ways to reach consensus and understanding, reinforcing student contributions, and setting the climate for learning (Ladyshewsky, 2013; Shea et al., 2006).

Research also validates the importance of the instructors role in guiding student discussions (Shackelford & Maxwell, 2012). Guidance from instructors during discussions helps students feel more included in a learning community especially when their discussion contributions are reviewed by the instructor. Similarly, discussion boards that are reviewed and nudged in a thoughtful and informed direction have proven to be

extremely beneficial to the students (Shackelford & Maxwell, 2012). A lack of discernible instructor input makes students feel that they are engaged in work that does not contribute to learning in any meaningful way (Shackelford & Maxwell, 2012). This, to them, is a waste of time and resources, as students expect a tangible return on their investment; instructor guidance in discussion boards and postings is considered evidence that they are not engaged in self-instruction (Shackelford & Maxwell, 2012).

Instructors should play a critical role in enabling online learners' success by closing the gap that separates students from the instructor, but most instructors don't know how, and this is where the use of technology is especially important (Nishikant, 2009). Research indicates that designing opportunities for collaboration and interaction, within online courses, is an important scaffold to student learning (Gedik et al., 2013; Lee, 2014; Moallem, 2007; Swan et al., 2014; Teräs & Herrington, 2014).

Direct Instruction

Direct instruction typically refers to instruction specifically led or guided by the teacher (Rosenshine, 2008). Research clearly documents the importance of the instructor's role as a discussion facilitator, guide, and subject matter expert (Anderson et al., 2001; McElrath & McDowell, 2008; Rovai, 2004). Students indicate that instructor participation in online academic discussions gives credibility to the topic and the discussion (McIsaac, Blocher, Mahes, & Vrasidas, 1999). The instructor, as content expert, helps guide the topic discussion and offers a valuable presence in the conversation (McElrath & McDowell, 2008). Other studies indicate that students tend to focus more on learning when online courses are planned with clear expectations and guidelines including those on direct instructions (Dykman & Davis, 2008; Ku, Akarasriworn,

Glassmeyer, Mendoza, & Rice, 2011). Overall, direct instruction behaviors include guided discussions, asking questions to enhance clarity and learning, providing feedback to students, and the actual time spent in presentation and in guided practice (Anderson et al.,2001; McElrath & McDowell, 2008; Rosenshine, 2008).

Teaching presence, as it relates to the CoI framework, helps create and balance social and cognitive presences in the online environment (Kupczynski, Ice, Wisesenmayer, & McCluskey, 2010). The components of teaching presence, instructional design and organization, facilitated discourse, and direct instruction prevent an online course from becoming a mere social setting or an inflexible course of study for students (Ladyshewsky, 2013).

There is an alternate view on the elements of teaching presence. It is this idea that the conceptualization of teaching presence containing three factors does not accurately describe that presence. Shea et al. (2006) have found that their results indicate variations in teaching presence. Shea and Bidjerano (2009) further supported this line of thought, suggesting that rather than consisting of instructional design and organization, facilitation of discourse, and direct instruction, teaching presence instead is better conceptualized as comprising two elements; directed facilitation, and instructional design and organization. They further suggest defining direct instruction as "the capacity of the instructor to provide valuable analogies, offer useful illustration, present helpful examples, conduct supportive demonstrations, and supply clarifying explanation" (p. 552).

Importance of Teaching Presence

The body of research concerned with the CoI framework is supporting the importance of teaching presence for successful online learning, showing that it's a

"significant determinate of student satisfaction, perceived learning, and a sense of community" (Garrison & Arbaugh, 2007, p. 67). According to Garrison, Anderson, and Archer (2010), there is growing evidence that teaching presence has a significant effect on student satisfaction, perceived learning, and sense of community. The model itself is an apt depiction of their interactions, their overlapping influence on each other, and being interdependent, not discrete. Garrison and Arbaugh (2007) asserted that, "Interaction and discourse play key roles in higher-order learning, but not without structure (design) and leadership (facilitation and direction) ...structure and facilitation have a significant influence on discourse" (p. 164).

Many studies recently have explored correlations between and amongst the various presences in an attempt to explain how the framework affects learning. Swan et al. (2008) found the teaching presence element indicators of the CoI questionnaire to have a Cronbach's alpha reliability of 0.94 while also validating the internal consistency of the questionnaire. Akyol and Garrison (2008) found a significant positive relationship between teaching and cognitive presence. Ke (2010) studied interactions between the various presences and the effects of teaching presence on the other presences in online courses with students aged 24-59. Both qualitative and quantitative results indicated that an effective teaching presence catalyzes social and cognitive presence.

Archibald (2010) utilized the CoI framework to test the effects of certain pedagogical choices on outcomes, as well as examined the effects of social and teaching presence on cognitive presence. He found that teaching and social presence explained 69% of the variance in cognitive presence; the effect remained even after controlling for self-direction, prior online learning experience, and prior collaborative learning

experience. Shea and Bidjerano (2009) further investigated the effects of teaching and social presence on cognitive presence and found that teaching presence had a significant direct and total effect on cognitive presence. These results were further supported in a study by Garrison, Cleveland-Innes, and Fung (2010), who used structural equation modeling to confirm that student perceptions of teaching presence had a significant direct effect on perceived cognitive presence, while also having a significant association with social presence.

Similarly, Kozan and Richardson (2014) found a large positive correlation between teaching and social presence, with cognitive presence having a strong mediating effect. In addition, they found a strong positive correlation between teaching presence and cognitive presence, which was maintained after controlling for social presence. Shea and Bidjerano (2009) found that as teaching presence indicators decline, average student social presence declines as well, specifically in courses where there was high teaching presence. The activities of the faculty member, then, appear to play a notable role in learning, and on the environment in an asynchronous online course.

Apart from the CoI version of TP, there is this other explanation of TP based on Moore's theory of Transactional Distance. According to Moore and Kearsley (2005), distance is a "pedagogical phenomenon" and is not a matter of geography. Teachers and researchers are concerned with the effect distance has on aspects of education, including "teaching and learning, communication and interaction, curriculum and course design, and the organization and management of the educational program" (p. 223).

Research has found a link between faculty teaching presence and student perception of learning and of the instructor's performance. In fact, teacher practices with

regard to their teaching presence and promoting student social presence has been found to have an effect on outcomes for students. This is a primary motivator for researching this topic. Low presence may result in frustration, negative attitudes toward the instructor, and lower affective learning. On the other hand, high levels of instructor presence result in better evaluations of effectiveness, while intimacy and immediacy communication behaviors are thought to be related to increased cognitive and affective learning (Sung & Mayer, 2012). Desai, Hart, and Richards (2008) concluded that successful online courses require teaching presence in the form of guidance and interaction, which establishes a sense of community in the online context.

Cleveland-Innes (2013) posits that the new structures and pedagogies are "constructed and crafted, based on content, students' needs, and the available technologies" (p. 397). Cleveland-Innes goes on to say that the teacher maintains a role in direct instruction and facilitation, and in design of the environment:

The teacher must be prepared to identify the design and requirements, clarify expectations, engage and facilitate interaction and critical discourse, assess understanding and diagnose and correct misconceptions. These aspects of teaching presence which foster a community of inquiry are interchangeable in face-to-face, blended and online environments. (p. 391)

Shea, Sau, Li, and Pickett (2006) suggested that instructors can develop social presence in their online courses by developing community among students. This can be accomplished through elements of teaching presence, designing cooperative activities that utilize the three areas of teaching presence, instructional design (curriculum, methods, timelines, group norms), facilitation (engagement, seeking consensus, working

with agreements/disagreements, encouraging, acknowledging student contributions, establishing the classroom climate, prompting, assessing), and cognitive and social process direction (presenting content, asking questions, checking for understanding, adding knowledge, and clearing up misconceptions). They also assert that students are not only aware of when instructors are present, but also of what techniques are used to create teaching presence, and that students will rate their instructors on evaluations.

Teaching Presence vs. Instructor Presence

In order to fully appreciate the theoretical underpinning that guides this research on teaching presence, it is important to clarify a misunderstanding that often shows up in the literature; that of interchangeably using 'instructor presence' and 'teaching presence' as identical constructs. These two labels should not be used interchangeably as they refer to two different constructs. According to Sheridan and Kelly (2010) the labels 'instructor presence' and 'teaching presence' have been used almost synonymously in the literature. The term 'instructor presence' does appear in the literature but commonly refers to teaching presence behaviors (Richardson, Besser, Koehler, Lim, & Strait, 2016).

However, Kassinger (2004) has defined instructor presence as the instructor's interaction and communication style and the frequency of the instructor's input into the class discussions and communications. Similarly, Pallof and Pratt (2003) pointed out that an instructor's presence entails "posting regularly to the discussion board, responding in a timely manner to e-mail and assignments, and generally modeling good online communication and interactions" (p. 118).

There are distinct differences between these two constructs: Instructor presence relates to how an instructor is physically positioned, socially and pedagogically, in an

online community (Lear, Isernhagen, LaCost, & King, 2009). Instructor's presence is based more on observable instructional behaviors and actions and is defined by Richardson, Koehler, Besser, Caskurlu, Lim, and Mueller (2015) as:

The specific actions and behaviors taken by the instructor that projects him/herself as a real person and is more likely to be manifested in the 'live' part of courses, as they are being implemented, as opposed to during the course design process. (p. 259)

While instructor presence depends on physical proximity, teaching presence, which forms the basis of this research, can be, and should preferably be initiated much before the teacher actually comes in contact with the students, i.e., at the course design stage which is the first of the three precepts of teaching presence. The other two are facilitating discourse and direct instruction (Ko & Rossen, 2017). It is important to understand that instructor presence and teaching presence do not necessarily have a causal effect. Just the physical presence does not create teaching presence. Teaching presence has to be intentionally and deliberately created for it to be perceived and felt by the students.

What Does TP Achieve?

Researchers believe that TP is able to create an intellectual climate that works as a catalyst in improving grades, retention, self-efficacy, and sense of community (Ke, 2010). Xu and Jaggars (2013) researched TP in 23 online courses, which they observed in terms of the depth of their interpersonal interaction as well as other quality factors, such as clarity of learning objectives, effectiveness of technology integration, and used these ratings to predict student grades. The course's level of interpersonal interaction was the

most important factor in predicting student grades; students in low-interaction courses earned nearly one letter grade lower than students in high-interaction courses. Students with minimum interpersonal interaction scored a letter grade D with an average 1.87/3.0 GPA; students with moderate interpersonal interaction scored a letter grade C+ with 2.27/3.0 GPA; whilst students with high interpersonal interaction scored a letter grade A-with 2.67/3.0 GPA. The difference, related to interaction, was sufficiently large and consistent among the groups to suggest strong validity (Xu & Jaggars, 2013).

Moore (1989, 1990) was one of the first to focus on interaction issues in distance education. He identified transactional distance as consisting of dialogue (i.e., interaction) and structure (i.e., design). Moore (1989) expanded on the dialogue variable and defined three core types of interaction: learner-teacher, learner-content, and learner-learner. Dialogue or interaction was recognized as a crucial variable in a distance education environment, which was not necessarily the case with an industrial design approach. Moore's work precipitated growing interest in issues around interaction in a distance or online learning context. Others accounted for all possible combinations of interaction based on teacher, learner, and content variables (Anderson & Garrison, 1997).

To capitalize on the potential of online learning for educational purposes, a qualitative shift in the nature of the interaction must be considered. Garrison, Anderson, and Archer (2000) provided a model of a CoI that maps and defines educational presence. A CoI is more than a social community and more than the magnitude of interaction among participants. A CoI is the integration of cognitive, social, and teaching presence. Considered together, the three presences address the qualitative nature of interactive inquiry consistent with the ideals of higher education.

To appreciate interaction and the quality of learning outcomes, one must understand how cognitive, social, and teaching presence come together to create a purposeful community of inquiry. An interactive community of learners is generally considered the sine qua non of higher education. However, interaction is not a guarantee that students are cognitively engaged in an educationally meaningful manner. High levels of interaction may be reflective of group cohesion, but it does not directly create cognitive development or facilitate meaningful learning and understanding. Interaction directed to cognitive outcomes is characterized more by the qualitative nature of the interaction and less by quantitative measures. There must be a qualitative dimension characterized by interaction that takes the form of purposeful and systematic discourse.

Interaction and Presence

Picciano (2002) made a distinction between interaction and presence. Interaction carries with it few conditions with regard to the nature of the communication and influence. Interaction by itself does not presume that one is engaged in a process of inquiry and cognitive presence exists. An educational experience sets a qualitative standard perhaps best reflected by the model of a CoI. This integrates cognitive, social, and teaching elements that go beyond social exchanges and low-level cognitive interaction (Garrison & Anderson, 2003).

Rovai (2002) found a "positive significant relationship between a sense of community and cognitive learning" (p. 328). Although the natural and appropriate inclination is to first direct interaction efforts to establishing social presence and creating interrelationships, this is only a precondition for a purposeful and worthwhile learning experience. Teaching presence is important for the creation and sustainability of a CoI

focused on the exploration, integration, and testing of concepts and solutions. This has been shown to be true in informal professional development forums, where there is considerable discussion, but most of it is of a social nature with only a low level of cognitive exchange, where information was shared rather than knowledge constructed (Garrison & Cleveland-Innes, 2005; Kanuka & Anderson, 1998). This also holds true in more formal academic settings where there is a growing body of research showing that the quantity of interaction does not reflect the quality of discourse (i.e., cognitive presence) as measured by the progression through the phases of the Practical Inquiry Model (Garrison, Anderson, & Archer, 2001; Meyer 2003; Pawan, Paulus, Yalcin, & Chang, 2003). The Practical Inquiry Model built by Garrison, Anderson, and Archer (2001) was "specifically created to assess outcomes of collaboration in a higher education online course environment." (p. 120).

Understanding interaction for the purposes of inquiry is complex. Moreover, students are not always prepared to engage in critical discourse, especially if this is in an online learning environment (Angeli, Valanides, & Bonk, 2003). This was congruent with the finding of Garrison and Cleveland-Innes (2004) that the greatest student adjustment to online learning was most directly associated with issues of interaction, both socially and cognitively. Interestingly, in this study, establishing social presence was more heavily shaped through peer interaction. With regard to successful higher-order learning, however, Garrison and Cleveland-Innes (2004) concluded that teaching presence in the form of facilitation is crucial in the success of online learning. There is considerable literature pointing to the relation between teaching presence and perceived

learning (Jiang & Ting, 2000; Pawan et al., 2003; Picciano, 2002; Shea, Pickett, & Pelz 2004).

Swan (2001) concluded that "interaction with instructors seemed to have a much larger effect on satisfaction and perceived learning than interaction with peers" (pp. 322-323). More specifically, Angeli, Valanides, and Bonk (2003) studied the quality of online discourse and with low-level mentoring found that only 7% of the replies were justified opinions and claims. Similarly, Wu and Hiltz (2004) reported that online discussions are related to perceived learning but varied according to instructional approach. They stated that the instructor's role is crucial to effective online discussions and "more online guidance, more structured discussion topics and considerable time devotion are required for instructors" (p. 149). Finally, Hay, Hodgkinson, Peltier, and Drago (2004) found in a study comparing online and traditional courses that instructor-student interaction was the stronger of the two interaction measures, student-student is the other, in terms of predicting effectiveness for both types of delivery. The primary reason is that instructors are more concerned with fulfilling interaction needs.

Interaction and Critical Discourse

Accepting that interaction is not equivalent to critical discourse or sufficient for sustaining a CoI, it is important to consider teaching and cognitive presence in terms of influencing quality learning outcomes. Synthesizing some of the literature, it would appear that critical discourse and teaching presence have some common features. The first is that if students are to reach a high level of critical thinking and knowledge construction, the interaction or discourse must be structured and cohesive (Aviv, Erlich, Ravid, & Geva, 2003; Pawan et al., 2003; Thomas 2002; Wu & Hiltz, 2004). The design

feature of successful online courses demonstrates structured discourse that facilitate clear discussion threads, avoid disjointed monologues and move the discussion through the phases of inquiry (levels of thinking). Another important feature found in the literature is clearly defined roles (Aviv et al., 2003; Garrison and Cleveland-Innes 2004; Hiltz & Turoff, 1993; Meyer 2003; Tagg & Dickenson, 1995). Here we find the leadership role of the instructor to be powerful in triggering discussion and facilitating high levels of thinking and knowledge construction.

Deep and Surface Learning

Levels of thinking and knowledge construction are learning process goals across delivery methods in education. Higher-order learning emerges in a CoI. The concept of approaches to learning, commonly referred to as deep and surface learning, and related models provide a framework for understanding the complex web of relations between learning context and learning processes that result in particular outcomes for individual students (Houghton, 2004; Entwistle, 1993; Biggs, 1998).

Social and academic interaction in learning environments, whether online or face-to-face, has a demonstrated impact on the approach to learning and outcomes (Cleveland-Innes & Emes, 2005). Approaches to learning emerge from the combination of student motivation and strategies for learning. Students employ varying degrees of three different approaches to learning: deep, surface, and achievement approaches. In a deep approach to learning, material is embraced and digested in the search for meaning. Surface learning employs the least amount of effort toward realizing the minimum required outcomes. Surface learners are motivated to complete the task rather than assimilate the learning (Cleveland-Innes & Emes, 2005). Achievement approaches to learning are reflected by

an orientation to the external reward for demonstrating learning. Strategies for the achievement orientation focus on the activities that will result in the highest marks. All students are capable of employing any of the three approaches and do so as required by the learning environment; they choose strategies deemed to be most effective based on the requirements in the environment (Cleveland-Innes & Emes, 2005).

Students can move from one approach to another and do so in response to the climate and requirements of the course. Without question, a deep approach to learning is the approach to foster in higher education. The mastering of material through detailed attention to the intricacies, substance, and limits of a subject area leads to improved academic performance (Svensson, 1977).

The Opposing View

Preisman (2014) posits that there is some research that disputes the generally accepted narrative and despite all the positive aspects of research on teaching presence, there is an opposing argument that relies on research showing many more reasons for online success than mere establishment of teaching presence. Researchers have listed elements of online experiences that influenced satisfaction among western students, which included (a) content and organization, (b) convenience and flexibility, (c) online interaction, and (d) instructor's role, especially in providing feedback (Beaudoin, Kurtz, & Eden, 2009). In addition, Sheridan and Kelly (2010) also found that indicators of instructor presence that were most important to students were clear course requirements, responsiveness to students' needs, timeliness of information, and instructor feedback. The authors further stated that while there was a focus on instructor communication and

responsiveness, students did not find importance in synchronous communication or being able to see or hear their instructors.

In support of these findings Mupinga, Nora, and Yaw (2006) found that the top three expectations of students include communication with the instructor, instructor feedback, and challenging online courses. In other research, of the top 10 reasons the students listed, only one addressed to the instructor's teaching style. Most of the others addressed personal reasons, difficulty of course, or technical difficulties (Fetzner, 2013).

Furthermore, many online students want the ability to manage their individual learning activities without an overly hovering instructor. Conceição (2007) suggested that online educators could see themselves as facilitators versus instructor-centered educators. Conceição (2007) writes that:

If time does not permit giving prompt feedback to individual students, responding to the whole class may be sufficient. A class message can address patterns and trends in the discussion without being overwhelmed by the amount of feedback to be given. (p. 9)

Teaching Presence Tools

Cultural-Historical Activity Theory (CHAT)

One planned intervention, strategy, and/or tool as researched by Bondi, Daher, Holland, Smith, and Dam (2016) is the use of cogenerated dialogues in synchronous settings using a social network tool like Adobe Connect. Cogenerated dialogues are a process used by educators and researchers to conduct research and improve teaching and learning where the students and instructors meet over the term of the course to discuss

what occurs in the classroom and come to a consensus on what they will change about the course (Stith & Roth, 2010).

The goal is to optimize teaching and learning for everyone in the course. This interaction not only helps the learners take ownership but also becomes a conduit for creating, sustaining, and maximizing teaching presence over the entire course with the teacher acting as a facilitator (Bondi et al., 2016). This is further supported in a seminal article by Boggs (1996), who states that establishing teaching presence through the role of teacher, more as a facilitator rather than an instructor, has resulted in a paradigm shift from a teaching environment to a learning environment. He further described this new paradigm as the "correction of a mistake which took the means or method, called instruction or teaching, and made it into the college's end or purpose. The new faculty member is envisioned as a coach interacting with a team" (p. 14).

Since social interaction has been deemed important in online learning, it is fitting that we use Cogen and a sociocultural theory of learning known as CHAT (Cultural-Historical Activity Theory). Different from cognitive learning theories, CHAT holds that learning occurs through social interactions. CHAT specifically identifies the following six elements that mediate learning: students, instructors, rules of behavior, tools and cultural artifacts, community, and the division of labor (Stith & Roth, 2010). Each of these elements is expected to shape the others and the learning outcomes. Rules could be described as the expected pattern of behavior (e.g., following teacher instructions). Tools might include assigned readings, activities, or case studies. Cultural artifacts might be syllabi or symbols such as criteria for grading. CHAT assumes the interactions of these

elements shape how and what people learn. Stith and Roth (2010) argued, students are shaping how the learning in the course occurs whether they are conscious of it or not.

Learning Management Systems (LMS)

LMS can provide some useful data to instructors, on a regular basis, to gauge their presence, such as frequency and duration of logging in to a course. Using data analytics in this manner provides some useful quantitative feedback, but it is also important to look at qualitative data as well (Kelly, 2014). An indirect way of gauging instructors' presence is the type of questions coming from students. More directly, instructors can ask students for feedback throughout the course such as: Is the timeliness of my responses helpful? Are the types of responses you're getting helpful? Is there anything else I could be doing to help you? (Kelly, 2014).

Assessments and Feedback Cycles

A critical non-technological tool, often overlooked, in the modern-day research is the use of assessments and feedback cycles to create teaching presence. Assessment with feedback cycles is now widely accepted as an important tool of not only establishing teaching presence, but also helpful in sustaining and maximizing it. Shea and Bidjerano (2010) states that "Finally, there is a more recent fourth category, assessment, includes both formative and summative assessment, across a broad range of instructor and student activities that occur within an online course" (p. 134).

It is widely accepted in higher education that assessment drives learning (Brown 2010), and that effective feedback is strongly related to improved achievement (Nicol & Macfarlane-Dick 2004). One fundamental principle of good feedback is that it should feedforward so that it can be used to inform future work (Orsmond, Maw, Park, Gomez,

& Crook, 2011). The purpose of evaluation can vary from formative (i.e., providing diagnostic feedback to educators) to summative (i.e., measuring teacher effectiveness for appointment, promotion, or quality assurance purposes). Most of the emphasis on the use of student survey data has been for personnel decisions rather than enhancing teaching effectiveness (Marsh, 2007); consequently, conventional forms of evaluation are of questionable relevance for new student-centered approaches to learning (Abrami, d'Apollonia, & Rosenfield, 2007).

A suitable designed formative assessment strategy, intelligently embedded into the course design, can go a long way in establishing teaching presence. Any comprehensive formative assessment, at its very roots, has the feedback system built into it and research suggests that feedback is the backbone of successful intervention, which in turns creates presence (Stiggins & DuFour, 2009).

As a principle of effective feedback, linked to formative assessments, there is a framework for learner-focused evaluation which is based on the application of a three-stage control model involving feedforward, concurrent and feedback evaluation. This shows that assessment through learner-focused evaluation cycles can be used as a tool to guide actions so that evaluation is not undertaken simply for the benefit of future offerings, but rather to benefit current students by allowing "real-time" learning activities to be adapted in the moment. As a result, students become co-producers of learning and evaluation becomes a meaningful, responsive dialogue between students and their instructors (Cathcarta, Greerb, & Neale, 2014).

However, for evaluation to be effective in producing results, it needs to move beyond external reporting compliance that informs future practice, to instead identifying gaps in student learning in order to benefit current and future students. By focusing on the learner, evaluation should not only be a mechanism just for gathering student voice but should be using that voice to inform practice and enhance learning. Any student views that are collected should be used as part of a culture of ongoing improvement practice (Josefson, Pobiega, & Stråhlman, 2011).

Students' Perceptions of Teachers' Actions that Create TP

Orcutt (2016) conducted extensive research on the students' perceptions and interviewed many teachers, apart from reviewing over one hundred articles. Based on the thematic categorization performed during the analysis of the collected data, some instructor actions were identified which the students relate to the creation of TP. Orcutt (2016) posits that a proactive incorporation of student contributions (postings, presentations, peer discussions, etc.) in course activities will draw students into the course, enhance collaborative learning, and encourage student-centered teaching. The students further identified posting updates of course schedules, due dates, or other critical schedule items that may impact the delivery of the course, as a source of continuous engagement helping to create TP.

It is also important to be aware of student engagement, following up when students do not participate and reinforcing expectations of involvement. This also helps in creating an authentic relationship, creating a foundation of trust in the instructor and a basis for open communication, making the student feel that the teacher cares (Orcutt, 2016). Other aspects identified by Orcutt (2016) were clear and frequent communications, setting clear expectations of rigor and performance commensurate with course level and degree program in student-friendly language, facilitation of discourse by

asking probing questions that develop critical thinking skills, noticing when someone is not participating and inviting them to engage in the dialogue (teacher cares), and provide substantive/constructive feedback. To be a lifeline, minimizing obstacles to access and humanizing of the course creates a bonding with the students.

Instructors' Perception of TP

While teaching presence appears to be an important consideration when designing and facilitating an online course (Richardson et al., 2015), little research focuses on teachers' perceptions of their presence and the specific actions taken to project presence in the online courses they teach (Stone & Chapman, 2006). The dichotomy of the importance of online presence and limited research on teaching presence from the viewpoint of the instructor, needs to be resolved (Preisman, 2014). However, there is ample research that focuses on instructor satisfaction, but that too primarily pertains to institutional job satisfaction or satisfaction with e-learning tools, and not to any aspects of teaching presence (Keengwe, Diteeyont, & Lawson-Body, 2012; McLawhon & Cutright, 2012; Wilson, 2008).

Previous Studies Informing this Study

In order to examine the nature of teaching presence, investigating the phenomenon from an instructor's point of view is necessary to provide insight and understanding. Three previous qualitative investigations were identified which provide a foundation for the research conducted, each supporting the goals of research from different perspectives. Conceição's (2006) study was initiated due to concerns for faculty development requirements and the increased awareness of pedagogical issues related to online instruction. This phenomenological study explored how instructors perceived and

described their online learning experiences and produced findings that showed instructors were cognizant of differences, particularly related to the work intensity involved in design and delivery of online courses. This work intensity was differentiated in the accounts of the participants as length of engagement, related to the amount of time associated with designing course content to accommodate student learning styles and providing materials in advance of delivery; depth of engagement, related to the level of cognitive and affective efforts exerted in engaging students and keeping them focused on course activities and content. While this work intensity may be construed negatively, the instructors nonetheless found the teaching experience rewarding and more fulfilling than traditional delivery, describing it as stimulating for the instructor as they felt they learned as much from students as the students learned from them.

This revelation led Conceição (2006) to conclude that knowledge came from the shared activities within the learning community, establishing that the instructor no longer holds the position of being the only expert in the classroom. This study provided a foundation for a later study by Lehman and Conceição (2010) into the exploration of the creation of a sense of presence in the online classroom, leading them to assert that presence was "the result of awareness, understanding, intentional planning and design, and involvement through experience on the part of the instructor" (p. 1).

The need to understand what actions supported this intentional creation of presence was the basis of the study conducted by Baran, Correia, and Thompson (2013). This multiple case study examined how exemplary face-to-face instructors transferred their thinking, pedagogical knowledge, and beliefs when transitioning to online teaching. Themes drawn from the analyses of the cases provided some similarity to Conceição's

(2006) study: the instructors expressed the need to apply significant time to the design and structure of a course and the need for depth of knowledge of the content in order to organize and present the course material to address different learning styles. Their study also identified themes from faculty related to the time applied to understanding the student and their motivations and the intense effort needed to build relationships to overcome immediacy issues. The results of the analyses showed instructors held on to traditional teaching and learning assumptions during their transition, increasing the development of one-to-one relationships, which increased work effort and reduced consistency in delivery of information. The authors concluded that the lack of guidance from experienced online instructors regarding constructing online personas affected the instructor's ability to establish and maintain a teaching presence in the online environment, which ultimately led to challenges in transferring or adapting successful practices. The results of this study led the authors to call for greater exploration and discovery of the strategies, intentions, and perspectives of successful online instructors to order to improve preparation of instructors for creating presence in their online courses.

Research Needed on How Teachers Perceive the Nature of Teaching Presence

Teaching presence has a significant effect on learning persistence and is highly related to the level of learning that occurs within an online course (Joo et al., 2013). The collaborative construction of knowledge that occurs as a result of the interaction within an online environment does not just happen, but it requires the intentional and responsive intervention of an instructor (Xin, 2012). Active interaction in an online course is not automatic and requires skillful intervention by an instructor to promote a level of cognition that can become self-regulated (Cho & Kim, 2013). This is particularly

important in graduate level education, where expectations of academic rigor and achievement are greater (Bowden, 2012). With growing pressures on higher education to be accountable for the achievement of learning outcomes and retention, educators are increasingly interested in improving pedagogies related to teaching presence by implementing practices that are effective in producing student outcomes in the online environment without jeopardizing academic rigor (Ekmekci, 2013; Hung & Chou, 2015; Roby, Ashe, Singh, & Clark, 2013).

Instructors who are used to the immediacy of feedback and interaction experienced in face-to-face environments are concerned about how they can achieve similar outcomes in the online environment (Costley, 2015; Hung & Chou, 2015; Mazzolini & Maddison, 2003, 2007). Tsiotakis and Jimoyiannis (2016) noted an emerging and evolving teaching community where instructors seek information and answers to instructional problems encountered when teaching online. These instructors, who are comfortable with the knowledge of how to project their presence in a physical classroom, are struggling with how to do so in a virtual environment (Baran et al., 2013; Duncan & Barnett, 2010). Tsiotakis and Jimoyiannis (2016) identify that the context for teaching online is increasingly demanding and therefore teachers need multiple professional development opportunities to deepen their pedagogical knowledge in order to thrive.

Baran et al. (2013) looked at practices used by exemplary instructors in transitioning to online teaching and found that even those experienced and successful instructors struggled with making themselves visible and heard in their online environments, needing to constantly challenge their established roles and assumptions

toward learning and teaching online. Much like the pre-service teachers studied by Duncan and Barnett (2010), teaching presence was found to be a critical component in creating a successful learning environment.

Baran et al. (2013) contended that change in pedagogy is needed, and that successful instructors could share insight, transfer knowledge, and explain intentions critical to practices used while teaching online. They identified the need for further research on how instructors create their online persona, or presence, with examination of the practices, perspectives, and assumptions that support their online role. To improve the quality of the e-learning process it is necessary to understand the sense of presence and its role in the learning process, understanding not just whether it exists but rather what the experience is and how it is perceived (Joo et al., 2013). Due to the connection between the sense of presence in an online environment and positive learning outcomes, Joo et al. recognized the implications for the practical improvement in teaching strategies such a study on presence might have.

It is acknowledged that the level of presence and degree of visible involvement demonstrated by the instructor is dependent upon the teaching strategy and personal preferences of the instructor (Ravenna, 2012). However, it is also acknowledged that the level of teaching presence can dramatically influence the quality of facilitation, which leads to successful learning in asynchronous environments (Costley, 2015; Hung & Chou, 2015; Rovai, 2007).

As has been discussed in the preceding sections, a key step in the achievement of academic expectations and scholarship is the instructor's role in setting the academic climate for such performance (Bowden, 2012; Ekmekci, 2013). However, there is little

guidance for practitioners with respect to fulfilling this vital function related to cognitive achievement.

The creation of presence in an online environment encompasses social, cognitive and instructional responsibilities of the instructor and has implications for setting an appropriate climate for teaching. Cox-Davenport (2010) recognized the close relationship between teaching presence and social presence and explored the perceptions, intentions and practices in setting climate when establishing social presence. Conducting in-depth interviews with online practitioners, Cox-Davenport concluded that "faculty construct a climate that includes ways in which each student can develop a connection to the human element of the course" (p. 81), identifying this as "the process of humanizing" that permeated an instructor's actions, intentions, and presence. The supporting, interrelated, themes associated with setting climate emerged from the analyses performed by Cox-Davenport (2010). The themes brought out the importance of using mechanisms that supported connecting students to the content and each other, gaining insight and understanding of who the students were as distinct individuals. This was the elevation of interaction to the level of humanizing it.

Another theme that stood out was the intentional building of community for a purpose, creating relevance for students through exchange of information, experience and professional interests. This theme was seen as meaningful socialization with close linkage to the humanizing aspect. The researcher also observed that the instructor's role as a facilitator not only helps in developing community connections within a course, building an awareness of each other and the commonalities within the learning group as peers in learning, but also were instrumental in improving learning. The data also showed that

students preferred to have control over their learning process, thus empowering students to be self-directed learners created a student-centered environment which encouraged involvement and accountability. The research also showed that the instructor's passionate involvement and participation by setting, meaningful, expectations for performance and engagement motivates the students to meet or beat those targets. The students expect that the instructor would help in reducing obstacles to learning, thereby lessening their frustrations by connecting frequently to create a bridge between student and the course.

The research further revealed that the human element in the classroom climate also depends on the awareness created by the teacher by being vigilant and cognizant of student behaviors and participation, by developing relationships that allow for open communication such that the student feels encouraged to repeatedly engage with the teacher, peers, and the content. From the research, Cox-Davenport (2010) presented a subtle issue, that of the instructor being the "lifeline" for the students, a role that can be enhanced through actions such as being available and accessible as a resource for support, intentional outreach to ensure student understanding, and being responsive in resolving issues that impact student performance. The thematic analyses and the conclusions reached by Cox-Davenport (2010) were subsequently confirmed by a detailed study by Orcutt (2016).

Chapter Summary

This chapter describes the CoI framework, the theory of TD, and the social constructivist theory that form the foundations of this research. They provide a background understanding of the TP, its three components, set the context for this study, which focuses on how teachers perceive teaching presence, interpret its element, devise

implementation strategies, and achieve the learning outcomes. In addition, this chapter also establishes, based on expansive studies, that TP does achieve improved learning outcomes. However, the chapter also establishes the fact that even those researchers who have studied the subject recommend that much work needs to be done to understand TP as seen through the perceptive lens of the teachers. This study also investigates the aspect of "is it worth investing the extra effort by the teacher already constrained for time and resources?" Many researchers have used case studies or IPA, with semi-structured interviews, but they do not triangulate the data acquired from these interviews. To this effect, this study will triangulate the data using three data points.

Though some studies have been conducted in the recent years, not many of them have dealt with perceptions of TP, thus showing a gap which, this study will try to partially fill. This study does not concern itself with how students react to the efforts of the faculty member to establish teaching presence, as this aspect has been well researched and documented over the last decade. This study was not situated within a specific discipline, which also helps it stand apart.

CHAPTER III: METHODOLOGY

There is no doubt that research has established significant, positive relationships between teaching presence and both student success and satisfaction in online courses (Garrison & Cleveland-Innes, 2005; Shea & Bidjerano, 2010; Shea, Li, & Pickett, 2006). However, it has overlooked the nature of perceptive cognition of teaching presence from the teacher's point of view and its implications on establishing an intellectual climate in the online classroom (Cox-Davenport, 2010; Duncan & Barnett, 2010). Teachers are responsible for establishing teaching presence; thus, it is important that we understand their thinking and rationale in what they do, why they do it, and how they do it.

The purpose of this research was to understand how online teachers perceive the role of teaching presence in the courses they design and teach. The study also examined the strategies employed by the teachers in the three overlapping phases of instructional design and organization, facilitation of discourse, and direct instructional activities, in establishing, sustaining, and maximizing teaching presence. Additionally, this study sought to qualitatively assimilate and analyze the processes utilized by instructors when establishing teaching presence in order to provide insight into its influence on the creation of an intellectual climate within the online classroom to affect learning outcomes (Cox-Davenport, 2010; Duncan & Barnett, 2010).

The study was conducted in Pennsylvania-based universities, typical of most similar universities in the US. The universities had well-established online higher education programs with a record of continuous growth. The study examined and explored how the faculty perceives the phenomenon of teaching presence (TP), its

perceived impact on achieving personally meaningful and educationally worthwhile learning outcomes, and the reality of whether this effort was even worthwhile.

According to Conderman and Rodriguez (2009), educators have a vital role through academic activities to promote inclusion and collaboration among students, and in the educational environment. Instructors being the key to transformation from the physical to the online pedagogy; it is critical to gain their perspectives on how the decisions are made, what and how the strategies are implemented, and what practices are put in place to achieve the goal of educationally worthwhile learning process (Baran, Correia, & Thompson, 2011; March & Lee, 2016). The primary theoretical underpinning for this research was the Community of Inquiry model (CoI), and the following research questions guided the study for this dissertation:

- **RQ 1**: How do online instructors perceive teaching presence and its impact on learning outcomes?
- **RQ 2**: How do online instructors incorporate teaching presence in designing their course content and delivery?
- **RQ 3**: What strategies do online instructors employ during the course to overcome challenges and to establish, sustain, and maximize teaching presence?

Problem Statement

The concept of teaching presence has historically been viewed through the eyes of the student learner and/or community of learners with a specific focus on strategies that create and improve presence in an online setting (Oztok & Brett, 2011). However, according to the review of the available research, the aspect of teaching presence that often gets overlooked is the nature of perceptive cognition of teaching presence from the

teacher's point of view and its implications on establishing an intellectual climate in the online classroom (Cox-Davenport, 2010; Duncan & Barnett, 2010). Similarly, research is scanty about how teachers perceive the benefits, if any, of the time and energy they invest in attempting to create teaching presence in their online courses (Preisman, 2014). Thus, there is a need to understand how online teachers perceive and establish teaching presence within the courses they teach as this can positively inform pedagogical decisions regarding instructor behavior, course organization, facilitated discourse, and direct instruction. Without this understanding, it is not possible to establish' a current benchmark, understand the shortcomings, create training and developmental plans to augment the teachers capabilities, and provide skill sets for sustainable improved learning outcomes.

Purpose of the Study

The purpose of this research was to conduct a descriptive, exploratory, interview-based, qualitative study of how online teachers perceive the role of teaching presence in the courses they design and teach, primarily asynchronous courses. The study also examined the strategies employed by the teachers in the three overlapping phases, instructional design and organization, facilitation of discourse, and direct instructional activities, in establishing, sustaining, and maximizing teaching presence. Additionally, this study sought to qualitatively assimilate and analyze the processes utilized by instructors when establishing teaching presence in order to provide insight into its influence on the creation of an intellectual climate within the online classroom to affect learning outcomes (Cox-Davenport, 2010; Duncan & Barnett, 2010).

Research Method and Design

The characteristics and nature of this study required rich, thick description about perceptions of teachers, and the need to be flexible during data collection and analyses.

These requirements were best satisfied by employing generic qualitative research methodology.

This is in line with Creswell (2009)) who stated that the selection of a research methodology should answer the question; which research paradigm will obtain the best answers to the research questions? In support, Alise and Teddlie (2010) also looked at the research paradigm as a shared understanding and set of values among researchers by commenting that "it is an approach to thinking about and doing research" (p. 33).

Qualitative Research

A generic qualitative research method helps to address questions that cannot be answered by way of quantification (Ospina, 2004). In the qualitative research paradigm, the most important focus is for researcher to capture accurately the existing experiences and perceptions of participants involved in the phenomenon or processes under investigation (Onwuegbuzie & Johnson, 2006). It is better for obtaining important preliminary insights about the phenomenon being studied than quantitative research. Liamputtong and Ezzy (2005) add that exploratory qualitative research helps researcher to acquire information about research issues where little is known. Qualitative methods are concerned with words and images, which the researcher employs in seeking to interpret meanings and explanations of the way people behave and to develop an understanding of social constructs. The principal advantage is the generation of very rich, deep data. Ospina (2004) summarized the benefits as the ability to add more detail to

existing knowledge of a phenomenon obtained from a quantitative study, generate better understanding of a topic by studying it simultaneously or concurrently, explore phenomenon not studied before, develop understanding of any phenomenon in its complexity, help understand the intricacies of a phenomenon, and advance a phenomenon well studied but not well understood in depth.

Qualitative research involves examining and describing, in a detailed and comprehensive way, a social or human condition. The perspective of the individuals involved is a central element (Creswell, 2009). Qualitative research is multimethod in focus, involving an interpretive, naturalistic approach to the subject matter. The aim is to explore and obtain descriptions of the perceptions or experience. Thus, in order to gain a rich thick description of the perceptive process, this research study employed qualitative methodology. The design utilized the descriptive data from exploratory in-depth interviews of the teachers that met the inclusionary criteria, to study and explore the perceptions of teaching presence, through the lens of the teachers. This approach allowed the participants to express their true inner feelings in detail and explain the rationale in support of their perceptive thoughts, strategies, and implementation.

The objective of qualitative research methodology for this study and the exploratory design was to find suitable answers to the research questions concerning the role of the instructor's perceptive process and the need to address issues in the online educational pedagogy that relate to the three elements of TP, i.e., instructional design and organization, facilitation of discourse, and direct instruction. The outcome objective of the qualitative methodology in this study was to gain an understanding of a particular set of circumstances involving teachers, and evaluate if this understanding could be utilized

outside of the study environment to impact the realization of achieving personally meaningful and educationally worthwhile learning outcomes.

The results of this study, as presented in subsequent chapters, will illuminate how these teaching presence elements can create an environment where the findings facilitate the future training programs of the teachers and help in allocation of resources to overcome the deficiency. Eisner (1991) described effective qualitative research as the "ability to see what counts" (p. 34). This indicates that a qualitative researcher needs to separate the significant information from the full mass of data that is gleaned through interviewing methods, because data that counts as significant, is not always immediately apparent. The study reviewed and analyzed the information and determined what truly was significant and what was peripheral.

Design

This research was an exploratory, descriptive, interview-based study to explore the perceptions of teaching presence through the lens of online teachers. As is relevant, defining the inclusionary criterion was critical in identifying those instructors who were seemingly more effective at creating a successful learning environment than their counterparts, specifically as it applied to online learning outcomes and facilitating learning activities through teaching presence.

The in-depth, semi-structured interviews with a flexible approach were used to collect a rich thick description of the perceptions and experiences of the participating teachers. These interviews were conducted in-person, in a face-to-face setting with four participants, though Zoom video link with five participants, and on phone audio with three participants, for a total of 12 interviews. Three face to face interviews were

conducted at the offices of the participants, and one at the residence of a participant. Ten interviews extended over the entire 60-minutes, whilst two interviewees kept the discussion going for 90 minutes and provided extensive in-depth insights. All the participants had been advised of this time arrangement in the informed consent, and also before the start of the interview.

The interview questionnaire was emailed to all the participants at least a week prior to the interview. The responses to all the questions were audio taped, with prior permission, using the informed consent form (Appendix A) as well prior to the start of the interview. Once transcribed, the responses were sent to the interviewee for member checking. Confidentiality of responses was strictly maintained in terms of identity of the individual, the department, and the institution. The transcripts have been securely placed under lock and key, to ensure privacy at all times for the required period of five years, and the audio recordings were deleted immediately after member checked transcripts were received back from the interviewees. The interview protocol allowed flexibility to adapt to each interviewee's situation to ensure a relaxed, friendly atmosphere. All these policies were explained to the participant before starting the interview.

The semi-structured interview questions were designed to support the in-depth exploration of instructor's intentions, actions, and perceptions when establishing, sustaining, and maximizing teaching presence in an online course environment. The interview protocol also helped elicit meaningful and descriptive first-person accounts of the experiences and intentions of the participants (Smith, Flowers, & Larkin, 2009). All interview questions were aligned with the research questions (Table 1) such that the

finalized data provided enough information to perform credible, in depth, thematic analysis.

Table 1

Research Question-Interview Question Alignment

Interview Question	Research question 1	Research question 2	Research question 3
A 1 . What does Teaching Presence mean to you?	X		
A 2. Do you see Teaching Presence as a coequal element of CoI intersecting with social and cognitive presence OR do you think that Teaching Presence acts as a catalyst to enhance the interaction between the two and improve learning?	X		X
A 3 . How do you tackle the challenges you face in establishing Teaching Presence? Can you give some examples of your success or failure in doing so?			X
B 1 . Teaching Presence is best established when it is embedded in course design. Do you agree? What aspects of course design you feel are critical to establishing Teaching Presence?		X	
B 2 . How do you provide "structure" to your online course? Why is it important to have a smooth, interwoven unfolding of the course like a story? (This includes the process, evaluation, interaction components, content, communications, collaborative and cooperative learning, creating an intellectual climate, etc.)		X	X
B 3. Do you feel it's important for your course design to help students clearly understand the Course Learning Outcomes/Objectives? If so, why is that important to you?		X	

C 1. (a) How would you define and differentiate between deep learning and surface learning?		X	X
(b) What teaching strategies or methods, related to Teaching Presence, do you use to encourage deep learning?		X	X
C 2. Do you feel that developing a sense of community among online students is important? Why or why not? (If yes, how do you work to develop this sense of community?)	X		X
D 1 . (a) Do you think it's important that you help students explore relevant issues deeply? What does that mean to you?			X
(b) What tools and strategies do you typically use to help students with this exploration?			X
D 2 . (a) What is your general approach to providing feedback to learners, and how you expect students to utilize your feedback?		X	X
(b) Do you agree that your feedback helps to advance learning? If so, what role should the teacher play in achieving that after providing the feedback?		X	X

Sample/Participant Selection

Purposeful sampling is typically employed in such studies to utilize a group of people who can best inform the researcher about the research problem, rather than securing a probability sample, which enables statistical inferences about a population (Creswell, 2013). Thus, purposeful sampling was employed with higher education online teachers for all phases of the research as these are the people who could best inform the researcher about the research problem and provide firsthand meaningful responses to the interview question.

For the purposeful, snowball sampling the potential participants were identified with the help of the researcher's advisor and other professors personally known to the researcher. Those initially interviewed then identified some more potential participants and the snowball effect came into play. The inclusionary criteria (Appendix B) applied to the identified participants was: A minimum 3 years' experience of teaching higher education online, instructors who believed that teaching presence has a role in learning outcomes, instructors rated highly in their contribution to learning by peers and superiors, and instructors who rate themselves highly in facilitating learning activities (discussion boards, formative assessments, effective feedback, overall teacher participation). The minimum three-year experience of teaching online was based on in-depth discussions with five experienced online higher education teachers, who all agreed that new online teachers, on an average, take up to three years to get comfortable in this role.

The snowball process identified 22 potential participants but based on the criterion only 18 were found eligible to participate in the research. However, three of them dropped out for unknown reasons within 24 hours; thus, 15 candidates confirmed their intention to proceed. As the interviews progressed and the interview questionnaire was sent out, three potential participants withdrew after seeing the questionnaire, citing "not being comfortable talking about these concepts." Thus, the final sample was 12 participants (10 males, 2 females), all with terminal degrees, and all except one were over 40 years of age. All of them were interviewed with great success and to their satisfaction.

The sample size of 12 was found to meet the sample size recommendations by Schreier (2018) who refers to Francis et al. (2010) and states that for interview studies, a sample size of 10 to 12 units is a reasonable starting point. Schreier further states that the

advance specification of sample size can be adjusted during the research process till thematic saturation is reached.

While reviewing the data, during and after the interviews, some level of saturation was apparent after eight interviews. However, to ensure true saturation, the researcher decided to continue the interviews. After two more interviews, at a total of 10, saturation was obvious. The researcher had in mind one observation, as noted by Onwuegbuzie and Leech (2007), that a novice qualitative researcher may prematurely end research analysis before true saturation occurs. They suggested that novice researchers go beyond what is felt to be saturation to assure that the topic has been exhausted. Taking this advice, the researcher conducted two more interviews to complete the tally of 12, thus interviewing the full sample, and true saturation was observed without any doubt.

The researcher understood that saturation, as a concept in qualitative research, is vaguely defined, and thus can lead to errors in judgement. "Saturation point" is a term taken from physical science to represent a moment, during the analysis of the data, where the same themes are recurring, and no new insights are given by additional sources of data. Bowen (2008) linked saturation to the research questions by stating that saturation in qualitative research is a difficult concept to define but has come to be associated with the point when there is enough data to answer the research questions.

Another aspect of a good sample, reaching early saturation, is its homogeneity.

The shared experience of the participants, working within similar structured academic settings in a specific region, provided the first level of homogeneity in the sample. The second level of homogeneity in the sample, for the purposes of this study, came from the

inclusionary criteria (Appendix B), serving as the sample selection criteria. This helped in achieving true saturation with the 12 interviews, that was the full sample.

Data Collection Procedures

Following the interview approach recommended by Seidman (2006), the interview questions were divided in four sections, to follow a sequence. Section 1 was about teaching presence acting as an independent entity, not just the sum of parts. Sections 2-4 related to the three elements of teaching presence, in a sequence that is important and logical:

Section 1: Reflections on the meaning of teaching presence

Section 2: Instructional design and organization

Section 3: Facilitated discourse

Section 4: Direct instruction

According to Creswell (2003) and Mertens (1998), interview questions should be intentionally unthreatening and open-ended. Participants should also have the safe option of refusing questions, or stating that they do not know, or are unable to recall an answer. A semi-structured interview, with open ended questions (Appendix C), was used to gain a rich, thick, in-depth description of the faculty's perception of teaching presence in all its dimensions of instructional design, facilitation of discourse, and direct instructions. The open-ended questions allowed the participants to share various experiences in great detail; they also invited the participants to reflect and explore their feelings about online teaching presence, leading to a deep and rich self-exploration of participants (Charmaz, 2006).

The intent of the questions was to establish and reveal to the researcher the perceptive process that a teacher goes through in trying to create teaching presence. The participants were asked to describe the significance of teaching presence and reveal how they perceived online teaching presence in their course. The questions also probed into the faculty's introduction and maintenance of teaching presence during the entire course, and also asked the participants to point out the methods they used to maintain teaching presence in their course. All interview questions were aligned with the research questions (Table 1), such that the finalized responses provided enough information to perform credible, in depth, thematic analysis.

Demographic information was also collected as part of the interview process. These data included educational level, years of teaching experience online, and total years of educational experience. This information assisted the researcher in identifying similarities or differences, if any, that occurred with the level of education and/or experience. As it turned out, all the participants had terminal degrees and enough teaching experience to even out variations, if any.

The recorded audio sessions were downloaded in a MP3 format into a secure computer for transcription purposes. All recordings were erased after receiving the member checked transcript from the interviewees. The written data files were transferred on to a jump drive, and at the end of the research will be kept securely, under lock and key, for five years, and then destroyed.

Data Collection Points

Instrumentation. In a qualitative study, pertinent questions may start with "how" or "what" and relate to both participants and the setting. Krauss (2005) states, "One major

point most qualitative researchers tout as a major epistemological advantage of what they do is that the qualitative approach allows them to grasp the point of view of the respondent" (p. 764). In this study, the interview followed the same structure, and the participants were interviewed in a familiar setting of their choosing. As expected, the environment, the current vision, the curriculum currently in use, and the participant's own vision of the required changes formed the core of the interview sessions. As Krauss (2005) noted, "participating in the mind of another, therefore, allows us a glimpse into the how and why, and the meaning behind an individual's behavior in social settings" (p. 764). This became apparent while theming the data at two levels, semantic and latent. Most responses, being semantic, could be seen and understood for what they said, in some cases the respondents knew what to say but the words did not directly convey that meaning. Thus, latent analysis required seeing beyond the words, through the context of the topic being discussed by the interviewee.

A semi-structured interview protocol was used (Appendix C), to interview the participants and the responses used as the primary source of data for thematic analysis. Four interviews were in a face-to-face setting, five through Zoom video link, and three through cell phone audio. The in-depth interview protocol (Appendix C) was designed for a 60-minute slot, with provision for another 30 minutes, in case the participant was willing to provide more in-depth insights. Ten interviews used up the entire 60-minute timeframe, and two went on for another 30 minutes. The interview questionnaire (Appendix C), comprising of open-ended questions, was provided to the participants a week before the interview; however, based on the responses, several supplementary questions were generated during the interview and became part of the interview process.

All the participants acknowledged that the pre-interview study of the interview questions allowed them to prepare, synthesize, present their own thought processes, and reflect on their own beliefs/facts/vision/commitment to the cause. The participants were able to explore and reflect on their experiences and place them in a formal context. The interview design, in itself, attempted to familiarize participants as to the nature, vision, purpose, and process of the study.

The interview consisted of several parts: background information, reflections on meanings of teaching presence, instructional design and organization, facilitation of discourse, and direct instructions. All questions were asked and received responses; however, in some cases the respondents answer to one question included in itself the answer to the next question as well. Only two participants declined to answer a particular question, citing inadequate situational exposure to answer that question.

The prime advantage of semi-structured interview, as observed during the process, was the flexibility of the process that generated several supplementary questions. However, this also acted as a double-edged sword, as it was very easy to veer off on a tangent and lose track of the point under discussion. In two cases this did happen, and the researcher had to intervene and politely ask the participant to get back to answering the original question. The interview responses, audio taped with permission, were thematically analyzed to answer the research questions.

Member checking. The transcribed interview responses were sent back to the interviewee for member checking to ensure accuracy of the responses and validation that the intent of the interviewee had been accurately captured and represented. This became the second source of data for triangulation. In nine transcripts there were no changes

suggested by the interviewee; in three cases there were minor errors and omissions which were corrected and confirmed by the interviewee to be accurate enough to proceed. There were no major changes suggested by any interviewee in the transcripts; in fact, all of them appreciated the accuracy of intent and content as visible in the transcript.

Teaching Presence Variables Scale (Dr. P. J. Shea) and CoI scale. Along with interview responses as the primary data source and member checking being the verifying second data source, Teaching Presence Variables Scale (Dr. P. J. Shea) and the CoI presence scale were both used as validated sources of the requisite characteristics to achieve triangulation, thus giving strong credibility to the accuracy of the data.

Analysis of Data

Memos and Diagrams

Corbin and Strauss (2008) define memos as a written record that contain the products of our analysis, whilst diagrams are visual representations that depict possible relationships between concepts or themes. The very act of writing memos and creating diagrams forces the analyst to think about the data, and it is in this thinking that analysis occurs.

Backman and Kyngas (1999) describe the process of analysis as the researcher having a conversation with the data; as such, notes from the exchanges the researcher has with the data are expressed as memos. Understanding this concept, the researcher used these analytical tools to help in creating better, broader themes and allow for more indepth analysis.

Although memos and diagrams are the tools for analyzing data in qualitative research, somehow they have become synonymous with grounded theory research

analysis. There being no restriction on them being used in any other research method or design, the researcher did use them extensively in effectively following the thematic analysis process.

Memos assisted this researcher to better understand the data in a narrative form. As the categories of data emerged, the activity of creating a memo allowed the researcher to clarify meanings and develop additional thoughts (Charmaz, 2006). Memos also served as a record of analysis as they provided an in-depth analysis of the data and supported the origins of the researcher's thoughts (Corbin & Strauss, 2008).

Similarly, diagrams are the visual tools for data analysis that help create new categories and cluster categories of the data (Corbin & Strauss, 2008). Diagrams also illustrate properties and dimensions of categories and serve to direct the researcher to areas that require additional data collection. They force the researcher to think in "lean ways," i.e., in a manner that reduces the data to its essence. Like memos, the researcher made use of this tool effectively. The researcher greatly benefited from both tools in not only uncovering the themes but also in the data analysis.

Coding and Thematic Analysis

A code is a brief description of what is being said in the interview; so, each time a researcher or analyst notes something interesting in the data, he or she writes down a code. A code is a description, not an interpretation. The researcher did some initial coding very early on during the transcription, and subsequently after member checking from the participants. After all data had been coded, primarily using apriori coding, and in some cases open coding, clusters of all the data code showed certain commonalities of concept or actions.

Although coding was the first step in the formation of themes, some codes did fit into multiple themes. Some codes, initially, looked redundant and were segregated and placed in a "temporary mixed" category but used later on, whilst some did not fit anywhere and were discarded eventually (Mortensen, 2010).

Braun & Clarke (2006) distinguish between two levels of themes: semantic and latent: semantic themes emerge "within the explicit or surface meanings of the data and the analyst is not looking for anything beyond what a participant has said or what has been written" (p. 84). In contrast, the latent level looks beyond what has been said and "...starts to identify or examine the underlying ideas, assumptions, and conceptualizations, and ideologies, that are theorized as shaping or informing the semantic content of the data" (p. 84).

Thematic analysis of the interview responses was conducted to identify common, broad themes. The transcribed interviews showed that majority of the data lent itself to semantic thematic analysis, but in some cases latent analysis had to be resorted to. A thematic analysis strives to identify patterns of themes in the interview data. One of the advantages of thematic analysis is that it is a flexible method, used both for explorative studies, where the researcher does not have a clear idea of what patterns he/she is searching for, as well as for more deductive studies, where the researcher knows exactly what he/she is interested in. It involves a constant moving back and forth between the entire data set, the coded extracts of data being analyzed, and the analysis of the data that is being produced (Braun & Clarke, 2012).

The use of CoI model as the theoretical underpinning meant that the researcher already had an idea of what to look for while analyzing the data, and this was, primarily,

a deductive thematic analysis, with Apriori being the appropriate coding method. However, it was observed during the interview and in the subsequent member checked transcriptions, that many ideas worthy of close evaluation had come into focus that seemed to be generic and specific to the person based on typical individual thoughts, reflections, and experiences. In such cases, and there were several, inductive thematic analyses had to be resorted to with the use of open coding. Thus, the research data, at times, had overlapping thematic levels being used alongwith the two totally different types of coding. This did help in cross verification of the themes and produced themes that were all encompassing, that were coherent within the theme, but distinct between the themes.

Thematic analysis, as an iterative process, allowed the researcher to go from messy data to mapping of the most important themes in the data. The researcher went through the entire six-step process proscribed for thematic analysis by Braun and Clarke (2012): Familiarize yourself with your data, assign preliminary codes to your data in order to describe the content, search for patterns or themes in your codes across the different interviews, review themes, define and name themes, and produce your report. Once the researcher had created the initial themes, they were reviewed for coherence of data within themes and clear, identifiable distinctions between themes.

The iterative process of reviewing extracts, codes, and themes continued until all the relevant data had been coded and the right number of coherent but distinctive themes had been generated to accurately represent the data. Subsequently, the themes were seen to be descriptive enough to define the essence of what the theme was about and why was it interesting to the researcher (Mortensen, 2010). Before finalizing the themes, the

researcher satisfied the following questions in the themes as suggested by Maguire and Delahunt (2017): Do the themes make sense? Do the data support the themes? Am I trying to fit too much into a theme? If themes overlap, are they really separate themes? Are there themes within themes (subthemes)? Are there other themes within the data?

Human Subjects Considerations and Protection

The first ethical consideration when working with human subjects is the participant's right to freedom from intrinsic risk or injury (LoBiondo-Wood & Harber, 2006). Informed consent (Appendix A) was obtained from each participant in the study prior to initiating the interview. As part of the informed consent, participants were told that they had the right to withdraw from the research at any time during the process without any repercussions. Participants were also made aware of the purpose of the research so they could make informed choices about how the involvement in the study may affect them, and if they wanted to continue; most were very happy to do so. The informed consent included the study's procedures for data collection and management of all data collected (Munhall, 2007). The nature of qualitative research, as explained to them, was not one that would inflict physical risk to person or property.

The second aspect of human consideration is the right to privacy and dignity (LoBiondo-Wood & Harber, 2006), such that a person has the right to control the way in which private information is made public. For this research, participants had explicit knowledge that the conversations were being audio taped during the data collection process, and this permission was always the first question at the start of the interview. Once transcribed, each participant was given an opportunity to review the transcripts of their interview for accuracy. All participants were told that they had the right to

delete/add/amend any information within the transcripts, in line with their recollections of what was said or not said in so many words but it did have a latent meaning to it.

The third aspect of human consideration is the right to anonymity. It is challenging to protect the anonymity of participants in qualitative research as the research is often presented with direct quotes from participants to support emerging themes (LoBiondo-Wood & Harber, 2006). All identifiers were totally removed and this researcher strove to preserve confidentiality at all times during the research, and will continue to protect the identity of the participants for five years after the end of this research, at which time the transcripts will be destroyed, to comply with regulations.

All personal participant identifiers were removed from the transcription and the participants were assigned random initials PA (indicating participant A), PB, etc. through PL. All digital research data has been secured; all audio tapes have been double erased to ensure confidentiality. Paperwork is being kept in a locked cabinet with this researcher for five years. A password and firewall-protected laptop has the electronic data stored and kept in a safe.

Trustworthiness

Methodological Rigor

Lincoln and Guba (1985) offer the qualitative researcher four ways in which study validity can be supported by qualitative rigor: credibility, transferability, dependability, and confirmability. Credibility relates to internal consistency of the study and is described as the method of inquiry for accurately measuring the phenomena it set out to measure (Lincoln & Guba, 1985). Credibility can be established in several ways, e.g.,

researchers can triangulate sources of data to gain credibility (Lincoln & Guba, 1985; Shenton, 2004).

The researcher employed qualitative triangulation methodology using multiple checkpoints on data to examine the veracity for the same research question. Credibility was supported by employing member checking and cross referencing with validated and verified presence scales (Lincoln & Guba, 1985). Member checking involved returning the transcripts to the research subjects and verifying researcher interpretations of their words and thoughts (Richards, 2005). The member checking verification process became very important as the researcher began to combine and make assumptions about the data. Semantic themes were readily visible, but the latent themes needed confirmation of what was meant but not said. In some cases, the researcher talked to the participants even when they had sent back the member checked transcripts, to ensure that the researcher was not misconstruing the participant's thoughts. This helped the researcher in eliminating preconceived ideas about the data, if any, and building clearer conclusions about the data. The researcher had no initial biases, no preconceived notions, being an outsider to the field of teaching. This was a big help in pragmatic analyses, without any fear of unintended corruption of data.

The all-important question of generalizability has always been at the forefront of qualitative research debate. The researcher believes, based on extensive research, that it is transferability in qualitative research that establishes generalizability, but in a different form than does quantitative research (Merriam, 1998). Qualitative research findings cannot always be made generalizable to the greater population because of the small number of individuals in a narrow sample of subjects (Shenton, 2004). For qualitative

data to be, in some sense, generalizable, researchers must include a thorough description of the context in which the data was obtained so that others can decide whether the conclusions are applicable to their particular situation. Lincoln and Guba (1985) describe this process as a rich, thick description which allows other researchers to understand the data's context and evaluate whether the theory is applicable to their circumstances.

In support of this, Merriam (1998) states that the construction of meaning is the task of qualitative research and reflects the specific methods used in the qualitative data analysis process. Merriam (1998), while talking about the traits of qualitative research, talks about generalizability being up to the reader to decide and sees it as a process not outcomes, searching for meaning about people, making sense of things, and perceptions in great detail and clarity.

Specific Aspects of Methodological Rigor

Systematic and transparent approaches to the data analysis are important to add to the confirmability of results (Lincoln & Guba, 1985). This researcher utilized Lincoln and Guba's methods for the qualitative researcher to establish trustworthiness and increase rigor in studies. Credibility was established by qualitative triangulation of data. Data veracity was established by using three different avenues including interviews, member checking, and validated scales created by Dr. Shea and those resulting from the CoI model. Credibility was established by having participants verify transcripts of interviews to ensure that collected data had been correctly transcribed to accurately reflect their content and intent.

Validity in qualitative research indicates how the intended variables have been studied and measured. Reliability defines the measurement of the findings consistency.

Golafshani (2003) stated, "If the issues of reliability, validity, trustworthiness, quality, and rigor are meant to differentiate 'good' from 'bad' research then testing and increasing the reliability, validity, trustworthiness, quality and rigor will be important to the research in any paradigm" (p. 6). In this research plan, the researcher attempted to select faculty from different academic schools and organizations to represent the different experiences and outlooks present; these different contexts did manifest in their responses, forming codes, and categories.

As Strauss and Corbin (1990) recommended, the participants' own language was used in analysis of the findings, which occurred immediately after the interviews, while the memory was still fresh, to assure validity. In this study, special attention was given to the usage of language to convey intended meaning, as the specific terms and concepts expressed can affect the validity of any future studies.

Chapter Summary

This chapter details the research methodology, the reasons for selecting this particular methodology, and the sequential steps for collection of data. These are based on IRB guidelines to ensure voluntary participation, confidentiality, rigor validity, ethical considerations, and respectful interaction to gather data from the participants. The use of descriptive qualitative research methodology, with semi-structured interviews, was selected to provide rich, thick description of teaching presence through the perceptive lens of the teachers.

Qualitative data analysis process, as stated by Krauss (2005), refers to a highly intuitive activity:

When one engages in a research effort, one engages in an intensive learning process where new knowledge and information is achieved. Thus, as an important learning facilitator, qualitative research and qualitative data analysis in particular have the power to be transformative tools through their ability to generate new levels and forms of meaning, which can in turn transform perspectives and actions. This is an important yet often overlooked aspect of qualitative research that can be understood and identified through the function of meaning and meaning making. (pp. 763-764)

Data analysis employed thematic iterative analysis, apriori and open coding, active use of written memos and visual diagrams to create a better narrative and talk to the data. "This helps in giving meaning and substance to the data; creating an intensive learning process where new knowledge and information is achieved" (Krauss, 2005, p. 763). The data, codes, and themes, from interviews were triangulated for validation with member checking and use of validated scales.

Most researchers, dealing with the topic of teaching presence, and even more so those dealing with it from the teacher's side, have not triangulated their data, codes, and themes for validation. The interview questionnaire (Appendix C) was designed such that the questions were aligned to one or more research questions to generate complete answers to the research questions.

CHAPTER IV: FINDINGS

This qualitative case study sought to gain insight into how online instructors, primarily teaching with asynchronous pedagogy, perceive teaching presence, create it while designing and delivering the course, and overcome the challenges they face in creating, sustaining, and maximizing teaching presence. Data were collected from semi-structured interviews and validated through member checking. Twelve online teachers, all with terminal degrees, 10 males and 2 females, all but one were over 40 years of age, were interviewed.

During the interviews, the researcher assimilated concepts that all the participants came up with and discussed at length. These were identified as important elements in create teaching presence, in online pedagogy, in an asynchronous environment. Themes emerged as the data from the interviews was being coded, primarily using apriori coding, but in some cases open coding was also used.

Replicating the format of the interview questionnaire, which had four sections, this chapter has also been divided into the same four sections for bracketing the emergent themes. To analyze the emergent themes, Section A deals with teaching presence as a single entity, and sections B, C, D each deal with an element of teaching presence. A total of fourteen themes emerged, and the sections and number of themes per section are as follow:

Section A. Reflections on Teaching Presence (four themes)

Section B. Instructional Design & Organization. (five themes)

Section C. Facilitation of Discourse. (three themes)

Section D. Direct Instruction. (two themes)

The themes that emerged from the data were ultimately used to better understand the perceptions of teachers, of teaching presence in online pedagogy, primarily in asynchronous courses.

Throughout the chapter, the 12 interviewed participants will be referred to as PA, PB, PC...PL, wherever necessary, to ensure anonymity. All responses from the teachers were transcribed, sent back for member checking, and returned to the researcher with permission to proceed with data analysis.

Interview Findings

The summary of findings is presented in the following sections, based on the major themes that emerged from the interview data using semantic and latent thematic analysis, as already discussed in chapter III.

Section A (Reflections on Teaching Presence)

The interview questions probing into the participants' perceptions of teaching presence, as an entity, were designed to elicit responses that would demonstrate the participants' understanding of teaching presence and its use to help improve the course learning outcomes. From the coding of the data the following main themes emerged:

Section A: Themes

Table 2

Theme A 1	Theme A 2	Theme A 3	Theme A 4
Planned humanization of learning	Extensive, meaningful interaction	Teaching presence as a prime mover	Challenge of knowing your students

Theme A 1: Planned humanization of learning (Insert the human element in learning). Even with varying backgrounds, teaching philosophies, multitudes of

unrelated courses, all the participants agreed that humanizing the course was a very important aspect of teaching presence. In fact, PG, PE, PF, PL, and PK stated that humanizing the course was the primary differentiating factor between a 'revered teacher' and an 'acceptable teacher' for lack of a better term. On the other hand, PA, PI, PG, and PB found it to be very important, but not the element that creates the difference between the two categories of teachers. Despite the agreement on its importance, almost all the teachers thought of humanizing the course in their own unique way.

All the participants believed that humanizing of the course starts with the course design that does not need to show the actual, physical, human presence. However, the design effort and genuine desire to transfer knowledge is reflected in the course layout, the shell organization, the clarity of processes, etc. An interesting comment about teaching presence in relation to course design came from PL, who said, "It is this designing element of the course that puts the teacher directly into the student's experience."

An actual scenario that PL narrated to the interviewer reconfirmed the central focus of this theme. PL inherited a so-called 'dead' course, designed by somebody else. The course had a basic syllabus, some assignments (no relation to the course objectives), and some articles for students to read at will. The dead course was given life by PL redesigning the course and incorporating elements that showed intentional effort to relate with the students and achieve the desired learning outcomes. Prior to the redesign, the course did show some structure and content organization, but there was no trace of teaching presence anywhere in the course. It was mainly material on screen, assignments, a bullet point list of tasks, and then the final exam. PL decided to become part of that

structure and be the course itself. Different tools and mechanisms were created such as narrated lectures to correspond to all of the content modules, creation of step-by-step videos of how to do the assignments and the homework, explaining the thinking behind the solutions for all of those assignments, and the reasons for doing whatever was it that they were doing. To PL, "teaching presence actually meant putting myself into the student experience and live it with them. That changed the student's response from boring to super exciting and the students, in most cases, enjoyed going through the course."

Another interesting observation about courses that were either very basic or very mathematical, generated a supplementary question; Is it equally important to have the same level of teaching presence in such courses as well? A general opinion, as shared by PK, PL, PF, PA, and PI, was that elements of teaching presence are important in all courses. However, purely mathematical courses, especially at the higher levels, can do with a lower level of humanization and teaching presence. "Nevertheless, even in such cases, 'teacher presence' is definitely required" (PF & PL).

All the participants believed that course design was step 2 of creating teaching presence; step 1, they all believed, was the pre-design planning, about what the instructor plans to do. PE added that there are pre-design questions to be answered as step 1: "What is that I need to incorporate in my online class so that I can effectively deliver the instructions and the material to the student? How can I enhance meaningful interaction? How can I humanize the course? Can I proactively do things that will help learners achieve better learning outcomes?"

A fundamental part of course design, supported by eight participants, was the importance of clear, relevant, logical, sequential communications, and interactions. PG felt that this helps the students become aware of the teacher being in the classroom for them, for guidance on demand, whenever they need you. PI believed that this message should be transmitted through active, continuous interaction which is an integral part of course design.

A similar stance on humanizing the course was adopted by PE who believed that, as part of an intentional design exercise, being proactive and thinking ahead, was critical to establishing teaching presence. His view is also supported by PF, PG, and PK. PF and PK further qualify this by adding that empathy for the students and trying to understand where they are coming from is also a very relevant issue for humanizing the course, leading to the creation of teaching presence. PF stated, "The students have changed, and in this dynamic environment, where change is continually happening, teachers must keep pace with change." PJ mentioned that "Students also look for the relevance of comingling interactional activities with related instruction materials, and this can come out being very authentic, which is an element of teaching presence."

The element of 'intentions' in designing the course was at the core of all responses. Participant PI said "I put a lot of thought into how students are going to be motivated to participate. So, I try and make my questions on discussion boards meaningful, relevant, and interesting." The effective use of discussion board, as a teaching presence tool, was also mentioned by PC, PB, PA, and PD.

Another aspect of humanizing instruction came out as caring for students and making them feel it. Participant PI noted, "It is important to take time to show students

teaching presence." PI further commented, subsequently supported by PK and PB, that any demonstrable, intentional effort visible to the students that helps the students to learn better is seen as an act of caring. An example of such a caring effort, as agreed to by the three participants (PI, PK, PB), is the work that goes into designing a clean, well-organized shell. The fact that the teacher put in all that effort, for the benefit of the students, in itself facilitates the creation of teaching presence.

Surprisingly, PK thought of humanizing instruction in the literal sense and looked at it as, "The embodiment of the actual human acts, those that you can directly relate to or feel." Explaining this further, PK mentioned that some students are non-committed; they do not even read their syllabus or the updates that are posted every couple of days on important course topics. However, they expect the teacher "to hold their hands and guide them through baby steps, as if it was literally the case" (PK). PJ, PA, and PC had similar experiences but the other eight had not experienced anything like it. PJ had a totally different view of humanizing instructions:

The point of being in it together and not stranded on an isolated, uninhabited island. This is the feeling that many asynchronous students have when going through an online course. They are looking for a supportive message: "I am here, right beside you, at all times, not just in text, but in action.

PF supported the above view by adding that, one way of doing this is to ensure that as students are going through the course they should feel your presence and, "believe that you are there with them, for them, all the way, all the time." Not in so many words, but PC, PD, and PG generally agreed with what PF had stated.

A critical component of humanizing instruction, in this perspective, was identified by PJ as personalizing the responses by "Injecting yourself into it." This is supported by PL, who had already talked about "Putting myself into the student experience and live it with them," and by PC who believes that empathy in a teacher is an attribute that allows the teacher to feel what the students feel. PJ, PL, and PC believe this can be achieved even by simple actions like providing prompt, relevant, detailed explanations, not only in writing but also in voice over text and slides; illustrating concepts through small video clips; or introducing every topic or giving an overview of expectations for the week in a video. The common thread from the three participants that stood out was, that humanizing from this aspect requires adaptations to the course elements, such as personalizing the actions and giving the student the rationale for why they are doing what they are doing.

The participants PF, PH, PG, and PK specifically mentioned that one aspect of teaching presence that tends to be overlooked by the teachers, is the technological advancement that has impacted the online pedagogy. The other eight participants also talked about technology but did not think of it as a strong challenge for the teachers. PG and PK said that, not only have the content, delivery and assessment changed, but also the students are no longer the type of student that most veteran teachers have taught in the past or were themselves as they were growing up. PF talked about students being tech savvy with their pulse on social media, more independent, and in a hurry to move out in the practical world. PH said, "Thus, a class that does not take advantage of the technology, does not reflect the ways students communicate, the way we communicate now."

A somewhat different angle emerged out of responses from some participants, PH talked about the personal circumstances of the nontraditional students that typically make up today's student body. PH states:

These are people with jobs, they have families, they have responsibilities, and have taken on this extra burden to progress in their careers. Keeping all this in view, the responsibility of an online professor should also be to create meaningful learning environment that is enjoyable and less stressful, because people don't need more stress then what they already have.

On the flip side, PC, PB, and PF commented that the teachers are also human beings with their own lived experiences (personal and professional), their educational background, their successes and failures in life, and their motivations to progress. PC had an interesting take on this and called it "Bringing myself into the class with my real-world experiences. How do I make it real for them?" In this context PC talks about being successful in making conversational, non-scripted, power points that makes the student feel like talking over a cup of tea on a kitchen table. "To them it looks like a story that unfolds as the course progresses, around my personal presence as a part of that story." PF also had similar experiences about bringing the real world in the class, "The true me should be visible to the students; transparency is what they expect."

However, PG, PB, PK, and PF felt that their most difficult challenge to achieve humanization is when they are teaching courses designed by other teachers or professional instructional designers. They pointed out that, generally speaking, there are no guidelines or course code keys available from the course designer about the logic of design parameters that were used in developing that course. PK said, "One has to go with

the flow and see how it really works; there is no fall back strategy, and what if it doesn't work?"

Apart from these four participants, the other eight generally agreed that this was an ongoing issue, and with the increase in online student registrations, the tendency to create, canned or cookie cutter courses has increased to meet the growing demand. PG said, "one has to find ways to adapt to the reality, we don't get to choose, we just get what we are supposed to teach." All the participants generally agreed in principle with PB, who said, "The way out was to focus on encouraging students to provide feedback about the course progression, on a regular basis, to see what works and what does not." However, each of them confessed that they do not ask students for feedback on a regular basis, as it requires significant time for analysis and implementation, provided the schools agree to do so.

Theme A 2: Extensive, meaningful interaction. This is a critical element of teaching presence in any online pedagogy. All the participants noted that a well thought out course design and a well-planned pedagogical process generates effective, prompt, timely, and extensive interactions. Nevertheless, teaching presence normally supports all three types of interactions: learner-learner, learner-content, and learner-instructor.

Different aspects of interaction using different tools emerged from these data. PE was very clear about the multiple options available to generate effective interaction, such as:

Discussion boards, questions and answer forums, reflective assignments, assessments with constructive feedback, the Socratic argumentative method,

collaborate sessions, the specialized knowledge available with the learners etc., all these can be used, singularly or in conjunction, to generate effective interaction.

In agreeing with PE, but looking at it from a different aspect, PF went on to say that the effective use of each of the activities mentioned by PE depends on the teaching philosophy of the teacher, and on the determination of the teacher to ensure that, maximization of learning is the only acceptable outcome of the course. PG mentioned that another, seemingly insignificant, gesture to promote interaction is "The use of first person in the conversational tone"; to that PK added, "The student needs to feel that you made an effort to generate interaction, even if it is for something small like making them watch a video."

One aspect that stood out as a powerful tool to facilitate interaction, though only four participants brought it up, was the idea of approachability, the student's comfort level in reaching out to the teacher. One of the four was PL who had personally and successfully incorporated approachability to improve interaction, PL said:

It's sort of my expectations that sets the tone for the course which is pretty well organized to start with. They can find everything very easily, especially after being subtly forced into watching an introductory video, in a very friendly conversational style, that explains everything they need to know. The video also encourages them to take advantage of my open approachability policy, and they feel comfortable reaching out to me for discussions.

The importance of approachability, though not often highlighted, cannot be understated. PE stated, "The amount of interaction between the student and the teacher depends on the students' comfort level in being able to approach the teacher." In further

supporting PL, PE maintains that it is important to make the students believe that their teacher is always present, not like a passive presence in the online class but like an active presence as in an on-ground class. An active online teacher is seen to care about the students, care about their learning progression, and for that the teacher needs to ensure the students' feeling of teacher's presence.

PJ believes, though the aspect of individual approachability is important and preferred by many, but some students prefer an intra-group discussion-based role, this highlights the role of discussion board posts as a powerful, effective tool for interaction. All participants agreed with this powerful role of discussion boards, at different times during the interviews, and called it the most effective tool for generating purposeful interaction.

PD, PG, PK, and PF opined that, if used effectively, a discussion board was a very powerful tool to provide large amounts of data about students' style of learning and learning progression levels. However, these four participants thought that this tool was underutilized, being used just as one of the many interaction tools without focusing on the multiple advantages it has over other alternatives. They all agreed that discussion boards, if used effectively, also allowed the instructor to judge the student's intentions and seriousness about the learning priorities, if any. However, PD stated, "For that to happen, discussion questions be designed to allow for deeper interaction, get the students to think critically, make them reflect on different aspects and elements of the question. That will help the teacher evaluate students' learning progression." However, PI complained:

Discussion boards are vastly overused, but wrongly so, as the students tend to see them as a mechanical tool, requiring X number of original posts and Y number of responses, with no analysis of what the post actually says or what is the planned learning outcome from this exchange.

Other tools mentioned by PI, PG, PD, and PF were the Q&A forums, writing blogs, and group projects. The dilemma with Q&A forums, as observed by these four participants, was that teachers who set it up did not engage with it in a timely manner to answer questions. This leads to the gradual tapering down of the students' interest and they stop participating in it. The consensus was that if a Q&A forum is setup, which it should be, it needs to be closely monitored, and thoughtful responses be posted in a timely manner.

A totally unexpected interaction tool identified by PH, PI, and PC, was the class students themselves. There was vast amount of knowledge sitting right there, in the class waiting to be tapped. Most online students are nontraditional students with jobs and expertise in some field; they are a vast resource of experientially applied knowledge that can provide a totally different perspective on the issues, if tapped intelligently. None of these three participants have yet incorporated, in their course design, a strategy to take advantage of this untapped resource. However, they do plan on tapping into the combined knowledge of the class, which is much more than the knowledge of the teacher. This will enrich the course discussion and benefit everybody. PH further stated, "why not look out for the experts in them, find a way to capture that knowledge and disseminate it, or create a design that will allow for extensive intra-students interaction using different modalities?" PI talked of "the Socratic cooperative argumentative dialogue, also known

as the Socratic debate or the method of Elenchus, to create an intellectual climate, elevate the Q&A interactive session to the highest level, and stimulate critical thinking."

Another tool of enhancing interaction that emerged from the responses was "formative assessment with constructive feedback." PA, PB, and PF said, that if applied correctly, this not only creates motivation but also improves learning due to the learners' desire to show better results. However, PJ brought out an important aspect about "factual learning related to feedback." PJ has observed this dichotomy firsthand and stated:

It's a matter of whether or not the students did factually learn, or did they think they learned; they have to think that they gained something from it in addition to actually having gained something from it. But, I definitely think learning is improved when the presence is there as opposed to when it's not there, and I show my presence there by giving them prompt, personalized feedback.

Relevant to the above comment, there was some advice given by PH: "For assessment to be effective, it needs to move beyond external reporting compliance that informs future practice; instead it should identify gaps in student learning in order to benefit current and future students." By focusing on the learner, PJ believed that, "Evaluation should become a mechanism, not just for gathering student voice, but using that voice to inform practice and enhance learning." This was the key point in assessment being used in improving interaction, creating teaching presence, and achieve worthwhile learning outcomes.

Another tool for interaction, that overwhelmingly gained the support of all the participants, was assignments, especially those that require reflection and critical thinking. As an added advantage, the students cannot cheat on these assignments because

every student has their own interpretation of why they wrote something, what it means, and why it is important to them. PG looks at it as a way to avoid plagiarism. However, according to PC, PI, and PB, such assignments only generate effective interaction when the students present to the class their critical analysis and reflective thoughts on their specific assignments, followed by a robust discussion.

Participants PK, PC, and PL use this in a different way to enhance interaction, by trying to determine: What does the new learning mean to them in their studies or careers? What don't they understand? What did they learn new and what does it mean to them? What does it mean to the course? On top of all this, PC makes them situate that learning, "Take everything that they learned from the class, situate it in a real-life scenario, and show that it can be gainfully used."

Theme A 3: Teaching presence as a prime mover. The presence of the teacher in an online course is a catalyst that ensures deep, speedy, and effective interaction between cognitive and social presences, as shown in the Community of Inquiry (CoI) model (Figure 1).

This theme emerged from responses to the question that compared the Venn diagram of the CoI model with the definitions of the three presences that the model itself provides. The CoI model shows all the three presences as coequal intersecting circles, creating equal sized segments at the points of intersection, and the circles look identical in all respects. However, in the definitions of the three presences, cognitive and social presences are defined based on their functions as they relate to the individual, whilst the definition of teaching presence is linked to its impact on the other two presences for

achieving, as per CoI model, "personally meaningful and educationally worthwhile outcomes."

The researcher would like to clarify that all participants, in principle, did have a common thread on the role of teaching presence in the CoI model as: a prime mover, a catalyst, a critical element, an unavoidable element, and an impactful part of the learning process. However, each one of those participants who did provide a response had individualized interpretations of creating a sense from it and then phrasing it. The researcher feels duty bound to use direct quotes for all the responses as paraphrasing may change the emphasis or the context. So, teaching presence in that specific context, as understood by the participants, meant the following:

PD was of the view that:

It has to be the catalyst for these other elements because otherwise, I'm not sure how your cognitive and social presence actually takes place if you don't have the teaching presence set up to sort of imbibe the class with those types of activities and in a learning environment that's conducive for the students.

PJ stated:

It needs to be a catalyst to improve learning. The online student simply won't be as engaged, and take as seriously, and put as much thought into what you're asking them to do if they don't feel a connection with you in some way, or with the instructor, and with the fact that you're there, and you're expecting them to work on it, and give an adequate and appropriate responses.

PL said: "I do think that teaching presence can facilitate and/or amplify the other two." PI explained:

Oh yes, based on my own experience, I know that teaching presence is a catalyst. When I first started teaching online, 10 years ago, I was not present in the true sense of presence. I put a bunch of stuff out there, I designed a Blackboard site and so on, and I thought that everything would run fine. But, I found out that students need teacher presence, at least for me. Thereafter, I made sure that I am present to my online students in every possible way, through videos being on there every day, sometimes more than once and responding to their questions as frequently as I could.

PE went on to say:

For me, teaching presence is definitely a catalyst, to enhance interaction between the other two presences. I do not believe that teaching presence is an equal element with the other two presences. I think, even in itself, it is an element that drives both cognitive as well as social process.

PA claimed: "I do see it more as the driving force, it does help determine how much of each of the other two presences is going to be part of the educational experience."

PF said:

I am pretty sure that teaching presence was a catalyst but suggested that this needed further study to ascertain the several roles that teaching presence played in the CoI model, could being a catalyst be one of them? Probably so.

In summary, all the above participants, in principle, did have a common thread on the role of teaching presence, in the CoI model. They believed it to be a prime mover, a catalyst, a critical element, an unavoidable element, and an impactful part of the learning process. However, each one of these participants had individualized interpretations of creating a sense from it and then phrasing it. The other five participants did not have a detailed response, but the general understanding was that teaching presence is not just one of the three presences, it does act like a catalyst for the other two presences.

Theme A 4: Challenge of knowing your students. The researcher saw this theme emerging from a number of responses to all the questions in the interview questionnaire, not just from section A. However, this theme found a place in section A because the challenges dealt with all the three elements of teaching presence, but they all pointed back to teaching presence as an entity, facing the same challenges. Several challenges were identified by all the participants, such as student irresponsibility, discussion board intervention, course design for a cardboard cutout student, transactional students, and not enough knowledge about the students. Most challenges were teacher specific and only a few were common among the majority, which was surprising. One reason could be the diversity of the sample in terms of the variety of disciplines being taught, from hard sciences to social sciences, and the student demographics suited to the type of courses being taught.

One challenge that seemed to stand out with many participants such as PA, PE, PK, PF, and PG, was the balancing act of going through a course that would generate equal or almost equal enthusiasm in younger students and older students. According to the data, participants struggled with promoting enthusiasm across the different generations. To this effect, PE stated:

I have students who have one-year experience or two years, and those that have 10 years or 20 years of experience, and some who just graduated from college?

How do I balance the interaction? How do I maintain their interest with the same content online?

PF, PK, and PG were of the view that in a face to face, on ground class, this diversity can be used to the advantage of the class, by engaging in real time cross functional discussion, to learn from the wealth of experience that each of them brings to the class. However, in an asynchronous class, it becomes difficult to create a format where this modality can be incorporated for the benefit of others. PF did try to create case-based and project-based team assignments where the teams were formed to represent the experiential diversity of the class.

However, it was observed that instead of knowledge sharing or collaborative learning, the team members resorted to cooperative learning by splitting up the project, based on convenience, and the leader put it back all together to present it as a team effort, which it was, but not the way it was supposed to be. All the participants, in general, seemed to struggle with this challenge and found it to be an impediment in achieving the desired learning outcomes of the course.

Participant PG talked about this balancing issue from the perspective of irresponsible students and/or transactional students. The latter category is there just for the paper degree with no interest in gaining any knowledge. PG noted that "These irresponsible and/or transactional students create a third category, apart from the experienced students and the fresh graduates. They lag behind and have no interest in catching up." In support of PG, PF added that the teachers get frustrated because this third category complicates the already fragile balance. This third category "Will do what it can to pose as being productive students while making no effort to do anything

worthwhile." PF threw the hands up in disgust, "I am unable to find a solution. Can any one of you find one?" PC confirmed the above by stating that student irresponsibility is the factor that creates problems, "These are students who lag behind and show no interest in trying to catch up, they don't really care." PE had similar frustrating experiences.

Despite the third category negative experiences and frustrations, there were teachers in the participant group who had a desire to engage in a two-way emotional relationship with these students. PH was one of them, stating:

I think another big challenge for me is that I don't know anything about my students after class ends and I would like to know more about them to be emotionally engaged. I feel that the students take more interest and tend to remember more information if that emotional element is somehow triggered. That might bring them in.

PD had a similar challenge but framed it differently, "There's an element where the students can be familiar with the teacher, but the teacher is not familiar with the students for the most part." This issue dovetailed into the issue of 'cardboard cutout of a student.' PA talked about the courses being designed for a cardboard cutout of a student, "Created over a period, based on observations, that we are stuck with. That instructional design, we try to map it to actual people who make up the class but were unknown to the designer." The biggest challenge, as explained by PA, PF, and PG is that you're not actually designing a course. You are just making a course framework, with options that you can utilize, depending on the actual people that show up, instead of the cardboard cutouts that you framed the course for.

All 12 participants talked about the challenge of discussion board intervention. To them it was a critical element of managing discussion board posts, and a logical thing to talk about, but they seldom see it being discussed in schools. This generated simple, but thought-provoking supplementary questions: When to intervene? More importantly, when not to intervene? How much intervention frequency is one too many? When do you pull out? How deeply do you get involved? PF and PE stated that "When to intervene and how deeply to intervene" is a question that has no universal answers, its each person according to their situation. PD had some advice, "The challenge is to be a moderator not a contributor, to be a guide and not be the sage on the stage, to motivate not intimidate." PJ, PI, and PF noted that some students respond well and join the discussion when the teacher intervenes, but as soon as the teacher leaves, the students leave too. That intervention is counterproductive.

One challenge that participants, PD, PE, PK, and PF brought up was the lack of guidance in preparing new online courses, to meet the basic criterion of creating teaching presence in these courses. Furthermore, there was no mechanism to help the teachers modify the course design, while transitioning their course from on ground to online. These four participants believe that this transition is important, as the pedagogical medium, even for the same content, defines the course structure, interactive components, and delivery.

PK and PF believe that this pedagogical variation, requiring differentiation of emphasis, causes them stress to switch from on ground to online or vice versa, as they have to be conscious of the emphasis variations that occur within these pedagogies.

However, PD and PE did not take it as a challenge but found it helpful as they could use

the experience of one in the other. On a different matter, PE complained that when asked to teach a course designed by somebody else, "There is no guidance about what logic the designer used to design the course and what did the designer have in mind while creating the structure." PF was given such a course and said, "It was like a horror story to try and understand the sequence of the topics, relevance of the outside readings, linking of the irrelevant videos. It was a nightmare to navigate that course."

To summarize, the four themes under interview questionnaire section A show the perceptions of the online teachers in terms of the requirements that conceptually define teaching presence. The aspects of humanizing the course, engaging in meaningful interaction, understanding teaching presence as a prime mover, and the importance of knowing your students all contribute to the creation of teaching presence, singularly and in conjunction.

Section B (Instructional Design & Organization)

Instructional design and organization is the first of the three elements of teaching presence, the other two being "facilitation of discourse" and "direct instruction." Only five participants, PL, PE, PJ, PF, and PI were aware of this being the fundamental difference between 'instructor presence' and 'teaching presence,' though some researchers use these interchangeably. Adding to the above, PF explained, "this is where teaching presence is not only initiated, but it is here that the extent and depth of interaction of the other two elements of teaching presence is also formulated."

The interview questions probing into the participant's perceptions of this critical element of teaching presence were designed to elicit responses that would demonstrate the participants understanding of instructional design and demonstrate its use to help

improve the course learning outcomes. From the coding of the data the following main themes emerged:

Table 3

Section B: Themes

Theme B 1	Theme B 2	Theme B 3	Theme B 4	Theme B 5
Ease of navigating the shell	Interaction with teacher's digital presence is not a choice	Technology- friendly shell	Well-designed, constructive, integrative feedback	Goals be reasonably attainable and appropriate

Theme B 1 – Ease of navigating the shell. Ease of navigating the course shell reflects teaching presence, and that was one thing that all participants agreed on without exception. PL and PA stated that when students see a shell that is user friendly, and by analogy "easy to navigate," they know that a lot of work went into planning and designing this course, purely to help the students to improve learning. "This lays the foundation of a tacit respect for the teacher and a somewhat abstract obligation to reciprocate," said PF. Going further, all three agreed that even before teaching starts, the student has already made a mental note of this effort, and that is how teaching presence manifests itself.

To this effect, participant PL was very clear that, even before teaching starts, the initial impact of teaching presence on the students should be "Positive, strong, and well directed." To achieve this impact, a robust course organization and a clean shell are extremely important. "Even simple things like headings being in the exact same format helps" (PL). All participants agreed that consistency of format, though seemingly insignificant, has a huge positive impact on the students. If a student has to look around

to find things, the course design has created a distraction that can result in loss of concentration. Participant PI said that to overcome this issue, "They embed an introductory video in the course, and that video is them." The video explains what they are going to do, why it is important, how it connects with the content, and with the learning outcomes. PL agreed by saying "The personification of actions sends a strong message; whatever is being presented, is being owned by the presenter. Taking ownership transmits confidence." This motivates the students to follow instructions and give some respect to the instructor.

There was no disagreement that "ease of navigating the shell" was an important aspect of teaching presence. PI believes "The syllabus should reflect what's going on in the course and looking at the syllabus or the course shell should give a pretty good understanding of what's going on." However, PI conceded that achieving this is difficult for a new online teacher, with limited experience; thus, guidance should be available. PI further stated that in some universities there is an "office of online teaching" to help the teachers in overcoming these hurdles. Their shell designs are pretty much in compliance with the Quality Matters (QMs) guidelines, which helps create shells that are easily navigable. In terms of what constitutes a navigable shell, all respondents agreed in principle, and PJ summed it up very well: "The design needs to be an easy read, have no clutter, be logically sequential, be user friendly, easy to move around, and have consistent formatting week after week." PI added that, "All this has to be communicated upfront to eliminate questions or surprises towards the end."

PF, PG, PD, and PK add to the above and believe that another aspect of "ease in navigation" is the connectivity between the beginning and the end of the course. Too

often students are presented with disjointed topics that break the logical sequence and confuse the student. PK adds "The concept of scaffolding in constructing knowledge is based on a continuum of logically related topics, that scaffold knowledge from simple to more complex, in well calculated steps, without creating turmoil along the way." PI also supports the view and agrees that connectivity between beginning and end of the course is essential because too often students are presented with disjointed topics. PL agreed to this, sating, "Things out of logical sequence make people go fishing in the shell, and they miss what you want them to see. Even a small thing like double indentation for supplemental reference information is very important."

Participant PG cautioned that upfront information should, necessarily, include the required fundamentals, policies that could affect the students learning, grading policies that may come as a surprise, and other similar requirements. The students are not familiar with the content when they come into the course. so they need to be told upfront what the course objectives are, how the assignments will fit in, how much interaction will be necessary, and for what reasons. But at that early point in the course, they have no real way to assess whether all those guidelines are appropriate or not. Down the road, this exercise needs to be repeated to ensure students' voluntary satisfaction in continuing the course. PJ, PF, PE, PD, and PB agreed with PG on this issue.

Theme B 2 – Interaction with teacher's digital presence is not a choice. This was an interesting aspect of instructional design that came up during the interviews.

"Instead of trying to encourage, motivate or facilitate students to interact, there are subtle ways to imbibe such elements into the design that will ensure interaction, without giving student any choice in it" said PL. Thus, the theme heading "Interaction with teacher's

digital presence is not a choice" puts that into perspective. PL also talked about becoming part of the student's experience in which the teacher travels with the student through the journey of navigating the course by creating steps that are not either/or, but sequentially placed as a logical progression to subtly lead the student to the teacher. PL further explained, "I create a powerful personalized video with a message. It covers the entire course, sets my tone and my expectations. It's really forcing the student to interact with my digital presence, there's no way to avoid me." PD, PC, PE, PJ, and PA agreed with PL on this messaging, confirmed their usage of similar videos, but did not show the same enthusiasm and clarity as PL.

Participant PF, though agreeing with this premise, was of the opinion that the implementation of this concept of "Forcing the student, though subtly, to interact with your digital presence" is easier said than done. Smart students always find ways to go around such things. PG and PK were apprehensive of this as it places a lot of responsibility on the teacher to continuously monitor the students' learning progression and ensure that all efforts of non-compliance are suitably handled. They also believed that the student would see through the strategy and look at it as 'use of academic force,' rebel against it and constantly try to get out of it. The consensus, however, was that this is truly an important aspect and teachers should, in their individualistic styles, try to implement it as best as they can.

A seemingly simple route, as per participant PH, to achieve this "Interaction with your digital presence" is to create unique assignments, not the generic "off the shelf" ones, but the ones that help students learn and be creative. PH states:

It is important to create meaningful assignments, assignments that students care about, that are not throw away assignments. Why not create assignments that students would like to keep, to be proud of, to show to somebody else? It should not be something that they can Google and bring in, but they have to use their own knowledge and critical thinking to create that assignment, so I call them creative assignments.

PH gave an example of a student who stayed with his mother in the hospital for two weeks. He created a log of activities during the hospital stay, observations about the doctors, nurses, visitors, staff etc., that gave a narrative of the operations. Similarly, two friends sitting in a bar had a dialogue on a topic and they recorded that dialogue and sent it to their classmates, who enjoyed it immensely.

The same can be said about reflective assignments. The best example that PH came up with was to ask the students to find something cool and write a blog on it. The subtle point of this learning strategy is that the topic, being a matter of interest to the student, helps develop reflective thinking more easily and relatively deeply. PK, PC, and PD also believe that reflective thinking is a transferable skill that automatically gets interwoven into the course learning process as well. "Through creative and reflective assignments, the teacher is indirectly and subtly, forcing the students to interact with the teacher's digital presence" (PH).

The researcher had previously mentioned a closely monitored, promptly responding Q&A forum as another tool to increase interaction. This was again brought up by PG and PF. They pointed out that for this forum the operational modalities were important, as was the choice of topics, and also the line of questioning. Normally, this is a

forum for students to ask such questions that they are not comfortable asking on the discussion boards. However, PG believed that "This could also be turned around and used by the teachers to achieve their deep interaction objectives." On the flip side, how about students who do not want to engage, who prefer to learn in solitude because they work better that way, and will happily comply with all requirements if left alone in peace? PF had some interesting thoughts on it: "Is it acceptable to let such a student be in their shell? Should the teacher try to know what is bothering the person? Is it just shyness, or is it a disability that the student is avoiding sharing?" In support of this PF narrated a firsthand experience:

From the discussion board it was obvious that the student needed help but won't ask for it. In order to know more, I got in touch with the student via email and showed strong empathy to gain the confidence of the student. After two weeks of back and forth, the story came out, and I was able to adapt certain things that helped ease the student's anxiety. The question I now ask myself is, what if this was a course designed by somebody else? Could I still create adaptations without knowing what adverse impact it might have? I am sure that the accommodations that I provided, not shortcuts, would not have been possible if the course design logic was not known to me.

Theme B 3 – Technology-friendly shell. "The whole shell, not just part of it, should be technology friendly to interact with cell phones, laptops, iPads, notebooks, and much more" (PL). Today's students, especially the younger ones, are born into technology. PL seemed well versed with technology but stated that many teachers still need to quickly catch up, if for some reason they already have not. The concept of a

traditional chalk blackboard is alien to the students, as is the use of pen and paper; reading printed books is tiring while eBooks are fun to read. This is the reality within which online courses need to be designed.

PK, PF, and PG generally agreed that technology has changed the way the students learn, and teachers teach. But they had their own specific issues with technology, as they were designing courses for easy accessibility on desktops and laptops. But to make them compatible with cell phones and other handheld devices, especially the videos, the PowerPoints, etc. needs tech support, which is not always available in the schools. On the other hand, students have a variety of gadgets with different processing capabilities that would need to be catered to. Some can afford pricey high-powered gadgets, others cannot.

Most teachers were comfortable with the technologies they needed to teach their courses; however, some were more well versed then others. Technology at both ends plays a critical role and each side needs to understand the other's role in it. PK complained, "The schools do not arrange for professional development training and continuing education to ensure that teachers are well versed with the LMS and CMS platforms. It's a struggle to master these. The school should be proactive on this issue."

All the participants believed in the importance of opening the whole shell, at the very beginning of the course, thus allowing the students to interact with any part of the shell at their convenience. The problem, as PK stated, is that, "In such a case everything in the shell has to be compatible from day one, before the shell is opened, and everything must be available on all the gadgets like laptop, iPad, cell phone etc." The consensus was that courses that are not technology friendly, or if some parts of the shell are not available

on all the gadgets, then such shells should be opened in steps, such that they can be managed with the students.

Another issue that the participant PF brought up was the online class demographics. "How about those non-traditional students, ages 45-55 years, whose technological competency is not at par with their younger peers? How should the course design balance these two extremes?" All the respondents believed that there needs to be a mechanism where the teacher is able to assess the technological competency of the class, prior to starting the course, and this should be a mandatory requirement by the institution. PG and PF believed that an early warning would help the teacher to provide options in the course, make it slightly more flexible, and also inform the weaker students what they need learn prior to starting the class. This to some extent goes back to the "cardboard cutout student" syndrome.

PK mentioned an actual technology compatibility scenario where a teacher that PK works with asked the students to obtain a certain computational device and be familiar with certain type of calculations. However, the market had several different devices available. Some students got type 1; others got type 2. The teacher personally had type 2 but did not want to force the students to get that model, as it was more expensive. However, in computations, the students with type 1 had a disadvantage as the computational process being used in the class or referred to was always from type 2, which had different keyboard and used more advanced computations. A mismatch in technology became an issue that wasted a lot of class time and led to widespread frustration.

Theme B 4 – Well designed, constructive, integrative feedback. Feedback is the most important tool in improving learning, be it online or on ground. However, in online pedagogy it assumes special significance as a "means of overcoming the transactional distance through meaningful interaction, primarily meant to help the student overcome weakness and convert them to strength" (PK). The participants talked about a wide variety of feedback types: two-way feedback, reflective feedback, and assessments with a feedback loop in their responses. All participants, however, agreed in principle that well-designed, well-timed, constructive feedback was an important factor for creating strong interactions. This process makes the students believe that there is someone on the other side, with their best interests at heart, and trying to help them to maximize their learning. This is a very critical aspect of teaching presence.

PA uses two-way feedback and based on the student feedback, PA constantly tweaks the design of the online courses, trying something new to improve their own effort. The students were asked, "How effective was the topic this week? What problems did you face? What part of the course did you get these problems from?" The responses were tabulated, cross referenced, and then used to make the requisite changes to improve the course.

In terms of teacher's feedback to the students and whether the students utilize it or not, PA believes that it is purely based on the student's motivation to improve learning. Self-motivated students think positively about the feedback they are receiving and try to use that feedback to get a better grade next time. But those whose grades do not change are not using the feedback to improve their work; maybe they do not care. PA believes that one way to accommodate feedback utilization is to allow multiple submissions. PG

and PI also allow multiple submission of assignments to improve learning, not necessarily to improve grades, definitely not beyond a B. PK wondered if it really made a difference to the practical world if you mastered a concept in one attempt or three attempts. The idea is "Demonstration of learning, maybe the one with three attempts learnt better, with deeper insights, and more control over the content" (PK).

All participants agreed that there were several aspects of feedback that have less to do with learning, but more to do with grades. PE talked about how feedback has changed in more than one way:

Many years ago, when you told a student, "you lost points here and this is the grade you make," they would take it. They weren't questioning it. But nowadays, students question, "why did I lose the points? Where did I make mistakes?"

Which is generally a good thing if it is to promote learning, but it has become hard for students to take B or a C. Whatever the grade, they start questioning it.

However, PE claimed that they have flipped it around and use this as a learning exercise. They tell these students what was missed, why it was important, and how that changed the whole narrative of the correct answer. Grades are only discussed if they are willing to listen and accept where they went wrong. PF said, "It's not about the grades; learning is more important. That is the sole reason this whole thing exists."

Another important point that emerged from the responses was that learning as a result of constructive feedback improves the self-confidence of the students. The students realize that when they make mistakes, they can learn from them, and they have the ability to correct those mistakes. PE commented, "These students may not realize at this point,

such learning helps their subconscious minds to accept that there is no shame in making mistakes, as long as you can learn from them. This is a very important lifelong lesson."

It was clear that not many teachers solicit feedback from students, during the course, to make changes during the session. "Each class is different, isn't it?" asked PH, who encourages student feedback about the efficacy of the course, during the course, and acts upon the relevant suggestions as far as possible. Emails from students with their feedback, serves as a continuous improvement tool for PH to tweak the course, even during the session. This approach needs dedication and hard work, but it overcomes the objection of teaching "cardboard cutout student" courses. PI has a similar strategy, cogenerative dialogue, to improve courses based on student feedback:

My learning outcomes are actually completed by the student. Its self-report in terms of, what extent have they grown in relation to where they were at start. I need to know what students are saying in terms of what they learned or didn't learn, so that next time around I can modify that course.

The majority of the participants, nine of the 12, looked at assignments-grading-feedback cycle as a closed loop that should, primarily, assess learning growth, not grades. The other three participants opined that generally speaking, assessments are meant to give a grade for differentiating between those who did well and those who did not. "What's the incentive to do well then?" they asked. PK had a good grasp on the concept and stated that "Formative assessments should be designed as a learning tool, where you integrate assignments and assessments with learning, as an ongoing practice, that evolves with time at various levels." This is known as integrated assessment, and as a tool it is commonly used for ongoing curriculum and learning development processes.

PA also had similar views about formative assessment being used as a learning tool, not as a grading tool, saying, "It is less about evaluating the student and more about providing an opportunity for the student to verify that which they think they actually know." PJ concurred, stating, "Formative assessments can be designed in such a way that it would measure the progressive achievement of objectives. For that it's really important that outcomes be tied to the objectives."

However, there were two responses that were not in line with other responses. PC stated, "My assessment philosophy revolves around all three assessment types:

Prescriptive, formative and summative in all my classes." The other comment was from PF who talked about using summative assessments, the only one to do so, as "An end of course validation of the formative assessment results," but the use of summative assessment, as a standalone, was not supported even by PF.

Theme B 5 – Goals be reasonably attainable and appropriate. "Learning outcomes, objectives, and goals are central to all course design. This is what the students are there for, and this is what the teacher should be aiming to achieve as the end result" (PF). The views of the participants had a lot of congruence, and there were no surprises.

All participants agreed that without goals there would be no way of knowing where we are going, how far we have gone, and when will we get there. All participants also agreed that the goals have to be reasonably attainable, within the realm of possibility, appropriate for the particular course, be applicable to the real world, and integrate into an overall larger goal, if need be.

PL believes that it is important for the students to know their personal goals before they can decide if the course objectives dovetail with their goals. Will it be worth the time and money spent? PL then explains the strategy to handle this:

Very early in the course I ask them why they're in the course? What they are going to use this material for? How do they plan on using what they're going to learn? And so, I then sort of adjust my interactions within the course based on their responses.

All participants agreed that it is important to help students meet their goals, but it is also important that those goals be reasonably attainable and appropriate to their actual interests, abilities and backgrounds. PL further stated that all goals that are spread over a long period need to be broken down into smaller, manageable, and measurable sub goals. Without these short-term markers, there will be no consistency in movement throughout the course. Thus, "It is critical that the overall course objectives tie up with the weekly topic objectives to help gauge learning progression and scaffold the knowledge construction" (PJ).

There was also a consensus about the need to have detailed course objectives, and as PD said, "That directly relates to why they are delving into the material they're going do that week or the next week, so on so forth." PD further explains that it is extremely important to tie the content directly to explicit statements of what is expected, what should they be able to accomplish, and what the outcomes will be for the week. PF stated that the "Sequence of goals, from overall course goals to weekly topic goals, should remain logical. If you changed it around, it would seem scattered and disconnected. It needs to feel organized and connected to what they expected from the course."

Another way to achieve this, as explained by PC, is the use of ADDIE (Analyze, Design, Develop, Implement, Evaluate) model for instructional design process and developing curriculum. None of the other 11 teachers had used it but eight had heard of it. PC states that this model starts with "What is it that they have to learn? What are the meaningful activities to help them conceptualize it? Why am I taking this course? What am I going to learn, and how this relates to my field of study?" The ADDIE model ensures that these questions are answered by the curriculum as it goes through the design process. All the eleven teachers showed interest in this as a future professional development objective.

Continuing on the topic, PI talked about a unique aspect of setting goals. "You need to ask yourself, when those students walk out the door at the end of that term, what are they taking with them?" PI maintained that the goal is not only about cognitive knowledge, but more importantly, it is also about emotional knowledge and attitudinal disposition about learning. It is important to know how students leave a course, in terms of the knowledge and skills that the teacher wants them to gain. "More importantly, it is their attitude towards future learning and growth; Is it something I know how to go back to, to try and learn more about? That's what's important as a goal."

In agreeing with PL and PJ, PE talked about mapping topic's specific learning outcomes to overall course learning outcomes. However, PE believed that topic learning outcomes were more important than course outcomes because every topic has core concepts. "I want you to demonstrate that you mastered these core concepts and you're able to apply them, which will ultimately tie back to the course learning outcomes." PE linked this to a concept called Assurance of Learning (AoL) and explained that AoL is

about measuring and ensuring that students learned what they were supposed to learn. PE uses a set of self-designed rubrics, but at the same time assignments are also given to the external faculty members to provide the ratings for comparison. This helps PE continuously refine and upgrade the self-designed rubrics.

To summarize, the five themes under interview questionnaire section B indicate the perceptions of the teachers about instructional design and organization, which is the first and the most important element of teaching presence. The importance of this element is also embedded in the themes that cover such aspects as ease of navigating the shell, interaction with the teacher, technological friendliness of the shell, integrative feedback, and setting attainable and appropriate goals. These themes indicate the direction the course designer needs to proceed to produce a course that will not only help create teaching presence but will also help in achieving the desired learning outcomes that all teachers aspire to.

Section C (Facilitation of Discourse)

Facilitation of discourse is the second element of teaching presence. This is where instructor presence comes out of the shell of teaching presence and manifests itself. The most important activities within this element are the effective use of discussion boards, ensuring deep learning, and creating a community of learners. Some interesting observations came out from the responses about the potential of effective utilization of discussion boards. The interview questions were geared towards understanding the impact of facilitation of discourse through the lens of the teachers.

Three themes emerged from the data as shown in Table 4.

Table 4

Section C: Themes

Theme C 1	Theme C 2	Theme C 3
Monitoring of learning progression towards objectives	Supports development of deep learning	Develop a community of learners

Theme C 1 – Monitor learning progression towards objectives. All the participants agreed that the discussion board was a very important tool that could provide instant, rich data for monitoring the students' learning progression towards the objectives. To do this on a fast track is of paramount importance, as that allows the teachers to plan for differentiated instructions without losing time.

Participant PL talked about using the discussion board as a follow up to an assignment that has already been completed. The students are asked how they would apply their classroom learnings to their professional work. Also, the discussion board allows students to demonstrate their ability to adapt classroom knowledge to their profession. That demonstration of learning, the adaptive learning, occurs in the discussion board posts where they showcase the concepts they have mastered. "There is nothing synchronous in the course, but I can take it a step closer by being synchronous with them through discussion boards and work with very short response latency" (PL).

PI and PJ said that a keen observation of the posts on the discussion board can demonstrate a student's learning progression. It can also indicate whether the student is a surface learner, a deep learner, research-oriented student, a transactional student, has high or low comprehension etc.

PJ further states that:

This can be observed only if you provide meaningful questions on discussion boards, those that tie directly to something they're interested in, and they feel they can gain from it, then it becomes really important for them to get involved. Those who still keep on the periphery are the non-learners, surface learners, transactional students etc.

Furthermore, PI suggests that the questions on discussion boards should be of the nature that require critical thinking and reflection. However, care should be exercised as it would also show your reflection and thinking about others and being careless with it could backfire.

All participants concurred that there are several other tools that can judge, measure, or estimate learning progress. PF talked about a "well-planned course that moves from simple to complex concepts using projects that are spread over the whole course." PI continued with the modular project concept that grows in complexity as the course content becomes more complex. PI further explained that the markers at each level of complexity have a value attached to them; as the student moves through this complex maze, the depth of understanding is tested at every level to showcase progress. As suggested by PL previously, PI agreed that this project could simultaneously be a discussion board post where students can interact with each other in a community of learners, as well as an opportunity to mutually enhance learning. PK agreed that there is a need for students to interact and take advantage of collaborative and cooperative learning opportunities afforded by the discussion board posts.

PL mentioned that all monitoring tools have one common purpose: to improve learning outcomes with as much regularity and consistency as possible. Monitoring of

learning progress helps the teachers to identify weakness and strengths of the students and guide them towards resources that can help them overcome these shortcomings. To this extent, PJ agrees that evaluation as a learning tool can effectively be used in gauging learning progress: "So, if evaluation feedback is important to them, then that's going to improve learning. Quick, timely, frequent, personalized, and constructive feedback helps interaction and creates a huge presence."

Theme C 2 – Teaching Presence actively supports deep learning. "Surface learning, as the name suggests, only scratches the surface of knowledge. On the other hand, deep learning allows the learner to transport the learning to any scenario, adapt it, and use it to get results" (PD). Going further, PD also calls this "adaptive knowledge," which is the result of reflective analysis, creative thinking, critical discourse, and the willingness to use what you learn.

PG shared from experience that some students, despite given the opportunity for deep learning, through the use of appropriate tools, would still go away with surface learning. Such students are either transactional students or they made a bad choice in taking that course.

There were no disagreements on the difference between the two terms; PJ explained that "surface learning is simply regurgitating back what the textbook said or what the teacher said semantically. But deep learning occurs when you are able to analyze, synthesize, utilize, and make a statement about it." PJ also referred to Bloom's taxonomy, with deep learning being the upper three levels of learning process, and surface learning being the lower three levels of that process. However, PI stated that

sometimes surface learning is a prerequisite to deeper learning, but then it should continue to progress further, not just stop there.

PJ continued further to explain Bloom's taxonomy because of its strong relevance to the topic, stating:

Bloom's taxonomy is a continuum of learning levels where each lower category is subsumed by the next higher one. From low to high, they are: Remembering, understanding, applying, analyzing, evaluating, and creating. The lower three levels are also attributed to passive learners (surface learners), while the upper three levels are more associated with active learners (deep learners).

Talking further about deep learning, it was generally agreed that several other tools can be used to instill deep learning in students. PD, in agreeing with this concept. talked about effective feedback as one such tool: "If used effectively, feedback is a tool which is absolutely vital for students, especially when you do team projects, ask them to be creative, synthesize, and come up with recommendation to a scenario to develop deep learning."

PJ came up with an interesting observation saying that "The first verb that you use in stating each objective dictate what your expectations are from the students with regard to deep versus surface learning." PJ went on to support this claim by comparing Bloom's Taxonomy's old and new versions. "The old version had nouns describing what needed to be done; the newer version replaces the nouns with actionable verbs."

Another common thread that came out was the responsibility of the teacher to create opportunities at every step to gently push the student towards deep learning,

leaving no choice but to comply. PJ provided this comment to support the common thread:

It depends really on how you frame the questions in the online discussions that will force the student to go into deeper learning and answer the questions, as opposed to just using surface learning for it. Another such opportunity arises when you design the assignments that require individual thinking and reflection.

Although the design of individual assignments has its own merits, several teachers were of the opinion that the numerous advantages of teamwork, collaborative learning, and cooperative learning should be effectively utilized and not overlooked in an online course. PG supported this by confirming that gradually all their assignments had been converted from individual based to project-based group assignments. These require teamwork, critical thinking, reflection, and creativity; such project-based assignments help deep learning.

PG said, in support of PI, that in surface learning all the concepts are fragmented in separate compartments, but in deep learning, you know why you do what you do, so that is where those fragmented concepts come together to make meaning. Surface learners can move towards deep learning provided they make that effort to transition. However, PF was of the candid opinion that these are two different routes of learning, with different goals, they cannot be simultaneously present in one entity. Deep learning is more about reasoning, analytical skills, critical thinking, debate, and argument, whilst surface learning has none of these requirements.

In terms of deep learning being the same as adaptive learning, nine out of 12 agreed that it was so. However, PD believed that deep learning leads to adaptive learning,

the latter being more practice driven with the ability to adapt to any discipline, a notch higher than deep learning. The other two saw adaptive learning as an integral part of deep learning.

Theme C 3 – Develop a community of learners. One of the objectives in the CoI model is the creation of a community of learners. The achievement of this objective helps learning, as being part of a learning community has numerous advantages. The feeling of isolation in an online course is a real fear that students have, resulting in high attrition rates. One way the teaching presence works in creating that community is to involve the learners such that their strengths are highlighted as individuals, and they can be who they are, within the safety of the community, in their comfort zone, and safe from being judged. PH has the valid tested solution for this:

Being professionals, most of the online students are SME in something; that is their strength. I ask them to share that knowledge with us as we are not familiar with it, and that is the knowledge that we can also use. So, they not only share knowledge on the subject matter, but also respond to questions from other students within their comfort zone. This also improves creativity and begins to create a community of learners.

The other aspect of creating community is related to the teacher's attitude towards students. PE talked from personal experience that "If students feel comfortable in contacting their teacher, and find that interaction friendly and helpful, that improves their confidence level in dealing with somebody more knowledgeable than them." Once this confidence takes root, it can be channeled towards student-student interaction; once that interaction approaches the comfort zone, the community of learners will start taking

shape. This aspect was seen as a possible route to working within the zone of proximal development but was not discussed and will be recommended as a future research project.

There was no doubt in any participant's mind that "humanizing the course" also leads to development of a community of learners. PK was very emphatic about this aspect of humanizing the course. The more positive human interaction the student has, the faster the seed of creating a community would have been planted. PK talked about personal experiences where humanizing literally meant holding hands to teach student to walk baby steps:

Sometimes it seems that I have to hold their hand and lead them through the system rather them being adult learners; make them read the requirements, follow them, and make them understand what to do. All these roles are not part of the course design, but they are part of human instincts to help, the humanizing of the course, to help the weak stand up and compete with the rest to the best of their ability. This is the first step, a big leap towards development of a community of learners (PK).

PA had a lone voice of dissent, believing that a community can only be sustainable if it has developed organically. "A community not based on genuine mutual respect, common goals, created for small gains is actually counterproductive. No doubt, it is good to encourage a sense of community, but let it emerge on its own."

To summarize, the three themes under interview questionnaire section C indicate the perceptions of the teachers about facilitation of discourse, the second element of teaching presence, that allows the teacher to interact with the students, create consensus after allowing for a debate from all contradictory angles, monitor their learning

progression, help them to adopt deep learning strategies, and create a community of learners that will support learning to produce educationally worthwhile outcomes.

Section D (Direct Instruction)

This is the third element of teaching presence where the teacher has a direct role to interact with the student and transfer knowledge in a somewhat traditional manner, as in the constructivist theory of learning. The interview questions were designed to explore the role played by direct instruction and teachers in exploring relevant issues, outside the course, that would allow wider exposure and induce a debate over a variety of topics to promote learning.

Starting from the first interview, there was a supplementary question about the need for teachers in this digital age. The question was directly in line with the interview question, so it was treated as such. This led to a lively discussion in each interview. The second aspect of this element was feedback and its role in advancing learning. Another element that evolved was the role of the teacher as SME and/or a facilitator. This too turned out to be a very interesting topic. This section had two themes (Table 5).

Table 5
Section D: Themes

Theme D 1	Theme D 2
The importance of teachers in this digital age	SME vs. facilitator: The balancing act!

Theme D 1 -- The importance of teachers in this digital age. The question that evolved during the interview and then became a supplementary question was, "In this digital age when the students have their pulse on social media, where every type of information is available at the touch of a button, where every question under the sky can

get multiple responses, where many conflicting views about one thing are readily available, than what do we need teachers for?" PI explained this as:

What I try to do is convince students that knowledge is not something that's out there to grab. It's something that is being developed, being constructed, as we talk, and as we work together. If you empower students to also become teachers, then if you have 15 students, you've got 16 teachers. I think this also ties into what is known as teaching within the individual's zone of proximal development (ZPD).

PI further went on to add, that the best direct instruction was 'reflective teaching' where you reflect on the things out loud, almost like loud thinking. The student sees the process the teacher is going through, realizes that this isn't something that only the teacher knows, or this is not the only answer just because the teacher found it. The student sees what the teacher found and how; but the teacher has found these other things as well, so it's not like the teacher has a monopoly over a solution. This gives the student the confidence to reflect, think critically, think creatively, and come up with something that could be totally different from that of the teacher. A good exercise in learning, outside the course materials, using direct instruction.

PA, PG, PE, and PD were unanimous about the fact that this information that can be found though Google, Wikipedia, and other search engines give a false sense of informational security and validity to the students, making them think that teachers are redundant. Though this attitude is not always visible, it does exist in the minds of the students and manifests itself in many ways, over time. As part of direct instruction, the teachers must add value to whatever these students learn directly or indirectly from the search engines. The information these students get from the external sources is not

validated, is often conflicting, and most importantly, is never placed within their context.

That is where teacher adds value, and this should be the new role of the modern teacher.

"Teachers need to realize that their role as providers of information is being heavily chopped off. However, their role as a designer will never cease to exist" (PC). In fact, the designer's role continues to grow, in direct response to the growing information available out there. This was supported by PH who stated that from knowledge holders that transfer knowledge to the students, we have become designers; we give students an opportunity to create something new. "We design a process that enables students to design something new. Creating new knowledge should be the ultimate goal of the modern professor. Create something new, something that didn't exist before, and help your students to create as well" (PH).

The biggest pothole that the students miss is the validity, the veracity of the information they receive from outside, at the touch of a button. They compromise on accuracy for convenience. The common questions PG asks the students are:

How can one trust what one gets from these search engines? Who guarantees their accuracy? What if they are wrong? The students need to be told that they can find everything online, but not everything out there is true, reliable, and accurate. So, they can find relevant information from whoever and wherever, but then they should have this ability to verify for accuracy, otherwise they may be greatly misinformed.

PH further supported this notion of teachers being designers, "The teachers need to switch to the role of guiding these students, be the designer who designs their path to get accurate information from external sources in support of the course materials." PE

sees the teachers' visionary roles: "It's not really about teaching them, it's more about telling them how to learn and what to learn, telling them how to put loose pieces together, more importantly, how to put the right pieces together."

In continuation of the new teachers' roles, PE further stated that the students need to be told that for every question there are several contradictory responses, and someone has to point them in the right direction. Students don't realize that it is not about finding answers to their questions, it's more about being relevant to their context, putting all these pieces together to make sense of it; that's what teachers should be doing.

PG, PD, and PC concurred in the changing role of the teacher. Basically, the role of the teacher has changed from just being the subject matter expert (SME) who will transfer knowledge, to that of somebody who will guide them to the different sources where they can find the right material. The teacher is more like a guide, to help navigate the sea of knowledge out there, and to make sense of it all. The role as a direct transferor of knowledge from one mind to the other is minimal, if any, the teacher is more of a facilitator now.

A supplementary question was generated. Are we looking at a time, in the future, where the teacher will not be required in attendance? Maybe "on demand" only? PD had the appropriate response and, in general, others agreed to it. PD stated:

The issue is about pulling up so much information that you don't actually understand much of it, you don't know what it says, and more importantly, how it relates within their overall context. The need for making these interconnections with other areas, in order to add value, will continue to increase as the volume of

available information increases. If you redefine the teacher's role, it makes more sense to accept the need for a teacher at all times.

Acknowledging the limitations of the teachers who have a role to guide students towards a degree, and that requires covering course topics within a, fixed, short period of time. To this effect, PC describes the teacher as a person who is designing that learning experience and guiding people through it. There is a specific body of knowledge that has to be mastered in the shortest period of time. Teacher as the facilitator needs to be not managing knowledge but constructing it, so that it is more efficient and effective.

The fact is that the modern world is awash in pre-packaged knowledge that needs to be unpackaged and then repackaged to fit the specific needs. PF, PK, and PA agree and believe that this needs a teacher, a SME in something, to show these students how the prepackaged material, in their area of expertise, needs to be deconstructed and reconstructed to be relevant, contextual, and useful.

Theme D 2 – SME vs facilitator: The balancing act! A debate is raging about the so-called new role of the teacher as a facilitator compared to the traditional subject matter expert role. Most research is leaning to the latter role, but interviews in this research suggest that this may not be the case. There is a need for SMEs, as there is a need for facilitators. The dilemma is to balance the two, a balancing act is the need of the hour. Some supplementary questions came up: is this duality a dichotomy? Are these two roles reconcilable? Can they be applied to a situation simultaneously? The interviews were lively and full of surprises. All responses are direct quotes, there is no paraphrasing as the researcher feels it is important to read the message, verbatim, from the respondent, as is.

PK is more about the role of teacher as a facilitator, going with the flow to try and help students learn at their pace, seeing through their lens and trying not to look like an SME. The courses taught by PK allows that flexibility to some extent if need be. PK says:

It's like, what do you feel you want to talk about? You tell me what you feel is important and let's talk about it. To me, either way, it's achieving the same thing, but maybe even I've had achieved greater than that because there are things more pertinent to them and that is crucial.

PL is more towards the SME role as the subjects allow less flexibility to switch roles and be a facilitator in totality. PL's message is tacit and latent, and states:

My availability to the students is part of the course design itself. It's super rare where an email is not responded to within 12 hours. Most of the time it's even shorter than that because I always have my phone on me, and everything gets pushed to my phone. This prompt response keeps the student on their feet. The courses have short durations and I believe the best use of that is the students dealing with me as the SME. That is efficient and will give better results.

PF believes that "the two roles are to be played by the same teacher, as a situational leader. Switching roles as needed, based on the ground realities. It is a balancing act and equilibrium is possible at any level between the two roles."

PG believes that "students take advantage of the facilitator role and take the course lightly. Being SME gives the teacher an upper hand and students pay more attention and seriously try to gain knowledge."

PB thinks that it is a "delicate balancing act where the equilibrium constantly shifts from one side to the other. It is a see saw and the wrong application can produce negative results. The balancing act and appropriate choice of role is critical."

To summarize, the two themes under interview questionnaire section D indicate the perceptions of the teachers about direct instruction, the third element of teaching presence, that allows the teacher to help guide the student towards knowledge from other available sources, improve their attitudinal approach to learning, balance their roles as SME and a facilitator, and help them understand that prepackaged information needs to be unpackaged and then repackaged to be useful for the student within the context of their learning.

Summary

In summary, this chapter presents the data, based on the participants' responses, in 14 themes, each theme is placed under the particular section of the interview questionnaire that generated the theme. The 14 emergent themes are summarized in table 6 below.

Table 6

Themes Created in Chapter IV

Interview questionnaire section	Themes				
Section A: Reflections on teaching presence	A 1: Planned humanization of learning	A 2: Extensive, meaningful interaction	A 3: Teaching presence as a prime mover	A 4: Challenge of knowing your students	
Section B: Instructional design and organization	B 1: Ease of navigating the shell	B 2: Interaction with teacher's digital	B 3: Technology- friendly shell	B 4: Well-designed, constructive,	B 5: Goals be reasonably attainable

		presence is not a choice		integrative feedback	and appropriate
Section C: Facilitation of discourse	C 1: Monitoring of learning progression towards objectives	C 2: Supports development of deep learning	C 3: Develop a community of learners		
Section D: Direct instruction	D 1: The importance of teachers in this digital age	D 2: SME vs. facilitator: The balancing act!			

Interview section A had four themes, section B five, section C three, and section D two. The results of each of these sections contribute to answering the research questions to understand the teaching presence perceptions of higher education online faculty. The four themes under interview questionnaire section A indicate the perceptions of the teachers in terms of the requirements that conceptually define teaching presence. The aspects of humanizing the course, engaging in meaningful interaction, understanding teaching presence as a prime mover, and the importance of knowing your students all contribute towards the creation of teaching presence, singularly and in conjunction. It also indicates that the aspect of humanizing the course is paramount in teaching presence and most other things emanate from this singularly important attribute. In order for humanization to be successful, it has to be a part of the teacher's personality.

The five themes under interview questionnaire section B indicate the perceptions of the teachers about instructional design and organization, which is the first and the most important element of teaching presence. The importance of this element is also embedded in the themes that cover such aspects as ease of navigating the shell, interaction with the teacher, technological friendliness of the shell, integrative feedback, and setting

attainable and appropriate goals. These themes indicate the direction the course designer needs to adopt to produce a course that will, not only help create teaching presence, but will also help in achieving the desired learning outcomes that all teachers aspire to. Each of these elements singularly have some impact, but it is the combined effect of these elements interacting with one other, that creates the big impact of teaching presence as a whole.

The three themes under interview questionnaire section C indicate the perceptions of the teachers about facilitation of discourse, the second element of teaching presence, that allows the teacher to interact with the students, create consensus after allowing for a debate from all contradictory angles, monitor their learning progress, help them to adopt deep learning strategies, and create a community of learners that will support learning to produce educationally worthwhile outcomes. The idea is to generate a discourse and not a discussion. The teacher needs to continuously monitor and take small corrective measures to ensure that the discourse does not veer and become a discussion.

The two themes under interview questionnaire section D indicate the perceptions of the teachers about direct instructions, the third element of teaching presence, that allows the teacher to help guide the student towards knowledge from other available sources, improve their attitudinal approach to learning, balance their roles as a subject matter expert and a facilitator, and help the students understand that prepackaged information needs to be unpackaged and then repackaged to be useful for them within the specific context of what they are looking for. This is where past experiential learning of the teacher comes into play to guide the students in the right direction.

Based on these section themes, the following chapter will bracket the themes that relate to the particular research question, synthesize the resulting themes, and seek to draw conclusions to provide answers to the three research questions that formed this study. Lastly, implications and recommendations for future research will be presented.

CHAPTER V: DISCUSSION

Introduction

This final chapter will synthesize and interlink the study's findings with the literature. The literature review showed a gap that generated the research questions, which led to the qualitative methodology to be adopted for the research. The methodology included interviews with 12 participants, all with terminal degrees and experience in teaching online higher education courses. This generated raw data that were coded and thematically analyzed in the results section, producing 14 emergent themes.

This discussion chapter synthesizes and analyzes all the data made available by this research, points out gaps that need further evaluation, and then answers the three research questions which informs the basis of this research. Next come the recommendations of the researcher, the deliverables, based on the findings of this research.

Lastly, while conducting this research, some new perspectives were highlighted, and certain areas/topics had questions that could not be answered. Looking for answers, the researcher found limited literature in academia, but not enough to do justice with any of these topics. The researcher has recommended these concepts/topics/areas as opportunities for future research for the benefit of the larger academic community. As a limitation of this study, these important topics were outside the scope of this research.

To help contextualize and to provide easy access, this final chapter replicates the sequence of the dissertation chapters/topics. The chapter starts with the introduction of the topic, followed by the problem statement, then the purpose of the study, the research questions, leading into a brief overview of methodology, ending with overview of the

findings that leads into this final chapter with discussions to answer the research questions.

To be consistent and sequential, and for ease of identification and reference, the researcher has done the following:

Each theme has the same identifying alphabet as that of the interview section it was generated from e.g. A, B, C, and D (Table 6).

The numeral after the alphabet signifies the serial number of the theme in the order it was identified in that specific section e.g. A 1, A 2, B 1,---- D 2 (Table 6).

To answer the research questions, the themes have been rearranged such that each theme is bracketed with the research question with which it corresponds. Some themes are bracketed with two research questions as they relate to both (Table 8).

The researcher then answers each research question, using all the bracketed themes related to that research question, and circles back to the literature review, wherever possible, to reinforce and validate the findings.

In certain cases where some new concepts evolved and the literature in chapter II did not cover them, the researcher referred to additional literature with proper in-text citations, and complete references have been added in the reference section.

Problem Statement

The concept of teaching presence has historically been viewed through the eyes of the student learner and/or community of learners with a specific focus on strategies to create and improve presence in an online setting (Oztok & Brett, 2011). However, according to the review of the available research, the aspect of teaching presence that has often been overlooked is the nature of perceptive cognition of teaching presence from the

teacher's point of view, and its implications on establishing an intellectual climate in the online classroom (Cox-Davenport, 2010; Duncan & Barnett, 2010).

Similarly, research is limited about how teachers perceive the benefits, if any, of the time and energy they invest in attempting to create teaching presence in their online courses (Preisman, 2014). Thus, there is a need to understand how online teachers perceive and establish teaching presence within the courses they teach, as this can positively inform pedagogical decisions regarding instructor behavior, course organization, facilitated discourse, and direct instruction. Without this understanding, it is not possible to establish a current benchmark, understand the shortcomings, create training and developmental plans to augment the teacher's capabilities, and provide skill sets for sustainable, improved, learning outcomes.

Purpose of the Study

The purpose of this research was to conduct a descriptive, exploratory, interview-based study of how online teachers perceive the role of teaching presence in the courses they design and teach. The study also examined the strategies employed by the teachers in the three intersecting teaching presence phases: instructional design and organization, facilitation of discourse, and direct instructional activities, in creating, sustaining, and maximizing teaching presence.

Additionally, this study sought to qualitatively assimilate and analyze the processes utilized by instructors when establishing teaching presence in order to provide insight into its influence on the creation of an intellectual climate, within the online classroom, to affect learning outcomes (Cox-Davenport, 2010; Duncan & Barnett, 2010).

Research Questions

- **RQ 1**: How do online instructors perceive teaching presence and its impact on learning outcomes?
- **RQ 2**: How do online instructors incorporate teaching presence in designing their course content and delivery?
- **RQ 3**: What strategies do online instructors employ during the course to overcome challenges and to establish, sustain, and maximize teaching presence?

Review of Methodology

This study used a generic qualitative approach to gain a rich thick description of the perceptions of higher education online teachers about teaching presence. Due to the specific focus of the topic, it was decided to use purposeful snowball sampling to create a participant sample pool of online higher education, faculty. These teachers were interviewed using a semi-structured interview questionnaire to learn about their perceptions and experiences of teaching presence.

The interview questionnaire had four sections: Section A was the overall reflections on teaching presence, as an entity by itself, not just the sum of its three elements. Section B focused on instructional design and organization (first element of teaching presence), followed by Section C, facilitation of discourse (second element of teaching presence), and then Section D, direct instruction (third element of teaching presence). The interviews were audio recorded, transcribed, sent back for member checking, and triangulated for validation with the teaching presence scale created by Shea et al. (2003). This scale has seminal value in all research related to teaching presence and

is referred to extensively by researchers globally. Permission was granted by Dr. Shea, via email, to use their scale in support of my research.

Review of the Findings

Apriori coding was the primary coding technique used for semantic and latent thematic analysis, but in some cases open coding technique was also applied for analyses. This coding process went through multiple coding resulting in fourteen emergent themes. For ease of reference, a summary of the emergent themes, from chapter IV, is reproduced below in Table 7.

Table 7

Themes Created in Chapter IV

Interview questionnaire section	Themes				
Section A: Reflections on teaching presence	A 1: Planned humanization of learning	A 2: Extensive, meaningful interaction	A 3: Teaching presence as a prime mover	A 4: Challenge of knowing your students	
Section B: Instructional design and organization	B 1: Ease of navigating the shell	B 2: Interaction with teacher's digital presence is not a choice	B 3: Technology- friendly shell	B 4: Well-designed, constructive, integrative feedback	B 5: Goals be reasonably attainable and appropriate
Section C: Facilitation of discourse	C 1: Monitoring of learning progression towards objectives	C 2: Supports development of deep learning	C 3: Develop a community of learners		
Section D: Direct instruction	D 1: The importance of teachers in this digital age	D 2: SME vs. facilitator: The balancing act!			

Based on the results of this study, the 14 emergent themes clearly link to the three research questions which form the basis of this study. In this section, the themes are further synthesized and bracketed to present conclusions answering the three research questions. This simultaneously addresses the overarching purpose of this research, i.e., to understand the perceptions of teachers about various aspects of teaching presence and its implementation, challenges, etc.

Additionally, research from chapter II of this dissertation is reintroduced, wherever possible, to validate the findings of this study. Some new perspectives, concepts, and terminologies emerged during the formation of themes. As these do not appear in any part of this dissertation, they have been reinforced within this chapter by intext citations of current academic research and by adding the complete reference in the references section.

Discussion of Findings

Data from four sections of the interview questionnaire in chapter IV identified 14 emergent themes. As shown in the themes (Table 7), Section A had four themes, section B five, section C three, and section D had two themes. In order to provide answer to the research questions, based on these identified themes, the themes were rearranged such that all themes related to a research question were bracketed with that question (Table 8). The nature of the topic and the responses thus received in some cases created themes that were bracketed with two research questions, as they related to both those research questions.

Table 8

Themes Linked to Research Questions

Themes	Research question 1	Research question 2	Research question 3
A 1. Planned humanization of learning		X	
A 2. Extensive, meaningful interaction	X		X
A 3. Teaching Presence as a prime mover	X		
A 4. Challenge of knowing your students			X
B 1. Ease of navigating the shell		X	
B 2 . Interaction with teacher's digital presence is not a choice		X	
B 3. Technology-friendly shell		X	
B 4. Well designed, constructive, integrative feedback		X	X
B 5. Goals be attainable and appropriate		X	
C 1. Monitoring of learning progression towards objectives		X	X
C 2. Supports development of deep learning	X		
C 3. Develop a community of learners	X		X
D 1. The importance of teachers in this digital age		X	X
D 2 . SME vs facilitator: The balancing act!	X		

Having bracketed all the themes with the related research questions, the researcher will now proceed to explain how these themes provide the answers to these research questions, and how the literature review or the current literature, as cited, but not from chapter II, supports these themes.

Discussion of Research Question 1

RQ 1. How do online instructors perceive Teaching Presence and its impact on learning outcomes?

This question was meant to capture the overarching perception of the impact of teaching presence on learning outcomes as a single entity, not as the sum of its three elements (instructional design and organization, facilitation of discourse, and direct instruction). It is important to understand that the impact of teaching presence as composite entity occurs in addition to the impact of these three individual elements, and the composite impact is much greater than the sum. The analogy is that of an ice cream wherein its elements: milk, sugar, butter, cream, essence, emulsifiers, etc. all have their individual tastes, are edible, and create a positive impact on their own. However, the taste of the ice cream, as the composite of these elements, is much better than the individual taste of each element alone. The difference is in the nonstop, random, multiple interaction between all these elements, individually, in pairs, and in multiple groupings that creates the powerful impact of the single entity. The permutations and combinations of such interactions is the job for a high-speed computer.

Keeping this distinction in mind, the participants were requested to segregate the impact of the independent elements, as best as they could, because most of those aspects would be covered in research questions 2 and 3. Five themes: A2, A3, C2, C3, D2 (Table 8), were identified as related to this research question 1. These five themes are discussed in detail below.

Theme A 2. Extensive, Meaningful Interaction

In any online course, a critical component of teaching presence is intense, active, purposeful interaction. Teaching presence normally supports all three types of interactions, as articulated by Moore (1993) in his theory of Transactional Distance: learner-learner, learner-content, and learner-instructor.

Rodgers and Raider-Roth (2006) state that this intense interaction is not a causal relationship by default but requires skillful intervention by an instructor to promote a certain level of cognitive and social interaction. This is also supported by Cranton (2006), who states that interventions by the instructor be such that it can project the notion of a caring teacher interested in building an authentic relationship by being in it together with the students. The students need to feel that you put in some effort for them, even when it is about a small thing like watching a video or using the first-person conversational tones, as all this elevates the student's comfort level in interacting with the teacher.

Interaction, being critical to teaching presence, can be achieved by using various tools in the teaching presence arsenal. This study's research data suggest that effective use of discussion boards, Q&A forums, reflective assignments, assessments with constructive feedback, Socratic method of cooperative argumentative dialogue, collaborate sessions, specialized knowledge available with the learners, and first person in the conversational element all help, individually or in conjunction, to generate interaction. A result of this interaction, apart from learning, is the sense of 'being there' or 'being in it together'. This feeling, though tacit in nature and experienced in different ways by different students, helps in collaborative construction of knowledge due to the responsive involvement of the instructor.

Cho and Kim (2013) support this and believe that cooperative and collaborative learning, even if it evolves in different ways, creates the togetherness that helps in coconstruction of knowledge, and the instructor, by design, has a major role in it. There is no doubt that today, the student body prefers an interactive learning environment that encourages multitasking, gravitates towards cooperative and collaborative learning, and incorporates the social aspects of learning including the teacher.

The aspects of socialized learning from the teacher depends on the teacher's availability and approachability. The importance of approachability may seem insignificant, but it cannot be understated, as the students' comfort level with this aspect dictates the amount and type of interaction that will effectively take place between them.

Zepke and Leach (2010) argue that making oneself appear very approachable will increase the likelihood that students will ask for help when they need it, which in turn makes the student feel more engaged in their work leading to better interaction and learning. When the students believe that the teacher is present in the online class, not as a passive presence but an active presence, then they are willing to believe that the teacher cares about them and about their learning. However, in order for that to happen, the teacher needs to make sure that, not only that there is online presence, but that the students actually feel that presence.

The research came out very strongly in favor of effective use of discussion boards. If used effectively, discussion boards can be a potent tool to provide a huge amount of real time data for monitoring student learning progress. This is crucial to identify strengths and weaknesses, possibly resulting in differentiated instructional strategies. However, the participants generally believed that discussion boards were not

being properly utilized to maximum advantage, but are just being used as one of the many interaction tools in a mechanical way, which they all believed was an error that needs to be rectified, and the sooner the better. To be productive, discussion boards should be working with discussion questions that allow for deeper interaction to try and get students to reflect, analyze, synthesize, and develop critical thinking (Noce, Scheffel, & Lowry, 2014).

Online learning theories have strongly emphasized the critical role of interpersonal interaction that supports collaborative work and helps build a learning community. This encourages critical thinking, allows for in-depth analysis, provides cognitive supports to learners, and ultimately promotes a deeper understanding of the material (Friesen & Kuskis, 2013).

As a teaching presence tool to enhance interaction, reflective and critical thinking assignments came out very strongly in the responses. Teachers can also use this tool to enhance interaction in a different way by determining the answers to several questions: What does this new learning mean to them in their studies or careers? What don't they understand? What did they learn new and what does it mean to them? What does this mean to the course? Teachers can further consolidate these gains if they ask students to situate that learning, take everything that they learned from the class, situate it in a workable real-life scenario, and demonstrate its gainfully utilization.

Linked with the creative assignments, the respondents saw formative assessment with constructive feedback as another tool for enhancing interaction. A well thought out, cohesive combination of assignments and assessments has a huge potential to effect interaction. Using this combination, as pointed out by one respondent, the teacher needs

to find out if the students did actually learn, or if they think they learned. It is equally important for them to believe that they gained something from it. This can be very time consuming for the teachers, but definitely worth the effort, in terms of better learning outcomes and student satisfaction.

In addition to other tools, Q&A forums also generate a lot of interaction. But having a tool does not guarantee results unless those tools are effectively used. The dichotomy is that the teachers who set up these Q&A forums do not engage in them in a timely manner to answer questions. This leads to the gradual tapering down of the students' interest as they see no desire in the teacher to generate interaction and show that they care. If a Q&A forum is set up, it should be monitored, and thoughtful responses be posted in a timely manner. This can create strong interpersonal bonds.

Interpersonal interaction can also help strengthen students' psychological connection to the course by enhancing social presence, the degree to which a person is perceived as a real person in mediated communications (Shearer, 2013). Survey research has bolstered the notion that effective student-instructor and student-student interactions, as a result of social presence, are critical to effective online learning (Ralston-Berg, 2010, 2011).

The aspect of enhanced social presence, seeing and believing in oneself as a real person, can be used for a unique perspective that evolved during this research. Some students can be shy about telling others how good they are in their field, or how they actually are a subject matter expert (SME), because they feel it might be perceived as boasting. However, through enhanced social presence, the confidence created by active

interaction in a safe environment, moderated by the teacher, can help in unlocking this biggest knowledge resource in the class, the students themselves.

Being nontraditional students with jobs and expertise in some field, they provide a vast reservoir of practical knowledge, time tested and proven, waiting to be tapped. The teacher should find a way to capture this knowledge, disseminate it, or create a design that will allow for the students to interact more, purely on this aspect, either through Q&A forums or the discussion boards. Alternatively, employing the Socratic method of cooperative argumentative dialogue, the teacher can elevate the interaction into an intellectual Q&A session and take advantage of that huge reservoir of knowledge available in the room.

More importantly, it is noteworthy that interaction may not always be voluntary. Nevertheless, a teacher must always try to ensure 100% participation in one form or the other. This participative shortcoming could be a student issue, which in most cases it is, but even worse, it could result from teacher issues. This was seen as one of the challenges, as it came out in this research, that the teachers face in online pedagogy. However, most teachers just ignore it instead of trying to effectively resolve it; this leads to student demotivation, affecting learning and attrition.

This research indicates that when students are not motivated, not prepared, or lack the self-discipline required to devote adequate time and effort to online classes, teaching and learning is affected significantly. This is further supported by Dogbey, Kumi-Yeboah, and Dogbey (2017) who state that, when the students' communication skills are poor, it affects their ability to express their ideas and thoughts effectively, as well as their ability to comment on peers' work, contribute to discussions, or ask the instructor

questions. Similarly, when students lack interpersonal skills to relate appropriately with the instructor and peers, when they feel isolated from instructor and peers, teaching and learning in the online environment are adversely affected.

Another major student issue that impacts interaction adversely was identified as students' lack of prior experience and inability to use the technology for online classes. This research showed that if a student had not taken any online class before this one, then participation in online discussions could be nerve-racking for them. There was a lot of talk about instructors' issues, but this was less semantic, most emerging from latent thematic analysis such as deficiencies in the instructors' subject matter knowledge, poor communication skills, poor feedback mechanism, lack of interpersonal skills to professionally relate with students, and incompetence in the use of the requisite technology. All these negatively affect the instructors' efforts to promote quality interaction and learning in the online environment. This is in line with Maryland Online's (2009) report, which found that many instructors of online courses lack three broad categories of knowledge desired to make online instruction effective: technical skills, facilitation skills, and managerial skills.

Theme A 3. Teaching Presence as a Prime Mover

Interview question A-2 about the CoI Venn diagram and the teaching presence definition was primarily meant to make the teachers reflect on the CoI model and the definitions as provided with the model. The model represents the three presences: instructional design & organization, facilitation of discourse, direct instruction, as coequal intersecting circles, creating equal segments at the points of intersection. The figurative image gives the impression of three equal presences, each playing their role to

create a community of learners to enhance learning. The CoI model, on its surface of it, does not indicate if teaching presence is playing a more dominant role, and if so, how?

Unless the model is read differently, it is clear that teaching presence seems to be a coequal presence with the other two presences.

Researchers, through their various theoretical and conceptual frameworks, have described teaching presence in different ways. As yet, there is no universally agreed-upon definition of teaching presence. Afolabi (2016) and Arbaugh and Hwang (2006) define teaching presence as the mechanism that bridges the transactional distance between instructor and student in a virtual classroom where direct instruction and facilitation of discourse is achieved through various forms of interaction.

Anderson, Rourke, Garrison, and Archer (2001) provided a seminal definition of teaching presence based on the Community of Inquiry model. They state that "Teaching Presence is the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (p. 5). Garrison, Anderson, and Archer (2000) define it as "a binding element in creating a community of inquiry" (p. 96). Shea et al. (2010) define it as "an online instructional orchestration" (p. 17) which indicates the role of a teacher as a conductor synthesizing all instruments to create a beautiful symphony.

This researcher found varying opinions during the research inquiry, but the common agreed theme was that teaching presence, in the Community of Inquiry model, no doubt acts as a prime mover, a catalyst, a critical element of the learning process that has to be present to achieve the desired results. Without teaching presence, one is not sure

how your cognitive abilities and aspects of social presence actually interact in unison to produce results, and how is that being regulated.

Ke (2010) studied interactions between the various presences and the effects of teaching presence on the other presences in online courses with students aged 24-59. Both qualitative and quantitative results indicated that an effective teaching presence catalyzes both social and cognitive presence. In itself, it is an element that drives both cognitive as well as social process, confirmed within the definition of teaching presence given by Garrison et al. (2001). It is more like a driving force, and it does help determine how much each of the cognitive and social presences will be a part of the educational experience. In addition, Akyol and Garrison (2008) found a significant positive relationship between teaching and cognitive presence.

If there is no teaching presence in the class that inspires instructors to create activities in a learning environment conducive for the students, then achieving educationally worthwhile outcomes and enhanced learning may not be possible. No doubt, based on the literature and this research, teaching presence does facilitate and even amplify the other two presences; therefore, by that definition it is a catalyst. Researchers also believe that teaching presence is able to create an intellectual climate that helps, as a catalyst, in improving grades, reducing attrition, elevating self-efficacy, and creating a sense of community (Ke, 2010). The teacher, in creating that intellectual climate, must come out as an authentic person truly committed to the cause, not faking the relationship as the students can see through it.

Furthermore, it is extremely important to understand that teaching presence is not just authenticity in relationships or appropriate timely interventions, but it is also a

mindset for extending activity between student, instructor, and content beyond just "being there." Teaching presence is a state of mind just as quality is a state of mind. The latter has to be a way of regular operations 24/7, so should the former. The teaching presence mindset includes a strategic workflow of effective practices that lead to co-construction of the intellectual climate shared by the instructor and students in the online course (Afolabi, 2016)

A strong teaching presence, as evidenced by a robust course structure and active instructor leadership, is crucial for achieving deep and meaningful learning outcomes (Garrison & Cleveland-Innes, 2005). Conversely, online courses dominated by student interactions can easily devolve into exchanges of poorly reasoned personal experiences and extended serial monologues (Angeli, Valanides, & Bonk, 2003). You cannot have teaching presence in abstention, unless you have designed it to be that way; otherwise, the students will have a field day with their monologues. You have to be present, though not physically, and they have to feel your presence all around them, at all times.

Theme C 2. Supports Development of Deep Learning

There are three different approaches to learning: surface, deep, and achievement or strategic approaches. Marton and Saljö, (1976a, 1976b) state that surface approach is where students see learning tasks as enforced work; they complete the minimum tasks, memorize what is needed for an exam, and nothing more. Surface learning employs the least amount of effort toward realizing the minimum required outcomes. Surface learners are motivated to complete the task rather than assimilate the learning. These students tend to be passive learners, working in isolation, and see learning as coping with tasks so they can pass an assessment.

By contrast, a student who adopts a deep approach to learning will seek to understand meaning. In a deep approach to learning, material is embraced and digested in the search for meaning. They have an intrinsic interest and enjoyment in carrying out the learning tasks, have a genuine curiosity in the subject and its connections with other subjects for building on their current learning, and enjoy social learning including discussing different points of view (Svensson, 1977).

Furthermore, deep learning allows the learner to transport the learning to any scenario, adapt it, and use it to gain success. This is similar to adaptive knowledge that comes from reflective analysis, creative thinking, critical discourse, and the willingness to try. Some students may use both deep and surface approaches to achieve their goals depending on what is required and the conditions under which they are learning, such as how much time they have to prepare for an assessment. This is referred to as strategic (Entwistle & Ramsden, 2015), or achieving (Biggs & Tang, 2007) learning. Achievement approaches to learning are reflected by an orientation to the external reward for demonstrating learning. Strategies for the achievement orientation focus on the activities that will result in the highest marks. Strategic learners use cues and clues (Ramsden, 2003) about assessment, and are motivated by learning that results in positive outcomes such as the achievement of high grades.

There are other factors that influence student learning, including motivation, background, prior knowledge and experience, educational context, and assessment, to name a few (Biggs & Tang, 2011). Most students are capable of employing any of these approaches and do so as required by the learning environment; they choose strategies

deemed to be most effective based on the requirements in the environment (Cleveland-Innes & Emes, 2005).

However, some students, despite given the opportunity for deep learning through the use of appropriate tools, would still take away only surface learning from it. It is important for the teacher to identify such students and take appropriate measures to rectify the situation. There may be a need for differentiating instructional strategies to overcome some genuine disability that the student may have and not be aware of it. Conversely, it is also possible that such a student is a transactional student with no interest in learning. Another way to look at surface learning is simply as regurgitating back what the textbook said or what the teacher said semantically, but deep learning occurs when you are able to analyze, synthesize, and make a statement about latent content.

During this study there were multiple references to Bloom's taxonomy, with participants talking about deep learning being the upper three levels of the learning pyramid as opposed to surface learning being the lower three levels of the learning pyramid. It is important to understand that Bloom's taxonomy is a continuum of learning levels where each lower category is subsumed by the next higher one. From low to high, they are: remembering, understanding, applying, analyzing, evaluating, and creating. The lower three levels are also attributed to passive learners, whilst the upper three levels are more associated with active learners. Nevertheless, these categories do not have a clean break at any point but gradually move up the continuum as learning improves over time, from the lower to the higher level. However, sometimes surface learning is a prerequisite

to deeper learning, but that should not be the end by itself, but just the means to get to the end, the top of the learning pyramid, which is creating.

Actionable verbs, when defining objectives, emerged as a powerful action item that helps initiate the process of deep learning. This may seemingly appear out of context, but the research participants, who have experienced it and seen the rewards it brings, were very confident of its benefits. These actionable verbs set expectations and indicate to the student your requirements for deep learning. This concept is comprehensively supported by observing the difference between the old (1956) and the revised (2001) versions of Bloom's taxonomy. The original version used nouns to describe the levels whilst the newer version uses active verbs and gerunds to define the same. In the former version, remembering was knowledge, understanding was comprehension, applying was application, analyzing was analysis, evaluating was evaluation, and creating was synthesis (Anderson, & Krathwohl, 2001). Thus, the importance of actionable verbs to define objectives is a powerful tool that is supported by the literature.

It is the responsibility of the teacher to create opportunities, at every step, to subtly push the student towards deep learning, leaving no choice for the student but to comply without feeling pushed. This is similar to what was mentioned earlier in chapter IV, where a participant had talked about creating course design where the student could not escape interaction with the teachers' digital presence.

Similarly, <u>Byron</u>, Jianxia, and Anthony (2005) talk about how instructors can frame the questions in the online discussions that will force the student not only to answer the questions, but also to dive into deeper thinking. As earlier discussed in this

chapter, this strategy takes on a critical role of effectively utilizing the discussion boards to gain maximum leverage in understanding student learning progression.

Another such opportunity can be intentionally created by designing assignments that require individual thinking and reflection. No doubt that the design of individual assignments has its own merits, but the multifarious advantages of teamwork, collaborative, and cooperative learning should be given its due importance in designing assignments for deep learning. Project-based group assignments that require teamwork, critical thinking, reflection, and creativity are steps that steadily move the students towards deep learning.

It is important for the teacher to be very clear about the knowledge and skills that they want their students to gain by the time they complete the course. More importantly, it is their attitude towards future learning and growth that the teacher must aim for. This cannot be achieved unless the goals of teaching these students shift from surface learning to deep learning, through strongly interactive and socially constructive processes (Ritchhart, Church, & Morrison, 2011).

Theme C 3. Develop a Community of Learners

One of the objectives of the CoI model is the creation of a community of learners to enhance knowledge gains, through both collaborative and cooperative learning.

Instructors can enhance the online community by purposefully designing courses to minimize student isolation (McInnerney & Roberts, 2004). The advantages of being part of a learning community are numerous. A sense of community helps to overcome many individual shortcomings of its members by creating a sense of social presence, which

humanizes the interaction and supports the individual to project a real person in a supportive environment.

This research found from the data collected that the feeling of being isolated in an online course is a real fear that many students have. It has been established through extensive research, both qualitative and quantitative, that high attrition rates in online classes, are a direct result of this isolationist feelings. The lack of mutual support, companionship, and consultation are real impediments that impede learning. This research found one nontraditional way of creating that sense of community was by involving online students in activities that highlight their strengths. This helps them operate in their comfort zone and also feel safe from being judged by others and thus minimizes feelings of isolation. The fear of being judged by peers for one's deficiencies stood out during the research studies.

Concerning comfort zones, online students being primarily nontraditional students, each of them has subject matter expertise in some field. That is their strength and comfort zone. If they are encouraged to share that knowledge with their classmates, who may not be familiar with it but can find use from it, they will feel good about being a useful contributing member of the learning community. Through this teamwork and collaborative learning, students in their learning communities can complete projects/assignments together and share knowledge to mutually enhance learning (Palloff & Pratt, 2001).

This researcher asked participants about their experiences in creating a community through student-teacher relationship. The participants' experiences indicated that if a student feels comfortable contacting the teacher and finds that interaction

friendly and helpful, it improves the confidence level of the student because of dealing with somebody more knowledgeable than them. Once this confidence is grounded, it can be gradually channeled towards inter-student interaction, and once that interaction approaches the comfort zone of the individual, a community will start taking shape.

This aspect can be seen as a possible route to understanding the concept of zone of proximal development (ZPD); if the teacher can identify the ZPD for a student and then teach in that zone, the student will remain interested and continue learning till the interaction can help that student to go beyond it. Vygotsky (1978) himself defined the ZPD as "the distance between the actual development level as determined by independent problem solving, and the level of potential problem solving as determined through problem solving under adult guidance or in collaboration with more capable peers." Teachers' confidence building attitude is the key to working in ZPD.

Theme D 2. SME vs Facilitator: The Balancing Act!

Most researchers tend to believe that the role of the teacher as a SME is over and that the teacher is now a facilitator, a referee, somebody who should not try to act as a knowledgeable entity, a sage on the stage. Surprisingly, this research suggests that this may not be the case after all. A case can be made about creating an equilibrium of some sort, a balancing act suited to the needs of the course, the class, the institution, the society and humanity at large.

Some of the best facilitators are not subject matter experts (SMEs) within the topic and scope of the discussion; however, nor can they afford to be subject matter ignorant. They need to be subject matter conversant and understand the terms being used

and the relationship of those terms to the deliverable, but they do not have to have an "answer" (Kholy, 2017).

There is and will always be a need for SMEs, as there is and will always be a need for facilitators. The two are not mutually exclusive but have overlapping roles in almost all circumstances. The dilemma is to balance the two and achieve the desired results. This researcher found surprising support for both roles for teachers: as SME as well as that of a facilitator.

The role of facilitator was seen as going with the flow to try and help students learn at their pace, seeing through their lens and trying not to act like an SME. A facilitator asks students what they want to talk about; what students feel is important drives the course content. In considering the course outcomes, the facilitator asks, Does this flexibility achieve the same thing? Or does it achieve more than that because these are more pertinent things to students and that is crucial for them? If being available to the students is part of the course design itself then the role of being a facilitator is easily filled out.

The roles are to be played by the same teacher, as a situational leader, switching roles as needed, based on the dynamic realities of the situation (Graef, 1983). It is a balancing act on a continuum; equilibrium is possible at any ratio between the two extremes. One thing, however, that emerged was that students try to take advantage of the teacher in a facilitator role: they take that course lightly, they lag behind, become argumentative, and assume that if the instructor is acting as a facilitator then he/she is definitely not a SME, though an instructor can be both.

The opinion that prevailed was that generally speaking, being SME gives the teacher an upper hand; the students pay more attention, try to gain knowledge, and overall behave respectfully as they believe that the instructor, as a SME, has what they are there to have (Lazaro, 2019). However, in today's modern digital age, students will not accept the instructor's claim of being a SME; the content and delivery must be convincing enough to make them respect the instructor's expertise. Participant PF had very aptly described the "versus" scenario as "a delicate balancing act with a constantly shifting equilibrium, from one side of the fulcrum to the other. It is a see saw, thus putting weights on the wrong side or at the wrong time, with the wrong application, will almost always produce negative results."

Summary

This question was meant to capture the overarching perception of the impact teaching presence has on learning outcomes, as an entity, not as the sum of its three elements (instructional design and organization, facilitation of discourse, and direct instruction). The themes related to this question brought out several elements indicating a strong relationship with teaching presence. Extensive, meaningful, and intensive interaction was one such element that came out as a critical component of teaching presence. Intense interaction is not a causal relationship by default but requires skillful intervention by an instructor to promote a certain level of cognitive and social interaction. The other aspect was the development of deep learning as opposed to surface learning where learners are motivated to just complete the task rather than assimilate the learning.

Then there also emerged the debate of teaching presence being a prime mover, a catalyst for the other two presences, or just one of the three presences in the CoI model.

The study also brought out the notion of developing a community of learners as one of the advantages of teaching presence. A community of learners enhances knowledge gains, through collaborative and cooperative learning, minimizes student isolation, humanizes the interaction, and supports the individual to project oneself as a real person in a supportive environment.

A supplementary question generated during the interview was that in today's digital world, are teachers subject matter expert, facilitators, or a combination with a delicate balance between the two?

Discussion of Research Question 2

RQ 2. How do online instructors incorporate teaching presence in designing their course content and delivery?

This question was directed more towards the understanding of the three elements of teaching presence (instructional design and organization, facilitation of discourse, direct instruction), and their use to create teaching presence as an outcome. The fact that course design and organization is a critical element of teaching presence has been repeatedly established by many researchers through numerous studies using qualitative, quantitative, and mixed methods research. Design and organization (the first element of teaching presence), includes the structure of the course that determines the quantum and the mechanism of employing facilitation of discourse (the second element of teaching presence) and direct instruction (the third element of teaching presence).

In fact, it is in the design of the course that all interaction is built in, both in terms of content, context, timeline, and intensity. The course design, in itself, sets the stage for establishing teaching presence, and teachers need to spend significant time in this

planning phase. Logic and sequence play an important role in how the course unfolds. If it unfolds like a story, with each preceding part laying the foundation for the next incoming activity, then the student will remain motivated and recognize the time that the teacher has put in to help the students achieve enhanced learning outcomes. This sows the seed of humanizing the course.

Eight themes: A1, B1, B2, B3, B4, B5, C1, D1 (table 8), were identified as related to research question 2.

Theme A 1. Planned Humanization of Learning

Even with varying backgrounds, teaching philosophies, multitudes of unrelated courses, all the participants agreed that 'humanizing the course' was a very important aspect of teaching presence. In fact, some referred to it as the primary differentiating factor between a 'revered teacher' and an 'acceptable teacher', for lack of a better term. Despite the agreement on its importance, almost all the teachers thought of "humanizing the course" in their own unique way.

In support of this role of teaching presence, Reupert, Maybery, Patrick, and Chittleborough (2009) shared the perception from a student whose comment is indicative of an issue that lies at the very core of the emerging era of online education, i.e., the role of the instructor in the virtual classroom. The student talked about how important it was for him, as a human being, to interact, not with a computer or a book, but with other humans who knew more about this subject than he did, and were there to bring it to life through their human side.

Humanizing of the course starts with the course design, in fact, it could be argued that it begins even earlier, as the teacher starts to think and plan the design itself. There is

no need to show the actual, physical, human presence in online courses, but the design effort and genuine desire to create knowledge become evident in the robust course structure, the shell organization, and the related activities. A comment about teaching presence in relation to course design came from participant PL who said, "It is this designing elements of the course that puts the teacher directly into the student's experience."

Online learning has some inherent challenges that can impede the efforts of the teacher. However, to overcome the possible negative impacts of online learning, Ko and Rossen (2017) proposed that faculty members establish presence and rapport online early enough in the course because when the course is in session, students need to see evidence of teacher engagement through such strategies as announcements, discussion board posts, and uploads of photos or videos on the part of the instructor. It is not enough to log in and monitor a course; the instructors need to show that they are equally active, or even proactive, in the course (Kelly, 2014). This has to be part of the design effort to humanize of the course.

There are many courses that show structure but have no trace of instructor presence anywhere in the course. Such courses consist of material on screen, assignments, readings, and then the final exam. However, to humanize such a course one must become the course itself. To do that, different tools and mechanisms can be created such as narrated lectures to correspond to all of the content modules, creation of step-by-step videos of how to do the assignments and the homework, explaining the rationale behind the solutions for all of those assignments, and the reasons for doing whatever is it

that they are doing. So, teaching presence actually means putting yourself into the student experience and living it with them.

Research has proved that course design is actually step 2 of creating teaching presence. Step 1, it is believed, is the pre-design planning in the designer's mind about what they plan to design. There are pre-design questions to be answered by the designer as step 1: "What is that I need to incorporate in my online class so that I can effectively deliver the instructions and the material to the student? How can I enhance meaningful interaction? How can I humanize the course? Can I proactively do things that will help learners achieve better learning outcomes?"

Based on the participants' responses, this research finds that if course design is critical for humanizing the course, then fundamental to course design is the incorporation of such elements as clear, relevant, logical, sequential communications and interactions. This helps the students become aware of the teacher's virtual presence in the classroom, to provide guidance on demand and provide support whenever needed. This tacit message needs to be transmitted through active, continuous interaction, which is pivotal for course design.

As part of an intentional design exercise, being proactive, thinking ahead, having empathy for the students, and trying to understand where they are coming from are critical to establish teaching presence through humanizing the course. It is important to understand that the students have changed, and in this dynamic environment, where change is continually happening, teachers must keep pace with change. Students look for interactive activities that related to instructional materials; this can come out as a very authentic experience for them and helps build the teacher's authenticity in the forefront.

This translates as being genuine, caring, having empathy, and showing a desire to enhance their learning. All these are elements of teaching presence.

The element of 'intentions to motivate for interaction' in designing the course is at the core of humanizing the course (Jones, Kolloff, & Kolloff, 2008). One such intentional activity, to make it more meaningful and interesting, is the effective use of discussion board. There is much that can be researched on the discussion board aspect of creating strong vibrant interaction as part of teaching presence (Noce, Scheffel, & Lowry, 2014).

Another aspect of humanizing through course design, came out as "caring" for students and making them feel it. It is important to take time to show students that their teacher cares about them as individuals, and that is one way of demonstrating teaching presence. One thing that demonstrates caring is to show intentional effort for student wellbeing. One such action, though seems disjointed, is designing a clean shell and organizing it well. The student immediately recognizes that effort and understands that a lot of time, effort and thought went into designing it, purely for the student to take advantage of and improve their learning. The point is to show that we are all in it together; the student is not isolated, which is a common feeling they get in online asynchronous courses.

The students are looking for a supportive message of "I am here, right beside you, at all times, but not just in text, but in action." This sentiment of the importance of the human side is also supported by Sheridan, Kelly, and Bentz (2013) in stating that the online learners want to know who their teachers are and want to be connected with them

in some way. They want to feel a real person behind the veil: understanding, kind, empathetic, patient, and creative human being at the other end of the virtual classroom.

Another critical component of humanizing the course was identified by the majority as personalizing the responses by injecting yourself into it. Things like providing prompt, relevant, detailed explanations, not only in writing but also in voiceover text and slides, small movie clips, introducing topics or giving an overview of expectations for the week in a video help in injecting oneself into the course. This requires being very familiar with technology that has impacted the online pedagogy, and this aspect of teaching presence tends to be overlooked by the teachers.

Research indicates, instructors who are ill-prepared to teach web-based courses or to use technology in meaningful, innovative ways leave students feeling disengaged, self-taught, and dissatisfied (Donavant, 2009; Gregory & Salmon, 2013). Today's students are very tech savvy, have their pulse on social media, are independent; they want to move into the practical world on a fast track. Thus, a class that does not take advantage of the technology does not reflect the ways the students communicate in today's world.

Moving towards the personal aspect of humanizing, the fact is that today, the majority of online students are nontraditional students. These are people with jobs, they have families, have responsibilities, and have taken on this extra burden to progress in their careers at a late age. Keeping all this in perspective, the responsibility of an online teacher should also be to create a meaningful learning environment for them that is enjoyable and has minimal stress, because people do not need more stress than they already have.

On the flip side, the teachers are also human beings with their own lived experiences, personal and professional, their educational challenges, their success and failures in life, and their motivations to progress. This also plays a role in trying to humanize the course and creating teaching presence. This is further corroborated by a meta-analysis of students' evaluations conducted by Kim, Jörg, and Klassen (2019). They found that teaching effectiveness is primarily a function of the instructor's personality, the human element, who teaches a course rather than of the course that is being taught.

The most difficult scenario to achieve humanization is when it comes to teachers teaching courses designed by others. Generally, there are no guidelines available from the designer about the logic used in developing the course. One has to go with the flow and see how it really works, and there is no fall back strategy. What if it doesn't work? Does the instructional designer bear any responsibility for failed outcomes? Who is at fault, the designer or the executor? In today's world, with online pedagogy gaining momentum, demand for canned/cookie cutter courses is on the rise because several teachers simultaneously teach that course to different groups of students. Commercialization has created problems that will only keep increasing unless the root cause is addressed. Teachers have no choice but to find ways to adjust to that reality on the go.

Theme B 1. Ease of Navigating the Shell

Ease of navigating the course shell reflects teaching presence, and that idea was unanimous among participant interviews, with no exceptions. When students see a shell that is user friendly and by analogy easy to navigate, they know that a lot of work went into planning and designing this course in order to help the students to improve learning. This lays the foundation of a subconscious respect for the teacher and an abstract

obligation to reciprocate. Thus, even before teaching starts, the student has already made a mental note of it and teaching presence has already started to show itself.

Several recent studies indicate that clear course structure, clearly communicated expectations, and explicit course rubrics are critical components of quality online course design (Gedik, Kiraz, & Ozden, 2013). This creates an initial impact of teaching presence on the students, even before teaching starts; it needs to be positive, strong, and well directed; to this end, course organization and having a clean shell is very important. Even simple things like headings being in the exact same format helps, as does the consistency of format. These might look small, but their impact on the students is large. If the student has to look around to find things, the concentration is lost and the course shell, unintentionally, becomes a distraction.

So, upfront the teacher should tell them what to look for and where to look for, such as: What are the course objectives are, how the assignments will fit in, how much interaction will be necessary and for what reasons, etc. Similarly, when Ralston-Berg (2010) asked students to rate the most important factors that contribute to their success in online courses, these factors included clear instructions regarding how to get started, how to find various course components, and how to access resources online.

One way to avoid causing distraction is to embed an introductory video made by the teacher, featuring the teacher. The video explains what the students are going to do, why is it important, and how it connects the content with the objectives. The personification of actions sends a strong message; PF said, "Whatever is being presented is being owned by the presenter." Thus, it is important to develop the specifications for things and articulate them in a way that is known upfront by the student to eliminate

questions or surprises towards the end. In the practitioner literature, Grandzol and Grandzol (2006) also suggest that a consistent and clear structure, including navigational documents and instructions, that explicitly instruct students in terms of where to go and what to do next, is vital to student success.

There was no doubt in the research that ease of navigating the shell was an important aspect of teaching presence. The syllabus should clearly reflect what's going on in the course and looking at the syllabus or at the course shell, one should get a pretty good understanding of what is involved in the course. Some participants complained that even as new online teachers there was no guidance on designing the course. More importantly when transitioning from on ground to online, the school did not provide any support to adapt the course and incorporate extensive use of LMS and CMS.

Thus, creating this shell can become a teacher's worst nightmare if left alone without guidance and expertise. In view of such predicaments, some universities now have an office of online teaching to help the teachers design good quality courses. These offices help teachers to produce shells pretty much in compliance with the Quality Matters (QMs) guidelines. Quality Matters standards specify that students should be "introduced to the structure and purpose of the course," and that course instructions should specify "how to get started with the course and where to find various course components" (Quality Matters Program, 2011). This helps create navigable shells.

In terms of what constitutes a navigable shell, most researchers agree that the design needs to be clean, without clutter, logical, sequential, user friendly, easy to understand, and have consistent formatting week to week. All this has to be communicated upfront to eliminate questions or surprises towards the end. Similarly, the

pre-requisite fundamentals, if required, should be indicated as early on as possible, in fact even before the students start the course. An institutional survey (Young, 2006) found that students appreciated instructors who made a strong effort to create a thoughtful course that was well organized and carefully structured. In larger-scale survey work, Smissen and Sims (2002) found that ease of use (an intuitive, user-friendly interface and navigation) was one of the three most important quality criteria identified by students, faculty, and staff.

Another aspect of ease in navigation is the connectivity between the beginning and the end of the course. Too often students are presented with disjointed topics, which breaks the sequence and confuses the narrative. The concept of scaffolding in constructing knowledge is based on a continuum of logically related topics that scaffold knowledge from simple to more complex, in well calculated steps, without creating any storm along the way.

Theme B 2. Interaction with Teacher's Digital Presence is not a Choice

This was an interesting aspect of instructional design that came up during the interviews. Hagenauer and Volet (2014) talk about course design elements that subconsciously move the student towards the teacher, creating interaction along the way without the explicit knowledge that they were being managed. This was the same concept that PL had talked about in the interview; instead of trying to encourage, motivate or facilitate students to interact, there are subtle ways to infuse such elements into the design that will ensure interaction, without giving student any choice in it. This is where the teacher becomes part of the student's experience and travels with the student through the journey of navigating the course.

Some participants create steps that are not either/or, but sequentially placed as a logical progression to lead the student to the teacher; unless you do A you can't do B. A very positive message is communicated by PL in saying "I create a powerful personalized video with a message. It covers the entire course, sets my tone and my expectations. It's really forcing the student to interact with my digital presence; there's no way to avoid me."

However, many participants, though agreeing with this premise, were of the opinion that the implementation of this concept of "forcing the student to interact with your digital presence" can be a challenge. They believed, and rightly so, as that places a lot of responsibility on the teacher to continuously monitor the learning progression and ensure that students comply. With extra teaching load many teachers were hesitant to pursue this approach. The consensus, however, was that this is a truly important aspect and teachers should, in their individualistic styles, try to implement it as best as they can.

A possible way to achieve this "interaction with your digital presence" is to help students generate assignments that are truly creative. These should be meaningful assignments, not throw away assignments. These will be the ones they can show to people around them, something that is unique to their personality. These assignments will require the students to use their own knowledge to create their unique assignment. The same can be said about reflective assignments (Boud, Keogh, & Walker, (1985).

Reflective assignments allow students to find something they care about and write about it. As the topic is of interest to the student it helps develop reflective thinking more easily and relatively deeply. Reflective thinking is a transferable skill; if it becomes part of one's personality, it will be a lifelong asset. By using creative and reflective assignments,

the teacher is, indirectly and subtly, forcing the student to interact with the teacher's digital presence.

Well monitored, prompt responding Q&A forums are another tool to force interaction (Hagenauer, & Volet, 2014). However, they point out, the modalities are important, so are the choice of topics and questions. This could be a forum that would work as a two-way communication channel, away from the norm where it is primarily students asking questions. This could also be turned around and used by the teachers to achieve their interaction objectives as well.

Theme B 3. Technology-Friendly Shell

Technology tools that did promote student learning were those that provided students with more control over their interactions with media (Balaji & Chakrabarti, 2010). This means that the complete shell should be technology friendly to interact with all devices including handheld ones like cell phone, laptop, iPad, etc. to give more control to the student. Today's students, especially the younger ones, are born into technology, and the teachers need to catch up if they have not already. This is the reality into which online courses need to be designed. The technologies that are the most beneficial and promote learning not only encourage learner reflection but also provide the platform to use the reflective thought process and create new knowledge (Roschelle et al., 2010).

It is evident that technology has changed the way the students learn, and teachers teach. Most teachers were well versed with the technology that they needed to teach their courses. Some teachers complained that the schools do not arrange for professional development training and continuing education courses to ensure that teachers are well versed with the LMS and CMS platforms.

The other important aspect that came up was the design of courses in such a way that the course shell is compatible with all the electronic devices that the students use (Kinash, Brand, & Mathew, 2012). It is important to allow access to the complete shell at the very beginning of the course, in fact even before the class starts. Thus, everything has to be aligned before the shell is opened and be available on the laptop, iPad, cell phone etc. Teachers stated that, courses that are not fully technology friendly, or some parts of the shell are not available on all devices, then those shells should not be opened all together, but in steps that can be managed with the students.

Another issue that comes up is the class demographics (Nawaz & Kundi, 2017). How about the non-traditional students, ages 45-50 years whose technological competency is not at par with their younger peers? Can the course design balance these extremes? It is important that the teacher should know the technical capabilities of the class prior to starting the course and this should be a requirement by the institution. This will give the teacher a head start to provide options, add flexibility, and advise the weak students to catch up before the class starts.

The fact is that technology is growing geometrically. The faster teachers can adapt, the better it will be. However, steps need to be taken to help those students who lag behind due to technology even before the classes start. Such students should be made aware of the fundamentals of technology that will be required for the course like Excel, PowerPoint, financial calculators, etc.

An incident was shared a teacher asked the students to get a certain computational device and be familiar with a certain type of calculations using a financial calculator.

However, the market had several different types available. Some got type 1, others got

type 2. The teacher's plans were made using type 2 but the teacher did not want to force the students to get that model as it was more expensive. In computations, the students with type 1 had a disadvantage as the computational process being referred to was always that of type 2 which had different keyboard and used more advanced computations. A mismatch in technology became an equity issue.

These results suggest that simply incorporating current technology into a course is not sufficient to improve student success; rather, the technology must also be thoughtfully leveraged to support student learning in the service of defined learning objectives (Roschelle et al., 2010).

Theme B 4. Well-Designed, Constructive, Integrative Feedback

The need for quality and timely feedback becomes even more paramount in online learning environment because of the lack of face-to-face interaction (Thurmond, Wambach, Connors, & Frey, 2002).

Feedback from assessments is the most important tool in improving learning. However, in online pedagogy it assumes special significance as a means of overcoming the transactional distance through meaningful interaction meant to primarily help the student overcome weaknesses and convert them to strengths. Feedback has different modes and varying purpose. There are reflective feedback, assessments with feedback loops, and two-way feedback, and each can be used depending on the situation. Research agrees that it is a vital component of creating interaction that leads the student to believe that there is somebody helping to maximize learning. This is another aspect of teaching presence creation.

Dogbey, Kumi-Yeboah, and Dogbey, (2107) state that when the instructor provides timely feedback, reinforces important ideas and concepts, and communicates high expectations to students, these actions have the likelihood to encourage dialogue in the online environment and subsequently enhance the quality of students' learning.

However, feedback given is only useful if it is utilized by the students. In terms of teacher's feedback utilization, most researchers think that it is purely based on their motivation to improve learning. Those students who are self-motivated think positively about the feedback they are getting and try to use that feedback to improve learning, but others are not interested, whatever their reasons may be.

Research has confirmed that in most cases feedback has less to do with learning and more to do with giving out grades. The means has become an end by itself. When students lose points they immediately question the grading. "Why did I lose the points? Where did I make mistakes?" which is good if it is to promote learning. Many, however, do that because in this competitive environment, it has become hard for students to accept a B or a C. However, some teachers claimed that they have used this as a learning exercise. The students are advised to try to understand where they lost points so that they can make up the next time. Grades are discussed only if they are willing to accept where they went wrong and then show that they made up. This does help learning in some form.

When students learn from their mistakes, such learning improves their self-confidence. They realize that mistakes can help them learn and that they do have the ability to correct those mistakes. Such learning helps them understand that there is no shame in making mistakes, to err is human, and learning from one's mistakes is honorable. This is an important lesson for them to remember lifelong. Providing

appreciation at this point helps in boosting the motivation to improve further. A strong constructive feedback loop with consistent monitoring makes feedback a tool for enhanced learning. Berge (2002) states that timely feedback has been noted as an important variable in student learning, in both face-to-face classrooms and online courses.

Several participants dealt with multiple submissions of assignments as a way to utilize feedback for learning. They were of the opinion that the actual mission is learning, the grades are only supposed to indicate the level of learning at a point in time. Does it make a difference to the real world if the student has learnt a concept in three attempts instead of one? Do they really care as long as you know the subject and can deliver? The objective, as all agree, is learning and demonstration of learning. Multiple submissions can also be seen as a tool of learning, as constructive feedback in action.

It is clear that not many teachers solicit feedback from students during the course to make changes to suit that group of students better. "Each class is different, isn't it?" asked one participant who encourages student feedback about the efficacy of the course, during the course, and acts upon the relevant suggestions as far as possible. However, this exercise needs dedication and hard work, but it does overcome the objection of having cardboard cutout student courses. These courses may start out that way, but they progressively morph into courses designed for the actual students enrolled in the course. This requires significant extra work, however, and many teachers are not willing or able to take that extra load.

Provision of timely, formative, and meaningful feedback that communicates areas of strength and areas for improvement (Aluko, Hendrikz, & Fraser, 2011), was cited as an

effective strategy that stimulates dialogue and enhance the quality of learning in the online environment. This is an extremely important aspect of feedback but not many see assignments, grading, or the feedback cycle as a closed loop, actually meant to assess learning progression, and not grades. The normal understanding is that assessment feedback is part of a grade cycle, which is partly true, but again the means has become the end in itself. Grades are supposed to be markers along the way the goal, not be the goal in itself.

However, formative assessments with prompt feedback can be designed as a learning tool known as integrated assessment. This tool integrates assignments, assessments, and feedback with learning progression as an ongoing practice that evolves with time at various levels (Crisp, 2012). Integrated assessment, according to SQA (2007), consists of bringing the various strands of assessment together in a coherent way that addresses the desired goals and takes into account opportunities and constraints in the setting concerned, whether that be a specific course or program of study, or department or faculty, or university as a whole.

As a tool, integrated assessment is used for curriculum and learning development. It is less about evaluating the student and more about providing an opportunity for the student to verify what they actually do know, in such a way that it would measure the achievement of objectives that tie in with outcomes. The key characteristics for the integrative assessment's primary purpose is to influence students' approaches to future learning, and the reward mechanisms in place for students will reflect an analysis of approaches to learning, rather than the learning itself.

Integrated assessment has the following characteristics: (a) students are provided with opportunities to make judgements about their own learning or performance through review and critique; (b) students are provided with opportunities to define standards and expectations in their response; (c) students are provided with opportunities to track and analyze their approaches to responding to a problem, issue, situation or performance,; (d) students are provided with opportunities to integrate prior or current feedback into their response; (e) students are provided with opportunities to engage with a meaningful task that has inherent worth beyond just an assessment activity, (f) students are rewarded for the quality of their analysis of metacognitive abilities, rather than factual knowledge or a specific performance, and (g) students would be active partners in integrative assessment (Crisp, 2012).

Theme B 5. Goals be Attainable and Appropriate

In the theoretical literature, Naidu (2013) argued that while carefully designed learning goals are important in all educational settings, they may be particularly critical in distance education, given that students are often "studying independently and without a great deal of opportunity to interact with their peers and tutors" (p. 269).

Learning outcomes, objectives, and goals are at the heart of course design. This is what the student is there for and this is what the teacher should be aiming to achieve. All researchers agree that without goals, there is no way of moving forward; how do we know how far have we come? How will we know when we get there? It is vital that the goals be reasonable, truly attainable, within the realm of possibility, useful in the real world, and part of an overall larger goal.

Some believe that it is important for the students to know their personal goals before they can decide if the course objectives dovetail with theirs. Would it be worth the time and money to invest in it? There is, however, a divergence of views in this particular aspect of goals. Some participants want goal setting to be part of the course design, something done very early in the course. It might help if the teacher were to know the reasons they were there, what use they have for this material, and plans on using what they learn. This information can help the teacher to tweak the interactions within the course early on.

There is no doubt that it is important to help students meet their goals provided those goals are reasonably attainable and appropriate for their interests and capabilities. Hara and Kling (1999) state that most online course quality rubrics highlight the importance of clearly stated and well-aligned learning objectives, a close relationship between course objectives and assessments, and specific and transparent grading criteria.

All long-term goals should be divided into manageable and measurable sub goals, to ensure the correct line of direction. This is similar to the overall course objectives being tied to the weekly topic objectives to gauge learning progress. It is extremely important to tie the content directly to explicit statements of what students will be able to accomplish and what the outcomes will be for the week. The sequence of goals, from overall course goals to weekly topic goals, should remain logical.

One way to achieve this, emerged from the research is the use of ADDIE (Analyze, Design, Develop, Implement, Evaluate) model for instructional design process and developing curriculum. It starts the process by identifying what students have to learn through meaningful activities that are going to help them conceptualize it, and progresses

through how the content fits into their field of study. ADDIE makes sure that these concerns are taken care of by the curriculum as it goes through the design process.

There was complete unanimity among participants in the need for goal compatibility with resources, capabilities, and overall objectives. Incompatible goals create frustration and demotivation. What happens if there are no clear-cut goals set out at the start of the class? Does it really matter? Hara and Kling (1999) provided an example of how unclear course objectives can negatively affect student performance. In an attempt to provide students with flexibility, the instructor did not specify course objectives or expectations for the assignments. However, many students did not consider this an advantage; rather, several were frustrated by their uncertainty of the instructor's expectations. Thus, students want goals to steer their learning and measure progression, as needed.

Theme C 1. Monitoring of Learning Progression Towards Objectives

The ability of the teacher to monitor learning progression towards the objective is dependent on how the teacher analyses the data available in various forms. To do this on a fast track is of paramount importance as doing so allows the teacher to adjust activities to suit the needs of the individual students without losing much time. The consensus was that the discussion board was one such tool which could be a source of rich data on the users (Noce, Scheffel, & Lowry, 2014).

The researcher believes that a keen observation of the posts on the discussion board provides a lot of information about the learning progression of the student. It indicates if the student is a transactional student, a surface learner, a deep learner, a research-oriented student, etc. The questions posed on discussion boards should generate

true thinking and reflection (Hudson, 2014). The board needs to be monitored very closely and the teacher should keep the discussion on track, ensuring educational, reflective, and respectful posts. Constant observations will allow the teacher to gauge the learning progression of the student. This can also be observed by providing meaningful questions on discussion boards that tie in directly with the content but need some reflection and analysis.

Discussion boards can be a follow up to a completed assignment. The students are asked to show the application of classroom knowledge in their profession and demonstrate their ability to transfer the knowledge they learned (Hudson, 2014). That demonstration of learning, the adaptive learning, is through the discussion board posts where they show the concepts they have mastered. However, research has shown other tools that can judge learning progress, such as projects that are spread over the whole course and move from simple to complex issues. The project keeps expanding, vertically and horizontally, keeping in view the complexity of the course, and the student is tested at every level to evaluate progress. This process could simultaneously be a discussion board post where students can interact with each other in a learning community and mutually help to enhance learning (Delaney, Kummer, & Singh, 2018).

All the tools have one common purpose; to improve learning outcomes with as much regularity and consistency as possible. Monitoring of learning helps the teachers to identify weakness and strengths of the students and guide them towards resources that can help them overcome these deficiencies. To this extent, PJ agrees that evaluation as a learning tool can effectively be useful in gauging learning progression: "So, if feedback is

important to them, then that's going to improve learning. Quick, timely, frequent, personalized, and constructive feedback helps interaction and creates a huge presence."

Monitoring learning progression is closely related to differentiated instruction. If the posts are closely monitored, the teacher can gauge the needs of the students based on what and how they post. Dogbey et al., (2017) believes that this can help to consequently adapt the teaching and the content to meet the learner's preference, skill, and intelligence levels. Thus, it has the potential to promote dialogue in line with student's competence, in enhancing the quality of learning in the online environment. Thus, by differentiating instruction to meet individual needs, the instructor makes the content more accessible and relevant to the learner, thereby motivating the students for an increased level of engagement that can optimize learning.

Differentiated instruction can be effective only if learning progression is accurately monitored; doing so will help in tailoring the instruction to make a good fit. This can also decrease the risk of the students falling behind or dropping the course. Apart from the using the discussion boards, a class setting can also be used. To differentiate instruction, for example, the instructor may pose an initial question to the entire class and use individual responses to assess respective students' mastery and struggles with the materials, and subsequently, adjust instruction to address individual needs.

However, it is important to know exactly where the student stands on the learning progression path moving towards the designated objectives. This can be assessed by Assurance of Learning (AoL) which refers to demonstrating, through assessment processes, that students achieve learning expectations for the programs in which they

participate. The important thing is measuring student performance. The first is that individual student performance—not group performance—needs to be assessed. So many faculty members rely on group projects in their classes that it can be difficult to identify an individually written paper for Assurance of Learning (AoL). A way to overcome this is to have a smaller individual paper accompany the team project to evaluate students' skills. The most significant problem related to AoL is not measurement, however; it is how to use the data to improve student learning. Many faculties rebound at having to change their courses in an attempt to "close the loop."

A good example is writing. Many undergraduate assessments conclude that student writing does not meet expectations. The obvious remedy is to have students write more and receive more feedback; however, many faculties are not willing to incorporate more writing into their classes. It is an issue of will, not measurement.

Assurance of Learning (AoL) can and should be the driver of curriculum change. For example, one of the early steps in the AoL process is curriculum alignment, where learning goals are mapped on the curriculum (McBrien, Jones, & Cheng, 2009). The focus in curriculum alignment is the common learning experience, i.e., required courses, that all students in a degree program are exposed to. It is not unusual, though undesirable, for a school to have a learning goal, ethical or global perspective, leadership, or sustainability, for example, but have no required curriculum for students that allows them to develop that skill, knowledge, or attitude. The first obvious benefit of effective AoL is that it should lead to an improvement in student learning. Raising the quality of graduates can result in many benefits for the individual, the school, and society.

Theme D 1. The Importance of Teachers in this Digital Age

The question that evolved during the interview and then became a supplementary question was that in this digital age when the students have their pulse on social media, where every type of information is available at the touch of a button, where every question under the sky can get multiple responses, where many conflicting views about one thing are readily available, than what do we need teachers for? One way of looking at it is to try to convince students that knowledge is not something that is being developed, being constructed as we talk and as we work together. This can also tie into what is known as the zone of proximal development (ZPD).

In the present times, the best direct instruction is reflective teaching. This is synonymous to thinking aloud, where the teacher reflects on the content out loud. The process that the teacher goes through while analyzing and synthesizing to reach a decision is akin to a computer logical sequence that tells you how to move through a maze of options, based on value judgements. The student realizes that this is not something that only the teacher knows, it is pure and simple logic. This gives the student an opportunity to follow in the teacher's footsteps, reflect, think critically, think creatively, and come up with something new, totally different from that of the teacher. This is learning at its best.

The students need to understand that, despite all the resources outside, it is the job of the teacher, during direct instruction, to add some value over whatever they might learn directly or indirectly from outside sources. That information is not validated, it can be conflicting, and it will never be in the same frame of reference as you are trying to look for. That is then the job of the teachers.

In fact, the roles of teachers as providers of information is over. However, their role as a designer will never cease to exist. In fact, that role continues to grow in direct response to the growing information and knowledge available. Teachers have to become designers; they have to give students an opportunity to create something new. They have to design processes that help students to be original. Creating new knowledge should be the ultimate goal of them today's teacher. So, the teachers need to switch to the role of guiding them, of helping them navigate the course. It is not really about teaching them, it is more about telling them how to learn and what to learn, telling them how to put loose pieces together, and how to put the right pieces together.

So, basically the role of the teacher has changed from just being the subject matter expert (SME) who will transfer knowledge, to that of somebody who will guide and help students search for knowledge through the different sources where they can find the right material. The teacher is more like a guide to help navigate the sea of knowledge out there, to make sense of it all. The role as a direct transferor of knowledge from one head to the other is minimal, if any, the teacher is more of a facilitator now.

A supplementary question was generated: Are we looking at a time, in the future, where the teacher will, genuinely, not be required, maybe "on demand" only? The answer to this hypothetical, but potentially possible, issue is that students are pulling up so much information, and they don't actually understand much of it. They don't know what it says, and more importantly, how it relates within the context of the overall discipline they are pursuing. The need for making these interconnections with other areas, in order to add value, will continue to increase as the volume of available information increases. If you

redefine the teacher's role for this purpose, it makes more sense to accept the need for a teacher at all times.

The teacher now is the person that is designing that learning experience and guiding people through it. Teacher as the facilitator needs to be not managing knowledge but constructing it so that it is more efficient and effective.

Summary

This question was directed more towards the understanding of the three elements of teaching presence: instructional design and organization, facilitation of discourse, and direct instruction, and making use of them to create teaching presence as an outcome. Design and organization (the first element of teaching presence), includes the structure of the course that determines the quantum and the mechanism of employing facilitation of discourse (second element of teaching presence) and direct instruction (third element of teaching presence).

The first theme that emerged was planned humanization of learning. In fact, some referred to it as the primary differentiating factor between a "revered teacher" and an "acceptable teacher" for lack of a better term. The importance of the ease of navigating the shell was also frequently mentioned. When students see a shell that is user friendly and easy to navigate, they know that a lot of work went into planning and designing this course. An interesting aspect of instructional design during the interviews was to ensure that interaction with teacher's digital presence should not a choice for the student. This is where the teacher becomes part of the student's experience and travels with the student through the journey of navigating the course. Technology-friendly shell, across all platforms, was one more such action that displays teaching presence. Only those

technologies are beneficial and promote learning that not only encourage learner reflection but provide the platform to use the reflective thought process and create new knowledge.

A well-designed, constructive, integrative feedback system was another aspect of teaching presence that was discussed. This is critical in online learning environment because of the lack of face-to-face interaction. This links directly to setting and achieving course goals that are at the heart of course design. It is vital that the goals be reasonable, truly attainable, within the realm of possibility, useful in the real world, and part of an overall larger goal. Once goals are truly set up, then monitoring of learning progression towards objectives is the tool to follow up on progress. The ability of the teacher to monitor learning progression towards the objective is dependent on how the teacher analyzes the data available in various forms. The consensus was that the discussion board was one such tool which could be a source of rich data on the users.

This leads to the reality of the importance of teachers in this digital age where every type of information is available at the touch of a button, then what do we need teachers for? One way of looking at it is to try and convince students that knowledge is not something for grabs out there, it is being developed and being constructed as we talk and work together.

Discussion of Research Question 3

RQ 3. What strategies do online instructors employ during the course, to overcome challenges, to establish, sustain, and maximize teaching presence?

The in depth responses and the themes generated in RQ 1 and 2 have covered a large canvas of issues on the subject, and five of the six themes applicable to this

question have also been used in either RQs 1 or 2. The difference is of focus, e.g., in RQ 1 the focus is more on the teaching presence as an independent entity, whilst in RQ 2 the focus of the theme is towards course design and organization, content, and delivery. In RQ 3, it is about the challenges that come up when things are put into practice. The participants were requested to segregate the impact of the independent elements, as much as they could. This section will outline the challenges as described by the participants and some solutions that were tried out by others. Thus, the problems and solutions come from different participants and not one of them has the full knowledge of the all problems or all the solutions that came out of the pool.

Six themes: A2, A4, B4, C1, C3, D1 (table 8), were identified as related to research question 3.

Theme A 2. Extensive, Meaningful Interaction (Challenges)

Interaction is the most important contribution of teaching presence for online pedagogy. The importance it deserves it does not necessarily get, as many teachers are not aware that the lifeline of online teaching depends on serious, in depth, and frequent interaction. There are many tools or forums that can be used and there is no "one size fits all" formula. However, there are some tools that are more powerful than others and they were specifically pointed out by the participants in this research. The following were specifically mentioned by the participants:

Q&A forums. This can and does generate a lot of interaction but having a tool does not guarantee results unless those tools are effectively used. This forum can be used for individualized inquiries that the student may not want the whole class to waste their time on. Many teachers who complain about the lack of response on the forum forget to

look inwards and see where the problem actually lies. The dichotomy is that the teachers who set these up do not always engage in it in a timely manner to answer questions. This leads to the gradual tapering down of the students' interest as they see no desire in the teacher to generate interaction and show that they care. Therefore, it is paramount that if a Q&A forum is setup, it should be monitored, and thoughtful responses should be posted in a timely manner. This creates strong interpersonal bonds.

Another advantage of having this forum is for those students who are shy, feel uncomfortable in a group, are unsure of their knowledge base, or have communication issues. They can comfortably interact with the teacher in private, provided the teacher has set up the climate of mutual confidence and taken measures to generate that comfort level for them. Teachers who do not operate this forum, it was stated, do an unintentional injustice to a silent majority and never even find that out. This is a parallel forum with the discussion board and the teachers insisted that it should be mandatory to create and manage a Q&A forum for every course.

Discussion boards. The most logical, but never in the forefront, tool as confirmed by all 12 participants, is the issue of effective use of discussion board. The responses were unanimous, and the points raised were simple but thought provoking. The participants came up with, seemingly, very simple daily based situations like: When to intervene in discussions? More importantly, when not to intervene? How much intervention frequency is too much? When do you pull out? How deeply do you get involved? These need to be thought out and answered. When to intervene and how deeply is a question that has no "one-size-fits-all" answer. One participant had some advice,

"The challenge is to be a moderator not a contributor, to be a guide and not be the 'sage on the stage.' One advice: step in and step out before someone steps on you."

Interaction may not always be voluntary. This happens frequently. There are students who are just too shy to ask questions for a host of reasons, some of them superfluous. However, a teacher cannot just leave them alone; the teacher must always try to ensure 100% participation in one form or the other. This participative shortcoming could be a student issues, which it is in most cases, but even worse, it could be teacher issues. Some participants talked of situations where it was a teacher issue, but the students had no recourse to rectify the situation. In most cases it is "take it or leave it"; thus, the students try to make the most of what they get. It was said that teachers have a duty to try to determine, not probe, but subtly find out if the problems on the student side are rectifiable with some effort, or are they purely based on apprehensions, fear or shyness, or lack of knowledge and poor communication skills. A good teacher, while creating teaching presence, will be able to overcome these issues based on humanization of the course, coupled with the comfort zone created by the teacher for such students.

Communication skills and interpersonal skills. This research indicates that when students are not motivated, not prepared, or lack the self-discipline required to devote adequate time and effort to online classes, teaching and learning is affected immensely. This is further supported by Dogbey, Kumi-Yeboah, and Dogbey (2017) who state that, when the students' communication skills are poor, it affects their ability to express their ideas and thoughts effectively, as well as their ability to comment on peers' work or contribute to discussions and ask the instructor questions. Similarly, when the students lack interpersonal skills to relate appropriately with the instructor and peers,

when they feel isolated by instructor and peers, teaching and learning in the online environment are adversely affected.

The participants have faced this issue for a long time and found that it was incumbent upon the teachers to ensure that the lack of interaction is not because of poor communication and interpersonal skills. These are learnable skills at all levels, and if the teacher can make a correct assessment about early enough, it may be possible to help the student overcome these deficiencies. In many cases the student may not be aware that opportunities exist for improving these shortcomings. One participant commented, "Wouldn't it be criminal neglect if the teacher knowingly did nothing to help such a student and let the student have that lifelong impediment?"

Inability to use the applicable technology. Another major student issue that impacts interaction adversely was identified as students' prior lack of experience and inability to use the applicable technology for online classes. This research showed that if the students had not taken an online class before, participation in online discussions could be nerve-racking for them. There should be a mechanism, the participants said, where the teacher should be made aware of the incoming classes' technology competency levels. The teacher could then either adjust the course technical requirements or suggest some training or guidance that the weaker student may get to come up to the required level. One suggestion was to start low on technology and ramp up after technology assessments in the first class. Alternatively, the course design should give details of what technical skills will be required, and in case of deficiencies there must be a recourse to contact the teacher for help before the course starts. A concern raised was that many students will

never be able to catch up if they fall behind in the first class because of lower technological competence.

Instructors' issues. There was a lot of talk about instructor issues, but this was subtle, not direct. Several shortcomings, some very serious, were identified but the issue remains "who will bell the cat and how?" Some were serious deficiencies like low level of subject matter knowledge, poor oral and written communication skills, almost no feedback mechanism, low interpersonal skills, etc. that can negatively affect an instructor's efforts to promote quality interaction and learning in an online environment. This is very much in line with what Maryland Online (2009) found out in their survey. This situation is far worse than when the issues are with the student. In the latter case the teacher can help, but in the former, who will help the teacher and how?

In the case of a teacher issue, the whole class suffers in silence with no recourse. One teacher, who also held an administrative position, stated that in their setup they have confidential channels open for the students to report on a teacher's lack of professional competence, not contents of the course, but everything else around it, within seven days of the first class. When a complaint comes in, it puts into motion a chain of steps where that class is monitored for two weeks to see if the complaints are genuine. Confidentiality of the complainant is guaranteed.

All participants had seen the problem of teacher issues at one time or the other, they were all aware of it, but not all were willing to endorse the monitoring aspect by the administration. However, the question remained unanswered, "what should be the response to the complaint?" Alternatively, just don't have that recourse available. "Is that

fair?" one teacher asked. It certainly raises further issues of professionalism and management.

Theme A 4. Knowing Your Students (Challenges)

Although the theme identifiers show it in section A, this theme emerged from a number of responses to all the questions in the interview questionnaire, not just from section A. The reason for situating this theme in Section A is the relevance of the challenges to the concept of teaching presence as an independent identity, not just the sum of its three elements.

Several challenges were identified, most challenges were teacher specific and only a few were common among the majority, which was surprising. One reason could be the diversity of the sample in terms of the variety of disciplines being taught, from hard sciences to social sciences, and the student demographics suited to the type of courses being taught.

Demographic balancing. One challenge that seemed to stand out with most participants was the "balancing act" of going through a course that would generate equal or almost equal enthusiasm in the "fresh" traditional students and the experienced 45/55 year-old nontraditional students. Some teachers are really struggling with this challenge, while others do not think it is a problem. "I have students who have one-year experience or two years, and those that have 10 years or 20 years of experience, and some who just graduated from college. How do I maintain their interest, equally, with the same content online?" This question is very valid and genuinely creates a balancing issue, but it is also an opportunity to try and even out things using a two-way flow of expertise.

The participants were of the view that in a face-to-face on ground class, this diversity can be used to the advantage of the class by engaging in cross-functional discussion, in real time, to learn from the wealth of experience that each of them brings to the class. However, in an asynchronous class it becomes difficult to create a format where this advantage can be incorporated for the benefit of others. Some teachers did try to create case-based and project-based team assignments where the teams were formed to represent the class experience diversity.

However, it was found that instead of knowledge sharing or collaborative learning, the team members resorted to cooperative learning by splitting up the project, based on convenience, and then the leader just put the pieces together to present it as a team effort, which it was, but not the way it was supposed to be. The participants in general seemed to struggle with this challenge and found it to be an impediment in achieving desired learning outcomes. No real solution has emerged except that the experience of the older students and the current technical expertise of the younger group can flow, either way, to make up the shortfalls. Some teachers have had moderate success with this approach.

Irresponsible students and/or transactional students. Some participants talked about the issue of students lagging behind, but from the perspective of "irresponsible students" and/or "transactional students," not from the genuine deficiency point of view. The latter category is there just for the paper degree with no interest in gaining any knowledge. They noted that such students are present in an already unbalanced class of varying ages/experiences, they create a third category, very different from the

experienced students and the fresh graduates. They lag behind and have no interest in catching up; they do not really care.

How to tackle this problem and avoid complicating an already tricky balancing situation, one teacher wondered. The teachers were frustrated with the fact that this fragile balance gets more complicated as this third category will do what it can to pose as being productive, while doing nothing worthwhile except being a nuisance in the discussion boards and group assignments. A teacher asked, "Is it prudent for me to try and identify such students, and then what?" PF and PG threw their hands up saying, "I am unable to find a solution." The question is, do we know what to do?

Two-way emotional engagement. On the one hand the interviews had teachers complaining about three categories; on the other there were some wanting to be more involved, even after the class is done. These were teachers in the sample that had a desire to have a two-way emotional engagement with the students: "I think another big challenge for me is that I don't know anything about my students after class ends and I would like to know more about them to be emotionally engaged." The question of emotional engagement was not really discussed by many participants who thought that this might step into the privacy domain and create controversies at a later stage.

However, the idea of two-way engagement is real and should be explored within reasonable limitations of respecting privacy and professionalism concerns. It is possible that some emotional engagement with the irresponsible students might motivate them to take their studies seriously; sometimes a personal connection will do what professional connection will not.

Cardboard cutout of a student. Another observation was of an element where the students can be familiar with the teacher, but the teacher is not familiar with the students for the most part. That being the case, this issue dovetailed into the issue of course design for a "cardboard cutout of a student." This issue was brought about as an impediment to creating teaching presence especially when we talk about teaching courses designed by others. The relevance is about designing a course for a class of students of whose demographics the instructor is not aware. Thus, this becomes a generic course being designed for a "cardboard cutout of a student," created over a period, based on observations that teachers are stuck with. So, teachers have to take an existing instructional design and try to map it to actual people who make up the class but were unknown to the designer. The biggest challenge, as explained by some participants, was that they are not actually designing a course; they are designing a course framework, with options that they can utilize, depending on what actual people show up instead of the cardboard cutouts. Nobody had an answer, but they all agreed that some flexibility has to be built in to adjust according to the ground realities.

Lack of guidance in preparing new online courses. One challenge that many participants brought up was the lack of guidance in preparing new online courses, to meet the basic criterion of creating teaching presence in their courses. Furthermore, there was no system to help the teacher transition from on ground to online courses, even if it was the same course. All agreed that even the same course needs to be fully modified when transitioning from on ground to online. Several aspects of monitoring, interaction, and absentee presence have to be strengthened and catered to differently for online teaching.

Similarly, when asked to teach a course designed by somebody else (canned or cookie cutter courses), there is no guidance from the designer about the logic used to design the course. Those teaching the course should know, for example, what the designer had in mind, in terms of student interactions, while setting the course structure. There was a suggestion that courses designed by professional instructional designers should be accompanied by a course key or guide to help the teacher go behind the brain of the designer and understand the logic of the design. For those designing their own courses, an additional struggle was training in effective course design. Some mentioned that there was support available to design online courses based on Quality Matters guidelines, but many did not have any guidance at all. Some suggested that as part of professional development programs the teachers should take Quality Matters short courses that will help them to understand the guidelines and interpret them correctly. Some suggested the Sloan-C programs will be a big help, and others thought that a teaching presence guideline to help design a course should be available.

Some will always take away, only, surface learning. It was evident in the interviews that the teachers should be on the lookout for surface and deep learning students and identify them as close as possible to the start of the course. This is because some students, despite given the opportunity for deep learning through the use of appropriate tools, would still take away surface learning from it. It is thusly important for the teacher to identify such students, analyze the cause, and take appropriate measures to rectify the situation, if possible. The participants believed that without this identification it is not possible to differentiate instructional strategies to overcome the genuine

handicaps that the student may have. It is possible that the student may be in denial of the shortcomings or even may not be aware of it.

It is also possible that such a student maybe a bright individual but is a transactional student, by choice, with no interest in any learning. The teacher must identify students like these to take appropriate measures for the class as a whole. It is no doubt the responsibility of the teacher to create opportunities at every step to subtly push the student towards deep learning, leaving no choice for the student but to comply without feeling forced.

Courses show structure but there is no trace of teaching presence. The big issue with many participants was that without proper support, training, tools, and guidance, they are not able to actually design courses that have teaching presence in them. Some mentioned that after having their courses checked out by "certified presence evaluators" they found that they had designed courses that showed structure but there was no trace of teaching presence anywhere in the course. There was material on screen, assignments, and readings, all logically sequenced, and then the exam. However, to humanize such a course for teaching presence, "one must become the course itself," they were told.

One participant successfully went through this experience and ended up creating different tools and mechanisms such as narrated lectures to correspond with all of the content modules, step-by-step videos of how to do the assignments and the homework, explaining the rationale behind the solutions for all of those assignments, and the reasons for doing whatever was it that they were doing. So, teaching presence actually meant putting oneself into the student experience and living it with them. It also meant the

teacher injecting him or herself into it by personalizing the responses. Strategies like providing prompt, relevant, detailed explanations, not only in writing but also in voiceover text and slides, small movie clips, introducing topics, and giving an overview of expectations for the week using a video are all elements that help in injecting oneself and living the student experience. This, however, requires dedication, selflessness, effort, time, and sacrifice, said one teacher. How many can take this extra load when the teachers are already fully loaded?

Instructors who are ill-prepared. Research indicates instructors who are ill-prepared to teach web-based courses or to use technology in meaningful, innovative ways leave students feeling disengaged, self-taught, and dissatisfied (Donavant, 2009; Gregory & Salmon, 2013). This issue is most common in adjunct faculty but not so much in tenured teachers. Still some participants were mindful that this is an issue that affects the students and gives a bad reputation to the institution as a whole.

Humanizing, a personal aspect. This is a family-related matter, an important aspect that does not get much attention. The majority of online students are nontraditional students; people with jobs, families, responsibilities, and have taken on this extra burden to progress in their careers, possibly under extreme compulsion. Keeping all this in perspective, the responsibility of an online teacher should also be to create meaningful learning environment that is enjoyable and creates minimal stress, because people do not need more stress than they already have. These students are accommodating education within their busy life schedules, not the other way around. Thus, course designers should keep this mind while setting deadlines, types of assignments, weekend days, and other related matters.

Achieve humanization when teaching courses designed by others. Participants overwhelmingly agreed that the most difficult scenario in which to achieve humanization is when it comes to teachers teaching courses designed by others. Generally, there are no guidelines available from the designer, about the logic used in developing the course. One has to go with the flow and see how it really works, and there is no fall back strategy. This occurs where online courses primarily are canned or cookie cutter courses because several teachers are simultaneously teaching that course to different groups of students. One has to find ways to adapt to the reality and adjust, wherever possible, within the first week. One teacher had this nightmare as the course was designed by someone else and then locked by the admin so no changes could be made. Nobody knows how that turns out in terms of expected course outcomes and learning progression.

Theme B 4. Well Designed, Constructive, Integrative Feedback (Challenges)

Feedback is the most important tool in improving learning, be it online or on ground. However, in online pedagogy it assumes special significance as a means of overcoming the transactional distance through meaningful interaction, meant to primarily help the student overcome weakness and convert them to strengths. The participants had different responses on feedback, its purpose, two-way feedback, reflective feedback, and assessments with a feedback loop. Everybody agreed that feedback was a vital component of creating interaction, an aspect of teaching presence that led the student to believe that there really was somebody on the other side, working hard to ensure maximized learning.

Teacher's feedback to the students and its utilization. In terms of teacher's feedback to the students and their utilization, most teachers think that it is purely based

on the students' motivation to improve learning. Those students who are self-motivated, think positively about the feedback they are getting, and try to use that feedback, they improve their learning. Those who ignore it fall behind in both grades and learning.

Less to do with learning but more to do with grades. One aspect of feedback that most participant agreed to, has less to do with learning but more to do with grades. They talked about how feedback has changed in more than one way. Many years ago, when you told a student, you lost points here and this is the grade you make, they would take it. They weren't questioning it. But nowadays, students question, "Why did I lose the points? Where did I make mistakes?" which is generally a good thing if it is to promote learning, but it has become hard for students to accept a B or a C. Whatever the grade, they start questioning it. However, some teachers claimed that they have used this as a learning exercise by telling these students what they missed and why it is important. The teachers tell them to understand where they lost points so that they can make up the next time. Grades are discussed only if they are willing to accept and change where they went wrong, which provides evidence that some learning actually did occur.

Corrective feedback improves self-confidence. Another important point that was not so obvious, but came out from the responses, was that such learning improves the self-confidence of the student. They realize that when they make mistakes, they can learn, and they have the ability to correct those mistakes. One teacher commented, "These students may not realize at this point, but such learning helps their subconscious minds to understand that there is no shame in making mistakes. This is a very important lifelong lesson." Providing appreciation at this point helps in boosting the motivation to improve further. It is not about the grades; learning is more important. A strong constructive

feedback loop, with consistent monitoring, can easily make feedback a tool to enhance learning.

Allow multiple submissions. One way to accommodate feedback utilization is to allow multiple submissions, and many teachers agreed that they do allow it, excepting in the finals. Another common thread in the responses was that allowing multiple submissions is actually constructive feedback in action. Several participants allowing multiple submissions of assignments were of the opinion that the actual mission is learning; the grades are only supposed to indicate the level of learning "at a point in time." The statement of fact was that it would make no difference to the real world if the student had learned a concept in three attempts instead of one. It is possible that the student with three attempts learned more about the problem. The objective, as all agree, is learning and demonstration of learning.

Two-way feedback. Some teachers use a two-way feedback system; based on the student feedback they constantly tweak the design of the online courses, trying something new to improve their own effort. The students are asked to give feedback on the effectiveness of the topic that week, the problems that they faced, if any, and the probable source of those problems. However, it was clear that not many teachers solicit feedback from students during the course to make changes to suit that group of students better. "Each class is different, isn't it?" asked one participant who encourages student feedback about the efficacy of the course, during the course, and acts upon the relevant suggestions as far as possible. The researcher understands this concept as "cogenerative dialogue" which is a tool for creating teaching presence.

Emails from students, providing their feedback, serves as a continuous improvement tool for the teacher to redesign the course even during the session. The teacher explained that this exercise needs dedication and hard work, but it overcomes the objection of having "cardboard cutout student" courses. These courses may start out that way, but they progressively morph into courses designed for actual enrolled students. However, this requires a lot of extra work, and many teachers are not willing or able to accept this extra load.

Integrated assessment. Assignments, grading, and feedback cycle as a closed loop are meant to assess learning and growth, but not necessarily in the form of grades. This is what most teachers want education to be about. They believe that the right thing to do is for assignments, grading, and the feedback cycle to be a closed loop meant to assess learning and growth, not grades. The normal understanding is that assessments are generally used to give a grade. However, formative assessments can be designed as a learning tool called "integrated assessment" where the teacher integrates assignments and assessments with learning as an ongoing practice that evolves with time at various levels. As a tool it is used for curriculum and learning development. It is less about evaluating the student and more about providing an opportunity for the student to verify that what they actually do know, in such a way that it would measure the achievement of objectives that tie in with outcomes. This is a clear recognition that assessments are provisional judgements, based on current evidence.

Integrated assessments primarily involve (a) coherent work-integrated programs that incorporate design principles for both learning activities and assessment tasks, (b) engaging students as participants in assessment design, and (c) a recognition that

feedback is essential to learning and comes from multiple sources and that students must be supported to use feedback effectively. Integrated assessment allows more public scrutiny of the curriculum design rather than the assessment tasks, since well-designed curricula should lead to good learning outcomes (Crisp, 2012).

Theme C 1. Monitoring of Learning Progression Towards Objectives (Challenges)

The ability of the teacher to monitor learning progression towards the objective is dependent on how the teacher analyzes the data available in various forms. To do this on a fast track is of paramount importance as it allows the teacher to adjust activities to suit the needs of the individual students without losing much time. Almost all of the participants agreed that the discussion board was one such tool which could be a source of rich data on the users.

Discussion boards. The participants generally believed that discussion boards were not being properly utilized to maximum advantage, but just being used as one of the many interaction tools, in a mechanical way, and that this needs to be rectified immediately. Discussion boards should be working with discussion questions that allow for deeper interaction to try and get students to reflect, analyze, synthesize, and develop critical thinking (Della, Debora, & Lowry (2014).

Generally speaking, the benefits of using discussion board are numerous: all students can participate so they are democratic, some students are not confident enough to speak out in face-to-face classes but are willing to contribute to discussion boards, they give students time to reflect on their thoughts before contributing, they allow students to work on their reply and check for grammar and spelling before posting - particularly useful for students whose first language is not the one used in the discussion, they allow

students to practice their writing skills in a more informal way, they offer peer learning opportunities - this takes some of the workload away from the tutor, they foster a learning community. "As new technologies emerge, instructional designers and educators have unique opportunities to foster interaction and collaboration among learners, thus creating a true learning community." (Beldarrain, 2006, p.140).

In summary it can be said that a keen observation of the posts on the discussion board will divulge a lot of information about the learning progression of the student. It can also indicate whether the student is a surface learner, a deep learner, or a transactional student. Those who still keep on the periphery are the non-learners. Furthermore, the questions posted on discussion boards should be of the nature that generate true thinking and reflection.

A well-planned course, that moves from simple to complex concepts. Most participants concurred that there are other tools that can judge learning progress. As just one example, a well-planned course that moves from simple to complex concepts, can use projects that are spread over the whole course. This project could simultaneously be built from a discussion board post where students can interact with each other in a learning community and mutually help to enhance learning.

All the tools have one common purpose: to improve learning outcomes with as much regularity and consistency as possible. Monitoring of learning progression helps the teachers to identify weakness and strengths of the students and guide them toward resources that can help them overcome these deficiencies.

Theme C 3. Develop a Community of Learners (Challenges)

Involve online students in activities where their strengths are highlighted:

This, along with interaction, is the prime motive of teaching presence. In fact, both, interaction and community of learners goes hand in hand. A nontraditional method of creating that sense of community, as practiced by one participant, is to involve online students in activities where their strengths are highlighted, they can operate in their comfort zone, and they can be safe from being judged by others. The fear of being judged by peers for one's deficiencies stood out during the interviews. Online students, being primarily nontraditional students, all have subject matter expertise in some field and that is their strength. If teachers ask them to share that knowledge with the class, other students may not be familiar with that expertise but may find it relevant, and the result is that all students have the opportunity to feel like useful, contributing members of the learner community. Through this teamwork and collaborative learning, based on their expertise, students in their learning communities can complete assignments together and share knowledge to mutually enhance learning (Palloff & Pratt, 2001).

Student contacts the teacher and finds that interaction friendly: Logically, if a student feels comfortable contacting the teacher and finds that interaction friendly and helpful, that improves the confidence level of the student because of dealing with somebody more knowledgeable than them. Once this confidence solidifies, it can be gradually channeled towards inter-student interaction, and when that interaction approaches the comfort zone of the individual, a community of learners will start taking shape. This aspect can be seen as a possible route to understand the concept of zone of

proximal development (ZPD); if the teacher can identify the ZPD for a student and then teach in that zone, it will enhance learning and keep the student motivated.

Theme D 1. The Importance of Teachers in this Digital Age

The question that evolved during the interview and then became a supplementary question for all interviews was that in this digital age when the students have their pulse on social media, where every type of information is available at the touch of a button, where every question under the sky can get multiple responses, where many views about one thing are readily available, than what do we need teachers for? To satisfy the students and answer this question the following aspects were identified from this research:

Knowledge is not something that is out there to grab: One way of looking at is to explain and convince the students that knowledge is not something that is out there to grab. It is something that is being developed, being constructed as we talk and as we work together. If instructors empower students to become teachers also, in a class of 15 students, there are actually 16 teachers. This also ties into the zone of proximal development (ZPD), provided the teachers are able to interact with the students such that the student is willing to accept where the teacher can help in improving learning outcomes.

Best direct instruction is reflective teaching: There was some talk, and most agreed, about the best direct instruction being "reflective teaching" where the teacher reflects on course content and concepts out loud. The student sees the process the teacher is going through, realizes that this isn't something that only the teacher knows, or this is not the only answer just because the teacher found it. The student sees what the teacher found and how; but the teacher has concluded several other things as well, so it is not like

the teacher has a monopoly. This gives the student the confidence to reflect, think critically, think creatively, and come up with something that could be totally different from that of the teacher.

False sense of informational security: There was unanimity in the fact that all the information available from Google, Wikipedia, and other search engines give a false sense of informational accuracy to the students who then degrade the teachers and think of them as being extraneous. Though this is not always communicated, this attitude does exist and is manifested in many ways over time. The students need to understand that, despite all the resources outside, it is the job of the teacher, through direct instruction, to add value with what the course content provides over what students might learn directly or indirectly through those search engines. There is much information accessible on the internet, but not all of that information is validated, can be conflicting, and is never placed in context. That is what the teachers then have to do.

Role as a designer will never cease to exist: In fact, the teachers agreed that as providers of information, their roles are being heavily chopped off. However, their role as a designer will never cease to exist; in fact, that role continues to grow in direct response to the growing information available. From knowledge holders that transfer knowledge to the students, we have become designers; we give students an opportunity to create something new. So, we design a process that enables students to design something new. Creating new knowledge is the ultimate goal of the modern professor. Create something new, something that didn't exist before, and the students need to create something new as well.

Validity and veracity of the information they receive from outside: The biggest pothole that the students do not see is the validity, the veracity of the information they receive outside, at the touch of a button. The common questions all teachers asked students are: How can one trust what one gets from these search engines? Who guarantees their accuracy? What if they are wrong?

The students need to be told that they can find everything online, but not everything out there is true, reliable, and accurate. So, they can find relevant information from whoever and wherever, but then they should have the ability to verify for accuracy, to distinguish true fact from opinion; otherwise they may be greatly misinformed. The teachers need to switch to the role of guiding them, of helping them navigate the course. It is no longer really about teaching them content, it is more about telling them how to learn and what to learn, telling them how to put loose pieces together, and how to put the right pieces together.

It's more about how it can work in their context: In continuation of the new role of teachers, students need to know that for every question they ask, there are several contradictory responses, so someone has to point them in the right direction. It is not just about finding answers to their question, it is more about how it can work in their context, how can they put all these pieces together, and that is what teachers should do. So, basically the role of the teacher has changed from just being the subject matter expert (SME) who transfers knowledge, to that of somebody who guides and helps students search for knowledge through the sources where they can find the right material. The teacher is more like a guide to help navigate the sea of knowledge out there, to make

sense of it all. The role as a direct transferor of knowledge from one head to the other is minimal, if any, the teacher is more of a facilitator now.

A supplementary question was generated. Are we looking at a time, in the future, where the teacher will, genuinely, not be required at all? Possibly, for the routine, mundane sort of information that does not need a context, teachers are not relevant. However, for information that relates to a context in a discipline, it is important to know how it relates within the context of the overall discipline, and that needs a teacher. There is a need for making these interconnections with other areas, in order to add value, and this will continue to increase as the volume of available information increases. It is therefore important that the teacher's new role should be defined to be compatible with this direction of enhancing knowledge. Then it makes a lot of sense to accept the need for having teacher for all times to come.

Designing that learning experience: The teacher now is the person who is designing that learning experience and guiding people through it. There is a specific body of knowledge that has to be mastered in the shortest period of time. The teacher as the facilitator needs to be not managing knowledge but constructing it so that it is more efficient and effective. The modern world is awash in pre-packaged knowledge that needs to be unpackaged and then repackaged to fit the specific needs. This needs a teacher, a subject matter expert in something, to show them how the prepackaged material, in this area, needs to be deconstructed and reconstructed.

Summary

This question is about the challenges that come up when plans are put into action.

The basic challenge was the Q&A forums. This tool of teaching presence can generate a

lot of interaction but having a tool does not guarantee results unless those tools are effectively used. The dichotomy of Q&A forums is that often teachers who set them up do not engage in it in a timely manner to answer questions. Effective use of discussion boards came out as another tool. Its use can pose a slippery slope: When to intervene? More importantly, when not to intervene? How much intervention frequency is too much? When do you pull out? How deeply do you get involved? The challenge is to be a moderator not a contributor, to be a guide and not be the "sage on the stage."

A point that came up; when the students' communication skills are poor, it affects their ability to express their thoughts effectively, their ability to comment on peers' work, contribute to discussions, and ask the instructor questions. There was also lot of talk about instructor issues, but this was latent, not semantic. Some serious deficiencies like low level of subject matter knowledge, poor oral and written communication skills, almost no feedback mechanism, and low interpersonal skills were identified as factors that negatively affect the instructors' efforts to promote quality interaction and learning in an online environment. Demographic balancing was another challenge that seemed to stand out with most participants: how to generate similar enthusiasm among traditional and nontraditional students, and how to maintain their interest, equally, with the same online content. There was some talk about the issue of students lagging behind, but from the perspective of "irresponsible students" and/or "transactional students," not from the genuine deficiency point of view. Such students lag behind and have no interest in catching up; they do not really care.

Another important aspect identified was the lack of guidance to instructors in preparing new online courses to create some teaching presence. Furthermore, there was

no system to help the teacher transition from on ground to online pedagogy, even if it was the same course. The most difficult problem faced by the teachers was to achieve humanization when teaching courses designed by others. Generally, there are no guidelines available from the designer about the logic used in developing the course. The use of feedback and grades as a learning tool was shown to be important but not many treat it that way. It was discussed that corrective constructive feedback improves self-confidence and learning. Such learning helps students' subconscious minds to understand that there is no shame in making mistakes, a very important lifelong lesson.

Some teachers use two-way feedback to constantly tweak the design of the online courses and try something new to improve their own effort. Assignments, grading, and a feedback cycle can generate a closed loop meant to assess learning and growth, not just for the purpose of assigning grades. Formative assessments can also be designed as a learning tool called "integrated assessment" where the teacher integrates assignments and assessments with learning as an ongoing practice that evolves with time at various levels. As a tool it is used for curriculum and learning development.

Some aspects of direct instruction came up in discussion, and the best method emerged as reflective teaching, where the teacher reflects on the course concepts out loud. This gives the student the confidence to also reflect, think critically, think creatively, and come up with something that could be totally different from that of the teacher. There was unanimity that all this information on Google, Wikipedia, and other search engines give a false sense of informational accuracy to the students. It is the job of the teacher, in direct instruction, to add some value to the content the course is providing over what students might learn directly or indirectly through those search engines. The

teacher's job, then, is teaching students how to distinguish which information is not validated, can be conflicting, and requires context. This, however, is their new role of a designer which will never cease to exist; in fact, it will continue to grow in direct response to the ever-increasing information available. The teacher as the facilitator needs to be not managing knowledge but constructing it so that it is more efficient and effective. The modern world is awash in pre-packaged knowledge that needs to be unpackaged and then repackaged to fit the specific needs. This needs a teacher, a subject matter expert in something, to show them how the prepackaged material, in their context area, needs to be deconstructed and reconstructed.

Recommendations from the Study, Including Deliverables

The study was able to achieve what it set out to do, i.e., to see through the lens of the teachers what teaching presence means, how it is created from design onwards, and what challenges are faced while implementing it online. The extensive interviews, the coding, the thematic process, the analysis and then the discussion all brought out one critical realization: much less is understood about teaching presence than the researcher's original estimation.

Each one of the 12 teachers had strengths in certain teaching presence aspects; thus, the researcher had excellent cumulative data that covered all aspects of teaching presence. However, imagine if each one of them had all that expertise developed within themselves, based on professional development training. What a difference it would make to the quality of online teaching, not only to them, but also to the institutions they represent.

Good teachers are good teachers because they are dedicated to the profession, have seen the ups and downs of academia, and have enough all-round academic knowledge to cross any bridge into the relative safety of success. This research indicates that teachers should take teaching presence courses, as part of continuing education, be familiar with course design and evaluation techniques that are specifically meant for teaching presence evaluations, and reflect on their best courses to see how much of that success was due to those elements.

The researcher also suggests that all new online teachers should intentionally make efforts to establish TP in the courses they design. Initially, they can follow some preset guidelines, if available, to create a minimum teaching presence level. This is also true for courses being transitioned from on ground to online, as these need to be modified to incorporate elements of TP to enhance monitoring and intensify interactional activities.

The researcher realizes that there will be instances when courses designed by one person will be taught by another. To mitigate the negative impact of this situation, all courses designed by instructional designers should include, as an appendix to that course, a course key or a decoding narrative that establishes the logic behind the design, explains the structure of the course, identifies how the course will achieve the learning outcomes as planned, and a fall back strategy if something does not work out.

There were indications from five participants, though not in the majority, that teaching a course, both on ground and online, in the same semester does pose challenges of switching between two very different pedagogies. However, the researcher believes that, while this could be a challenge for some, especially the less experienced teachers, others have used it to their advantage, as a self-correcting mechanism by observing things

in both pedagogies and using what works best in either of them. For the former it is stressful, for the latter it is motivating. As mentioned earlier, "TP is a state of mind."

A detailed scrutiny of the interview transcript enabled the researcher to produce a list of actions/activities that were either used by the participants or were known to work in establishing basic TP through their peers. These have been shown in Appendix F as "Good Teaching Presence Practices" applicable from design to delivery in a simple logical way, to be used as a guide, if need be.

Opportunities for Future Research

The researcher feels that the questions generated during the interviews, the coding, thematic analyses, findings and discussions have shown that limited literature, if any, exists for some important areas of critical inquiry. This could be an opportunity for future research to add to the body of literature and inform the academic community about these topics.

During this study the researcher found that the limited sample of 12 participants from one region provided the homogeneity but had the delimitation of curtailing diversity across academic cultures. A more varied academic culture would have brought in many more diverse approaches, challenges, and solutions for the benefit of the academic community. It is suggested that further research maybe undertaken with a larger, more diverse sample to extend the knowledge base to maximize transferability.

It was also realized that the teachers did not have an easy-to-use self-assessment mechanism to judge for themselves, their progression towards the teaching presence objectives, especially in course design. There is a need to have such a basic instrument. The researcher did work on one, but it is not part of this study.

Another avenue that needs further study is the CoI model Venn diagram as it relates to the definition of all the three presences given therein. It was clear from the responses that all the participants believed TP to be a catalyst for the other two presences and not a coequal presence, not just one of the three. This aspect of the Venn diagram needs more research to verify how TP, not only acts as a catalyst but also as an individual presence similar to the other two. This duality of role needs further study to understand the interaction. This may result in new insights into the CoI model and help understand better, the dynamic role of TP in enhancing learning.

An extremely important problem is teaching of online courses designed by instructional designers for mass use, in a one-size-fits-all model. Teaching such courses creates challenges for teachers to create, sustain, and maximize TP, primarily because the courses designed by others do not necessarily provide any document that explains the logic and rationale behind the design, the structure, the sequencing etc. It is important to study what challenges such teachers face and how they overcome them. Alternatively, do the designers have any responsibility for the learning outcomes of courses they mass design for others?

Another aspect noticed during this study was the use of "instructor presence" and "teaching presence" labels, interchangeably. Many researchers believe that it is wrong to do so; however, the research on this is very limited. Some researchers have pointed out the differences between the two attributes, but more research is needed to validate these constructs and establish firmly the differentiation criterion between the two.

Summary

The final chapter of this study discussed the results from chapter IV, which were shown as themes (table 6) related to each section of the interview questionnaire. The researcher then matched the themes with the relevant research question that they best answered. Nine themes were linked to one single research question while each of the other five themes were linked to two research questions. The research questions were then answered, one by one, by explaining the related themes, how they were closely aligned to the question, and what impact they had on the learning outcomes.

Research question 1 had five themes, research question 2 had eight themes, and research question 3 had six themes. Within each theme, the different elements or various aspects of it were individually explained to shed light on the role of the theme in answering the question. A summary of discussions in each research question can be seen at the end of the discussions in that question.

The set of themes, linked to the interview sections and then linked to the research questions, have provided substantial material for the academics who want to ensure that the true benefits of online teaching should accrue to the students and the institution, as the future of higher education is rapidly moving towards online pedagogy for a multitude of reasons.

This research has highlighted some issues being faced by the online teachers as they try and improve their online teaching skills and endeavor to create teaching presence, with little or no formal training for doing so. Their vulnerabilities have been identified, supported by actual narratives, so that the administration can find ways to mitigate the negative effects of these shortcomings. These areas need to be improved for

future expanded roles and there is a need for training new teachers or guiding them into this critical role. After answering the three research questions, the chapter gives some recommendations, that emerged out of this study, and also identifies opportunities for further research to create new knowledge and further enrich the academic literature.

APPENDIX A: Informed Consent Form

Robert Morris University Institutional Review Board Approval Date: Renewal Date: IRB Number:

CONSENT TO ACT AS A PARTICIPANT IN A RESEARCH STUDY

TITLE: IMPACT OF TEACHING PRESENCE ON LEARNING OUTCOMES; A QUALITATIVE STUDY OF PERCEPTIONS TRHOUGH THE LENS OF ONLINE TEACHERS.

PRICIPAL INVESTIGATOR: Mansoor A. Bhatty

School of Education and Social Sciences

Robert Morris University 6001 University Blvd. Moon Township, PA 15108

(412)-555-2222

SOURCEOF SUPPORT: NCNR

CONSENT FORM: Page 1 of 3

Participant's Initials _____

INFORMED CONSENT

DESCRIPTION: This research is being undertaken to study the perceptions of the teachers, about "teaching presence" while designing and delivering their online higher ed. courses. Prior to the scheduled interview, I will request you to share a copy of the course syllabus, of your choice, that you taught in the last six months.

The interview will be app. 60 minutes, extendable by 30 minutes, or more, at your sole discretion, and will be audio recorded, with your written permission. You will have the opportunity to review the transcript, as they become available, and have the sole right to edit; to accurately reflect your views as shared at the time of the interview. A, short, follow-up interview may be requested, if needed, to cover additional/leftover questions and/or to confirm initial study findings. However, it will be entirely up to you.

RISKS & BENEFITS: The findings of this study may benefit other online teachers, possibly add to the current knowledge base and inform the teaching community of the benefits that can accrue with the implementation of teaching presence. As such, your participation in the study will contribute to the scholarship on undergraduate and graduate instruction. There are no bodily/physical risks associated with this study. The research topic is geared, purely, towards professional pedagogical approaches, thus there are no personally emotional angles to any aspect of it. However, if you feel emotionally stressed out, you have the right to withdraw from the survey or refuse to answer any particular question.

COSTS AND PAYMENTS: For you, there are no costs or payments, in cash or kind, associated with this survey. Your time is the only intangible that you will be using for this survey.

Participant's initials: -----

CONFIDENTIALITY: All identifying information will be removed from the study, pseudonyms will be allocated, before presentation or publication. Every effort will be made to keep your documentation and identity in strict confidence.

RIGHT TO WITHDRAW: You have the right to refuse to answer any particular question, for whatever reason, or withdraw from the study at any time you choose with no explanations, obligation, and/or risks.

VOLUNTARY CONSENT: Your participation in this research is completely voluntary.

Your signed agreement, also initialed on each page, constitutes your written consent with the interview protocol, in its entirety, and gives permission to make it a part of the research described therein.

Please contact me for any questions, clarifications, or concerns to help in your decision, one way or the other. I look forward to hearing from you.

SIGNED DATE	
Name:	
Title:	
Institution:	

APPENDIX B: Request to Participate; Eligibility Confirmation

Dear [Name],

I am a doctoral candidate, Cohort 13 of the Instructional Management & Leadership Program at the School of Nursing, Education, and Human Studies, Robert Morris University, Moon campus (Pittsburgh). In partial fulfillment of the requirements for the degree of Doctor of Philosophy with a major in Instructional Management and Leadership, I am conducting a research study on Teaching Presence primarily looking at it from the lens of fully online, Higher Ed. teachers.

Your name was suggested to me by [informant or colleague] as a potential participant with a good understanding of the research subject. I hope you will consider contributing to this research. If you are interested, can you please complete this brief, inclusionary criteria, questionnaire:

PLEASE CIRCLE YOUR RESPONSE.

- Are you an Instructor with more than 3 years' experience of teaching Higher Ed.
 Online? Yes/No
- 2. Do you believe that the Community of Inquiry Model (CoI) suitably explains all aspects of online teaching and learning? Yes/No/Not Sure
- 3. How strongly do you believe that Teaching Presence, in online higher Ed., has a role in achieving "Personally Meaningful and Educationally Worthwhile Learning Outcomes"? Very strongly = 1, Strongly = 2, I believe so = 3

4. Reflecting back, how would you rate yourself as being successful in facilitating, online, learning activities (Discussion boards, formative assessments, effective feedback, regular assignment submissions, continuous participation etc.)
Very successful =1, Successful = 2, I do my best = 3

- 5. Do you believe that your students, peers and superiors give you a high rating, acknowledging your contribution and success in achieving desired learning outcomes? Yes/No/Not Sure
- 6. Do you elicit regular feedback from your students about the learning goals you set for them in the syllabus, as part of course design? Yes/No/Occasionally

Based on your responses to the sample inclusionary criteria, you will be requested to participate in this study. As a data collection activity, your participation will include a face-2- face, on ground, interview for app. 60 minutes. The interview slot may be extended by 30 minutes, at your discretion. The time and location will be entirely at your discretion.

However, if it is not possible for you to be physically present, we can schedule a video zoom or an audio telephonic interview, at your convenience. Your participation is completely voluntary, and you have the right to refuse to answer a particular question or to terminate the interview, at any point, without assigning any reason.

APPENDIX C: Semi-Structured Interview Questionnaire for Online Teachers

- A) Reflections on Meaning of Teaching Presence (NOT Instructor Presence)
 - 1. What does Teaching Presence mean to you?
- 2. Based on the CoI model as shown to you, do you see Teaching Presence as a coequal element of CoI intersecting with social and cognitive presence OR do you think that Teaching Presence acts as a catalyst to enhance the interaction of social and cognitive presences to improve learning?
- 3. How do you tackle the challenges you face in establishing Teaching Presence?

 Can you give some examples of your success or failure in doing so?
- B) Instructional Design and Organization
- 1. Research has shown that Teaching Presence is best established when it is embedded in course design. Do you agree? What aspects of course design you feel are critical to establishing Teaching Presence?
- 2. How do you provide structure to your online course? Why is it important to have a smooth unfolding of the course like a story? (This includes the process, evaluation, interaction components, content, communications, collaborative and cooperative learning, creating an intellectual climate, etc.)
- **3**. Do you feel it's important for your course design to help students clearly understand the Course Learning Outcomes/Objectives? If so, why is that important to you?
- C) Facilitation of Discourse
- 1. (a) How would you define and differentiate between deep learning and surface learning?

- **(b)** What teaching strategies or methods, related to Teaching Presence, do you use to encourage deep learning?
- 2. Do you feel that developing a sense of community among online students is important? Why or why not? (If yes, how do you work to develop this sense of community?)
- D) Direct Instruction
- 1. (a) Do you think it's important that you help students explore relevant issues deeply? What does that mean to you?
- **(b)** What tools and strategies do you typically use to help students with this exploration?
- **2.** (a) What is your general approach to providing feedback to learners, and how you expect students to utilize your feedback?
- **(b)** Do you agree that your feedback helps to advance learning? If so, what role should the teacher play in achieving that after providing the feedback?

APPENDIX D: Teaching Presence Variables Scale

Instructional Design and Organization

- Overall, the instructor for this course clearly communicated important course outcomes.
- **2.** Overall, the instructor for this course clearly communicated the important course topics.
- **3.** Overall, the instructor for this course provided clear instructions on how to participate in course learning activities.
- **4.** Overall, the instructor for this course clearly communicated important due dates/time frames for leaning activities that helped me keep pace with the course.
- **5.** Overall, the instructor for this course helped me take advantage of the online environment to assist my learning.
- **6.** Overall, the instructor for this course helped student to understand and practice the king of behaviors acceptable in online learning environments.

Facilitating Discourse

- 1. Overall, the instructor for this course was helpful in identifying areas of agreement and disagreement on course topics and assisted one to learn.
- **2.** Overall, the instructor for this course was helpful in guiding the class towards agreement/understanding about course topics and assisted me to learn.
- **3.** Overall, the instructor for this course acknowledged student participation in the course.
- **4.** Overall, the instructor for this course encouraged students to explore concepts in the course.

- **5.** Overall, the instructor for this course helped to keep the students engaged and participating in productive dialog.
- **6.** Overall, the instructor for this course helped keep the participants on task in a way that assisted me to learn.

Direct Instruction

- 1. Overall, the instructor for this course presented content or questions that helped me to learn.
- **2.** Overall, the instructor for this course helped to focus discussion on relevant issues in a way that assisted me to learn.
- **3.** Overall, the instructor for this course provided explanatory feedback that assisted me to learn.
- **4.** Overall, the instructor for this course helped me to revise my thinking in a way that helped me to learn.
- **5.** Overall, the instructor for this course provided useful information from a variety of sources that assisted me to learn.

Reference:

Shea, P. J., Pickett, A. M., & Pelz, W. E. (2003). A follow-up investigation of teaching presence in the SUNY learning network. *Journal of Asynchronous Learning Networks*, 7(2), 61-80.

Note: Used with permission from Dr. Peter J. Shea through his email confirmation attached as Appendix E.

APPENDIX E: Email Approval from Dr. Shea

From: Mansoor Bhatty < mabst114@mail.rmu.edu > Sent: Wednesday, February 19, 2020 11:08 AM

To: Shea, Peter J < pshea@albany.edu >

Subject: Permission for using Three-factor 17-item TPS for doctoral research

Good morning Dr. Shea,

I am not sure if you can recall my name as it has been sometime since I last wrote to you. I am in the final stages of my doctoral dissertation titled " Impact of teaching presence on learning outcomes. A qualitative study of perceptions through the lens of online teachers". Hope to defend by mid April this year.

Over the last 6 months I have read in great detail about your contributions towards creating a better understanding of teaching presence including the Three-factor 28-item model, Three-factor 17-item model, and two-factor 17-item model (by creating a merged 'directed facilitation' category).

I am writing this to humbly request permission, asap, to use your TPS Three-factor 17-item model in my research as a validated data point to triangulate my findings with. My original data is based on, 60 minutes, semi-structured interviews with professors, all having terminal degrees, and experience in designing and teaching online courses, primarily Asynchronous.

I would be very obliged for this permission.

Very warm regards,

Mansoor Bhatty
Doctoral student, IM&L program, Cohort 13
School of Nursing, Education and Human Studies (NEHS)
Robert Morris University,
Moon Campus, Pittsburgh, PA
Cell#: 732 407 9057

From: "Shea, Peter J" <pshea@albany.edu>
Date: February 19, 2020 at 12:35:48 PM EST
To: Mansoor Bhatty <mabst114@mail.rmu.edu>

Subject: RE: Permission for using Three-factor 17-item TPS for doctoral research

Mansoor,

You have my permission with attribution to the article in which the items appear. Best of luck with your research!

Peter

Peter Shea, PhD Associate Provost for Online Learning & Professor Educational Theory and Practice & Informatics University at Albany, State University of New York 1400 Washington Ave., Albany, NY 12222 518-852-1904 pshea@albany.edu

APPENDIX F: Good Teaching Presence Practices

GOOD TEACHING PRESENCE PRACTICES

- A. CREATE TP (Prior to start of course)
 - 1. Spend time meticulously designing and organizing course and setting the curriculum.
 - a. Provide well organized course layout for easy navigation.
 - b. Select course topics:
 - i. Create clear and accurate course overview to important topics
 - Organize content and assignments in chronological order.
 - c. Design and develop all learning methods and activities:
 - i. Identify specific learning outcomes for each module.
 - ii. Develop content to match desired outcomes.
 - iii. Design quality learning activities (consider activities to facilitate cognitive and social presence).
 - iv. Plan relevant assignment. Consider scaffolding assignments (breaking complex assignments into smaller components that are completed and build upon each-other so students master each step in the process and develop skills needed for the final assignment).
 - v. Plan formative and summative evaluations of learning.
 - vi. Select instructional materials and textbooks (keep cost in mind).
 - vii. Provide online resources.
 - viii. Setup discussion forums including instructions on participation requirements and grading.
 - 2. Ensure that the course contains:
 - a. Detailed course orientation.
 - b. Grading rubrics and sample of assignments.

- c. Course calendar with all due dates.
- d. Methods such as audio, video, and text-based formats to clearly communicate:
 - i. Course topics and goals.
 - ii. Course requirements (consistently rated by students as the most important TP behavior).
 - iii. How to participate in discussions and other learning activities
 - iv. All due dates and policy on late submissions.
- 3. Send welcome emails in advance with information on course, technological competence, and required textbooks.
- 4. Record a 3-5-minute introductory video to introduce yourself and the course. This will humanize your presence (good for establishing SP) and help students form a connection with you as their instructor.
- 5. Review course for clarity and consistency.
- B. SUSTAIN TP (At the beginning of the course, the first 2/3 weeks)
 - 1. Set the climate for learning and foster development of a sense of community.
 - a. Encourage students to be comfortable in participation.
 - b. Use an icebreaker or "getting to know each other" forum for students to introduce themselves, find commonalities, and build relationships.
 - 2. Orient students to the online LMS as needed.
 - 3. Provide clear and accurate course overview to communicate important topics.
 - 4. Clearly communicate course requirements, directions and time frames for all course activities, and assignment due dates. Provide explicit instructions in a variety of formats (audio and text based).
 - 5. Provide clear grading guidelines and rubrics for complex assignments.
 - 6. Help students access resources.
 - 7. Establish netiquette:

- a. Provide guidelines for interaction online-including appropriate use of the reply and quote functions and posting to the correct discussion forums.
- b. Include expectations on timeframes and expectations for participations in discussion forums.
- c. Give instructions on expectations for how students should communicate with you and when to expect a response e.g. 24 hours during weekdays, 48 hours on weekends etc.
- 8. Create a general discussion board for FAQs or off-topic conversations. This offers an avenue for social gathering or expressing ideas beyond the course content.
- 9. Respond to student questions in a prompt, constructive, friendly conversational manner. Encourage them to ask questions.
- C. MAXIMIZE TP (Throughout the course, but especially in the last 3 weeks)
 - 1. Use announcements frequently:
 - a. Introduce each week with an overview (audio clip preferred):
 - i. This week we will be focusing our discussions on ------
 - ii. This week you will be working in groups to create concept maps related to -----
 - 2. Keep course calendar updated.
 - 3. Provide useful information from a variety of sources.
 - a. Enhance course with narrative and exemplar cases.
 - b. Use asynchronous chat rooms.
 - c. Video or audio recordings of assignment instructions.
 - 4. Use a variety of methods to present content (video, audio, etc.)
 - a. Introductory videos to kick off each module helps maintain social and TP.
 - 5. Send reminders of upcoming activities or due dates. Extremely important to be consistent on this.
 - 6 Provide feedback:

- a. Let students know when they should expect feedback on assignments.
- b. If there is a delay in feedback, let the students know about it, with reasons.
- c. Feedback should:
 - Be frequent and prompt based on timelines already provided.
 - ii. Be personalized-address the student by name.
 - iii. Use positive and encouraging tone.
 - iv. Be clear, specific, and direct.
 - v. Ask questions to promote critical thinking.
 - vi. Help students understand their strengths and weaknesses.
 - vii. Acknowledge and reinforce student contributions.
 - viii. Use integrative format.

7. Facilitation of discourse

- a. Set the climate for learning and reinforce community among participants:
 - Create an accepting and cooperative climate for learning that sustains SP. Encourage them to step up share thoughts even if those are opposed to the majority view.
 - ii. Reinforce the development of a sense of community among participants by addressing students by name.
 - iii. Give fair individual attention and feedback
 - iv. Preemptively respond to students needs or technical c0mcerns
 - v. Let students know that you will monitor their discussions.

- vi. Try to show presence, in some way, on a regular basis, possibly every day to enhance student satisfaction and trust in your supportive behavior.
- Identify areas of agreement and disagreement on course topics and resolve these by helping students find congruent relationships.
- c. Seek to reach consensus and understanding:
 - i. Look for consensus amongst students in discussions.
 - ii. Guide the class towards understanding course topics to help clarify student thinking.
 - iii. Scaffold (building in complexity) discussion forums for greater understanding.
 - iv. Confirm student understanding through Assurance of Learning (AoL).
 - v. Help students, subtly, revise their way of thinking if they misunderstand certain key concepts.
 - vi. Recognize misperceptions and endeavor to remove them. Never let them linger as they solidify very fast.
 - vii. Provide appropriate content from diverse sources to help engage the student to see relevance to their learning.
 - viii. Help students place the web sourced information in context of their disciplines.
 - ix. Link content to the professions.
 - x. Inject own knowledge as needed. (DI/SME)
- d. Encourage, acknowledge, and reinforce student contributions:
 - i. Encourage participants to explore new concepts in the course, do aloud thinking.
 - ii. Recognize and reinforce contributions that add to understanding of the concepts.

- e. Draw in participants and prompt discussions, but do not dominate discussions:
 - i. Initiate discussions with questions.
 - ii. Model engagement and guide students to respond to each other's questions.
 - iii. Foster peer to peer communications in discussions.
 - iv. Draw in students who are less active.
 - v. Refrain from being overly present to facilitate student interaction.
- f. Assess the efficacy of the process:
 - i. Focus discussion on relevant issues that promote knowledge construction and application.
 - ii. Keep the course participants engaged and on task in a way that helps them to learn.
 - iii. Keep the discussion posts moving forward to construct and apply knowledge.
 - iv. Tie the discussions and follow-up learning activities together.
 - v. Summarize regularly with students.

APPENDIX G: Email approval to use the CoI model from Dr. Garrison

On Mar 11, 2020, at 9:37 AM, Mansoor Bhatty <<u>mabst114@mail.rmu.edu</u>> wrote:

Hello Dr. Garrison,

I had sent an earlier email but I believe it did not get to you This morning I was reading this article "Researching the CoI framework: Review, issues, and future directions (Garrison & Arbaugh, 2007)" and I saw the Venn diagram on pg 158 of this article. That prompted me to again request your permission as you were a pioneer in moving towards this diagram in 2000 alongwith Andersen, and Archer.

I am a student of you learning model and it is the theoretical underpinning for my doctoral dissertation on "Impact of teaching presence on learning outcomes. A qualitative study of perceptions through the lens of online higher ed. teachers".

I have submitted my dissertation to the committee for review, and in my theoretical underpinning section I used a pix of this CoI Venn diagram with the qualifier " subject to approval from the author". I hope to defend before the end of this month.

Again most humbly requesting "Can I please have that approval?"

Regards,

Mansoor Bhatty

Doctoral student, IM&L program, Cohort 13

School of Education and Social Sciences (SESS)

Robert Morris University,

Moon Campus, Pittsburgh, PA

Cell#: 732 407 9057

From: "D. Randy Garrison" < arrison@ucalgary.ca>

Date: March 11, 2020 at 1:28:38 PM EDT

To: Mansoor Bhatty <mabst114@mail.rmu.edu>

Subject: Re: Researching the Col framework----- (Garrison & Arbaugh,

2007).

Mansoor,

Sorry I missed your email.

You most certainly have my permission to use the venn diagram associated with the Col framework.

Good luck with your dissertation,

DRG

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